

**UAM**

**UNIVERSIDAD AUTÓNOMA**

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**FACULTAD DE FORMACIÓN DEL PROFESORADO Y EDUCACIÓN**

**DEPARTAMENTO DE TEORÍA Y DIDÁCTICA DE LA EDUCACIÓN**

**PhD Dissertation**

**The influence of UNESCO on the  
development of Technical and Vocational Education  
and Training systems; a comparative study in  
Botswana and Namibia.**

**Ms. MIRIAM PRECKLER GALGUERA**

**Supervisor: PhD. JAVIER MANUEL VALLE**

**2016**

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## ACROMYNS

ACP	African, Caribbean and Pacific
ADEA	Association for the Development of Education in Africa
ADP	Accenture Development Partnership
AfDB	African Development Bank
AIDAB	Australian International Development Assistance Bureau
AIDS	Acquired Immune Deficiency Syndrome
ALMPs	Active Labor Market Policies
ASEAN	Association of Southeast Asian Nations
BCA	Botswana College of Agriculture
BEAR	Better Education for Africa's Rise
BFTU	Botswana Federation of Trade Unions
BGCSE	Botswana General Certificate of Education
BIUST	Botswana International University of Science and Technology
BNVQ	Botswana National Vocational Qualifications
BNVQF	Botswana National Vocational Qualification Frameworks
BOCODOL	Botswana College for Distance and Open Learning
BoP, current	Current Account Balance
BOTA	Botswana Training Authority
BTEP	Botswana Technical Education Program
CAME	Conference of Allied Ministers of Education
CARICOM	Caribbean Community
CBET	Competency-based education and training
CBOs	Community Based Organizations
CEDEFOP	Centre Europeen pour le Developpement de la Formation Professionelle
CESC Namibian	Computer Education Services Coorporation
CIES	Comparative and International Education Society
CIDA	Canadian International Development Agency
CONFEMEN	La Conférence des ministres de l'Éducation des Etats et Gouvernements de la Francophonie
COSDECs	Community Skills Development Centers

COSDEF	Community Skills Development Foundation
COST	College for Out of School Training
CSP/NIP	Namibian Country Strategy Paper and National indicative Paper
D and EU	Developed Countries and European Union
DAC	Development Assistance Committee
DACUM	Development a Curriculum
DHS	Demographic and Health Surveys
DOSET	Department of Out-of-School Education
DR	Developed Region
DR CONGO	Democratic Republic of Congo
DTVET	Department of Technical and Vocational Education and Training
EAG	Education at a Glance
EC	European Commission
ECCE	Early Childhood Care and Education
ECD	Early Childhood Development
ECO/CONF	Conference of the United Nations for the Establishment of an Educational and Cultural Organization
ECOWAS	Economic Community of West African States
ED	Education
EDF	European Development Fund
EDUCAIDS - UNAIDS	Global Initiative on Education and HIV and AIDS
EFA	Education for All
EMIS	Education Management Information System
ESD	Euro Statistic Database
ETF	European Training Foundation
ETSIP	Education and Training Sector Improvement Program
EU	European Union
Euro Stat	European Statistics Office
FDI	Foreign Direct Investment
FFA	Framework for action
FGDP	Foreign Trade on Gross Domestic Product
G20	The Group of Twenty

GATS	General Agreement on Trade in Services (World Trade Organization)
GDP	Gross Domestic Product
GIFTs	Global Institute For Transferring Skills, South Korea
GINI	GINI Coefficient
GIZ	Rendered through the Deutsche Gesellschaft für Internationale Zusammenarbeit
GMR	Global Monitoring Report
GNI per capita	Gross National Income per Capita
GNP	Gross National Product
GPI	Gender Parity Index
GTZ	German Agency for Technical Cooperation
HATAB	Hospitality and Tourism Association of Botswana
HDI	Human Development Index
HDRs	Human Development Reports
HIGSE	Higher International General Certificate of Secondary Education
HIV	Human Immune-deficiency Virus
HRD	Human Development Service of Korea, South Korea
HRDAC	Human Resources Development Advisory Council
HRDC	Human Resource Development Council
IAG-TVET	Inter-Agency Technical and Vocational Education and Training
IATT	Inter-Agency Task Team
IBE	UNESCO's International Bureau of Education
ICT	Information and Communication Technology
IDP	Integrated Development Planning
IGCSE	International General Certificate of Secondary Education
IGOs	Intergovernmental Organizations
IHDI	Inequality-Adjusted Human Development Index
IICBA	UNESCO's International Institute for Capacity Building in Africa
IIEP	UNESCO's International Institute for Educational Planning
ILO	International Labor Organization
IMF	International Monetary Fund

INEE	Inter-agency Network for Education in Emergencies
INSSO	International Network of Sector Skills
IOM	International Organization for Migration
IRBM	International Results Based Management
ISC	Industry Skills Committee
ISCED	International Standard Classification of Education
ISESCO	Islamic Educational, Scientific and Cultural Organization
ISIC	International Standard Industrial Classification of All
ITC	Information Technology Center
JSC	Junior Secondary Certificate
KfW	Kreditanstalt für Wiederaufbau
KILM	Key Indicators of the Labor Market
KRIVET	Korean Research Institute for Vocational Education and Training
LA and C	Latin America and Caribbean
LAMP	Literacy Assessment and Monitoring Program
LDC	Low Development Countries
LDR	Low Developed Region
LIFE	Literacy Initiative for Empowerment
LMS	Labor Market Statistics
MCC	Millennium Challenge Corporation
MDGs	Millennium Development Goals
MHETEC	Namibian Ministry of Higher Education, Training and Employment
MIS	Management Information System
MLAF	Botswana Ministries of Labor and Home Affairs
MLHA	Botswana Ministry of Labor and Home Affairs
MLHF	Ministry of Labor and Home Affairs
MOA	Botswana Ministry of Agriculture
MoE&SD	Botswana Ministry of Education and Skills Development
MoESD	Botswana Ministry of Education and Skills Development
MOH	Botswana Ministry of Health
MOOC	Massive Openline Course
MQC	Minimum Qualified Candidate
MTC	Transport and Communications



MTTC	Madirelo Training and Testing Center
MWC&R	Quarrying, construction and resources
N\$	Namibian dollar
NAMCOL	Namibian College of Open Learning
NAMWATER	Namibian Water Corporation
NATCOM	National Commission for UNESCO
NCC	National Craft Certificate
NCE	National Commission on Education
NDP	Namibian Development Plan
NEET	Youth Not in Education, Employment or Training
NER	Net Enrolment Rate
NFE-MIS	Non-Formal Education Management Information System
NGO	Non Governmental Organization
NIED	National Institute for Education Development
NIMT	National Institute of Management Technology
NIP	National Indicative Paper
NPD	National Development Plans
NPO	National Project Officer
NPVET	National Policy on Vocational Education and Training
NQA	Namibian Qualification Authority
NQF	National Qualification Framework
NTA	Namibian Training Authority
NTL	National Training Levy
NVTA	National Vocational Training Act
ODA	British Overseas Development Agency
ODA	Official Development Assistance
ODL	Open and Distance Learning
OECD	Organization for Economic Co-operation and Development
OECD/DAC	Organization for Economic Co-operation and Development/Development Assistance Committee.
PASEC	Program for the Analysis of Education System Francophone Countries
PLS	Policies and Lifelong Learning Systems

PSC	Peace and Security Council
QAA	Quality Assurance and Assessment Unit
RISDP	Regional Indicative Strategic Development Plan
RNPE	Revised National Policy on Education
ROK	Republic of Korea
RPL	Recognition of Prior Learning
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SACU	Southern African Customs Union
SADC	Southern African Development Community
SARC	Southern Africa Resource Center
SC	Steering Committee
SIDA	Swedish International Development Authority
SIPO	Strategic Indicative Plan for the Organ
SQA	Scottish Qualification Authority
SSA	Sub-Saharan Africa
SWAP	Sector-wide Approach
SWAPO	South West Africa People's Organization
TCCA	Technical Committee on Certification and Accreditation
TCs	Government Technical Colleges
TEC	Tertiary Educational Council
TVE	Technical and Vocational Education
TVET	Technical and Vocational Education and Training
TVSD	Technical and Vocational Skills Development
UCW	Botswana United World College
UIL	UNESCO Institute for Lifelong Learning
UIS	UNESCO Institute for Statistics
UK	United Kingdom
UN	United Nations
UNAIDS	Joint United Nations Program on HIV/Acquired Immune Deficiency Syndrome
UNAM	University of Namibia
UNDP	United National Development Program

UNESCO-UNEVOC	International Centre for Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNESCO HQ	United Nations Educational, Scientific and Cultural Organization Headquarter
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNITWIN	University Twinning and Networking
UNPOP	UN Department of Economic and Social Affairs
USA	United States of America
USAID	United States Agency for International Development
USD	United Sates of America
VET	Vocational Education and Training
VTCs	Vocational Training Centers
WAP	Working Age Population
WB	The World Bank
WBES	World Bank Enterprise Surveys
WBI	World Bank Indicators
WHO	World Health Organizations
WTO	World Trade Organization
WVTC	Windhoek Vocational Training Centre
YLS	Youth Literacy and Skills Development
ZAR	South African Rand

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# PART I

## THEORETICAL FRAMEWORK

## CHAPTER 1

### Introduction, Justification and Map of Contents

In this chapter it is exposed, not only the motivations and specific reasons that brought the researcher to conduct this particular study, but also to describe from an eclectic and holistic theoretical framework, the main ideas, concepts and approaches about the influence of the international organizations on the expansion of mass education and its relation with the globalization trends, that support the following chapters of this dissertation.

Chapter 1 is divided into three interrelated sections. The first section focused on the reasons and the necessity about why the research was conducted.

The second section conceptualizes globalization and describes the sociological theories that allow the reader to get a clear understanding about the rise, nature and impact of the modern world order or society. This is linked with the description of the international organizations, its role and mandate as main actors on the global stage, and its particular importance on the Education arena. Mass Education theories are then conceptualized and explained as a world universal and universalistic enterprise embedded and legitimated by the world society and associated with the transformation of professions from an historical point of view. The section continues by describing UNESCO's role as international organization and its influence on TVET education worldwide, and finalizes by enhancing the importance that the Southern African Development Community region gives to Technical Education and Vocational Training as a way to increase youth employment and diminish poverty rates, and its commitment to revitalize it.

The third section focus on the description of the dissertation content map, providing an explanation not only about the full dissertation structure, but also about the content that is included in each of the chapters.

## 1.1. INTRODUCTION - MOTIVATIONS

The aim of this study is to analyze the influence of United Nations Educational, Scientific and Cultural Organization (UNESCO) as international organization on the development of national Technical and Vocational Education and Training (TVET) systems in Botswana and Namibia. It is a comparative study.

The research problem arose on 2012, while I was working at the Technical Vocational Education and Training (TVET) sector as Program Specialist, within UNESCO's Education Area, on the implementation of the Better Education for Africa's Rise (BEAR) project. At that time I came to realize that within UNESCO's overall mandate to develop and implement educational public policies in member states, a lot of specific policies were being implementing all over the world.

During the implementation of these policies, UNESCO developed a variety of programs that shared common goals and faced common challenges, but there was also something in common that increase my concern, among all the programs and projects that were being developed and implemented by UNESCO; there was a completely lack of action to measure the impact and influence that these programs were having at national level, despite the final evaluation assessment of the project that used to be conducted, the truth was that there wasn't any specific tool developed in order to measure, either in a qualitative or quantitative way, whether the new implemented policies through UNESCO's projects and programs were successful or not; which was the social impact perception on the society in relation to the new policies developed and implemented with UNESCO's support at national level; and how UNESCO's contribution influenced the national development processes in reality?, or in the opposite case, if the policies failed, why do they failed?.

This specific concern, in addition to the fact that I was working on one of these programs that aimed to implement new educational policies in the Southern African Community Region (SADC) motivated me to conduct this research study, in order to

measure not only the influence of UNESCO on the development of national TVET education policies in Namibia and Botswana but also to conclude if the policies developed were successful or not.

Therefore, this research study will measure the influence according to the main actor's perception based on outputs and outcomes of the case study associated to result number one (curriculum development for the selected sectors) of the Better Education for Africa's Rise (BEAR) project, in Botswana and Namibia. The analysis will be done from the perspective of the key stakeholders: UNESCO HQ, UNESCO field offices, international partners (KRIVET), Ministry of Education and Ministry of Labor in both countries, the main stakeholders on the public and private sector: employers and employees; vocational education and training (VET) institutions': trainers and trainees, and education officers.

Thus, this study seeks not only to provide a comparative overview of the influence of UNESCO on the development of national TVET systems but also to explore the current state of data on skills and the challenges and possibilities that lie ahead in trying to develop robust evidence on TVET in Namibia and Botswana. There is real potential in this study to contribute to a wider international process of improved research on TVET, as well as to support national governments in their continued efforts to develop their education systems and better link them to the world of work.

This points a key message of this research, that later on will be further described: there is a lack of academic research on TVET in the SADC region, to address this weakness, in order to strengthen the TVET existing policies on the region, redressing the low status of TVET should be a priority.

## 1.2. JUSTIFICATION

### 1.2.1. Globalization, world society and the expansion of standardization

Globalization, as a process, has a number of dimensions. First, it increases the political and military interdependence and expanded the strength of organizations involved. Second, it increases the economic interdependencies. Third, it expands a flow of individual persons among societies through socioeconomic migration. Fourth, globalization intensifies the interdependence expansion of expressive culture through communication and last, globalization expanded common models of social order become authoritative in many social settings. (Meyer, 2000). Moreover it has been argued that general models of modern society and the nation-state have spread rapidly, with mass education as a derived consequence of the urgency of national integration and development (Boli, Ramirez, and Meyer, 1985).

As starting point, historicism, with a focus on local factors, does not explain well a social change that is happening worldwide. Sociological institutional or neo-institutional theory, as it has developed since 1970, has provided a useful perspective from which to understand the rise, nature and impact of the modern world order or society. For many decades, social theories made difficult to think of the world as a society. Societies were independent systems, as the world did not have a sovereign state, and global independence was recognized only in a limited way, the world was by definition not a society (Heintz, 1972; Robertson, 1992), but the institutional theory change the scenario and the post-functionalist theories were increasingly outlined emphasizing a cultural conception of society as an “imagined community” (Anderson, 1983) rather than a model of actors involved in functional interdependencies (Meyer 2009).

Even though the world polity and cultural system are relatively stateless, they legitimate strong nation-state identities as the dominant actors, which produce very strong tendencies for the adoption of common models of modernity, despite extraordinary differences in resources and local culture (Meyer, 2009). Nation-State,

organizational and individual actors are seeking models of their actor hood. Participation in these globalized association networks is known to be a strong predictor of proper mobilized actor hood: this is true not only of national states but also of formal organizations and individuals too.

Common models of organization in the world arise and penetrate within social life worldwide; according to Mc Neely (1995) there is no central controlling political organization with legitimate sovereignty over or responsibility for the whole. There are some important organizations such as the UN system and the World Bank/IMF, but these are not sovereign they derive such authority, as they have, from delegation by the subunit nation-state actors that make them up. There are also some rather dominating subunit actors, but these too have no direct or authoritative sovereignty over the system as a whole. Thus modern world society is filled with eager participants in the formation of universalized global culture. These are the direct creators of the general principles of social progress and social equality.

The economic and financial globalization that began on 1970 created a profoundly new environment for policy actors in both developing and developed nations. (Fourcade and Babb, 2002). It has been suggested that postwar economic globalization was the driving force behind the worldwide spread of market-friendly policies (Maxfield 1997; Kitschelt *et al.* 1999). In a context where production and finance have become “flexible” and globalized (Boyer and Hollingsworth, 1997; Castells, 2000), the economy is increasingly perceived as exogenous, and therefore relatively uncontrollable.

Some sociologists have pointed out the importance of international normative pressures in constructing the liberalization process as “inevitable” (Centeno, 2001). According to this analysis, international norms (e.g., the belief in the “market logic”) should be regarded as social constructions whose systematic institutionalization worldwide is effectively organized by “rationalized others”—mainly, international organizations (e.g., the United Nations, the Organization for Economic Cooperation and Development [OECD], the International Monetary Fund [IMF]) and associations, science, and the professions (Haas, 1992; Meyer *et al.* 1997). As has been widely

shown, these institutions routinely produce, teach and thereby contribute to the worldwide diffusion of a set of “norms”, including economic ones, from standards for the collection of economic data to analytical categories for thinking about economic questions and courses of action regarding economic policy.

While this “normative” analytical framework correctly identifies some important vehicles for the dissemination of an economic consensus, it does not account for the latter’s substantive nature, nor does it explain why the consensus changes over time. The fact that we rarely connect the development of technical education and vocational training policies and the impacts on society suggests that the fundamental role of technical education as an agent of globalization is not very well understood by sociologists. Partly this is because we don’t consider that the economy and the labor market play an important role regarding the specificities of this type of education. As Fourcade (2006) said, we might see the necessity for sociologist to look at globalization as a critical factor in the transformation of professions and professional dynamics in the modern era (Fourcade, 2006).

### **1.2.2. The operation of international organizations in the field of Education**

Traditionally international organizations are entities established by formal political agreements between their members that have the status of international treaties; their existence is recognized by law in their member states; they are not treated as resident institutional units of the countries in which they are located (Archer, 2015). Nowadays it is no longer possible to think about international organizations only including those that have traditionally comprised the “global” landscape (Dale and Robertson, 2007). The various multilateral organizations have been joined by an array of new market actors on the global stage; private-for profit universities, multinational firms, credit rating agencies, and so on, all with interest in capitalizing on the education sector. Some of these organizations have become powerful actors in education. The neo-institutionalism theories have seen them as epistemic communities diffusing the norms and values of a world polity based on the values and assumptions of Western modernity.



The international organization's work emphasizes on the role of ideas, knowledge, expertise, discourse, agenda setting, all of which are mechanisms of power of one sort or another. A key feature is that they show how important it is not to adopt a one size fits all assumption, but to probe beyond classifications and examine questions of what mechanisms work, in what ways, for whom and under what circumstances. In other words, it is important not to see the global institutions as similar actors with similar interests on a similar stage, but to view them as part of a complex set of social forces and patterning's which change over time.

On one hand, it is difficult to create a comprehensive categorization of the international organizations, even though it already exist different comparisons regarding the work they do (Schafer, 2006); shown the production of cross organization concepts. Any categorization of the international organizations would include conditionality's (World Bank), conventions (International Labor Organization (ILO), rules (World Trade Organization (WTO), 'norm creation', indicators and peer review (Organization for Economic Cooperation and Development [OECD]) and meta-regulation (European Union (EU) (Dale and Robertson, 2007). On the other hand, it is important to recognize as Bernstein refers that international organizations generates a set of "rules of realization" and "rules of recognition" of the global system that are spread by this entities and dominate; that is, the rules that describe what that system is. What Lukes' called as "the rules of the game" (Lukes, 2005). The kind of rules does not apply only to the content of the education but also to its governance, and in particular to the role of national states in that process.

Moreover it is important to point out that a range of new and different actors have entered into the international organizations scene, and consider that the "traditional" international organization have changed qualitatively in the last decade and a half, both in the nature of their functioning and their mandates across the board, and in the increasing emphasis they have placed on education; the clearest example of this is the OECD, where education has moved from being a "cinderella" function, a small and relatively disregarded part of an umbrella economic and social directorate, to becoming a separate directorate in its own right (Dale and Robertson, 2007).

New actors have arrived on the scene engaged in supplying a highly differentiated range of services, including testing services, tutoring, and specialized knowledge. Thus, not only is there evidence of an emerging ‘globalizing education industry’, but this industry runs parallel with the existing sector, at the same time transforming that sector.

These companies operate differently to traditional education institutions; many are publicly and traded their growth is through differentiation rather than offering across the board services and global expansion in order to achieve economies of scale. These enterprises are not simply symptomatic of the growing market dimensions of education, but their presence is being shaped by state policy (as a result of subsidization, vouchers and so on) at the national and supranational scales. Many of these actors are also involved in promoting their own interests through, for example, the GATS, or through World Bank contracts in the developing world.

### **1.2.3. Mass education at the nation-state level**

Education has traditionally been regarded socially as the most national of activities. For the last decades Education has been scripted linking ideologies of human rights and social progress and has had an enormous impact on educational expansion around the world (Riddle, 1993). It is the institution through which new members of a society are socialized into its ways and understandings, and learn the values and the rules of appropriateness of the society (Dale and Robertson, 2007).

To explain national education developments one must go beyond “national traditions” and situate nation-state within a broader nation-state system. Only then does the world institutionalization of education emerge as a major dynamic to be analyzed. (Meyer, 2009).

Since the end of the Second World War, the growth of education is notable for several reasons. First, the institutions of mass education have spread to virtually all countries despite vast differences in political, economic, social, and cultural

organization. Second, rates of enrollment around the world are high and represent enormous financial investments by many impoverished states and economies. And, third, the rapidity of educational expansion across states was unanticipated, its speed catching by surprise both theorists and practitioners alike (Meyer, Nagel and Synder, 1993).

Mass education, throughout its modern history has been justified by functional theories and ideologies. Education (understood as mass and elite education), both are supposed to be closely tied to the distinctive needs and direction of a particular society. This tradition is not without critics. On one hand the arguments from the left side are based on the assessment that mass and elite education function to maintain societies dominated by economic and/or political interest, on the other hand from the right side, it is seen as the received wisdom both in educational theories of social order. These visions continue to influence the field of comparative education (Meyer, Ramirez and Soysal, 1992).

National education systems originate and become institutionalized in national societies that aspire to develop and progress along quite standard lines. Standardized education arises then as an agreed upon common feature of development and progress as well as a crucial instrument intended to attain these transnational legitimated goals. Conventional functional theories, both from the left and the right, tend to be micro sociological, sharing characteristics that limit their capacity to interpret the global standardization of education. First, standardization would arise from the tight economic and political integration, which implies that educational standardization seems to occur at faster not slower rates than other forms of integration. Second, education is tied into national social systems made up of defined interest therefore the society constructs and reconstructs education as a phenomenon rather than a natural entity. But it is also important to consider a macro sociological aspect while retaining the realism of functional theories.

As a reaction to the functional theories of mass education, a social scientific reaction to functionalism refers that educational systems tend to reflect the distinctive cultural values and perspectives characteristics of national societies, not necessarily

tight functional requisites or even power and interest systems, which emphasize the uniqueness of national educational systems.

Furthermore, the sociological neo-institutionalism perspective defended by Thomas *et al* (Thomas *et al*, 1987) refers that modern education tends almost inherently to be a world enterprise, universal and universalistic in aspiration and as in outcomes, nation-states organizes education as embedded in a world society. Nation-states share the same identity which is a national society with standard modern goals and standard strategies to attain these goals, even though the characteristics of these nation-states differ (Thomas *et al*, 1987). The concept of Mass Education understands Education as a part of the cultural model of the modern society or nation-state. Education is adopted as a part of this model and this adoption symbolizes commitment to becoming a respectable member or “imagined community” legitimated by world society (Anderson, 1983).

Education is standardized because it is part of a general model of the modern nation-state. But model itself also spelled out as a model; the elaboration of education as a relatively specific model in itself greatly increases global standardization (Meyer, 2009).

#### **1.2.4. The construction of a global profession**

Professionalization is traditionally understood as a local and geographically bound process. Typically, we consider that the nation-state sets the boundaries of the ecologies within which professions emerge, structure themselves, and interact with each other. The main reason is that professions’ rights of entry are typically regulated locally, either at the national or the state level. As a result, the sociology of professions has been a particularly fertile ground for developing cross-national and comparative arguments (Abbott, 1988). For instance, the literature draws a sharp contrast between the state-regulated professions of continental Europe and the privately regulated professions of the Anglo Saxon world, even though finer distinctions have often been made within these categories.

The link between nation and profession holds in reverse as well: professionalization is often seen as one of the processes whereby nation building takes place historically. This is especially clear in the case of certain professions, such as the civil service or the military that directly participate in the institutionalization of public authority (Skowronek, 2002). Abbott (2005) suggests that the argument applies more broadly; states, he argues, constructed and defined themselves partly in relation to the very effort made by the emerging professions to establish their own space.

Professions are determined primarily by markets and politics (Sarfatti-Larson, 1979). To know how markets and politics interact at the international level to influence professional dynamics is a quite complex matter. National boundaries and regulations continue to limit the extent to which economic activities (including professional ones) can be transplanted within a country or from one country to another. Professionalism may expand their activities beyond their country of origin, nevertheless it is not in our hands to analyze this specific scenario, not trying to know what happens when a profession extends its influence beyond its national boundaries, meanwhile the process on how professions internationalize looks analytically similar to how they nationalized. In other words, we ought to consider the global logic of professional development as such; both at local and global level rather than to study the globalization of the particular professional domain.

Since the beginning of 1950s and 1960s, the intellectual and institutional framework of the social sciences worldwide started undergoing rapid expansion and transformation of professions, higher education was increasingly seen as a central element in the societal purpose: to construct the nation by providing a moral education to the masses and a technocratic training to the elite. To summed up Colonial European powers exported educational designs to their core colonies during the first half of the twentieth century.

### 1.2.5. The role of UNESCO and its influence on TVET education worldwide

UNESCO is an international organization that aims to create and build a better world, based on peace, the eradication of poverty, sustainable development and intercultural dialogue through education, science, and culture, sharing common values the civilization can achieve this common goal. According to UNESCO's principles, Education is the key to development, is an indispensable tool for humanity to progress to the ideals of peace, sustainability and freedom (UNESCO, 2011a).

The international community have created the sense that, we all have to find out new ways of education and training, considering new key directions towards more inclusive and sustainable model of development, in order to contribute to achieve in a shorter and longer term-both-, a more equitable and sustainable pattern of human development.

Literacy, adult education, teacher education and technical vocational education and training are the educational cornerstones of the organization. At the education sector, UNESCO's mission is focus mainly in four aspects: the first one, is to provide international leadership, creating plural societies with educational opportunities for all; the second one, is to provide expertise and foster partnership to strengthen national educational leadership improving as well the quality of education; the third one, is to work as an intellectual leader propelling the international community to accelerate progress towards Education for All goals; and the last one is to facilitate the development of partnerships and monitor the achievements of the international community.

As the global economic downturn is impacting on unemployment, Technical and Vocational Education and Training (TVET) promotes learning and life skills for young people and adults. It is one main goals (number 3) on the Education For All program to reach at 2015, and it is the third skills that UNESCO has identify on the Global Monitoring Report 2012, as crucial to be acquired in life, as well as the foundation skills and transferable skills. It is also included within the Agenda for Sustainable

Development Goals 2030, within Goal 4 that aims to ensure that all people have access to quality education and lifelong learning opportunities, through providing more equitable access to quality education at all levels as well as technical and vocational education and training (TVET); and the knowledge, skills and values needed to function well and contribute to society.

Technical and Vocational Education and Training it does not refer only to the formal studies related to acquisition of professional skills that seems as an alternative to the enrolment on a higher formal education level, at the university. TVET is a broader concept that comprises formal, non-formal and informal learning; it takes place across a wide range of institutions, starting from schools, it also includes public and private vocational institutes, tertiary education organizations, community projects in different locations, at the study centers, at home or at the workplace. (UNESCO, 2009a) TVET is a complex formulation that interrelated many different variables and components, sharing a common goal: contribute significantly to human development.

UNESCO's Global Monitoring Report 2012, share that there is an ongoing concern related to the youth world of work from an innovative and comprehensive perspective, it is mention that "it is time to rethink about how education and training contribute to the economic growth and tackle the global unemployment". It is also mention that a reflection on what kinds of skills and competencies youth may need in order to implement better ways to access to the world of work have to be done, not only for urban but also for rural livelihoods.

From this starting point UNESCO identifies tree main types of skills that all young people may need to be acquired (foundation skills, transferable skills, and technical and vocational skills) (UNESCO 2012a). The first one is the foundation skills, which refers to the most elemental ones, that include literacy and numeracy skills that are needed in order to get a job that can pay enough to meet daily needs. (This is the prerequisite in order to further get the other skills, the transferable and technical and vocational ones). The second one is the transferable skills, help each individual to adapt himself from different work environments, and it includes de ability to solve problems, and communicate information and ideas in a creative and effective way. The last one is

the Technical and Vocational Skills, which refers to the specific know-how needed to perform effectively and competently a job. These three competencies create a pathway that young people can follow and acquire through the formal or from other alternative educational programs.

Technical Education and Vocational Training cannot be handled like a ready-made tool that can be used without studying its nature and analyzing deeply the context in which it has to take action, it is influenced by historical factors as well as philosophies of education and training. (Beduwe, C. et al, 2009) TVET is diverse and varies widely from country to country, as we have mentioned, but there are also common global challenges to face; demographical constraints, economic and labor market straggles, globalization and ITC, sustainable development, peace and security concerns, as well as youth engagement (UNESCO 2012b).

#### **1.2.6. The importance of TVET in the Southern African Development Community (SADC) region**

After the Jomtien World Conference on Education for All (EFA) of 1990 there was a sharp decline in international support to TVET in Africa. On the one hand, donors were convinced of the overriding imperative of focusing their resources on basic education, reinforced by the introduction of the Millennium Development Goals in 2000. On the other, a powerful critique of the failings of African TVET became widely accepted. This centered on a lack of relevance in terms of skills developed; a divorce of providers and their staff from industrial realities and interactions; and high costs of provision, all of which were exacerbated by rapid changes in industrial structure. Where support to TVET did continue, it became increasingly focused on a set of systemic changes: new governance structures that gave institutions more autonomy and business more say at the local and national levels; competency-based curricula; and national qualifications frameworks. (UNESCO, 2013a).

TVET neglect was not always shared by African governments, which saw the continued need for programs that dealt with issues of youth transitions to the labor



market in particular. Equally, this perspective was present in the donor countries but in their strong focus on TVET at home rather than in Africa. For instance, in Europe, TVET has been an important part of overall economic and social policy, resulting in a transformation of national TVET systems and the development of a common language regarding, and monitoring process for, TVET across the European Union (EU).

In recent years, there have been signs that the low priority for TVET in Africa has been breaking down. Progress towards the EFA targets, although incomplete, has encouraged African governments to think more actively about where young people will go after basic education and TVET has clearly been identified as one of the answers. At the same time, high economic growth rates across the continent serve to make skills issues more pressing.

These trends rapidly accelerated during 2009. Most significantly, the UNESCO General assembly ratified a proposal to make TVET one of the three thematic priorities for its Education Sector work. Then, in late 2010 it was announced that the 2012 Global Monitoring Report (GMR) would be on skills and that UNESCO was planning a Third International Congress on TVET.

Whilst TVET activities have continued across the Southern African Development Community (SADC) region through the lean years of TVET's unfashionability, the neglect of TVET means that there is very little available research evidence on TVET in the region to help this envisioning process, whether from academic or evaluation sources.

At this moment the SADC approach to TVET is governed by the SADC Protocol on Education and Training (SADC, 1997) where TVET does receive important visibility in the protocol. The SADC Regional Indicative Strategic Development Plan (2003) also notes the importance of TVET for regional development, having as one of its goals: 'promoting educated and skilled society for regional integration and development and global competitiveness'.

Progress towards this goal was reviewed by SADC in 2010. SADC's commitment to TVET revitalization requires SADC to support national policy that must be grounded in national strategies.

### 1.3. MAP OF CONTENTS

In this research study the influence of UNESCO as an international organization on the development of national Technical and Vocational Education and Training systems in particularly two countries of the SADC region: Botswana and Namibia, is analyzed under the umbrella of the globalization process and the global trends of mass education existing worldwide. In order to do so, it has been conducted an introductory macro analysis as well as a quantitative and qualitative studies.

The macro analysis conducted for both countries in a comparative way, it is framed within five inter-related parameters related to contextual factors, skills acquisition, skill requirements, degree of matching and outcomes. Each of these parameters includes a set of indicators established by using the criteria of relevance, feasibility, comparability and timeliness. The inventory of databases used covered key international organizations including the ILO, OECD, UNESCO, WHO and the World Bank, as well as Euro stat and other sources of international data on skills. For many of the indicators, the relevant data already exist but in some cases it has been necessary to go back to the primary sources to obtain the data required to construct the indicators. This analysis show us the historical trends and the existing socio-cultural-economic and educational realities and complexity that of each of these countries are facing now a days, from a comparative point of view.

The quantitative study conducted focuses on measure and analyze the social impact perception or socio-economic benefits provided to participants from the UNESCO TVET project through the implementation of the BEAR project, in order to determine the perceived influence of the organization in the participants' life. Proving that the social function of TVET goes beyond employability and economic development, which nowadays comprise the principal issues in the current TVET

discussion. A semi-structure questionnaire with 53 semi-structured questions and 4 open questions was developed, administrated and analyzed. The questionnaire was divided into two different parts. Part I aimed to analyze the socio-demographic variables and Part II comprises two different dimensions: Output and Social benefits. The first dimension included three categories (human capital, cultural capital and social capital) and the second dimension include (social mobility, economic security and balance of time).

The qualitative study aimed to elicit key participants 'opinions, feelings, experiences and understanding the influence of UNESCO on the development of the national TVET systems in their respective countries. Apart from the participant observation, it was important to allow participants "flow their ideas, experiences and thoughts" through the semi-structured interviews and focus group discussions. This study aimed to find out "how" and "why", in addition to "what" and "how many", therefore a qualitative approach will complement the quantitative one. It was also important to understand and capture people's point of view of the people without predetermining them.

The distribution that has been used to present this thesis or dissertation follows a clear structure. There are three differentiated parts, comprised by several chapters on each of them. The first part focused on the theoretical framework, it includes chapter 2 (globalization, international organizations and mass education), chapter 3 (contextualization of UNESCO as an international organization on education), chapter 4 (contextualization of TVET in education), chapter 5 (TVET at UNESCO) and chapter 6 (UNESCO's project: Better Education for Africa's Rise). The second part of the dissertation focuses on the comparative study and includes chapter 7 (methodology), chapter 8 (descriptive phase: contextualization of Botswana and Namibia as member states of the SADC region) and chapter 9 (juxtaposition and comparative phase); the third and final part, include chapter 10 (final results and conclusions, limitations and recommendations).

Chapter 1, comprises the introduction, the justification and the map of content, it appears as a separate chapter prior to the introduction of the theoretical framework.

Chapter 2, focuses on the description of globalization as a process, it identifies the main actors of the world modern society (individuals, nation-states and international organizations) and explains the operationalisation of the international organizations within the world society and the evolution of the multilateralism in the field of education over time. It also defines mass education as a concept describing its characteristics and common patterns of diffusion and expansion over the world through the international organizations. The chapter finalizes with the description of UNESCO's role as an actor on the expansion of mass education worldwide.

Chapter 3, contextualize UNESCO as an international organization in the education area. It describes not only the background, basement and foundations of UNESCO as the UN specialized agency for Education, it also explains the composition of UNESCO's governing bodies, the scope of work and the role of member states and partners. The chapter finalizes with a description of UNESCO's Education strategy for 2014-2021 and UNESCO's role as leading agency on the development and implementation of Goal number 4, from the Sustainable Development Goals 2030 Agenda.

Chapter 4, starts with the description of what TVET means and imply in education, and defining some relevant concepts as formal, informal and decent work. It continues explaining the importance of TVET in a global world, and finalizes describing which are the existing challenges for TVET on the 21st century from a global perspective, including the demographic changes, the labor market pressures and the impact of the global economic crisis.

Chapter 5, if firstly focuses on the conceptualization of TVET for UNESCO, justifying the especial emphasis on the importance of TVET within the UNESCO Education sector by describing not only the actual UNESCO TVET strategy for 2016-2021 and its core areas, but also the previous strategy 2010-2015. and the relevance of UNESCO's TVET normative instrument. The chapter finalizes with a broad analysis and description of UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training of its role and its mandate.

Chapter 6, explains in detail not only the nature and background of UNESCO's TVET project named Better Education for Africa's Rise (BEAR project) but also, the overall approach used, the description of the project design including goals and features, the structure for implementing and manage the project. It continues by describing in detail the country specificities for both Botswana and Namibia, including the particular beneficiaries and principal actors. It concludes by explaining the monitoring, evaluating and auditing procedures of the BEAR project implementation in both countries.

Chapter 7, is fully focus on the methodology used during the whole research process. This chapter has been divided into different subsequent elements: the first one is the description of the general problem, hypothesis and main and specific goals of the research study. The second one specifies the approach and the research methods that include a literature review (about the existing TVET research) the description on the research design and approach used (introducing an explanation about the nature of the comparative study, the data collection methods used, the data analysis, the consistency measures) and finalizes with the description of the ethical considerations of the study.

Chapter 8, attends to the descriptive phase of the comparative study, by contextualizing Botswana and Namibia as member states of the SADC region. It firstly explain deeply the goals, principles and purpose of the South African Development Community and the perceived relevance of TVET within it. It continues by explaining the socio, cultural, economic and educational realities existing in Botswana and Namibia with a particular focus and description not only on the national educations systems but also about the national TVET systems, that includes :the historical evolution of TVET, the TVET governance structure, the TVET legislation, the formal, non-formal and informal TVET provision nowadays, the different ways of financing TVET, gender and TVET.

Chapter 9, completes the juxtaposition and comparison phase. All the data collected from the macro analysis, and the quantitative and qualitative studies are compared among countries in order to analyze similarities and differences among the data collected and find common patterns that explain the results obtained.

The dissertation finalizes with Chapter 10, whose main goal is to posit the main reflections and conclusions based on the obtained results from the previous chapters. Therefore, the chapter starts with the recapitulation or summary of the main findings, integrating in an holistic way all the relevant data from the comparative, the qualitative, the quantitative and the macro studies, including references to the theoretical framework on the basis of the results, in order to be able to understand and interpret these findings in terms of the social impact perception on the development of TVET systems by UNESCO, the distribution of mass education worldwide through the international organizations and UNESCO's role on the development of national TVET systems. To conclude, a series of main limitations of this research study are enumerated and described, as well as a suggestion about the future research lines. The final remarks of the chapter are the recommendations made by the researcher about the directions on the development of national TVET systems that should be considered onwards.

## CHAPTER 2

### Globalization, International Organizations and Mass Education

Chapter 2 presents the main ideas in two different sections. The first section focuses on international organization and its evolution over time, but includes an introductory chapter presenting globalization as a process and describing the main modern actors of society: individuals, nation states and international organizations; its roles and the existing domain structures within them, legitimizing new power structures of those who are creating the general principles of social progress, social equity.

After the introductory chapter, it continues by focusing on the international organizations and its evolution over time, how a new range of different actors have entered into the international organization scene, and the internal changes on the "traditional" international organizations have occurred over the last decades, not only in the nature of their functioning and their mandates but also in the increasing emphasis they have placed on education. A full description of the historical evolution of the operations from the international organizations in the field of Education for Development is provided and classified in three different periods. The first period from 1945 to 1970 characterized by the rise of education multilateralism in which idealized notions of redistributive social policy became institutionalized as part of the core mandate of the multilateral institutions, the second period from 1970 to early 1980 characterized for being an interim period in which the third world bloc demanded the expansion of this norms to include the right to a global system of economic redistribution, the third period, from 1980 to 1999, characterized by reforms and crisis on the educational for development multilateralism aims and functionality of organizations due to the changes in the world economy and new approaches to social welfare and security take and the last period from 2000 up to now 2016, characterized by a common Global Consensus on Educational for Development Goals among the international community.

The second section focuses on Mass Education and its expansion on the world society. It starts by describing precisely the concept and the origins of mass education within the formal education systems, and the different ways in which mass education is being financed. It continues by explaining the how the diffusion and expansion of mass education through international organization takes place and it finalizes by describing UNESCO as an actor on the expansion of mass education worldwide. Three periods could be clearly distinguished within UNESCO's involvement as an International actor in the expansion of education worldwide over the time. The first period from 1943 - 1973 is characterized by its involvement and active response to the educational demands by member states. The second phase from 1974 to 1984 UNESCO's advocate for the development of a multilateral and integrated plan for education to eradicate global gaps, without much legitimacy from other actors. The third phase started in 1985 up to nowadays, could be clearly defined by two words: crisis and reforms.

## 2.1. GLOBALIZATION AND THE WORLD SOCIETY

For the last four decades globalization has been a significant factor in the development of the world society (Castells, 2010). Globalization as a process it is characterized by the exponential increase on worldwide communication, information, transport, migration and economic transactions (Lallement, 2001). It increase the economic interdependencies, and increases the strength of the supranational organizations, expanding common models of social order (Meyer, 2000) with mass education as a derived consequence of the urgency of national integration and development (Boli; Ramirez, and Meyer, 1985).

Since 1970 the neo-institutional theory provides an understanding about the rise and impact of the modern social order, the new scenario outline a cultural conception of the society as an "imagined community" (Anderson, 1983) where the actors involved do act interdependently, adopting common models of modernity, despite the differences in local cultures (Meyer, 2009). Nation states, formal organizations, individuals and also, international organizations are participating in this globalized association, acting as new members of the global community and seeking models of their actor hood. There is



no central organization with full control or domain, but within this scenario there are international organizations acting at supranational level with the authority and legitimacy from member states as they delegate mandate obtained from the member states to these organizations (e.g. UN system, World Bank/IMF,...) These are the direct creators of the general principles of social progress and social equality.

It was in 1970 when the economic and financial globalization began and created a profoundly new environment for policy actors in both developing and developed nations. International norms organized by international organizations are considered as the social constructions. These institutions routinely produce, teach and thereby contribute to the worldwide diffusion of a set of standardized norms.

Mass education has been integrated as part of the general models of modern society and have spread rapidly among different nation states, as a derived consequence of the urgency of nations to integrate education within the global standards and development process across and within countries all over the world.

### **2.1.1. Actors of the world modern society**

Globalization defines the model of modern world society, which is made up of "actors" - individuals, nation-states, together with the organizations derived from them. (Meyer and Jepperson, 2000). Modern actors are seen as autochthonous and natural entities (Meyer 1988). The cultural construction of the modern world society is based in a progressive construction of the modern actorhood through the time. The term actorhood of individuals, organizations, and nation-states as an elaborate system of social agency had a continuing religious and post religious evolution; as there have been a relocation into society of agency originally located in transcendental authority (gods); the Western cultural framework reflects the development, expansion, and secularization of the principally religious models of Western Christendom, a sustained cultural evolution extending into the human rights movements of the contemporary period (Weber 1927; Thomas *et al.* 1987). In the Western world, humans have the capacity and responsibility to modify society and to intervene in lawful nature, in order to reduce

discrepancies and search for more common and universal principles of justice and morality (as in modern attempts to create and elaborate global conceptions of "human rights" and to implement them in legal systems [Boyle and Meyer, 1998]).

Modern "Actors" include agents for larger realities and larger imagined truths of a larger cultural project. The new actors or agents of the actor hood, can be found throughout the global system and its organizations (e.g., the United Nations system, the World Bank, and so on). The liberal model legitimates an actor as an abstract, rather content-less, entity in social space. It also constructs a standardized agent who manages, elaborates, and standardizes that self, employing the latest cultural recipes: elaborate psychological theories for individuals (e.g., self-development, organizational theories for firms, development theories for nation-states, science, welfare policies, and so on). The liberal model is distinctive in foregrounding "action," creating extensive psychological, biological, and organizational theory about this action, and focusing upon proper agency arrangements and enactment. Cultural devolutions other than this liberal form occurred within the broader Western traditions, producing different distributions of social agency and responsibilities (Meyer and Jepperson, 2000).

The expansion of the rationalized modern society modern generates institutional rules and the organizational structures of mass education, that can be described in the following prepositions: 1) The penetration of society by any rational model of social organization leads to both the adoption of institutional rules of compulsory education and the construction of a mass system of schools to create members of the new model of society. 2) Social forces that incorporate the individual into the collectivity as a member of the rational society lead to the construction of mass systems of schools, but they have less impact on the adoption of central institutional (State) rules of compulsory mass schooling. 3) Social forces that incorporate the individual into the collectivity as a member of the nation-state lead to the adoption of national rules making education universal and compulsory, but they have less direct impact on the construction of mass system of schools (Boli, Ramirez and Meyer, 1985).

### **2.1.1.1. *Individuals***

Individuals as new actors in the modern world society are the central social unit. The formal social values promotes the competence, capacities and responsibility of the individual member of society. The world modern society and nation-states systems have an individual character, that is described and defined by individuals, as mentioned before, as central units of action, stressing the importance of proper socialization, and view collective progress as the result of the competence and commitment of progressive individuals (Boli, Ramirez, and Meyer, 1985). The individual as an actor or citizen within the society have rights and obligations, and the economic market system make assumptions about individual capacities and motivations in both production and consumption. Mass education as a secular procedure construct the individual as the central actor of modern institutions of the religious, political and economic organization in the world society.

### **2.1.1.2. *Nation-States***

The nation-state with individuals as citizens, and organizations as components, is found worldwide. General models of modern society and the nation-state have spread rapidly, with mass education as a derived consequence of the urgency of national integration and development (Boli, Ramirez and Meyer, 1985). While there are attempts in Asia and the Islamic world to limit the spread of models originating in the West, a surprising feature of the modern system is how completely the Western models dominate world discourse about the rights of individuals, the responsibilities and sovereignty of the state, and the nature of preferred organizational forms. One can as yet find little impact of other huge civilization forces (China, Islam) on the standardized rule structures found in those institutions, organizations, and associations operating on a world scale (Meyer, Boli, Thomas, and Ramirez 1997). Most recently, the various formal "others" of this system-collectives representing sciences, professions, and rationalized world associations-explicitly deploy the expanded standards and putative truths as collective culture for the world, with substantial influence. In effect, Christendom had some modest attainments as a missionary movement, but has achieved

vastly greater hegemony in its transformation into science, law, and rationalized education (Boli and Thomas 1999).

The nation-state along with the individual, has been a primary generator of social mobilization throughout modern history. It is now entirely dominant as an organizational form, having defeated or incorporated alternatives. Like the individual, the nation-state is seen in modern society as a rational, purposive actor, organizing society toward progress and competitive success in the larger interstate system. The nation-state incorporates the individual through the institution of citizenship, which both grants participatory rights in political, economic and cultural arenas and imposes strong obligations to participate in state directed national development (Marshall, 1964). As mentioned before, education is been regarded as the most national of activities. It is the institution through which new members of a society are socialized into its ways and understandings, and learn the values and the rules of appropriateness of the society (Dale and Robertson, 2007). Nation-states share the same identity which is a national society with standard modern goals and standard strategies to attain these goals, even though the characteristics of these nation-states differ. (Thomas *et al*, 1987) Education is a part of the cultural model of the modern society or nation-state. symbolizes commitment to becoming a respectable member or “imagined community” legitimated by world society (Anderson 1983).

### **2.1.1.3. *International organizations***

World level processes seems to be at work, and general models of modern society have spread rapidly, with mass education as one of the main components. The organizational structure that manage and leads the diffusion of mass education are international organizations: UN system, the World Bank, professional bodies and national aid programs. These international actors share a common vision and goal of rapidly developing independent nation-states, and mass education is seen by all as a crucial property and also a cause of political and economic development. The educational expansion has spanned state boundaries despite great variations in

productive capacity and social mobilization at nation-state level (Meyer, Nagel and Snyder, 1993).

## 2.2. INTERNATIONAL ORGANIZATIONS AND THE WORLD SOCIETY

Traditionally international organizations are defined as entities established by formal political agreements between their members that have the status of international treaties; their existence is recognized by law in their member states; they are not treated as resident institutional units of the countries in which they are located (OECD/DAC, 1972).

Nowadays it is no longer possible to think about international organizations only including those that have traditionally comprised the “global” landscape (Dale and Robertson, 2007). The various multilateral organizations have been joined by an array of new market actors on the global stage; private-for profit universities, multinational firms, credit rating agencies, and so on, all with interest in capitalizing on the education sector. Some of these organizations have become powerful actors in education. The neo-institutionalism theories have seen them as epistemic communities diffusing the norms and values of a world polity based on the values and assumptions of Western modernity. The international organization’s work emphasizes on the role of ideas, knowledge, expertise, discourse, agenda setting, all of which are mechanisms of power of one sort or another. A key feature is that they show how important it is not to adopt a one size fits all assumption, but to probe beyond classifications and examine questions of what mechanisms work, in what ways, for whom and under what circumstances. In other words, it is important not to see the global institutions as similar actors with similar interests on a similar stage, but to view them as part of a complex set of social forces and patterning which change over time.

On one hand, it is difficult to create a comprehensive categorization of the International Organizations, even though it already exist different comparisons regarding the work they do (Schafer, 2006). Any categorization of the international organizations would include conditionality's (World Bank), conventions (International

Labor Organization [ILO]), rules (World Trade Organization (WTO), ‘norm creation’, indicators and peer review (Organization for Economic Cooperation and Development (OECD) and meta-regulation (European Union (EU) (Dale and Robertson, 2007). On the other hand, it is important to recognize as Berstein refers that international organizations generates a set of “rules of realization” and “rules of recognition” of the global system that are spread by this entities and dominate; that is, the rules that describe what that system is. What Lukes’ called as “the rules of the game” (Lukes, 2005). The kind of rules does not apply only to the content of the education but also to its governance, and in particular to the role of national states in that process.

Moreover it is important to point out that a range of new and different actors have entered into the international organizations scene , and consider that the “traditional” international organization have changed qualitatively in the last decade and a half, both in the nature of their functioning and their mandates across the board, and in the increasing emphasis they have placed on education; the clearest example of this is the OECD, where education has moved from being a cinderella function, a small and relatively disregarded part of an umbrella economic and social directorate, to becoming a separate directorate in its own right (Dale and Robertson, 2007).

New actors have arrived on the scene engaged in supplying a highly differentiated range of services, including testing services, tutoring, and specialized knowledge. Thus, not only is there evidence of an emerging ‘globalizing education industry’, but this industry runs parallel with the existing sector, at the same time transforming that sector.

These companies operate differently to traditional education institutions; many are publicly and traded their growth is through differentiation rather than offering across the board services and global expansion in order to achieve economies of scale. These enterprises are not simply symptomatic of the growing market dimensions of education, but their presence is being shaped by state policy (as a result of subsidization, vouchers and so on) at the national and supranational scales. Many of these actors are also involved in promoting their own interests through, for example, the GATS, or through World Bank contracts in the developing world.

### **2.2.1. The operation of international organizations in the field of Education for Development.**

The foundations of actual education for development regime were laid in the establishment of systems of mass public education in western countries in the period between the late 19th and mid-20th century when many features of the social welfare state were institutionalized and accepted as 'norms' for state behavior (Mundy, 1998). Efforts were enhanced worldwide following World War II, as it can be distinguished four different periods of change in multilateralism (Mundy, 1999). The first period from 1945 to 1970 characterized by the rise of education multilateralism in which idealized notions of redistributive social policy became institutionalized as part of the core mandate of the multilateral institutions, the second period from 1970 to early 1980 characterized for being an interim period in which the third world bloc demanded the expansion of this norms to include the right to a global system of economic redistribution, the third period, from 1980 to 1999, characterized by reforms and crisis on the educational for development multilateralism aims and functionality of organizations due to the changes in the world economy and new approaches to social welfare and security taken (Mundy, 1998) and the last period from 2000 up to now 2016, characterized by a common Global Consensus on Educational for Development Goals among the international community.

#### ***2.2.1.1. The rise of educational multilateralism, 1945–1970***

International multilateral organizations, as United Nations, the World Bank and the Monetary Fund, were created with the aim of enhancing the development of a world society, by states whose purposes would be the integration and expansion of a world economy buffering the Keynesian state from international economic fluctuations. The characteristics of this multilateralism were the common shared goals among all the actors, which aspire to achieve security and peace to the expansion of a stable, liberal world economy and the protection and institutionalization of a Keynesian welfare state

model for national development. By 1945, despite the historical reluctance of Western governments to engage multilaterally in what was seen as uniquely domestic matters, it finally succeed due to a strong call for multilateral institutions to engage in social policy fields, for the first time in modern history. In addition to it, the US support for a more expansive conception of multilateralism and world order provided in 1940 the context where different actors could formed an international education organization, previously forbidden by the League of Nations. Nongovernmental organizations and actors emphasize this interest, and advocate by promoting the notion that intellectual and educational cooperation was essential to the construction of a peaceful, democratic and civilized international society. This can be seen as the promotion of the ‘common welfare of mankind’ through cooperation on mass education, social security, high levels of full employment, which appear in war-time and immediate post-war multilateral agreements like the Atlantic Charter, the Charter of the United Nations, and the Universal Declaration of Human Rights (World Peace Foundation, 1945). There was a highlighted and strong commitment to the expansion of mass education systems which had grown out of a century of historical convergence among Western educational systems. The commitment at that time was lead by the USA, reinforced by its new role as underwriter of the new multilateral system, and by its own historically constructed faith in the link between mass education, national development and democracy (Ramirez and Boli, 1987; Ruggie, 1992). Therefore, by 1945 the US and French Government stated that educational cooperation should be linked to the goal of international ‘equalization,’ a theme that achieved widespread consensus at UNESCO’s founding conference in 1945 (Jones, 1988). Nevertheless by 1949 while the Marshall and Colombo Plans were taking place, it was obvious that western countries preferred to use bilateral agreements for post-war reconstruction and decolonization rather than multilaterally. This tendency of providing educational assistance through bilateral aid programs remained the priority during 1960 and 1970s, there were offered in limited quantity, normally in the form of expertise and training, and tied to western goods, services and geopolitical interests (Lee, 1995). Moreover, educational aid remained focused on secondary, vocational and higher education (OECD/DAC, 1972).



### *2.2.1.2. 1970s and early 1980s: From contestation to impasse*

As the 1970s decade started, the operationalization of multilateralism changed, this new period of multilateralism was characterized by the development of a new international political space, in which two main issues gained importance: equity and global redistribution. The developing countries made a series of demands which included new mechanisms of international economic regulation, as they claimed that the existent relations between north and south were unequal and economically exploitative, and there were the reason for their underdevelopment.

In the area of education multilateralism, since 1960, the network of international organizations was amplified. The broader network was shaped in two ways by these changes: first, prompted by the development impasse in western countries characterized by skepticism about the outcomes of development efforts in the South, and a wave of questioning about the value of formal schooling and its capacity to promote economic development; and secondly by the Third World demands for a more truly redistributive form of multilateralism, and the trends to reframe the purposes of international educational cooperation, characterized by rising interest and research on rural, non-formal and vocational education (World Bank, 1974).

As a results, new trends in the allocation of intergovernmental resources for multilateral activities in education emerged: the World Bank, whose loans had begun to overshadow all other forms of development assistance by the early 1970s developed its own technical expertise and vision of an appropriate educational multilateralism. UNICEF was very instrumental in forging an interim ideological consensus about the scope and meaning of redistributive multilateralism, meanwhile UNESCO lost countries confidence on its programs diffusion due to the politicized approaches to education. Therefore, the legitimacy and centrality of UNESCO as organization, was eroded by the rise of other multilateral actors and by almost a decade of disagreement between Third World and Western members over the organization's broader purposes and roles.

### ***2.2.1.3. Crisis and reform: 1985 to 2000***

By mid 80s UNESCO remained significantly unresponsive to the educational dimensions of the unfolding economic crisis that was taking place in the South, and to the educational solutions being advocated by other international organizations like the World Bank and UNICEF.

The World Bank start focusing on its neo-liberal agenda for educational policy; UNESCO meanwhile was focused on its internal reform with nothing to say to other international organizations, nor did it contribute to the emerging debates on public choice, standards, and privatization of education (World Bank, 1986).

### ***2.2.1.4. Common global consensus on Education for Development Goals 2000-2016***

In late 90s and year 2000, education early emerged as a central part of a new international consensus about development. with an starting point in 1990 with the approved World Declaration on Education for All adopted in Jomtien, Thailand; this was also reflected not only in the priority given by the UN Member states to education within the Millennium Development Goals, but also the near-revolutionary attention that the World Bank and the International Monetary Fund (IMF) played to the achievement of universal access to basic education in their country programs (Millennium Development Project 2005a, b).

The elevation of education within the new official development agenda is perhaps not so surprising, as it straddles the divide between neoliberal and social welfare orientations. The World Bank (2002a, b), was regarded in this period as one of the leading advocates for greater public spending on basic education.

The new official discourse of education development during this period, was based on the expansion of educational opportunity, which can promote income equality and growth, is a win-win strategy that in most societies is far easier to implement than

the redistribution of other assets, such as land or capital. Education is seemed in this period as one of the most powerful instruments known for reducing poverty and inequality and for laying the basis for sustained economic growth, sound governance and effective institutions.

## **2.3. MASS EDUCATION AND ITS EXPANSION ON THE WORLD SOCIETY**

### **2.3.1. Formal Education and the origins of Mass Education**

Mass educational systems appeared at a steady rate before the 1940s and sharply increased after 1950 (Meyer, Ramirez, Nohoglu, 1992). Since the end of the Second World War, the growth of formal education has notice an extreme increase for several reasons. First, the institutions of mass education have spread to virtually all countries despite vast differences in political, economic, social, and cultural organization. (Meyer, Nagel, Snyder, 1993). Secondly, because formal Education has spread, becoming a compulsory, essentially universal worldwide system. It has even expanded greatly in the poorest countries. (Boli, Ramirez and Meyer, 1985). According to UNESCO Global Monitoring Report (UNESCO, 2015a) since 1999, 80 million more children and adolescents are now enrolled in school; while there has been progress towards universal primary enrollment from 84 percent in 1999 to 91 percent in 2007, 58 million children are still out of school. In 2015, in low and middle income countries, one in six children will not have completed primary school. Although the richest countries have reach universal enrolment, there is an stronger fervor for education in the poor countries. In both rich and poor countries, secondary education has expanded to the point where it should be considered a mass way of education as well, around 30 percent more adolescents are enrolled in secondary education globally than in 1999, representing almost 117 million more students (UNESCO, 2015a)

Mass education has emerged and expanded broadly, sharing common institutional features; The first one, is the institutional ideology, which implies that everywhere in the world share the same interpretative schemes underlining the observed

reality (universal, standardized and rationalized education). It incorporates every single person without differentiate ethnicity, class and gender. The second one, Mass education has developed a general system that express general principles and validity; it does not deal with particular local problems or group conflicts. It develops national regulations, laws and religious structures. Thirdly, the main purpose of mass education is to conduct the socialization of the individuals as social units. The rituals of mass education enhance the individual's choice and responsibility, not the immersion of individuals in corporate groups such as castes, classes, extended families, and so on (more traditional educational forms aim less to socialize individuals as distinct social entities than to redefine their social identity) (Mundy,2006).

Therefore, mass education became a core component of the action-state model. Its collective standardization celebrates the unified sovereignty and purposiveness of the collectivity (the state), its individual focus and universality enact the integrated and universal character of society (the nation of citizens),and its secularized culture defines the character of the nation-state as an enterprise that is designed to attain progress. From this point of view, mass education is not primarily an adaptation to societal realities of function and power. It arose as nation-states and candidate states affirmed, enhanced, and thus legitimated nationhood within the broader Western civilization network ( Boli, Ramirez, Meyer, 1985; Meyer, Boli, and Thomas, 1997; Ramirez and Boli, 1987).

Functional theories, both of the right or the left, that stress national factors have failed, as educational expansion has spanned worldwide, despite the great differentiation in productive capacity and social mobilization at national level. (Meyer, Nagel, Snyder, 1993) For most individuals in the planet, education is the most important element of their social status, and there is a central importance on each person educational background affecting directly on people's life chances. There has been a reductionist tendency that enhanced the interest of particular groups, aiming for power, that build mass education institutions for their own purposes. On one side, mass education could be explained as a way of resolving the strains of differentiation, and on the other side, it legitimates the vertical differentiation of the society. Therefore the rise of mass education involves the analysis of the power relations of interest groups in society. Third World countries, which are generally characterized by a traditional social

organization, extreme social inequality and relative lack of autonomy due to their subordination to the developed countries are engaged in the same progress-oriented societal project as the rich developed counterparts (Boli, Ramirez and Meyer, 1985).

### ***2.3.1.1. Conceptualization and characteristics of Mass Education***

The concept of Mass Education, involves an ideological conception of a new society, incorporating all individuals in a unified and progressive collectivity that would successfully operate in a real world as a nation-state, whether organizationally centralized or not (Anderson, 1983). Mass Education is an outcome of the religious, economic and political processes that expand and secularize the organization and ideological rules of individual memberships in these larger units (nation-states) (Boli, Ramirez and Meyer, 1985). Mass Education is part of the effort to construct the universalistic and rationalized society, incorporating individuals and their actions. Mass Education turn to the other main dimension of modernization, the increasingly differentiated division of labor, as epiphenomenal reflections of social differentiation. Mass Education embrace Third World Countries as much as for the developed West; even though third world countries are characterized by a good deal of traditional social organization, extreme social inequality, and relatively lack of autonomy due to their subordination to the developed countries, they are nonetheless enthusiastically engaged in the same progress-oriented societal project as the west countries (Boli, Ramirez and Meyer, 1985). Everywhere in the world there is a common interpretation about modern Mass Education, which can be observed through the commonly standardize school infrastructure existing even in the most remote peasant villages that conform it.

Mass Education tendencies involves as mentioned before common characteristics:

- First of all Mass Education is institutional chartered to be universal, standardized and rationalized; it focuses on the socialization of individuals for membership in society. It aims to extend membership to all individuals within the society, it incorporates everyone, cutting across such lines of differentiation as ethnicity,

region, class and gender. It articulates a secular vision of progress, in which action and achievement take place in this world, not in some transcendental cosmos. It sets increasingly a standardized curriculum (Benavot et al. 2010). In many countries the higher status people, send their children to distinctive elementary schools that only differ from the mass institutions in the resources they have than in their general aspirations or curricula. (Boli, Ramirez and Meyer, 1985) It links mastery of the curriculum with personal development and the latter with the progress of the nation-state (Meyer; Ramirez, Nohoglu, 1992).

- Secondly, Mass Education is very highly institutionalized at a general collective level (Meyer, 1977) it shares an homogenous aspiration through the world, that has conformed homogeneous organization forms. Education systems everywhere are build to conform world-institutionalized standard models. Mass Education does not aim to deal with particular local problems or group conflicts, it is a general system expressing principles of broad meaning and validity. It encompasses the most central aspects of human life: the nature of God and moral action and the laws of the natural world. It developed out of comprehensive religious structures, as well as broad national regulation and laws. Nevertheless, it is difficult to explain the broad ideological mission of mass education.

- Thirdly, Mass Education is seemed as the institution that conducts the socialization of the individual as the central social unit (Boli and Ramirez, 1984). Education systems attempt to build collective society by enhancing individual development; modern systems have this individualistic character in the sense that they also define the individuals as the central unit of action, stressing the importance of proper socialization, and understanding the collective progress as the result of the competence and commitment of progressive individuals. The rituals of Mass Education celebrate the reality of individual choice and responsibility not the immersion of individuals in corporate groups such as castes, classes, extended families and so on.

### *2.3.1.2. Financing Mass Education*

There has been an important commitment from the international community and donor agencies to achieve the Education for All (EFA) goals since 2000, when the international community commit itself in Dakar and established as a world common endeavor, the formal enrolment within Primary Education for every child in the world, which was a visible way of expanding mass education systems.

Even though the ultimate financial responsibility for improving educational access, participation and quality relies on national governments, in many countries, especially those most affected by conflicts and poverty, the educational progress has been brought by international aid coming from bilateral, multilateral and other donor agencies in order to construct classrooms, distribute textbooks, pay teachers and assess learning (Benavot et al. 1991).

Economically the share of all sector aid going to education has remained virtually unchanged at about 12 percent since 2000 from the overall development assistance. Members of the OECD Development Assistance Committee (DAC) disbursed in 2007 approximately 10.8 billion US\$ of overall aid to education. However, the share of aid going to basic education declined from 41 percent to 38 percent from 2002 to 2007.

The number of donors providing aid to education is concentrated among a small group: only five donors account for over 60 percent of all aid commitments to basic education. This means that decisions to cut funds among certain donors can have major global implications. Overall aid from non-OECD countries (Saudi Arabia, Brazil, India, China) appears to be rising; so too are the contributions of private foundations and philanthropies. However, the share of this aid targeting educational frameworks varies considerably across countries and agencies, and it is inconsistent over time. Finally, aid allocation to conflict-affected countries, where educational challenges are acute, is highly concentrated (mostly to Afghanistan, Ethiopia, and Pakistan); many other conflict-affected countries receive insufficient aid relative to their educational needs

(Benavot et al., 2010). At best, the current international aid level is one-half or one-third of what it should be—probably \$20 billion per year (UNESCO, 2015a).

### **2.3.2. The expansion of Mass Education**

#### ***2.3.2.1. The diffusion and expansion of Mass Education through international organizations***

The evolution of a multilateral regime for international organizations in education took place mainly as we have mentioned before, after World War II, when Education was considered as a universal right in the 1948 Universal Declaration of Human Rights (Article 26), and the establishment of UNESCO as leader, with its broad mandate to support (among other things) the universal right to education. (Mundy, 2006).

The organizational apparatus that articulates the diffusion of mass education is in general terms assigned mainly to the international organizations (the UN system, the World Bank, OECD, professional bodies) normally put them in place through the national aid programs). For many reasons, these international actors all now embrace a global vision of rapidly developing independent states, and mass education is seen by all as a crucial property (and cause) of political and economic development. Nowadays, mass education is very highly institutionalized at a very general collective level (Meyer, 1977).

International organizations in general took up the notion that education could be used as a tool in national development by spreading ways of mass education, and educational aid began to account for something between 5 and 10% of all aid flows. Mass education regime as a new form of education for development implemented by the international organizations share three main characteristics: First, although the concept of a universal right to education and of mass public education figured strongly in the international discourse since the 1950 - 1960 (for example, in the UN Charter, UNESCO's mandate, and host of international declarations at regional meetings of



developing country governments) this was not what was supported by major flows of funding or technical expertise. Most aid flows to education were focused at levels beyond primary schooling. The reasons for this were: 1) Donors assumed that national governments would/should fund and provide universal primary schooling. 2) Recurrent costs like teachers and textbooks, which are the largest piece of any public education budget, were seen as ineligible for aid funding - to fund recurrent costs would be 'unsustainable'. 3) The bilateral donors who dominated the field wanted to tie aid to their own economic and political interests and thus were linked towards programs of post primary training, foreign scholarships and institution-building (Mundy, 2006).

The second characteristic has been its profound decentralization and disorganization. No formal system of governance or coordination among its many international organizations engaged ever emerged. UNESCO, As putative leader in the field started organizing ambitious regional conferences and targets, but due to its limited economic resources and strong politicization in the 70s and 80s, UNESCO never developed the capacity to coordinate the growing number of new agencies interested in the development of new ways of mass education (Jones, 1988). Due to this situation UNICEF during the 60s began to develop its own approach to educational development on behalf of world's children but not in coordination with UNESCO. The World Bank also started developing its own approach of education for development on the 60s, and overtook UNESCO in terms of expertise and flows of funding by 1980. Nevertheless the World Bank didn't focus its attention to the educational activity coordination of other donors, instead it focus its action on the development of an economic rationale for its educational activities to support its own distinct approach to educational development (Mundy 1999).

Meanwhile there was no coordination among the international organizations in terms of developing a common framework for action or establishing common goals towards the implementation of common ways of implementing mass education systems, every industrialized country include included education-sector programs in its bilateral aid programs, with its budget allocation that vary between the 3 and 30% of total bilateral official aid.

The result has been that during the period from 1960s to 1990s even though all the international organizations tried to coordinate education-sector activities among its members, for example: UNESCO's regional conferences on the 60s, OECD DAC efforts to coordinate education-sector activities in the 70s, the World's Bank initiative in Sub-Saharan Africa in the 80s and the Jomtien World Conference on Education for All in the 90s, the educational situation was characterized by the leading role of many small to medium-sized, short-term, bilateral transaction, working most of times at cross-purposes. For example countries like France, England, and Australia focused attention on scholarships and provision of teachers; others adopted vocational, adult and literacy education as the focus of their support (Nordics), all outside of any systematic or coordinated effort to support national planning for educational change (King, 1991). Therefore, this regime had a fairly limited range of actors and a fixed array of aid modalities.

The reality faced by the implementation of actions by the international organizations was that, the growing community of professional experts on education for development that were increasing within the international organizations and research institutions, could not provide good expertise as the donors behind a common agenda change so often and very widely the priorities to develop (Chabbot, 2003) and the southern governments were not often active participants within it (Samoff 1999, 2001) they remained outside its conferences and conventions, despite the existence of international teachers unions and international humanitarian and religious organizations with an interest in education that predated official educational aid activities (Murphy and Mundy, 2002).

**Figure 1: Evolution of Education as a global development priority for United Nations**

ENTITY	YEAR	NAME OF FORUM	COMMITMENT
United Nations Conferences	1989	Children's Summit	Convention on the Rights of the Child (free primary education) agreed by 190 states.
	1990	World Conference on Education for All Jomtien, Thailand	World Declaration on EFA
	1993	World Conference on Human Rights	Vienna Declaration and Program of Action (Members states obliged to promote gender equality, esp. In Education)
	1995	World Summit for Social Development Copenhagen	"universal and equitable access to education" as one of its commitments
	2000	World Education Forum (Jomtien follow up) Dakar Senegal	Dakar Framework for Action: - Expand Early Childhood Education - Free UPE by 2015 - Access to life skills - 50% Improvement in Literacy - Eliminate gender disparity 2005 - Improve quality education World Bank Presents First Track Plan with the purpose that no country seriously committed to EFA will be thwarted by their lack of resources.
	2000	Millennium Summit and Millennium Declaration	Millennium Development Goals: - Goal 2: Achieve Universal Primary Education - Goal 3: Promote gender equality and empower women (eliminate gender disparity in primary and secondary education)
	2002	United Nations Conference on Financing for Development, Monterrey, Mexico	Commits governments, international financial institutions and United Nations organizations to work through new forms of development partnerships and coordinate external aid
	2015	World Education Forum . Incheon, South Korea	Elaboration of the new education agenda for the Sustainable Development Goals 2015-2030
	2015	United Nations - Sustainable Development Summit	Goal 4: Quality Education (to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all)

Source: Own Elaboration based on Mundy (2006).

### ***2.3.2.2. UNESCO as an actor on the expansion of Mass Education worldwide.***

UNESCO was created in 1946 as part of the broader network of United Nations organizations, this moment marks the origin of a broadly supported regime of educational cooperation in the post-World War II era. The early history of UNESCO's work in education is especially important because it underscores the way in which the shared conceptualizations of multilateralism and world order which developed after 1945 broke from the more restricted notions of peace and security institutionalized in

the work of the League of Nations (Mundy, 1999). Over time, UNESCO's work in education have shown some of the significant limits which characterized this new multilateral regime, and shown us how a single organization has struggled to mark out its place within the consolidation of a broadly shared model for domestic development, often termed the 'Keynesian welfare state' (Ruggie, 1983).

Three periods could be clearly distinguished within UNESCO's involvement as an International actor in the expansion of education worldwide over the time. The first period from 1943 - 1973 is characterize by its involvement and active response to the educational demands by member states. The second phase from 1974 to 1984 UNESCO's advocate for the development of a multilateral and integrated plan for education to eradicate global gaps, without much legitimacy from other actors. The third phase started in 1985 up to nowadays, could be clearly defined by two words: crisis and reforms.

#### **a) First Period: UNESCO 1943 -1973**

The first years of UNESCO's endeavor, its involvement in education was intense and focus in provide substance and order to the general expectations. Between 1946 and 1955, UNESCO launched an enormous range of educational activities, responding to the varied demands of governmental and non-governmental actors, and providing high level of technical expertise. As time went on, the post-war multilateral system evolved, and UNESCO's wealthiest members limited the scope of the educational organization aspirations, as they constrained UNESCO's budget, and forced a concentration of its activities (Sewell, 1975) as a response to these demands, UNESCO established a flagship for the organization's broader purposes by the promotion of "fundamental education" as the main concept, aiming to express a commitment to the goals of educational equalization and redistribution among nations, primarily through the provision of literacy and adult education linked to community development in developing countries. This reconceptualization of education was accompanied in 1961, by the opening of four UNESCO regional offices (Beirut, Bangkok, Santiago, Dakar), so it began to focus its operational activities on technical

assistance for planning and training. During the same year, 1961 UNESCO launched a pilot for the world literacy campaign that led the inclusion of adult literacy in national education development plans despite the reluctance of western countries (especially United States) to finance that mass literacy effort. By the mid-1960s, UNESCO emerged as the central mediator between developing country demands for educational funding and the resources for development now available from Western governments through the United Nations, bilateral aid programs, and the World Bank. UNESCO helped to spread a model of education which embedded learning within an ideology of state-led economic modernization and married this to concepts of individual productivity and national citizenship (McNeely, 1995; Ramirez and Boli, 1987). It deepened this model by stressing that successful national educational development depended primarily on what it termed 'national political will.' Therefore, during this period UNESCO helped to establish an international consensus about Third World educational needs, with its underlying objective of global educational equalization. And this was true not only in literacy but also in the field of mass primary education.

**Table 1: Periods in UNESCO's history**

	<b>Period 1 (1945-1973)</b>	<b>Period 2 (1974-1984)</b>	<b>Period 3 (1985 - Today)</b>
<b>Changes in World Order</b>	Rise of Postwar Multilateralism Embedded Liberalism	North-South Confrontation and the Decline of the Post-war International Order	Globalisation and World Order Rise of Rich Country Multilateralism and Neo-liberalism Reform of UNESCO
<b>Unesco: Key events</b>	<p>Rise of Education Development Regime.</p> <p>Unesco was formed in 1945-1946 as UN specialized agency with mandate on education, science, culture and communications</p> <p>Budget begins to grow after 1960s, as international development becomes central charge of UN.</p>	<p>Contestation and Crisis in Unesco.</p> <p>Unesco enters period of non-growth marked by its adoption of Third World calls for a new international economic order (1974) and for a new world information and communication order (1977)</p> <p>US, UK and Singapore withdraw from UNESCO in 1984/5</p>	<p>Unesco struggles to reform its work in context of declining budget</p> <p>Greater cooperation with UN; downsizing and decentralization of programming to field</p> <p>The focus on a "culture of peace" has been introduced</p>
<b>Changes in Unesco's educational activities</b>	<p>Wide array of programs: educational, reconstruction in Europe, collection of educational statistics, promotion of interational forum in adult education, special education, higher education and peace.</p> <p>Increasing concentration of resources on promotion of compulsory, free primary education and the provision of technical assistance to education for national political and economic development.</p>	<p>Contestation around the meaning of national development turns discussion to critical literacy, endogenous education and local control.</p> <p>Central concentration of organization lost, Unesco's prominence in the delivery of technical assistance for education development erodes</p>	<p>Educational activities streamlined around basic esucarion and new UN issues, peace, and conflict resolution, the enviroment.</p> <p>Greater reliance on "moral" as principel mode of operation. Reflected in world conferences, publication of "Learning the Treasure Within" and the EFA Forum</p> <p>"Rethinking Education Report"</p>

Source: Own elaboration based on Mundy (1999).

**b) Second Period: UNESCO 1974-1984**

UNESCO's first attempt to respond to the new demands from the developing countries and broader challenges diverged from those of its multilateral partners because its formal responsibilities included education in both the developed and developing world. Under the mandate of the elected African Director General M'bow, UNESCO philosophically reconfigured its work to meet the demands for a new world order (UNESCO, 1976). On one hand, themes as endogenous development and the cultural dimensions of learning to its framing of educational cooperation were introduced (UNESCO, 1983). On the other hand, the report on *Learning to be* urged governments worldwide to adopt an expanded, innovative conceptualization of education, and to recognize the need for flexible alternatives to formal schooling by committing themselves to 'lifelong education'; at the same time, it also suggested a contradictory vision of educational multilateralism. It advocated multilateral efforts to develop a form of educational planning which is 'integrated, global and long term,' and placed special emphasis on the eradication of global gaps in educational opportunity (UNESCO, 1972).

While the organization began to open up new political spaces for the Third World demands, these demands undermined the legitimacy and centrality of the organization within the evolving multilateral system. Therefore, by the early 1980s, UNESCO's educational activities were no longer providing the organization with the kind of legitimacy and authority which they had once afforded in the 1960s and early 1970s.

**c) Third Period: UNESCO 1985 to present**

In the 80's UNESCO was living a deep crisis, which was a harbinger of the broader shifts in multilateralism. By the mid-1980s UNESCO had already spent almost a decade evading Western governmental pressures for a more limited, functional and pragmatic program, choosing instead to focus on high level debate about philosophical

and conceptual issues. According to Lee (1995) and Mogami (1990) UNESCO was an easy target for the United States of America (USA) campaign to reform the United Nations around more narrow technical tasks. USA left UNESCO in 1983 claiming its little functional value (United States, 1984 and Finn, 1986). The decision of leaving UNESCO by USA was followed by Britain and Singapore in 1984 (Preston, Herman and Schiller, 1989) which has an important impact on its budget with a reduction of almost 30%. Therefore after this withdrawals the focus of UNESCO for the next years was to strength the support from the remaining members and adapting to the budget cuts (Jones, 1988).

From November 1987 UNESCO started to gain more stability with the election of Federico Mayor Zaragoza as Director General of the Organization, with the support of the western member countries, he established a clear agenda for the institution reform, which include (prioritization of the programs, the increase of public relations and visibility, decentralization of the programs to the field, and "zero-budget growth" policy (UNESCO, 1996, 1997). By early 1990s, there was a visible change and improvement on the management and the reforms undertaken, and the radical demands made on the 1970s were removed from UNESCO's official program.

In 1989 the Australian Colin Power was appointed as new Assistant Director General, who focused his mandate and efforts trying to increase the visibility of the educational area by launching several flagship publications in education. The most important educational program for UNESCO in this period started with the World Conference on Education for All. In 1990, at Jomtien, Thailand, the world leaders adopted its reaffirmed vision towards education worldwide, through the World Declaration on Education for All, which aimed the achievement of universal primary education it was an historic momentum as it has been the focus for the discussion and action within the international community for the past decades, and the development of the program was leaded by UNESCO. The idea of 'education for all' became a part of a broadly based consensus about 'what works' among bilateral and multilateral development agencies. It recalls also the responsibility of heads of state and international financial institutions with relatively high volumes of aid spending (Mundy, 2006).



Nowadays UNESCO is still searching for some clear sense of its comparative advantage within an increasingly competitive group of multilateral organizations. It is still too early to tell how successful it will be. UNESCO clearly lacks both UNICEF's long tradition of field programming in basic needs and the World Bank's more systematic approach to global research and policy making.

Although its staff emphasize that UNESCO's approach is more humanist and rights based than that of other multilateral organizations, there appears little in UNESCO's work in basic education that distinguishes it from that of other organizations, or establishes a distinctive direction for redistributive educational multilateralism in the 21st century. The rise of basic education in the program is probably best understood as a rather successful accommodation—one which has met some of the demands for concentration and functionality demanded by its major donors and which has placed the organization back in the multilateral fold. Yet these programs in basic education are operating in the context of a continuing deterioration of donor funding for development assistance and development education, and of an ongoing decline in UNESCO's own extra-budgetary resources for education, which now stand well below 1980 levels (Mundy, 2006).

## CHAPTER 3

### **Contextualization of UNESCO as an International Organization on the Education Area**

This chapter is divided in two sections, the first one contextualize UNESCO as an international organization, it describes the basement and foundations of the organization, as a UN specialized agency aiming to create and build a better world, based on peace, the eradication of poverty, sustainable development and intercultural dialogue through education, science, and culture. It describes the origins of the organization from 1945 the scope of work and the main role and description of the two main governing bodies: the General Conference and the Executive Board. It also includes the explanation of the three institutional representations of the Member States within UNESCO: the National Commissions, the Permanent Delegations and the Ministries at the national level. The section finalizes by describing different UNESCO's partnerships, as they differ from a wide range of institutions, to entities and individuals of many kinds – governments, the wider UN family, other intergovernmental organizations, NGOs, Private Sector companies, corporate and philanthropic foundations, media organizations, parliamentarians, Goodwill Ambassadors and many other specialized networks in UNESCO's field of activities such as the Category 2 Institutes and Centres, Clubs for UNESCO, UNESCO Associated Schools and UNESCO Chairs.

The second section of this chapter focuses on UNESCO's work in the field of Education, and its commitment to provide a holistic and humanistic vision of quality education worldwide. It describes firstly the educational background and objectives and explains the main fields of action including literacy, teachers, TVET, primary, secondary and higher education, HIV and education in emergencies and reconstruction after disaster or conflict and education for sustainable development among others. It continues by providing a full description of the key three priorities of UNESCO's Education Strategy 2014-2021 approved in 2013; the development of education systems to foster quality and inclusive lifelong learning for all; to empower learners to be

creative and responsible global citizens, and to shape the future education agenda. It finalizes describing UNESCO's role in defining the post-2015 education agenda, and within Goal 4 of the Sustainable Development Goals 2030, special focus on TVET have been given in these two final elements.

### **3.1. UNESCO AS AN INTERNATIONAL ORGANIZATION**

#### **3.1.1. Basement and foundations**

The United Nations Educational, Scientific and Cultural Organization (UNESCO) is a specialized agency of the United Nations (UN). UNESCO as international organization specifically aims to create and build a better world, based on peace, the eradication of poverty, sustainable development and intercultural dialogue through education, science, and culture (UNESCO Constitution, 1945). Sharing common values, the civilization can achieve this common goal. According to UNESCO's principles, Education is the key to development, is an indispensable tool for humanity to progress towards the ideals of peace, sustainability and freedom (UNESCO, 2011b).

The United Nations (UN) was founded in 1945 after the Second World War by 51 countries with one specific goal to maintain international peace and security among nations, by building friendly relations and promoting social progress, improving the standard of life and human rights (UN at a glance, 2015). UNESCO as a United Nation entity shares the same ideals and objectives: peace and security, justice and human rights, promotion of economic and social progress and the improvement of people's living conditions in the specific areas of Science, Culture and Education (Valderrama, 1995).

### 3.1.1.1. *The origins - Background*

In 1942, during the Second World War, the governments of European countries facing Nazi Germany and its allies met in England at the Conference of Allied Ministers of Education (CAME). The war was far from over, but countries question themselves about how they were going to rebuild the education systems once peace was restored. This project grew very quickly and acquired a universal dimension. Based on the proposal of CAME, it was held in London from 1 to 16 November 1945, just after the war ended, a conference of the United Nations for the establishment of an educational and cultural organization (ECO/CONF). This meeting brought together representatives of 40 States; driven by France and the United Kingdom, which were highly affected by the conflict, delegates decided to create an organization to establish a true culture of peace. In spirit, this new organization must establish the "intellectual and moral solidarity of mankind" and thus prevent a new world war. At the end of the conference, 37 of these states signed the Constitution of the United Nations Educational, Scientific and Cultural Organization (UNESCO) (Valderrama, 1995). Therefore, UNESCO was founded the 16th November 1945, with the aim of creating conditions for dialogue among civilizations, cultures and peoples based on respect for common values. Through this dialogue the world could achieve global sustainable development encompassing observance of human rights, mutual respect and the alleviation of poverty, objectives that are in the centre of the mission itself and the activities of UNESCO. On November 4th, 1946 UNESCO Constitution was ratified by 20 States: Saudi Arabia, Australia, Brazil, Canada, China, Czechoslovakia, Denmark, Egypt, USA, France, Greece, India, Lebanon, Mexico, Norway, New Zealand, Dominican Republic, United Kingdom, South Africa and Turkey. The first session of the General Conference of UNESCO was held in Paris from November 19 to December 10, 1946 where there were representatives from 30 governments. Nowadays, UNESCO has 195 Member States and 8 associate members (UNESCO, 2015b).

### **3.1.1.2. *Scope of work (Goals and Mission)***

UNESCO works to promote collaboration and dialogue among cultures, civilizations, and peoples, based upon respect for the rule of law, human rights and commonly shared values (UNESCO, 1945). It is through this dialogue that the world can achieve global visions of sustainable development encompassing observance of human rights, mutual respect and the alleviation of poverty, all of which are at the heart of UNESCO'S mission and activities.

The broad goals and concrete objectives of the international community – as set out in the internationally agreed development goals, including the Millennium Development Goals (MDGs) – underpin all UNESCO's strategies and activities. Thus UNESCO's unique competencies in education, sciences, culture and communication & information, contributes towards the realization of those goals.

The Organization focuses, in particular, on two global priorities: Africa and gender equality; and on a number of overarching objectives: attaining quality education for all and lifelong learning; mobilizing science knowledge and policy for sustainable development; addressing emerging social and ethical challenges; fostering cultural diversity, intercultural dialogue and a culture of peace; building inclusive knowledge societies through information and communication.(UNESCO, 2014a).

### **3.1.1.3. *Governing bodies***

There are two main governing bodies at UNESCO: The General Conference and the Executive Board.

The General Conference specifies the policies and main lines of work of the organization. It sets the programs and UNESCO's budget. Moreover, it elects the Members of the Executive Board and appoints the Director General every four years.

The composition of the General Conference is built on the representative of UNESCO's Member states. It meets every two years and is attended by Member States and Associate Members, together with observers for Non-Member States, intergovernmental organization and non-governmental organizations (NGOs) each country has one vote, no matter the size or contribution to the budget. The General conference every two years assigns specific tasks to the Board. Other functions stem from agreements concluded between UNESCO and the United Nations, the specialized UN agencies and other intergovernmental organizations as it states the Rules and Procedures of the General Conference (UNESCO, 2014d).

The Executive Board is formed by fifty-eight members whose are elected by the General Conference. It meets twice a year in order to ensure the overall management of UNESCO. It prepares the work of the General Conference and sees that its decisions are properly carried out. The functions and responsibilities of the Executive Board are derived primarily from the Constitution and from rules or directives laid down by the General Conference (UNESCO, 1945).

#### ***3.1.1.4. Representation of the Member States***

There are three institutional representations of the Member States within UNESCO: the National Commissions, the Permanent Delegations and the Ministries at the national level.

National Commissions for UNESCO are represented by all Member States (193 and 3 associate members: Aruba, British Virgin Island and Netherlands Antilles). This is a national body that has been set up by the member states with the purpose of their governmental and non-governmental organizations to the work of the Organization. The aim of the institution is to involve in UNESCO's activities the various ministerial departments, agencies, institutions, organizations and individuals working for the advancement of education, science, culture and information at each Member State (UNESCO, 2014e). UNESCO Permanent Delegations aims to ensure the link between the governments of the member states and the secretariat of the organization. There are

183 member states with permanent delegations to UNESCO, and 3 permanent observers, and 10 intergovernmental organizations as observers. Headed by people with diplomatic status, in a regular basis use to hold consultations on different topics related to the proper functioning of the organization and its activities. Members and Associate Members may also designate one or more Ministries responsible for relations with UNESCO and / or ministries in the fields of competence of UNESCO.

#### **3.1.1.5. Partnerships**

UNESCO works with a wide range of partners in all of its fields of competence, as key enabler for meeting global challenges and generating sustainable change and long-lasting impact. Partnerships are firmly embedded in UNESCO's way of working at global, regional and national levels. UNESCO partners differ from a wide range of institutions, to entities and individuals of many kinds – governments, the wider UN family, other intergovernmental organizations, NGOs, Private Sector companies, corporate and philanthropic foundations, media organizations, parliamentarians, Goodwill Ambassadors and many other specialized networks in UNESCO's field of activities such as the Category 2 Institutes and Centres, Clubs for UNESCO, UNESCO Associated Schools and UNESCO Chairs.

By joining forces with its partners UNESCO can leverage resources, expertise and competencies to promote all UNESCO's ideals and values, to achieve common development goals, and to strengthen visibility and impact of its action. To make sure that partnerships achieve their stated objectives, they need to be carefully and sustainably managed. UNESCO's overall approach to partnerships is set out in its 'Comprehensive Partnership Strategy'.

There are different approaches in which UNESCO works with partners: By combining expertise for programme delivery through joint designing and implementation of activities at national, regional or global level; by direct financial and in-kind contributions, including personnel secondment, volunteers, equipment; by

coordination and consultation on the elaboration of programs and on development of policies, standards and norms; by sharing outreach capacity and specific networks to support UNESCO's advocacy and policy dialogue in its priority areas and countries and by providing and benefiting from technical assistance and advisory services.

Non-Governmental Organizations: As UNESCO Constitution assert: "The United Nations Educational, Scientific and Cultural Organization may make suitable arrangements for consultation and cooperation with non-governmental international organizations concerned with matters within its competence, and may invite them to undertake specific tasks." (UNESCO, 1945) which means that specific partnerships with Non-Governmental Organizations has been done since its founding, UNESCO has sought to collaborate with NGOs, which are fundamental civil society partners for the implementation of the Organization's activities and programs (UNESCO, 2014f). Over the years, UNESCO has built up a valuable network of cooperation with NGOs having an expertise in its fields of competence, i.e. education, science, social and human sciences, culture, communication and information. Currently, UNESCO is enjoying official partnerships with 373 international NGOs and 24 foundations and similar institutions. In addition to this formal framework, the Organization has also been carrying out a range of activities hand in hand with non-governmental partners, not only at international and regional levels, but also at national level. Combining expertise and resources with NGOs allows the Organization to: create strategic alliances; enhance efficiency and effectiveness of program/activity implementation; strengthen visibility and impact of its action and presence, globally, regionally and at country level; reinforce the implementation and monitoring of its normative frameworks; enhance its capacity to reach all segments of societies which should be beneficiaries of its action; multiply the effects of UNESCO's actions.

Intergovernmental Organizations (IGOs): UNESCO cooperates as well with many intergovernmental organizations, with which it shares the same goals and missions, emphasizing in particular its global priorities (Africa and gender equality). The organization has strengthened and broadened its cooperation with IGOs, by concluding 87 formal agreements to reinforce its delivery through joint activities at country, regional and global levels. The organization renewed its collaboration and



operational relations with the Islamic Educational, Scientific and Cultural Organization (ISESCO), one of its longstanding partners and maintains close working relations with a number of regional organizations, including the European Union and Multilateral Development Banks (EUMDB) UNESCO signed an agreement with the Caribbean Community (CARICOM) in November 2013 as well as with the Association of Southeast Asian Nations (ASEAN) in December 2013, to renew and reinforce the joint cooperation UNESCO enjoys with these regional organizations.

Private sector: UNESCO cooperates with a wide variety of private sector partners such as business enterprises, including small and medium-size firms, national, international and multinational corporations, philanthropic and corporate foundations, financial institutions and private individuals to carry out its vast mandate. Read less over these last two decades, the private sector has become an increasingly valuable partner for UNESCO - contributing its core business expertise, creativity, innovative technological solutions, social media outreach, financial and in-kind contributions to achieve shared objectives in the area of Education, Culture, the Sciences and Communication and Information. Current partnerships with the private sector range from fundraising to strategic partnerships. UNESCO is an official partner in a large number of collaborative relationships with the Private sector intervening in various degrees from being involved in program delivery arrangements, providing policy guidance, technical assistance and expertise, to playing a strong role in promoting its core ethical and programmatic values through advocacy and awareness-raising.

### 3.1.2. UNESCO in the field of Education

#### 3.1.2.1. *Background and objectives*

Since 1945 when UNESCO was created Education is one of its principal activities in order to attain its goals: building of peace, poverty eradication, lasting development and intercultural dialogue (UNESCO, 1945). UNESCO is committed to a holistic and humanistic vision of quality education worldwide, the realization of everyone's right to education, and the belief that education plays a fundamental role in human, social and economic development (UNESCO, 2014b). UNESCO's commitment to the right to education is enshrined in three key standard-setting documents. Signed in 1948 in the aftermath of the Second World War, the Universal Declaration of Human Rights (Article 26) proclaims that: "Everyone has the right to education".

In 1960, the Convention against Discrimination in Education, adopted by the General Conference of UNESCO, stated that the Organization has the duty not only to proscribe any form of discrimination in education but also to promote equality of opportunity and treatment for all in education". It was, and remains, the first international instrument with binding force in international law that develops the right to education in all its dimensions.

In 1989, the Convention on the Rights of the Child, in Articles 28 and 29, stipulated that primary education should be "compulsory and available free to all", and that it should allow children to reach their fullest potential.

The Educational main objectives are: a) supporting the achievement of Education for All (EFA); b) Providing global and regional leadership in education; c) Building effective education systems worldwide from early childhood to the adult years; d) Responding to contemporary global challenges through education (UNESCO, 2011a). within the actual UNESCO Medium-term strategy special emphasis has given to: a) Advancing education for all (EFA) and shaping the future international education

agenda; b) Empowering learners to be creative and responsible global citizens; c) Supporting Member States to develop education systems to foster high quality education and inclusive live long learning as specific goals for the 2014-2021 period (UNESCO, 2014b).

UNESCO is the only United Nations agency with a mandate to cover all aspects of education. Its work encompasses educational development from pre-school through primary, secondary and higher education, including technical and vocational education and training, non-formal education and adult learning. The Organization focuses on increasing equity and access, improving quality, and ensuring that education develops knowledge and skills in areas such as sustainable development, HIV and AIDS, human rights and gender equality (UNESCO, 2011b).

**Figure 2: UNESCO Medium-Term Strategy 2014-2021 (37/c4)**

<b>Medium-Term Strategy 2014-2021 (37 C/4)</b>			
<b>Mission Statement</b>	As a specialized agency of the United Nations, UNESCO contributes to the building of peace, the eradication of poverty, and sustainable development and intercultural dialogue through education, the science, culture communicationa and information		
<b>Overarching objectives</b>	Peace	Equitable and Sustainable Development	
<b>Global Priorities</b>	Africa	Gender Equality	
<b>Strategic Objectives</b>	SO1: Supporting Member States to develop education systems to foster high-quality and inclusive lifelong learning for all	SO2: Empowering learners to be creative and responsible global citizens	SO3: Advancing Education for All (EFA) and shaping the future international education agenda
	SO4: Strengthening science, technology and innovation systems and policies, nationally, regionally and globally	SO5: Promoting international scientific cooperation on critical challenges to sustainable development	SO6: Supporting inclusive social development, fostering intercultural dialogue for the rapprochement of cultures and promoting ethical principles
	SO7: Protecting, promoting and transmitting heritage	SO8: Fostering creativity and the diversity of cultural expressions	SO9: Promoting freedom of expression, media development and access to information and knowledge
<b>Responding to Post-Conflict and Post-Disaster Situations</b>			

Source: UNESCO (2014b). *UNESCO Education Strategy 2014–2021*

UNESCO works with governments, National Commissions for UNESCO and a wide range of other partners to make education systems more effective through policy change. It coordinates the Education for All movement, tracks education trends of educational needs on global development agendas. UNESCO is also an active and committed partner in UN reform, which aims to improve coordination, efficiency and delivery.

UNESCO's education sector has five main functions: The first one is to act as laboratory of ideas: anticipating and responding to emerging trends and needs in education, and developing education policies based on research and country priorities. The second one is to standard-setter: developing standards, norms and guidelines in key education areas, and monitoring the implementation of relevant legal and normative instruments. The third one is to act as a clearinghouse: promoting the development, implementation and dissemination of successful educational policies and practices. The fourth one is to act as capacity-builder: providing technical cooperation to develop the capacity of Member States to achieve their national education goals. and the last one is as a catalyst for international cooperation: initiating and promoting dialogue and exchange among education leaders and stakeholders (UNESCO, 2011a and UNESCO, 2014a).

Up to 2015 there were three main international targets: Education for All (EFA), the Millennium Development Goals and the two key UN initiatives (UN Decade of Education for Sustainable Development 2005-2014) and UNAIDS global Initiative on Education and HIV and AIDS (EDUCAIDS). In the year 2000, the international community signed up to the Education for All and Millennium Development Goals. Currently the two most influential frameworks in the field of education, they are an ambitious roadmap for the global community to follow, offering a long-term vision of reduced poverty and hunger, better health and education, sustainable lifestyles, strong partnerships and shared commitments (UNESCO, 2011a). Since November 2013 when the 37<sup>th</sup> General Conference established a new resolution that was validated by the 194<sup>th</sup> Session of the Executive Board, the Medium-term strategy 2014 -2021 established a

new approach focusing on fostering high-quality and inclusive lifelong learning for all, and shaping the future international education agenda post 2015 (UNESCO, 2014b).

The Education for All (EFA) movement is a global commitment led by UNESCO to provide quality basic education for all children, youth and adults. It began at the World Conference on Education for All (Jomtien, Thailand, 1990), which stressed education as a human right and outlined a holistic vision of lifelong learning. Ten years later, at the World Education Forum, 164 governments pledged to achieve EFA and identified six goals with wide-ranging targets to be met by 2015 and signed the Dakar framework for action (UNESCO, 2000a).

The five multilateral institutions that organized the World Conference for Education for All remain the key international stakeholders in the EFA movement: United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Development Programme (UNDP), United Nations Population Fund (UNFPA), United Nations Children's Fund (UNICEF) and the World Bank. As lead agency of the EFA movement, UNESCO focuses its activities on five key areas: policy dialogue, monitoring, advocacy, mobilization of funding and capacity development.

The six education for All goals are the following ones: Goal 1: To expand early childhood care and education. Goal 2: To provide free and compulsory primary education for all. Goal 3: To promote learning and life skills for young people and adults. Goal 4: to Increase adult literacy. Goal 5: To achieve gender parity. Goal 6: to improve the quality of education (UNESCO, 2000a).

The Millennium Development Goals: also adopted in 2000, the eight Millennium Development Goals (MDGs) aim to reduce in half poverty by 2015. Although MDGs 2 and 3 focus on achieving universal primary schooling, empowering women and eliminating gender disparities at the primary and secondary levels, education drives the achievement of all the MDGs. This is because it equips people with the knowledge and skills to break the cycle of poverty and shape their future life chances. (United Nations, 2000).

There are two other key UN initiatives: UNESCO leads three major initiatives within the UN family. The first one is the UN Decade of Education for Sustainable Development (2005-2014) encourages governments to incorporate the principles, values and practices of sustainable development into teaching and learning, so as to address social, economic, cultural and environmental challenges (UNESCO, 2005). The second one launched in 2004, the UNAIDS Global Initiative on Education and HIV and AIDS (EDUCAIDS) works with more than 80 countries to promote, develop and support comprehensive educational responses to the pandemic (IIEP, 2005).

Beside the international goals, UNESCO holds two priorities: Africa and Gender. On one hand, Africa is a top priority for UNESCO and education is key to the region's development UNESCO (2014b) The past decade has seen marked advances towards EFA in sub-Saharan Africa. Indeed, the region has increased primary net enrolment ratios by almost one-third, despite a large rise in the school-age population. Gender gaps have narrowed at the primary level, more children are moving from primary school to secondary education and real expenditure on education has increased by more than six per cent each year (UNESCO, 2012a). On the other hand, Gender is the other priority for UNESCO, as gender inequality is still an obstacle to Education for All. The Organization has developed a UNESCO Priority Gender Equality Action Plan for 2014 – 2021 and a set of gender mainstreaming training tools to build gender equality considerations into policies (UNESCO, 2013b).

In 2010, UNESCO was a signatory to the UN Joint Statement on Accelerating Efforts to Advance the Rights of Adolescent Girls, through UNESCO's new global partnership for girls' and women's education (UNESCO, 2011b) which focus on the access of learning primarily within secondary education and adult literacy. The program includes a global advocacy plan that aims to reduce the drop-out rate of adolescent girls trying to create partnerships with the support of the private sector.

### 3.1.2.2. *Field of action*

Literacy is the foundation for lifelong learning and a fundamental right. It generates and develops knowledge, skills and also enhances individual self-confidence, leading to better health and income as well as fuller participation in the community. UNESCO motivates governments and civil society to focus on literacy, it helps Member States to increase their literacy rates by formulating solid policies and by developing national capacities. Up to date, UNESCO's major Literacy initiatives have been the following ones: The United Nations Literacy Decade (2003-2012) and the Literacy Initiative for Empowerment (LIFE, 2006-2015). In coordination with UNESCO HQ, UNESCO Institute for Statistics (UIS) in Montreal, Canada, have developed a Literacy Assessment and Monitoring Program (LAMP), which is a tool to help Member States measure levels of literacy achievement. Moreover, an international research, training, information and publishing center for literacy, adult education and non-formal education named UNESCO Institute for Lifelong Learning (UIL) is based in Hamburg, Germany). This center holds more than 60,000 items, including a unique collection of literacy materials from 120 countries in more than 160 languages. Furthermore, UNESCO celebrates each year the International Literacy Day and awards prizes in recognition of excellence and innovation in promoting literacy throughout the world.

Teachers are key player to attain the Educational goals, they help to empower people, build peace and develop societies. Nowadays it lacks 1.6 million primary teachers in order to attain the universal Primary Education Goal set on the Millennium Development Goals. Without sufficient numbers of qualified teachers – men and women – the EFA and MDG targets will be hard to meet. There are also important qualitative challenges to face such as the training, deployment and motivation of teachers. (UNESCO, 2013c).

UNESCO provides global leadership on teachers and their status, recruitment, training and professional development, based on the UNESCO/ ILO Recommendation concerning the Status of Teachers (1966), which is applied in parallel with the Recommendation concerning the Status of Higher Education Teaching Personnel (1997), it also helps countries to develop comprehensive teacher policies.

UNESCO's International Bureau of Education (IBE, Geneva, Switzerland) develops teacher guidelines for curriculum development with teams from Ministries of Education in various countries, and UNESCO International Institute for Educational Planning (IIEP, Paris, France) revises teacher management practices. UNESCO's International Institute for Capacity Building in Africa (IICBA, Addis Ababa, Ethiopia) assists Member States in Africa with open and distance learning and face-to-face training of trainers.

Technical and vocational education and training (TVET) plays an essential role in helping reduce poverty and promote growth as well as in ensuring the social and economic inclusion of marginalized communities (UNESCO, 2013a) UNESCO has established a strategy to support TVET in Member States from 2010 to 2015. The strategy focuses on three core areas: The first one is providing upstream policy advice and related capacity development; the second one is with the conceptual clarification of skills development and improvement on monitoring of TVET, the third one is by acting as a clearinghouse and informing the global TVET debate (UNESCO, 2009b).

UNESCO promotes TVET and skills for work on secondary and post-secondary training in formal and non-formal settings as part of lifelong learning. It helps Member States to develop long-term strategies and solutions based on inclusive and rights-based approaches. A five-year project named "Better Education for Africa's Rise" BEAR project began in 2011, with the aim of revitalize TVET in five target countries of the Southern African countries: Botswana, D.R.Congo, Malawi, Namibia and Zambia. The project is based on a comprehensive research carried out on the status of TVET systems in countries in the Southern African Development Community as part of the UNESCO capacity-building initiative funded by the Government of the Republic of Korea (UNESCO, 2014c).



The UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training (Bonn, Germany) formed by 282 specialized institutions named UNEVOC Centers located in 167 UNESCO Member States help Member States strengthen and upgrade their TVET systems (UNESCO-UNEVOC, 2014).

In 2009, an Interagency Group on TVET was established on the initiative of UNESCO. Its members include ILO, OECD, the World Bank, the European Training Foundation, the European Commission and the Asian Development Bank. The objective of the group is to promote cooperation at different levels and to share knowledge on TVET issues. The same year in August a specific working group on indicators, involving the UNESCO Institute for Statistics, was established to develop TVET indicators for policy monitoring and evaluation. Moreover another Inter-Agency Task Team (IATT) was created for the revitalization of TVET in the Economic Community of West African States (ECOWAS). Through this task force team, UNESCO is creating partnerships with agencies including UNDP, ILO and the Association for the Development of Education in Africa (ADEA), to support the development of skills for youth employment.

Strengthening education systems: UNESCO's top priority is to speed up access to quality learning. The Organization helps countries to develop inclusive education systems from early childhood to the adult years. Early childhood care and education (ECCE) programs prepare children for school, mitigate the effects of household deprivation, break the cycle of educational disadvantage between parents and children, and strengthen prospects for economic growth. UNESCO advocates for ECCE programs that include, health, nutrition and security as it was stated on the Moscow Framework for Action and Cooperation (UNESCO, 2010).

Regarding Primary and secondary education, the increase in primary school enrolments had an impact in many countries, as they have broadened the concept of basic education to include lower secondary education, nevertheless it is vital to ensure quality and relevance are maintained during the expansion.

Higher education: UNESCO is the only UN agency with a mandate for higher education, UNESCO helps Member States and their institutions widen access to quality higher education through diverse modes of provision adapted to local development needs. Initiatives to inform policy include Global For essential issues such as university rankings (2011), graduate employability (2012) and diverse provision and enhancing of higher education (2013). Normative instruments are in place to support international mobility of students and graduates. UNESCO is in the process of revising the Regional Conventions on recognition of higher education qualifications as well as exploring possibilities to establish a Global Convention for all Member States. Further activities promote quality assurance in higher education, support institutions and states, reduce brain drain, and enhance inter-institutional cooperation and networking through the UNESCO Chairs and UNITWIN programs.

Reconstructing education after disaster and conflict: a significant proportion of the 67 million children out of primary school worldwide live in countries affected by war and natural disasters. Education restores routine and gives people hope for the future. It can also serve as a channel both for meeting other basic humanitarian needs, and for communicating vital messages that promote safety and well-being. Rebuilding education systems is an essential element in restoring peace and laying the ground for long-term sustainable development. The Inter-agency Network for Education in Emergencies (INEE) is an open global network of practitioners and policy-makers working together to ensure quality education in emergency situations. UNESCO supports Member States to integrate Disaster Risk Reduction into their education sectors.

HIV and AIDS: with an estimated 6,800 people newly infected with HIV every day, prevention education must be at the forefront of any response to the epidemic. School based HIV education offers a very cost-effective approach to prevention, as the right message can reach large numbers of young people from diverse backgrounds. The UNAIDS Global Initiative on Education and HIV and AIDS (EDUCAIDS) helps countries to respond to the epidemic by giving particular attention to children and youth, especially the most vulnerable, within a sector-wide approach. This work is

reinforced by UNESCO's efforts to support HIV prevention through sexuality education.

### **3.1.3. UNESCO Education Strategy 2014-2021**

UNESCO's Medium-Term Strategy (2014–2021), drafted by the Organization's Secretariat and approved by the 37th session of its General Conference in November 2013 corresponds to the eight year medium-term strategy of the organization and it articulates UNESCO's vision and strategic priorities in education over that period.

UNESCO's Medium-Term Strategy explains how the vision and mission translate into programmatic actions for 2014–2021 and sets out three strategic priorities that will guide the Organization's support to Member States' education systems up to 2021: (i) developing education systems to foster quality and inclusive lifelong learning for all, (ii) empowering learners to be creative and responsible global citizens, and (iii) shaping the future education agenda. And finally it presents future milestones and implementation arrangements.

This strategy paper is fully aligned with Organization's Medium-Term Strategy (document 37 C/4) and Program and Budget 2014–2017 (document 37 C/5). This strategy it also articulate its role and the strategic directions it will take in order to contribute fully to the post-2015 global education agenda as part of the new global development agenda.

### **3.1.4. Education Agenda Post -2015**

UNESCO, as the United Nations' specialized agency in education, plays a key role both technically and intellectually to support Member States in strengthening their education systems' responsiveness to current and future demands and ability to sustain and accelerate education progress. UNESCO strongly believes in the need for an inspirational, transformative and holistic post-2015 education agenda of universal

relevance, with measurable targets and indicators that encompasses but goes beyond the unfinished EFA agenda (UNESCO, 2014b).

The objective of such education must be envisaged in a broad lifelong learning perspective that aims at empowering people to realize their right to education, fulfill their personal expectations for a decent, healthy life and work, and contribute to the achievement of their societies' socio-economic development objectives. In addition to the acquisition of basic knowledge, attitudes and cognitive, social and emotional skills, the content of learning must promote problem-solving and creative thinking; understanding and respect for human rights; inclusion and equity; and cultural diversity, all of which are essential to the realization of peace, responsible citizenship and sustainable development.

In defining the post-2015 education agenda, UNESCO suggests building on what has been achieved in EFA since 2000 and completing the unfinished agenda, while taking into consideration emerging trends and broader socio-economic development issues and their implications for education.

UNESCO recommends the following as a possible overarching education goal, aiming to achieve just, inclusive, peaceful and sustainable societies: '*Ensure equitable and inclusive quality education and lifelong learning for all by 2030*' (UNESCO, 2015f; pp.7) and suggests the following principles to guide the agenda: a) Education is a fundamental human right and contributes significantly to the realization of other rights; b) Education is a public good. The state is the custodian of education as a public good. At the same time, the role of civil society, communities, parents and other stakeholders is crucial in the provision of quality education; c) Education is a foundation for human fulfillment, peace, sustainable development, economic growth, decent work, gender equality and responsible global citizenship; d) Education is a key contributor to the reduction of inequality and poverty as it bequeaths the conditions and generates the opportunities for better, more sustainable societies (UNESCO, 2014f).

**Table 2: UNESCO's strategic objectives for education 2014-2021**

<b>UNESCO's overarching mission: Education for peace and sustainable development</b>		
<b>Strategic Objective 1</b>	<b>Strategic Objective 2</b>	<b>Strategic Objective 3</b>
<b>Supporting Member States to develop education Systems to foster high quality and inclusive lifelong learning for all</b>	Empowering learners to be creative and responsible global citizens	Advancing Education for All (EFA) and shaping the future international education agenda
<b>Thematic areas of expected results</b>		
<b>Sector-wide planning, policies and reform</b>	Global citizenship education	Foresight and research
<b>Literacy</b>	Education for sustainable development	Monitoring education development and the right to education
<b>Skills development for work</b>	Health education	Partnerships for and coordination of education
<b>Higher education</b>		
<b>Teachers</b>		
<b>Learning processes and outcomes</b>		
<b>ICT in education</b>		

Source: UNESCO (2014a). *2014 - 2021 Medium-term strategy 37/c4*

It is proposed that the overarching goal should be translated into seven specific global targets; Target 4 is focused on skills for work and life through technical/vocational, upper secondary and tertiary education, referring to: *“By 2030, at least x% of youth and y% of adults have the knowledge and skills for decent work and life through technical and vocational, upper secondary and tertiary education and training, with particular attention to gender equality and the most marginalized”* (UNESCO, 2015d; pp.12).

Technical and vocational education and training (TVET) vision in relation to the post-2015 agenda is subject to increasing and varied demands and expectations. A key challenge is how TVET can assist youth in developing skills for successful transition to work and further learning. Strategies that target the participation of marginalized groups in relevant TVET programs can, therefore, make important contributions to social equity and inclusion.

While positioning TVET as a key part of any education system, UNESCO argues that TVET is closely associated with the world of work. UNESCO will amplify its provision of upstream policy advice and capacity-building for the effective design and implementation of TVET policies. UNESCO will strengthen the role of the UNESCO-UNEVOC international centre as a key platform for capacity-building. It will collect and disseminate evidence on the multiple and diverse policy approaches for transforming and expanding TVET and use its convening power to promote knowledge production and sharing as well as regional and global TVET advocacy (UNESCO, 2014f).

### **3.1.5. Education and the Sustainable Development Goals 2030**

In September 2015, at the 70th Session of the United Nations General Assembly, the international community set an ambitious Agenda for Sustainable Development Goals (SDGs) for 2030. These represent a universal, ambitious, sustainable development agenda, it calls for an integrated approach to development which recognises that eradicating poverty in all its forms and dimensions; combating inequality within and among countries; preserving the planet; creating inclusive and sustainable economic growth; achieving full and productive employment and decent work for all women and men; and ensuring full gender equality and fostering social inclusion, are interdependent (UNESCO, 2015e).

Education and training are central to the achievement of the 2030 Agenda. The vision of the Incheon Declaration: Education 2030 is fully captured by Sustainable Development Goal 4 “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”. Through the Incheon Declaration adopted at the World Education Forum in May 2015, UNESCO, as the United Nations’ specialized agency for education, has been entrusted to lead and coordinate the Education 2030 agenda with its partners.

The roadmap to achieve the ten targets of the education goal is the Education 2030 Framework for Action, adopted in November 2015, and it provides guidance to

governments and partners on how to turn commitments into action. Education 2030 goes beyond past attempts to ensure access to basic education, as set out in the Education For All goals and the education-related Millennium Development Goal 2 of 2000-2015.

The Global Education 2030 Agenda new expanded scope: a) It reaches from early childhood learning to youth and adult education and training; b) It emphasises the acquisition of skills for work; c) It underlines the importance of citizenship education in a plural and interdependent world; d) It focuses on inclusion, equity and gender equality; e) It aims to ensure quality learning outcomes for all, throughout their lives.

The main responsibility for implementing the agenda lies with governments, with UNESCO and partners providing support through coordinated policy advice, technical assistance, capacity development and monitoring of progress at global, regional and national levels.

#### **3.1.5.1. TVET within the Sustainable Development Goal 4**

Education 2030 devotes considerable attention to technical and vocational skills development, specifically regarding access to affordable quality Technical and Vocational Education and Training (TVET); the acquisition of technical and vocational skills for employment, decent work and entrepreneurship; elimination of gender disparity and ensuring access for the vulnerable. In this context, TVET is expected to address multiple demands of an economic, social and environmental nature by helping youth and adults develop the skills they need for employment, decent work and entrepreneurship, promoting equitable, inclusive and sustainable economic growth, and supporting transitions to green economies and environmental sustainability (UNESCO, 2015e).

## CHAPTER 4

### Contextualization of TVET in Education

Chapter 4 presents in its two sections the conceptualization of TVET in Education and the Influence and presence of TVET in the global world.

The first section, as already mentioned starts by describing what is generally understood by Technical Vocational Education and Training, as an educational sub-sector; and how TVET is translated within the formal, non-formal and informal learning processes in order to develop skills and knowledge and shape people's attitudes.

The second section focuses on what does TVET mean and imply in a global world. It starts with a broad description of the existing TVET challenges that the world is facing on the 21st century in different areas or domains as: the human development domain, where TVET has a strong potential in developing the human dimension of individuals and communities; the demographic challenges (highlighting the changing structure of the population and the changes in international migration flows); the labor market pressures, that have forced changes over the last decade worsening unemployment and job quality situation especially for youth and persisting gender differences in labor force participation; the global economic crisis that have mainly impacted on skills development in terms of uncertainty, vulnerability of employment and inequality; and it finalizes giving a clear understanding about the various channels through which globalization affects labor markets and demand for skills in developed as well as in developing countries. The section concludes by describing who Globalization intensifies the pressure on the TVET sector to supply the necessary skills to workers involved in globalised activities, and to adapt existing skills to rapidly changing needs.



## 4.1. TVET – GENERAL UNDERSTANDING

### 4.1.1. What does TVET mean and imply?

Technical Education and Vocational Training (TVET) is sub-sector of education and training. It comprises formal, non-formal and informal learning<sup>1</sup> (UNESCO, 1972). It develops skills and knowledge from basic to advanced levels, and shapes people's attitudes. It takes place across a wide range of institutional settings, including schools, public and private vocational institutes, tertiary education institutions, community projects, at home and the workplace, in both the formal and informal economies. At its best, TVET enhances skills for working, further learning and living, and for contributing to human, economic, social and environmental aspects of development (UNESCO, 1972). TVET equips people with vocational skills and a broad range of knowledge, skills and attitudes that are recognized as indispensable for meaningful participation in work and life. Examples of the benefits include self-awareness and self-esteem, and strengthened interpersonal, citizenship, communication and entrepreneurial skills. Much of TVET also reaffirms the value of traditional knowledge and skills, as well as of knowledge and skills acquired outside formal settings (UNESCO 2012b).

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<sup>1</sup> Definition of Formal, Non-Formal and Informal Learning (UNESCO, 1972)

**Formal education:** the hierarchically structured, chronologically graded 'education system', running from primary school through the university and including, in addition to general academic studies, a variety of specialized programs and institutions for full-time technical and professional training.

**Informal education:** the truly lifelong process whereby every individual acquires attitudes, values, skills and knowledge from daily experience and the educative influences and resources in his or her environment – from family and neighbors, from work and play, from the market place, the library and the mass media.

**Non-formal education:** any organized educational activity outside the established formal system – whether operating separately or as an important feature of some broader activity – that is intended to serve identifiable learning clienteles and learning objectives.

**Table 3: Overview of the different interpretations of "formal", "non-formal" and "informal" education worldwide**

Source of the information	Formal Education	Non-Formal Education	Informal learning
<b>Green, Oketch, Preston, 2004</b>	"Organized and intentional learning whose outcomes are accredited"	"Results form organised activities within or outside the workplace which involve significant learning but it is not accredited"	"That which occurs unintentionally or as a by-product of other activities"
<b>Tight, 2002</b>	"Formal learning is that provided by the education and training system set up or sponsored by the state, for those express purposes"	"Any organized, systematic activity, carried out outside the framework of the formal system, to provide selected types of learning to particular subgroups in the population, adults as well as children"	"The life-long learning process by which every individual acquires and accumulated knowledge, skills , attitudes and insights from daily experiences and exposure to the enviroment"
<b>Eurostat, 2015</b>	"Education provided by the system of schools, colleges, universities and other formal educational institutions tht normally constitutes a continuous ladder of full-time education for children and young people"	" Any organised and sustained educational activities that do not correspond exactly to the above definition of formal education. It may take place both within and outside educational institutions and cater to persons for all ages"	"Informal education is generally intentional but unorganised and unstructured learning events that occur in the family, in the workplace, and in the daily life of everyperson, on a self-directed, family-directed, or socially directed basis"

Source: An innitial statistical study, UNESCO-UNEVOC and UNESCO-ISU (2006).

From an international perspective TVET represents many different traditions, which are reflected in multiple terminologies, institutional arrangements, organizational

approaches and educational cultures. TVET can make a substantial difference to individuals' well-being by developing their knowledge, skills, creativity and wider competences; therefore, it contributes significantly to human development. It has also a great potential in terms of contributing to national competitiveness, productivity and smoother development towards a more sustainable future. TVET is increasingly expected to support quality-learning opportunities, which facilitate both initial entry into work, and career development and lifelong learning.

Normally TVET is perceived, in general basis, as being too much of a supply-side solution that is not adequately situated within the broader labor market, social and economic policies that affect the transition from education and training to work. Some forms of TVET have been seen by parents and young people as an option of last resort and a dead-end route that cuts learners off from any possibility for tertiary education and 'good jobs', preparing them instead for low-status occupational roles. If this is so, then it actually perpetuates social inequalities by reproducing them. Given the high costs of persistent unemployment and social divisions, these are vital issues impelling TVET to transform itself.

TVET could be rightly perceived as high quality and inclusive, and leading to excellent opportunities and outcomes in the labor market for young people and adults alike. On the one hand, TVET is important as a set of approaches to learning both as preparation for the world of work and for well-being later in adult life. On the other hand, TVET can make an important contribution to skills as well as to human resource development policies and strategies that are designed to meet the various local, national, regional and global labor market needs. TVET can play an effective role in skills development in both traditional and new industries and trades. It can also support individual and societal rehabilitation after conflicts or disasters, and can strengthen social capital and resilience. Moreover, TVET is a way to prevent social exclusion and its consequences.

### 4.1.2. Work, formal sector, informal sector and decent work

Work is central to our lives: it gives us a sense of purpose and identity, and provides an income to meet our material needs. Work is one of the main ways we relate to others. It is both an individual and a social activity. It can be a source of dignity and fulfillment. But it can also be a source of exploitation and frustration (ILO, 2006).

Work can be defined as "*exertion or effort directed to produce or accomplish something, labor, toil.*" (Oxford, 2010; pp.592) our conventional understanding of work links it to paid jobs. But work is so much more: a huge amount of unpaid work is done in households, particularly by women. Information sources that quantify and value that work are extremely thin, but we know that much of this sort of work is essential to the welfare not just of the young or elderly or sick, but also to those in paid work. Moreover, there is no sense in only considering work in the formal economy. It is estimated that there are between 900 million and 2 billion workers in the informal economy (depending on whether agriculture is included – OECD, 2009).

Informal work and self-employment are often seen as identical but are not; self-employment in formal enterprises refer to workers in small unregistered or unincorporated enterprises including: employers, own account operators, unpaid family workers; meanwhile the wage employment in informal jobs refer to workers without worker benefits or social protection who work for formal or informal firms, for households or with no fixed employer, including other informal wage workers such as: casual or day laborers, domestic workers, unregistered or undeclared workers, some temporary or part-time workers and industrial outworkers (also called home-workers) (Alter Chen, 2007). ILO (2006) highlights the fact 300 million workers are in wage employment within the informal economy or are working informally for formal sector firms and four out of every ten of the world's working women and men are trying to make a living off the land, and in some of the lowest income countries, three-quarters or more of workers, especially women, are engaged in agriculture.

In recent years, the concept of informal sector has been re-elaborated and it incorporates certain types of informal employment that were not included in the earlier concept and definition (M. Alter Chen, 2007) it focuses on the nature of employment in addition to the characteristics of enterprises and it includes informal employment for both within and outside agriculture. Therefore informal employment refers to employment without labor or social protection both inside and outside informal enterprise, including both self-employment in small unregistered enterprises and wage employment in unprotected jobs.

While the informal economy is often a major source of innovation, entrepreneurship and learning, with up to 90% of TVET in some West African countries being located within the traditional apprenticeship system (Walther, 2007), it is also too often associated with poverty, poor working conditions and low quality products and services. Moreover, the formal and the informal ends of the economy are often dynamically linked.

In 1999 the idea of "decent work" was born being used to sum up the aspirations of people in their working lives. These aspirations are for job opportunities and sufficient income; rights at work, representation and a voice at the workplace; family stability and personal development; and fairness and gender equality. Decent work is a cornerstone for stability and social advancement. ILO (2006) states that there is a growing feeling that the dignity of work has been devalued; that it is seen by prevailing economic thinking as simply a factor of production, a commodity, forgetting the deeper individual, family, community and national significance of human work. The absence of work, the quality of work, having a voice at work, continued gender discrimination and unacceptably high youth unemployment are all major issues in politics today. All of these raises new challenges for TVET.

## 4.2. TVET IN A GLOBAL WORLD

### 4.2.1. Global TVET challenges on the 21st century

The beginning of the 21st century has brought a radically change on the global economy and the global society with profound implications for technical and vocational education and training. (UNESCO,1999b). Since 1999 the global changes are address by the different world dynamics that include a changing human development paradigm, demographic changes, labor market changes, technology development, globalization of economies and new demands on education systems requiring different policies and performances. Technical Education and Vocational systems in this 21st century must be able to adapt to these transformations, which include globalization, an on-going technological revolution, involving information and communications technologies, and the consequent rapid pace of social change. The knowledge-based society, which these changes are bringing about, offers exciting new modalities for education and training. At the same time, these social and economic trends require a new development paradigm which, hopefully, will have a culture of peace and environmentally sound sustainable development as its central features (UNESCO, 1999).

Attention to TVET policy will increase globally as our world becomes more vulnerable to crises, whether economic, political, social or environmental. Technologies and social relations are also evolving rapidly and in often unpredictable ways. Within turbulent global and local contexts, millions of young men and women experience severe challenges in making transitions from education to adulthood and to the worlds of work. Large numbers of young people and adults lack meaningful work opportunities or have their opportunities threatened by circumstances beyond their control. Persistent poverty, vulnerability and inequality are ongoing concerns in societies across the world. At the same time, exciting opportunities and possibilities for the future exist as new ways of learning, working and living changed societal configurations and green technologies.

The implications for TVE includes the increased mobility of labor and capital, uneven impacts for rich and poor, and emerging market economies in both rural and industrial sectors. The knowledge-based society, which these changes are bringing about, offers exciting new modalities for education and training. At the same time, these social and economic trends require a new development paradigm which, hopefully, will have a culture of peace and environmentally sound sustainable development as its central features. (UNESCO, 1999).

#### **4.2.1.1. *Human development and TVET***

While every society is vulnerable to risk, some suffer far less harm and recover more quickly than others when adversity strikes. The concept of vulnerability is used to describe exposure to risk and risk management, including insuring against shocks and diversifying assets and income (UNDP 2014). Human development concept refers to the expansion of people's freedoms to live long, healthy and creative lives; to advance other goals they have reason to value; and to engage actively in shaping development equitably and sustainably on a shared planet. People are both the beneficiaries and the drivers of human development, as individuals and in groups. This reaffirmation underlines the core of human development—its themes of sustainability, equity and empowerment and its inherent flexibility. The human development framework applies to all countries and to all people (UNDP, 2010). Special efforts are needed to ensure that human development is sustainable and equitable. And it is about enabling people to exercise individual choice and to participate in, shape and benefit from processes at the household, community and national levels—to be empowered (UNDP, 2010).

For more than 20 years, the UNDP's Human Development Reports (HDRs) have expanded and promoted this human development notion significantly in theoretical and methodological terms. Since 1990 a substantial progress has been done, as the world's average human development index (HDI) has increased by 18% (and 41% since 1970), reflecting large aggregate improvements in life expectancy, school enrolment, literacy and income (UNDP, 2010). Even in countries facing adverse economic

conditions, people's health and education have greatly improved as it is suggested in The Human Development Report 2010.

The human development perspective position TVET as a human, social, vocational and technological, activity. TVET also emphasize the importance of 'learning to be' (UNESCO, 1972 and 1996) and contributes to individuals' well-being (and, hence, to that of communities and countries) through developing knowledge, skills and attitudes that will enhance their capabilities. Therefore TVET has very real possibilities for developing the human dimension of individuals and communities as well as building the capacity of workers, enterprises and economies.

#### ***4.2.1.2. Demographic changes and implications for TVET***

Demographic shifts always generate great challenges, specially for TVET in order to create conditions to improve the skills, knowledge and attitudes not only for those entering in the labor force but also those who are already active in the labor market. Two major demographic shifts are changing labor markets globally with clear implications for TVET: the first one is the changes in the age structure of the population and the second one is the international migration flows.

On one hand, the age structure of world population has changed noticeably over the last decade as a result of changes in fertility and mortality rates and higher life expectancy. With fertility rates dropping nearly everywhere and life expectancy rising in most of the world regions, the ageing phenomenon becomes the essential challenge for the next decades, even though unevenly across regions. The proportion of older individuals increased between 2000 and 2010, but the share of persons below 14 years of age declined from 30% percent to 26% globally; However, there is a stark contrast between developed and developing countries. In the former, there was a 6% absolute decline in the below 14 years of age group, in contrast to an 18% increase in the least developed countries. (UNDP, 2011).



Demographic tendencies will contribute significantly to the expansion of the working age population (WAP) over the next four decades. On average, this population category is going to increase by more than 28% globally. The highest increase is expected in the least developed countries, which by 2050 will have almost 2.3 times more persons of working age than in 2011. At the same time, the Working age population will decline in developed countries by almost 10%. (UNDP, 2011).

**Table 4: Projections of working age population by development regions**

	2011	2020	2030	2040	2050
<b>WORLD</b>	4583,041	5031,779	5438,040	5707,025	5887,808
<b>Developed Region</b>	834,650	817,192	795,175	776,939	756,340
<b>Low Developed Region</b>	3748,390	4214,587	4642,865	4930,086	5131,468
<b>[of which] Low Developed Countries</b>	482,783	612,395	768,851	936,970	1100,620

Source: Calculations based on UN (2011).

These demographic changes have an impact in the labor market and TVET in various ways: First, the ageing populations in developed regions will continue to put pressure on social security outlays and public finances. This, coupled with a better educated labor force and increasing health conditions across populations, is triggering new welfare policies that aim to postpone the retirement age and thus take full advantage of the productive potential of older and healthier populations. In a context of rapid technological change, TVET will become a central piece for continuous learning and lifelong learning strategies to support a longer working life and permit workers to stay productive over longer periods of time compared to previous generations. The investment of enterprises in skills development together with greater responsibility of individuals to engage actively in learning over the whole lifecycle will be key features of continuing TVET. Governments will need to further support this by implementing effective legislative and institutional arrangements for continuing TVET, including validation of prior learning, certification and quality assurance, and by encouraging enterprises and individuals, for example through incentives, to invest in skills development, as well as by using appropriate approaches to lifelong career guidance

and counseling (Cedefop, 2011). Secondly, in less developed regions, the combination of large numbers of young people entering the labor market with very low qualifications has created a social divide between a minority with the necessary skills to access decent jobs and those with low skills working in low paid jobs in the formal or informal sector.

On the other hand migration, internal and abroad, is flowing more and more to cities and to developed countries. In the future, demographic trends will require the expansion of TVET learning opportunities for young people, and will keep pressure on the labor market to create jobs capable of providing decent work for increasingly better educated labor forces.

The degree of success of individual countries in expanding TVET learning opportunities and generating the required number of decent jobs will vary depending on specific strategies and policies adopted. Countries failing to generate decent work at the pace of population growth will see labor increasingly occupied in the informal sector or seeking work abroad or, alternatively, increased political instability at the extreme. TVET policies in this context will have to promote a diverse supply of TVET programs in order to reach disadvantaged groups and fight social exclusion. Increasing learning opportunities through TVET will also require the introduction of innovative funding mechanisms and new forms of partnership, networks and alliances at all levels, between public, private and civil society stakeholders.

Migration is a dynamic phenomenon in terms of scale and complexity, due to the growing demographic disparities, the effects of environmental change, new global political and economic dynamics, technological revolutions and social networks (IOM, 2010). As a result of increasing migration flows, the national character of TVET systems and qualifications is being challenged more and more. TVET qualifications no longer only act as proxy for the skills, knowledge and competences of an individual, they also take the form of a currency that signals national and international value (ETF, 2005). At the same time, TVET policies are expected to manage labor migration effectively and support the integration of migrant workers. These may include policies for: skills development, such as language skills and cultural knowledge and understanding; career guidance and counseling, including skills in understanding and

navigating local labor markets; and skills recognition, the recognition of prior learning and qualifications gained abroad.

#### 4.2.1.3. Labor market pressures on TVET

The world's labor markets have been subject to several dynamics over the last decade. These changes include the worsening unemployment and job quality situation for youth; persisting gender differentials in labor force participation; and continued skills mismatches.

Unemployment globally remained constant for almost the whole decade. Youth unemployment slightly decreased in 2007, but by 2009 it had reverted to its 2000 level (12.8%). In 2010, North Africa and sub-Saharan Africa recorded the highest rates of youth unemployment, followed by developed countries (including the EU) and the Central and South East Europe / (former) Commonwealth of Independent States region. At a global level, the position of youth in the labor market, is deteriorating in terms of unemployment and job quality. The length of youth expose to unemployment is increasing, meanwhile employed youth face reductions in job quality (Cedefop, 2009).

**Table 5: Evolution of total and youth unemployment (%) over time**

		2000	2004	2005	2006	2007	2008	2009	2010*
World	Total	6.3	6.4	6.2	5.9	5.6	5.7	6.3	6.2
	Youth	12.8	13	12.9	12.4	11.8	11.9	12.8	12.6
D and EU	Total	6.7	7.2	6.9	6.3	5.8	6.1	8.4	8.8
	Youth	13.5	14.6	14.2	13.3	12.4	13.3	17.4	18.2
LA and C	Total	8.5	8.4	7.9	7.6	7.0	6.6	7.7	7.7
	Youth	15.7	16.5	15.7	15.3	14.2	13.8	15.7	15.2
SSA	Total	9.0	8.6	8.6	8.0	7.9	7.9	7.9	8.0
	Youth	13.8	13.2	13.1	12.2	12.1	12.1	12.1	12.3

Source: Cedefop (2009).

Notes: \* - estimated; D and EU - developed countries and EU; LA and C - Latin America and the Caribbean; SSA – Sub-Saharan Africa.

During the last decade, the most notable change in the analysis of problems relating to labor participation and the employment of young people was its emphasis on the skills mismatch and on the importance of having good coordination mechanisms when considering how to make TVET systems more effective. TVET policies need to take into account both the supply and the demand for skills. As a consequence, most countries in the world are seeking policy answers for addressing the skills mismatch which, in particular, include greater involvement of social partners in the governance of TVET, the development of public and private partnerships and the implementation of mechanisms for ensuring effective coordination with employers, such as sector skills councils (INSSO, 2010).

#### **4.2.1.4. *The global economic crisis and its impact on TVET***

There are three main themes that have received significant attention in recent debates on the global economic crisis and its impact on skills development: uncertainty, vulnerability of employment and inequality (WTO and ILO, 2011). Officially the economic recession caused by the American sub-prime crisis is officially over, nevertheless the economy worldwide is still uncertain and very fragile.

Several European countries and the United States are facing public debt crisis, which is in fact the prolongation of the previous economic crisis. As explained by Zaman (2010), by recapitalizing banks in difficulty, the problems of the financial system that generated the economic crisis moved from the banking and financial sector to the government sector, and the risk of insolvency in the corporate sector passed therefore to the state level. Consequently, many governments (including those not affected by the debt crisis) have been forced to adopt tough austerity measures that will further affect their economies. By reducing various forms of social benefits and salaries at national level, the domestic demand for commodities will decline, these measures will concern in particular middle and low-income groups, the external demand for exports will decline as well, creating very fragile national economies. If measures to boost productivity and efficiency in production are not taken in parallel, the decline in

demand will most probably generate a second recession, which will easily go global. While economies are starting to recover, the effects of the crisis on employment and unemployment are still present, and it will take more time for labor markets to return to their pre-crisis equilibrium than is the case for the productive sector (Eichhorst *et al.*, 2010). For example, in 2009, global GDP fell by 0.6% and unemployment increased from 5.7% to 6.3%. However, in 2010, global GDP rose by 4.8%, but unemployment only declined from 6.3% to 6.2% (Graziosi, 2011). This reflects a longer tendency towards jobless growth: between 1999 and 2008, global GDP increased by 47%, but unemployment declined by only 0.7 percentage points, from 6.4% to 5.7% (Graziosi, 2011).

A CEDEFOP study on European Union labor markets (Cedefop, 2010) revealed that there are probably around 10 million fewer jobs now than would have been expected without the crisis, and that this situation will not improve over the next few years. The crisis, however, did not affect the declining tendency of vulnerable employment that has been observed since 1999 all over the world. This indicator remains exceptionally high in the South Asia (79%), sub-Saharan Africa (76%) and South-East Asia and Pacific (62%) regions (WTO and ILO, 2011).

Increasing the employability of TVET graduates will require increasing their capacity to seize immediate employment opportunities and to deal with labor market constraints. This has at least three significant implications for TVET. First, to improve the coordination among government departments responsible for different policy areas, in particular TVET and employment. Second, TVET systems have to develop tools and mechanisms for anticipating and meeting the needs of labor markets and individuals. Third, TVET needs to focus more on developing immediate job skills and wider competencies, through workplace learning and competency-based approaches to enable learners to handle vulnerable employment and to sustain their learning capacity. (ILO, 2010).

Therefore, TVET need to equip individuals beyond traditional and static concepts of 'employability' to be more resilient and to manage risk and uncertainty in fast changing education and labor markets (Hanushek, Woessmann and Zhang, 2011).

Given current and future demographic trends, it is crucial that young people and older adults in particular are ‘prepared’ to continue their development in more demanding employment, education or training contexts (UK Commission for Employment and Skills, 2011). At the same time, in countries with a rapidly growing youth population, the transition from school to work will be difficult because job creation may not be sufficient to absorb the growing skills supply. In order to deal with this situation, many countries have reinforced different forms of workplace learning (apprenticeship, internship and industry detachment). Effort has also gone into enhancing the capacity of TVET systems to better understand changing market forces. Investment in labor market information is equally crucial for developing better TVET systems (ILO, 2010).

Unemployment is also targeted by active labor market policies (ALMPs) more directly, by providing job-search support and skills upgrading (ILO and ILS, 2011).

#### **4.2.1.5. Globalization, TVET and the labor market**

Globalization as a process stimulates economic, social and cultural activities across national borders. The main forces that have driven global integration have been technological innovations, broader political changes and economic policies. The economic aspects of globalization include the fast increase of trade, investment, capital movements and migration (WTO, 2008). Globalization has had a strong influence on TVET and the labor market in the world over the past years. It is important to understand the various channels through which globalization affects labor markets and demand for skills in developed as well as in developing countries. On one hand, globalization impulse the foreign direct investment (FDI) which acts as a strong force that impulse competitiveness in the labor market and enhance the in-service training, at the same time it has appeared new options for industrial restructuring as the fragmentation of value chains that allows the outsource the production outside the originating country (Faust *et al.*, 2004) what induce that a high proportion of the employees of the global value chains are located in developing economies. According to (Brown, Lauder and Ashton, 2011) there are two different types of outsourcing. The first type exist within the labor intensive industries and mostly low-skills activities and low-paid work (For example clothing and footwear) mainly existing in the low-income

countries in which the economies become trapped in low-skill equilibrium. The second type of outsourcing more highly skilled work is relocated, which enable companies to develop capacities and compete on the global market. Outsourcing raises concerns regarding the redistributive aspect of globalization and poses serious risks of polarization of global labor markets, with rapid growth in high-wage, high-skill professional jobs in developed and emerging countries but low-wage, low-skill jobs in developing countries, (Bartels and Lederer, 2009).

On the other hand, the international community has increasingly highlighted the importance of developing approaches that could harmonize economic prosperity, environmental conservation and social well-being, as it has been the Bonn Declaration in 2004 where it states that TVET policies are expected to contribute to make globalization inclusive and socially and environmentally sustainable (UNESCO, 2004).

Globalization intensifies the pressure on the TVET sector to supply the necessary skills to workers involved in globalised activity, and to adapt existing skills to rapidly changing needs. As a consequence, there is increasing demand for more agile TVET systems where there is a greater focus on modular and competency-based programs, as well as on cognitive and transferable skills, which are expected to help people adapt to unpredictable conditions (WTO and ILO, 2011).

## CHAPTER 5

### TVET at UNESCO

This chapter presents how does UNESCO understands Technical and Vocational Education and Training (TVET) as a part of the lifelong learning process, that includes education, training and skills development, and moves to the description and explanation of the Actual UNESCO's TVET strategy 2016-2021 approved in 2015 and its three core areas: fostering youth employment and entrepreneurship; promoting equity and gender equality and facilitating the transition to green economies and sustainable societies. and UNESCO's first historical TVET strategy for the period 2010-2015 that aimed mainly to upstream policy advice, facilitated conceptual clarifications and act as clearinghouse on TVET.

The chapter continues describing UNESCO's TVET normative instruments and its responsibility on monitoring the implementation the instruments: the 1989 Convention on Technical and Vocational Education; and the 2001 Revised Recommendation concerning Technical and Vocational Education.

It concludes with an specific focus on UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training, by describing its mandate, role, vision and scope.



## 5.1. CONCEPTUALIZATION OF TVET FOR UNESCO

UNESCO understands Technical and Vocational Education and Training (TVET) as a part of the lifelong learning process, that includes education, training and skills development related to a wide range of occupational sectors, production, services and livelihoods. Technical and Vocational Education and Training can take place at secondary, post-secondary and tertiary levels and includes work-based learning and continuing training and professional development which may lead to qualifications.

TVET also includes a wide range of skills development opportunities attuned to national and local contexts. Learning to learn, the development of literacy and numeracy skills, transversal skills and citizenship skills are integral components of TVET (UNESCO, 2015c).

TVET contributes to sustainable development by empowering individuals, organizations, enterprises and communities and fostering employment, decent work and lifelong learning so as to promote inclusive and sustainable economic growth and competitiveness, social equity and environmental sustainability.

For UNESCO TVET has several aims: a) To empower individuals and promote employment, decent work and lifelong learning. TVET contributes to developing knowledge, skills and competencies of individuals for their employment, careers, livelihoods and lifelong learning. TVET helps individuals to make transitions between education and the world of work, to combine learning and working, to sustain their employability, to make informed choices and to fulfil their aspirations. TVET contributes to social cohesion by enabling individuals to access labour market, livelihood and lifelong learning opportunities; b) To promote inclusive and sustainable economic growth. TVET contributes to the effectiveness of organizations, the competitiveness of enterprises and the development of communities. TVET is labour market-oriented, anticipates and facilitates changes in the nature and organization of work, including the emergence of new industries and occupations, and scientific and technological advances. Through promoting entrepreneurship, TVET supports self-employment and the growth of enterprises. c) To promote social equity. TVET

contributes to the equality of learning opportunities and socio-economic outcomes including gender equality. TVET creates attractive and relevant learning opportunities for populations of all social, economic and cultural backgrounds. TVET is inclusive and does not tolerate any form of discrimination. TVET contributes to developing knowledge, skills and competencies that promote responsible citizenship and democratic participation. d) To promote environmental sustainability. TVET integrates principles of environmental sustainability and fosters environmental responsibility through the promotion of a critical understanding of the relations between society and the environment so as to promote sustainable consumption and production patterns. TVET contributes to the development of knowledge, skills and competencies for green occupations, economies and societies. TVET contributes to the development of innovations and technological solutions needed to address climate change and to preserve environmental integrity (UNESCO, 2015c).

## **5.2. ACTUAL UNESCO'S TVET STRATEGY 2016 - 2021**

The development of the actual UNESCO Strategy for TVET has taken into account the 2030 Agenda, the Education 2030 Framework for Action, the evaluation of the Strategy for TVET (2010-2015), the Recommendation concerning TVET (2015), UNESCO's analysis of global trends in TVET, and various consultations, such as the expert on-line meeting consultation that took place from September, 22<sup>nd</sup> 2015 to October 3<sup>rd</sup> 2015 organised by the UNESCO-UNEVOC International Centre and meetings of the Inter-Agency Group on TVET on skills in the 2030 Agenda. The consultation and drafting process took place in coordination with the development of the Education 2030 Framework for Action (FFA). This is intended to ensure that the implementation of the Strategy for TVET and the FFA will mutually address key TVET policy issues, in particular youth employment, decent work, entrepreneurship and lifelong learning.

The aim of the Strategy is to support the efforts of Member States to enhance the relevance of their TVET systems and to equip all youth and adults with the skills required for employment, decent work, entrepreneurship and lifelong learning, and to

contribute to the implementation of the 2030 Agenda for Sustainable Development as a whole. It has three priority areas (UNESCO, 2016):

### **5.2.1. Core area 1: Fostering youth employment and entrepreneurship**

UNESCO raises awareness of one of the most significant problems facing economies and societies in today's world, youth unemployment. UNESCO fosters TVET as a solution to youth unemployment as it can equip youth with the skills required to access the world of work, including skills for self-employment. TVET can also improve responsiveness to changing skill-demands by companies and communities, increase productivity and increase wage levels. TVET can reduce access barriers to the world of work, for example through work-based learning, and ensuring that skills gained are recognised and certified. TVET can also offer skills development opportunities for lowskilled people who are under- or unemployed, out-of-school youth and individuals not in education, employment and training (NEETs) (UNESCO, 2016). UNESCO will continue providing evidence-based and impact-oriented advice for interventions at the national level, and through regional and global initiatives where appropriate. At the national level, UNESCO will support TVET policy reviews and policy development and in-depth analysis of specific priority areas, including funding. Additionally, UNESCO will support capacity building initiatives of national decision-makers and institutions responsible for the training of teaching of staff and managers. At the regional level, UNESCO will support the emergence of regional TVET agendas, peer learning and knowledge sharing. At the global level, UNESCO will encourage and support multilateral initiatives and collaborative activities that promote the transformation and attractiveness of TVET worldwide as a contribution to youth employment, decent work and entrepreneurship.

UNESCO will promote a whole-of-government approach to TVET transformations that foster youth employment and better connect and align relevant policy areas, including but not limited to education, employment, industrial and economic development, agriculture and rural development, health, and social policy.

UNESCO will focus on ways to create effective institutions and partnerships across governments and between agents and institutions involved in TVET at the national and local levels, and will also focus support on the development of TVET leaders in ministries, agencies and TVET institutions through the TVET Leadership Programme aiming at capacity building of TVET institutional leaders and heads of TVET teacher training institutions through the UNEVOC Center.

### **5.2.2. Core area 2: Promoting equity and gender equality**

As a result of wider gender inequalities and stereotypes, TVET programmes are often gender-biased, affecting the access to and participation of women in specific occupational areas. This participation issue contributes to the perpetuation of gender inequalities at work and in society at large, including for countries that have achieved parity of access.

UNESCO will aim to shed light on these issues and identify the most cost-effective policies to tackle them. The Organization will support Member States to define appropriate policy measures to promote equity in and through TVET; to ensure all youth and adults, women and men, have equal opportunities to learn, develop and enhance their knowledge, skills and competencies; and to address the great diversity of learning and training needs.

UNESCO will also provide policy advice and capacity development to Member States to make TVET more accessible to all disadvantaged and vulnerable groups, including through investment in Information and Communication Technologies (ICTs) as innovative means to widen access and participation rates.

UNESCO will work with concerned Member States in improving skills development in the informal sector and rural areas.

### **5.2.3. Core area 3: Facilitating the transition to green economies and sustainable societies**

For all countries, climate change represents an urgent and potentially irreversible threat. All Member States have priorities for transition to green economies and climate resilient societies.

UNESCO will develop practical tools to assist Member States in designing and implementing appropriate and effective strategies regarding the requirement, supply and use of skills to achieve the expected development outcomes in priority areas such as health, water, sustainable industrialisation and energy, agriculture and food safety and security.

UNESCO will support Member States in achieving a smooth transition to green economies and increase their capacities to meet their commitments to the Paris Agreement on Climate Change, adopted in December 2015.

### **5.3. UNESCO'S TVET STRATEGY 2010 - 2015**

In 2009 UNESCO, at its 181<sup>st</sup> session, in consultation with different partners, developed an Strategy for Technical and Vocational Education and Training (TVET) to support the development of TVET in Member States over three biennia (2010-2015) (UNESCO, 2009b) UNESCO aim strengthen its assistance to Member States to improve their TVET systems in line with Education for All (EFA) goal 3 relating to “ensure that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programs”. The strategy focuses on three core areas of action: a) The provision of upstream policy advice and related capacity development; b) Conceptual clarification of skills development and improvement of monitoring of TVET; and c) Acting as a clearinghouse and informing the global TVET debate (UNESCO, 2009).

### **5.3.1. CORE AREA 1: Upstream policy advice and capacity building at country level.**

For core area 1, UNESCO provides upstream policy advice focusing on the development of TVET policies according to national needs and priorities reinforcing the link with key challenges as gender mainstreaming, lifelong learning opportunities and youth unemployment or underemployment. Building the capacity of national decision-makers and personnel of relevant institutions to review these policies will be an integral part of this action. Other issues of particular concern include: the articulation between general and technical and vocational secondary education; curricular reform; entrepreneurship; qualifications frameworks for formal and non-formal TVET; links to the labor market; financing and cost-effectiveness; the training of trainers; equal opportunities for boys and girls; and new approaches to improving access to and the status of TVET, particularly for marginalized groups. UNESCO's assistance is focus primarily on building national capacities to undertake subsector diagnosis and policy analysis, and to prepare comprehensive national TVET plans aligned with other parts of the national education system. UNESCO's comparative advantage lies with skills development falling under the ministry of education. Its programmatic interventions therefore focus primarily on secondary and post-secondary TVET, as well as on non-formal TVET.

TVET must be an integrated part of a more comprehensive post-primary education subsystem. Private sector involvement is of great importance to ensure that there are appropriate linkages with the labor market and that training is relevant. TVET policy should provide for the targeting of vulnerable groups including women and girls, and pay adequate attention to the informal sector. Furthermore, TVET curricula should include basic entrepreneurship education in support of self-employment. UNESCO promotes TVET strategies that include recruitment and retention, training and certification of teachers and trainers.

Establish coherent and cooperative multilateral approaches: many national TVET strategies are fragmented. Promoting a holistic approach to TVET require harmonized interventions with key partners in countries, UNESCO therefore aim to establish systematic cooperation and improved coordination with agencies such as the International Labor Organization (ILO), the World Bank (WB), the European Training Foundation (ETF), the Organization for Economic Co-operation and Development (OECD) and the United Nations Industrial Development Organization (UNIDO), and relevant regional bodies as a first step.

### **5.3.2. Core area 2: Conceptual clarification and improve on TVET monitor systems**

For core area 2, UNESCO is expected to improve national capacities and systems for monitoring and assessing progress in skills development as a priority. At the international level, conceptual clarification is needed to produce comparative data and indicators. Terms such as “competency”, “skill”, “life skills”, “TVET”, “technical and vocational education” (TVE) and “technical and vocational skills development” (TVSD) are used differently across the world and in different languages and contexts. The complex landscape of skills development, with its diverse learning environments (school- or work-based, formal or non-formal) and widely varying national systems, has rendered virtually impossible the monitoring of TVET for international comparison. UNESCO is placed to propose interpretations of these concepts. Key indicators are being identified and national statistical capacities developed in close cooperation with UIS and other main partners. In a first phase, UNESCO undertakes the work on conceptual clarification outlined above and review existing indicators. This will build on ongoing cooperation in this area between the UNESCO-UNEVOC International Centre and UIS. Then, the Organization draw on the expertise acquired in developing a framework of indicators to monitor non-formal education and the Non-Formal Education Management Information System (NFE-MIS). Building on this work, UNESCO step up its technical assistance to Member States and develop capacity to collect and analyze sex-disaggregated data on skills, allowing the collection of internationally comparable data.

Assess and monitor the two normative instruments in the field of TVET: the Convention on Technical and Vocational Education (1989), and the Revised Recommendation concerning Technical and Vocational Education (2001), which aim to provide policy-makers with advice on improving their national TVET policies and systems.

### **5.3.3. Core area 3: Act as TVET clearinghouse at global level**

UNESCO works as a clearinghouse for TVET in relation to Core area 3. In particular, it revamps the global UNEVOC networks to serve as a platform for cooperation and information-sharing to improve TVET across the world. This facilitates the scaling up of South-South cooperation between countries faced with similar challenges. In cooperation with other partners such as ILO, OECD and the World Bank, a web portal for information and tools covering the various aspects of TVET is envisaged. Moreover, the information collected could later become a world databank on TVET systems as part of UNESCO's knowledge management system.

UNESCO use its convening power to promote global awareness of the importance of TVET. UNESCO is expected to facilitate the debate on the place of TVET and skills development in the post-2015 education and development agenda.

## **5.4. UNESCO'S TVET NORMATIVE INSTRUMENTS**

UNESCO is responsible for monitoring the implementation of two normative instruments in the field of technical and vocational education and training. The 1989 Convention on Technical and Vocational Education; and the 2001 Revised Recommendation concerning Technical and Vocational Education (henceforth the 2001 Revised Recommendation). The 1989 Convention was adopted by the 25th session of the General Conference (1989) two years after the International Congress on the Improvement and Development of TVET (Berlin, 1987). The Recommendation was



originally adopted by the 12th session of the General Conference of UNESCO (1962). It was revised in 1974 and again in 2001 at the 31st session, following the Second International Congress on Technical and Vocational Education (Seoul, 1999).

The General Conference decided at its 37th session in 2013 (37 C/Resolution 17) that the 2001 Revised Recommendation should be revised once more to reflect the new trends and issues in technical and vocational education and training. The final report of the Director-General containing a draft text of the new Recommendation concerning TVET was, communicated to Member States on 10 April 2015 and approved by the General Conference at its 38th session in November 2015 (UNESCO, 2015e).

The new revision of the 2001 Revised Recommendation focus its attention in five main following areas: a) Policies and governance; b) Quality and relevance; c) Monitoring and evaluation; d) Research and knowledge management and d) International Cooperation (UNESCO, 2015c).

Within the first area, related to policies and governance: In relation to the policy development: Member states should: a) Develop TVET policies; b) Guide, recognize and promote TVET in a lifelong learning framework; c) Raise public attractiveness of TVET; d) Expand TVET at secondary, post-secondary and tertiary levels; e) Develop pathways that facilitate access of individuals to the TVET studies; f) Support continuing training and professional development to adult learners.

As for the Governance and regulatory framework: Member states should: a) Assume the primary responsibility of public policies strength a regulatory framework for TVET, encourage stakeholder participations and partnerships; b) Facilitate inter-ministerial coordination; c) Establish governance models for TVET institutions supporting work-based learning.

In terms of Social dialogue, private sector and other stakeholder's involvement: Member states should: a) Foster social partner's participation to agreed labour market,

education regulations; b) Increase private sector participation in TVET; c) Engage with other stakeholders including NGO, TVET providers, staff, parents, youth, and others.

As for financing: Member states should: a) Set up measures involving all stakeholders involving innovative funding mechanisms; b) Forms of incentive and accountability mechanisms should be established; c) TVET institutions should have adequate funding for their operations.

To improve equity and Access: Member states should a) Ensure that youth and adults have equal opportunities to learn; b) Ensure quality education for all; c) Take measures against all forms of discrimination; d) Make TVET more accessible to all disadvantaged and vulnerable groups.

The second area, is focused on quality and relevance. Member states should improve their learning processes by a) Encouragement of new learning opportunities; b) TVET should be holistic and develop transversal and entrepreneurial skills; c) promote work-based learning in its various forms, including in-service training, attachments, apprenticeships and internships; d) TVET in the informal economy should be promoted; e) Exploit the potential of information and communication technologies in TVET; f) Establish effective and appropriate assessment system.

As for TVET staff, member states should, a) Ensure qualified and high-quality TVET staff through the development of policies and frameworks. Moreover in relation to the qualification systems and learning pathways: Member states should: a) Well-articulated outcome-based qualifications frameworks or systems based on learning outcomes in consultation with stakeholders, based on identified needs including occupational standards; b) Promote systems for the recognition, validation and accreditation of knowledge, skills and competencies acquired through non-formal and informal learning; c) Promote the mutual recognition of qualifications at national, regional and international levels, in relation to the mobility of learners and workers.

To ensure quality and quality assurance, member states should a) Foster an environment for high quality TVET; b) Establish a system for quality assurance in TVET based on participation by all relevant stakeholders; c) Seek to improve the leadership and

management of TVET institutions; d) Establish, an appropriate legal framework for the regulation, registration and monitoring of private TVET providers.

To improve the relevance to labour markets and the world of work: Member States should: a) Support and facilitate transitions from education to the world of work, employment and/or self-employment; b) Establish TVET and labour market information systems; c) To identify and anticipate skills needed through public-private partnerships. To conclude to improve the information and guidance, member states should facilitate information and guidance to individuals.

The third area referred to monitoring and evaluation, member states should: a) Evaluate TVET policies and programmes; b) Develop appropriate tools and indicators for measuring the effectiveness and efficiency of TVET policies against agreed standards; c) Include relevant stakeholders on the processes for monitoring and evaluating TVET.

The fourth area focused on research and knowledge management: member states should deepen the knowledge base for TVET through sustained investment in interdisciplinary research so as to develop new methodologies and understandings of TVET in its broad context and to inform TVET policies and decision-making.

To conclude, the last area which is international cooperation, member states should consider sharing knowledge, experiences and promising practices, reinforce international TVET data collection and make use of international and regional networks,

## 5.5. UNESCO-UNEVOC

The UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training was established as a result of a decision taken by the UNESCO General Conference in 1999. It assists UNESCO's member states strengthen and upgrade their Technical and Vocational Education and Training (TVET) systems. It does so by providing capacity building and resource development in view of promoting best and innovative practices in TVET for the world of work, as well as improving access to TVET, knowledge services and online services. UNESCO-UNEVOC particularly focuses on contributing to the overarching UNESCO goals in TVET. These are to help member states improve and integrate TVET as part of the global Education for All Campaign, and also to assist in the alignment of TVET with the tenets of sustainable development goals 2015 - 2030 (UN, 2011).

UNESCO-UNEVOC undertakes its activities through a worldwide network of around 280 UNEVOC Centers in more than 165 countries. The UNEVOC Network is the only network of TVET institutions with a global outreach. It links and fosters interaction and learning among diverse institutions of TVET stakeholders around the world. The UNEVOC Network serves as a unique platform for south-south and north-south-south cooperation.

UNEVOC is a member of the Inter-Agency Working Group on Entrepreneurship Education, created in 2012. This working group consists of representatives of ILO, UNESCO Headquarters, UNESCO-UNEVOC, GIZ and ETF and guest members of bilateral organizations. It was established to promote entrepreneurship education at all levels and in all types of education and training through advocacy, networking, research and the sharing of knowledge, materials and good practice in order to contribute to the achievement of Education for All and the Millennium Development Goals (UNESCO, 2012c).

## CHAPTER 6

### UNESCO's TVET Project: Better Education for Africa's Rise (BEAR)

Chapter 6 describes in detail UNESCO TVET project named Better Education for Africa's Rise (BEAR) which refers to the case study of this research project.

Starting with a description of the rationale, background and importance of conducting this particular project for the SADC community in the selected countries, it continues by explaining the overall approach used to develop the project from the inception phase, when a consultation process was conducted in 2011, to the planification phase when designing the project, establishing clear objectives and key features in relation to the curriculum development component; and providing an explanation about the project management structure, and its implementation.

The chapter continues by describing the country specificities for both Botswana and Namibia, that includes the description of overall and specific objectives for each country according to the logical framework, the identification of direct and indirect benefits and principal actors of the project, and finalizes by explaining the monitoring and evaluation systems that have been put in place in relation to the activities carried out and the quantifiable outputs achieved.

## 6.1. CONTEXT AND BACKGROUND

During the last decade UNESCO has been advocating for increase the support for TVET in member states and more particularly in the Southern African Development Community (SADC) region. With this respect, the Government of the Republic of Korea (ROK) decided in 2010 to support five selected SADC countries (Botswana, DR Congo, Malawi, Namibia, and Zambia) in the TVET sector through a new project: Better Education for Africa's Rise (BEAR). The project's time-frame is 2011 - 2016 and the overall budget is 10 million USD (2 million USD for each country). Thus, a new type of development cooperation is being established, where a newly developed country shares its expertise in education. In this view, the Organization sees a unique opportunity to tie in with previous and on-going cooperation with SADC and its member countries, and in particular the comprehensive review of TVET provision conducted in 2010 (UNESCO, 2011a).

Although TVET systems are divergent by country, the common framework for the BEAR project is determined by four key factors: 1) The SADC regional agenda; 2) The major building blocks that go into constructing any TVET system: governance, labor market, content (curriculum, certification and quality), institution building, legislation and finance; 3) The choice of project elements or themes that reflect both this architecture and the SADC Secretariat's preoccupations (in particular the lack of data for sound decision making); 4) The specific reform initiatives in each of the five countries (see Annex 2: BEAR project leaflet).

Therefore the project maintains its main focus of the Southern African Development Community (SADC) Regional Strategic Development Plan (SADC, 2003) that notes the importance of TVET for regional development, having as one of its goals: 'promoting educated and skilled society for regional integration and development and global competitiveness' (SADC, 2003; pg.15); as well as the African Union's 2007 TVET Strategy which confirmed the important role of TVET in national development in order to "promote skills acquisition through competency-based training with

proficiency testing for employment, sustainable livelihoods a need responsible citizenship” (African Union, 2007; pg.27).

## 6.2. OVERALL APPROACH

In order to ensure involvement of all stakeholders concerned, UNESCO followed a participative design process involving national stakeholders and national experts. Moreover, UNESCO managed to create a close partnership with the SADC Secretariat and closely liaised with the potential beneficiary countries delegates to UNESCO. Field mission preparations were undertaken thereafter in collaboration with the National Commissions to UNESCO.

The consultation process started with a regional workshop in Gaborone, Botswana, conducted 21-22 March 2011. Representatives from the five selected countries, from SADC’s Secretariat, UNESCO’s Section for Technical and Vocational Education and Training, and the Republic of Korea met. At this workshop, a briefing was provided to build a mutual understanding of the project and to receive inputs and comments. In addition to roundtable discussions with all representatives, meetings with each country’s representatives were held to engage in further dialogue on the countries’ needs, their situation regarding TVET, and the preparation of the field mission. The field missions to each of the countries directly followed in the weeks after this 2-day workshop. The missions were each undertaken by a country expert team composed of one representative from UNESCO-HQ (two in the case of Botswana), one Korean expert, one international specialist, and one local expert. The missions’ purpose was to prepare a project feasibility report and a corresponding aide-memoires.

**Picture 1: BEAR project consultation process**

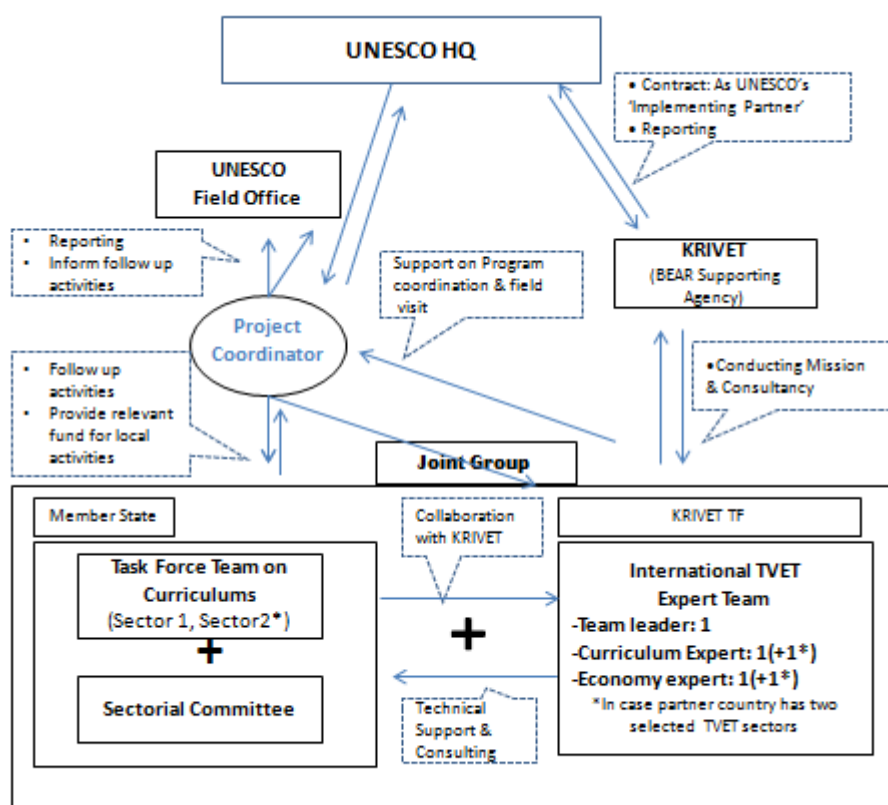
Source: UNESCO (2011d). BEAR project consultation process. Regional workshop.

The organization of the missions followed, among others, a five-step process that is intensively used by UN and UNESCO in the framework of its Capacity Building for Education programs. Hence, the field mission worked with a view of: a) Developing consultations, advocacy and consensus building; b) Using a systematic approach for examining the key policy objectives and capacities and performance of TVET institutions and identifying key issues and problems to be addressed; c) From previous step identifying priority areas for intervention and capacity development; d) Formulating implementation modalities as well as e) Elaborating monitoring and evaluation mechanisms (UNDP, 2014).

The teams employed appropriate methods, techniques and tools to collect information and views/opinions from key stakeholders and to design a country project using particularly a logical framework approach. The situation at national and sectoral level was analyzed to identify problems, constraints and opportunities which the project could address. Relevant project options were developed and then assessed for their feasibility and sustainability. Lessons learned from previous experiences and current initiatives were considered and intensive consultation with beneficiaries and stakeholders were conducted.



Figure 3: Implementation framework on curriculum development



Source: UNESCO (2012f). Bear project Kick of Meeting.

### 6.3. PROJECT DESIGN - OBJECTIVES AND KEY FEATURES

In each of the five countries, the proposed project aims to contribute to the promotion of a Technical and Vocational Education and Training (TVET) system that is relevant to the needs of the labor market and of individuals. The overall underpinning strategy of each project is based on a two-pronged approach that addresses the urgent need to improve access to quality TVET (with a particular focus on, yet not limiting itself to youth access) in selected countries, while working toward the broader goal of developing national capacities for leading TVET reforms.

This strategy has been implemented through a series of institution building and direct assistance initiatives in support of the development of TVET programs, and

enabling the shaping of evidence-based TVET policies and programs (UNESCO-TVET, 2012).

More specifically, the Better Education for Africa's Rise (BEAR) project aims to: a) Implement TVET sectoral programs in selected countries of the Southern African Development Community (SADC) region through public and private partnership and b) improve the knowledge base and capacity of TVET systems to develop evidence-based TVET policies.

**Figure 4: Main goals of the implementation of the BEAR project**



## Goals of BEAR project

1. To implement sectoral programmes in selected countries of the SADC region through public and private partnership.
2. To improve:
  - ✓ New governance structures;
  - ✓ Competency-based curricula;
  - ✓ National qualifications frameworks

**Beneficiaries:** The main direct target groups are TVET policy-makers, teaching staff in TVET institutions and youth.

Source: Preckler, M. (2015a). CIES Washington.

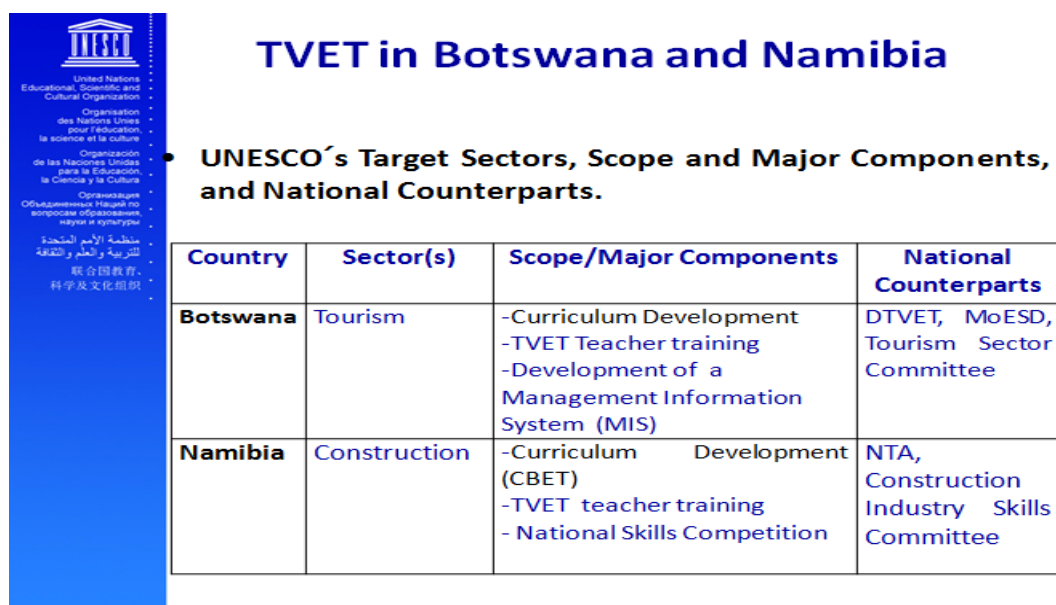
The main direct target groups of the proposed capacity building activities are TVET policymakers, experts and teaching staff in TVET institutions of the five beneficiaries countries as well as young drop-outs, unemployed and in-school youth. This initiative will include gender equality and social dialogue as cross-cutting themes (UNESCO, 2011b).

The impact at the system level it is measured in terms of changes in TVET policies, institutions and programs that result from the performance of the country projects. The human resources development investment of the five country projects on

staff of national and local institutions allow for replication of interventions, multiplying the number of young people to be outreached once the BEAR project is completed. Capacity building activities will include staff of governments, employers' organizations, employee organizations and enterprises. The investment on Management Information Systems, monitoring and evaluation and strategic planning that enhance the capacity for evidence based policies.

The twin focus on systemic change and on training and capacity development of staff of institutions and agencies responsible to design, monitor and evaluate TVET policies and programs have a multiplier effect and, at the same time, ensure replicability and, therefore, sustainability of interventions promoted by the project. At least 100 staff (including teachers) of public and private organizations have participated in (and benefit from) project implementation in each country (500 staff for the five countries).

**Figure 5: UNESCO’s target sector, scope and major components of the BEAR project in Botswana and Namibia**



Source: Preckler, M. (2016). SPCE-SEC, Lisboa, Portugal.

At beneficiaries’ level, the sectoral focus of national project has focused on initiatives targeting access of youth to new and/or updated TVET programs relevant to labor market and youth needs and organized closely with enterprises and local stakeholders. The project measures impact on young beneficiaries in terms of increased

employment and quality of work. It is expected that at least 1000 youth (200 in each country) will benefit directly from the project through updated curricula, trained teachers, improved infrastructure, guidance and attachment to enterprises focusing on specific sectors selected for their potential of job growth (UNESCO, 2011a).

The process of implementation, monitoring and evaluation of the BEAR project is such that it also develop in a mechanism for examining developments of TVET systems in participating countries, engaging policy dialogue on the issues and challenges facing education, training and employment in the SADC region. This have been further fostered, at regional level, through the partnership that has been established between SADC and UNESCO.

Finally, demonstrating the effectiveness of the project approaches, in each country, has constituted an incentive for other donors to get involved in the TVET sector, forge partnerships and pursue the application of similar approaches after project completion.

#### **6.4. IMPLEMENTATION AND MANAGEMENT STRUCTURE OF THE PROJECT**

The implementation of the project considered all actors and stakeholders taking part on it and have given clear roles in order to reach a common understanding and consensus on how to better achieve the goal. The main actors for the project development are UNESCO HQ, UNESCO Field Office: Harare, Windhoek, National Project Officers for the BEAR project, National major partners (Steering Committee) the duties and roles are the following ones:

##### **1. UNESCO-HQ:**

- Planning, Monitoring & Evaluation (every 6 month) of all activities
- Coordination of Korean government support and donor agency's engagement.
- Coordinating actions with the Implementing Partners.

## 2. UNESCO Field Office: Harare

- Accountability of Budgeting
- Report on financial management of the project

## 3. A Focal Point at the country level

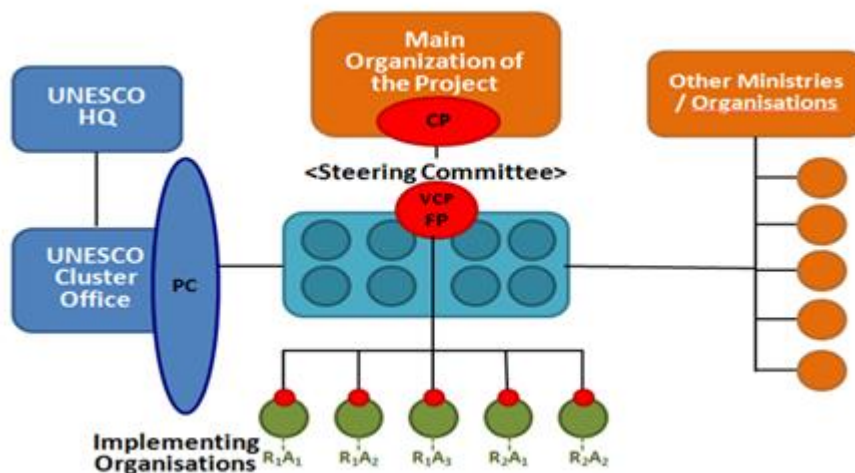
- The Focal Point named National Project Officer (NPO) or Project Coordinator has been set-up in the premises of D-TVET in the Ministry of Education and Skills Development in Botswana and in the Namibian Training Authority (NTA) in Namibia, which will respond well with the basic principles of the project (particularly better coordination and synergy between different stakeholders) and will guarantee that the interests of the various beneficiaries, ministries and institutions, will be taken into account.

The NPO has: a) Direct access to the Permanent Secretaries of involved ministries; b) An autonomous organizational structure and status and c) Specific and fully dedicated operational capacities such as office facilities (including independent communication facilities) and dedicated office support staff in order to: Monitor everyday activities and to report on progress of the project.

## 4. National major partner (s):

- A Steering Committee (SC) was created for country ownership and commitment and has been composed of representatives from different ministries and organizations participating in the project: In the case of Botswana, The Ministry of Education and Skills Development; BOTA; The Ministry of Labor; The Ministry of Environment, Wildlife and Tourism; HRDAC (to be replaced by the Human Resource Development Council); Tourism Sector Committee; and the Hospitality and Tourism Association of Botswana (HATAB). In the case of Namibia, The key mandate of the Committee is to plan the project implementation and mobilize beneficiary institutions, and to mobilize resources for recurrent budgets in concerned institutions.

**Figure 6: Implementation process and stakeholders' responsibilities within the BEAR project**



Source: Own Elaboration based on UNESCO (2012f).

The target sectors, projects' scope, major components, and an overview of national counterparts in Botswana and Namibia are summarized in Table 6 below.

## 6.5. COUNTRY SPECIFICITIES: BOTSWANA AND NAMIBIA

### 6.5.1. Botswana

#### 6.5.1.1. Overall and specific objectives

The overall objective to which the project will contribute is that TVET programs be relevant to the skills needs of businesses and individuals.

The specific objective, for which the project will be fully accountable, given a number of assumptions is: to enhance TVET system capacity to ensure employability of students from formal TVET programs in the Tourism Sector.

The project is expected to have three results: Result 1: Program delivery in the Tourism Sector is based on updated curricula developed with employers. Result 2: Capacity of TVET trainers to deliver TVET programs in a competent manner is enhanced. Result 3: Capacity of TVET system to monitor and evaluate efficiency, effectiveness and equity is improved.

A set of activities are been carried out under each result.

\* Under Result 1, six activities are foreseen in order to reach the expected result:

- 1.1 Identify skills needs in the Tourism Sector in consultation with the Tourism Sector Council
- 1.2 Develop new standards, curricula, teaching and learning materials
- 1.3 Develop employers' capacity to contribute to program design and implementation
- 1.4 Provide necessary equipment and materials for program delivery
- 1.5 Implement new curricula in courses for the Tourism Sector
- 1.6 Capitalize the lessons learned from the demand-driven model to other sectors

\* Under Result 2, five activities are foreseen:

- 2.1 Review TVET trainers' training curriculum to include industry experience, pedagogical and technical training
- 2.2 Develop capacities to organize enterprise-based training for trainers.
- 2.3 Train administrators and trainers on how to deliver the new program.
- 2.4 Design a Recognition of Prior Learning (RPL) route for experienced practitioners to become trainers.
- 2.5 Plan, design and implement open and distance learning modalities for professional development of trainers in cooperation with the Botswana College for Distance and Open Learning (BOCODOL).

\* Under Result 3, three activities are foreseen:

- 3.1 Develop a MIS together with HRDAC.
- 3.2 Train staff on data collection, processing and analysis.
- 3.3 Run a pilot on data collection, processing and analysis in Tourism.

#### **6.5.1.2. Beneficiaries and principal actors of the project**

The principal actors of the proposed BEAR project in Botswana will be TVET institutions and businesses located within one economic sector or skill area (as a pilot area). The economic sector will be the Hospitality/Tourism Sector. The TVET institutions will be those concerned with teacher training (CTVE in Francistown under DTVET) and curriculum development (within DTVET, with a benefit for BOTA capacity). More specifically, Maun technical college and Francistown technical college have run the programs for Tourism. Gaborone Technical College is planning to do so, for regular students and for students with learning difficulties/disabilities. No program has been offered by Brigades regarding tourism. Additionally, the Madirelo Training and Testing Centre under the Ministry of Labor and Home Affairs is planning to train in the form of upgrading workers from the hospitality industry. The Department of Wildlife under the Ministry of Tourism, Wildlife and Environment runs tour guide



training courses in Maun. The businesses will be those that are directly involved in employing and possibly training and / or providing internships for the selected skills area. The principal actors are engaged with each other in the Sector Council of the Human Resources Development Advisory Council (UNESCO, 2011a).

Beneficiaries of the BEAR project are individuals and businesses who acquire or employ people with useful, relevant skills and thus improve employability and productivity respectively. The Sector Council under the HRDAC will benefit, as this may be the first project the Council engages itself in, offering a contribution to institution building.

The various players in TVET data collection and management information systems are beneficiaries of the project. The project aims to strengthen TVET monitoring and evaluation by contributing to the development of a MIS, to data collection, and to staff training for the MIS. Currently, TVET data are collected by DTVET, MTTC and BOTA, as well as by the EMIS unit within the Ministry of Education and Skills Development, in an uncoordinated and not always systematic manner. The project intends to work with all these players to collect data on all relevant indicators, including data on the impact of training (UNESCO, 2011a).

#### **6.5.1.3. *Audit, monitoring and evaluation***

For each of the activities under the three results, the project has defined clear, and where possible quantifiable, outputs. These outputs were described in the project's logical framework. Key indicators for overall objectives, project specific objective and results are included in the logical framework matrix. The project will fund regular monitoring two times per year.

Close monitoring of progress will allow the Focal Point and the PSC to use these indicators for a continuous assessment of project implementation. The Focal Point will provide three monthly progress reports to the Project Steering Committee for approval.

The Focal Point will also present annual progress reports as part of its annual work plans and budget proposals.

The project will fund regular monitoring two times per year to be led by UNESCO-HQ in coordination with UNESCO Harare Office. In addition, a mid-term review will be carried-out at the end of Year 3. A final evaluation at the end of the project will be carried-out.

## **6.5.2. Namibia**

### **6.5.2.1. Overall and specific objectives**

The overall objective to which the project will contribute is as follows: TVET programs are relevant to the skills needs of businesses and individuals.

The specific objective, for which the project will be fully accountable, given a number of assumptions is: to increase the numbers of appropriately trained VET personnel and gainfully engaged (employed or self-employed) in critical occupational areas for the Construction Sector.

The project is about to have three results: Result 1: Program delivery in MQC&R sector is based on updated curricula and attractiveness for trainees that respond to the requirements of national and international standards. Result 2: Capacity of VET trainers to deliver TVET programs in a competent manner is enhanced. Result 3: Overall VET system capacity is improved through applying lessons learned from the demand-driven model to other sectoral development.

A set of activities have been carried out under each result.

Under Result 1, six activities are foreseen in order to reach the expected result:

- 1.1 Develop new standards, curricula, teaching and learning materials

- 1.2 Develop Industry Skills Committee (ISC) technical capacity to contribute to program design and implementation
- 1.3 Produce and distribute training packages
- 1.4 Implement the new qualifications for the sector
- 1.5 Prepare and organize a nationwide Skills Development Olympics in Construction Sector
- 1.6 Procure needed CBET equipment and tools in preparation for a nationwide Skills Development Olympics

\* Under Result 2, five activities are foreseen:

- 2.1 Identify and upgrade VET trainers' qualifications
- 2.2 Facilitate industry attachments for VET trainers
- 2.3 Train training centers managers on program delivery
- 2.4 Design a Recognition of Prior Learning (RPL) route for experienced practitioners to become VET trainers
- 2.5 Plan, design and implement open and distance learning modalities for professional development of VET trainers in cooperation with NAMCOL

\* Under Result 3, two activities are foreseen:

- 3.1 Capitalize the lessons learned from the demand-driven model to other sectoral development
- 3.2 Develop national regulatory framework including funding for sustainability

#### **6.5.2.2. Beneficiaries and principal actors of the project**

The principal actors of the proposed BEAR project in Namibia are the NTA, VET institutions, VET trainers and businesses located within the Construction Sector (as a pilot sector). In fact, this sector is part of the overall mining, quarrying, construction and resources (MQC&R) sector in Namibia. The businesses will be those that are directly involved in employing and possibly training and / or providing internships for this selected skills area.

**Picture 2: Capacity building workshop on curriculum development in DTVET, Gaborone. Botswana.**



Source: Preckler, M. (2014). Second workshop of the BEAR project in Botswana.

Beneficiaries of the BEAR project are individuals and businesses, who acquire or employ people with useful, relevant skills and thus improve employability and productivity respectively. The Industry Skills Committee under the MQC&R will benefit, as this may be the first project the Committee engages in and a contribution to institution building.

The various players in VET data collection and management information systems will be beneficiaries of the project. The project aims to strengthen VET trainers training and curriculum development as two key priority areas that the mission has identified. These require a close collaboration between NTA, VET institutions and businesses (represented by the ISC), to render VET relevant both to individuals and businesses.

**Picture 3: BEAR project student at the GTC in Botswana.**



Source: Preckler, M. (2015b). Mid-term evaluation review of the BEAR project.

### **6.5.2.3. Audit, monitoring and evaluation**

For each of the activities under the three results, the project has defined clear, and where possible quantifiable, outputs. These outputs were described in the project's logical framework. Key indicators for overall objectives, project specific objective and results are included in the logical framework matrix. The project will fund regular monitoring two times per year.

Close monitoring of progress will allow the Focal Point and the PSC to use these indicators for a continuous assessment of project implementation. The Focal Point provide three monthly progress reports to the Project Steering Committee for approval. The Focal Point will also present annual progress reports as part of its annual work plans and budget proposals.

The project will fund regular monitoring two times per year to be led by UNESCO-HQ in coordination with UNESCO's Namibia Office. In addition, a mid-term

review will be carried out at the end of Year 3. A final evaluation at the end of the project will be carried-out.

**Picture 4: BEAR project student at Namwater, Namibia.**



Source: Preckler.M. (2015b). Mid-term evaluation review of the BEAR project.

# PART II

## COMPARATIVE STUDY



## CHAPTER 7

### Methodology

This chapter is focused on the methodological approach used to carry out this research study. As a comparative education research study, the methodology used aims to describe, understand, explain and transform the reality (Latorre, Rincón and Arnal, 2005, p.22) in order to improve the existing reality. It is framed within the basis of a comparative study that follows seven different phases: selection and definition of the problem, formulation of the hypothesis, selection of the indicators for the analysis, description phase, interpretative phase, juxtaposition phase and comparative phase (Caballero, Manso, Matarranz, Valle, 2016). The research also took the form of a case study as associated to the process for developing and implementing new Technical Education and Vocational Training Systems in Botswana and Namibia, as part of UNESCO's project implementation, named "Better Education for Africa's Rise" (BEAR). By understanding the dynamics of the development and implementation process of the project, it may be possible to isolate critical elements which contribute to the success or failure of the project. This study is particularly useful as the new education curriculum developed by the BEAR project is tested, which, if successfully, may inform and encourage policy makers to replicate it elsewhere.

Therefore, the chapter is divided in three different sections, the first one aims to describe the general problem of this research study as well as its main and specific goals, highlighting the importance of doing it through formal and systematic procedures according to the principles of the scientific methods.

The second section describe very precisely the approach and the way in which the two different methodologies used (quantitative and qualitative one) are complementary and gives and holistic understanding of the issue we are dealing with. It includes a literature review of the TVET research in Africa, on TVET research on the



SADC region since year 2000 and on national TVET literature in Botswana and Namibia.

The third and final section of the methodology focused on the description of the comparative approach used, providing a description on the country selection process, ISCED classification, and the specificities of the quantitative research study that includes a macro analysis [parameters and indicators, list of data sources, unit of analysis] and a semi-structured questionnaire [unit of analysis, validation]; and the qualitative research study that is formed by: documentary analysis, participant observation, semi-structured interviews, focus groups. In addition to this, the section finalizes with an explanation of sensitivity to context, reflexivity, timing, measure of consistency and ethical considerations of the research study.

As mentioned before, this study seeks not only to provide a comparative overview of the influence of UNESCO on the development of national TVET systems but also to explore the current state of data on skills and the challenges and possibilities that lie ahead in trying to develop robust evidence on TVET in Namibia and Botswana. As mentioned before, it has been identified a real potential in this study to contribute to a wider international process of improved research on TVET, as well as to support national governments in their continued efforts to redevelop their education systems and better link them to the world of work.

## **7.1. GENERAL PROBLEM, HYPOTHESIS AND MAIN AND SPECIFIC GOALS**

### **7.1.1. General problem and hypothesis of the project**

The definition and selection of the general problem refers to: the description and analysis of the influence of UNESCO as an International organization on the Development of National Technical Education and Vocational Training (TVET) Educational System in Botswana and Namibia, as a comparative study.

A set of different hypothesis have been developed and are enumerated as follows:

1. It posits the existence of differences in the social impact perception regarding the development of National Technical and Vocational Training Systems implemented by UNESCO in Botswana and Namibia.
2. It states that there is a direct correlation between the distribution of mass education worldwide and the influence of international organizations (UNESCO) in developing national TVET educational systems in Botswana and Namibia.
3. It posits that UNESCO's role on the development of TVET policies is based on a bidirectional dialogue with the national governmental institutions.

### 7.1.2. Main and specific goals

The main Goals of the research project are:

1. To describe, analyze and compare the different dimensions of the social impact perception related to the development of new TVET systems at national level, in Botswana and Namibia.
2. To determine the existing correlation between the development of National TVET educational systems by UNESCO and the pressures of implementing ways of mass education.
3. To identify and asses the role of UNESCO, as an International Organization, on the development of the National Technical Education and Vocational Systems at National Level in Botswana and Namibia.

The main goals generates a set of specific goals that are linked to them, and these specific goals are:

1. To describe, analyze and compare the different dimensions of the social impact perception related to the development of new TVET systems at national level, in Botswana and Namibia.
  - 1.1. To describe the different dimensions of the social impact perception related to the development of new TVET systems at national level.
  - 1.2. To analyze the different dimensions of the social impact related to the development of new TVET systems at national level.
  - 1.3. To compare the differences on the social impact perception related to the development of new TVET systems at national level in Botswana and Namibia.

2. To determine the existing correlation between the development of National TVET educational systems by UNESCO and the pressures of implementing ways of mass education.

- 2.1. To describe if there is any existing pressure of implementing ways of mass education at national level.

- 2.3. To determine if UNESCO impose ways of mass education at national level, through the development of National TVET educational systems.

-2.2. To describe the added value that UNESCO bring to the country through the development of national TVET systems

3. To identify and asses the role of UNESCO, as an International Organization, on the development of the National Technical Education and Vocational Systems at National Level in Botswana and Namibia.

- 3.1. To describe the role of UNESCO on the development of national TVET systems in Botswana and Namibia.

- 3.2. To describe the main goals achieved by UNESCO on the development of National TVET systems.

- 3.3. To define UNESCO's strengths and weakness on the development of National TVET systems.

In order to achieve these goals described, it was firstly needed to design a set of specific tools that will be used to describe, analyze and evaluate the social impact perception regarding UNESCO's influence on the development of the National Technical Education and Vocational Training Systems in Botswana and Namibia. This requires good information about: where skill development is most needed in both countries; how well the skills individuals have acquired are matched with those required in the labor market; and the returns on investments in skills in terms of their economic and social outcomes. It is not easy to set up a comprehensive system of information related to skills development, and is particularly challenging specially in low-income countries with very limited resources to devote to a strong statistical infrastructure of data collection, processing, analysis and dissemination (OCDE, 2013).

This study presents a conceptual framework for choosing the most appropriate skills indicators to assess skills development policies and to benchmark country performance based on the nine pillars underpinning the G20 Action Plan that was adopted by G20 leaders at their Seoul Summit in November 2010 (G20 Seoul Summit, 2010). Therefore, more detail information and time is given to the selection of indicators for the analysis, as the skills possessed by each country's population provide the fundamental determinants of prosperity and well-being based on the widespread acknowledgement that TVET is becoming increasingly important as it develops policy issues and contributes to social development objectives in developing countries (King, 2009; Palmer, 2009). As mentioned before two different methodologies have been used (quantitative and qualitative ones).

## **7.2. APPROACH, METHODOLOGY & ETHICAL CONSIDERARIONS**

### **7.2.1. Literature review and research paradigm**

In comparative research the literature review can be done before, during or even after the field work (Cohen, Manion & Morrison, 2007). To facilitate the study of significant emerging concepts, in this study the researcher decided to review the literature both, before and during the field work. As participants raised new concepts during the data collection, these were included in the literature review. Patton (2002; pg. 123) highlights the importance of reviewing the literature during the field work allows "a creative interplay among the processes of data collection, literature review and researcher introspection".

#### **7.2.1.1. TVET research in Africa**

The first major wave of TVET research in Africa dates to the 1920s, although it was very much part of a wider discussion about the adaptation of schooling to African realities rather than being focused on post-school provision. The Phelps Stokes Fund

(1925) argued that schooling needed to be more vocationally oriented, leading to a range of attempts to develop ‘industrial’ schools in Africa (King, 1971; Gustafsson, 1987).

By the time of the transition period between colonialism and independence of the late 1950s and 1960s, the vocational schooling argument had dramatically lost ground as the dominant discourse of educational policy became expansion of academic schooling. Indeed, this was often a key demand of independence movements and one of their most symbolic policies once in power. In 1965 Foster apparently conclusively showed that given the structure of educational provision and the state of the formal labor market around independence, a good academic education was the best vocational preparation.

However, the decade after independence saw practices that ignored or rejected Foster’s argument, or at least, chose to limit the breadth of its relevance. These included attempts to make curricular offerings in school more diverse; to provide vocational preparation after schooling for unemployed youth; and to deliver formal training to plug skills gaps.

In the first case, although it would later become the most powerful supporter of Foster’s position, the World Bank at that time was a strong promoter of American-style comprehensive schooling offering a diverse mix of academic and vocational options, as the debate moved beyond the narrow issue of expanding access. (World Bank, 1991).

Second, by the latter part of the 1960s, increasing concerns about rising youth unemployment, as educational growth outstripped economic growth, prompted a series of interventions in African countries that sought to ‘solve the problem’ of the educated unemployed, such as the Kenyan village polytechnics and the Botswana brigades (National Christian Council of Kenya, 1967; Van Rensburg, 1974).

Third, the readily apparent lack of skilled nationals at independence led to a strong concern with formal vocational education and training at the artisanal and professional levels across Africa, largely to service government departments and parastatals.

However, the period between 1975 and 1990 saw a further wave of research that seemed to make it clear that there could be no case for vocational education in Africa. First, the World Bank recanted on the issue of curricular diversification through Psacharopoulos and Loxley's (1985) critique of such programs in Tanzania (and Colombia) and Heyneman's (1985) wider review of the effectiveness of such interventions. Second, there was a wave of further, largely negative, studies of vocationalized secondary education in Africa (Lauglo and Lillis, 1988) that reflected concerns by some agencies, especially the Swedish International Development Agency. Third, and by far most significantly, this work was linked to a remarkable international project of calculation of rates of return to various levels and forms of education, led by Psacharopoulos at the World Bank (Psacharopoulos, 1994). Together with parallel work at the Bank considering the effects of relatively small amounts of primary education on both farmer productivity and female fertility (Lockheed, Jamison and Lau, 1980), this work developed the evidential basis for the EFA movement and the educational component of the MDGs. Together, this research on education's developmental impacts seemed to make it clear that primary education was a far more efficient and effective way of reducing poverty than were secondary, vocational or higher education.

Whilst vocational forms of schooling were clearly discouraged under this orthodoxy, some governments and donor agencies did continue to stress the importance of post-school vocational provision as a direct preparation for specific occupations. However, the level of financial support to the sector declined considerably. Moreover, the World Bank developed a critique of this continued provision (World Bank, 1991 and 1995; Middleton, Zideman and Adams, 1993). Public vocational education and training in Africa, according to this account, was guilty of a lack of relevance in terms of skills developed; a divorce of providers and their staff from industrial realities and

interactions; and high costs of provision, all of which were increasingly exacerbated by rapid changes in industrial structure.

#### *7.2.1.2. TVET research on the SADC region since 2000*

There has been little in the way of published comparative analysis of TVET across the region in the past decade. Indeed, there are only two studies that can be cited in this regard. First, Johanson and Adams (2004) surveyed the whole of the Sub-Saharan region for the World Bank, and several of the background papers also looked in part at countries in the SADC region. Second, Akoojee, Gewer and McGrath (2005) led a study that looked at seven of the countries in the region (Botswana, Lesotho, Mauritius, Mozambique, Namibia, South Africa and Swaziland). Both projects provide considerable information to support the research as both reflect the state of TVET in the early part of this decade as a wave of reforms was happening or, at least, was being discussed.

As part of the research, a review of 14 major international and regional journals on international and comparative education, further education and training, and development studies have been conducted. This review highlighted the lack of published literature on TVET in the SADC region. Of 47 relevant articles published in these leading journals since 2000, 35 were on South Africa and only four other SADC countries (Botswana, Swaziland, Tanzania and Zimbabwe) had papers dedicated to them; the other papers being either on a range of Southern African countries or on TVET in Africa more generally.

This points to a key message of this research, already mentioned, there is a lack of academic research on TVET in the SADC region and it should be a priority to address this weakness both as part of a broader strengthening of the evidential base for TVET policies and as an element of redressing the low status of TVET.



Particularly significant within the literature are the chapters on further education and training and enterprise-based training in the *Human Resources Development Reports* of 2003 and 2008 (Akoojee, 2003; Badroodien, 2003; Fisher et al., 2003; Akoojee, McGrath and Visser, 2008; McGrath and Paterson, 2008), which, along with the quantitative reviews of the South African sector by the National Business Initiative (Powell and Hall, 2000, 2002 and 2004), provide the clearest published set of accounts of the size and nature of a national TVET system in the SADC region.

Most of the published literature that has been reviewed is focused on policy matters: both on its development and its implementation. This reflects in large part the context of the South African research that dominates the literature. South Africa was strongly involved in system development at least in the first half of the past decade and much of the published research emerged from research that was funded by the South African government or its international partners. However, it is important to note that across the region there is typically more evidence of policy discussions and plans for reform than there is of change at the institutional level.

As with the trends in international support to TVET, certain themes emerge from this literature.

#### **7.2.1.3. National TVET literature in Botswana and Namibia**

The national literature reviews were central to the methodology in three ways. First, the national literature review was an important source of data for an initial assessment of the status of TVET in Botswana and Namibia. The review addressed the range of themes required by the research, and provided baseline information for the comprehensive review. It also identified areas or themes for which information was missing. Second, the review included information that was required to complete the research. Therefore, it provided the primary source of data. The review also identified gaps in information that would need to be addressed through alternative means.

Finally, very little literature on TVET in Botswana and Namibia has been published in internationally available sources.

Several challenges were experienced in completing the literature review. First, the literature identified and examined is largely based on policy documents, with relatively little attention being paid to research on TVET. Very little research exists, and that research and evaluation reports that may exist are not widely available. Many countries do not have national centers for TVET research with archived publications.

It was also experienced severe logistical problems in gathering literature. The lack of national specialize centers meant that the researcher had to move between institutions gathering documents and literature from a range of places during the field visit. The research resources for travel were limited, with no possibility for gathering documents housed in distant locations. Many key documents are only available in hard copy, and often not publicly available. TVET colleagues were often reluctant to loan their only copy of a document, and facilities and resources for copying documents were limited. Facilities for scanning documents for electronic transmission and storage are also limited and available scanners are often not suitable for efficient conversion of larger documents.

It is clear that the published literature on TVET in Botswana and Namibia is very underdeveloped, reflecting broader challenges of capacity in policy, provider and academic institutions. Thus, there are very major gaps in our state of knowledge and much of what we do know is dated. It is important to note also that too many policies lack any grounding in a reading of the extant literature, and there is little in the way of evidence of robust evaluation of policies. What we are left with is a research literature that is partial both geographically and thematically, and a policy literature that is heavy on rhetoric but light on detailed plans for implementation. This in itself is a finding with very significant implications for any future strategy for regional TVET renewal.

#### **7.2.1.4. Research paradigm**

The research paradigm is "The basic belief system or worldview that guides the investigator, not only in the choice of method but in ontologically and epistemologically fundamental ways" Guba and Lincoln (1994, pp.73) which guides the researcher to answer key questions as what subject is to be studied, what kinds of questions need to be asked in relation to this subject, and how the findings should be interpreted. The paradigm is essentially normative, guiding the researcher in how to approach the inquiry. Patton describes how paradigms are "deeply embedded in the socialization of practitioners" (Patton, 1990).

This research study aimed to describe and explain the phenomenon being studied from the perspective of the individuals involved. It has been important to understand how individuals in a specific situation interpret that situation. Individuals and group meanings, motivation for action and interpretation of situations must be understood, including the limitations and constraints on actions. Within the interpretative paradigm researchers endeavor to understand the subjective world of individual experience. Information was sought from the experience of the people taking part in the process being studied; Education Program Specialist, UNESCO staff, International consultants, Implementing Partners, policy makers, TVET students, teachers and directors of TVET centers.

In Comparative Education the theoretical and methodological diversity supports the assertion that neo-institutional theory provides a productive framework for understanding and interpreting comparative education phenomena, but that complementary approaches and methods are useful as well (Wiseman, Astiz & Baker, 2013). A particular strength of neo-institutional theory in comparative education research are empirical analyses and explanations of global expansion and legitimization of educational structures, policies, and expectations (Wiseman & Baker, 2006).

Because many of the globalization theories applied in comparative education research, the neo-institutional approach in comparative educational research complements and contextualizes rather than contradicts the more critical and power-

oriented globalization theories that dominate comparative education (Wiseman, Astiz & Baker, 2013). There is a need of understanding the processes of institutionalization of education structures, expectations, and outcomes; especially the ways that culture contextualizes and influences them (Marginson & Mollis, 2001).

Neo-institutionalism suggests that organizations are macro-level abstractions. In this sense, educational systems in highly non-western communities can align their educational system's structure and policies with a western model while also preserving significant elements of their traditional culture in those same systems. It also stresses the role of culture in shaping organizational reality within schools and educational systems worldwide. Therefore, Neo-institutional theory is an useful framework because much of the influence and action that scripts national policies and local practices is found in the transnational spaces where social, political, and economic ideologies disseminate worldwide through development organizations and multilateral agendas (Meyer and Rowan, 2006).

### **7.2.2. The research design & approach**

This research study is a comparative study where the field work has been guided by a qualitative and quantitative approach, in order to provide an holistic understanding of the findings.

This comparative research study aims to describe, understand and explain the reality and follows the basic properties of comparability: (García Garrido, 1982) a) Phenomenological character: since the subject of the research could be studied through the documents as measured by different instruments; b) Plurality: because the study approach has been developed through different units of analysis: countries, TVET institutions, stakeholders; c) Uniformity: since the same type of education will be studied, with the same instruments, and analyzing the same dimensions; d) Heterogeneity: because educational realities of the countries in which the research is been conducted are diverse; e) Globalization: since they all have common elements, including the membership of the Southern African Development Community.

It is framed within the basis of a comparative study that follows seven different phases: selection and definition of the problem, formulation of the hypothesis, selection of the indicators for the analysis, description phase, interpretative phase, juxtaposition phase and comparative phase (Caballero, Manso, Matarranz, Valle, 2016). The research also took the form of a case study as associated to the process for developing and implementing new Technical Education and Vocational Training Systems in Botswana and Namibia, as part of UNESCO's project implementation, named "Better Education for Africa's Rise".

### *7.2.2.1. Selection of the unit of analysis*

#### **a) Country selection**

The election of Botswana and Namibia as the selected countries for the research study was based on a set of different criteria: a) UNESCO's priority to work and develop the TVET systems within the SADC region; b) The degree of the institutional capacity development at governmental-national level in the countries; c) The availability of data related to the TVET system; d) The level of difficulty to have access to relevant participants on the research study; e) The official language spoken at national level on the country (English).

Therefore, using the criteria mentioned above, on a first phase five countries were selected as potential country candidates. Based on the first selection criteria, as priority countries for UNESCO and participants on the BEAR project, five countries were shortlisted: Botswana, DR Congo, Malawi, Zambia y Namibia; the second criteria – degree of development of the Governmental Institutional Capacity – reduce the list up to three. During the Kick of Meeting of the BEAR project that I conducted as UNESCO Program Specialist, DR Congo and Malawi were rejected due to the existing lack of institutional capacity of the education system at national level that would have impeded

on one hand to obtain the sufficient data to map a clear picture of the TVET situation at national level and on the other hand to ensure that the BEAR project would succeed in terms of development of a new curricula for the selected trades. In addition to that DR Congo as francophone speaking country was not in agreement with criteria official language criteria spoken at national level. The third and fourth criteria – availability of TVET data and the level of difficulty to have access to relevant participants on the research study, force the rejection of Zambia as best candidate, as the logistics were much more complicated. Therefore, the final selected countries were Botswana and Namibia.

#### **b) Educational level selected - ISCED classification**

In this research study the International Standard Classification of Education (ISCED) has been applied, which is the standard framework used to categorize and report cross-nationally comparable education statistics. As national education systems vary in terms of structure and curricular content, it can be difficult to benchmark performance across countries over time or monitor progress towards national and international goals. In order to understand and properly interpret the inputs, processes and outcomes of different education systems from a global perspective, it is vital to ensure that data are comparable (UNESCO 2012b).

The classification is divided as follows:

- ISCED levels.
- ISCED level 0 – Early childhood education.
- ISCED level 1 – Primary education.
- ISCED level 2 – Lower secondary education.
- ISCED level 3 – Upper secondary education.
- ISCED level 4 – Post-secondary non-tertiary education, Tertiary education.
- ISCED level 5 – Short-cycle tertiary education.
- ISCED level 6 – Bachelor’s or equivalent level.
- ISCED level 7 – Master’s or equivalent level.
- ISCED level 8 – Doctoral or equivalent level.

ISCED classifies education programs by their content using two main cross-classification variables: levels of education and fields of education. The Technical Education and Vocational Training in both countries Namibia and Botswana, is recognized as being part of the formal education system (as it is institutionalized, intentional and planned through public organizations and recognized private bodies). Nevertheless, it is clear that there is an non-formal TVET training that provide skills for students and is part of the non-formal education that takes place in both countries.

Vocational education is defined as education program that is designed for learners to acquire the knowledge, skills and competencies specific to a particular occupation, trade, or class of occupations or trades. Such programs may have work-based components (e.g. apprenticeships, dual-system education programs). Successful completion of such programs leads to labor market-relevant, vocational qualifications acknowledged as occupationally-oriented by the relevant national authorities and/or the labor market (UNESCO 2012b). The ISCED classification for TVET education refers to ISCED 3 which is related to programs which form the second/final stage of secondary education that are vocational. Some of these programs allow direct access to ISCED 4 level that give continuity and correspondence to further vocational pathways. If the theoretical duration of vocational ISCED level 3 program is two or more years longer than the theoretical duration of a general ISCED level 3 program in the same education system, the program should be regarded as spanning upper secondary education and post-secondary non-tertiary education ISCED 4.

Codes for educational attainment related to ISCED level 3 (Upper secondary vocational education):

- Partial level completion, without direct access to tertiary education (But may give direct access to post-secondary non tertiary education).
- Level completion without direct access to tertiary education (but may give direct access to post-secondary non-tertiary education).
- Level completion, with direct access to tertiary education (May also give direct access to post-secondary non-tertiary education).

### *7.2.2.2. Data collection methods*

In this Comparative research study, qualitative and quantitative methods have been used in order to collect the required data needed.

Qualitative methods are based on an interpretive approach as the aim was to elicit respondents' opinions, experiences and interpretations of the influence of UNESCO on the development of national TVET systems in Botswana and Namibia. The interpretive perspective presupposes that reality is socially construed and the access to that reality is primarily done through social interactions (Meyer, 2009). A macro analysis and semi-structured questionnaires have been used as qualitative methods.

Qualitative research method used in this research study follow a naturalistic approach, in the sense that it takes place in the real-world setting and the researcher does not attempt to manipulate the phenomenon of interest (Patton, 2002). With a clear purpose of understanding the existing reality, the qualitative research methods used have been: a) Documentary analysis; b) Participant observation; c) Semi-structured interviews; d) Focus groups; e) Secondary data research.

#### **a) Quantitative research study**

##### **- Macro analysis:**

Developing skills is costly and so investments in skill building need to be made wisely. This requires good information about: where skill development is most needed; how well the skills individuals have acquired are matched with those required in the labor market; and the returns on investments in skills in terms of their economic and social outcomes (OCDE, 2013). As mentioned before, putting in place a comprehensive system of information relating to skills development is not easy and is particularly challenging in low-income countries with very limited resources to devote to a strong statistical infrastructure of data collection, processing, analysis and dissemination.



This research study includes a conceptual framework for choosing the most appropriate skills indicators to assess skills development policies and to benchmark country performance based on the nine pillars underpinning the G20 Action Plan that was adopted by G20 leaders at their Seoul Summit in November 2010, in order to analyze the influence of UNESCO on the development of national TVET systems in Botswana and Namibia. The analysis conducted will correspond to several particular moments of time and corresponds to 1990, 2000, 2005, 2010 and 2015 (or last year of available data).

- *Parameters and Indicators of the Macro analysis*

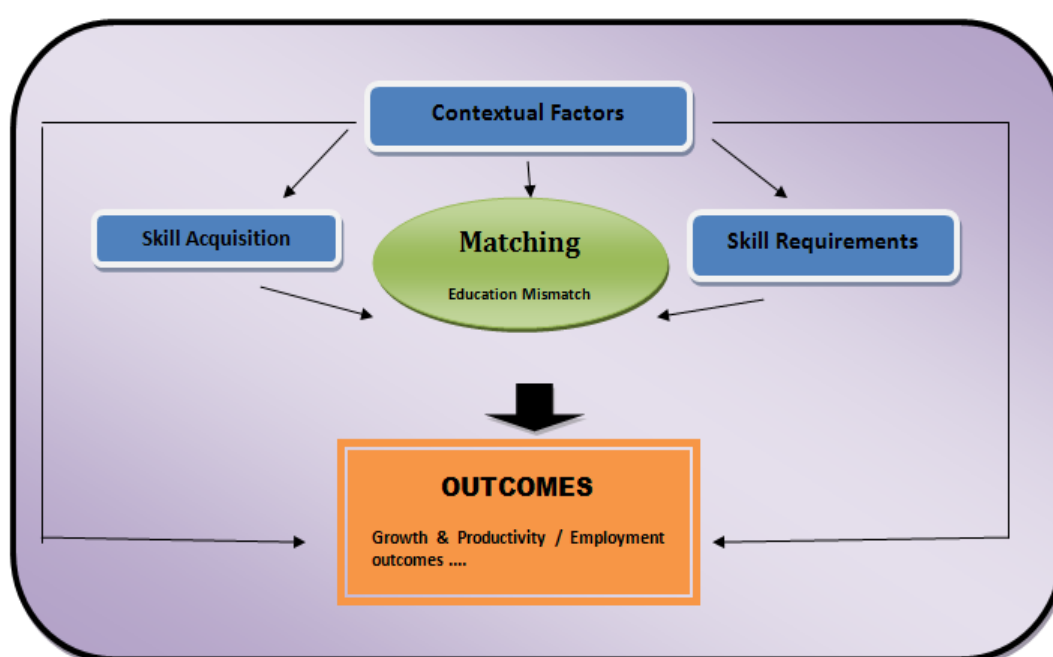
The conceptual framework developed in this macro analysis consists of five inter-related parameters, including: contextual factors which drive both the supply of and demand for skills; skill acquisition which covers investments in skills, the stock of human capital and its distribution; skill requirements which measure the demand for skills arising in the labor market; the degree of matching which captures how well skills obtained through education and training correspond to the skills required in the labor market; and outcomes which reflect the impact of skills on economic performance and employment and social outcomes (see Annex 3: Macro quantitative indicators, guideline).

According to the parameters a set of indicators have been proposed in the study using this framework and based on the criteria of: relevance, feasibility, comparability and timeliness. A distinction is made between core indicators, which are seen as both essential and potentially available, and supplementary indicators which, while desirable, are not yet available.

An in-depth inventory of data availability have been carried out to determine more precisely the extent of the gaps in country coverage for each indicator. This

exercise have been conducted for both countries. The inventory covered the databases of the key international organizations, including the ILO, OECD, UNESCO, WHO and the World Bank as well as Euro stat and other sources of international data on skills. For many of the indicators, the relevant data already exists but in some cases it may be necessary to go back to the primary data sources to obtain the data required to construct the indicators. For a few indicators, there are large holes in country coverage.

**Figure 7: Parameters of the macro analysis**



Source: Own elaboration.

Within this framework, the following criteria will be used to select core skills indicators for each of the five broad skill domains: relevance, feasibility, comparability, and timeliness.

-Relevance: the indicators should give information that provides a useful comparative backdrop to identify priorities for skills development and to monitor the impact of their strategies in this regard.

-Feasibility. The indicators should focus on those for which data are available from existing international and national data collections; or that are feasible to generate from (low-cost) new data collection initiatives and/or modifications to existing surveys.

-Comparability. The indicators should be internationally comparable in concept and measurement. This criterion rules out the use of a number of potential sources such as national employer surveys which are rarely implemented in a comparable way across countries.

-Timeliness. The indicators should include those for which data are available or can be collected for a recent year such that the current or future situation in each country is represented reasonably accurately.

Proposed set of Indicators: contextual factors, skill acquisition, skill requirements, matching and outcomes.

-Contextual factors: A set of contextual indicators is required to capture the main drivers of skill supplies and demands as well as the key factors affecting the efficiency of the matching process between them. Many of these factors will also affect the outcomes of skill use. Accordingly, a range of indicators is proposed covering several areas: aggregate economic conditions, demographics, early childhood health, technology conditions, and public expenditure in education.

A full description of each indicator from all factors is presented in Annex 4: Description of each macro quantitative indicator.

**Table 6: Contextual Factors (macro analysis)**

1	GNI per capita (current US\$)
2	Total Population (in thousands)
3	Population growth (annual %)
4	Human Development Index
5	Relative size of young population (aged 15-24 years, in thousands)
6	Urban population growth (annual %)
7	Rural population (% of total population)
8	Early Childhood health (life expectancy at birth, years)
9	Access to Internet (Internet user per 100 people)
10	Access to mobile phones (mobile phones subscriptions per 100 people)
11	Public expenditure in education (as % of GDP)
12	Public expenditure on education as % total government expenditure %

Source: Own elaboration.

-Skill acquisition: The skill acquisition parameter is divided into two broad areas. The first area covers the stock of human capital in the economy which has been acquired through past investments in skill formation and which is a key driver of economic growth and source of skills for meeting the requirements of employers. This is captured by indicators of literacy rate, internal efficiency in education, and pupil-teacher ratio which will capture gaps in the education system for basic level employable skills.

The second area covers ongoing investments in skill formation. This is captured by indicators on access to education and training, as enrolment rate and opportunities for lifelong skills development. Technical and Vocational Education are also a key path to skill development for many young people and, while comparable data are currently not readily available in relation to completion rate at TVET programs, drop-out rates in the same field, a supplementary indicator on participation in TVET programs has been included.

**Table 7: Skills Acquisition (macro analysis)**

<b>1</b>	Adult Literacy Rate (15 years old and over)
<b>2</b>	Youth Literacy rate (15 - 24) %
<b>3</b>	Youth literacy (15 -24) thousands
<b>4</b>	Net enrolment rate in primary education (Total, both sexes, %)
<b>5</b>	Gross enrolment rate in primary education (both sexes, %)
<b>6</b>	Pupil-teacher ratio primary education
<b>7</b>	Internal efficiency / Repetition in primary (all grades) %
<b>8</b>	Net enrolment rate in secondary education (Total, both sexes, %)
<b>9</b>	Gross enrolment rate in secondary education (both sexes) %
<b>10</b>	Pupil-teacher ratio secondary education
<b>11</b>	Lower secondary education completion rate (both sexes)
<b>12</b>	Rate of out of school adolescents of lower secondary school age (both sexes)
<b>13</b>	Share of vocational programs in secondary education
<b>14</b>	Percentage of students in secondary vocational education who are female (%)
<b>15</b>	Gross enrolment ratio in tertiary education (Both sexes %)

Source: Own elaboration

-Skill requirements parameter (i.e. the demand for and utilization of skills) will ultimately determine how productive each country's economy is and its growth potential. Two key indicators are proposed, including employment shares by different activity sectors. In addition, an indicator has been included on the importance of self-employment, as this form of employment is very common in most Low Income Countries and requires its own set of skills, particularly entrepreneurial skills. Special consideration would be given to the youth unemployment rate that will show us the vulnerable situation that this collectivity may suffer in term of job acquisition.

Ideally, it would have been desirable to use indicators that are based on more direct measures of skills used at work, but due to the lack of data it has not been possible.

**Table 8: Skills Requirements (macro analysis)**

<b>1</b>	Employment to population ratio, ages 15 - 24, total (%)
<b>2</b>	Employment, total (% of employment)
<b>3</b>	Employers, female (% of employment)
<b>4</b>	Employers, male (% of employment)
<b>5</b>	Unemployment, youth total (% of total labor force ages 15-24)
<b>6</b>	Unemployment, youth, male (% of total labor force ages 15-24)
<b>7</b>	Unemployment youth, female (% of total labor force ages 15-24)
<b>8</b>	Self-employed, total (% of total employed)
<b>9</b>	Self-employed, female (% of total employed)
<b>10</b>	Self-employed, male (% of total employed)
<b>11</b>	Industry, value added (% GDP)
<b>12</b>	Employment in Industry (% of total employment)
<b>13</b>	Service, value added (% GDP)
<b>14</b>	Employment in Service (% of total employment)
<b>15</b>	Agriculture, value added (% GDP)
<b>16</b>	Employment in agriculture (% of total employment)

Source: Own elaboration

-Matching: Indicators are also required on the efficiency of matching skills that have been obtained through education and training with those required by employers according to the nature of the employment.

Indicators of vulnerable employment are put forward as one way to measure this, although a more direct measure of skills would be preferable but is not possible because of limited data availability. Two other, more indirect, indicators of the matching process have been proposed: unemployment rates and wage and salary workers.

Ideally, it would be useful to supplement these indicators with information based on employer surveys of skill gaps and shortages.

**Table 9: References (macro analysis)**

1	Vulnerable employment total (% of total employment)
2	Vulnerable employment, female (% of total employment)
3	Vulnerable employment, male (% of total employment)
4	Wage and salary workers, total (% of total employed)
5	Wage and salary workers, male (% of total employed)
6	Wage and salary workers, female (% of total employed)
7	Unemployment with primary education (% of total unemployment)
8	Unemployment with secondary education (% of total unemployment)
9	Unemployment with tertiary education (% of total unemployment)

Source: Own elaboration.

-Outcomes: Finally, a number of indicators have been selected which may provide some information on the links between skills and economic, employment and social outcomes. In terms of economic performance, the selected indicators cover GDP growth and the net inflows of foreign direct investment. Employment outcomes will be represented by indicators of employment rates by sector (agriculture, industry and service). Social outcomes will be reflected in indicators of labor force by educational completion and poverty. Supplementary indicators will be included for health outcomes covering general HIV prevalence and infant mortality rate.

**Table 10: Outcomes (macro analysis)**

1	Growth in GDP (annual %)
2	Foreign direct investment, net inflows (BoP, current US\$)
3	Labor force total
4	Labor force with primary education (% of total)
5	Labor force with secondary education (% of total)
6	Labor force with tertiary education (% of total)
7	Primary education completion rate (both sexes)
8	Out of school children (000) school year ending in
9	Out of school adolescents (000) school year ending in
10	Employment in agriculture, female (% of female employment)
11	Employment in agriculture, male (% of male employment)
12	Employment in service, female (% of female employment)
13	Employment in service, male (% of male employment)
14	Employment in industry, female (% of female employment)
15	Employment in industry, male (% of male employment)
16	Incidence of poverty - Not used
17	Prevalence of HIV
18	Infant mortality rate

Source: Own elaboration

- *List of data sources*

In order to identify more precisely the extent of the gaps in country coverage for each indicator mentioned above, a detailed inventory or stock-take of data availability will be carried out, this allows comparisons of data availability across country and provides information regarding of it will be possible to eventually compare the values of the skills indicators.



The inventory will cover the databases of the relevant international organizations, including the ILO, OECD, UNESCO Institute for Statistics, WHO and the World Bank as well as Euro stat and other sources of international data on skills.

The full list of data sources covered by the inventory is enumerated on the table below.

**Table 11: List of data sources covered by the inventory source**

	Institution	Weblink
1	Euro stat statistics database (ESD)	<a href="http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database">http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database</a>
2	ILO Key Indicators of the Labor Market (KILM)	<a href="http://www.ilo.org/kilm">www.ilo.org/kilm</a>
3	OECD Education at a Glance (EAG)	<a href="http://www.oecd.org/edu/eag2012.htm">http://www.oecd.org/edu/eag2012.htm</a>
4	OECD Labor Market Statistics (LMS)	<a href="http://www.oecd.org/els/emp/onlineoecdemploymentdatabase.htm">http://www.oecd.org/els/emp/onlineoecdemploymentdatabase.htm</a>
5	CONFEMEN Program for the Analysis of Education Systems in francophone countries (PASEC)	<a href="http://www.confemen.org/le-pasec">http://www.confemen.org/le-pasec</a>
6	Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ)	<a href="http://www.sacmeq.org">http://www.sacmeq.org</a>
7	UCW and ILO YouthSTATS	<a href="http://www.youthstatistics.org">http://www.youthstatistics.org</a>
8	UNESCO Institute for Statistics (UIS) Data Centre	<a href="http://stats.uis.unesco.org">http://stats.uis.unesco.org</a>
9	UN Department of Economic and Social Affairs, Population Division (UNPOP)	<a href="http://esa.un.org/unpd/wpp/index.htm">http://esa.un.org/unpd/wpp/index.htm</a>
10	USAID Demographic and Health Surveys (DHS)	<a href="http://www.measuredhs.com">http://www.measuredhs.com</a>
11	WHO Global Health Observatory (GHO) data repository	<a href="http://www.who.int/gho/database">http://www.who.int/gho/database</a>
12	World Bank Indicators (WBI)	<a href="http://data.worldbank.org/indicator">http://data.worldbank.org/indicator</a>
13	World Bank Enterprise Surveys (WBES)	<a href="http://www.enterprisesurveys.org/CustomQuery">http://www.enterprisesurveys.org/CustomQuery</a>

Source: Own elaboration.

Based on the conceptual framework for each separate indicator, as mentioned before, a brief description will be given of its definition in Annex 4, the rationale for its inclusion, sources for the underlying data and, finally, the coverage for both countries.

Based on data availability for at least one year since 1990, coverage is classified as: good, if data is available for both of these countries for more than three different periods of time; and poor, if data is available for only one particular period or moment of these countries.

- *Unit of Analysis*

The choice of the unit of analysis, establish benchmarks and indicators that allow us to obtain valid conclusions in this study internationally and whose main characteristic is to be static, thus corresponds to the analysis done of a particular moment of time and as mentioned before it corresponds to 1990, 2000, 2005, 2010 and 2015 (or last year of available data).

The description phase provides a concrete and the detailed description of the realities regarding the development of National Technical Education and Vocational systems within two countries of the Southern Africa Development Community under the umbrella of UNESCO.

### **- Semi-structure questionnaire:**

The researcher decided that semi-structured questionnaires should also be used. According to Baker and Foy (2008), semi-structured questionnaires comprise a mixture of open and closed questions that represent a middle ground between fully structured and unstructured interviews. This mixture was important because it accommodated new issues and themes that arose, and ensured that the researcher could identify ideas that the study intended to research. Baker and Foy (2008, pp. 69) note that the semi-structured questionnaire is a useful method — ". . .when sampling a population to ensure that one has the necessary factual information for determining its representativeness, for ensuring that quotas have been filled, when the primary purpose is to get a feel for attitudes, opinions, etc. . ."

The Social Impact Questionnaire, was developed based on the work conducted by Kirsten Kruger et al (2013), that focused on measure and analyze the social benefits provided by tertiary education at individual level, that connect with the discussions about the social and economic impact of education, it was designed specifically for this study. In the researcher's view, the social function of Technical Education and Vocational Training goes beyond employability and economic development, which nowadays comprise the principal issues in the current discussion on TVET, it also includes the social impact perception of students, professors and other stakeholders on how this new TVET programs that has been developed by UNESCO, the BEAR project that is being implemented in both countries (Namibia and Botswana) it is perceived by the students and how do they think it will add value to their education path and their professional situation.

The Social Impact Perception Questionnaire has been developed with 53 semi-structured questions and 4 opened questions. The Questionnaire is divided into two different parts, Part I that aimed to analyze the socio-demographic variables and Part II with a focus on analyzing the Social Effectiveness, Comprised by Outputs and social benefits parameters. Each of this two parts were categorized into different dimension for a more concrete analysis of the answers. Part I was comprised by 5 categories a)

Personal data -gender, age, education, ethnicity-; b) Family situation; c) Economic situation of the Household; d). Labor market situation; e). Program information.

At the same time, Part II is comprised by 2 different dimension with different categories, the a) Output category included 1) Human capital; 2) Cultural capital and 3) Social capital; and b) The social benefit category included: 1) Social mobility - Quality of work; 2) Economic security - Quality of work; 3) Knowledge and intellectual development - Quality of work; 4) Balance of time - Quality of work. (see Annex 6: Social impact perception questionnaire - Botswana. and Annex 7: Social impact perception questionnaire - Namibia.

**Table 12: Categorization of the questionnaire according to the existing variables**

<b>Part I</b>		<b>Socio Demographic Variables</b>	
	Personal Data	Family Situation	Economic Situation of the Household
	Labor Market Situation	Program Information	
<b>Part II</b>		<b>Social Effectiveness</b>	
<b>Outcomes (Parameter)</b>		<b>Social Benefits (Parameter)</b>	
- <u>Human Capital</u>		- <u>Social Mobility</u>	
* Motivations			
* Initial Expectations			
* Actual Expectations			
* Perceptions			
- <u>Cultural Capital</u>		- <u>Economic Security</u>	
* Expected Learned Outcomes			
* Satisfaction			
- <u>Social Capital</u>		- <u>Intellectual Development</u>	
* Networking			
		- <u>Balance of time</u>	

Source: Own elaboration.

The total distribution of semi -structured questions and open questions according to each category of questions appears in table 13.

**Table 13: Numer of questions for each category and variable**

Initial Questionnaire		
NUMBER OF QUESTIONS at the SEMI-STRUCTURED QUESTIONNAIRE	N. of Semistructured Questions	N. of Open Questions
<b>Part I - Socio demographic variables</b>		
1. Personal data (gender, age, education, ethnicity)	<b>8</b>	<b>0</b>
2. Family situation	<b>4</b>	<b>0</b>
3. Economic situation	<b>4</b>	<b>0</b>
4. Labor market situation	<b>8</b>	<b>1</b>
5. Programme Information	<b>7</b>	<b>1</b>
<b>Part II - (Dimensions: Outputs and Social benefits)</b>		
<b>a) Outputs dimensions</b>		
6. Human capital (learners motivation and expectations)	<b>3</b>	<b>0</b>
7. Cultural capital (learners outputs)	<b>2</b>	<b>1</b>
8. Social capital	<b>5</b>	<b>0</b>
<b>b) Social Benefit Dimensions</b>		
9. Social mobility	<b>3</b>	<b>0</b>
10. Economic security	<b>2</b>	<b>0</b>
11. Knowledge and intellectual development	<b>1</b>	<b>0</b>
12. Balance of time	<b>2</b>	<b>1</b>
<b>TOTAL</b>	<b>49</b>	<b>4</b>

Source: Own elaboration.

- *Unit of Analysis*

In order to measure the social effectiveness of the BEAR TVET program that has been implemented to develop the national TVET system, two principal dimensions Outcome and Social Benefit have been considered. The Outcome dimension is defined by several parameters a) Human Capital aims to measure the learner's motivation and expectations. The indicators included in this parameter are motivation, initial expectations, actual expectations and perceptions.

Motivation: is considered the internal and external factors that stimulate desire and energy in people to be continually interested and committed to the TVET studies they are involved in, in order to make an effort and attain a goal, this is described on item 5.1 of the questionnaire. Therefore the highest frequencies that will appear in question 5.1 will show us the internal/external reasons that strongly motivate students in order to pursue their personal goals.

Motivation is a theoretical construct used to explain behavior. It represents the reasons for people's actions, desires, and needs. It results from the interaction of both conscious and unconscious factors such as the a) Intensity of desire or need; b) incentive or reward value of the goal; and 3) expectations of the individual and of his or her peers. These factors are the reasons one has for behaving in a certain way. For example a student that spends extra time studying for a test because he or she wants a better grade in the class (Oxford, 2010).

Initial Expectation is considered the most likely to happen at the starting point of something. The initial expectations is a feeling or belief about how successful, someone or something will be. The questionnaire will show us the main reasons and attitudes the student had at the time they choose to join the TVET Program, which were the main reasons for them to choose the program. The more strongly agree they feel with each statement, the more identified they feel with the reason that is explained on that

sentence. Therefore the highest frequencies will show us the strongest believes and attitudes the student have had in order to select and join this TVET program.

Actual Expectation refers to the reasons and attitude that the student share in relation to what identifies as its main motivation, attitude in order to achieve its actual goal, at this certain point in time. The more strongly agree the student feels in relation to each statement, the more identified he feels with the reason that is explained on that sentence. Therefore the frequencies will show us the students' believes and attitudes, towards the perception on how successful the TVET program is, according to what they expected to be.

Perceptions is the way that you notice or understand something using one of your senses. Perception refers to the the organization, identification, and interpretation of sensory information in order to represent and understand the environment. Perception can be split into two processes . Firstly processing sensory input which transforms these low-level information to higher-level information. Secondly processing which is connected with person's concept and expectations (knowledge), and selective mechanisms (attention) that influence perception.

In the questionnaire the questions about perception will show us which is the sense and understanding that students have about what they understand as key elements essential for developing their own learning through the development and piloting of this TVET program. The more strongly agree they feel with each statement, the more identified they feel with the reason that is explained on that sentence. Therefore the highest frequencies will show us the strongest perceptions the student have had in relation to the key elements they perceive as essential in their learning process.

Cultural Capital Parameters as part of the Outcome dimension, include two different indicators: Expected learned outcomes and satisfaction of the students in relation to the implemented TVET BEAR project

Expected Learned Outcome: Learning outcomes are statements that describe significant and essential learning that learners have achieved, and can reliably

demonstrate at the end of a course or program. In other words, learning outcomes identify what the learner will know and be able to do by the end of a course or program. This demonstration of learning involves a performance of some specific domains that could prove and show significant learning. Learning outcomes refer to observable and measurable knowledge, skills and attitudes. In our questionnaire, the questions related to the block 6.1 will show us that the highest frequencies are linked to the skills the students expect to further developed during the TVET program learning process.

Student satisfaction is a subjective perception, on students' part, of how well a learning environment supports academic success. Strong student satisfaction implies that appropriately challenging instructional methods are serving to trigger students' thinking and learning. Important elements in student satisfaction are likely to concern the role of the instructor and of the students; these elements may be central to student learning (Winberg and Hedman, 2008). In the questionnaire developed, the level of satisfaction will show us how well a learning environment and instructional methods, and quality of learning supports their academic success.

The Social Capital parameter, includes Networking as an indicator, understood as a tool (the TVET program) that helps to enlarge the professional network, nevertheless this question has not been well understood by the students while answering the questionnaires, despite the adequacy of the question validated during the validation process. Most students understood that the question was referred to the social media, like twitter, Facebook, so many of them understood the question as follows (how does the TVET program help you to enlarge your social-media network activity related to Facebook and Twitter?) therefore the question and answers were deleted from the analysis.

As for the Social Benefit dimension, it is constituted by the following parameters: a) social mobility, b) Economic security, c) Intellectual development, d) Balance of time. The Social Benefit is understood as the increase in the welfare of an individual that is derived from a particular course of action, which in this case is associated to the participation to the TVET program. It includes all the private benefits in addition to any external benefit.



Social Mobility refers to the movement of individuals, through a system of social hierarchy or stratification. If such mobility involves a change in position (occupation) but not a change in social class, it is considered as horizontal mobility; if the move involves a change in social class, it is named vertical mobility as it moves upward in the social-class system)

In this research study, the social mobility will try to measure both the horizontal and vertical mobility. On the one hand the horizontal mobility will be measured by comparing the life balance before joining the TVET program and the expected life balance that they think they will have once they conclude successfully the TVET program. In addition to that it will compare the employment prospects for better jobs once the TVET program is ended. It is important to clarify that as the students are still enrolled on the TVET program it is impossible to measure the real impact that the project is having on them, a longitudinal study would have been essential to precisely measure it. Nevertheless a projection will be drawn, according to the student's perceptions. On the other hand the vertical mobility will be measured by the economic security parameter.

Economic Security is the condition of having a stable source of financial income that allows a person for the on-going maintenance of one's standard of living currently and in the foreseeable near future. It includes: employment security, predictability of the cash flow of a person and the probable continued solvency.

In the questionnaire, the economic security is measured by comparing the actual and future income expectations, and the working stability foreseen in comparison to the actual one, that will provide as an accurate prediction on the difference on individuals' solvency before and after the students complete the TVET program.

Knowledge and Intellectual Development is about learning. It is about how individuals organize their minds, ideas and thoughts and develop their intellectual capacities as rational and critical thinkers. In this research study it refers to the changes that occur, as a result of growth and experience, in a person's capacity of thinking,

reasoning, relating, judging, conceptualizing, and how this development will have an influence in the health been of the individual, as it is perceived and foreseen by themselves.

Balance of time refers to a comfortable state of equilibrium achieved between individual's primary priorities of their employment position and their private lifestyle. In this research study, the participants have rate and compare its own perception of the current and previous work-life balance of time and the projected one, if differ from the actual one, as a result of the completion of the TVET program.

- *Validation of the Questionnaire*

The questionnaire was develop by the researcher, based on a deep literature review on social impact perception questionnaires in social science, particularly useful for the creation of the questionnaire was the tool was developed by Karsten Krüger *et al.* (2013), that measured and analyze the social benefits provided by tertiary education at individual level.

Once the original version of the questionnaire was developed it was subjected to a triple validation: The first validation took place by two TVET Education and Program Specialist, experts involved on the implementation of the BEAR project in Botswana and Namibia, they check the accuracy of the questions in relation to the new TVET programs and curriculums for Botswana and Namibia, changes on the questions were made and the questionnaire was depurated by reducing the number of questions in order to shorten the time required to complete the questionnaire by the students and changing the nature of some questions. The second validation was conducted separately by two University Professors (Universidad Pontificia de Comillas) one of them is an expert on International Cooperation for Development and psychometrics who did revise the psychometric properties of the questionnaire, and the other Professor (Sussex University) is an expert on the TVET Educational area, and have worked for UNESCO within this area for the last 5 years, according to their inputs some questions were deleted in order to preserve the confidentiality of the questionnaires and some other

questions which were irrelevant to the purpose of the study were erased. The third validation was undertaken by Professor at the Illinois State University in United States of America who emphasizes some changes in some parts of the questionnaire and highlighted the importance of the open questions that were already in place at the questionnaire.

Once the questionnaire was revised, modifications were done and the reliability of the questionnaire was guaranteed, a student from the BEAR program at the Gaborone Technical College piloted the questionnaire and provided comments for improvement, that were analyzed and included when relevant. During the validation process some errata on the writing was discovered and improved, guarantee the accuracy of the English language on the final questionnaire and a proper understanding. These validations verified the adequacy of the questionnaire and its technical characteristics.

- *Administration of the Questionnaire*

Once the questionnaire was validated, the researcher proceeded to make the required photocopies to administrate the questionnaire to all participants of the TVET program in both countries. According to the especificities of each country, the general questionnaire was modified in the title in order to identify the name of the TVET centre and the country. One question differed from the questionnaires among countries, question number 3.1 the amount of household income per month stimated differ in the currancy (Pula for Botswana and namibian dollars in the case of Namibia).

Once the copies of the questionnaire werer done, the researcher sent two different packages addressed to the national project coordinators in each countries, with their support, the researcher hired an national personal assistant to administrate the questionnaires once the packages arrived. The person that was hired for the specific task of administrating the questionnaire proceed to do so, and was also incharge of collecting the questionnaires once completed and kept them save, until the researcher field tryp was conducted during in July 2015. In the case of Botswana, the administration of the

questionnaires was complicated, as the two TVET centers were located far from each other, there are 436 km from Gaborone to Francistown, which logistically means almost 5 hours by car, and 7 by bus.

The established procedures to administrate properly the questionnaires, was highlighted to the assistant, so that the voluntary, anonimacy and confidentiality was guaranteed for each of the participants. The procedures were also read to participants at the beguining of the session so that they could be free to drop their participation on the research study at any time they wished for.

- *Researcher Field Trip*

The researcher conducted a field trip for two main reasons, the first one was to collect data from the semi-structured interviews and the completed questionnaires from both countries, and also to conduct a participant observation study.

To conduct the research study the researcher first of all informed UNESCO HQ in order to provide all relative information about my movements and the field trip that was being planned (see Annex 16: Information e-mail about the field trip to UNESCO HQ. for their information and knowledge. Latter on, the researcher contacted the national project coordinators in order to know the adequacy and feasibility of the field trip from their side, after a week identifying which was the best moment to travel to both countries in a susequent manner, from the 15th July to the 24th July,an invitation letter was sent to the researcher from each of the national project coordinators (see Annex 17: Invitation letter from Botswana to conduct the field trip.and Annex 18: Invitation letter from Namibia to conduct the field trip.

The field trip took place technically from the 14th to the 24th July 2016, even though the research started on the 15th and finalized on the 23rd as the plane was heading europe on the 24th July.

The completed questionnaires that were administrated were collected the first day of the field trip. In the case of Namibia, the social impact questionnaires was administrated at the Namwater TVET center during the field trip, on the same day that the interviews to the director and the teachers of the TVET program were conducted.

Once all the questionnaires were collected, they were kept and carried as a hand lagage during the flight back to Europe to avoid any inconveniences in the case of a possible lost of the lagage.

### **b) Qualitative research study**

While quantitative research involves statistical sampling techniques and revolves around some form of measurement, the qualitative research methods focuses on what the participants 'behavior means to them. It is important that the researcher get close to the reality and to the actors and learn from their inner culture, thoughts and experiences (Ghauri & Gronhaug, 2010; Myers, 2009). Qualitative methods at the research are characterized by the collection and analysis of textual data (interviews, focus groups, conversational analysis, observation, ethnographies (Olds *et al.*, 2005), and by its emphasis on the context within which the study occurs. Veal (2005) described the qualitative approach as a method that involves collecting a great deal of data from a relatively small number of subjects, as is used in this study. Qualitative research is rigorous and involves its own set of data collection and analysis methods that ensure the trustworthiness of the findings (Hoaglin *et al.*, 1982; Koro-Ljungberg and Douglas, 2008).

The primary purpose of this qualitative research methods used, as mentioned previously, was to elicit key participants 'opinions, feelings, experiences and understanding the influence of UNESCO on the developement of TVET systems in Botswana and Namibia. In this study, it was important to allow the participants 'flow of ideas, experiences and thoughts (that have hitherto not been studied), which was best done by giving the respondents open room for expression through semi-structured

interviews and focus group discussions. This study aimed to find out "how" and "why", in addition to "what" and "how many", therefore a qualitative approach will complement the positivist/quantitative approach. For this reason the study selected use semi structured interviews, focus groups, questionnaires and observation in order to understand and capture the point of view of the people without predetermining those points of view through prior selection of questionnaires categories (Patton, 2002).

The qualitative methods used to gather data include: documentary analysis, focus group discussions, semi-structured interviews, participant observation, and secondary data analysis.

An early plan was to request key members of the BEAR project, such as UNESCO staff in Headquarter, field offices and key persons at the Ministries of Education in Botswana and Namibia, to keep a journal or diary of their activities and their reflections on those activities they were involved in. However, it quickly became clear that these persons were unlikely to commit to doing this in a sustained and useful way so this method was discarded.

To reduce misinterpretation of data and improve the accuracy of the qualitative research conclusions, triangulation recommended by Stake (2005), Neuman (2006) and Yin (2009) has been used. There are different types of triangulation, but it mainly refers to look at the object of study through different methods. Therefore, this study differed from the positivist approach which uses only quantitative and experimental methods to test a hypothesis, in addition to that in this research it has been used qualitative methods.

### **- Documentary analysis**

Documentary has been a crucial element in the data collection. The national literature reviews were central on the research and based on national country policy documents, as it provided primary source of data. There is very little literature on TVET in Botswana and Namibia published internationally. Nevertheless, unique and relevant information could be learned about the main national organizations involved (Ministries and Specialized TVET institutions) in both countries by its documented strategic plans, policies and procedures. In addition, project documents reports and newspaper articles have been identified as documentary evidence. As the research progressed, it has become clear that there was a baste quantity of documentary which was not initially identified, such as BEAR project workshop's documents as flip charts, program descriptions, outcomes of working group meetings, and so on. These resources have been labeled as internal documentary evidence, all this information have been collected and analyzed. A specific and careful analysis of all information (internal and external documents) aided in identifying relevant information. Documents were selected when they related directly to the research questions. Some documents were excluded specifically because they did not relate to the research question.

A desk review and analysis of relevant internal documents and online resources on UNESCO's work in TVET as well as key strategic documents and those of other entities and partners working in the area, has been done with deep detail, including:

- UNESCO Strategy for TVET in 2010-2015, the mid-term review of its implementation, and it's indicative logical framework.
- UNESCO Medium-Term Strategy (C/4), Program and Budget (C/5), Operational Strategy on Youth, Operational Strategy for Priority Africa, Gender Equality Action Plan, Education Sector Strategy.
- Global and regional normative instruments in the field of TVET.

- Shanghai Consensus 2012 and related follow-up documents.
- EFA-Global Monitoring Report (EFA-GMR) and Documents related to the post-2015 education and development agenda.
- TVET Policy Reviews and related Guidelines.
- Project documents for BEAR, CapEFA country projects documents.
- UNESCO-UNEVOC Publications and online tools/resources.
- Previous evaluations of UNESCO-UNEVOC and the Mid-term review of the BEAR project.
- TVET Strategies and related project documents of other organizations working in the field, as KRIVET, HRD, and GIFTS.
- Outputs of the IAG-TVET including the Proposed Indicators for Assessing TVET.
- Documents and reports from UNESCO (regional, cluster, national) field offices.
- UNEVOC-Medium-Term Strategy document (2015-17).

### **- Participant observation**

Observation determines the day-to-day processes and activities taking place under the researcher first-hand experience of the phenomenon under study. It entails listening to people, watching their behavior and noticing natural settings in a way that allows some type of learning. This prompts intellectual inquiry into the meaning and possible analytical interpretation of observed behavior. Baker and Foy (2008) argue that



observation —avoids the possibility of distortion that may arise when people are asked to report their own behavior.

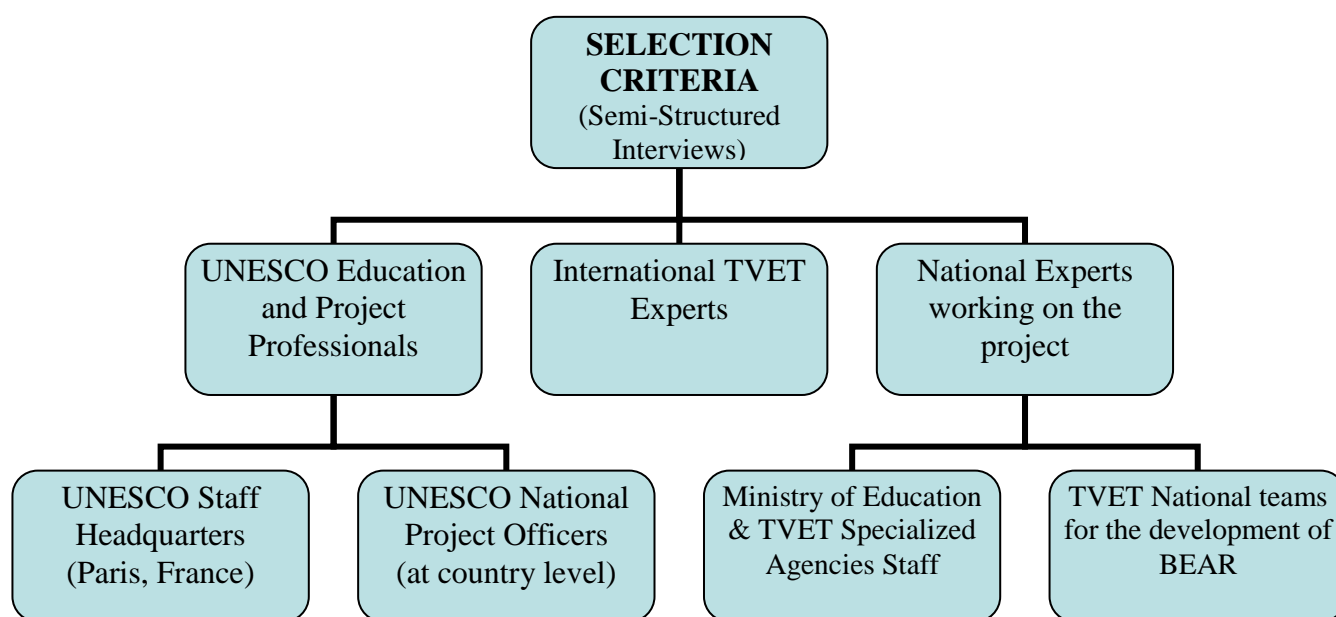
As a Program Specialist at the Youth, Literacy and Skills Development section at UNESCO HQ the researcher could be considered a change agent in the phenomenon being studied, as the researcher was directly working on the management of the project, this meant that there has been a daily interaction with all key participants in both countries. It could be difficult for a complete outsider to gain access to a private place such as the colleges and even more difficult to that person to understand what is going on. Therefore, it was inevitable that participant observation would be selected as an appropriate research method.

This is the strength and value of participant observation. In this case the researcher had a legitimate role within the social unit and did not need a sponsor to "get in" to the context and the project itself.

During the fieldwork observations were made and themes were noted. Later, specific participants were selected to provide more focused information on specific issues and an attempt was made to confirm the initial observations. Both confirming and disconfirming participants were sought in an attempt to make sense of the emerging findings.

### **- Semi - structured interviews**

As previously mentioned, individuals were selected for interview based on a range of criteria. These criteria included: their role within the implementation of the BEAR project, the role within the government in both countries, the expertise related to the development and implementation of TVET systems, the international expertise hired by UNESCO in order to develop the Botswana and Namibian National TVET systems, the level of participation as students on the pilot of the new TVET program.

**Figure 8: Selection criteria for the semi-structured Interviews**

Source: Own elaboration.

Interview participants were drawn from the five main groups of actors in the process: at international level: UNESCO and International Senior Expert Consultants, and at National level: Ministry officers, officers from the national specialized agencies on TVET, officers from the Colleges and students.

In total, 28 persons have been interviewed, 13 of them by conducting face to face semi-structured interviews . It was considered most appropriate to interview the participants individually to facilitate discussion and probing of ideas rather than to send the interview by e-mail or post. 15 persons have participated within the focus groups discussions that were carried out as complement to the interviews, as there was little time to spare according to the location to visit.

Semi-structured interviewing was considered important to access the complexities of the situation. This form of data gathering "encompasses both ordinary conversation and listening as it occurs naturally during the course of social interaction and semi-structured interviewing involving the use of an interview guide consisting of a list of open-ended questions that direct conversation without forcing the interviewee (usually referred as informant) to select pre-established responses" (Lofland *et al*, 2006, pp77).

- *Validation of the semi-structured interviews*

The development of the semi-structured interview used to collect data and further conduct the qualitative analysis, was initially done by the researcher after conducting an extensive literature review on how to develop semi-structured interview guidelines.

The initial semi-structured interview guideline included 30 questions, categorized in two different parts. The first part aimed to know some socio-demographic information as the age, gender and nationality, and the involvement of this particular person within the development of the Better Education for Africa's Rise project. The second part focused on the participant's perception on the development of national TVET systems by international organizations.

The first part of the validation process of the semi-structured interview, was done by the revision of all questions and items from an university professor in United States of America (University of Illinois) expert on monitoring and evaluation in Education. From the suggestions obtained, the semi-structured interview guideline reduce the number of questions up to 23 and questions were classified in three different parts according to the subjects that were asked. The first part remained with questions related to the socio-demographic information and the involvement of the participant on the study, the second part focuses on the analysis on the social impact related to the development of new TVET systems at National Level and the existing correlation between development of National TVET education systems and the pressures of implementing ways of mass education worldwide; the last and final part focused on the identification of UNESCO's role as an International Organization on the development of the National TVET systems.

The second part of the validation process was done by piloting the semi-structured interview with the assistant to the National Project Officer in Botswana, from the suggestions obtained, the guideline of the semi-structured interview was depurated a couple of questions were erased, to allowed the interviewers respond more accurately

and precisely. The final version of the semi-structured interview guideline is presented in Annex 11: Semi-structure interview guideline.

- *Interview preparations*

The arrangements to conduct the interviews were prepared and confirmed prior to conduct the field trip, the researcher in coordination with the national project officer, agreed on the key interviewers in both countries. Once the key persons were identified, an e-mail was sent with a cover letter that request their voluntary participation on the semi-structured interview during the field try (Annex 9: Semi-structured interview cover letter. the assistant was incharged of following up the e-mails by phone until each of the potential candidates confirmed or refused to participate. A final list of the key interviewees was completed prior to the arrival in both countries (Annex 15. List of the key interviewees and focus group participants).

- *Researcher Field Trip*

One of the main task of the researcher during the field trip was to conduct the semi-structured interviews to the key identified persons. Therefore, once landed in both countries the interviews started, the assistant hired provided the necessary support to move from once spot to another within both cities. In order to be effective and efficient the researcher in coordination with the national project coordinators and the assitant established an accurate schedule for each day and hour of the field visit (Annex 12: Field trip interview schedule in Botswana and Namibia.

In order to cope with all the stakeholders within TVET, including public and private provision of TVET tranining, the first day the researcher interviewed the director of DTVET and conducted a focus group with different members with different positions at DTVET (chief education officer, policy and development division, and program development and the delivery unit of DTVET), once concluded the first part of the morning, the researcher went to the Gaborone Technical College and conducted the

second focus group with (the principal, GTC bear coordinator, Business studies head of department and the clothing design-senior lecturer), the last meeting (interview) on that day was conducted to the head of Quality Assurance and Assessment Unit of QAA.

On the 16th June 2015, the morning started interviewing the representative of the National Commission for UNESCO in Botswana, after that, the first focus group of the day took place at the Botswana Qualification Authority with (Head of BQA - Manager of capacity building, Qualification Development Officer I, Qualification Development Officer II, and the assistant program specialist). The day finalized with the last focus group of the day with the Executive Director and Deputy Executive Director of the Construction Industry Trust Fund (CIFT) which is a private company that provides TVET training to youth.

On Friday 17th June, the two final interviews were conducted, the first one to the National Project Coordinator / Officer and the second one to the Assistant to the NPO in Botswana. There was also a follow up meeting with the BEAR team and the KRIVET team.

The researcher was heading to Namibia on Saturday and rested on Sunday. By Monday 20th in the morning, the researcher was ready to start conducting the semi-structured interviews and the focus groups for the prior identified persons in Namibia.

The first meeting was conducted at UNESCO Windhoek office, interview with the Head of UNESCO office for this country. Once it finished a focus group with the NTA core team took place, where the curriculum development officer and the team leader of carpentry curriculum development, participated. In the afternoon, the interview was with the Quality Assurance Officer within the curriculum implementation and assessment division at NTA.

On Tuesday 21st July 2016, during the morning I was transported by my assistant to the Namwater TVET training center, in order to conduct the interview to the teacher that was piloting the BEAR project and the school director. As mentioned before, the social impact questionnaires were administered to the Namwater students that morning.

On the afternoon, the interview to the NTA Communication officer took place at the NTA Headquarters.

During Wednesday 22nd, the representative of the UNESCO National Commission in Namibia was interviewed as well as the Chief operations officer at NTA. On the afternoon the Manager of VET standards was interviewed as well.

The last day, Thursday 23th started interviewing the National Project Officer/Coordinator in Namibia (Annex 12: Field trip interview schedule in Botswana and Namibia).

All the interviews were recorded with the purpose of transcribe the relevant content that was mentioned and described by each interviewee.

### **- Focus groups**

In addition to the one-on-one interviews, a number of focus groups discussions were used to gather data from staff of each training institution under study in both countries; Botswana and Namibia. Focus groups allow shared opinions of a particular defined subject that is of interest to a group of individuals who have had certain shared experiences (Myers, 2009). The aim of the focus group was to answer the how' and 'why' questions that produce rich, multifaceted and even challenging explanations of how people attribute meaning to, and construe their understandings (Kamberelis and Dimitriadis, 2011).

In order to conduct a successful focus group discussion, an interviewer has to possess rich interview skills so as being sensitive to others' views, being quick to spot issues that deserve further clarification, and being able to keep all participants attentive and responsive and to avoid wasting time (Myers, 2009). In this study, the interviewer was a program specialist at the BEAR project, making it easy for her to develop a rapport with the participants on the project. She was able to sufficiently moderate the discussions and ensured the participation by a majority of respondents instead of

allowing a few participants to dominate the conversations. This was done by asking participants to clarify their answers, by using additional questions to elaborate on a point, and, by asking the less confident members for their opinion.

Data generated from focus groups are rich and descriptive because ideas were built and people worked to explain why they felt the way they do. Focus group discussions bring synergy in the conception and dynamism of ideas 'while generating data that can complement that produced from individual interviewing. The focus groups discussions also present ideal sources of data on how diverse groups in a community perceive their status or challenges (Murray, 1997).

Focus groups discussions also have potential disadvantages: doubts about validity, interviewer variability, degree of freedom, sample size, too much interaction, and self-appointed leaders who may influence others' opinions (Fahad, 1986). The researcher addressed some of the issues that arose at various stages of the discussion. For example, the number and choice of the respondents were determined to ensure adequate interaction and sufficient data. The first focus group discussion was challenging for the interviewer, but the successive ones improved as the interviewer's confidence grew. During initial discussions with participants it was important to provide participants with sufficient information to help them feel comfortable. The researcher and the respondents could understand the goal of the research differently but shared constructs and shared meanings were clarified and participants were convinced that the research is important and their contribution would enrich the findings. A specific aspect of the discussion was that some respondents attempted to influence the responses of others, which required intervention by the interviewer to ensure that the voices of more timid participants were heard.

The description on the procedures used by the researcher to conduct the focus groups follows the same logic as the semi-structured interviews as described before.

### **- Secondary data research**

A baste number of documents related to the topic under this study were examined. These documents were retrieved from government ministries, libraries, organizations that related to the research and from training institutions. The data gathered from the documents provided background information about past processes of developing national systems of technical education and vocational training, and revealed figures and systems used. Archival research included items such as strategic plans, annual reports, newspaper clippings, workshop agendas, and reports as well as meeting minutes. These are necessary to supplement primary data and to help in research questions formulation (Myers, 2009). To guarantee the quality of the information retrieved only sources that were deemed useful to the study. Baker and Foy (2008) advise that, secondary data gathered by international organizations and governments are usually of a high quality because they are compiled by experts using rigorous methods; these can be used for cross-cultural comparison with similar information from multiple countries (Ghuri and Gronhaug, 2010). Other data, like those found in international journals of research, have gone through peer-review scrutiny before being published, making them reliable.

#### ***7.2.2.3. Data analysis***

In this study a large amount of data were collected from the interviews, focus groups, questionnaires, field notes,... which necessitated reduction to make them manageable and meaningful. In general case studies tend to generate large amounts of data from several sources, making the analysis and organization of the data critical.

- Qualitative Data Analysis: The question on how to analyze qualitative data normally arises in the methodological literature (Cohen, Manion and Morrison, 2007). In analyzing qualitative data, it is sometimes difficult to make a clear delineation between data gathering and analysis because some preliminary analysis and interpretation occurs during data gathering (e.g. making sense of and recording



observations), and sometimes analysis reveals the need to double and seek more data. At the end of data collection the researcher scrutinizes the raw data, using interpretations and clarifications to establish causal relations, and then presents a report of the findings, drawing conclusions that are supported by evidence. In this research it was observed that the answers received during the interviews determined the categorization of data, which formed part of the analysis. The interview responses were produced digitally.

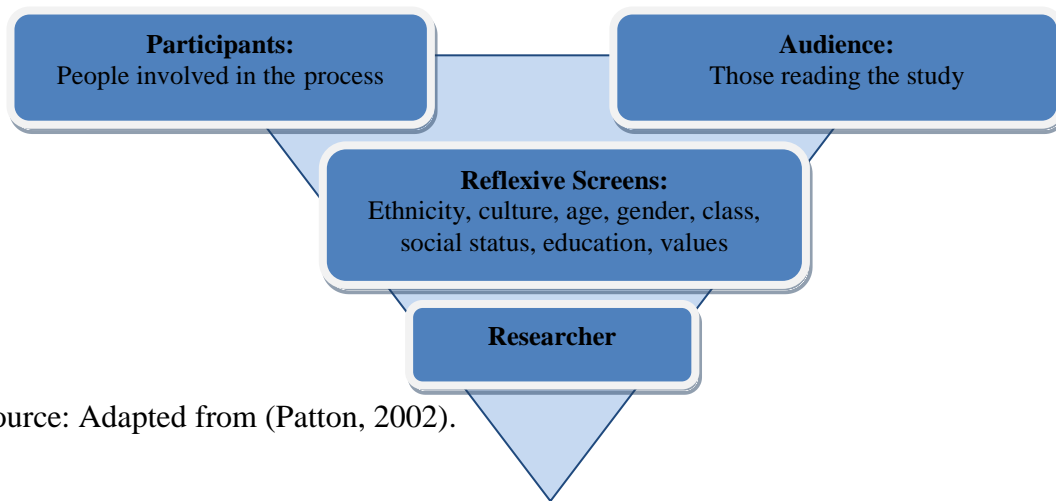
- Quantitative Data Analysis: the research is potentially affected by their own background, selectivity, perception and inductive processes, therefore it is important that the researcher is reflexive during the whole research process.

#### **a) Sensitivity to context**

Contextual factors mean that TVET systems in the SADC region are highly diverse and monitoring tools and indicators must be sensitive to context whilst amenable to generalization across both countries. When considering indicators for a comparative analysis, it was necessary to find appropriate ways of measuring progress that are sensitive to contexts and also allowed for comparison of data across contexts. The tools have been developed to be realistic and particularly suitable for application in resource-constrained environments.

#### **b) Reflexivity**

In qualitative research the researcher is the research instrument. Reflexivity acknowledges that quantitative researchers are inevitable part of the social situation they are researching and unavoidably have views and interpretations of the meanings of that social situation. The researcher have been reflexive as it was aware of multiples influences she has on the research processes and on how research processes affect her (Cohen, Manion and Morrison, 2007).

**Figure 9: Reflexive screens in research**

Source: Adapted from (Patton, 2002).

The reflexivity has been particularly significant in this study as the researcher was from a different cultural and educational background and held a different worldview of from the participants in the study. The researcher has been very careful to guard against imposing her own constructs on participants during the interviews and content analysis.

### c) Timing

It was really important in this study to design time-efficient data collection methods in order to achieve the level of research required. Therefore the lack of time for data collection did not apply to this study. It was really important from the beginning to design time-efficient data collection methods in order to achieve the detailed level of research required. The sheer weight of data which is collected during the field trip and the research skills needed to be effectively analyze and attribute meaning to this enormous quantity of data require a large allocation of time (Lofland et al, 2006).

#### **7.2.2.4. Measures of consistency**

A primary concern in most research is related to the validity and reliability of the study. On one hand and according to Webb (2000) validity is the extent to which a tool measures what it is expected to measure, whereas reliability denotes the consistency of achieving similar results when the measure is repeated. Therefore, while valid measures will always be reliable, a reliable measure may not always be valid (Baker and Foy, 2008). On the other hand, reliability is the degree to which an assessment tool produces stable and consistent results.

##### **a) Validity**

Validity is an important key to effective research. If a piece of research is invalid then it is worthless. Validity is thus a requirement for both quantitative and qualitative / naturalistic research (Cohen, Manion and Morrison, 2007).

The validation of the instruments (questionnaires and interview guidelines) developed and used in this research study to gather data, have been previously described on this chapter, when describing both research tools.

In quantitative data validity might be improved through careful sampling, appropriate instrumentation and appropriate statistical treatments of the data. Quantitative research possesses a measure of standard error which is inbuilt and which has to be acknowledged. In qualitative data the subjectivity of respondents, their opinions, attitudes and perspectives together contribute to a degree of bias. Validity, then, should be seen as a matter of degree rather than as an absolute state (Gronlund 1981). Hence at best we strive to minimize invalidity and maximize validity.

In this research, the qualitative analysis has been validated by using multiple sources of evidence, maintaining a chain of evidence, in line with the recommendations made by Amerson (2011). All the taped interviews and focus group discussions were

kept safely and referred to during analysis to clarify any ambiguous statements. To clarify vague statements and contradictory information during the interview process, opinions were sought from colleagues respondents. In addition, the researcher explained technical terms to avoid misinterpretations.

External validity defines the extent to which particular research findings can be generalized to other populations and to the broader world (Devlin, 2006), and the extent to which the outcome of a study in one or more instances applies to others that have not been studied (Dul and Hak, 2008).

In this research 111 persons and three training institutions were used to collect data that was estimated sufficient. Although this sample is not enough for generalization the research generates more study by presenting multiple views from the parts involved which can be replicated for other industry's sectors.

In this research study, the statement of the problem was clearly and precisely stated right from the beginning of the study and was communicated to all the participants of this research. The study objectives and research questions have been clearly presented and the research methods have been described. Analysis of the data have been done using content analysis and presented using simple frequency measurements, and the interpretations presented in the next chapter. Lastly, a summary detailing the implications of the findings has been established and recommendations for further research have been made in the last chapter of this study.

#### **b) Reliability**

Reliability is defined by Silverman as the degree of consistency with which instances are assigned to the same category by the same observer or different observers (Silverman, 2006). Reliability in qualitative research is focused on consistency of a measure, meanwhile on quantitative research focuses on the perspective of a number of observers and the changing reality. The importance of the reliability is based on two

reasons, the first one is to help ensure replicability of the research findings and secondly to provide a prerequisite for validity (Neuman, 2006).

To ensure the reliability of this research study a set of different actions were carried out: The National Project Coordinators set the proper timing for the field trip according to the general BEAR project schedule in order to undertake the field trip in each country at the same phase of the project implementation. Secondly, interviewers were contacted by e-mail at least two weeks before the interview and the time schedule was arranged and agreed with each participant by phone. A informative letter was sent on the first e-mail to inform them about the aim of the study, the topic and particular areas of concern. They were encouraged to bring any relevant documents that would support their assertions and during the interviews, the researcher took hand-written notes and also with the written authorization of the interviewers the conversations were recorded, transcriptions of the interviews were prepared according to the audio recorded. Second, the focus groups discussion were all taped using an audio recorder with the authorization of the interviewers and field notes were taking. The data was transcribed as well into paper. Thirdly, the researcher compared the data collected from multiple sources to authenticate them, categories and codes were established and data were place into these. In addition to that, the researcher worked with a University Professor specialized in Research Methods to re-examine a sample of data and place different definitions into categories.

#### ***7.2.2.5. Ethical considerations***

Careful considerations has been given to ethical issues to this research study, in order to balance the professional values and the research objectives with the rights of their respondents to be treated fairly. In terms of the qualitative methodology carried out, the researcher faces a challenge in aiming for accuracy of reporting whilst ensuring that the self-esteem of respondents is not undermined, nor confidence betrayed. The principle of equal respect as stated by Strike (1990) is important as it requires researchers to see respondents as ends rather than means and to regard them as free and

rational. This has been a main guiding principle in the ethical considerations for this study.

As the researcher has had both a professional as well as a research role within the process being studied. This meant the researcher was not neutral about the process but was bias towards the expected change being a positive development. Great care had to be taken when analyzing observations and carrying out interviews to mitigate that positive bias from influencing the analysis. On the positive side, the researcher has had a legitimate role in the process which facilitated access to the research situation which Lofland *et al.* (2006) describe as often problematic. This raises the question of the ethics of covert as opposed to overt research.

As program specialist and manager of the BEAR project, the researcher was trusted by the people to assist and support them in their work. The researcher had worked with many of these people for several months before the study began. A relationship based on trust was important.

A simple question was posed - if the research was carried out without the knowledge and permission of colleagues, how would they feel, if they subsequently found out? The researcher belief that some people would be very upset. The study could not have been carried out without the explicit consent of the Director of the Better Education for Africa's Rise Project at the Department of Technical and Vocational Education and Training. It was important to be able to demonstrate that permission had been given for the research to take place (see Annex 1: UNESCO Acknowledge e-mail and authorization to conduct the PhD research study).

More importantly, covert research would have compromised the research findings. The ultimate aim for these research findings is for them to be applied within the context of UNESCO work and more specifically in relation to the Technical Education and Vocational Training Policies being developed by this institution. Therefore a staged approach was taken, as advocated by Lofland *et al.* (2006) a hierarchy of people was established from whom consent was needed to carry out the research.

**Table 14: UNESCO focal points at the BEAR project**

N.	Name and Surname	Position	Action
1.	Mr. Saehun Seol	Director of BEAR Project UNESCO (ED/PLS/YLS)	Permission obtained to conduct the PhD research study
2.	Mr. Raymond Doherty	Botswana National Project Officer (NPO) UNESCO	Permission obtained to conduct the field trip in Botswana to collect data
3.	Ms. Veruschka Mckey	Namibian National Project Officer (NPO) UNESCO	Permission obtained to conduct the field trip in Namibia to collect data

Source: Own elaboration.

#### **a) Anonymity, confidentiality and protection**

The issue of confidentiality and anonymity was a priority for the researcher on this study and was discussed with the participants - it was made clear that anonymity was difficult to maintain in practice as respondents were drawn from a specific and very small population and for the case of the interviews in some departments of the national TVET institutions both in Botswana and Namibia there is only one responsible person. Therefore it can be difficult to maintain the anonymity when categorization of data may uniquely identify an informant (Raffe, Bundell and Bibby, 1989).

Nevertheless, anonymity was guaranteed for participants responding the questionnaires, an a clear statement was made and appeared on the first sentence of the

questionnaires to be answered (see Annex 6: Social impact perception questionnaire - Botswana.and Annex 7: Social impact perception questionnaire - Namibia.In relation with the interviews conducted, anonymity was guaranteed and it appeared as a clear statement on the cover letter prior to the interview and the interview acceptance letter (see Annex 9: Semi-structured interview cover letter. and Annex 9: Semi-structured interview cover letter. Moreover participants on the research study were always and at any time free to drop out from the study, as participation was absolutely free and volontaire.

The data collected has been codified and treated with the highest precaution to keep the anonimicity of participants at all times. The researcher have also taken steps to obscure the identity where it does not affect the quality of the data.



## CHAPTER 8

### **Descriptive phase: Contextualization of Botswana and Namibia as Member States of the SADC**

The descriptive phase of the research study takes place on Chapter 8, aiming to contextualize both countries, Botswana and Namibia within the SADC region and also the national education systems for both countries and in particular for TVET. Therefore the chapter is divided in three separate sectors.

The first one, as mentioned before introduce the Southern African Development Community, its goals, principles and purpose for the 15 southern African Member States. It describes the importance of Education within the SADC and it finalizes by highlighting the value of Technical and Vocational Education and Training within The SADC Regional Indicative Strategic Development Plan and the SADC commitment to TVET revitalization. It also describes the formal, non-formal, open and distance learning, informal and private TVET provision on the SADC; its efficiency and TVET funding mechanisms.

The second and the third sections explore in parallel Botswana and Namibian: a) Contexts; b) Their national education systems, which include a broad description of both c) Ministries of Education and Skills Development in Botswana and Ministry of Education in Namibia; d) The strategic development plans for education, and d) The influence of international organizations on the development of their own education systems. It continues by describing precisely the TVET systems in Botswana and Namibia respectively; emphasizing not only the historical development of the TVET system over the time, but also which is the actual TVET system in place (formal, non-formal and informal), the description of the TVET governance structure; the national legislation, the ways of financing TVET, gender mainstreaming in TVET and the existing relation between the each TVET governmental agencies and UNESCO.

## 8.1. SOUTH AFRICAN DEVELOPMENT COMMUNITY (SADC)

### 8.1.1. SADC goals, principles and purpose

The Southern African Development Community (SADC) was established as a development coordinating conference (SADCC) in Lusaka, on first April 1980, and transformed into a development community in 1992. It is an inter-governmental organization whose goal is to promote sustainable and equitable economic growth and socio-economic development through efficient productive systems, deeper co-operation and integration, good governance and durable peace and security among fifteen Southern African Member States: Angola, Botswana, the Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe (Africa Housing Finance Yearbook, 2013).

**Figure 10: SADC Region**



Source: SADC (2003).

The main objectives of Southern African Development Community (SADC) as to stated at SADC treaty in 1992, are to achieve economic development, peace and security, and growth, alleviate poverty, enhance the standard and quality of life of the peoples of Southern Africa, support the socially disadvantaged through Regional Integration, strengthen and consolidate the long-standing historical, social and cultural affinities and links among the people of the region. These objectives are built on democratic principles: balance, equity, mutual benefit, and equitable and sustainable development. The regional integration mentioned covers five areas of work which are: 1) Trade Industry Finance and Investment; 2) Infrastructure and Services; 3) Food Agriculture and Natural Resources; 4) Social and Human Development and Special Programs; 5) Policy Planning and Resource Mobilization (SADC, 1992).

The SADC Common Agenda, spelled out in Article 5 of the Treaty (as amended, 2009), summarizes the key strategies and policies of the institution, it encapsulates the Regional Indicative Strategic Development Plan (RISDP) and Strategic Indicative Plan for the Organ (SIPO) which highlight the main policies of the organization: a) To promote sustainable and equitable economic growth and socio-economic development; b) To promote common political values; c) To promote and consolidate democracy, peace and security (SADC, 2009).

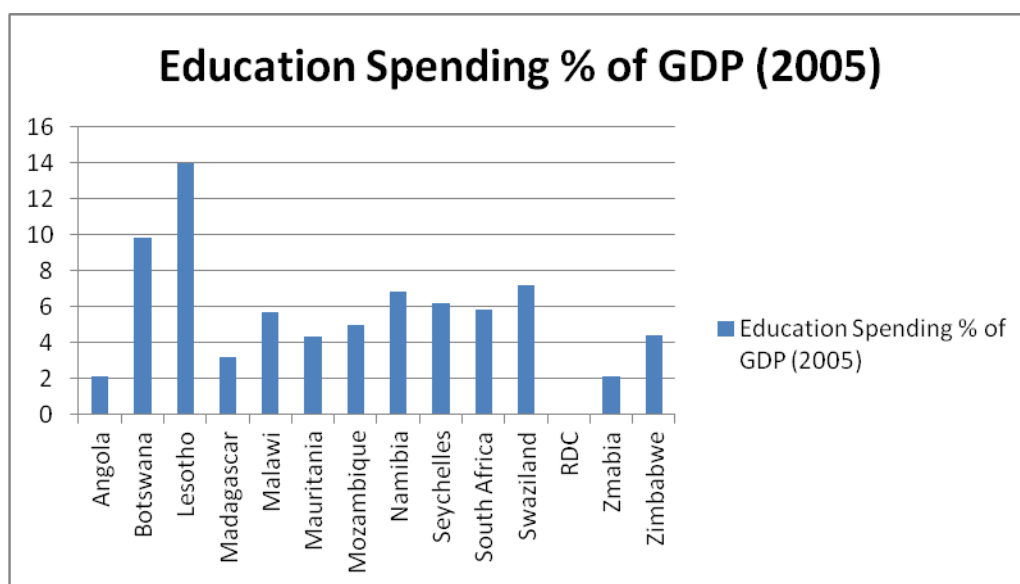
#### ***8.1.1.1. Introduction to SADC region and Education***

The population in the SADC region was estimated at 257.7 million in 2012, according to the world bank; DR Congo has the largest population of 72 million. 39% of the total SADC population lives in urban areas (World Bank, 2012).

The SADC region has the highest GDP per capita in the whole Africa; the collective GDP for the region in 2009 was US\$471.1 billion. Nevertheless compared to other regional economies in the world is relatively low. Financially, all the SADC member states have their own financial systems which are completely independent and

function as independent economies. Among them South Africa is the largest economy in Africa with 80 percent of the region's GDP it dominates the regional economy. During the last years, since 2010 the GDP growth in the region was attributed to robust mining activities due to increased capital flows into the SADC region (Africa Housing Finance Yearbook, 2013) meanwhile levels of inequality remain high. Some countries in the SADC regions are considered as the most unequal economies in the world, where the South Africa one is at the top according to the Finscope data followed by other economies as Namibia, Angola, Lesotho, Botswana and Zambia, for example, an estimation of 62 percent, 95 percent, 74 percent and 97 percent of the people in Botswana, Malawi, Tanzania and Zambia respectively cannot afford a loan for housing purposes (Demirguc-Kunt, Asli and Klapper, Leora, 2012). In the 2012 World Bank Doing Business Report from the fifteen countries only three improved their position in the World Bank's Doing Business ranking. The region recognizes the work that it still needs to be achieved in reducing poverty and developing equal opportunities for all. There is a mayor number of illegal migration that continue to be a challenge for the SADC region.

The SADC population was 280.96 million in 2011, with a population growth rate of 2.68% the same year (SADC, 2011). The adult literacy rate (15 years and older) in 2009 was 92.8% and in 2009, 89.4% of the adult females and 94.7% of the adult males were literate (African Development Bank [AfDB], 2010). The regional average education expenditure on the SADC region as percentage on the GDP was 5.6% in 2005. (Keevi, Chakroun and Deij, 2010).

**Graph 1: Education spending percentage of GDP, 2005**

Source: UNESCO (2007). Data on education expenditure is for 2007 with the following exceptions: Malawi (2003), Namibia (2003), Seychelles (2004), Tanzania (1999) and Zimbabwe (2000).

#### **8.1.1.2. TVET in the SADC region**

The value of Technical and vocational education and training (TVET) is clearly recognized in SADC's work, which is governed by the SADC Protocol on Education and Training (1997), where TVET does receive important visibility. The Protocol attempted to increase the recognition cross-border through bilateral and multilateral agreements on its countries' educational systems, at the same time the SADC Technical Committee on Certification and Accreditation (TCCA) in order to respond to the diversity of education and training systems within the member states, tried to establish harmonization and standardization of education and training systems within the SADC region (SADC, 2011b).

The SADC Regional Indicative Strategic Development Plan (2003) also notes the importance of TVET for regional development, having as one of its goals: 'promoting educated and skilled society for regional integration and development and

global competitiveness'. One area of particular focus within SADC regarding TVET has been the drive towards a set of national, and ultimately a regional, qualification frameworks (SADC, 2003). Plans for a regional qualifications framework for Southern Africa date back to the Education and Training Protocol in 1997. This led to a planning document in 2005 entitled *Towards a Southern African Development Community Qualifications Frameworks: Concept Paper and Implementation Plan* (SADC, 2005). Progress towards this goal was reviewed by SADC in 2010. SADC has also sought to encourage improved approaches to quality assurance of education (SADC, 2007). SADC's commitment to TVET revitalization is the driving force behind this assignment, but this SADC commitment needs to be in harmony with SADC's ways of working. These require SADC to support national policy processes rather than develop regional strategies that are intended to be binding on members. Thus, a SADC strategy for TVET must be grounded in national strategies (UNESCO, 2013a). Policy coherence among Ministries in relation to TVET issues and Employer involvement are two other weak factors among the SADC countries in relation to TVET.

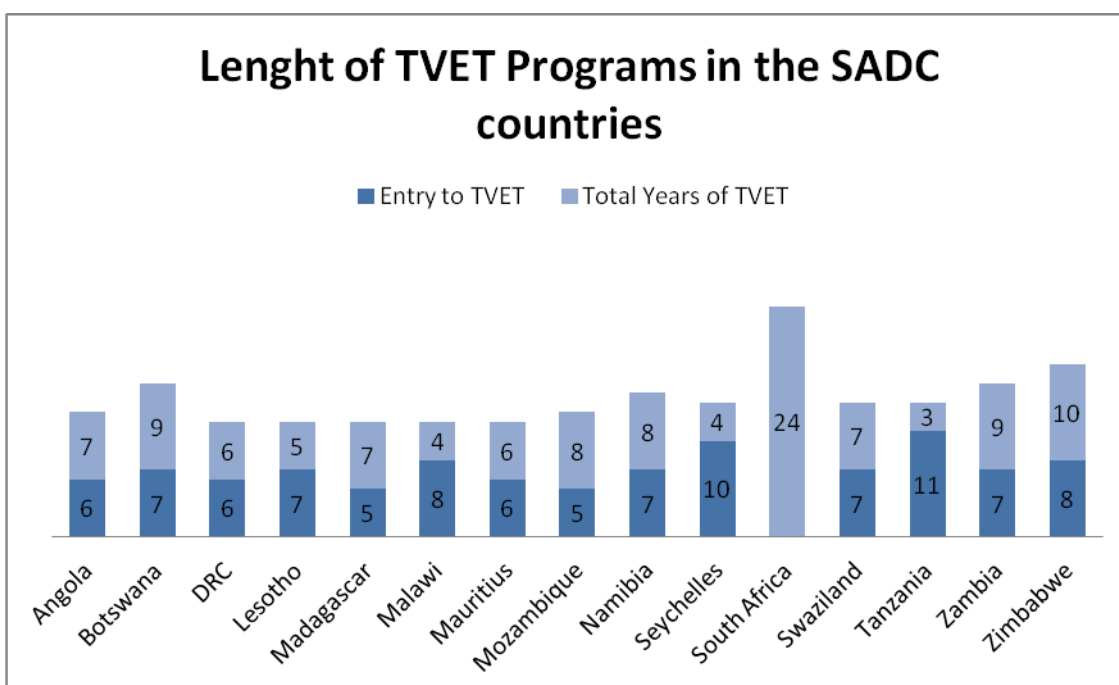
TVET Management Information System (MIS) are often absent or weak. There are huge data gaps and weaknesses to make any monitoring exercise sustainable. It is difficult to see how TVET systems can be successfully transformed when there is a lack of feedback data at both institutional and national levels, such data are vital for policymaking to become more evidence based, but it is equally essential for regional cooperation that there be something of some substance to be shared between member states. The other component of an effective TVET knowledge system on the SADC region is research, with very few exceptions, regional governments lack internal capacity, either for the generation or analysis of research (UNESCO, 2013a).

#### **a) Formal TVET Systems within the SADC Education**

There is a broad range of TVET systems within the SADC region; in the French and Portuguese speaking countries (DRC, Madagascar, Angola, Mozambique and Mauritius). TVET commences after primary school as part of the secondary school program. Seychelles also offers enterprise education (TVET initiation) within the

secondary school program. Other countries that commence TVET directly after primary school, but not within the secondary program include Botswana, Lesotho, Malawi, Namibia, Swaziland, Zambia and Zimbabwe. Tanzania is the only country that requires GCE equivalent (i.e. eleven year school preparation for TVET). In South Africa Technical Certificates are offered at the lowest level of education and training (equivalent to primary school level) and Vocational Certificates are available at levels associated with secondary schooling. In Angola and DRC there is no post-secondary TVET. Others usually have three or four levels of TVET, extending beyond senior secondary school level. (UNESCO, 2013a).

**Graph 2: Length of the TVET Programs in the SADC countries**



Source: UNESCO (2013a).

Following the ISCED classifications only seven of the fifteen SADC countries offer TVET qualifications at Level 5B, higher level TVET qualifications in some cases is offered within universities.

**b) Non-formal TVET provision in the SADC**

Non-formal TVET provision is provided mainly through community-based organizations, which are largely subsidized by government or donor funded. Community-based non-formal provision is typically focused on survival skills for vulnerable sectors of society and has a significant presence in rural areas. This community-based form of TVET provision is focused on skills training, as well as entrepreneurship under the autonomy of local communities. Adult education centers also provide basic vocational training, with a focus providing opportunities for upgrading qualifications (McGrath and Akoojee, 2009).

The Botswana youth brigades have been extensively documented and represent a more formalized approach to non-formal TVET provision, this training is certified. The Namibian COSDECs were influenced by the Botswana model but continue to operate semi-autonomously.

**c) Open and distance learning for TVET**

Open and distance learning (ODL) for TVET provision is starting to be developed in SADC countries. Six of the 13 SADC countries have for open and distance learning policies. However, many of these policies are not new. Most ODL policies developed are based within higher education institutions. There is a clear limitation on the existing capacity to implement ODL programs (World Bank, 1995).

**d) TVET Private provision in the SADC**

Most SADC countries have incomplete records of private TVET provision as information management systems largely capture public TVET provision. Countries with TVET qualifications frameworks have relatively more information on private providers but there are still significant gaps in the data. Private training provision



mainly exists at the work place in different countries. A serious factor affecting information on private provision is the lack of clarity on what constitutes private provision (Akoojee, S. 2003).

#### **e) TVET Sector efficiency in SADC**

It is not possible to make definitive statements on the efficiency of the TVET sector in SADC countries. This is primarily because of the poor quality of data available within national TVET systems. Data on public pass rates are incomplete and often only reported under one ministry.

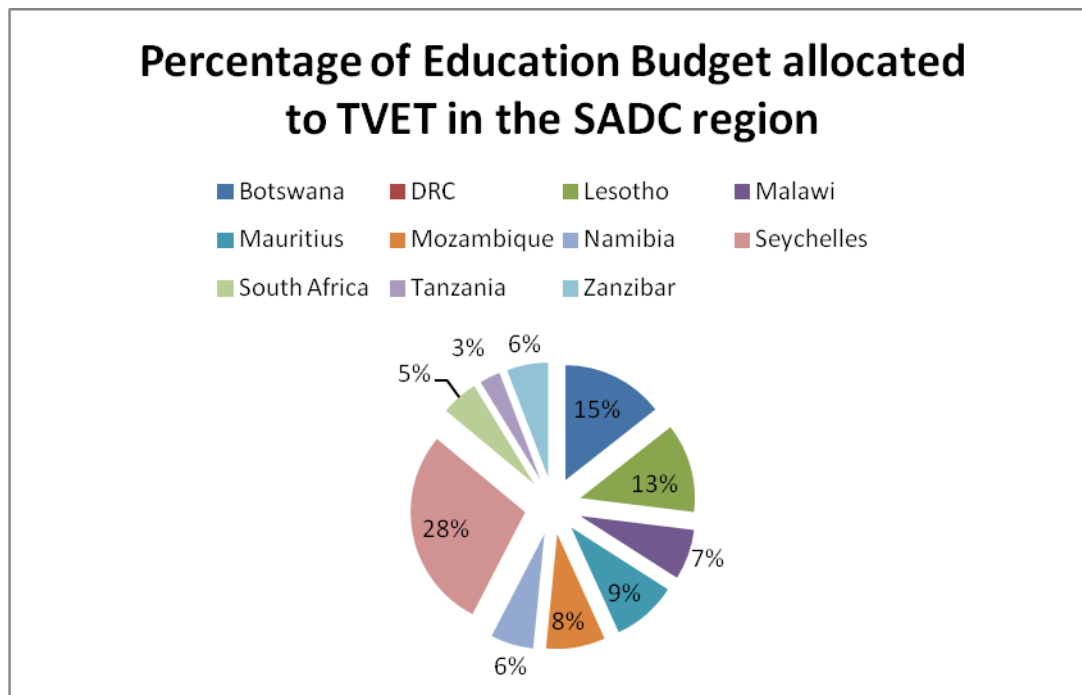
There is often no data on pass rates and, when there is, it is typically incomplete. Pass rates by gender were largely incomplete and by NQF level were not available. Even where pass rates are available, it is not possible to compare these across countries as different data are reported on. For instance, data are presented for programs of different duration or level, or not disaggregated enough to make this clear. Moreover, high pass rates are not unambiguously good as there is always a possibility that they reflect low institutional standards, even where competency-based approaches have been introduced (Johanson and Adams, 2004).

#### **f) TVET Funding on the SADC**

TVET in SADC countries is mostly funded through government subsidies - which are the main contribution-, student fees, employer fees, donations and income generation activities by the providers. All formal public provision of TVET is funded by government through budget allocations to ministries. Graph 3 shows the proportion of education budgets allocated to public TVET per country. Another more recent funding source is a skills levy based on a percentage tax of employer payroll, which primarily target the private companies. Levy is set at 1% in Namibia, Malawi and Zimbabwe;

meanwhile in Botswana the levy paid is set at 0.2 to 0.25% of the company turnover (UNESCO, 2013a).

**Graph 3: Percentage of Education Budget allocated to TVET in the SADC Region**



Source: Elaborated from data UNESCO (2013).

Seychelles allocates the highest percentage of its education budget to TVET provision, followed by Botswana, while Namibia is below the average expenditure (4,7%) with 2,9 percentage. It should be mentioned that, government budgets for TVET provision are generally low in relation to other education sectors. Informal TVET provision is not funded in a systematic way in the SADC region. In spite of an overall downturn in international support for TVET, there have continued to be significant international contributions to the funding of TVET in the SADC region. In Botswana, the European Union has been a major partner in providing funds for TVET capital infrastructure, technical assistance and tracer studies. UNESCO, ILO, the World Bank and the African Development Bank have also been active in technical assistance studies, though these represent far smaller sources of funding.

**g) Revitalization process of the TVET system in the SADC**

There is widespread and genuine commitment to improve the SADC region's TVET systems and considerable evidence of positive developments that have taken place over a decade or more and which continue. All transformed TVET systems in the SADC in the region should look like, reflecting both international trends and the technical advice they have received from development partners, particularly the multilateral agencies (OECD/DAC, 2012).

Key elements of a general model for reform can be found that feature: a qualifications framework, quality assurance, policy coherence concerns, national governance reform, employer involvement, public provider governance reform, a role for private sector providers. Additionally, several countries should also emphasize in other elements, such as: decentralization, new funding arrangements, new learning technologies (UNESCO, 2013a).

## 8.2. BOTSWANA

**Figure 11: Botswana**



Source: CIA (2014). The world Fact Book, Botswana.

### 8.2.1. Context

The Republic of Botswana is located in Southern Africa; it is a country that covers an area of about 582,000 sq.km<sup>2</sup>. It is bordered by South Africa to the south and the southeast, Namibia to the west and north and Zimbabwe to the northeast, its north border with Zambia is defined by few hundred meters long. Formerly the British protectorate of Bechuanaland, Botswana adopted its new name after becoming independent within the Commonwealth on 30 September 1966 (Government of Botswana, 2009). More than four decades of uninterrupted civilian leadership, progressive social policies, and significant capital investment have created one of the most stable economies in Africa (CIA, 2014). The Okavango river, one of Southern Africa's longest rivers flows into the north-western part of the country, forming the UNESCO World Heritage. The Kalahari Desert occupies more than 70% of the country (SADC, 2012).

Botswana total population size is 2,024,904 persons with a density of 3.5 person per square kilometer as per 2011 Botswana Population and Housing Census (Government of Botswana, 2014b). The population is concentrated in the eastern parts of the country

due to the climate conditions and around 10 percent of the population lives in the capital city Gaborone. Botswana's population continues to increase at diminishing growth rates, where the annual population growth rate between 2001 and 2011 is 1.9 percent. Botswana has one of the world's highest rates of HIV/AIDS infection, but it is also has one of Africa's most comprehensive programs for dealing with the disease (World Bank, 2014).

Botswana is a multi-party democracy, with elections held every five years. The president is the Head of State. There are 16 administrative districts and associated councils, where the Central Government is represented. The national language is Setswana while English is the official language used in business, there are as well some indigenous languages spoken by different ethnic groups known as Batswana. The main religion followed by the population is Christianity, it coexist with a number of indigenous religions throughout the country.

Botswana is considered as one of the fastest-growing economies in the world, as its GDP per capita has change significantly, from US\$70 per year in 1960s to a US\$16,400 per year as of 2013 (World Bank, 2014). The economy is highly dominated by mining and mineral extraction activities, principally diamond, nevertheless tourism is an important growing sector due to the country's conservation practice and baste nature preserves (for example the Okavango Delta covers 16,800 km<sup>2</sup>). At least 75 percent of the labor force is engaged in non-agricultural activities, beef processing accounts for about 80% of the livestock industry (CIA, 2014).

In 2014, Botswana has been classified as medium human development country (UNDP, 2014), ranked the 109 position over 185 on the Human Development Index (HDI)<sup>2</sup> with a punctuation of 0.683 Botswana Inequality-adjusted Human Development Index (IHDI)<sup>3</sup> ranked in 2013 on the 99th position with 0.422 points.

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<sup>2</sup> The Human Development Index (HDI) is a composite statistic of life expectancy, education, and income indices used to rank countries into four tiers of human development, included in the United Nations Development Programme's Human Development Report.

<sup>3</sup> The IHDI is the actual level of human development (accounting for inequality)" and "the HDI can be viewed as an index of 'potential' human development (or the maximum IHDI that could be achieved if there were no inequality)".

Botswana is a member of the Southern African Development Community (SADC), the Southern African Customs Union (SACU), the Commonwealth of Nations, the United Nations and the World Trade Organization (Government of Botswana, 2009a).

## **8.2.2. Education**

### **8.2.2.1. Botswana Ministry of Education and Skills Development**

Since Botswana independence, education has been a key priority for the government in terms of national and human development (Government of Botswana, 2009a). In the year 1966 at the time of independence of the country The Education Law of Botswana came into existence (Government of Botswana, 1966). Then the Revised National Policy on Education of 1994 emphasized that Botswana's principal education goal is to produce a competent and productive workforce, the importance of investing in human capital and social development is highlighted. The National Policy was revised and updated to align it with achievement of the MDGs and Vision 2016. Education takes the highest priority to the Botswana government, as it states at Botswana Vision 2016 that "*an informed and educated society would turn to a productive, prosperous and innovative society*" (Government of Botswana, 1994; pp. 21).

The Ministry of Education and Skills Development (MoESD) has authority over all of Botswana's educational structure except the University of Botswana (which was established 1st July 1982) and the responsibility for the overall growth in the number of students within the education system. The Ministry of Education and Skills Development spends around 30% of the public spending and 9,5% of the GDP on education in 2009 (CIA, 2014).

The core objectives to carry out by the Ministry of Education and Skills Development are: a) To offer impartial admission and opportunity for training and education; b) To escort the Human Resource Development in the country; c) To offer and guarantee value training and education (Botswana Federation of Trade Unions [BFTU], 2007).

The Ministry of Education and Skills Development is structured with different Departments which are at the same time formed by five different divisions. The Department of Curriculum Development has the overall mandate of planning, developing and assessing school curricula for primary, junior and senior secondary schools. The divisions that are under the mandate of the department of curriculum development are: a) Curriculum Development division, responsible for create and elaborate instructional materials and develop syllabus; b) Education Publication Division, in charge of the public relations and provide supplementary materials for students and teachers; c) Guidance and Counseling Division, which creates teacher training programs as well as provides career guidance; d) Teaching Aid Production Division develops mainly printed materials for teaching mainly at primary level; e) Education Broadcasting Division elaborates radio lessons to support the school curriculum, mostly for primary; f) A semi-autonomous division has been created with the mandate of the design and implementation of national examination programs for primary and secondary ensuring quality learning standards, named the Examinations, Research and Testing Division (Ministry of education and skills development, 2009).

#### **8.2.2.2. Botswana strategic development plan for Education**

Since the independence all governments in Botswana have been concerned on the importance of having a long term development planning, therefore different National Development Plans (NDP) have been elaborated and implemented since then, always with the aim of spread Botswana national principles: democracy, development, self-reliance and unity (Government of Botswana, 2009a). The first NDP was implemented during 1968-1973 with one specific goal "*to raise the standard of living of the people in Botswana*" (National development plan 1968-1973, 1968; pp.12). The

same commitment was reiterated in the subsequent plans, for example the second NDP 1973 - 1978 that was focused on *"achieving a systematic improvement in the overall standard of education, which is a fundamental prerequisite to attain high per capita productivity and, hence, income"* (National development plan 1970-1975, 1970; pp.9). The goal of the latest National Development Plan numbered at 10 is *"to sustained development, rapid economic growth , economic independence and social justice"* (National Development Plan 10, 2009; pp. 10). The Tenth National Development Plan (NDP 10) represents the blueprint of Botswana National Vision, outlining the policies and aiming to achieve Vision 2016 objectives during 2009 -2016.

Is the Ministry of Finance and Development Planning (MFDP) responsible to elaborates progressively National Development Plans (NDP) that outlines short-medium term initiatives for Botswana and which includes Educational Strategic Plans. The current National Development Plan named NDP10 is aligned with the Millennium Development Goals and covers a seven year period (2009-2016) and finalize at the same time as the country's long term vision 2016; towards prosperity for all which highlight the necessity to have "an educated and informed nation" (Government of Botswana, 2011). The principles of Democracy, Development, Dignity, Discipline and Delivery have been chosen to be the roadmap of NDP10 development agenda and to the Vision 2016 goals (Government of Botswana, 2009a).

Vision 2016 added new dimensions to the development concerns in Botswana provides a blueprint for the country's development path until the year 2016. The Vision outlines what Botswana aspires to be by 2016, the country's aspirations as being a nation that is "educated and informed", "prosperous, productive and innovative", "compassionate, just and caring", "safe and secure", "open, democratic and accountable", "moral and tolerant" and "united and proud" (Government of Botswana, 2009a).

The Vision recognized that it would be necessary *"to manage population growth in Botswana if its people are to be adequately catered for in terms of education, health and service"*. (Government of Botswana, 2011; pp.23).



During NDP 9, Government spending in Education and training was about 30% of the annual budget. The Education sector focused on increasing access and equity, improving the quality and relevance of education and providing competent human resources necessary for achieving the nation's economic diversification strategy. The sector's key objectives included provision of universal 10 year basic education; increasing access to senior secondary education; expanding vocational and technical education and training; promoting lifelong learning; increasing access and equity at tertiary education level; and improving access to education services by children with special needs. As a result of the youth unemployment and the lack of opportunities for youth the skills development program started. Quality assurance procedures were developed to coordinate the Botswana Vocational Training system, therefore there were register an accredited the vocational institutions and the training ones in order to ensure that the vocational training ensures the quality standard prescribed by the Vocational Training Act of 1998. The Vocational Training Fund was created and provide grants for vocational skills development. In order to ensure sustainability of education provision, the Ministry implemented cost sharing and cost saving measures during NDP 9. These measures included re-introduction of fees at secondary and tertiary levels (colleges) and extending sponsorship to local private tertiary institutions which were registered with the Tertiary Education Council (TEC).

Botswana National Development Plan 10 (2009) differs from previous plans as the Plan utilises the Integrated Development Planning (IDP) approach, which is an essential part of the Integrated Results Based Management (IRBM) framework. The IDP approach maps out the national development priorities, providing a structured and systematic roadmap for all development. The NDP 10 goal, arising from the Vision 2016 pillar of an Educated and Informed Nation, is to provide an adequate supply of qualified, productive and competitive human resources. The associated Millennium Development Goal (MDG) is to achieve Universal Primary Education by 2015 (MDG 2).

Through the successive national development plans, the importance of developing Botswana's human resource capacity through education has been always the top priority.

### ***8.2.2.3. The influence of international organizations on the educational development in Botswana***

The education sector in Botswana has been also influenced by international organizations over the history of the country (Meyer *et al.*, 1993). The effective use of the foreign assistance and expatriate workers is regarded as one of the major contributing factors for its national development. Therefore, the educational development in Botswana cannot be explored without contributions of those international agencies.

There have been various donors in education sector since its independence: USAID (United States Agency for International Development), ODA (British Overseas Development Agency), SIDA (Swedish International Development Authority), GTZ (German Agency for Technical Cooperation), the World Bank, UNESCO, UNICEF and AIDAB (Australian International Development Assistance Bureau).

Table 15: List of donors in education sector according to the area of intervention

<b>Department of Curriculum Development and Evaluation</b>	
<b>Research and Testing Centre</b>	USAID
<b>Curriculum Development Unit</b>	USAID, British, AIDAB
<b>Publication Unit</b>	British
<b>Teacher Aids Production</b>	UNICED, Swedish
<b>Education Broadcasting</b>	British, Swedish
<b>Examination Unit</b>	British
<b>Department of Non-Formal Education</b>	
<b>Literacy</b>	German and Swedish
<b>Administrative</b>	USAID, British
<b>Distance Education</b>	British, AIDAB
<b>Department of Teacher Education (including teacher training colleges)</b>	
<b>Preservice</b>	British, USAID, Swedish
<b>In-Service</b>	USAID, British, AIDAB, Holland, EEC
<b>Administration</b>	British, USAID
<b>Department of Primary Education</b>	
<b>British, USAID, AIDAB</b>	
<b>Department of Secondary Education</b>	
<b>British, Swedish, USAID, AIDAB</b>	
<b>Planning Unit</b>	
<b>British, Swedish, USAID</b>	
<b>Technical Education</b>	
<b>British, German, Swedish</b>	
<b>Unified Teaching Service</b>	
<b>British, TBRS and volunteers, Peace Corps, German volunteer service, Netherlands volunteers, UN volunteers</b>	
<b>Bursaries</b>	
<b>British, USAID</b>	

Source: Meyer *et al.* (1993, pp. 474-475).

However, there are studies revealing that the pursuit of international assistance in the Botswana education sector does not mean any weakness in the national institution in education sector. According to the study of Meyer *et al.*(1993), it is confirmed that the parents and students have their eagerness to reach an international standards of education. Hence, politicians and government authority ask to the international agencies first to bring modern educational philosophy and methodology.

Meyer *et al.*(1993) finds it is the special feature because the international education standard was not imposed by foreign hegemonic or political powers, but Botswana found attraction points of the international standards for themselves. Hopkin (1994) scrutinizes characteristics of the Botswana educational authority in collaborating with foreign development agencies, in an effort to identify ‘peculiarity’ of the Botswana government in its capacity and working habit. He concludes that the Botswana education ministry has a high level of leadership in collaborating with the foreign agencies, saying that:

*"In utilizing the aid offered it has demonstrated the determination to incorporate it into its own developmental plans; thereby ensuring that bothe the deployment of the aid and the outcomes are "owned" by Botswana" (Hopkin, 1994; pp.37)*

Meyer also points out some weaknesses of the Botswana education authority associated with the foreign partners. The Botswana government failed to find skilled and experienced officials and professionals to operate some development cooperation projects. This indicates that the Botswana’s manpower development do not match with its economic development. There are warnings on a failure of the government officials to handle newly emerging problems in education sector, as the education problems become a complex social issue requesting more than quantitative expansion.

Despite such an ambivalent reputation on its strength in cooperating with the foreign agencies, there is a general consensus among the foreign agencies working in Botswana that the Botswana government usually organizes well-coordinated effort in planning and implementing cooperation projects(Hermans, 1974; Whitfield and Fraser,

2010). Also, it is confirmed that the Botswana government strategically utilizes foreign aid and cooperation for its problem solving, as Hopkin mentioned the aid that has been given to date has helped the country to get where it wishes to go more quickly (Hopkin, 1994).

#### **8.2.2.4. Education system in Botswana**

Botswana has shown an outstanding advancement in providing better access and quality education to its population, after attaining independence in 1966. The structure of the Education systems it's similar to other Anglophone countries of the sub-Saharan region. The structure consist of seven years of primary education, five years of secondary education and five years of tertiary education. In 2012 at primary level there were 337,206 primary students and 12,785 teachers in Botswana, In 2000 the public spending on Botswana education was about 9.1% of the GDP girls and boys have equal access to education. (Government of Botswana, 2013). There was an increase in literacy rates from 68 percent in 1993/94 to 83 percent in 2007/08. The major challenge constitute the student drop out school specially in remote areas, in 2003 desertion constitute the 84 percent of primary school drop-outs and 50 percent of secondary school drop outs (Government of Botswana, 2009).

Education at primary and secondary levels was free since 1987 as a bid to get more children into schools came out, the situation changed when the Botswana government decided to introduce new fees, 5 percent of the total operating costs were re-introduced for children whose parents could afford such fees, this decision that was approved by the parliament on october 2005, therefore schools feels were reintroduced by 2006, according to the new law students at junior secondary school will pay 300 pula (54US\$) per year, while the fees for senior secondary school will be 450 pula (81US\$) per year (Jeffrey Jensen Arnett, 2007). Those households earning less than P1,200 per month or who had fewer than 50 cattle or 100 calves or 250 goats or sheep were exempted from paying school fees. In the 2007/08 financial year, the Ministry collected P46 million through this process (Government of Botswana, 2009).

The main objectives of the national education System in Botswana are: a) To highlight science and technology in the educational system; b) To hoist the standards of education at all the levels; c) To offer lifelong education to every section of the society; d) To attain competence in progress of education (Government of Botswana, 2011).

In 2001, the education system of Botswana was restructured. This new system includes seven years of primary education, three years of junior secondary education and two years of senior secondary education (Maps of World, 2014). Each year at the primary level is named standard, and each secondary level is a form. The basic education is lead to a Junior Certificate qualification after completion of the 10 years, after that, the school population that attends to a further two years of secondary schooling lead to award the Botswana General Certificate of Education (BGCSE). After completion school, students can take vocational training courses, attend to technical colleges in the country or enter to the University.

In relation to the inclusive education, within the Botswana first policy on Education in 1977, the education system makes minimal provision for children with disabilities, nevertheless, in 1993, the Revised National Policy on Education (RNPE) was formulated and approved by the National Assembly as White paper (Government of Botswana, 1994) were a list of specific provisions for the education of all children including those with disabilities ensure equal education opportunities for all citizens of Botswana, to prepare children with special educational needs for social integration in ordinary schools with their peers and to ensure the support and active participation of the children's parents.

**Table 16: Education levels in Botswana**

EDUCATION	School Level	Grade from	Grade to	Age from	Age to	Years	Notes
Primary	Primary School	1	7	6	13	7	
Secondary	Junior Secondary School	8	10	13		3	10 years of Primary School Leaving Examination (PSLE)
Secondary	Senior Secondary Education	11	12	15	17	2	Botswana General Certificate of Secondary Examination (BGCSE)
Vocational	Vocational Education						
Tertiary	University						University of Botswana

Source: Table elaborated with data from Education Database (2014).

**Table 17: Education pathways in relation to the age**

Student Age	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Educational Pathways	Pre-Primary (2 years)	Primary (7 years)							Secondary					Tertiary					
		National Literacy Programme				Adult Basic Education			Junior Secondary School (3 years)			Senior Secondary		Tertiary Institutions					
													Vocational Training						

Source: UNESCO-IBE (2010). *World Data on Education*. Botswana.

### a) Preschool

Early childhood care and development (ECCD) Education in Botswana is provided by civil society organizations, including the private sector, which implies lower participation rates. However, the Government provides substantial support in the

form of policy direction, grants, teacher training and teaching materials, to NGOs and Community Based Organizations (CBOs) involved in this type of education.

Prior to 1977 the development of early childhood education was not guided by any policy direction, but it was provided in various forms by day care centers run by voluntary organizations such as the Red Cross. Since then, there has been a large increase in different kinds of early childhood care provisions. In 1980 it was established a multi-sectoral Reference Committee on early childhood that look into the activity of day care centers and established their operational guidelines (UNESCO, 2000b).

The government was committed to prepare a comprehensive policy on pre-school education within the National Development Plan 7, 1991-1997 (Government of Botswana, 1991). The strategy has not been fully implemented. Nevertheless the government is committed with the Recommendation included at the RNPE which stated that “universal access to pre-primary education should be achieved within 25 years with immediate commencement of its implementation” at the Recommendation 7, RNPE, (Government of Botswana, 1994). Meanwhile a multi-sectoral approach to the provision of ECCD is necessary especially for targeting children of disadvantaged groups.

### **b) Primary Education**

Botswana has achieved universal access to primary education, with a 100% total enrolment ratio for males and females in 2012 (Government of Botswana, 2013) which provides a strong basis for the higher goal of 10 years of basic education. The primary education program starts at the age of six, lessons are taught in Setswana and English at schools. In order to achieve the governmental goal of being literate first in Setswana, this is the instructional language during the first four years of primary school. The program



ends with Standard VII, when passing successfully the examination process named the Primary School Leaving Examination ending with the junior certificate examination.

In 2012, 337.206 primary students were register on the 812 primary schools country wide, of which; 92.7% were government owned and 7.3 % are privately owned. In 2012, the population of female school going age (6- 12 years) were 140,815 while females was 143,227 showing a Gender Parity Index (GPI) of 0.98 which is an indication that the population of males age 6 to 12 years are more than their female counterparts. (Government of Botswana, 2013).

From 2003-2012, the estimated Net Enrolment Rate (NER) for children aged 6-12 was consistently above 85%, reaching almost 93% in 2012 (UNESCO, 2015a). Over the same period, the gross enrolment ratio (GER) of the age group 6-12 shows a positive increase of 4.5 percentage points higher than the net enrolment rate (NER), due to the fact that some pupils start school late and because some dropouts. In 2012, the net primary enrollment rate for children aged 6 -12 was 93.1 % and the rate for children aged 7- 13 was 88,6 % (Government of Botswana, 2013). There has been an increase on primary school dropouts between 2011 and 2012 from 3,026 to 3,239 (7.0% increase) generally more males drop out of school than females. The Ministry of Education and Skills Development has introduced the Back to School Initiative which aims at giving all students who dropped out of the school, second change to be re-admitted into the school system (Government of Botswana, 2014).

Access to education has improved over the time. In 2002, 98.2% of all pupils at Standard 7 progressed to junior secondary. In order to maintain efficiency in the primary school system, extra investment to should be made towards programs geared towards encouraging remote populations to remain in school Recommendation 15 of the RNPE calls for this kind of action (UNESCO, 2000b).

In relation to the quality of Education, the Department of Primary Education in Botswana is in charge of the assessment and administration of all the primary schools of the country. The average pupil-teacher ratio in Botswana's primary public school was estimated at 25.42 in 2009, meanwhile the ratio at the private schools is 16 (Government of Botswana, 2013).

The pupil-teacher ratio is below the National development plan target of 30 pupils per class. The quality of primary school teachers normally is measured by the percentage of teachers who have the required academic qualification and the percentage of teachers who are certified to teach according to national standards in Botswana. In 2012, 75% of Primary school teachers were female; of these 90.1 percent were trained teachers. About 89, 4 percent of all teachers were trained and employed on permanent basis (UNESCO, 2000b).

### **c) Secondary Education**

Botswana secondary education is not free, not compulsory. It has two levels: Form I to III corresponding to the three-year junior secondary program and Form IV to V related to the two-year senior secondary program. In 1996 junior secondary level, was expanded in order to enhance the preparation to vocational training from two years to three years in relation to the governmental revision of the system in 1994, it added different items into the academic subjects. In January 2006, Botswana announced the reintroduction of secondary school fees (BBC, 2006).

There has been an increase of 2.5 percent on the number of secondary schools, from 276 in 2008 to 283 in 2012. Out of the 283 schools, government schools constituted 84.0 percent of all secondary schools in the country, the other two types of secondary schools are government aided and privately owned schools (UNESCO, 2015a). In 2012 secondary school enrolment was at 172,669 secondary students with a female enrolment of 51.7 % and 48.3% for males (UNESCO, 2015a) Government

schools enrolled 92.3 % of them. The secondary enrolment trend from 2006-2012 has had a gradual increase, from 164,201 students in 2006 to 172,669 students in 2012. The theoretical age for secondary school (Form I to Form V) is 13 – 17 years. However, the ratios for 14-18 years are usually present. On one hand the Gross Enrolment Ratio for age group 13-17 years, increased from 77.3 % in 2002 to 81.2 % in 2012 showing an increase of 3.9 % over 10 years; there was slight decrease in GER (13-17 years) from 84.1 percent in 2008 and 2009 to 84.3 percent in 2011 and further decline to 81.2 percent in 2012. On the other hand, the net enrolment ratio for students aged 13 - 17 years increased from 58.8 percent to 64.2 percent over the ten year period. Furthermore, statistics show that since 2002 there have been an increase in access to secondary education over a decade (Government of Botswana, 2014).

Although the education policy outlines that each child should go through 10 years basic education, since 2000 the transition rates from primary school (Standard 7) to lower secondary level (Form I) have been above 96.0 %. On the other hand, the transition rates from lower (Form III) to upper secondary (Form IV) ranges from 52,8% in 2000 to 63.8 percent in 2012. In relation to the drop-outs ratios, 25,5 % of secondary school students who dropped out of school in 2012 were doing Form I, followed by 25% doing Form II and 24.2% respectively (UNESCO, 2015a). The students who dropped out at Form VI and constitute 0.5 and 0.1 percent respectively. (Government of Botswana, 2014). In relation to the quality of education associated to teacher training, 46.9 percent of teachers hold a Diploma on Secondary Education, 23.3 percent of teachers have been trained in Bachelor of Education degree, 1.3 percent has Master of Education. More than half of the secondary school teachers were aged between 30 and 39 years.

#### **d) Higher Education**

- University Programs: the University College of Botswana was part of the Regional University of Botswana, Lesotho and Swaziland until 1975, after that period Botswana and Swaziland developed as a joint university until 1982 when the two institutions were established separated. Botswana University is not under the control of

the government, there is no intervention of the state, the management of the university and all concerning issues related to it are controlled by the autonomous body of the university. Its mission is to provide the intellectual strength to the academic and human resource capability of the country and also of the global population. There is an associate institution to the University of Botswana is the Botswana College of Agriculture. The construction of the second national university is nowadays finalized in 2011, named the Botswana International University of Science and Technology (BIUST). There are as well numerous private tertiary education institutions around the country.

The University of Botswana teaches 15,484 students where 14,093 of them are undergraduate students and 1,445 are post graduates students. The administration staff consist of 2,658 people. The endowment of this public university is Pulas334 million (US\$50million). The campuses are located on Gaborone, Francistown and Maun. The streams of studies taught include: business, engineering and Technology, education, medical education, science, social Science, humanities (University of Botswana, 2015).

The Botswana College of Agriculture (BCA) located in Gaborone, was established by the Act n.9 on 31st may 1991 by the Parliament of Botswana. Botswana International University of Science and Technology located in Palapye, was established by the Act of 2005. the Enrolment at this public university started in March 2011 and it cater for 1,000 - 3,000 students.

The University of Botswana is the hub of higher education for the students of Botswana after the senior secondary education. The students, who on the final examination of their senior secondary courses receive first or second class can apply to get admission at the University of Botswana (Bailey, Cloete and Pillay, 2012).

- Non-University Vocational Training is provided at government Vocational Training Centers (VTCs). Enrollment is open to Botswana's employed and unemployed citizens. These centers are strategically located in development areas, which have diversified major industrial and commercial infrastructures. VTCs offer short courses during the day, evening, and weekends for full-time trainees and apprentices. Courses

include mechanical, automotive, textile, computing, construction, electrical, commercial trades, and hotel/catering. The VTCs emphasize the importance of practical training and experience. The programs require apprentices to spend three months at a VTC and nine months at job training supervised by the Ministry of Labor and Home Affairs (Government of Botswana, 2009b).

### 8.2.3. TVET in Botswana

Initially, since the independence the Botswana TVET system was left aside under the enthusiasm by the government on reinforcing primary and higher education to secure basic and higher level workforce. This trend was reflected on the First National Commission on Education (NCE) in 1977, called "Education for Kagisano" (Education for Social Justice). However, with the growing concerns on its economic downturn unemployment problem, the political attention shifted specifically into the TVET sector. During the decade of 1990, the government of Botswana made a great effort in promoting its TVET system by enhancing and suggesting basic educational policy directions and relevant TVET education strategies. That is why in 1993, the second NCE stressed the need to promote the TVET sector for its national economic development. The Revised National Policy on Education (RNPE), developed in 1994, looked at vocational education and training as crucial to the country's transition from a traditional agro-based to an industrialized economy, and it had an immense impact on the development of National Policy on Vocational Education and Training in 1997.

The NPVET was developed under the supervision of both the Ministry of Education and Skills Development (MoE&SD) and the Ministry of Labor and Home Affairs (MLHA), with the objective to place vocational education and training at the same level as academic education and to "integrate the different types of vocational education and training into one comprehensive system" (Government of Botswana, 1997). The 1997 Vocation Education and Training Policy clearly stated the need to make TVET more accessible and equitable and to develop more flexible curriculum and teaching and learning methodologies.

Moreover, within Botswana's strategic planning taking place in National Development Plans (NDPs). The current NDP 10 (2009-2016) that coincide with the national Vision's horizon. It aims "to continue to improve access to high quality technical and vocational education and training (TVET), with a view to producing a competent, innovative and internationally competitive National Human Resource with ability to contribute to the socio-economic and technological advancement of the country, the creation of employment, the reduction of inequity and engaging those affected by poverty." (Government of Botswana, 2009). The overall goal for education, including TVET, is in line with the Vision to provide accessible, equitable quality education. NDP10 aims at three TVET outcomes: improved vocational and technical skills; employability and an adequate supply of skills (Government of Botswana, 2009; pp.108). A multi-sectoral approach will be used in increasing opportunities for education and training. The stakeholders will include; the Ministries, Finance and Development Planning and the Directorate of Public Service Management, as well as the private sector, development partners and non-governmental organizations. Consequently, the TVET system formation in Botswana is in an evolutionary phase under the influence of international collaborators and internal reflections by various stakeholders.

### **8.2.3.1. TVET historical evolution in Botswana**

#### **a) The brigades movement (Post colonial times)**

After the independence, the government of Botswana tried to expand basic education, at that time TVET sector was relatively marginalized. Most of the high skilled positions within the government were filled with expatriate workers, filling the skills gap effectively.

The Brigades Movement was designed to contribute to the social problem caused by youth unemployment of school leavers and primary school graduates, at that time of the 1960s and 1970s (Ulin, 1974). It was initiated by an individual, called

Patrick Van Rensburg, an expatriate from South Africa. Hence, the Brigades movement was the community based post-primary school, started with the establishment of Serowe Builder's Brigade (Rensburg, 1978). It was not just a school due to its adoption of 'learning to produce' concept. Students were workers themselves who provided selling products. Teachers were managers and trainers teaching students while making products (Graaff, 1980; Molwane, 1993). Therefore, one of the objectives of running this school was 'cost recovery' for the further operation of the school. Rensburg clearly mentioned about the social goal of the movement:

*"This lack of opportunity is primarily a consequence of inadequate resources: but it is also the result of the concentration of the available resources in providing a high standard of education and training, in an essentially non-productive way, exclusively to a chosen few, in the formal system of education and trade schools" (Rensburg, 1987; pp. 5).*

The main reason for establishing the brigades was laid on the issue of productivity, financing and relevance of education, which was the recurrent issue in its own history of education. It was also a community based movement, not searching for the solution from the central government, thus adopting a self-reliance model. The brigades were not just schools, but operated as a community center dealing with various community issues.

On the other hand, the Brigades Movement was a good policy measure to respond to the public complaints caused by a limited opportunity for further education after students finished their primary education. The government actively promoted the brigades to accept more students into the secondary education level. Because of its cost recovery nature, the government was able to easily expand its school facilities with a help of the Brigades Movement without spending much money on it (Hinchliffe, 1990).

As the industry was developed, the competitiveness of the brigades also decreased. They could not compete with the private enterprises and there were a number of problems in operating the brigades (Yezo, 2013). Also, there had a clear limitation in maintaining its initial motives as it was kind of imposed model from the outside by the

expatriate, Van Rensburg (Henderson, 1974). In this ground, the central government, who secured enough budgets from its mining industry, started taking over the brigades from its local communities (Mupimpila and Narayana, 2009).

#### **b) The german dual system**

An introduction of the German dual system was initiated in the late 1980s. The German partner GTZ promoted its dual system, which was designed to train students in work places, in Botswana. The dual system had a very high reputation around the world, because it was considered as a panacea in that it successfully combined a school-based theoretical learning with an industry-based practical learning (Barabasch *et al.*, 2009).

However, according to Wilson (2000), among many countries who tried to replicate the system, it was only Singapore that was considered to be successful. It was because the dual system required cooperative and well coordinated industrial partners who recognized the value of education and training for the social development. Botswana also failed in its adoption of the German dual system due to its weak industrial base at that time.

#### **c) Modernization drive for TVET:**

The government of Botswana focused its attention to the TVET system once the universal primary education was achieved in 1990s. The major problem was that though the country provided the universal basic education-including 7 years of primary and 2 years of junior secondary, an employment rate of the graduates stayed low (Tabulawa, 2011). The government realized it might require another solution for this conundrum, thus introducing a modernized TVET system. This recognition was reflected in the second NEC report in 1993 (Vlaardingerbroek, 1999). It emphasized renovation of its TVET system and vocationalization of general secondary education (UNESCO, 2001). Based on this national education policy direction, the first ever National Policy on Vocational Education was announced in 1997 with a close collaboration between the



MoESD and the MLHA (Mutula *et al.*, 2004). These policy papers recommended the expansion and upgrade of the TVET system while pointing out the deficiency of the industry-based training. This provided major mandate and rationale to start the BTEP by the DTVET under the MoESD.

#### **d) BTEP (Botswana Technical Education Program) by the DTVET**

The BTEP was introduced with the influence of the modernization drive during the 1990s and the problems of adopting German dual system. The BTEP was developed by the Botswana MoESD in 1997 with a close partnership with industry and the SQA, whose actual implementation initiated only in 2001 (Richardson, 2009). The managing authority was the DTVET under the MoESD and they were provided with a technical assistance of the SQA, which dispatched experts who could support developing curriculum components and quality assurance systems according to the contract with the DTVET. Each and every curriculum developed with the qualification blueprint of BTEP was designed to be administered by the DTVET and then its quality was assured by the Quality Assurance and Assessment Unit (QAA), and finally endorsed by the SQA in Scotland (DTVET, 2009). It was so-called outcome-based modularized TVET program and also pursued a flexible delivery mode with the distance education in specific qualifications (Odora, 2010).

The BTEP is comprised of the qualifications with four levels: Foundation, Certificate, Advanced Certificate, and Diploma. Each of them provides varying components such as key skills, electives, mandatory and work experience, etc. It also provides specific contents to teach by suggesting Unit Specifications which illuminates unit title, learning outcome, performance criteria and evidence requirements, etc. (Baliyan and Baliyan, 2013). Thus, with all these components, the BTEP seeks to provide a quality TVET program with employable skills. The BTEP includes an institutional component called Quality Assurance and Assessment Unit (QAA). The BTEP programs and its units are required to be validated and evaluated by the QAA's quality assurance system. Thus, the QAA was established under the MoESD when the BTEP was introduced by the SQA. It is designed to control validation and evaluation

process, which used to be supported by the SQA technical assistance based on rigid manuals.

Given the brief sketch above on the developmental history of TVET in Botswana, it is noted that there has been recurrent issues of promoting TVET. The first issue is the 'relevance of the education'. During the colonial period, Botswana people wanted the education reform to have a vocationalized curriculum, because they thought the life skill was required for a daily production. This issue echoed in the other TVET reforms during the post-colonial period. The other one is a youth unemployment problem.

The Brigades Movement was widely accepted and promoted as it was recognized as an alternative measure to solve the problem of youth unemployment. The modernization drive of TVET in 1990s was also triggered by the concern on its increasing youth unemployment though it completed the universal basic education.

However, from 1990s, there has been a growing demand on upgrading its technical level. As its industry grew the industrial stakeholders requested the government to provide skilled labor to meet the industrial demand. Also the globalization trend and the emergence of the knowledge society required a high standard workforce to compete against the other countries. It means the modernization drive in the 1990s in Botswana symbolizes the start of new era in its TVET history.

Lastly, it should be noted that the development of TVET in Botswana cannot be understood without the contribution and intervention of the foreign influence. The Brigades Movement was initiated by the expatriate who brought the idea of Europeans, and the following German dual system was transferred from the Germany through the GTZ. Even after its modernization drive, the Botswana government actively sought for the foreign partners to borrow their system and experience. It means that the TVET history of Botswana is the history of educational policy borrowing, as it has never stood alone in pushing for its TVET reform.

### 8.2.3.2. *Actual TVET system in Botswana (Formal, non-formal and informal)*

Botswana TVET system is divided into two sections of 1) The MoESD which led institution-based training and 2) The Minister of Labor and Home Affairs (MLHA) which led industry-based training. According to Eichhorst *et al.* (2012) the world TVET practice can be classified three types a) School-based, 2) Dual system, and 3) Informal training.

There are several major players providing vocational education and training in the country such as government, parastatal organizations, the private sector, and the communities. The Ministry of Labor and Home Affairs and the Ministry of Education share the responsibility for the provision of skill level training. Within MoESD, DTVET controls polytechnics, national technical colleges and community based brigades. The MLHA controls the BOTA (Botswana Training Authority), the Madirelo Training and Testing Centre (MTTC), the Auto Trades Training Centre, the Roads Training Centre and the Construction Industry Trust Fund (Akoojee *et al.*, 2005; Modise *et al.*, 2007). Such a separation has hindered to organize a nationally unified TVET policy and its effective implementation. The BOTA is established to unify the fragmented policy frame but, still it doesn't seem to be on the right track (Masisi, 2004).

#### **a) Formal TVET system**

Students can enter TVET programs after either ten or twelve years of academic education. Those joining after ten years normally enter an artisan program, while those entering after twelve years join a technician program.

The Brigades offer three levels of training: a) Trade certificate training programs, which leads to a National Craft Certificate (NCC) in 17 trades; b) Skills certificate training programs, designed for school leavers who prefer a vocational career or desire to embark on entrepreneurship; and c) Informal training programs, or short-duration courses to provide self-reliance which do not lead to certification. In 2008, the

Brigades enrolled over six thousand students. (Swartland, 2008) among the 41 existing brigades.

In 1997, the Government established the first government technical colleges (TCs), formerly called vocational training centers (VTCs), alongside the numerous private vocational training institutions that had emerged earlier. They admit both junior and senior secondary school leavers. Actually there are seven technical colleges, which provide both full- and part-time second level training, leading to a National Craft Certificate (NCC). The TCs also run two-year full-time courses to cover the first two years of the apprenticeship scheme as well as a number of short term, part time, and evening courses. Nevertheless, access to vocational education and training was very limited. Enrollment data indicate that less than 10 % of all secondary school leavers have access to some form of vocational education and training. Mobility between vocational education and training and academic education was minimal as many of the vocational training qualifications were not recognized as minimum entry qualification to higher level training within the academic system (MLHF, 2007).

In 2001, In order to improve the access and the quality of TVET, the Department of Technical and Vocational Education and Training (DTVET) launched the BTEP program that was developed and have been implemented in cooperation with the employers and the industry. It consists of seventeen vocational areas and is being offered at four different levels: Foundation, Certificate, Advanced Certificate and Diploma. Following nationwide consultation with stakeholders, it was decided to make entrepreneurship education an integral part of every BTEP course.

Since the last decade, many private institutions have been registered and accredited by the Botswana Training Authority (BOTA) in order to provide Formal Technical and Vocational Training, which has increased access to this type of education.

**b) Non-Formal and informal TVET system**

Although Botswana does not have any lifelong learning strategy, it duly recognizes its importance through several education policies and national development plans, among others the Revised National Policy on Education (1994), the National Development Plan 9 of 2003-2007, Botswana's Vision 2016. The Government is fully aware of the potential for recognition of skills and knowledge possessed by people without formal education or who are unemployed and is expecting the National Qualifications Framework (NQF) to help in assessing individuals who have learned through non-conventional modes (Steenekamp and Singh, 2011). For the moment, the validation, recognition and accreditation of non-formal and informal learning are conducted and endorsed by Botswana Training Authority. Non-formal and informal learners are assessed and given credits based on the evidence of their competence.

Little information is available about the providers of informal and non-formal TVET education in Botswana. The Brigades have included in their program informal training, which does not lead to any certification. The Botswana College of Distance Education and Open Learning (BODOCOL) was established by the Revised National Policy Education (RNPE) to deliver vocational education and training on a non-formal basis (AfDB/OECD, 2008).

Some accredited centers, like Madirelo Training and Testing Centre (MTTC) and the Department of Out-of-School Education (DOSET) within the MoE&SD, offer technical and vocational programs to out-of-school learners. For instance, a skills Development Training Program was developed by DOSET for out-of-school children, over the age of 16, in order to provide them with vocational and entrepreneurship skills.

### **8.2.3.3. TVET governance structure in Botswana**

The Ministry of Education and Skills Development is responsible of the proper functioning of the TVET system. The Vocational Training Act initially assigned responsibility for policy formulation and strategic planning for TVET to the Ministry of Labor and Home Affairs. In 2000 it was created the Botswana Training Authority (BOTA) as the statutory body to coordinate and implement TVET policy into a comprehensive system. For ensuring that Botswana has “a responsive, comprehensive and coordinated education system”, BOTA was transferred to the Ministry of Education and Skills Development in 2010, which will become a full Statutory Council (BOTA, 2010).

BOTA’s mission is to accredit, register and monitor both public and private training institutions in accordance with the needs of the learners and the industry, through the development of standards, quality assurance, policy advice and evaluation. The board of BOTA comprises representatives of government, employer and employee organizations and private training institutions. BOTA has also the mandate to develop the Botswana National Vocational Qualifications Frameworks (BNVQF).

The Department of Technical and Vocational Education and Training (DTVET) is responsible for the planning and implementation of all institutional-based vocational programs – 1) Technical and vocational education and 2) Apprenticeship skills training – provided through the government vocational training centers and the Brigades. There are five areas of work under the umbrella of DTVET: a) Policy and Development; b) Program Development and Delivery; c) Human Resource Management and Development; d) Brigades Development; and e) Departmental Management.

The Botswana Technical Education Programs (BTEP) provided by the technical colleges is developed by the Program Development and Delivery Unit of the DVET, in consultation with the industry and the employers.

#### **8.2.3.4. National TVET legislation**

In relation to the national TVET legislation. In Botswana, the government enacted The Vocational Training Act (2000), which led to the establishment of the Botswana Training Authority (BOTA) in 2008, and also the Tertiary Education Act, which led to the formation of the Tertiary Education Council (TEC) in order to meet the recommendations of the NPVET. Moreover, the Department of Vocational Education and Training (DVET), which became the DTVET after the inclusion of Training, was created under the Ministry of Education and Skills Development, in order to augment what was being enforced by both acts (Ministry of Labor and Home Affairs, 2007).

As mentioned above, in 2008 the government of Botswana approved the Training Act (Government of Botswana, 2008) where it was established the Botswana Training Authority (BOTA) with three principal mandates: a) Coordinate vocational training activities in order to achieve better integration and harmonization of the vocational training system being developed; b) Monitor and evaluate the performance of the vocational training system being developed in order to ensure the successful performance of all training activities; and c) Advise on policy related issues of vocational training. Within the development of the NDP 10 in 2009, the Botswana Technical Education Program (BTEP) included expanded diploma level programs in key skills of communication, personal and interpersonal skills, information technology, entrepreneurship and problem solving to promote economic diversification. It was also identified as a challenge a lack of curriculum alignment of franchise programs offered by some institutions, over which they had little control. Lack of teaching qualifications for vocational trainers was also found to be a weakness.

#### **8.2.3.5. Financing TVET in Botswana**

The provision of vocational education and training is very expensive not only for Government, but also for all providers of such training. The costs are considerably

higher than unit costs of many other sectors of the educational system such as primary and secondary education (MLHF, 2007).

TVET in Botswana is funded in four major areas: 1) The main provision of skills programs by TVET institutions is mainly financed by the Government's Budget. The Ministry of Education and Skills Development (MoE&SD) is the main financial supporter, followed by the Ministries of Labor and Home Affairs (MLHF), of Health (MOH), of Agriculture (MOA) and of Transport and Communications (MTC). In some cases, the institutions can also partly finance their programs through their own training units. 2) A levy system for Vocational Training was introduced by the Minister of Labor and Home Affairs. The amount of the levy is based on the annual turnover of Botswana companies registered under the Vocational Training Fund, entirely managed by BOTA under the responsibility of the Ministry of Education and Skills Development. 3) The construction and expansion of public TVET institutions' facilities are funded by the Government's Development Budgets for capital investments as well as by the Government's collaborating partners, notably the European Union, except where it entails private tertiary education institutions. 4) Technical assistance are provided through the support of governmental collaborating partners, like the European Union, UNESCO, the World Bank, ILO, the African Development Bank (AfDB), etc.

Given the emphasis the training policy places on increased access and quality of training, it is likely that substantial resources will be needed. The policy direction for financing of vocational education and training should therefore provide for broadening the funding base to generate more resources.

#### **8.2.3.6. *Gender equality in TVET***

Within vocational training in Botswana, there is a gender disparity as recognized by BOTA that in 2012, 68% of these 3280 registered trainers were males (UNESCO-UNEVOC, 2012).

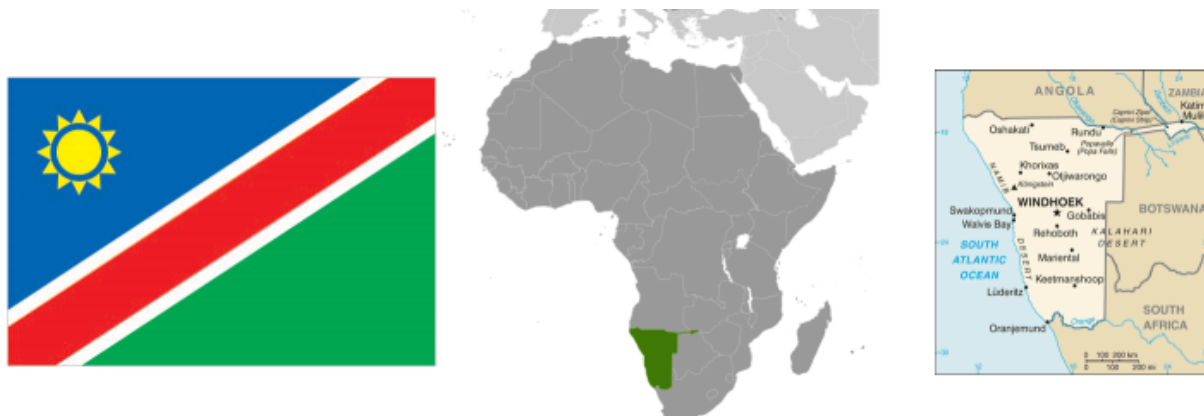


### ***8.2.3.7. Relation of Botswana governmental agencies and UNESCO***

There are two institutions that take part with the UNESCO work on the field of TVET through the UNEVOC center. These two institutions are: The Ministry of Education and Sustainable Development and Botswana Training Authority.

### 8.3. NAMIBIA

**Figure 12: Namibia**



source: CIA (2014) The world Fact Book, Namibia.

#### 8.3.1. Context

Namibia is a country that covers 825,615 km<sup>2</sup>. It is located on Africa's south-western seaboard, bordered by Angola to the north, Botswana and Zimbabwe to the east, to South Africa to the South and by the Atlantic Ocean to the west. On March 21<sup>st</sup>, 1990 Namibia became the last colonized country in Sub-Saharan Africa to be independent (World Bank, 2009). In 1884/85 during the Congo Conference in Berlin, Namibia became a German colony known as "Deutsch-Südwestafrika". In 1915, during the First World War, the German army surrendered against the South African army and became a mandated territory of South Africa in 1920. In 1966 United Nations – in the capacity of the League of Nation's successor – withdrew the mandate, but the South African government continued illegally administrating the territory as its fifth province. The long winded liberation struggle of the 1960s founded South West Africa People's Organization (SWAPO) lead to the nation's first free elections and drove Namibia into independence in 1990 (Konrad-Adenauer-Stiftung, 2015).

Namibia is the driest country in Sub-Saharan Africa, with deserts occupying much of the country; the Namib Desert is considered the world's oldest desert with approximately 81,000 square kilometers, and less than 5 percent of the country is arable. Namibia's population continues to grow at a 0.67% annually (World Bank, 2009).

Namibia enjoys political stability, and a multi-party system is in place. General, presidential, regional and local elections are held every five years. The President is elected by popular vote. The bicameral legislature consists of the National Assembly with 72 seats elected by popular vote and 6 nonvoting members that are appointed by the president; and the National Council, with 26 seats and is comparable to a senate (AfDB/OECD, 2008).

Namibian total population size is 2,127,013 persons according to the Namibian Labour Force Survey (Namibia Statistics Agency, 2015) with a urban density of 38.4% (CIA, 2015). The adult prevalence rate of HIV/ AIDS is 13,3% ranking number 6 in the world on 2012 (CIA, 2015).

The national language is English, while Afrikaans is the common spoken language of most of the population and about 60% of the white population, German is with a 32% a representative spoken language, some indigenous languages are spoken by different ethnic groups (CIA, 2015). Namibia is a secular state, but over 90 % of the population is Christian, it coexists with several indigenous religions throughout the country.

The judiciary in Namibia is independent. The courts' structure is made up of a three tier hierarchy: the Supreme Court, the High Court and the Lower Courts.

Namibia is economically dependent on the Republic of South Africa. About half of the population lives on subsistence farming, even though this sector conforms one tenth of the GDP. Mining and processing of minerals is another important industry, Namibia is the fourth largest producer of uranium in the world. Mining accounts for 11, 5% of GDP but provides more than 50% of foreign exchange earnings. Tourism also

offers tremendous potential for growth. Despite the comparably high income per capita for this region 8,200US\$ in 2013 (the fifth-highest per capita income) the wealth distribution is extremely uneven, Namibia holds one of the world's most unequal income distribution, as shown by a 59.7 GINI coefficient (CIA, 2015). In 2014, Namibia was classified as medium human development country ranking the 127 position over 185 on the Human Development Index with a punctuation of 0.626. Namibia Inequality-adjustment Human Development Index (IHDI) ranked in 2013 the 115 position with a score of 0.352 (UNDP, 2014).

In September 1993, Namibia introduced its own currency, the Namibian dollar (N\$). It is linked to and on par with the South African rand (ZAR), which is also legal tender in Namibia.

Namibia is a member of the Southern African Development Community (SADC), the Southern African Customs Union (SACU), the Commonwealth of Nations, the United Nations and the World Trade Organization, and the Organization of African Unity.

### **8.3.2. Education**

#### **8.3.2.1. *Namibian Ministry of Education***

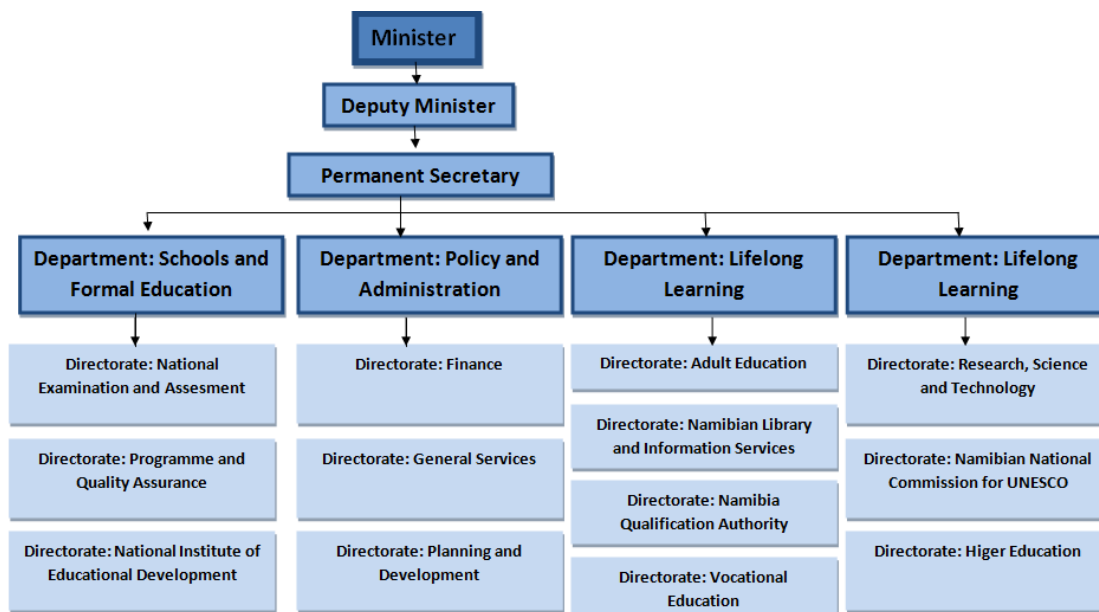
At the time of Namibian independency on 21st March 1990, education in the country was best characterized by its fragmentation along racial and ethnic lines. Through the policy of apartheid, separate education systems (for whites, coloreds and blacks) were established characterized by inequalities in the allocation of resources, thereby depriving many Namibians of the right to education (AfDB/OECD, 2007). The unequal access to education and training at all levels of the education system; the inefficiency in terms of low progression and achievement rates; the irrelevance of the curriculum and teacher education programs to the needs and aspirations of individuals and the nation; and the lack of democratic participation within the education and

training system were the main characteristics of Namibian Education System right after the independency (Ministry of Education, 2013)

Moreover, teachers, parents, administrators and workers were largely excluded from the decision-making process in education. There was also an extremely unequal financial resource allocation in education based on the eleven ethnic authority systems which were operational before independence (IBE, 2010). Soon after independence a wide scale educational reforms that ensured inclusive, fair and learner-centered education sector took place in order to create a unified education system. A policy directive entitled, *“Towards Education for All: A Development Brief for Education, Culture and Training”* was adopted, highlighting four development goals of Access, Equality and Quality and Democracy to guide the education provision in the country (Government of the Republic of Namibia, 2002). the educational expenditure in Namibia increased between 20 – 25% of the government budget and Education policies target a lifelong learning approach (Government of the Republic of Namibia, 2004). The reform process in the Ministries of Education was immediately followed by the introduction of a standardized curriculum in the secondary phase followed by the reform of primary education. The implementation of the Education Act n. 16 of 2001 took democracy and school governance a step further by bringing in national educational advisory councils, formalizing the role of the school boards and the regional education forums (Government of the Republic of Namibia, 2002).

The Actual Ministry of Education was formed in March 2005 by the combination of the two former Ministries, the Ministry of Basic Education, Sport and Culture and The Ministry of Higher Education, Training and Employment. The new structure was approved by the Public Service Commission in the Office of the Prime Minister in August 2006.

Figure 13: Organigram - Namibian Ministry of Education



Source: Millenium Challenge Cooperation (2008).

The Ministry’s Mission statement is: *“To provide all Namibian residents with equitable access to quality education programs to develop the abilities of individuals to acquire the knowledge, understanding, skills, values and attitudes required throughout their lifetimes”* (Ministry of Education, 2012. pp.12).

The Ministry works in coordination with different Development Partners: a) Accenture Development Partnership (ADP) that provides high-quality business and technology consulting services to the development sector; b) Cambridge University Press that aims to advance knowledge, education, learning and research; c) CESC Namibian which is a non-profit organization which provides training and support for teachers and communities in ITC literacy; d) The four Colleges of Education which deliver pre-service teaching education and e) The Education Management Information System (EMIS) which provides statistics on the formal schooling system of the Republic of Namibia, on developing and implementing the education policies.

**a) Educational laws and regulations**

The Constitution of the Republic of Namibia adopted in February 1990, states that all persons shall have the right to education, primary education shall be compulsory and the state shall provide reasonable facilities to render effective this right for every resident within Namibia, by establishing and maintaining state schools at which primary education will be provided free of charge. Children shall not be allowed to leave school until they have completed their primary education or have attained the age of 16. (Constitution of Namibia, 1990). The drafting of a new Education Bill started in 1990. The Education Act. N. 16 was promulgated in december 2001, which aimed to provide an accessible, equitable, qualitative and democratic national education service: it state the establishment of the National Advisory Council on Education, the National Examination Assessment and Certification Board. It also establishes state and private schools and hostels and The Education Development Fund, to cater to the needs of socio-economic disadvantaged children in schools and tertiary institutions (Government of the (Government of Namibia, 2001a).

The Namibian Qualification Authority Act N.29 of 1996 provides for the establishment of this a statutory body. The Teacher's Education Colleges Act N.25 of 2003, regulates the education and training of teachers, and provides for: the establishment, functions and composition of the Advisory Council on Teachers' Education and Training.

The Higher Education Act N.26 of 2003 regulates higher education, provides for the establishment of a National Council for Higher Education.

The National Disability Council Act N.26 of 2004 established the Council and provides for the function, powers and composition of the Council. Among other functions, the Council (set up in 2008) has to monitor the implementation of National Policy on Disability.

The Vocational Education and Training Act N.1 of 2008 provides for the establishment of the Namibian Training Authority and the National Training Fund.

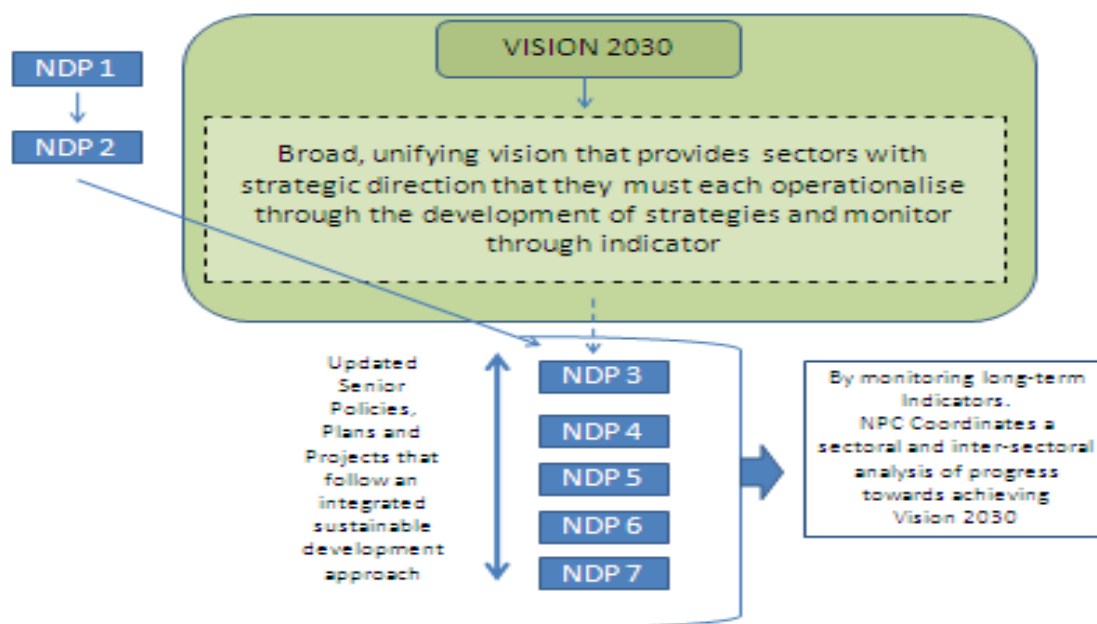
The National Youth Council Act N.3 of 2009 provides for the establishment of the National Youth and the Youth Development Fund: the management and administration of the Council and the Fund.

### **8.3.2.2. *Namibian strategic development plan for Education***

The Namibian government, since its independence, adopted planning, as a management tool to help ensure effective decision-making on the national development process. Therefore, five-year development plans began subsequently to be developed. The first one, named NDP1 was developed for the period 1995 – 2000. Nowadays Namibia's development agenda is reflected in "Vision 2030" adopted in June 2004 which mainstreams the vision of "*a prosperous and industrialized Namibia, developed by its human resources, enjoying peace, harmony and political stability*" (Government of the Republic of Namibia, 2004; pp 54) through eight broad objectives. Therefore, Vision 2030 ensures that all young men and women in Namibia are given opportunities for development through education and training, and ensure that they and are well equipped with appropriate skills, abilities and attitudes (Government of the Republic of Namibia, 2004).



Figure 14: Namibian historical strategic development framework



Source: Government of the Republic of Namibia (2004). *Namibia Vision 2030*.

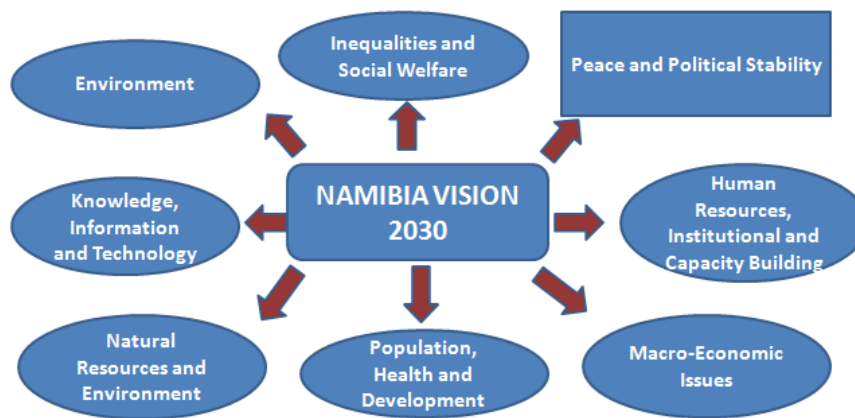
The five-year “National Development Plans” (NDPs) are the primary implementation tool for Vision 2030. NDP2 covers the period 2001-2006; NDP3 covers 2007-2012 with “*Accelerating Economic Development through deepening Rural Development*” as the overarching theme. A large part of the plan will be informed by a human resource needs identification exercise, ensuring a match between supply and increased demand for a knowledge-based and technology-driven Nation. NDP3 will also focus on addressing youth unemployment (Government of the Republic of Namibia, 2007).

The Ministry of Education Strategic Plan (ETSIP), recommends the development of a National Lifelong Learning Policy for Namibia that will create a culture where all Namibians have the desire and the opportunity to continuously develop their knowledge and skills, thus enhancing their quality of life of all people (Government of the Republic of Namibia, 2004).

The development of the Lifelong Learning Education Policy is in line with the Ministry of Education mission statement. *“We in partnership with our stakeholders, are committed to provide all Namibian residents with equitable access to quality education programs to develop their abilities of individuals acquire the knowledge, understanding, skills, values and attitudes required throughout their lifetimes.”* (Ndjoze-Siririka, 2003; pp.143). Through this Lifelong Learning Approach the government recognizes that knowledge acquisition cannot be confined to time or place. Learning should not be confined to childhood and should also take place throughout one life and in different settings or environments. Learning is a continuous ongoing process. The Ministry of Education is convinced that the country would be able to address developmental challenges such as unemployment, poverty, social inequalities and HIV/AIDS.

In 2006, a fifteen year strategic plan (2005/6 – 2020) referred to as the “Education and Training Sector Improvement Program (ETSIP)” which is a comprehensive reformation of the education and training sector, was launched by the Ministry of Education to strengthen the quality, effectiveness and efficiency of education and training system in the country. This plan is premised on the realization that a weak education and training system cannot facilitate the attainment of the national development goals (Ministry of Education, 2007).

As part of its ETSIP, the Namibian MoE has outlined the following strategic objectives: a) Strengthen institutional capacity of tertiary education; b) Enhance relevance and responsiveness of tertiary education; c) Improve the quality and effectiveness of tertiary education and training system; d) Improve equitable access to higher education and lifelong learning; and e) Mobilize financial resources and use them efficiently (Ministry of Education, 2012).

**Figure 15: Main issues within the formulation of Namibia Vision 2030**

Source: Government of the Republic of Namibia (2004). *Namibia Vision 2030*.

A consultative process was followed in the drafting of the policy and existing government policies and legislative documents were reviewed. Learning providers, employers, the Namibia Qualifications Authority, non-governmental organizations, private sector and trade unions were amongst the key stakeholders consulted. A consultative forum with all stakeholders to review the draft policy document is in the pipeline before final submission to the Minister and cabinet for approval. The draft policy document expressed the need to establish a Lifelong Learning Forum among all key stakeholders from the various sectors.

### ***8.3.2.3. The influence of international organizations on the educational development in Namibia***

External development assistance provided by International Organizations as well as donor countries, has been guided historically by Namibian national development priorities, and geared towards institutional and human resources, and capacity-building, poverty-reduction, employment creation and income-generating activities (UNDP, 2014). There are a further 11 multilateral organizations and 21 nongovernment organizations, although some of these NGOs are operating on behalf of their national governments. In total the international community has disbursed USD 2.4 billion within

the period from 1990 to 2004 in official development assistance (ODA) in support of Namibia's development (Hynes, W and Scott, S, 2013). The grants provided by development partners have represented 5% of Namibian GDP/p.a (European Commission, 2014).

As stated in Namibian Vision 2030 *“Development cooperation is strong and is based largely on trade and mutual exchange of opportunities”*. *“External assistance, serves to improve the status of all groups, promotes environmental sustainability, revives and sustains economic growth and supports the development of rural areas and the provision of essential services”* (Government of the Republic of Namibia, 2004; pp.21). Development co-operation also promotes democracy, human rights, good governance, participatory development, transparency and accountability. Namibia is not aid-dependent country. According to Vision 2030, nowadays the main priority of development cooperation remains poverty reduction through economic growth. About 50% of the development assistance has gone to finance human resources development and social sectors (potable water, housing and sanitation). Some 17% of the aid resources were invested in the natural resources sectors (agriculture, forestry and fisheries) while 16% went to transport and communication sectors. The rest were invested in administration (development) and regional development. Development Cooperation with all friendly nations is strong and is based largely on trade and mutual exchange of opportunities. Dependency on foreign development aid is eliminated. Peaceful negotiation with other countries achieved (Government of the Republic of Namibia, 2004).

Historically, the main donors in Namibia have been the European Union and the World Bank through sector wide support. The education and Training Sector Improvement Program (ETSIP) aimed to increase educational investment in previously disadvantaged areas and communities. The ETSIP was Namibia's response to the enormous challenges faced by the education sector. This program was the first fully-fledged Sector-wide approach (SWAp) elaborated in Namibia co-coordinating the contributions of all ministries, agencies and donors involved in the education sector. The program cost about N\$2.4b over five years (2007/08 - 2010/11) (ETSIP, 2006). Through ETSIP, the 10th EDF is also contributing directly to the development of

information and communication technology (ICT) in Namibia. ETSIP aims to ensure the provision of good quality skilled labor, through the establishment of knowledge and innovation system, the improvement of the quality of general and higher education and the creation of greater opportunities for lifelong learning.

#### **a) The European Union**

Since independence and even before, the European Communities have supported a wide range of projects in many different sectors contributing to Namibia's development and political emancipation. The relations between the European Union (EU) and Namibia are based on Article 1 of the African, Caribbean and Pacific (ACP) - EU Partnership Agreement, which aims at preparing an interregional association between the EU and Africa. The agreement was signed in Cotonou on 23 June 2000 and revised in Luxembourg on 25 June 2005. Namibia has made good progress and has reached the status of 'Upper Middle Income country' (European Commission, 2014). The EU (European Commission and Member States) has provided 72% of total development assistance that has been received in Namibia.

The first Namibian Country Strategy Paper and National Indicative Paper (CSP/NIP) for the 7th EDF between the European Commission (EC) and Namibia was signed in March 1992. At that time the Government of the Republic of Namibia and the EC agreed to concentrate on three priority areas: agriculture/rural development, health and human resources.

The overall objective of European Commission support, under the 10th EDF, remains to support and Complement Government's effort to reduce poverty as specified in the Vision 2030, the 1998 Poverty Reduction Plan and the third National Development Plan (NDP3). The support under the 10th European Development Fund (EDF10) retains the priority areas: Human Resource Development and Rural Development (CSP/NIP, 2007). The future NIP, under the 11th EDF and covering the period 2014-2020, is fully aligned with Namibia's 4th National Development Plan. The EU will continue its budgetary support to the Education sector with a focus on pre-

primary education and early childhood development, as well as the new field of vocational training.

#### **b) The World Bank**

A last very special feature of Namibia's education development is that the country has so far opted not to borrow from the World Bank, judging that it is cheaper and more satisfactory to borrow on the domestic capital market.

As a result, Namibia has been free from the sometimes all-pervasive influence of the World Bank as lead donor, within the Education sector. Beside that the Bank Group has financed historically 24 public sector loans and grants and one private sector loan for a total of 310 million US dollars. The transport sector has been the largest recipient of Bank financing with a share of 85 percent, followed by finance (7 percent) and the social sector (6 percent) (SARC, 2014).

#### **c) The German International Cooperation (GIZ)**

German's assistance agency named "rendered through the Deutsche Gesellschaft für Internationale Zusammenarbeit" (GIZ) and "Kreditanstalt für Wiederaufbau" (KfW). GIZ focuses on the management of natural resources, transport, and sustainable economic development; and provides technical assistance in the fields of basic education and health. KfW provides assistance in energy, transport, water, education and health. MCC's support focuses on education, tourism, health and livestock. GTZ has provided funding for the construction of the Windhoek Vocational Training Centre, which complements the COSDEC component of MCC funding (Millennium Challenge Corporation, 2008).

#### **d) The Canadian International Development Agency**

The Canadian International Development Agency (CIDA) is supporting the Community Skills Development Foundation (COSDEF) to establish a Centre of Excellence that produces skills and semi-skills community workers for environmentally sustainable (self) employment in tourism-related occupations. These efforts are part of CIDA's "Skills for Employment" initiative, whose first round was started in 2009 and comprises a total investment of C\$22.3 million to support nine countries in Africa (Government of Canada, 2009).

#### **8.3.2.4. Education system in Namibia**

The Namibian Education System is under the responsibility of the Ministry of Education, which is divided into four main departments: a) Schools and Formal Education; b) Policy and administration; c) Lifelong learning; and d) Tertiary education, science and technology. The Department of schools and formal education is formed by three directorates: firstly the national examinations and assessments, secondly the program and quality assurance, and thirdly the national institute for educational development (IBE, 2010).

The National Institute for Educational Development (NIED) was established in 1990 in order to ensure that the education system in the country was developed according to people's educational needs. The NIED design, develop and evaluate curricula for schools and teacher education, introducing approaches teaching and learning, this institution comprises two divisions: Curriculum research and development and professional and resource development.

The Namibia Qualification Authority (NQA) established in late 1996 is responsible for quality assurance, the accreditation process, the evaluation of qualifications, and standard setting procedures. NQA is now a directorate of the

Ministry of Education, under the Department of Lifelong Learning which also included the directorates of adult education and vocational education and training. The NQA is committed to the promotion of quality education and training in Namibia through the development and management of a comprehensive and flexible National Qualification Framework (NQF).

Quality is also promoted by the NQA through the accreditation of education and training providers in Namibia and their courses.

Higher education was under the responsibility of the Ministry of Higher education. The Directorate of Vocational Education and Training, under the Department of Lifelong Learning in Ministry of Education, is responsible for the Vocational Training Centers and the Community Skills Development Centers (IBE, 2010).

National Qualification Framework (NQF) Quality is also promoted by the NQA through the accreditation of education and training providers in Namibia and their courses. The NQA has the following main obligations: to set up and administer a national qualification framework: set the occupational standards for any occupation, set occupational standards, benchmark acceptable performance norms, and evaluate and recognize competencies learnt outside formal education.

The Directorate of Vocational Education and Training, under the Department of Lifelong Learning in the Ministry of Education is responsible for the Vocational Training Centers and the Community Skills Development Centers (IBE, 2010).

In Article 20 of the Republic of Namibia's Constitution, adopted in 1990, there is an explicit desire for good quality, lifelong learning and democratic participation in education for the country; this article, makes full provision for education as a right and access to quality free education for all children in Namibia (Constitution of Namibia, 1990). These goals were further strengthened in the recommendations of the *World Declaration on Education for All* (UNESCO, 1990). The Commitment was further strengthen when the Government reaffirmed itself to achieve the six Dakar Goals.



The formal education system comprises seven years of compulsory and free primary education, three years of junior secondary, and two years of senior secondary education, from the age of six years up to the age of sixteen. However, free education does not mean completely free. There are certain hidden costs that may hinder children from attending school such as contributions to the school development funds, school uniforms and transports. For a few children, primary education is preceded by two to three years of pre-primary education. However, early childhood development (ECD) and pre-primary programs do not form an integral part of public education provision (Salim, A; Anthony G. and Simon McGrath, 2005).

The Formal Education system is divided into four phases: Lower Primary (1 – 4), Upper Primary (5 – 7), Junior Secondary (8 – 10) and Senior Secondary (11 – 12). At the end of primary education cycle (Grade 7), learners are prepared for semi-external examinations as a transition to junior secondary education. Learners at the junior secondary school level write the Junior Secondary Certificate Examinations, while senior secondary school learners are prepared for the International General Certificate of Education (IGCSE) and the Higher International General Certificate of Secondary Education (HIGSE) in collaboration with University of Cambridge which is a Ministerial Partner (Clegg and Van Graan, 2006).

**Table 18: Education levels in Namibia**

EDUCATION	School Level	Grade from	Grade to	Age from	Age to	Years	Notes
Primary	Lower Primary School	1	4	6	9	3	
Primary	Upper Primary School	5	7	10	12	3	
Secondary	Junior Secondary School	8	10	13	15	3	Junior Secondary Certificate Examination
Secondary	Senior Secondary School	11	12	16	17	2	International General Certificate of Education (IGCSE) Higher International General Certificate of Secondary Education (HIGSE)
Vocational	Vocational Education	9		14			From Junior Secondary
Tertiary	University						Namibian College of Open Learning (NAMCOL) University of Namibia (UNAM) Polytechnic of Namibia

Source: Own elaboration.

**Table 19: Education pathways in relation to the age**

Student Age	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Educational Pathways	Pre-Primary Education						Primary Education						Secondary Education				Tertiary Education						
							Lower Primary			Upper Primary			Junior Secondary		Senior Secondary		Tertiary Institutions						
															Vocational Training								

Source: Own elaboration based on Government of Republic of Namibia (2002). World data on education: structure of the education system in Namibia.

In addition to the formal Education System, the Namibian College of Open Learning (NAMCOL), a parastatal educational institution created in 1997, was established by the Government of the Republic of Namibia to provide educational opportunities to adults and out-of-school youth under its program of alternative

secondary education. NAMCOL is actually the largest educational institution in Namibia with more than 23 thousand learners enrolled for subjects at both junior secondary certificate Grade 10 and senior secondary Grade 12 levels.

The Ministry of Basic Education, Sport and Culture is commended for the success in school enrolment rates. At primary school level the enrolment rate has increased since 1995 with an average annual national growth rate of 1,8% . The total school age population from 7 to 13 years old, in 2012 was 380.000 students (UNESCO, 2015a).

The net enrolment rate is also affected by the lack of education opportunities to some marginalized groups. These are mainly children from the San and Ovahumba communities, street and working children who still live under difficult circumstances. There has been an increase in the enrolment in private institutions as 2% increase between 1999 and 2012. It has been a decrease in the GPI (F/M) in relation to the Gross Primary Education Net Enrolment Ratio as 0.04 between 1999 (1.01) and 2012 (0.97) (UNESCO, 2015a).

Children with special needs and learning difficulties are taught either in mainstream schools with special classes, or taken to special schools for children with learning, emotional, hearing impairments. There are eight special schools for children with special educational needs, distributed in various regions, but administered centrally from the MOE head office in Windhoek (MOE, 2007). The Government, in conformity with the Salamanca Framework for Action (1994), makes provision for all children, irrespective of their special educational needs to benefit from the same education through mainstreaming education. Therefore, the Policy on inclusive education is currently being considered for implementation but advocacy on the policy need to be strengthened (Government of Republic of Namibia, 2001b).

The total number of schools in Namibia has increased from 1,545 in 2001 to 1,661 in 2007, at an average growth rate of 1.2% (Millennium Challenge Corporation, 2008).

On average the duration of the school year at the primary and secondary levels does not exceed 200 working days. The school year, which starts mid-January ends at the beginning of December, is divided into three terms (Trimesters) as follows: January-April, May-August, and September-early December. A maximum of 37 weeks per year are devoted to instruction (IBE, 2010).

According to the Educational Statistics in Namibia (Ministry of Education, 2007) the number of primary schools in Namibia in 2007 was 1.048 from which 997 were state schools and 54 were private schools. The number of secondary schools was 176, of which 160 were public ones and 16 private. There was also 428 schools which combined primary and secondary education, of which 399 were public and 29 private.

#### **a) Early Childhood Education**

Early Childhood Education and Development (ECCE) is considered for children aged from zero to six years old. Early Childhood education and development is provided outside the formal education system. The National Early Childhood Development Policy was adopted by President's Cabinet in February 1996, and reviewed in 2005 through a long process of consultations at the national, regional and community levels among a broad range of stakeholders. The Ministry of Gender Equality and Child Welfare is responsible for home-based care programs and also for ECD care centers, which provide services for groups of 20-25 children aged 2-4 years. The majority of ECCE centers are run by communities, non-governmental organizations, churches and individuals. However, there are a number of private schools, which offer early childhood education within their formal education system, but these are normally very expensive and cannot be afforded by the ordinary citizen. The Ministry of Education is responsible for the pre-primary school year, which caters children aged 5/6 years and is considered as the first phase of basic education (IBE, 2010).

According to Namibia Vision 2030, "by providing children a fairer and better start in life, ECD programs have positive long-term benefits, including gains on future learning potential, educational attainment and adult productivity" "Early childhood programming can also serve as an important entry-point for community and social mobilization, promoting participation, organization and a better quality of life for older as well as younger members of the community" (Government of the Republic of Namibia, 2004; pp. 98).

The number of ECD centers has substantially increased over the last years. According to the 2001 Population Census, around 31 percent of children of 3 - 6 years were attending ECCE centers. The census report indicates that there are no significant differences between female and male children participation in ECCE programs in 2001 but the participation varies significantly in terms of region. (Government of the Republic of Namibia, 2001b).

According to Vision 2030, the main two priorities related to ECCE are: 1) To promote and support quality, sustainable and holistic Integrated Early Childhood Development for children aged 0 - 6 years; 2) To develop the capacity of ECD caregivers/Workers through skills development and the provision of quality training, and to promote the recognition of ECD as a profession, as a means to ensure quality care. within the goals that the government intends to achieve it wants that the ECD policy becomes and act, it also aims that integrated ECD programs are extended and 90% of children of 3-6 years are enrolled in ECD centers; Capacity of 80% of ECD caregivers is reinforced and children received quality care; and Clear standards are set and implemented for ECD Centers.

### **b) Primary Education**

Primary education lasts seven years, divided into lower primary (grades 1-4, second phase of basic education) and upper primary (Grades 5-7, third phase of basic education). Under ideal conditions, a learner begins grade 1 at the age of 6. Learners will be monitored nationally in grade 5, using nationally standardized assessments. with

the implementation of the new curriculum for basic education (2010) the grade 7 examinations will be phased out IBE (2010).

During primary school, pupils are promoted to the next class on the basis of their competences. According to the Curriculum for Basic Education of 2010, in grades 1-4 (lower primary phase) pupils learn to read and write in two languages: they learn basic mathematics: about nature and they develop their creative abilities. Teaching and learning are through the medium of the mother tongue or predominant local language with a transition to English medium in grade 4. In the upper primary phase teaching is in English, and the mother tongue or predominant local language continues as a subject through the end of basic formal education in grade 10 (Government of Republic of Namibia, 2002).

The enrolment in primary education has grown substantially since 1990, at a rate of growth that has exceeded the population growth rate. Repetition rates vary substantially among the regions. On average they remain high (17% in grades 1-10 in 2007), particularly in grade 1 (21, 9%), grade 4 (15, 9%), grade 5(25, 7%) and grade 7(18, 5%). At the junior secondary level, in 2007 the repetition rate was 24, 2% and 19, 4% in grades 8 and 9 respectively. In 2007, dropout rates were particularly high in grade a (1.9%), grade 5 (4%), grade 7 (5%) and at the junior secondary level (6, 7% and 7, 2% in grades 8 and 9 respectively). Since 1999 there is an increasing trend on the number of repeaters from all graders, as in 1999 there was 47.000 and in 2012 there were 62.000 repeaters, therefore there was an increase of the 7.58% (UNESCO, 2015a).

The Ministry of Education reports a total enrolment of 409.508 students in grades 1-7 in 2007. The net primary school enrolment ratio was estimated at 92.3% in 2006 and the survival rate to grade 5 at 94% and to grade 8 at 81%. Survival rates tend to be higher for girls than for boys (Ministry of Education, 2007).

HIV and AIDS has a significant impact on the education sector, due to the impact on teachers and pupils. There are about 121.000 orphans enrolled in school accounting for 21.2% of total learners (National Planning Commission, 2015).

### c) Secondary Education

Secondary education is formed by two educational cycles: junior secondary (related to 8-10 grades, which is the fourth phase of basic education) and senior secondary (grades 11 and 12, corresponding to the fifth phase of basic education). Junior secondary education consolidates achievements and extends them to a level where the learners are prepared for young adulthood and training. At this level, learners choose two pre-vocational subjects. At the end of grade 10 that correspond to the end of formal basic education students are assessed by an external examination to get the Junior Secondary Certificate (JSC). Those who meet the JSC requirements may continue in formal senior secondary education, which provides specialization in different areas. Slightly more than 25 percent of the school-going population is at the secondary level.

In 1991 a new junior secondary curriculum was introduced throughout the country that unified the 11 separate educational authorities and introduced English as the common medium of instruction. About 20 percent of weekly class time is devoted to pre-vocational subjects. The syllabus thus prepares students either for higher education or the workforce. At the same time Vocational Education and Training centers offer a variety of courses at the junior secondary level. Skills development opportunities are also offered to out of school youths at various centers such as vocational training and community skills development centers (IBE, 2010).

During grade 11 and 12 students at senior secondary schools, prepare the International General Certificate of Secondary Education (IGCSE) of the Cambridge Examinations Syndicate, that assesses the following subjects: agriculture, commerce, technology, domestic science and health education, natural sciences and mathematics, and humanities.

The Ministry of Education reports a total enrolment of 158.378 learners and 176 secondary schools in 2007, that raised up to 263.000 in 2012 (UNESCO, 2015b) of whom 124.448 at the junior secondary and 33.714 at the senior secondary level in 2007. The gross enrolment ratio was estimated at 32%. The school leaving rates from junior

secondary education to senior secondary (Grade 11) remains a major concern through there has been a decrease from 46.6% in 2004 to 38.2% in 2007 (Ministry of Education, 2007) there is no information for 2012.

Vocational training centers offer technical subjects at the junior secondary level. To enroll, learners need not have completed primary school if they have some work experience. The centers mainly provide training in building, metal and wood working, motor mechanics, electrician work and fitting and turning. Additional opportunities for further training are also available through the private sector. There has been a satisfactory increase in enrolment at vocational education and training centers with a total of 4.741 students in 2007. Most of the vocational training centers offer levels 1-3 certificate courses.(Akoojee, Gewer and McGrath, 2005).

#### **d) Higher Education**

Higher education was under the responsibility of the Ministry of Higher Education, Vocational Training, Science and Technology when it was established in 1995. Postsecondary and tertiary education and training are now coordinated by the Directorate of Higher Education, under the Department of Tertiary Education, Science and Technology in the Ministry of Education. The Directorate also administers teacher education and training colleges and coordinates with the main higher education institutions, particularly the University of Namibia (UNAM) that accounts for about 53% of all higher education enrolments and the Polytechnic of Namibia which accounts for another 40% of the enrolments and focuses on education for advanced technical skills The other seven per cent of the students attend the private institutions International University of Management and the Headstart Mercy Montessori Teaching Training College (IBE, 2010).

The University of Namibia was established by the Act N.18 of 1992, which also provides for the administration and control of its affairs. The Polytechnic of Namibia was established by the Act N.33 of 1994, resulting from merging Technikon Namibia and the College for Out of School Training (COST), The Act provides for the gradual



phasing out of vocational training courses and the granting of degrees by the Polytechnic (Kotecha, Wilson-Strydom & Fongwa, 2012).

Teacher education colleges offer a three-year program leading to the Basic Education Teaching Diploma, the qualification required for grades 1-10 teachers. The polytechnic offers a range of programs in several fields leading to national certificates (one-year program), higher certificates (two-year) and diplomas (three year program) programs leading to a bachelor's degree normally last three to four years. At the postgraduate level the Polytechnic offer master's degree programs lasting 18 months to two years.

The Namibian College of Open Learning (NAMCOL), established in 1997, provides mainly distance education for Namibians who could not complete the formal requirements to enter a university (Kotecha, Wilsom-Strydom, and Fongwa, 2012).

#### **e) Finance Education**

Following the country's independence in 1990, Educational expenditure increased between 20 – 25% of the government budget, and accounted 10% of the GNP according to the First National Development Plan NDP1. This proportion of national income devoted to education in Namibia indicates the national effort to education and is a sign of political will behind that effort (Government of the Republic of Namibia, 2002b).

Nowadays, Namibian education is financed from general taxation and borrowing through the national budget; from charges and fees levied on individual learners; from voluntary contributions paid by parents; and from other contributions by donors and private sector. Foreign donor contribution is taken up in the national budget under the sector-wide approach. A significant number of public resources in Namibia are spent on Education. Technical Education and Vocational Training is financed through a Training Levy (Government of the Republic of Namibia, 2004).

The Global Monitoring Report (UNESCO, 2015a) indicators shows that the total public expenditure on education in 2012 was 7.9% of the GNP and in 2015 was 8.5%, therefore on the last years there has been an 0.6 points increase; which is directly related with the 2.6 % increase on the total public expenditure on education as % of the total government expenditure on that period. Primary education public expenditure increased from NS359, 7 million in 1992/93 to 936NS million in 2000/2001. This means the average expenditure per primary learner rose from N\$1.034 in 1992 to N\$2.421 in 2000. This tendency has been maintained over the time. According to the lasted data available in 2008 it was reported at 22.40, in 2012 it was reported 23.7 percent of the total public expenditure, and was dedicated to Education (UNESCO, 2015b).

The demand for an increase for public funding of education will also be brought about by the strong inequality in the distribution of resources and income in Namibia. The data suggest that 5% of the population earn 70% of FGDP, the other 40% earn 27% of GDP and the remaining 55% of the population earn just 3% of GDP (Government of the Republic of Namibia, 2002b).

### **8.3.3. TVET in Namibia**

#### **8.3.3.1. TVET historical evolution in Namibia**

Prior to 1990, the TVET System in Namibia was decentralized. Mainly all industries formed their own labor force, according to their needs, but there were also some technical institutes run by the government under the ministry of Basic Education. After independence in 1990 the Ministry of Labor and Manpower Development became in charge of the Technical Education and Vocational Training at national level, which aimed to protect and develop the national human resources to their fullest potential and to promote comprehensive manpower development programs to provide work-related training in accordance to the needs of the economy (Ministry of Labor and Manpower Development, 1991). At the time, some of the national vocational training policy objectives were outlined as follows: a) To promote or provide vocational training,

including the establishment of skills development centers as an integral part of the system of national manpower planning; b) To contribute to the solving of employment related problems, through a flexible vocational training systems; c) To optimize the utilization of the country's human resources and ensure that the skilled labor demand is met; d) To utilize a TVET system which, among other things, incorporates training programs based on approved national standards, provision for lifelong learning and arrangements for trainees to re-enter the main educational systems for higher level education, provides adequate flexibility in order that outputs may be readily adjusted to meet the changing needs of the economy, provides for effective monitoring, evaluation and follow-up of trainees adopts a modular approach and appropriate up to date teaching/training principles and fosters entrepreneurial values and skills. e) To ensure that the financing of TVET is a joint venture between the government parastatals, private enterprise and others (Ministry of Labor and Manpower Development, 1991).

These objectives set the tone for the structure of the system, its curriculum focus, aims and the challenges it needed to address. Thus, the Ministry of Labor and Manpower Development was responsible for the development of the Vocational Training Act 1991.

In 1994, the National Vocational Training Act (NVTA) was promulgated, the implementation of the new system was piloted at the Windhoek Vocational Training Centre (WVTC) with the assistance of the International Labor Office (ILO) training standards for technical subjects were drafted. The technical institutes were required to change their status into VTCs. Their minimum entry requirements were set at Grade 10. TVET was then removed in 1995 from the Ministry of Labor and Manpower Development and incorporated under the Ministry of Higher Education, Vocational Training, Science and Technology, which has since changed to the Ministry of Higher Education, Training and Employment Creation (MHETEC) (Akoojee, Gewer, McGrath, 2005).

In its Vision 2030, the MHETEC sees its goal as being “to provide hope an instill faith in the future to the youth and citizens on Namibia” through, among other things, developing and integrated and comprehensive vocational, training and career-

education system, and co-coordinating the planning and development of a higher education system relevant to the needs of Namibian and individual students (Government of the Republic of Namibia, 2004).

To achieve this vision by 2030 the TVET system should have short-term and medium-term achievable goals. To this end, the TVET system “*aims to enhance national technical capacity through productive skills development that would give Namibia the competitive edge both regionally and globally*” (Ndjoze-Siririka, 2002; pp.73). Hence, the TVET system has embarked upon a reform process that includes setting up the NTA while aiming at improving access, competitiveness and responsiveness, meeting industry’s skills needs, quality assurance, management and leadership structures and financial provision and funding system (Norrage, 2007).

These challenges are largely informed by the legacy of racial inequality, which was enforced by decades of colonial rule and apartheid. Moreover, it would appear that the MHETEC is beginning to grapple with the issues raised by a number of evaluations made by the studies of its TVET system.

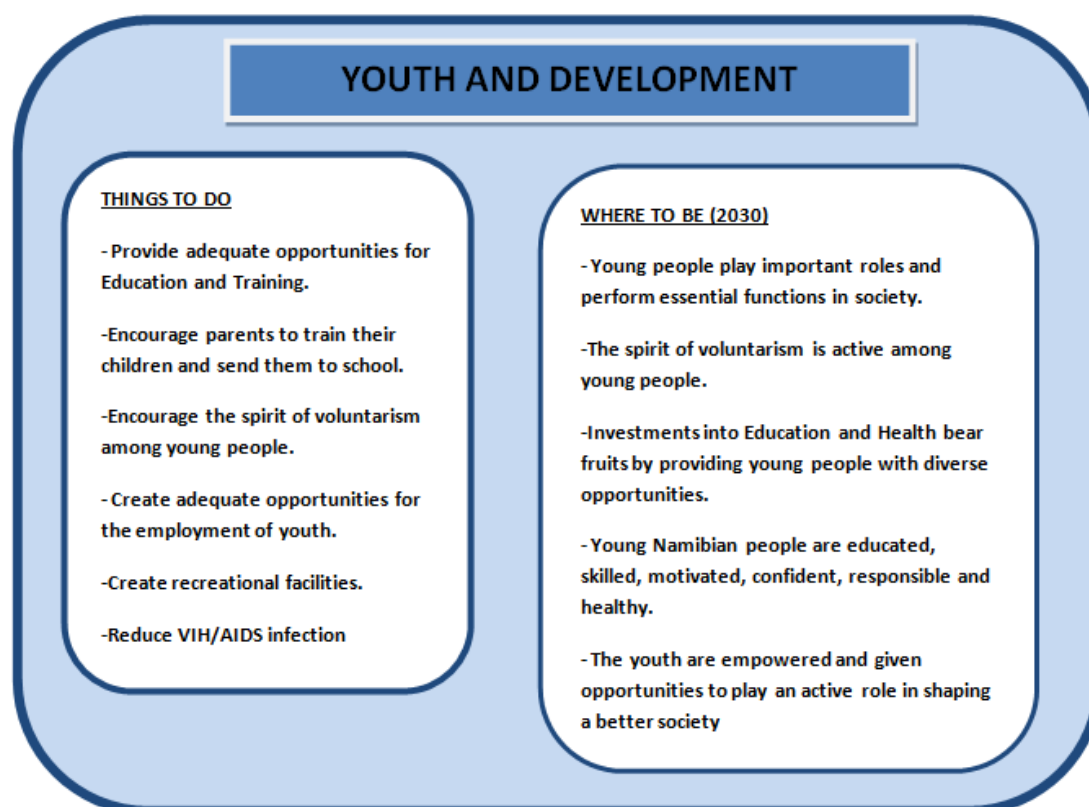
The current changes being implemented in the TVET system of Namibia include improving access and equity, an NTA, CBET and making VTCs autonomous. The MHETEC is in a process of introducing a new TVET policy. According to the draft policy document (MHETEC, 2000) the main goals of such a policy are to: a) Promote an integrated, demand-driven competency-based modularized VET system; b) Establish an open and flexible training structure that facilitates mobility within the education and training system. c) Promote community-based training programs for school leavers to acquire skills for both employment and self-employment. d) Establish mechanism for the effective co-ordination of the VET system through the development of an autonomous government and management structure. e) Develop the national quality management system for VET. Facilitate the development of a financial sustainable funding system.

The main objective of this policy is to have a VET system whose policy is managed at government level, whilst implementation and day-to-day management of

policy takes place through and autonomous body. This is expected to improve to system so that it is flexible and responsive to individual, community and national socio-economic needs. However, according to the (Government of the Republic of Namibia, 2004) the policy does not contain enough detail about the vision.

### 8.3.3.2. Actual TVET system in Namibia (formal, non formal and informal )

Figure 16: Namibia Vision 2030: Projections on youth and development



Source: Own elaboration from Namibian Vision 2030

#### a) Formal

The TVET system in Namibia comprises a set of different institutions. Two key types of institutions can be here mentioned: Vocational Training Centers (VTCs) for formal TVET and Community Skills Development Centers (COSDECs) for non-formal, there are also three agricultural colleges in the country, which are a responsibility of the

ministry of agriculture. There is also the Namibia Institute for Marine Resources under the Ministry of Fisheries and marine Resources.

The Competency-based education and training (CBET) was introduced at the formal TVET system of Namibia since 2000. According to the proposed TVET policy, CBET system includes a competency-based modular system, meeting the needs of the formal and the informal sector economy, promoting entrepreneurial skills and recognizing the need for lifelong learning and continuing education (MHETEC, 2000).

#### **b) Nonformal and Informal TVET systems**

Namibia's Community Skill Development Centers (COSDECs) have been at the forefront of the technical and vocational training among the most disadvantaged segments of the population. COSDEC was initiated as a response to the high dropout rates of high school learners and the inability of learners to acquire the VTC entrance requirement of Grade 10, it was set up to bring back these youths who were leaving the schooling system with weak skills (Akoojee, Gewer and McGrath, 2005).

By introducing a research based approach to curriculum development, the COSDECs have used local market assessment and design studies to develop training programs that are reflective of the real market opportunities available to their learners, as well as the areas that are most compatible with the target group. The COSDECs have benefited from this information and diversified to implement training in both long and short course formats, with different skill and product focuses. To strengthen the potential for successful self-employment in formal and informal sectors, the COSDECs have also adopted a project focus in their practical skills training. As they develop technical skills, learners also learn product design and specification, production planning, costing and pricing, quality control, and marketing.

In 2006 there were seven COSDEC centers in the country, with 470 trainees and of which 57 percent are women. Also, nearly 60 percent of COSDEC trainees received employment after completion of their training courses, with 35 percent going into

formal employment while 22 percent start their own small businesses. At present the Ministry of Education caters for COSDEC through its budget allocation, which it supplements with private donations and course fees. More recently, MCA Namibia funded the construction of four new COSDEC centers in Swakopmund, Rundu, and Gobabis as well as the upgrading of five existing COSDEC centers in Opuwo, Ondangwa, Oshakati, Otjiwarongo and Windhoek. With the introduction of "incubation" or "production" units and SME service centers in 2007, the COSDECs supports entrepreneurial development and increases the impact of TVET on the development of the Namibian economy (Norrag, 2015).

#### **8.3.3.3. *TVET governance structure in Namibia***

The Directorate of Vocational Education and Training, under the Department of Lifelong Learning in the Ministry of Education, is responsible for the Vocational Training Centers and the Community Skills Development Centers with the exception of the WVTC and NIMT, all VTCs report directly to the Directorate of Vocational Education and Training in the MHETEC. This means that decision-making and procurement are dependent on the approval of the Directorate and budget and expenditure are also dependent on the Directorate, as are staff appointments (IBE, 2010). WVTC and NIMT are autonomous; their governance is independent, although they rely on the government for most of their funding. Both of the institutions manage their own funds according to their own defined needs and also they use marketing strategies for acquire an extra budgetary amount of money, it is important to mention that they are not self-sustaining.

#### **8.3.3.4. *National TVET legislation***

The Vocational Education and Training Act N.1 of 2008, provided the establishment of the Namibian Training Authority (NTA) and the National Training Fund. The aim of the NTA as institution was to regulate the provision of vocational education and training and to provide for: the funding of TVET: the imposition of a

vocational education and training levy; and the appointment of inspectors and designation of quality systems of skills formation. In addition, NTA promotes access, equity and quality in TVET, according to the procedures determined by the Namibian Qualification Authority. It also develops occupational standards, curriculum and qualifications. Develops occupational standards, curriculum and qualifications, issues certificates and negotiates articulation arrangements between vocational education and training programs (IBE, 2010).

#### **8.3.3.5. *Financing TVET in Namibia***

Public TVET education through post-secondary institutions is essentially funded by the government national budget. According to Thomas (2002) the government of Namibia spent N\$1.23 billion on Technical Education and Vocational Training between 1997 and 2000. The establishment of the Namibian Training Authority took place concurrently with the establishment of the National Training Levy (NTL) (Johanson and Kukler, 2003) (Government of the Republic of Namibia, 2004).

#### **8.3.3.6. *Gender equality in TVET***

According to the Johanson and Kukler's study (2003; pp. 109), one of the main objectives of the government of Namibia is to increase access and make the TVET system equitable, such expansion should increase the number of female enrolments. They claimed that '*in most VTCs females now make up approximately half of the trainee population*'. They observed that '*the increase in female enrolment is largely due to the introduction of tailoring and computing courses rather than larger numbers enrolling in traditional courses like for example, building, welding, motor mechanics and carpentry*'.



### 8.3.3.7. *Relation of Namibia governmental agencies and UNESCO*

Namibia is a member of the UN nations and UNESCO and Namibian Training Authority has become a member of the UNEVOC Centers on 2015, therefore it exists a strong an direct relation between the Namibian governmental agencies and UNESCO. The most significant medium term challenge that Namibia has to face in relation to TVET is the creation of employment for the rapidly growing, young population. Unemployment rates increased from 19% (1991) to 31% in 2001(2001Census), while 20% of the active population is considered to have only an “elementary occupation”.

Future support should enhance the government, and donors, efforts to improve access and equity through the expansion of TVET system in relation with labor market needs. This will be better achieved through the development of quality assured, regulated and effective TVET system with more autonomous TVET institutions that can operate at local level to respond to enterprises, local communities and individual needs (UNESCO, 2013a).

The provision of education at different levels remains a challenge for Namibia. In particular, the provision at secondary education to those who cannot be accommodated through the conventional schools because of limited capacity. In addition, lack of skills and supply-driven training are constraining enterprise growth and development in Namibia.

Finally, for the governance of the system, there is a general confusion regarding the specific functions that are to be fulfilled by the NQA. The communication and cooperation between the NQA and NTA has diminished in the past few months. This is leading to confusion as to how they are to work together with the NTA to control the quality of VET. It is believed that the NQA must be given the go-ahead to audit and accredit the VTCs with regards to their facilities, staff and use of capital so as to be able to better control quality. Quality is further controlled by making use of a National Qualifications Framework. This database is however also not up and running yet.

According to UNESCO (2013a) possible interventions in line with government objectives and taking into account the issue of access and quality, could be: a) Upgrade Vocational Training Centres (VTCs) and enlarge access to all VTCs; b) Support the set-up of new vocational training centers including new model of governance, management and funding to enhance autonomy and partnership with enterprises; c) Support the enhancement and expansion of the system of Community Skills Development Centres (COSDECS).

## Chapter 9

### Juxtaposition and Comparison Phase

Chapter 9, includes de juxtaposition and comparison phase for the macro-analysis, the quantitative and the qualitative studies conducted. The juxtaposition phase show is a proper comparison for both countries on the different analysis conducted from the data collected, and the comparison phase provides an interpretation of the similarities and differences objectively, reflecting how the parameters behaves in different educational systems.

The macro analysis conducted it is framed within five inter-related parameters related to contextual factors, skills acquisition, skill requirements, degree of matching and outcomes. Each of these parameters includes a set of indicators established by using the criteria of relevance, feasibility, comparability and timeliness. The inventory of databases used covered key international organizations including the ILO, OECD, UNESCO, WHO and the World Bank, as well as Euro stat and other sources of international data on skills. For many of the indicators, the relevant data already exist but in some cases it has been necessary to go back to the primary sources to obtain the data required to construct the indicators. This analysis show us the historical trends and the existing socio-cultural-economic and educational realities and complexity that of each of these countries are facing now a days, from a comparative point of view.

The quantitative study conducted focuses on measure and analyze the social impact perception or socio-economic benefits provided to participants from the UNESCO TVET project through the implementation of the BEAR project, in order to determine the perceived influence of the organization in the participants' life. Proving that the social function of TVET goes beyond employability and economic development, which nowadays comprise the principal issues in the current TVET discussion. A semi-structure questionnaire with 53 semi-structured questions and 4 open questions was developed, administrated and analyzed. The questionnaire was divided into two different parts. Part I aimed to analyze the socio-demographic variables and Part II comprises two different dimensions: Output and Social benefits. The first dimension

included three categories (human capital, cultural capital and social capital) and the second dimension include (social mobility, economic security and balance of time).

The qualitative study aimed to elicit key participants 'opinions, feelings, experiences and understanding the influence of UNESCO on the development of the national TVET systems in their respective countries. Apart from the participant observation, it was important to allow participants "flow their ideas, experiences and thoughts" through the semi-structured interviews and focus group discussions. This study aimed to find out "how" and "why", in addition to "what" and "how many", therefore a qualitative approach will complement the quantitative one. It was also important to understand and capture people's point of view of the people without predetermining them.

## **9.1. JUXTAPOSITION AND COMPARISON PHASE**

### **9.1.1 Macro analysis**

The framework of this macro analysis consist in five inter-related parameters related to contextual factors, skills acquisition, skill requirements, degree of matching and outcomes. Each of these parameters includes a set of indicators established by using the following criteria of relevance, feasibility, comparability and timeliness.

The specific description of the criteria used to select core skills indicators for the five parameters, as mentioned before is given as follows. Relevance: indicators should give the information that provides a useful comparative backdrop to identify priorities for skills development and to monitor the impact of the strategies on this regard; feasibility: indicators should focus on available data from the existing international and national data collections; comparability: indicators should be internationally comparable in concept and measurement; timeliness: indicators should include those for which data are available or can be collected for a recent year accurately.

The analysis has been carried out in both countries, Botswana and Namibia. The inventory of databases used covered key international organizations including the ILO, OECD, UNESCO, WHO and the World Bank, as well as Euro stat and other sources of international data on skills. For many of the indicators, the relevant data already exist but in some cases it has been necessary to go back to the primary sources to obtain the data required to construct the indicators.

**Table 20: List of data sources for the macro analysis**

Institution	Weblink
Eurostat statistics database (ESD)	<a href="http://epp.eurostat.ec.europa.eu/portal/page/portal/stat">http://epp.eurostat.ec.europa.eu/portal/page/portal/stat</a>
ILO Key Indicators of the Labour Market (KILM)	<a href="http://www.ilo.org/kilm">www.ilo.org/kilm</a>
OECD Education at a Glance (EAG)	<a href="http://www.oecd.org/edu/eag2012.htm">http://www.oecd.org/edu/eag2012.htm</a>
OECD Labour Market Statistics (LMS)	<a href="http://www.oecd.org/els/emp/onlineoecdemploymentd">http://www.oecd.org/els/emp/onlineoecdemploymentd</a>
CONFEMEN Programme for the Analysis of Education	<a href="http://www.confemen.org/le-pasec">http://www.confemen.org/le-pasec</a>
Southern and Eastern Africa Consortium for Monitoring	<a href="http://www.sacmeq.org">http://www.sacmeq.org</a>
UCW and ILO YouthSTATS	<a href="http://www.youthstatistics.org">http://www.youthstatistics.org</a>
UNESCO Institute for Statistics (UIS) Data Centre	<a href="http://stats.uis.unesco.org">http://stats.uis.unesco.org</a>
UN Department of Economic and Social Affairs, Population	<a href="http://esa.un.org/unpd/wpp/index.htm">http://esa.un.org/unpd/wpp/index.htm</a>
USAID Demographic and Health Surveys (DHS)	<a href="http://www.measuredhs.com">http://www.measuredhs.com</a>
WHO Global Health Observatory (GHO) data repository	<a href="http://www.who.int/gho/database">http://www.who.int/gho/database</a>
World Bank Indicators (WBI)	<a href="http://data.worldbank.org/indicator">http://data.worldbank.org/indicator</a>
World Bank Enterprise Surveys (WBES)	<a href="http://www.enterprisesurveys.org/CustomQuery">http://www.enterprisesurveys.org/CustomQuery</a>

Source: Own elaboration.

The analysis will be done parameter by parameter, one by one the complete analysis for both countries appears in Annex 5: Comparative macro analysis between countries completed. Annex 5: Comparative macro analysis between countries completed.

**Contextual factors** drive both the supply and the demand for skills, the stock of human capital and its distribution; the indicators that have been set for the analysis are the following ones: GNI per capita (current US\$), Total population (in thousands), population growth (annual %), human development index, relative size of young population (aged 15-24 years old, in thousand), urban population growth (annual %), rural population (% of total population), early childhood health (life expectancy at birth, years), access to internet (internet user per 100 people), public expenditure in education (as % of GDP), public expenditure on education (as % total government expenditure).

**Table 21: Macro analysis: Contextual factors for Botswana and Namibia**

	BOTSWANA					NAMIBIA					Last year of data
	1990	2000	2005	2010	2015	1990	2000	2005	2010	2015	
<b>Contextual Factors</b>											
GNI per capita (Current US\$)	2540	2940	4730	7650	7240	2020	1950	3390	5610	5630	2014
Total Population (in thousand)		1755,37	1875,8	1969,34	2021,14	14154,47	1897,95	2027,02	2178,96	2303,31	2013
Population growth (annual %)	2,94	1,63	1,68	2,003	1,97	3,928	2,164	1,317	1,9	2,369	2014
Human Development Index					0,698					0,628	2014
Relative Size of young population (aged 15-24 years in thousand)		396,245	434,34	443,98	444,508		387,254	417,243	469,94	501,699	2013
Urban population growth (annual %)	11,09	3,24	2,106	2,41	2,411	4,876	3,789	3,952	4,369	4,58	2014
Rural population % of total population		46,71	42,68	39,02	37,74		67,62	64,95	62,182	61,6	2012
Early childhood health (Life expectancy at birth, years)	62,55	50,48	46,72	46,44	46,66	61,22	55,12	55,97	63,77		2011
Access to Internet (Internet user per 100 people)	0	2,902	4,28	6	18,5	0	1,644	4,398	11,6	14,84	2014
Access to mobile phones (Mobile phone subscriptions / per 100 people)	0	12,65	43,41	120,01	161,29	0	4,32	29,657	89,495	113,756	2014
Public expenditure in education (as % of GDP) %			10,67	9,63			6,99	6,037	8,35		2010
Public expenditure on education as % total government expenditure %			25,82				21,92	20,32	26,19		2010

Source: Own elaboration

The ratio of Gross National Income (GNI) per capita expressed in US dollars, provides a measure of the level of economic development of the country and the potential constraints on the resources that can be devoted to skills development, it provides a useful control for benchmarking the country performance.

In Botswana, the GNI per capita has increased since year 1990 when the GNI per capita was 2.540 US\$. From 1990 to 2000 there was an increment of 11.5% that continue over the years; right after 2005 the GNI per capita was duplicated (5.080) in comparison with 1990. The highest GNI in Botswana History was reached in 2010 (7.650 US\$) since then the GNI per capita has slightly decrease (9.4%), reaching 7.240 US\$ in 2015. Therefore Botswana economic development has been positive since 1990, more intensively from the period from 2005 to 2010 and with a final period of a slight economic recession from in 2015, due to the weak global demand of diamonds and falling customs revenues.

In Namibia, the economic development that is shown through the analysis of this indicators, it clearly states that this country has had a steady and constant increasing on the GNI per capita since for the last 15 years. The previous period, from 1990 to 2000 there was a slightly decrease on the GNI per capita (9.6%); Nevertheless there was an increase of 17.5% from year 2000 to 2005 and 28.9% increase up to 2010, were 5.610 GNI per capita was reached. During the last period from 2005 to 2010 there has been a minimum increase 0.01% Making 2015 the healthiest year with an exemplary amount of 5.630 US\$ per capita, the highest amount on the national history.

In comparison, the GNI per capita existing in Botswana has been historically higher to Namibia one. Nevertheless, even both counties have suffered ups and a slightly downs at some point (Namibia from 1990 to 2000 and Botswana from 2010 to 2015). GNI per capita in Botswana was duplicated earlier and the difference in GNI per capita in absolute terms has broader over time, in 1990 the difference between GNI per capita between Botswana and Namibia was 520 points difference, and in 2015 is 1.610 points of difference.

The total population (in thousands) indicator provides a measure of the overall demographic size of each country. Both countries Botswana and Namibia have a similar amount of population at national level, around two million people, which means that the population size of the countries are relatively small in comparison with other neighbor countries as South Africa (54 million inhabitants) and DR Congo (81 million inhabitants).

In Botswana, in year 2000 there was a total population of 1.755 million inhabitants, since then there has been a steady increase. From 2000 to 2005 the increase of total population was 0.68% (1.875 persons), in 2010 the increases reached 1.21% (1.969 persons) and 1.51% increase in 2015 (2.021 persons) in comparison with year 2000.

In Namibia, by 2000 there were 1.897 inhabitants in the country (142 more than in Botswana at that time), over the time the population has also constantly increase,

since the year 2000 the percentual increase by five, ten and fifteen years period has been: from 2000 to 2005 (0, 68%) 2.027 persons, from 2000 to 2010 (1.48%) 2.178 persons and from 2000 to 2015 (2.14%) 2.303 total population.

The annual population growth rate indicator refers to the exponential rate of growth of midyear population from year t-1 to t, expressed as a percentage. Population is based on the de facto definition of population, which counts all residents regardless legal status or citizenship except for refugees not permanently settled in the country of asylum, who are generally considered part of the population of the country of origin.

The annual percentage of population growth in both countries has fluctuated over the years. In both countries, Botswana and Namibia the highest percentage of annual population growth appeared in 1990 with 2.94% in Botswana and 3.98 % in Namibia.

In Botswana, since 1990 there was a decrease on the annual population growth for almost 20 years, this is due to the AIDS -HIV prevalence in the country. The national HIV prevalence rate among adults (15 to 49 years old) is the second highest in the world 21.9% (in 2013) with 320.000 people living with HIV; 5.8000 AIDS-related deaths and 69% of adults on antiretroviral treatment according to the UNAIDS Gap Report 2014 (UNAIDS, 2014). The high HIV infection rates caused a slight annual population decline as in year 2000 the annual population growth was 1.63% and in 2005 was 2.68%, which corresponds to a decrease of 1.31 and 1.26% points respectively in comparison to 1990. Nevertheless from 2005 there was an increasing tendency on population growth reaching 2.003% of annual population growth in 2010, from that moment up to 2015 there has been a slightly decrease of 0.03% points (UNAIDS, 2014).

Namibia in 1990 had a significant positive annual population growth of 3.92%. Due to the AIDS -HIV pandemic, the same reason that in Botswana, the annual population growth fell significantly over the years. By 2000 there was a total annual population growth of 2.16 % which meant a decrease of 1.76% points, in 2005 the annual population growth was of 1.31 (decrease 2.61% points in relation to 1990).



The number of people living with HIV in Namibia is 260.000 persons, the prevalence rate in adults aged 15 to 49 years old is 16.0%; the number of deaths due to AIDS in 2013 were 5.100 and the number of orphans aged 0 to 17 due to AIDS is 53.000 (UNAIDS, 2014) Since 2005 there has been an steady increase o the annual population growth at national level, as in 2010 there was a 1.9 % population growth and in 2015 there was a 2.3% population growth, which is 0.42% points higher than in Botswana (UNAIDS, 2014).

As for the Human Development Index Indicator, which includes different elements related to life expectancy, educational attainment and income. It provides a summary measure of globalization which may have an impact on skills demands. This indicator is measured and provided by the World Bank data base, and there is only information available for the last year 2014. The HDI was created to recognize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not just considering economic growth in its own. The health dimension is assessed by life expectancy at birth; the education dimension is measured by mean of years of schooling for adults aged 25 years and more and expected years of schooling for children of school entering age. The standard of living dimension is measured by gross national income per capita.

Botswana has been ranked within the Human Development Index of 0.698 (with the position 106 over 198) classified as a Medium human development country (first in the list), and Namibia with 0.628 (with a position of 126 over 198 in the global ranking) also considered as a Medium human development country, number 20 of this segment. In relation to the relative size of young population aged 15 to 24 years in thousands, this indicator provides a measure of the size of the potential group of new entrants to the labor market relative to the whole working age population and the scale of the challenge facing each country's education and training system to provide youth with appropriate skills.

In Botswana the size of the young population has been growing over the last years. In 2000 there were 396.245 persons that increase up to 434,340 in 2005 (0.96%), in 2010 there were 443.980 persons (1.20% increase over 2000) and 444.508 persons in

2015 (1.21%). In comparison with the total population the young population (14 - 25 years old) have represented (22,5% of the total population in 2000; 23,1% in 2005; 22,5% in 2010; 21,9% in 2015).

In Namibia, as well, the size of young population has grown since year 2000 up to now. At that moment in 2000, there were 387.254 young persons, that increase up to 417.243 persons (0.77 % increase) in 2005, 469.940 persons (2.13% increase over 2000) in 2010 and 501.699 persons in 2015 (2.95% increase over 2000) . If we compare which is the percentual representation of the youth population (14 - 25 years old) in comparison with the total population over the years, the analysis shows that in youth population has represented the 20,4% in 2000, 20.58% in 2005; 21.56% in 2010; 21.78% in 2015)

The Urban population growth refers to people living in urban areas as defined by national statistics offices; it provides an indication of the concentration for demand for skills and accessibility to training services.

In Botswana the urban population growth has remained over the 2.1%-2,4% over the last 10 years (2005 - 2015). The highest annual urban population growth took place in 1990 since then the annual growth has diminished and stabilized.

In Namibia, the urban population growth fluctuates since 1990 between 4.8 % to 3.7%. The highest annual growth rate was in 1990 as it was in Botswana as well with 4.87% annual growth rate and the lowest annual growth rate was in 2000 with 3,78% annually. In comparison with Botswana there is a higher urban population growth in Namibia.

The urban population growth annually in Namibia follow the same patterns as the total annual population growth tendencies, but it does not happen in Botswana.

The rural population as percentage of total population, focus on the stake of population living in rural areas, provides an indication of the concentration of demand for skills and accessibility to training services.

In Botswana the percentage of rural population since 1990, have never reach the 50% of total population, over the time there has been a clear decreasing tendency of people living in rural areas, in 2000 there was a 46,71% of population living in rural areas, 42,68% in 2005, 39,02% in 2010 and 37,74% in 2015.

In contrast in Namibia, the percentage of people living in rural areas since 1990 has never gone below 60% of the total population in the country. This is explained by the vast extension of the national surface 825.418 square kilometers distributed in a large fringe of land parallel to the coast (in comparison, Botswana has a surface of 600.370 square kilometers). Nevertheless, there has been a steadily decreasing on the rural population over the years, as it is shown by the data. In Namibia by 2000 the 67,32% of total population lived in rural areas; 64,95% in 2005; 63,18% in 2010 and 61,6% in 2015.

Early childhood health, life expectancy at birth (number of years) this indicator measures the proportion of children aged 0 to 59 months who are below minus two standard deviations from the World Health Organization standard median weight. There is a range of evidence pointing to the importance of good infant health for subsequent cognitive development in low and medium income countries that will directly have an impact on the acquisition of skills of those children.

In Botswana, the life expectancy at birth indicator shows very clearly the HIV incidence over the population for the last decades. In 1990 when the HIV outbreak was not existing the life expectancy at birth was 62,55 years old, as time went on, the HIV outbreak appeared at national level and have a deep impact in all segment of population as a consequence the life expectancy at birth in 2000 decrease up to 50.48 years old (-10,07 years difference) which is a significant decrease, and continue decreasing, in 2005 the life expectancy at birth was 46.72 years old (-15,83 years difference) and reached the lowest live expectancy at birth in 2010 with 36,44 years old (-16,11 years difference). Since 2010 the decreasing tendency has stopped and has reversed, starting on the last period a slightly increase and recovery of the life expectancy at birth reaching 46,66 years old in 2015 (+0.22 years difference comparing to 2010).

In Namibia, it could also be seen the effects of the HIV incidence over the population life expectancy at birth in the country, as the tendency follows the same pattern that in Botswana. Nevertheless, the incidence of the HIV over the population in Namibia has not been as deep and dramatically as it was in Botswana. In 1990, the life expectancy at birth was 61,22 years old; the effects of the HIV outbreak appeared in 2000 when the life expectancy at birth reached the lowest level 55,12 years old (-6,1 years difference), a very slightly recover took place up to 2005 when the life expectancy at birth was 55,97 years old (+0,85 years difference) and the recovery has been maintained over the last years, in 2010 the life expectancy at birth was 63,77 years old, the highest life expectancy in history (+8,65 years old difference in comparison with 2000).

Access to internet (internet user per 100 people) this indicator provides a proxy measure of the availability of IT technology and the potential demand for and supply of IT skills. It may also indicate ease of carrying out job search and achieving better skill matches or the potential for developing and utilizing entrepreneurial skills.

As for the access to internet, both countries show a common pattern on the progression of the availability of IT technology, broadband and the demand for ICT supplies. In 1990, there was no access to internet in Botswana neither in Namibia.

By year 2000, in Botswana there were 2.9 internet users per 100 people, this amount was duplicated by 2005, when the number of internet users increased up to 4.2 users per 100 people, the number of users continue growing, reaching in 2010, 6 users per 100 people ( + 206,89% in comparison with internet users in 2000), by 2015 the number of users have been triplicate reaching 18.5 users per 100 people ( + 637,93 in comparison with internet users per 100 people).

In Namibia, In 2000, there were 1.64 internet users per 100 people, by 2005 this amount was almost triplicate with 4.39 internet users per 100 people, in 2010 there was 11.6 internet users (+ 707,31% difference in comparison with the existing internet users

in 2000), 2015 reached the highest number of internet users by 100 people, with 14.84 (+ 904.87% in comparison with the existing internet users in 2000).

Access to mobile phone (mobile phone subscriptions per 100 people), provides a proxy measure of the availability of communications technology and the potential demand for and supply of IT skills. It may also indicate ease of carrying out job search and achieving better skills matches or the potential for developing and utilizing entrepreneurial skills.

The access to mobile phone indicator follows the same progression and tendency as the access to internet that has been described previously. In Botswana there was no mobile phone subscriptions in 1990, in year 2000 there were 12.65 persons per 100 people that had a phone subscription; by 2005, there were 43.41 mobile phone subscriptions by 100 people (+ 343,16 %); by 2010 there were 120.01 mobile phone subscriptions by 100 people (+948,69 % in comparison with 2000 subscriptions), to conclude in 2015 there were 161.29 mobile phone subscriptions by 100 people, which is the highest amount of subscriptions over 100 people, representing an increase of 1275,01 % respect to the number of mobile phone subscriptions by 100 people in year 2000.

The last two indicators access to internet and access to mobile phones clearly show us the importance of the IT and technology on the economic development of the country, and therefore the importance of introduce ICT subjects in the education curricula, to develop IT and ICT skills and capacities and therefore to cope with the future potential demand of ICT job opportunities and the supply of the graduates that are expert on this field, at the same time that the entrepreneur skills are also reinforced.

Public expenditure in education (as % of GDP) provides a measure of public investment in human capital relative to the total resources available in the economy. There is not a lot of information in Botswana in relation to this indicator. In 2005 the public expenditure in education as percentage of the GDP was 10.67, in 2010 the amount slightly decrease reaching an amount of 9.63 % GDP.

In Namibia, the expenditure in education as percentage of GDP was 6.99 in 2000, that slightly decrease to 6.03 in 2005, and was reinforced by 2010 reaching a 8.35 % of the GDP.

Public expenditure in education as % total government expenditure, this indicator, provides a measure of public investment in human capital relative to the total resources distributed by the government. In Botswana there is only information as for the year 2005, when the public expenditure on education was the 25,82% of the government expenditure.

Meanwhile in Namibia, the public expenditure on education in 2000 was 21.92% of the government expenditure, it decrease slightly in 2005 reaching 20.32 % and increasing on the years later, reaching a 26.19% of the government expenditure by 2010.

The second part of the analysis refers to the **skills acquisition parameter** that covers the investment in skills. Skills requirements which measure the demand for skills arising in the labor market. The set of indicators established for the analysis are: adult literacy rate (15 years old and older), youth literacy rate (15 - 24) %, youth literates (15 - 24) thousands, net enrolment rate in primary education (total, both sexes), gross enrolment rate in primary education (both sexes, %), pupil teacher ratio primary education, internal efficiency (repetition in primary, all grades %), net enrolment rate in secondary education (total, both sexes %), gross enrolment rate in secondary education (total, both sexes), pupil-teacher ratio secondary education, lower secondary education completion rate (both sexes), share of vocational programs in secondary education, percentage of students in secondary vocational education who are female (%), gross enrolment ratio in tertiary education (Both sexes %).

**Table 22: Macro analysis: Skills acquisition for Botswana and Namibia**

Skill Acquisition	BOTSWANA					NAMIBIA					Last year of data
	1990	2000	2005	2010	2015	1990	2000	2005	2010	2015	
Adult literacy rate (15 years old and over)			81	87	88			85	76	82	2012 gmr
Youth literacy rate (15 -24) %			94	96	98			92	87	90	2015 Pj 2015
Youth Literates (15 - 24 ) thousand			26	35	26			30	57	52	2014
Net enrolment rate in primary education (total, both sexes, %)		81,91	85,99	85,67	92,02	79,42	89,23	88,26	86,85	91,22	2013
Gross enrolment rate in primary education (both sexes) %	103,55	103,67	105,38		108,16	118,28	114,35	108,15	107,48	109,46	2012
Pupil-teacher ratio primary education	31,65	26,72	25,5		23,41		31,59	30,82	29,77		2013
Internal efficiency / Repetition in primary (all grades) %	4,875	3,396	4,7088			13,18	15,59	15,59	14,9	14,88	2012
Net enrolment rate in secondary education (total, both sexes, %)	31,16	53,42	55,88				42,74	49,95			2005
Gross enrolment rate in secondary education (both sexes) %	39,7	74,65	78,45			37,974	60,169	63,698			2005
Pupil-teacher ratio secondary education	16,62	17,29	13,84				24,05	25,11			2005
Lower secondary education completion rate (both sexes)	51,88	85,83	83,13		87,63	52,93	60,95	58,25		58,12	2012
Rate of out school adolescents of lower secondary school age (both sexes)		9,893	6,234				15,279	9,96	7,158		2007
Share of vocational programmes in secondary education	4875	10558	11265			598					2005
Percentage of students in secondary vocational education who are female (%)	43,36	37,15	38,11			22,24					2005
Gross Enrolment ratio in tertiary education (both sexes %)		2,292	10,05	16,99	24,83			6,872			2014

Source: own elaboration

The adult literacy rate indicates the proportion of population aged 15 and over that is literate. It provides a measure of basic literacy skills or their absence that complements the indicator of education attainment (i.e. some individuals may have had some schooling but still be illiterate while others may have had no schooling but may be literate. Basic literacy is an important prerequisite for many types of further learning. The data available to measure the adult literacy rate started in 2005 for both countries, Botswana and Namibia. In Botswana there were an 81% of adult literates in 2005, that increase over time reaching 87% in 2010 and continue over 2015 with a 88% in total. Therefore, Botswana has increase the number of adult literates for the past 15 years with an increasing tendency over the time.

In Namibia, the percentage of adult literates in 2005 was 85, slightly higher than in Botswana; during the following years in Namibia there was a significant decrease on the number of adult literates reaching 76% of the total population in 2010, at that time Botswana had a 11 points difference (higher) in respect to Namibia,

therefore there was a change in the predominance of adult literates among both countries during the period 2000-2005. The tendency from 2010 -2015 of adult literates in Namibia changed again reaching 82% in 2015, but still lower than the existing 85% in 2000.

As for the youth literacy rate, refers to the proportion of youth from 15 to 24 years old that it literate. It also provides a measure of basic literacy skills or their absence that complements the indicator of educational attainment (i.e. some individuals may have had some schooling but still be illiterate while others may have had no schooling but may be literate. Basic literacy is an important pre-requisite for many types of further learning.

In Botswana the youth literacy rate is slightly higher than the Namibia in absolute terms. In 2005, 94% of the youth (between 15 and 24 years old) were literate; this figure increased up to 96% in 2010, and continues its increase over the next five years reaching 98% in 2015.

In Namibia, the youth literacy rate in year 2000 was 92% and over the next five years it decreased up to 87%; nevertheless during the next 5 years, period 2010 - 2015, it has increase its number, reaching 90%, but it has not reach the percentage that was existing in year 2000.

The number of youth illiterates, between 15 and 24 years old, in thousands, represent the number of youth that is illiterate. As the previous indicators it provides a measure of the absence of literacy skills that complements the indicator of educational attainment. Therefore it complements the information provided by the previous indicator analyzed.

In Botswana, the number of illiterate youth in 2005, was 26.000; this figure increased during the next five year period 2005 - 2010, when it increased in 9.000 youth, reaching in 2010 the total number of 35.000 youth illiterates. This figure shows a contradiction, as it does not correspond with the previous indicator where there was a increase in the youth literate population percentage, (it decreased 2% points) but it does



correspond with the increase of the total population over this period in Botswana, this could be the factor that explains this contradiction. Nevertheless, during the period 2010 -2015 the number of illiterate youth decreases to 26.000, the same existing amount in 2000.

In Namibia, the number of illiterate youth in 2005, was 30.000 (higher than the existing number in Botswana), over the next five year period the number increased significantly reaching 57.000 in year 2010, this is in line with the drastically decrease on the youth literacy rate that was taking place in Namibia from 2005 - 2015. On the period 2010 - 2015 the numbers of youth illiterates have diminish a little, reaching 52.000 people in 2015. This number shows that in 2015 there were 22.000 more youth illiterates than the existing number of youth illiterates in Namibian in year 2000.

As mentioned before it is important to highlight that even though Namibian youth population is slightly higher than Botswana one, over the period 2000 -2015, the percentage of illiterate youth is significantly higher in Namibia, than Botswana. Namibia situation has worsened over the last 15 years.

Net enrolment rate in final year of primary education by gender, refers to the participation in primary education that provides an indicator of the acquisition of basic skills and is typically a precondition for going on to higher level of educations.

In Botswana the total net enrolment rate for both sexes has increased over the years since 2000, with a slight decrease from the year 2005 to 2010. In 2000 there was an 81.91% of total enrolment rate in primary, that increase to an 85.99% in 2005 (1.04% increase in comparison with 2000). The slight decrease took over the period from 2005 to 2010 where the total enrolment rate decrease up to 85.67 (0,32 % points less in comparison with year 2005), Nevertheless from 2010 to 2015 there was an important increase achieving a 92,02% of total enrolment rate in primary in 2015 (11.2% increase in comparison with year 2000).

In Namibia, the net enrolment rate in primary education has fluctuated over time. In year 2000 there was an 89.23% of total net enrolments in primary for both

sexes, during the next five year period there was a decrease on the amount of children enrolled in primary, the enrolment rate in 2005 was 88.26% (1.01 % less children enrolled than in 2000). In 2010 the decreasing tendency continues, reaching its lower level, the enrollment rate was 86.85% (0.97% decrease in relation with year 2000). On the last five year period, from 2010 to 2015, the tendency changed and an important increase on the enrollment rate in primary took place at national level in Namibia, reaching a 91.22%, the highest amount of children enrolled in the Namibian history (10.2% more than year 2000).

The gross enrolment rate in primary education for both sexes is an indicator that shows us the participation in primary education and provides an idea of the acquisition of basic skills, as the net enrollment ratio it is a precondition for going on higher level of education.

In Botswana the gross enrolment ratio in primary has increased over time, with a starting point in 1990 of 103.55% that almost remain constant for the next ten years, as in year 2000 the gross enrolment rate was 103.67%. After that there has been an increase over the time reaching 105.38% of gross enrolment rate in 2005 and 108.16% in 2015. Therefore the absolute increase over the last years, since 1990, has been 4.61 % points increase.

In Namibia, the gross enrolment ratio in primary for both sexes, has fluctuated over time, but has been always higher than the Botswana one. In 1990 the gross enrolment ratio in primary was 118.28%, after that during the next years there was a significant decrease, in year 2000 the gross enrolment rate was 114.35% (3.93 % points decrease in comparison with 2000), the decrease continue over the next ten years, reaching 108.15% in 2005 (6.2 % points decrease in comparison with 2000) and 107.48% in 2010 (0.67 % points decrease in comparison with year 2000). Nevertheless the last five year period from 2010 to 2015 there was a change in the decreasing tendency and the gross enrolment ratio in primary increased up to 109.46%. The highest level reached in the history was in 1990, since then even the recovery, the gross enrolment levels remain lower.

The pupil-teacher ratio in primary education refers to the ration of the number of pupils to the number of teachers in primary education. It provides a proxy measure of class size and a crude measure of education quality.

In Botswana the pupil-teacher ratio in primary, in general terms is lower than in Namibia. The highest pupil-teacher ratio in Botswana was in 1990 were the ratio was 31.65 over the time the ratio has decreased significantly, as we can see in year 2000 the ratio was 26.72 (-4.92 students less per teacher than year 1990) the decrease continue, in 2005 the ratio was 25.5 (-6.15 students less per teacher than year 1990) and the lowest ratio in the national history has been reached in 2015 when the ratio was 23.41 (-8.24 students less in comparison with year 1990).

In Namibia the pupil-teacher ratio in 2000 was 31.59 students per teacher which was 4.87 students higher than Botswana at the same moment, over the time the pupil-teacher ratio has decreased, in year 2005 it was 30.82 (+5.32 students than Botswana) and in 2010 it was 29.77

Internal efficiency / Repetition in primary all grades shares the comparison of the performance of the education system and the resources consumed. This indicator is used to assess the extent of educational internal efficiency in terms of the estimated average number of years to be invested in producing a graduate and to measure the extent and patterns of repetition by grade, as part of the internal efficiency of the education system.

In Botswana, the percentage of repetitions in all grades remained constant over the years. in 1990 there was a 4.87% of repetitions in all grades of primary education, by 2000 the percentage diminished up to 3.39% (-1.48%) but after that moment, there was a new increase +1.31% points on the repetitions during the period 2000-2005. After that moment there is no more official data available.

Meanwhile in Namibia, the percentage of repetitions in all grades at primary education, showed a higher amount of repetitions in Namibia than in Botswana, In 1990 there was a 13.18% of repetitions at primary level in Namibia, it increased during the

period 1990 - 2000, reaching 15.59% in year 2000 (+2.41% more repetitions than in 1990) and this percentage remained constant from 2000 to 2005. In 2010, the repetition percentage for all grades in primary education increased up to 14.9% (-0.69% points), during the last period of time, from 2010 to 2015, there percentage of primary repetition in all grades was reduced on -0.02% points, reaching 14.88% in 2015.

Net enrolment rate in secondary education total both sexes, this indicator provides information about the acquisition of basic skills and is typically a precondition for going on to higher levels of education and to show the skills acquired through the learning process.

In both countries, the net enrolment rate in secondary education has increased over time, even though it hardly go over the 50 percent in Botswana and haven't so far achieve 50% in Namibia (as for the latest official data collected) significant improvement have been achieved over the last decades.

In Botswana the net enrolment rate in secondary education in 1990 was 31.16%, It increased for the next ten years reaching in 2000 53.42% ( 22.26 % points more than in comparison with 1990) and in 2005, 55.88% (2.46 % points more than in comparison with 1990).

In Namibia, meanwhile, the net enrolment rate as per 2000 was 42.74%, that incremented up to 49.95 in 2005 (last year of available data).

The Gross enrolment rate in secondary education both sexes provides an indicator of the acquisition of basic skills and is typically a precondition for going on to higher levels of education. The Gross enrolment ratio has increase significantly over time in both countries.

In Botswana, in 1990 the gross enrolment rate was 39.7%, in year 2000 it increases drastically up to 74.65% (+34.95%), this increase continue at a slower motion, in 2005 it reached 78.45% (+38.75).

In Namibia, in 1990 the gross enrolment rate was 37.9%, (-1.8% than Botswana at that time), it drastically increases in 2000 up to 60.1%, (+22.2 %points more than in 1990) and it continue over 2005 with a 63.69% rate (+25.79 % points in comparison with 1990).

Pupil-teacher ratio secondary education refers to the ratio of the number of pupils to the number if teachers in lower secondary education; it provides a proxy measure of class size and a crude measure of education quality.

The pupil teacher ratio for secondary in both countries is lower that their respective pupil teacher ratio for primary due to the lower number in absolute terms of secondary students. In Botswana there were 16.62 students per teacher in secondary schools by 1990, during the following years this ratio worsened a little bit, as in 2000 the pupil teacher ratio was 17.29, but it improved again from 2000 to 2005, where the pupil teacher ratio was 13.84. In Namibia, in year 2000 there were 24.05 secondary students per teacher, and during the next five years it worsen a little bit reaching 25.11

If we compare Botswana and Namibia, in year 2000 Namibia had 6.76 students more for each teacher; in 2005 the difference increased significantly, in Namibia there were 11.27 students more per teacher than in Botswana.

Lower secondary education completion rate for both sexes, refers to the gross enrolment rate in first grade of lower secondary education that are expected to reach the last grade. Completion of lower secondary education provides an indicator of the acquisition of basic skills and is typically a precondition for going on to the higher levels of education.

In Botswana, by 1990 the lower secondary education completion rate was 51.88% which mean that half of the lower secondary students finalized their studies. There was a drastically incremental in 2000 when it reached 85.83%, which meant an incremental of 33.95% points more in five years, this was the highest rate in the history, this increasing tendency reverse a little bit and decreased slightly over the period from

2000 to 2005, were the lower secondary completion rate was 83.13% (-2.7 % points difference in relation to the previous period).

Namibia in 1990, the lower secondary education completion rate was 52.93% (a little bit higher than Botswana one at that time 51.88% (+1.05), it continue increasing during the next ten years, by 2000 60.95% of lower secondary education students completed their studies; during the following five years in contrast to the existing tendency over the last 10 years (2000-2010) it decrease -2.7% points in relation to the previous period. Since then the lower secondary education completion rate has remained almost stable over the time. In 2015 the actual rate was 58.12% (-2.83% points lower than the highest historical rate in 2000 and +5.19% points higher than the initial data in 1990).

Rate of out-of school adolescents of lower secondary school age (both sexes), refers to the proportion of all adolescents of lower secondary school age that do not attend to school. It reflects the number of out-of school adolescents by region and demonstrates where the greatest overall needs are found. In contrast, the proportion of out-of school adolescents of lower secondary school age expressed as a percentage of the population of that age provides information on the relative challenges faced.

In Botswana, the rate of out-of school adolescents of lower secondary school by year 2000, was 9.89% for both sexes, this percentage was reduced in 2005, by -3.66% points reaching a 6.23% which shows a good improvement of the situation.

In Namibia, the rate of out-of school adolescents of lower secondary school in 2000 was bigger than Namibia, with a percentage of 15.27 adolescents out-of school, the situation improved by 2005, with a decrease of -5.31% points of total number of out-of school adolescents, and it continue improving from 2005 to 2007 (the last year of data available) with 7.15% of out-of school adolescents (a 2.81% decrease in relation to year 2005).

Share of vocational program in secondary education, refers to the proportion of all enrolments in upper secondary education that are in vocational programs. It indicates the possibility for students to obtain more vocationally-specific skills.

In Botswana, by 1990 there were 4.875 vocational programs, during the next ten year period, it duplicated and reached in 2000 a number of 10.558 programs, by 2005 which was the last year with official available data, the total number was 11.265.

In Namibia, there is almost no official information about this indicator, it is only known that in 1990 there were 598 vocational programs, but the evolution has not been possible to analyze as there is no more data.

The percentage of students in secondary vocational education, who are female, show the gender balance among the TVET trades that are offer at the technical schools, nevertheless there is no information about the type of trades the females and males are enrolled into.

In Botswana, in 1990 the percentage of female students in TVET secondary education was 43.36% of the total TVET students, the evolution over time, shows that it has been a decrease in the number of female participants in TVET education. It is important to highlight, as it has been done before, that there is no record on which are the type of trades the TVET institutions are offering, as some trades have a very remarkable gender stigma in the society, for example, Hairdresser is seen more likable to be a female TVET learning program, meanwhile bricklayer is seen as more likable for a man.

In Namibia, the same stereotypes over the gender for each TVET program also exist. In this case there is almost no official data for this indicator; in 1990 the percentage of the female students in secondary vocational education was 22.24%. In comparison with Botswana it was -21.14% points below the Botswana situation at the same time (1990).

Gross enrolment ratio in tertiary education for both sexes in percentage, this indicator reflects the gross enrolment rate in tertiary education that is expected to reach the last grade. The completion of lower tertiary education provides an indicator of the acquisition of advanced skills.

In Botswana, in year 2000 the gross enrolment ratio in tertiary education was 2.2% for both sexes, which meant that there was a weak acquisition of advanced skills at national level, the situation has improved over the years, the initial data was quintuplicate in five years, during the period 2000 – 2005, reaching in 2005 a gross enrolment rate in tertiary education of 10.05 %. The increasing tendency continued over the next years from 2005 to 2010 when it reached 16.99% (+14.79% difference from the initial year 2000), and over 2010 – 2015 where the maximum number of gross enrolment ratio in tertiary education has been reached with 24.83% (+22.63 % points higher in comparison with the initial year 2000).

In Namibia, there is no much information on regard to this indicator; the data that is officially available refer to the gross enrolment ratio in tertiary education in 2005 as 6.87%. In comparison with Botswana at the same time Namibia was – 3.18% points below the Botswana situation.

**The skills requirements** measure the demand for skills arising in the labor market, and the set of indicators related to the parameter are: employment to population ratio (ages 15 - 24 total %), employers total (% of employment), employers female (% of employment), employers male (% of employment), unemployment youth total (% of total labor force ages 15 - 24), unemployment male youth total (% of total labor force ages 15 - 24), unemployment female youth total (% of total labor force ages 15 - 24), self-employed total (% of total employed), self-employed female (% of females employed), self-employed male (% of male employed), employment in industry (% of total employment), industry value added (%GDP), employment in service (% of total employment), service value added (%GDP), employment in agriculture (% of the total employment), Agriculture value added (% GDP).



**Table 23: Macro analysis: Skills requirements in Botswana and Namibia**

Skill Requirements	BOTSWANA					NAMIBIA					Last year of data
	1990	2000	2005	2010	2015	1990	2000	2005	2010	2015	
Employment to population ratio, ages 15-24, total (%)		58,4	59,2	62,9	62,79		17,29	22,1	19,7	19,89	2014
Employers, total (% of employment)			2,7				8,19		0,69	4,09	2013
Employers, female (% of employment)			2,09				6		0,4	3,09	2013
Employers, male (% of employment)			3,2				10,19		1	5	2013
Unemployment, youth total (% of total labor force ages 15 - 24)		39,9	37,29	33	39		43,7	39,09	44,09	40,59	2014
Unemployment, youth total, male (% of total labor force ages 15 - 24)		35,9	33	26,89	28,5		42,09	35,4	40,79	36,4	2014
Unemployment, youth total, female (% of total labor force ages 15 - 24)		44,4	41,9	39,59	39,7		46,09	43,09	47,79	43,29	2014
Self-employed, total (% of total employed)			15,6				35,79		35,79	36	2014
Self-employed, female (% of females employed)			18,2				42,2		42,29	44,79	2014
Self-employed, male (% of males employed)			13,39				30,1		29,29	27,2	2014
Employment in Industry (% of total employment)		20,89		17,5			12,19		12,5	14,39	2014
Industry, value added (% GDP)	61,01	50,52	49,03	36,61	39,15	31,521	27,959	34,64	30,183	31,792	2014
Employment in Service (% of total employment)		58,2		56,09			56,09		54,7	54,2	2014
Service, value added (% GDP)	34,12	46,42	48,66	60,52	58,39	58,69	60,216	54,89	60,542	61,2133	2014
Employment in Agriculture (% of total employment)		19,7		26,39			31,1		31,2	31,39	2014
Agriculture, value added (% GDP)	4,853	3,049	2,304	2,859	2,441	9,7885	11,823	11,326	9,274	6,994	2014

Source: own elaboration

Total employment to population ratio, (15-24 %), refers to the proportion to all employed persons aged from 15 to 24 years old. It provides a measure of the demand of skills within the youth segment of the population. In order to analyze this indicator we will bear in mind, which is the percentage of total youth population (15 – 24) in relation to the total population for each year, in both countries, so it will be easier to contextualize this indicator.

In Botswana, in 2000 the total population between 15 and 24 years old represented the 22.57% of the total population, in thousands 396.245 at that time the proportion of employed persons aged 15 to 24 was 58.4% of the total youth population. The participation increased progressively over time, in 2005 there was 434.340 youth representing 23.15% of the total population, and the proportion of employed 15-24 years old persons was 59.2% (+ 0.8% points in comparison with 2000). By 2010, there was a total of 443.980 youth (15 – 24 years old) representing 22.54% of total population, and the proportion of employed 15 – 24 years old persons was 62.9% (+4.5% in comparison with 2000). As for 2015, the proportion of 15-24 employed youth

was 62.79%, showing a slight decrease from 2010 (-0.11), at that time the number of youth within the population was 444.508 representing 21.99% of the total population in the country.

In Namibia, by 2000, there were 387.254 youth population (between 15 – 24 years old) living in the country, which represented 20.40% of the total population in the country, the proportion of employed persons aged 15 to 24 years old was 17.29% which shows an important problem with youth unemployment. Over the years the situation has not improved significantly. In 2005, there were 417.243 youth (15 – 24 years old) living in the country and representing 20.58% of the total population, the proportion of employed persons 15 to 24 years old was 22.1%. by 2010, there was 469.940 youth representing 21.56%, where there was only 19.7 % of the proportion of employed persons between 15 and 24 years old. To conclude, in 2015, there was 501.699 youth, which is the highest youth population over time, representing 21.78% of the total population and the proportion of employed persons aged 15 – 24 was 19.89%.

The increase in absolute terms in the proportion of employed persons aged from (15 to 24 years old) over the time: from 2000 to 2005 there was an increase of + 4.81 % points; from 2005 to 2010 the tendency changed and there was a decrease of – 2.4 %, and to conclude from 2010 to 2015 there is a new increase of + 0.19.

Total employers, refers to those workers who, working on their own account or with one or a few partners, hold the type of job defined as a “self-employment jobs” for example, jobs where the remuneration is directly dependent upon the profits derived from the goods and services produced, and in this capacity, have engaged on a continuous basis, one or more persons to work for them as employee.

In Botswana the percentage of employers represented in 2005, which is the only year with official data available, 2.7% of employment; of which 2.09% employers are female, and 3.2% are male employers.

In Namibia the percentage of employers in 2000 was 8.19% of employment; of which 10,19% represent the male employers and 6% female employers. Meanwhile in

2015, the percentage of employers significantly decreased to 4.09% of employment, of which 5% represent male employment and 3.09% female employment.

Unemployment youth total it represents the total share of youth not in education, employment or training (% of youth population). The share of youth not in education, employment or training (NEET) is the proportion of young people who are not in education, or training to the population of the corresponding age group: youth ages 15 to 24, persons ages 15 to 29 or both age groups.

The total youth unemployment in both countries is very high, in comparison between both countries is higher in Namibia, in absolute terms but also in relative terms considering the total number of youth population.

In Botswana, in 2000 the total youth unemployment was 39.9% of total labor force ages 15 to 24, of this group 35.9% correspond to male youth unemployment rate and 44.4% to the female youth unemployment rate. In 2005, the total youth unemployment rate was 37.29 (which indicate a general decrease of - 1.39% in relation to year 2000), of which 33% corresponds to male youth unemployment and 41.9% to female youth unemployment. In 2010, the youth unemployment continues to decrease up to 33% of the total labor force for the 15 to 24 years old, representing a decrease of - 6.9% in relation to 2000, of this group 26.89% corresponds to youth male unemployment and 39.59% to female youth unemployment. As for year 2015, the total youth unemployment grew up to levels of 1990 reaching 39 % of total youth. This reflects a very difficult for youth to find a job, to live independently to be economically autonomous and to start a personal life project. Of the 39% of total youth unemployed, 28.5% correspond to male youth unemployment and 39.7% to female youth unemployment.

In Namibia, the situation with the total youth unemployed, has fluctuated over time, with more critical figures than Botswana, Namibia in year 2000 had a total youth unemployment rate of 43.7% of total labor force, of which 42.09% corresponds to male unemployment and 46.09% to female unemployment. From 2000 to 2005 the situation improved substantially with a decrease of - 4, 61% points, achieving the lowest youth

unemployment rate at national level with 39.09%, of these, 35.4% corresponds to youth male unemployment and 43.09% to youth female unemployment. As for 2005, the total youth unemployment rate increase dramatically more than 5 % points in respect to 2000, of these 40.79% were youth male unemployed, and 47.79% were youth female unemployed. To conclude, on year 2015, there was 40.59 % of total youth unemployment, which represent another significant decrease in relation to 2010, of which 36.4% correspond to male youth unemployment and 43.29% to female unemployment. As we can see there is strong evidence that gender is a factor that makes females more vulnerable to be unemployed and not be able to find a job.

Total self-employed, reflects the share of total self-employment as percentage of the total employment. Self-employed workers are those workers who, working on their own account or with one or a few partners or in cooperative, hold the type of jobs defined as a “self-employment jobs” which are the ones where the remuneration is directly dependent upon the profits derived from the goods and services produced. Self-employed workers include four sub-categories of employers, own account workers, members of producers’ cooperatives and contributing family workers. There is few data in this regard in both countries, although there is a bit more information in Namibia.

In Botswana, the data related to the total and female/male self-employment is dated in 2005, and it shows that there were a total of 15.6% of total self-employed as percentage of total employment at national level. There was a representation of 18.2% female self-employers and 13.39% represent the total male self-employed.

In Namibia, the existing data on these indicators refer to years 2000, 2010 and 2015; there is no information about year 2005. Namibia has a higher rate of self-employees which means that the entrepreneur skills are already there in the nation which fluctuates around the 35% of the total population. In year 2000 there was a 35.79% of total self-employed in the country, it remain the same over the next 10 years period 2000 – 2010 (35,79%) and increases just 0.01% points during the period 2010 – 2015, reaching 36% in 2015. The percentage of total female/male self-employed in 2000 represents 42.2% of total percentage for female employed and 30.1% for male. Over the time the female percentage remained constant meanwhile there has been a

slight decrease on male percentage, by year 2010, the percentage of self-employed by gender represented 42.29% for female and 29.29% for male; over the last period of time, from 2010 to 2015, there has been a slight increase on the percentage of female (-0.81) reaching 44.79% and a slight decrease on the percentage of male (-2.09) they represent 27.2% of total self-employed male in Namibia.

Through the comparison between countries, it could be seen that in both countries there is a relatively high entrepreneur ambition. Namibia has a higher percentage of entrepreneurs than Botswana. It is particularly relevant the difference in number among gender, females in Namibia are almost 20% more likely to be entrepreneurs than men, meanwhile this difference is not that relevant in Botswana, where the difference between female and male entrepreneurs highlight a 4.81% positive difference towards women.

Employment in Industry indicator refers to the shares of total employment in the industry sector as percentage of the total employment. It provides a wide economic measure of the general type and level of skills demands in the industry sector for each country. The industry sector consist of mining and quarrying, manufacturing, construction and public utilities (electricity, gas and water) in accordance with divisions 2 – 5 (ISIC 2) or categories C – F (ISIC 3) or categories B – F (ISIC 4).

In Botswana, in year 2000 total employment in industry represented 20.89% of the total employment over the time the participation of workers in the industry sector has diminished as in 2005 the percentage was 17.5% of the total employment, representing a -3.39% decrease.

In Namibia, in year 2000 the total employment in industry represented 12.19% of the total employment, from 2000 to 2010 there was a minimal increase of (+0.31 % points) that continue for the next five years, reaching 14.39% in 2015, representing the highest rate of employment in industry.

In general terms the total employment industry rate is higher in Botswana than Namibia, as in year 2000 Botswana's percentage of employment in industry was +8.7%

points difference than Namibia, over time, in year 2010, even though the differences between countries continue the difference or gap between them have decreased up to 5%.

The next set of indicators will analyze the value added to the economy in relation to the activity sector (industry, service and agriculture) as percentage of the Gross Domestic Product for each country and in comparison between both of them. There will be an initial and general analysis over the impact of the three economic sectors on the economy and then a more specific analysis will be conducted according to each specific sector.

In Botswana, the most relevant sector for the economy has changed over time as the economy has shifted from an industrial economy to an economy where most of the activities are provided on the service sector. The distribution of the value added by sector as percentage of the national gross domestic product, as shown in the table, in 1990 there was 61.01% of the value added coming from the industry sector, 34.12% from the service sector and 48.5% from the agriculture sector. During the next time period (1990 – 2000) there was a significant change over the relevance of the different sectors over the economy, by 2005, the value added represented by industry was 50.52% (-10.49% points in comparison with year 1990), 46.42% in service (+12.3% increase in relation to 1990), and 3.04% in agriculture (-1.08% in comparison with 1990). These changing tendencies continue over the next five years 2000 – 2005. In 2005, there was a 49.03% of the GDP, coming from the industry sector added value, this percentage show a -1.49% points difference from the previous period. The service sector represented the 48.66 % of the national GDP (+2.24% points) what evidence the smooth progression of the value added by the service sector. As for the agricultural sector, during this period the value added reached a 2.304% of the GDP which show a decrease of -0.75% points in comparison with the value added in year 2000.

As for the analysis related to the value addition within the national GDP per sector for year 2010, in general terms, the changing tendency that started over the 90's decade continue, for the first time in Botswana, the value addition from service sector to the GDP was greater that the value addition from the industry sector, this is a clear

result the development process at national level, there is also a small increase in the value addition coming from the agriculture sector, which may imply that inequalities could broaden during this period. Therefore, in 2010, the industry value addition was 36.61% of the GDP -12.42% points less than year 2005, the value addition from the service sector reached 60.52% (+11.86% increase from 2005), the value addition from the agriculture sector increase a little bit (-0.55% points) as mentioned before, reaching the 2.85% of the GDP.

Within the last period of time that covers from 2010 to 2015 the situation reversed as a consequence of the decrease on the income generation at national level. This situation forced to generate again a stronger activity on the industry sector (it is important to highlight that the income generated by the national mines are included on the industry sector) there was an increase of 2.54% points on the industry value addition, reaching 39.15% of the total GDP. The service sector during this period lost -2.13% points, generating a value addition of 58.39% of the GDP. To conclude, the agriculture sector during this period contributed with 2.41% of the GDP (-0.41% points difference over 2010).

Once that the general analysis is done. The industry value addition measures the net output of the industry sector after adding up all outputs and subtracting intermediate inputs. The industry sector corresponds to International Standard Industrial Classification of All Economic Activities (ISIC) divisions 10-45 and includes manufacturing. It comprises value added in mining, manufacturing, construction, electricity, water and gas. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the international standard industrial classification revision 3.

In Botswana, the industry value addition as percentage of the Gross Domestic Product (GDP) has significantly decreased over the time up to the last available data in 2015. In 1990 the value added from industry was 61.01% of the GDP, during the next ten year period there was a -10.58 % point decrease, reaching 50.52% of the GDP in 2000. From 2000 to 2005, the decrease continue but not as significantly as before, it decreased -1.49 % points over five year, the total value added from industry to the

economy as percentage of the GDP was lower than 50% for the first time in the history of Botswana, with 49.03%. From 2005 to 2010 the decrease on the industry value added deepened with a -12.42% point loss, reaching a 36.61% of the GDP. During the last period of time, corresponding from 2010 to 2015, the value added from industry as percentage of GDP has increased + 2.54 % points reaching 39.15% of GDP.

In Namibia, the industry value addition to the GDP has fluctuated several times over the last years. In 1990 the value addition from industry was a 31.52% of the national GDP, on the next ten years there was a decrease on it, -3.57% points less at year 2000, reaching 27.95% of total GDP, by 2000 the industry value addition reached its maximum amount with 34.64% (+6.69% points difference), by 2010 there was a - 4.45 % points less, with a total value addition of 30.18% of GDP, which is the lower value addition from the industry sector in the history and finally by 2015, the industry value addition was 31.79% of GDP -1.06% points.

As for the employment in the service sector, this indicator shares the information about the total share of employment as percentage of the total employment. It provides an economic wide measure of the general type and level of skills demands in the service sector for each country. As we can see on the table, the value addition of the service sector in the economy and more specifically in its contribution to the GDP has increase its relevance since 1990 in both countries, where reflects around 60% of the added value in Botswana's and Namibia's economy.

In Botswana the service sector value addition in 1990 was 34.12% of the total GDP, that continued increasing over the next ten years, up to 46.42% (+12.3%) with an employment on the service sector of 58.2% of the total employment, this is a clear reflection of the developing process in the country during the 90's decade. By 2005 the service value added was 48.66% of the GDP (+2.24% points more), in 2010 reached its maximum amount for 60.52% of GDP (+11.86%), during the next five year period 2010 – 2015 the value addition decreased to 58.39% (-2.13% %).

In Namibia, the service sector value addition in 1990 was already over 50% of total national 58.69% of total GDP, with an increase on the next ten years 1990 – 2000



of +1.52% points reaching 60.21%, by year 2000 there was a decrease of -5.32% points, reaching 54.89% of GDP; by 2005 there was an increase of +5.65 reaching 60.54%; with an increase of +0.67% achieving its historical maximum in term of service value addition for 61.21%.

In Namibia de employment in the service sector in 2000 represented 56.09% of total employment, it slightly decrease over the last years, in 2010 the rate was 54.7% and continue constant through the time with small differences, reaching 54,2% in 2015 (-0.5% points in comparison with 2010).

The value addition from the agriculture sector in relation to the percentage added value of the GDP is in general terms, higher in Namibia than in Botswana, this indicates that Namibian developing process in progressing smoothly but it ranks behind than Botswana one.

In Botswana, by 1990 the value addition of the agriculture sector to the GDP was 4.83%, from 1990 to 2000 there was a decrease of -1.8% points, reaching a total of 3.04% of total GDP. From 2000 to 2005, the continue decrease remained for about 0.74% reaching 2.30% of total GDP. From 2005 to 2010 there was a little increase (+0.55%) reaching 2.85. From 2010 to 2015, there was another decrease about -0.41% point decrease, reaching 2.44%

In Namibia, the agriculture sector value addition was in 1990, 9.78% of the GDP, from 1990 to 2000 there was an increase of +2.04, reaching 11.82% of total GDP; in 2005, there was a small decrease of -0.49% reaching 11.32%. From 2005 to 2010 the decrease continued up to 9.27% (-2.05) and finally from 2010 to 2015, there decrease continue more predominantly up to 6.99% (2.28%).

The total employment in agriculture as % of total employment in both countries shows that in Botswana has increased over the time meanwhile in Namibia has remained constant. In Botswana, in 2000 the employment rate in agriculture was 19.7% of total employment that increased up to 26.39% in 2010 (+6.69% points more).

Meanwhile in Namibia in 2000 the employment rate was 31.1% and in 2010 remained constant, as for 2015 it increased slightly up to 31.39% (-0.29% points).

The agriculture value added, measures the value addition of the net output of the agriculture after adding up all outputs and subtracting intermediate inputs. The agriculture corresponds to ISIC divisions 1-5 and includes forestry, hunting and fishing as well as cultivation of crops and livestock production. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the Internal Standard Industrial Classification (ISIC) revision 3.

The agriculture value added as percentage of the GDP, in Botswana has decreased over the time by half, with an initial percentage of 4.8% in 1990, the value addition of the sector has been decreasing, from 1990 to 2000 there was a decrease of -1.80% points, reaching a total of 3.04% total agriculture value added; the decrease was slighter -0.74% points, achieving 2.30% in 2005; from 2005 to 2010 the tendency changed and the value addition increase +0.55% reaching the 2.8% of the agriculture value addition and finally from 2010 to 2015 there was a new decrease of -0.41% finalizing with a 2.44% value addition from the agriculture sector to the GDP.

In Namibia, the agriculture value added as percentage of the GDP has follow the same trends as Botswana one. In 1990, the agriculture added value represented 9.78% of the total GDP, the importance of the sector activity within the economy slowed down on the next ten years, from 1990 to 2000, with a +2.04% points reaching a 11.82% of the total GDP percentage, the next five years, from 2000 to 2005, were characterized by an improvement on the national economy that was translated into a decrease of the agriculture value addition. In 2005 there was a decrease of -0.49% of the total value addition from agriculture as percentage of the GDP. This decreasing tendency continues over the next period (2005 – 2010) reaching a 9.27% agriculture added value, representing -2.5% points. Finally, during the last period of time, from 2010 to 2015, the lowest level of agriculture value addition was registered in 2015, with a 6.99% of the total GDP (-2.28% points).

**The matching degree** which is the fourth parameter captures how well skills obtained through education and training corresponds to the skills required in the labor market. The indicators included are: vulnerable employment total (% of total employment), female vulnerable employment total (% of total employment), male vulnerable employment (% of total employment), wage and salary workers total (% of total employed), wage and salary workers male (% of total employed), wage and salary workers female (% of total employed), unemployed with primary education (% of total unemployment), unemployed with secondary education (% of total unemployment), unemployed with tertiary education (% of total unemployed). For the comparison of this parameter it is important to bear in mind, that there is more official information on this regard in Namibia than in Botswana.

**Table 24: Macro analysis: Matching factors in Botswana and Namibia**

	BOTSWANA					NAMIBIA					Last year of data available
	1990	2000	2005	2010	2015	1990	2000	2005	2010	2015	
<b>Matching</b>											
Vulnerable employment total (% of total employment)				12,89			27,7		34,59	32,7	2012
Vulnerable employment female (% of total employment)				16			36,2		42,59	40,79	2013
Vulnerable employment male (% of total employment)				10,19			19,89		28,2	25,39	2013
Wage and salary workers, total (% of total employed)				68,19			62,2		63,9	63,59	2014
Wage and salary workers, male (% of total employed)				70,59			67,69		70,4	72,4	2014
Wage and salary workers, female (% of total employed)				65,19			56,09		56,79	54,79	2014
Unemployment with primary education (% of total unemployment)				58,29					64,19	66,8	2012
Unemployment with secondary education (% of total unemployment)				24,39					23,39	22	2014
Unemployment with tertiary education (% of total unemployment)				6,09					2,2	1,2	2014

Source: Own elaboration

Total vulnerable employment refers to the unpaid family workers and own-account workers as a percentage of total employment. There is more official data available in Namibia than in Botswana for this indicator. In order to be able to compare data from both countries, the analysis of this indicator will focus on year 2010.

Workers in vulnerable employment are the sum of own account workers and contributing to family workers. They are less likely to have formal work arrangements, and are therefore more likely to lack decent working conditions, adequate social security and “voice” through effective representation by trade unions and similar organizations. Vulnerable employment is often characterized by inadequate earnings, low productivity and difficult conditions of work that undermine worker’s fundamental rights.

The total vulnerable employment in Botswana in 2010 (the reference year) was 12.89% of total employment which in comparative terms represents half of the existing vulnerable employment in Namibia in the same year, 34.59%.

It is interesting to notice the increase of the percentage of vulnerable employment over time in Namibia, as in year 2000; there was a 27.7% of vulnerable employment as percentage of total employment. In 2010, there was a 34.59% vulnerable employment, which represents a +6.89% in comparison with 2000. The difference between 2010 and 2015, even if It is not much significant -1.89 represents a diminish of the total percentage of the vulnerable employment (Total 32.7% of total employment).

The female vulnerable employment as percentage of the total employment represents the unpaid female family workers and own-account workers as a percentage of total employment. The data available in Botswana shows that there was a 16% of vulnerable female employment as percentage of total employment in 2000, which is -26.59 % points less than the amount in Namibia for the same year 42.59% of female vulnerable employment.

The situation in Namibia reflects clearly the gender inequalities existing in the country, as the female vulnerable employment has increased over time at national level. In year 2000 the percentage was 36.2% that increased over 6.39% in the period 2000 to 2010 reaching 42.59%. After that there was a small decrease of -1.8% from 2010 to 2015 achieving 40.79%.

The male vulnerable employment refers to the male unpaid workers and own-account workers as percentage of the total employment. In year 2000, In Botswana there was a 10.19% of total male vulnerable employment as percentage of total employment, meanwhile in Namibia, at the same time there was a 28.2% of male vulnerable employment as percentage of total employment, representing in comparative terms among countries, 18.01% difference.

In general terms it is seen on the tables there is a more prominence existence of vulnerable employment in Namibia than in Botswana, for both males and females, even though the female vulnerable employment is close to be double of male vulnerable employment in all decades.

Wage and salary workers (employees) are those workers who hold the type of jobs defined as “paid employment jobs”. The wage and salary workers are characterized to be the “paid employment jobs” where the incumbents hold explicit (written or oral) or implicit employment contracts that give them a basic remuneration that is not directly dependent upon the revenue of the unit for which they work.

The total wage of salary workers in both countries represent more than half of the active population. In Botswana, by 2010 there was 68.19% salary workers as percentage of the total employed, which is slightly higher than the existing percentage in Namibia at the same time, 63.9%, just a difference of +4.29% for Botswana.

In Namibia, as more official data is available, it is possible to do a national analysis over time. The total salary workers remain stable over time from year 1990 to 2015, fluctuating no more than +2% of total. In year 1990, there was 62.2% of total salary workers at national level, that increased in the next 10 years to 63.9% (+1.7% points), and decreases just a little bit from 2010 to 2015 (-0.31%) reaching 63.59% in total.

In general, the male wage and salary workers as percentage of total employed, is at least 10% higher than the female wage workers in both countries, this percentual difference remains all the time. In Botswana, by year 2010 the male wage or salary

workers represented 70.59% of total employed, at the same time the figure in Namibia was almost the same 72.4% (+1.81% in Namibia in comparison with Botswana). Nevertheless, the existing tendency in Namibia's tendency over time is an increasing one, as in 1990 there was 67.69% of male wage and salary workers, in 2010 there was 70.4%, (+2.71% in comparison with 1990); by 2015, the percentage of male salary workers was 72.4% of total employed (+2% in comparison with 2010).

As for the female wage and salary workers, there is a common representation among both countries. In Botswana, by 2010, there were 65.19 % of female salary workers, meanwhile in Namibia at the same time there were 56.09, without much difference over the time, as in 2010 there were 56.79% and in 2015 there were 54.79% of female salary workers.

The unemployment with primary education is the share of the total unemployed who attained or completed primary education as the highest level of their personal education attainment. It provides an economic wide measure of the general type and level of skills demands in all the economic sectors for the country according to the educational attainment. A variable percentage of unemployed people with low education (primary education) have a very significant impact on the unemployment rate variable with very high efficiency.

There is not a significant difference between the unemployment with primary education, as percentage of total unemployment in Botswana and Namibia, data shows that the unemployment in Botswana is higher than in Namibia for people who have attained primary education as the highest level of educational attainment (Botswana 2010: 58.29% of total unemployment; Namibia 2010: 64.19% of total unemployment), it also reflect the same tendency for unemployment for people with secondary education Botswana 2010: 6.09% of total unemployment; Namibia 2010:2.2% of total unemployment and tertiary education (Botswana 2010: 6.09% of total unemployment; Namibia 2010: 2.2% of total unemployment). Nevertheless, it is important to mention that even though the existing tendencies in Botswana and Namibia follow the same pattern, on one hand the unemployment rate for people who has attained primary education is +5.9% points higher in Namibia than in Botswana; and on the other hand,

the unemployment rate for people who has attained tertiary education is 3.89% points lower in Namibia than in Botswana, which makes it clear that in Namibia the higher education attainment each individual has, the most chances they have to get a job.

The analysis by country shows very clearly that on one hand Botswana case, held the highest ratio of unemployment correspond to those people who have as highest level of educational attainment primary level (58.29%), followed by secondary education attainment (24.39%) and finally tertiary education attainment (6.09%) in year 2010. On the other hand, the Namibia case, show a similar scenario, where the highest ratio of unemployment in 2010 corresponds to people with primary education (64.19%) as the highest level of educational attainment, followed by secondary education (23.39%) and finalizing with a small representation of tertiary education (2.2%)

The final parameter refers to **the outcomes** which reflect the impact of skills on economic performance and employment and social outcomes, the indicators associated to this parameter are the following ones: GDP growth (annual %), foreign direct investment, net inflows (BoP, current US\$), labor force total, labor force with primary education (%of total), labor force secondary (% of total), labor force with tertiary education (% of total), primary education completion rate (both sexes), out of school children (000) school year ending in, out of school adolescents (000) school year ending in, employment in agriculture female (% of female employment), employment in agriculture male (% of male employment), employment in service female (% female employment), employment in service male (% male employment), employment in industry female (% female employment), employment in industry male (% male employment). There is also two supplementary indicators: infant mortality rate (per 1000 live births) and prevalence of HIV (% post 15 - 49).

Table 25: Macro analysis: Outcomes in Botswana and Namibia

Outcomes	BOTSWANA					NAMIBIA					Last year of data
	1990	2000	2005	2010	2015	1990	2000	2005	2010	2015	
GDP growth (annual %)	6,772	1,9877	4,5566	8,594	4,178	3,92	3,488	2,528	6,2735	5,0164	2012
Foreign direct investment, net inflows (BoP, current US\$)	95889963	57176113,3	486640085	136063065	393180125	29567264,7	118862678	187933802	75514065,1	493302263	2014
Labor force total	560404	804207	912587	1047659	1155963	446037	638512	749086	831057	901859	2014
Labor force with primary education (% of total)				49,5					24,89	57,29	2013
Labor force secondary (% of total)				17,5					53,9	23,39	2013
Labor force with tertiary education (% of total)				15,89					8,6	6,69	2013
Primary education completion rate (both sexes)	88,5	89,11	96,46		97,72		91,177	82,365	81,233	85,371	2012
Out of school children (000) school year ending in		64					41		43		2011
Out of school adolescents (000) school year ending in		18					11				2000
Employment in agriculture, female (% of female employment)		17		21,29			29,1		29,89	30,89	2014
Employment in agriculture, male (% of male employment)		21,89		30,7			32,79		32,29	31,89	2014
Employment in services, female (% of female employment)		67,4		68,5			6,69		5,4	5,3	2014
Employment in services, male (% of male employment)		50,7		45,59			17,2		18,89	23,6	2014
Employment in industry, female (% of female employment)		14,1		10,3			6,69		5,4	5,3	2014
Employment in industry, male (% of male employment)		26,29		23,6			17,2		18,89	23,6	2014
Supplementary indicator: Prevalence of HIV (% post 15-49)	6,7	28,2	25,7	23,7	23	1,6	48	42,4	31,1	28,3	2014
Supplementary indicator: Infant mortality rate (per 1000 live births)	54,2	54,6	45,7	43,6	41	73,5	48	42,4	31,1	28,3	2012

Source: own elaboration

As point of departure, it is considered the perspective that consider that Technical Vocational Education and Training education is a prominent factor in the education system and the national economy in the developing countries, as it links the labor market demand with the supply offer by the education system through the development of transferable and technical skills in students, and therefore will have a key function in labor market policies.

Such policies are an essential component of the societal measures taken to manage the social risks and social vulnerability. This research study consider that the social benefits provided by TVET education at a) societal and b) individual level should be connect with broader discussions about the social-economic impact of education.



In our view, the social function of TVET goes beyond employability and economic development, which comprise the dominant issues in the current discussions on TVET policies. It should be also considered a key element for developing more inclusive and responsive societies, by expanding the education and training activities beyond traditional students to a wider range of citizens and therefore developing a wider range of learning environment, that are reflected on the last set of indicators of the output parameter.

The Gross Domestic Product (GDP) annual growth (%) provides a measure of the overall economic size of each country, its annual growth and the potential resources available for skills development. In general terms both countries have followed the same patterns over time. There was an significant increase in the GDP annual growth in Botswana and Namibia starting on 1990 that ended around year 2000, then the tendency was reduced but the annual growth of the GDP continue growing.

In Botswana, by 1990 the GDP annual growth was 6.72%, during the period 1990 to 2000. By year 2000, the annual GDP growth was 1.98% which shows that from 1990 to 2000 even the economy slow down a little bit continue growing. From 2000 to 2005, the economy grows with a higher speed, achieving a 4.55% GDP annual growth in 2005. This percentage almost double by 2010 when the GDP growth was 8.59% annually, representing the highest level in the Botswana's history. From 2010 to 2015 the economy slow down again even though still growing, it reach a 4.18% growth in 2015.

In Namibia, the GDP growth in 1990 was 3.92% that remained almost stable during the following period, from 1990 to 2000 reaching 3.44% of the annual growth. By 2005 the GDP growth decrease a little in comparison with year 2000 with a 2.52% annual growth (-0.92% points difference). During the next five year period the economy grew substantially as it was reflected on the GDP growth, by 2010 the GDP growth annual was 6.27% (+3.75% points more than 2005); and finally by 2015 the economy growth at a 5.01% annually, which represent a slow down process on the national economy growth (-1.26% points).

Foreign Direct investment refers to direct investment equity flows in the reporting economy. It is the sum of equity capital, reinvestment of earning and other capital. Foreign direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. Ownership of 10 percent or more of the ordinary shares of voting stock is the criterion for determining the existence of a direct investment relationship. Data is normally in US dollars.

In Botswana the foreign direct investment in 1990 was over 95 million US\$ that relevant amount of money decreases over the following ten years, reaching 57 million US\$ in 2000, almost half of the FDI existing ten years before. Nevertheless there was an immense increase on the foreign direct investment from 2000 to 2005, as it reached 486 million at that time 2005, latter on there was another decrease, once again, in 2010, it diminished up to 136 million dollars. To conclude the final period 2010 - 2015, the foreign direct investment increased again and reached 393 million US\$.

In Namibia, the foreign direct investment at the starting point 1990, was over 29 million US\$, from that moment on words and during the next 15 years, the FDI kept raising with a significant amount. By year 2000, the foreign direct investment was 118 million US\$, which meant that during 10 years the FDI was quadruplicated, by 2005, the foreign direct investment achieve 187 million US\$. After that moment there was a decrease, in 2010 the foreign direct investment was reduced up to 75 million US\$. To conclude the final period from 2010 to 2015 the FDI started to be increased once again and reached a 493 million US\$ in 2015.

Labor force total, comprises people ages 15 and older who meet the International Labor Organization definition of the economically active population: all people who supply labor for the production of goods and services during a specified period. It includes both the employed and the unemployed. The total labor force includes the armed forces, the unemployed and first-time job-seekers, but excludes homemakers and other unpaid caregivers and workers in the informal sector.

In Botswana the total labor force, has increase over the years, following the same pattern as the increase in the total population at national level. In 1990, the total labor force existing in Botswana were 560.404 persons, that increase substantially during the next ten years (+243.803) reaching a total amount of 804.207 persons in year 2000. From 2000 to 2005 the increase continued for an amount of (+108.380 persons) reaching a total of 912.587 persons. The tendency continues, and by 2010 it was reach an amount of 1.047.659 persons. By 2015, the highest amount of total labor force was reached with 1.155.963 persons, representing more than double of the initial total labor force in 1990.

In Namibia the total labor force, has increase since 1990, progressively through the years, as Botswana did. In 1990, there was 446.037 persons conforming the total labor force, during the following 10 year period (1990-2000) there was an increase of (+192.475 persons) reaching a total of 638.512 persons. This tendency continued so that in year 2005; the total amount was 749.086 persons representing a+ 110.574 persons more in comparison with the previous period. From 2005 – 2010 the increase represented was +81.971 persons, achieving 831.057. Finally by 2015, the total labor force existing at national level was 901.859 persons (+70.802 persons more).

Labor total force participation is the rate reflects the proportion of the population that is economically active. It refers to all people who supply labor for the production of goods and services during a specified period.

Labor force with primary education (% of total) is the share of the total labor force that attained or completed primary education as the highest level of education. Refers to all people who have attained primary education who supply labor for the production of goods and services during a specified period

Labor force with secondary education (% of total) is the share of the total labor force that attained or completed secondary education as the highest level of education. Refers to all people who have attained secondary education who supply labor for the production of goods and services during a specified period.

Labor force with tertiary education is the share of the total labor force that attained or completed tertiary education as the highest level of education. Refers to all people who have attained tertiary education who supply labor for the production of goods and services during a specified period.

There is not much official data about these indicators neither for any of both countries. Meanwhile in Botswana the data available refer to 2010, in Namibia, the data available refers to 2010 and 2015.

In Botswana in 2010, the major percentage of labor force was linked to people with primary education, which means that almost 50% of the total labor force has primary as their highest level of educational attainment, (49.5%). The representation of the labor force with secondary education as percentage of total is 17.5%; and 15.89% with tertiary education.

In Namibia in 2010, the biggest proportion of the labor force is represented by people with secondary education as highest educational attainment 53.9% of total, followed by a 24.89% of total labor force with primary education, and a 8.6% of total labor force with tertiary education. During the period 2010 – 2015, the situation changed and by 2015, there was a shift on the biggest proportion of the labor force, at this moment there was a 57.29% of the total labor force with primary education, a 23.39% of total labor force with secondary education, and a 6.69% of total labor force with tertiary education.

Primary completion rate (both sexes), represents the total number of new entrants in the last grade of primary education, regardless of age, expressed as percentage of the total population of the theoretical entrance age to the last grade of primary. This indicator monitors education system coverage and student progression. It is intended to measure human capital formation and school system quality and efficiency. The ration can exceed 100% due to over-aged and under-aged children who enter primary school late/early and/or repeat grades.

In Botswana, the primary completion rate, in 1990 was 88.5% and over the time has constantly increase, by 2000 the primary completion rate increase (+0.61% points) reaching 89.11%. By 2005 the completion rate was 96.46% (+7.35% more than the previous period 2000) which was the highest increase in absolute number. Finally in 2015 the primary completion rate reached its highest level with 97.72% of total (+1.26 in comparison with 2005).

In Namibia, the primary completion rate started in 1990 with a higher percentage 91.17% in comparison with Botswana (88.5% in 1990), but it has follow the reverse tendency, over time the primary completion rate in Namibia has decrease progressively, showing a decrease of the efficiency and quality of the education system. by year 2000, the primary completion rate represented the 82.36%, (-6.14% points less than 1990), this decreasing tendency continued, in 2005, the primary completion rate reached 81.23% (-1.13% points in comparison with year 2000), and the final data available, from 2015, shows that in 2015, the primary completion rate was 85.37% which meant that the system started gaining efficiency and quality again, as there was a +4.13% points more than in 2010.

Out of school children (000) refers to the number of out-of school children in thousands by school year ending in a particular year. The definition of "out-of school" encompasses a wide range of realities and refers to children who: do not have access to a school in their community, do not enroll despite the availability of a school, enroll but later than they should have, enroll in schools that have poor facilities, no teachers, drop out of the education system, enroll but do not attend school.

There is almost no official information on this regard in order to do a deep analysis of the situation, neither for Botswana nor for Namibia, nevertheless we will analyze the data available as this indicator is crucial to measure how the national efforts to provide free and compulsory education have a real impact within the wide range of realities existing within the country that affect children.

In year 2000 Botswana had 64.000 children out-of school which was a higher number than the existing out-of school children in Namibia at the same time 41.000. It is important to mention that the situation in Namibia worsen during the period 2000 to

2010 as the number of the out-of school children by 2005 was 43.000, which represented 3.000 children out-of school more than in 2000.

Out of school adolescents (000) represents the number of out-of school adolescents in thousands by school year ending in a particular year. The incidence of out-of school adolescents relates to a wide range of realities and refers to adolescents who do not have access to a school or technical vocational and training center in their community, do not enroll despite the availability of a school or enroll but later do not attend school. The number of out-of school adolescents in 2000, which is the only available data for both countries, was 18.000 in Botswana and 44.000 in Namibia.

Employment in agriculture, as percentage of total employment. It refers to the group of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. The agriculture sector consists of activities in agriculture, hunting, forestry and fishing, in accordance with division 1 (ISIC 2) or categories A-B (ISIC 3) or category A (ISIC 4). This indicator is being disaggregated by gender (female / male).

In Botswana the gender distribution of employment in agriculture is done as it follows: In 2010, there were 17 % of females employed in agriculture as percentage of total female employment; and 21.89% of males employed in agriculture as percentage of total male employment. Over time, the distribution increased a little bit, as by 2010, there were 21.29% of females employed in agriculture as percentage of total female employment (which represent a +4.29 % points increase) and there were a 30.7% males employed in agriculture as percentage of total male employment (+8.81% increase).

Meanwhile in Namibia, in year 2000, there were 29.1% females employed in agriculture as percentage of total female employment, what represents a significant difference with the existing percentage in Botswana at the same time (12.1% points higher female participation in agriculture in Namibia) and there were 32.79% males employed in agriculture as percentage of total male employment (10.9% points difference among the male participation between Botswana and Namibia for year 2000).

The situation in Namibia in 2010, continue almost equal than previously, the female employed in agriculture was 29.89 % of total employment (0.79% points difference between 2010 and 2000) and the male employed in agriculture represented the 32.29% of total male employment (2.4% points difference between 2000 and 2010).

Employment in service, as percentage of employment. Employment in service is defined as persons of working age who were engaged in any service activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to temporary absence from a job, or to working-time arrangement. The services sector consist of wholesale and retail trade and restaurants and hotels, transport, storage, and communications, financing, insurance, real estate and business services, and community, social and personal services in accordance with divisions 6-9 (ISIC 2) or categories G-Q (ISIC 3) or categories G-U (ISIC 4).

In Botswana, in 2000, there was a 67.4% of female employed in services as percentage of total female employment, meanwhile the percentage of male employed in services was 50.7% of total employment. as time went by the percentages slightly changed for both genders, in 2010, there was a 68.5% of female employed in services (+1.1% point increase since 2000) and 45.59% male employed in services, representing a decrease of about -5.11% points from 2000 to 2010.

In Namibia, in 2000, the total female employed in services was 17.2% of total female employment, meanwhile there was a 6.69% of males employed in services as percentage of male total employment. By 2010, the percentage of female and male participation on the service sector slightly changed; there was a 18.89% of female employed in service (+1.69% points more than 2000) and 5.4% male employed in service (-1.29% points less than 2000).

As for the employment at the industry sector, it refers to the percentage of working age people who are engaged in an industrial activity. The analysis will be disaggregated by gender. Employment at the industry sector refers to the persons of working age who were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period or not at work due to

temporary absence from a job, or to working-time arrangement. The industry sector consists of mining and quarrying, manufacturing, construction, and public utilities (electricity, gas, and water) in accordance with divisions 2-5 (ISIC 2) or categories C-F (ISIC 3) or categories B-F (ISIC 4).

By 2000, Botswana had a 14.1% female employed in industry as percentage of total female employment; and 26.29% male employed in industry as percentage of total male employment; over time the difference in both male and female participation in industry diminished, as by 2010 there was a 10.3% female employed in industry (-3.8% points less in comparison with 2000) and a 23.6% of male employed in industry (-2.69% points less in comparison with 2000).

As for Namibia, the situation in 2000, followed the same pattern than Botswana, there was much more significant representation of male employed in industry which was 17.2% of total employed males, rather than females employed in the industry sector 6.69% of total female employment. by 2010 there was not much difference on the participation and employment rate by gender. At that time there was a 18.89% male employed as percentage of total male employment ( +1.2% difference ) and 5.4% female employed as percentage of total female employment (-1.29 difference).

Incidence of poverty refers to the proportion of families or individuals whose annual per capita income falls below the annual per capita poverty threshold. It is the share of population whose income or consumption is below the poverty line, that is, the share of population that cannot afford to buy a basic basket of goods. This indicator won't be used on the study and therefore during the analysis, due to the lack of available data existing for both countries on this regard, despite it is considered to be a good indicator to be included on the outcome parameter, it has been impossible to include it within the study research.

There are two supplementary indicators: prevalence of HIV (% post 15 to 49 years old) and Infant mortality rate (per 1000 live births) that complete the outcome parameter, that is why both of them have been included on the analysis.



Prevalence of HIV (% post 15-49) refers to the percentage of people ages 15 – 49 that are infected with HIV. The human immunodeficiency virus (HIV), which causes AIDS, varies in prevalence from nation to nation. The HIV pandemic is most severe in Sub-Saharan Africa. Over 60% of all people living with HIV reside within the region. As mentioned before Botswana ranks the third highest HIV prevalence in the world with 23% of its total national population in 2015, according to the World Bank data. Nevertheless, Botswana has demonstrated a strong national commitment in responding to its HIV and AIDS epidemic. It has been the first Sub-Saharan African country to provide universal free antiretroviral treatment to people living with HIV, The impact of the treatment program it has been visible over the last years, new infections have decreased significantly over time.

In 1990 Botswana prevalence of HIV as percentage of population aged 15 to 49 years old, was 6.7%, during the next decade, from 1990 to 2000, the pandemic spread incredibly fast over the population, by 2000, the percentage of HIV infected people multiplied by four, reaching a total of 28.2% of the total national population between 15 and 49 years old, this meant that more than 1 over 4 people was HIV affected (+21.5% in 10 years difference). The prevalence of HIV have diminished progressively since then, in 2005, there was 25.7% of total population with HIV (-2.5% points less than 2000); by 2010 the prevalence of HIV in the country was 23.7% (-2% decrease) and finally by 2014 the last official available data, the HIV prevalence was 23% of people aged 15 to 49 years old.

Namibia's first case of HIV infection was reported in 1986. Consequently and in line with guidelines from the World Health Organization (WHO), the government adopted a surveillance system for assessing the epidemic in 1992. Namibia has a generalized epidemic, where HIV is primarily transmitted through heterosexual and mother-to-child transmission (MTCT).

In Namibia, the HIV prevalence in 1990 represented 1.6% of total population aged from 15 to 49 years old, there was an drastic increase from 1990 to 2000 as it also happened in Botswana, when the percentage of the HIV prevalence in Namibian population increase almost 10 times reaching 10.2% (9.6% points) in year 2000. The

situation continue increasing over time, as in 2005 there was 11.8% of HIV prevalence, and 13.3% by 2010 and finally in 2014, the last time with official available data the HIV prevalence was 16% of total population aged 15 to 49 years old, which represents around 260.000 people. According to Namibian Ministry of Health and Social Services the estimation prospects for 2017, indicate a further increase over 273.000 of HIV infected people and over 296.000 people by 2020 (Ministry of Health and Social Services, 2015).

Infant mortality rate (per 1000 live births) refers to the number of deaths of children under one year of age per 1000 live births. Infant mortality refers to deaths of young children typically those less than one year of age.

In General both countries have decrease the infant mortality rate significantly since year 1990. In Botswana at that time there were 54.2 infant deaths per 1000 live births, the situation get worse over the period 1990 to 2000, reaching the highest amount of infant mortality in 2000, when there were 54.6 infant deaths per 1000 live births. since that year the situation improve substantially, by 2005 there were 45.7 infant deaths for 1000 live births which represented a decrease of 8.9 thousand infant deaths a year, the decreasing tendency continued and in 2010 there were 43.6 infant deaths per 1000 live births, by 2015 the amount of infant mortality was 23 per 1000 live births.

In Namibia, the situation in 1990 was much worse in comparison with Botswana the infant mortality existing was 73.5 deaths for 1000 live births, which was 19.3 points higher in Namibia. The situation improved radically, from 1990 to 2000 with a decrease of almost half of the existing deaths (-25.5 points less) reaching 48 deaths per 1000 live births. By 2005, the decrease continued reaching 42.4 deaths per 1000 live births, in 2010 the amount of deaths per live births was 31.1 (-11.3 point less). In 2015, it was reached the lowest infant mortality rate with 28.3 deaths per 1000 live births in history. The reduction of infant deaths between 1990 and 2015 in absolute terms is -45.2 children for each 1000 live births, which represents and incredible improvement.

## 9.1.2 Quantitative analysis

### 9.1.2.1. *Socio-Demographic variables*

The quantitative analysis conducted present an initial description report about the socio-demographic variables of the research study. All the data collected from the social impact perception questionnaire is included in Annex 8: Social impact perception database.

Firstly, there is a specific description about the participant's age, the number of students by gender, nationality of origin, TVET center of study, and sector of study (trade). Secondly, there is a complementary description about the status of the households and family situation of the students, describing the family composition, the number of adults and children living in the households, the level of education or training attained by each student and their employment status or situation prior to the enrolment on the Technical and Vocational Education and Training project named 'BEAR project'; Moreover it is also described, the source of family income and the living standards perception that each of one have in relation to their own life.

The situation of the TVET centers and a comparative overview of the participants on the BEAR program in relation with the total number of students undertaking the same studies at national level is provided in order to have a clear picture of the overall scope of the research study. In Botswana there are 264 TVET providers accredited, with a total of 2068 programs accredited (BOTA, 2010). In Namibia there are 43 TVET providers accredited at national level, with 975 programs accredited in total.

As for the total students in the selected trades, in Botswana the total number of students in the tourism sector is 583 at national level, of whom 85 are participating on the BEAR program; meanwhile in Namibia the total number of students in the selected sector is 26, all of them are participating on the BEAR program. Therefore eventhough the data and number of questionnaires obtained are significantly fewer in Namibia than

Botswana, the reality is that the sample covered by the questionnaires in Namibia is broader than the Botswana one, as it copes with 100% of the national students that are participating on TVET programs for that specific trade.

**Table 26: Total number of TVET students at national level and within the BEAR program on the selected trades by country**

Total Number of Students	Country of Origin	Country of Origin		Total
		Botswana	Namibia	
At national level - in the selected trade	Frequency	583	26	609
Total				
Within the BEAR program in the selected trade - total	Frequency	85	26	111
Absolute percentage of participation at the BEAR in relation to the total students on the same trade at national level		14.57%	100%	18.22%

Source: Own elaboration from data collected from NTA (2016) and BOTA (2010).

In order to get to know the participant's average age from all students in this study, we have registered the information about 111 different subjects, the total average age for the students is 26.31 years old with a typical deviation of 4,1 with a minimum of 19 years old and a maximum of 44 years old. As for the participant's average age in each country, in Botswana there are 80 participants with an average age of 26.81 years old and a standard deviation of 4.17; the youngest person is 19 years old and the eldest is 44 years old. In Namibia, there is a total amount of 25 participants with an average age of 24.72 years old, with a typical deviation of 3.53 the youngest is 19 years old and the oldest is 32.

**Table 27: Comparative age descriptor: Botswana and Namibia**

<b>Descriptive Statistics</b>					
	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Typical Deviation</b>
<b>Age</b>	105	19	44	26,31	4,17
<b>Age - Botswana</b>	80	19	44	26,81	4,25
<b>Age - Namibia</b>	25	19	32	24,72	3,53

Source: Own elaboration from collected data (questionnaires).

There is a total of 111 participants of the questionnaires, the highest percentage of participation belongs to Botswana, which has 85 subjects representing 76.6% of this research student sample, from this group, there are 68 women (61.3%) and 17 men (15.3%); In Namibia there are a total of 26 participants representing the remaining 23.4% of the total sample. In this country, the female participation is higher with 16 female students (14,4%) and 10 male participants (9%); Therefore, in general, the female participation is higher, with 84 women (75.7%), than men (24.3%).

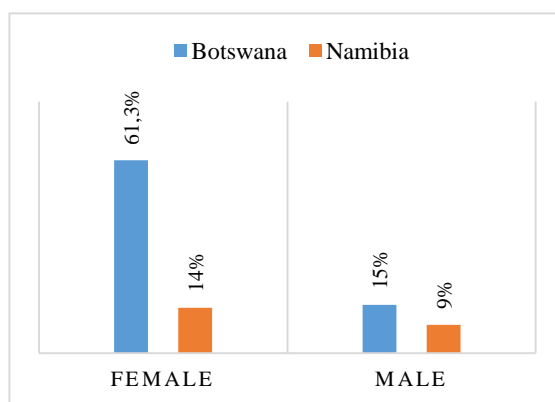
**Table 28: Participants by gender and country of origin**

<b>Gender</b>		<b>Country of Origin</b>		<b>Total</b>
		<b>Botswana</b>	<b>Namibia</b>	
<b>Female</b>	Frequency	68	16	84
	Percentage	61,3%	14,4%	75,7%
<b>Male</b>	Frequency	17	10	27
	Percentage	15,3%	9,0%	24,3%
<b>Total</b>	Frequency	85	26	111
	Percentage	76,6%	23,4%	100%

Source: Own elaboration from collected data (questionnaires).

The distribution of participants by gender in general terms is shown on the table below.

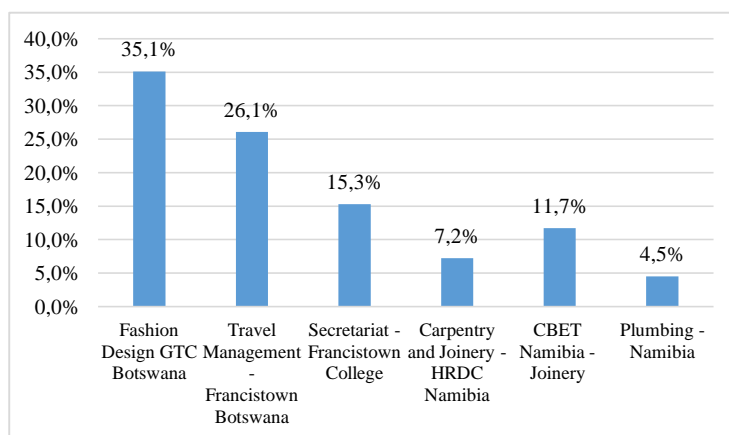
**Graph 4: Participants by gender and country of origin**



Source: Own elaboration from collected data (questionnaires).

As for the fields of study (trades/sectors), as it is shown in the graph below, these trades are classified into 6 groups: a) Fashion Design; b) Travel Management; c) Secretariat; d) Carpentry and Joinery; e) Joinery; f) Plumbing.

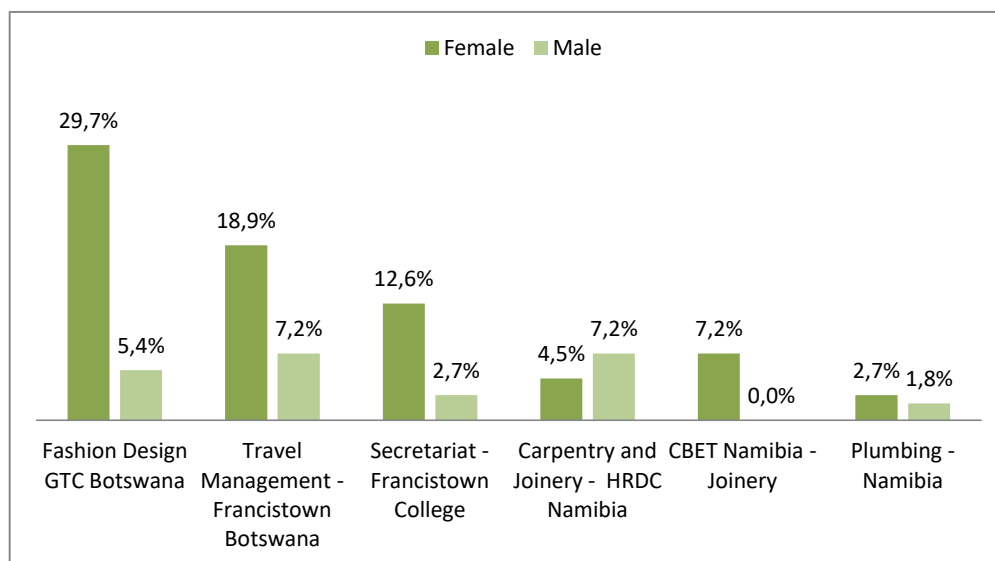
**Graph 5: Participation within the different TVET trades by centers**



Source: Own elaboration from the data collected (questionnaires)

The distribution of the by fields of study (trades/sectors) disaggregated by gender is represented below.

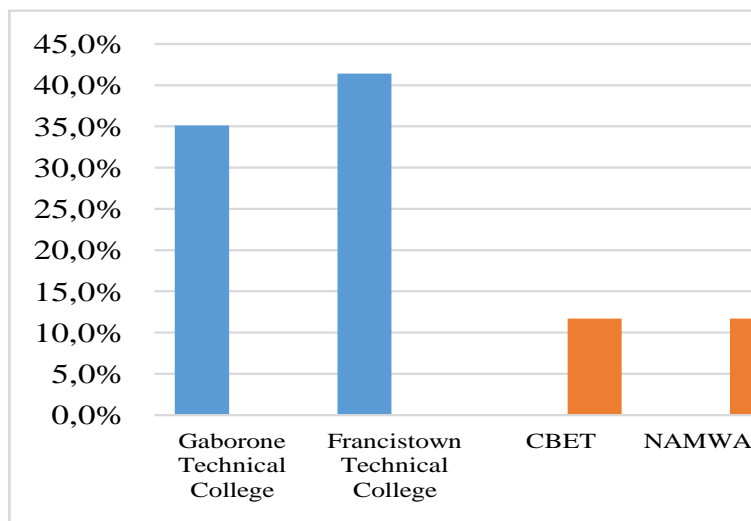
**Graph 6: Participation within the different TVET trades by gender**



Source: Own elaboration from collected data (questionnaires).

In relation to the fashion design sector- Botswana GTC host most of the students or participants with 35.1% of the sample, of which 29.7% are women and 5.4% are men; the Travel Management sector - Francistown Botswana is at the second position in participation with 26.1% of the sample, of which 18.9% are female and 7.2% are male; The Secretariat sector - Francistown College has a 15.3% stake ranking at the third position, of which 12.6% are women and 2.7% are men. As regards to the other sectors, CBET Namibia – Joinery has a 11.7% stake, of which 4.5% are women and 7.2% men. Carpentry and Joinery Industry at HRDC Namibia holds a 7.2% participation just from women. The sector that holds the less participation rate of the sample is plumbing with 4.5% of the total, of which 2.7% are women and 1.8% men.

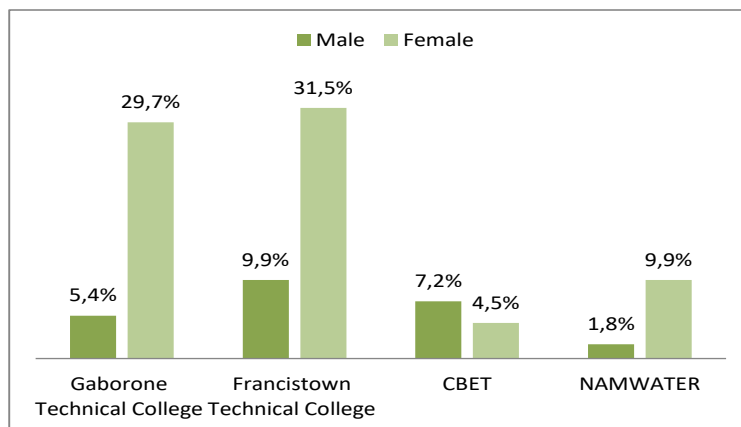
**Graph 7: Enrolment at the TVET centers by country**



Source: Own elaboration from collected data (questionnaires).

The enrolment distribution on the different TVET centers by gender is shown on the graph below.

**Graph 8: Enrolment at the TVET centers by gender**



Source: Own elaboration from collected data (questionnaires).

In relation to the student's participation within the centers, as it can be expected, there is more involvement in Botswana, its two centers are those with a larger group of subjects. At the Francistown Technical College there are attending 41.4% of all participants, of which 31.5% are women and 9.9% of men; at the Gaborone Technical College there is a 35.1% students' participation, of which 29.7% are women and 5.4%



men. In Namibia, there are two centers; both of them have 11.7% stake, however, in Namibia CBET there is a 4.5% female enrollment and 7.2% male enrolment; the Namibia NAMWATER center host a 9.9% share of women and 1.8% share of men.

As it has been previously mentioned, the second part of the socio-demographic description is focused on the student's households situation.

#### a) People living in the households

**Table 29: Number of people living in the households in total**

<b>Descriptive Statistics</b>				
	Minimum	Maximum	Mean	Typical Deviation
<b>Children</b>	0	24	3,98	3,63
<b>Adults</b>	1	11	4,54	2,71

Source: Own elaboration from collected data (questionnaires).

In relation to the number of people living in the houses, we find that there are 9 missing data. Regarding the valid data, the average in the case of adults is 4.54 with a standard deviation of 2,74; in the case of children the mean is 3.98 with a standard deviation of 3.61. The minimum number of adults living at the households is 1 and 0 children, and the maximum is 24 for children, and 11 for adults.

**Table 30: Number of people living in households by country**

<b>Country</b>	<b>People living in the houses</b>	<b>Descriptive Statistics</b>			
		Minimum	Maximum	Mean	Typical Deviation
Botswana	Children	0	24	4,05	3,97
	Adults	1	11	4,63	2,76
Namibia	Children	0	8	3,77	2,4
	Adults	1	11	4,27	2,61

Source: Own elaboration from collected data (questionnaires).

Noting the information from the number of people living in households by country, it is clear that in Botswana, the average number of children living in the households is 4.05 with a standard deviation of 3.97, with a minimum value of 0 children and a maximum of 24 within a household, this case refers to a family where the grandmother is taking care of all grandsons -24- as their respective daughters died due to the VIH-AIDS pandemic; the average number of adults is 4.63 with a standard deviation of 2.76, and a existing minimum of 1 adult and a maximum of 11 within the household.

In Namibia the average number of children living in households is 3.77 with a standard deviation of 2.4, a minimum of 0 and a maximum of 8. And the average adult per household is 4.27 with a standard deviation of 2.61, a minimum 1 and a maximum of 11

#### **b) Highest level of education attained**

With respect to the highest level of educational attained by the participants prior to joining the TVET program, we have registered 109 valid data, of which 64.2% of the participants have a tertiary education level (50.5% of them are women and 13.8% men). The average age of the participants in this group is 27.08 years old with a standard deviation of 4.36 and wherein the average number of children per household is 2.47 with a standard deviation 5.28.

The second level where most subjects are located is in upper secondary education (ISCED 3) with 15.6% of the total share, (from which 13.8% are women and 1.8% men), the average age is 24,41 years old with a standard deviation of 3.46 and with an average of 4 children per household with a standard deviation of 2.26.

In the third position, with 11.9% of the total share, we find participants with post-secondary education, including pre-vocational education but not tertiary (ISCED 4), of these, 8.3% are female, and 3.7% male; It has an average age of 25.62 years old and a standard deviation of 2.75 and with the highest average number of children per

household (4.54) with a deviation of 6.21; Finally, there is a 8,1% of individuals who have a secondary education (ISCED 2), of which 2.8% are women and 5.5% men, the average age in this group is 25.38 years old with a standard deviation of 4.80; and with an average of 3.67 children per household and a standard deviation of 2.

**Table 31: Highest level of education attained from students by country**

Country	Highest level of education attained	Frequency	Percentage	Age	Children living at households
Botswana	ISCED 3	7	8,4%	M=23,86 SD=4,59	M=2,71 SD=1,6
	ISCED 4	10	12,0%	M=26,50 SD=2,41	M=5,7 SD=6,68
	Tertiary Education	66	79,5%	M=27,23 SD=4,36	M=3,98 SD=3,55
	Total	83	100%		
Namibia	ISCED 2	9	34,6%	M=25,38 SD=4,8	M=3,67 SD=2
	ISCED 3	10	38,5%	M=24,8 SD=2,61	M=4,9 SD=2,28
	ISCED 4	3	11,5%	M=22,67 SD=1,52	M=0,67 SD=1,15
	Tertiary Education	4	15,4%	M=24,75 SD=4,27	M=3,50 SD=2,64
	Total	26	100%		

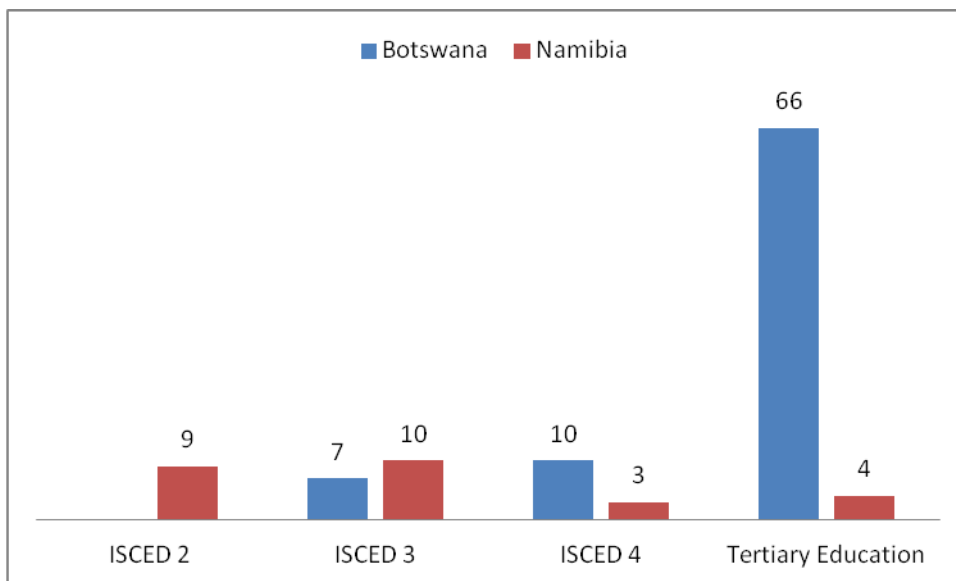
Source: Own elaboration from collected data (questionnaires).

As per the different levels of education attainment for the participants on the TVET program from each country, as it appears in the table above, we note that in Botswana the participants are divided into three of the established educational levels. There are 7 students which represent 8.4% of the total stake in ISCED 3, these students have an average age of 23.86 years old with a standard deviation of 4.59 years; the number of average children per household within this group is 2.71 with a standard deviation of 1.6.

There are 10 participants, representing 12% of total stake in ISCED 4, with an average of 26.50 years old and a standard deviation of 2.41 years. The average number of children within the household of this group is 5.7 with a standard deviation of 6.68.

In addition to this, there are 66 participants, representing the majority of the sample (79.5%) whose highest education attainment correspond to tertiary education, with an average age of 27.23 years old and a typical deviation of 4.36 years old, the average number of children within this household group is 3.98 with a standard deviation of 3.55.

**Graph 9: Highest level of education attained by country**



Source: Own elaboration from collected data (questionnaires).

As it is show on the graph above, that the results in Namibia are unlike to Botswana, participants are distributed more evenly in the four established educational levels. There are 9 participants, representing 34.6% of the total sample in ISCED 2, with an average age of 25.38 years old, and a standard deviation of 4.8years; participants from this group have an average of 3.67 children within their households with a standard deviation of 2.

As for the students within ISCED 3, there is 10 participants, representing 38.5% of the sample with an average age of 24.8 years old and a typical deviation of 2.61. The average number of children per household for this group is 4.9 with a typical deviation of 2.28 To conclude within ISCED 4, there are 3 individuals, representing 11.5% of the total stake, with an average of 22.67 years old and a typical deviation of 1.52 years; the average number of children per household within this group is 0.67 with a typical

deviation of 1.15. As for the last educational level or segment represented by the participants whose highest educational attainment corresponds with tertiary education, there are 4 individuals, representing 15.4% of the total sample, with an average of 24.75 years old and a typical deviation of 4.27; the average number of children per household is 3.5 with a typical deviation of 2.64.

### c) Employment situation

**Table 32: Employment situation before joining the TVET program in total**

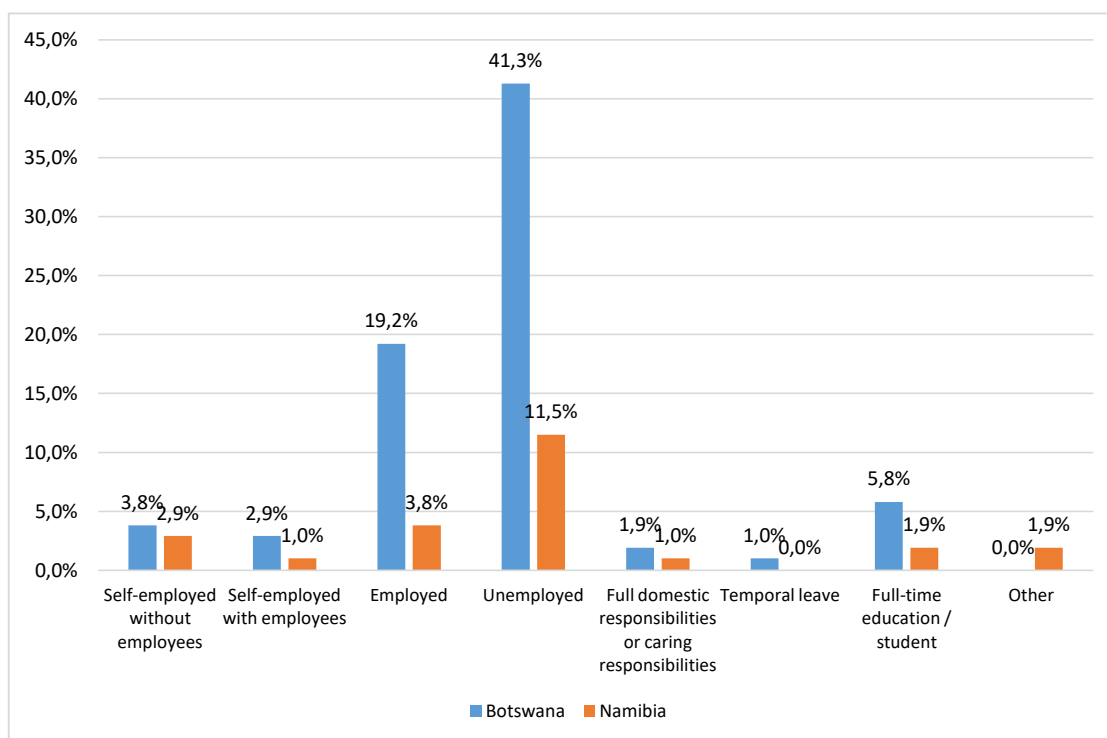
<b>Employment situation before joining the program</b>	<b>Frequency</b>	<b>Percentage</b>	<b>Age</b>
Self-employed without employees	7	6,7%	M=30,57 SD=7,06
Self-employed with employees	4	3,8%	M=25,75 SD=1,70
Employed	24	23,1%	M=28,85 SD=4,27
Unemployed	55	52,9%	M=25,34 SD=3,34
Full domestic responsibilities or caring responsibilities	3	2,9%	M=25 SD=0,0
Temporal leave (i.e. parental leave, sabbatical leave)	1	1,0%	M=24 SD=0,0
Full-time education / student	8	7,7%	M=25,75 SD=3,84
Other (i.e. retirement / inability to work)	2	2,0%	M=21 SD=0,0
<b>Total</b>	<b>104</b>	<b>100%</b>	

Source: Own elaboration from collected data (questionnaires).

Moreover, in relation to the existing employment status/situation before entering to the TVET program (BEAR project), there is a 61.53% of subjects who did not work or have not defined their working prior status and 37.5% who have had an occupation that allow them to earn income. In order to describe the specific reality, we find that most of the participants were unemployed (52.9%) of which 40.4% are women and 12.5% men, and 41.3% are from Botswana and 11.5% of Namibia, this group holds an average age of 25.34 years old, with a standard deviation of 3.34; the minimum frequency refers to the temporary leave (1%) which is associated with the profile of a

24-year old woman from Botswana. As for the other work situations there is a 6.7% self-employed with no employees, of which 2.9% are female and 3.8% are male; 3.8% are from Botswana and 2.9% from Namibia; the average age of this group is 30.57 years old with a standard deviation of 7.06 The next group represent is the one related to the self-employed with employees which represent a 3.8%, of these, 2.9% are women and 1% men; 2.9% is from Botswana and 1% is from Namibia; the average group age is 25,75 years old with a standard deviation of 1.70 Following this group we find the individuals that are employed, that represent the 23.1% of the total; of which 17.3% are women and 12.5% are men; 19,2% are from Botswana and 3.8% are from Namibia, the average age for this group is 28,85% with a typical deviation of 4.27. The next group represents the individuals with full domestic or responsibilities, that represents a 2.9%, with an average age of 25 years old and a standard deviation of 0.0, of which 1.9% are women and 1% are men; 1.9% of them are from Botswana and 1% is from Namibia. It is remarkable to mention that there are only 7.7% of women who are full-time students with an average age of 25.75 years old and a standard deviation of 3.84, 5.8% are from Botswana and 1.9% from Namibia. To conclude there is 2% of participants that classified their labor situation as other employment situation with an average age of 21 year old, of which there is a 1% men and 1% women both of them from Namibia.

**Graph 10: Employment situation before joining the TVET program by country**



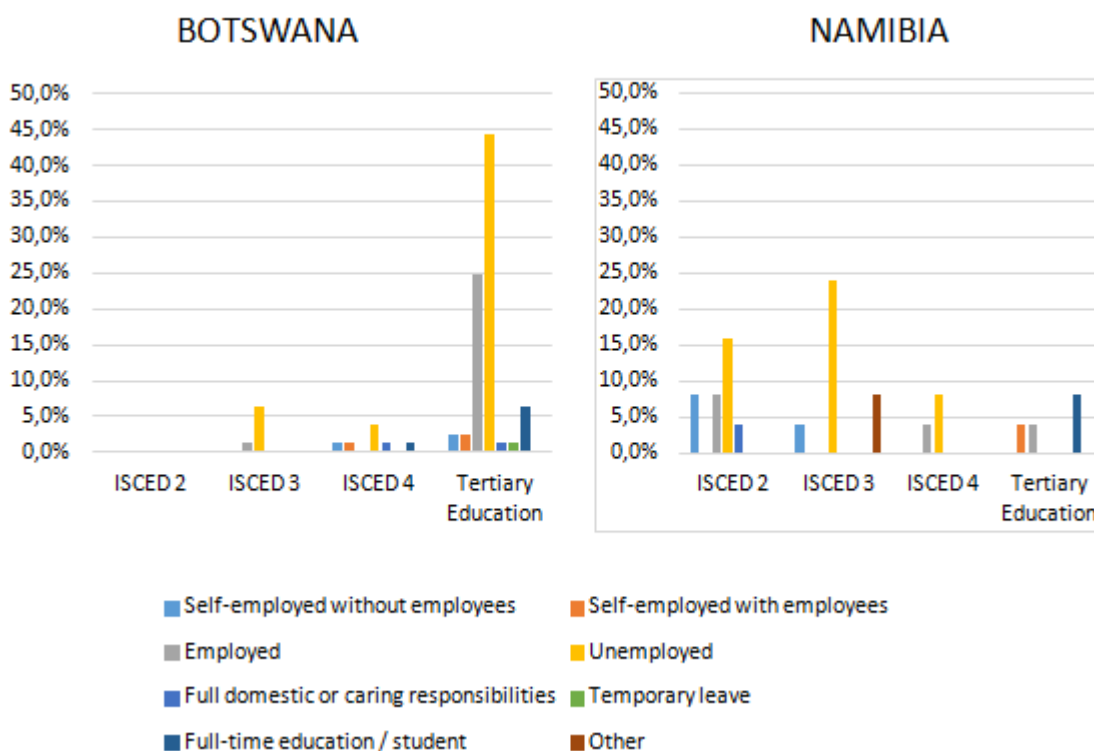
Source: Own elaboration from collected data (questionnaires).

- It is of great interest to know how is distributed the frequency of prior employment status (labor situation before joining the TVET program) in relation to the highest level of educational attainment by participants prior to the enrolment in the TVET program:

From the total stake there are 5.9% of participants who are self-employed without employees, of which 2% have attained ISCED 2 as highest educational degree, there is 1% who attained ISCED 3, another 1% who attained ISCED 4 and 2% finalized the tertiary education level ; In relation to the self-employed with employees, 1% have ISCED 4 and 2.9% tertiary education; Of those who have been employed , most of them have finalized tertiary education (19.6%), 2% have ISCED 2, and 1% of ISCED 3 and 1% ISCED 4; as for the unemployed, it is observed that as in the previous case, most have tertiary education (33.3%), 3.9% have attained ISCED 2, a 10.8% have ISCED 3

and 4.9% have an ISCED 4. According to the data, the full domestic or caring responsibilities group shows that 1% of them have attained ISCED 2; ISCED 4 has been attained by 1% and another 1% have tertiary education. The unique case on temporary leave has a attained tertiary education. As for the Full-time students 1% have ISCED 4, meanwhile a 6.9% have tertiary education. From those who are experiencing a different employment situation as the ones mentioned above, both cases have attained an ISCED 3.

**Graph 11: Prior labor situation according to the highest level of education attained by students in both countries**



Source: Own elaboration from collected data (questionnaires).

In the above graph, we can see the relation between the highest level of education attainment for the students and the employment situation prior to the start of the TVET program in Botswana. As it has been previously described participants from this country are distributed in three different levels of education attained. Form the 7.8%



of all participants in Botswana who have achieved ISCED 3, 1.3% of those are employed, 6.5% are unemployed. From the 9.1% of participants who have achieved ISCED 4 level, 1.3% of these are self-employers with or without employees, full-time students and full domestic caring responsibilities. Finally there is a 83.1% of the total participants who have attained tertiary education, of these group, there is a 2.6% who are self-employed with and without employees, 1.3% of household employees full-time, 6,5% full-time students, 24.7% of employees and 44.2% unemployed.

It shows also very clearly the relation between educational level attained by students and the employment situation before joining the TVET program in Namibia. It is shown that 36% of all participants have reached an educational level ISCED 2, of these people, 8% are self-employed without employees, and employers 4% have full domestic responsibilities and 16% are unemployed. There is also another 36% of participants who have reached ISCED 3, of this group, 4% are self-employed without employees, 8% had other labor situation, and the highest frequency for this group, correspond to the 24% who are unemployed. Finally, there is also a 16% of students that have attained tertiary education, of whom 4% of them are self-employed with employees and employers, and 8% are full time students.

#### d) Main source of household income

On the table below, the main source of household income from participants at the moment when the questionnaires were completed is presented, without neglecting any prior wages or income earned that could have been obtained based on the working situation prior the start of the TVET program.

**Table 33: Participants' main source of household income in total**

Main Source of Household Income	Frequency	Percentage	Age
Wages and salaries	38	39,6%	M=26,51 SD=3,95
Income from self-employment (excluding farming)	15	15,6%	M=27,54 SD=4,59
Income from farming	6	6,3%	M=26,20 SD=2,28
Pensions	13	13,5%	M=23,77 SD=1,83
Unemployment / Redundancy benefit	12	12,5%	M=25,36 SD=3,23
Any other social benefits or grants	3	3,1%	M=28,33 SD=8,38
Income from investment, savings, insurance or property	1	1,0%	M=25 SD=0,0
Income from other sources	8	8,3%	M=25 SD=1,91
Total	96	100%	

Source: Own elaboration from collected data (questionnaires).

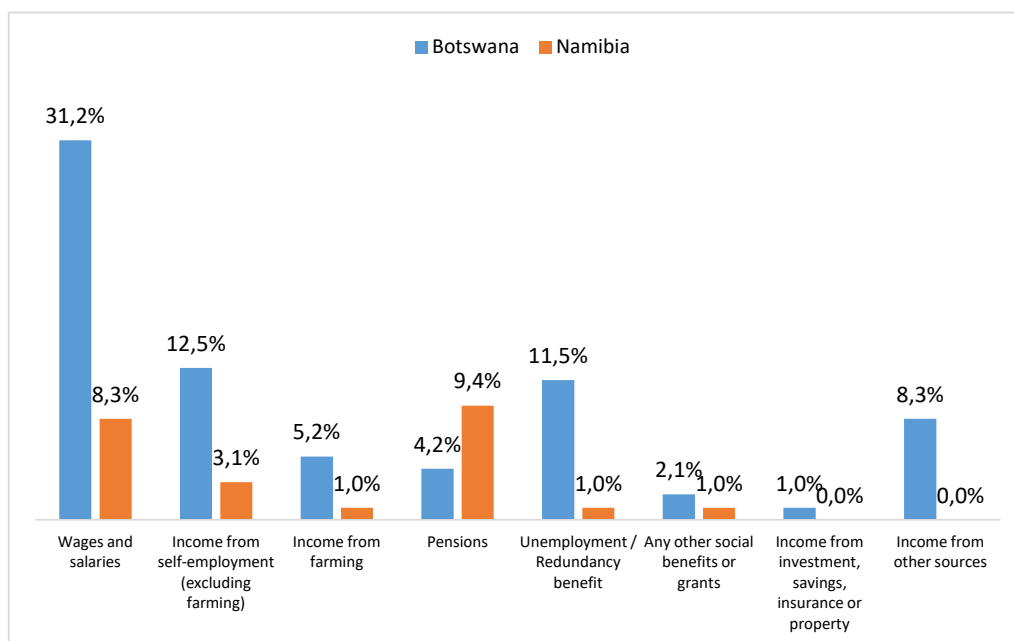
There is 96 data that help us to describe the main source of household income by family, of which 39.6% of the sample refer to cases where their household income come from wages or salaries, this group shares an average age of 26,51 years old, with a standard deviation of 3.95; in relation to the gender distribution, 32.3% are women and 7.3% men, as for the country of origin, 31.2% are from Botswana and 8.3% are from Namibia.

There are 15.6% of cases where income comes from self-employment excluding farming, of these, 11.5% are women and 4.2% men, 12.5% are from Botswana and 3.1% from Namibia, this group has an average age of 27.54 years old with a standard deviation of 4.59. It also shows that for 13.5% of the sample the main source of income comes from pensions, this particular group has an average age of 23.77 years old with a standard deviation of 1.83, the distribution of the group by gender is 9.4% women and 4.2% men, the distribution by country refers to 4.2% Botswana and 9.4% Namibia.

In addition to that 12.5% of the cases have as main source income unemployment benefits, these cases, have an average age of 25.36 years old, with a standard deviation of 3.23; 9.4% of them are female, 3.1% are male; as for the country of origin, 11.5% are from Botswana and 1% in Namibia.

Moreover, among the lowest percentages, we find the revenues or incomes from farming (6.3%), of these, 4.2% are women and 2.1% men, as to the origin, 5.2% are from Botswana and 1% from Namibia; this group has an average age of 26.20 years old with a standard deviation of 2.28; Another category with a low rate or percentage is the group in which the main source of income comes from social benefits or grants (3.1%), of these, all cases are women with an average age of 28.33 years, with a standard deviation of 8.38; of these 2.1% are from Botswana and 1% from Namibia. There is only one case in which the main source of income is related to investment income, savings, insurance or property (1%) it refers to a 25 years old female from Botswana. Finally, there is a 8.3% of the sample that have their main income coming from other sources, all of them are from Botswana, of these 4.2% are women and 4.2% are men, with an average age for the group of 25 years old, and a standard deviation of 1.91.

**Graph 12: Participant’s main source of household income by country**



Source: Own elaboration from collected data (questionnaires).

- By linking the main source of household income with the level of educational attainment, it is found that from the 38.9% of individuals that have wages or salaries as main source of household income, 4.2% of them have attained an ISCED 2, a 6.3% have an ISCED 3, a 5.3% have an ISCED 4, and 23.2% have tertiary education level; of those whose the main source of income come from self-employment excluding agriculture, 3.2% of them have ISCED 2; 1.1% have an ISCED 3; another 1.1% have an ISCED 4, and 10.5% have tertiary education; as for the participants whose main source of income comes from pensions; 2.1% have an ISCED 2; a 4.2% have an ISCED 3, a 2.1% have an ISCED 4 and 5.3% have tertiary education.

**Table 34: Main source of household income according to the highest level of education attained in total**

Main Source of Household Income		Highest Level of Educational Attainment				Total
		ISCED 2	ISCED 3	ISCED 4	Tertiary Education	
Wages or Salaries	Frequency	4	6	5	22	37
	Percentage	4,2%	6,3%	5,3%	23,2%	38,9%
Income from self-employment (excluding farming)	Frequency	3	1	1	10	15
	Percentage	3,2%	1,1%	1,1%	10,5%	15,8%
Income from farming	Frequency	0	0	1	5	6
	Percentage	0,0%	0,0%	1,1%	5,3%	6,3%
Pensions	Frequency	2	4	2	5	13
	Percentage	2,1%	4,2%	2,1%	5,3%	13,7%
Unemployment / Redundancy benefit	Frequency	0	1	2	9	12
	Percentage	0,0%	1,1%	2,1%	9,5%	12,6%
Any other social benefits or grants	Frequency	0	1	0	2	3
	Percentage	0,0%	1,1%	0,0%	2,1%	3,2%
Income from investment, savings, insurance or property	Frequency	0	0	0	1	1
	Percentage	0,0%	0,0%	0,0%	1,1%	1,1%
Income from other sources	Frequency	0	0	0	8	8
	Percentage	0,0%	0,0%	0,0%	8,4%	8,4%
Total	Frequency	9	13	11	62	95
	Percentage	9,5%	13,7%	11,6%	65,3%	100%

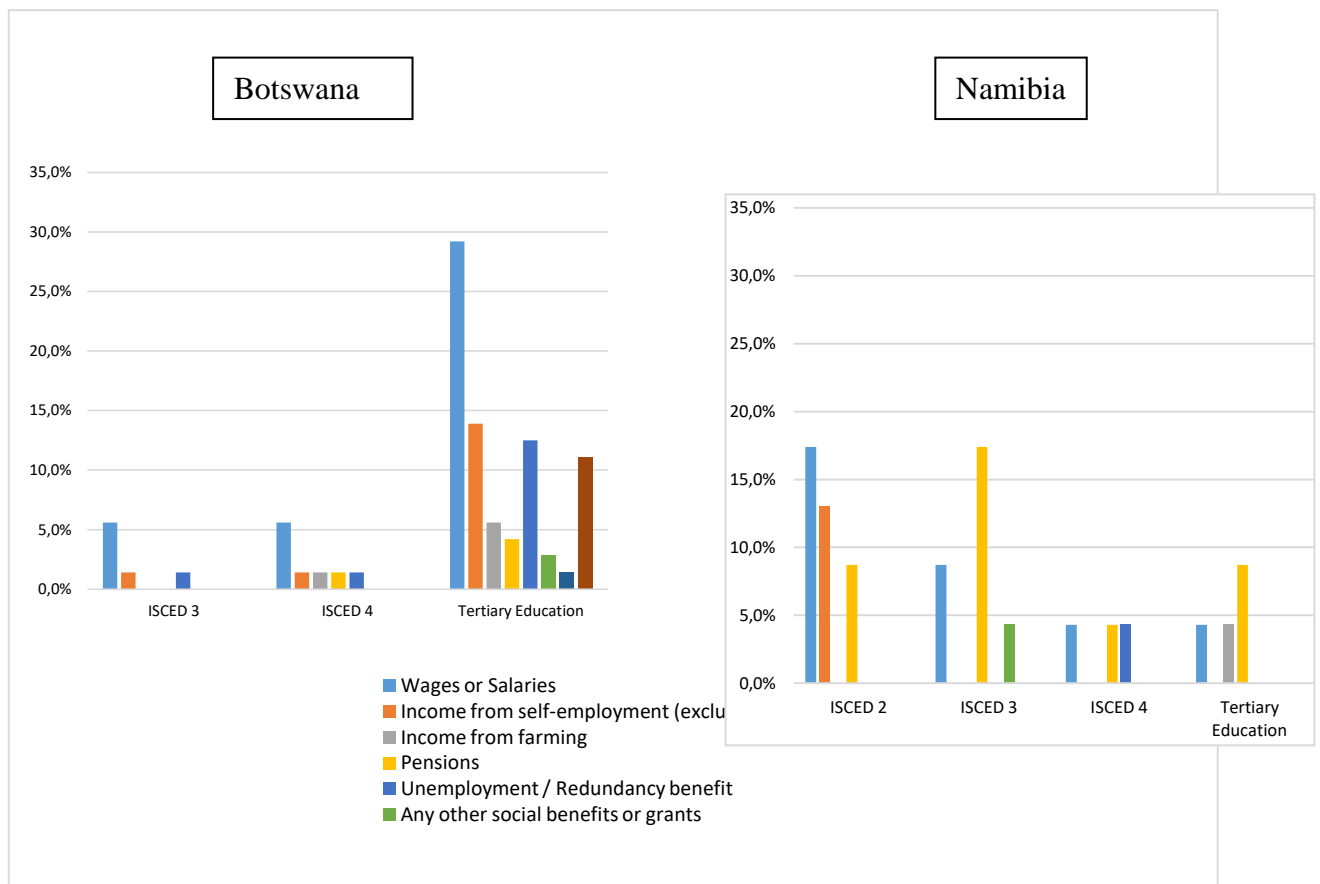
Source: Own elaboration from collected data (questionnaires).

In addition to that, it is important to consider that within the lowest percentages; the households in which the main source of income comes from farming, 1.1% have attained an ISCED 4 and 5.3% have tertiary education level; From those that are receiving the unemployment benefits, a 1.1% of them have an ISCED 3, a 2.1% have an ISCED 4 and a 9.5% have tertiary education; From those receiving other social benefits or grants, 1.1% have an ISCED 3 and the other 2.1% have tertiary education. There is a unique case in which the main source of household income comes from investment,

savings, insurance or property, this subject has an educational attainment of tertiary education level. Of those households that have other sources of income as the main ones, all have tertiary education.

- A specific description about the comparison between both countries in relation to the highest level of education attained in relation to the main source of household income is presented below.

**Graph 13: Highest level of education attained according to the main source of household income by country**



Source: Own elaboration from collected data (questionnaires).

Noting the above graph, it can be seen the existing links between the education level attained by students and the main sources of household income for each of the countries. From the analysis, it has been found that only participants from Namibia reached an educational level ISCED 2, there are not Botswana students whose highest educational attainment is ISCED 2. Of these Namibian students with ISCED 2, there is a 17.4% of them whose main source of income come from salaries or income wages, 13% of them are self-employed excluding farming and 8.7% received pensions. As for the participants who have reached an educational level ISCED 3, there are 5.6% of them from Botswana and 8.7% from Namibia whose main source of income come from salaries or wages. 1.4% which has income from self-employment excluding farming in Botswana and 17.4% whose earnings come from pensions, and 4.3% that gets any other social benefits or grants in Namibia.

From the participants who have attained an ISCED 4, 5.6% of them are from Botswana and 4.3% are from Namibia and the main source of their household income is link to salaries and wages. There is also a 1.4% in Botswana whose main source of income is agriculture and self-employment excluding farming. At the same time there is a 1.4% in Botswana and 4.3% in Namibia whose income comes from pensions, as well as 1.4% in Botswana and 4.3% in Namibia that are getting the unemployment subsidies. Finally, there is a 29.2% in Botswana and 4.3% in Namibia whose highest educational attainment is tertiary education linked to the main income source from salaries and wages. There is a 5.6% of Botswana participants and 4.3% of Namibian participants of this group whose main source of household income comes from farming. A 4.2% in Botswana and 8.7% in Namibia getting income from pensions. A 13.9% whose main source of income comes from self-employment excluding farming and 12.5% from unemployment / redundancy benefit, a 2.8% from the revenues obtained on farming, and 1.4% from investments, savings.... and 11.1% from other source of income just in Botswana.

- Once that we have described in detail the main source of household's income, it is relevant now to report on participant's perceptions about how this income situation allows them to have a particular standard of living:

**Table 35: Perception of living standard with household income in total**

<b>Perception of living standard with Household Income</b>	<b>Frequency</b>	<b>Percentage</b>
Living comfortably on present income	6	6,3%
Coping with present income	19	19,8%
Finding it difficult on present income	32	33,3%
Finding it very difficult with present income	39	40,6%
<b>Total</b>	<b>96</b>	<b>100%</b>

Source: Own elaboration from collected data (questionnaires).

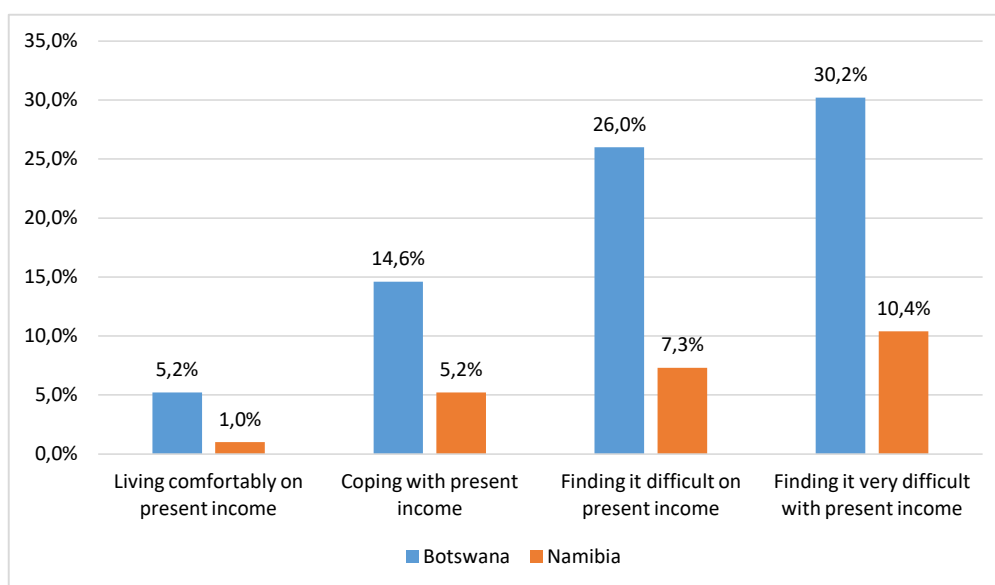
In order to describe in detail which is the perception of the living standards by each participant according to the main source of household income, we have 96 cases, of which most of them consider that are living with many difficulties (40.6%) from these, a 33.3% are females and 7.3% are men, in relation to the country of origin, 30.2% are from Botswana and 10.4% are from Namibia; as for the level of educational attainment 3.2% of them have an ISCED 2, a 6.3% have an ISCED 3, another 6.3% have an ISCED 4, and 25.3% have tertiary education. There is a 33.3% of the sample who consider that they are living with difficulties, of which 24% are women and 9.4% are men; 26% are from Botswana and 7.3% are from Namibia; as for their level of education, 5.3% have an ISCED 2, a 3.2% have an ISCED 3, a 2.1% have an ISCED 4 and 23.2% of the sample have tertiary education.

At lower percentages, we find that 19.8% perceive that current income is sufficient to get ahead, of these, 14.6% are from Botswana and Namibia 5.2%, with respect to gender, 13.5% are women and 6.2% men; and as to their level of education, 1.1% have a ISCED 2, a 3.2% ISCED 3, another 3.2% with ISCED 4 and 11.6% with tertiary education.



There is a minority (6.3%) of the sample, that considers that their income allows them to live comfortably, of these 5.2% are from Botswana, 1% is from Namibia; with respect to the gender 3.1% are men and another 3.1% are women; as for the level of education, 1.1% have an ISCED 3, another 1.1% have an ISCED 4 and 4.2% have tertiary education.

**Graph 14: Perception of living standard with household income by country**



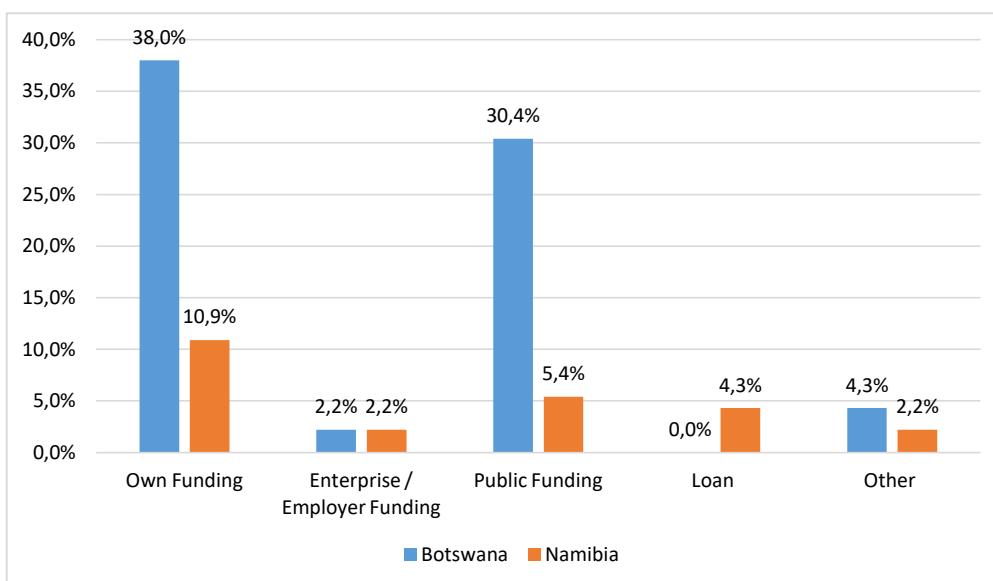
Source: Own elaboration from collected data (questionnaires).

**e) Program Information**

Once the social description has been developed, the quantitative analysis focuses on the program information. Therefore, the following part of the analysis describes how the students have financed their participation on the TVET program, which is the profile of those students who are beneficiaries of the government subsidies and to what extent it is relevant or important for them to participate in the program by country and by gender.

In order to know how the students have funded its participation on the program, we have 92 data, of which the majority, 48.9% have financed their participation by its own way (own funding), of these 37% are women and 12% are men, as for the country of origin of this group, 38% are from Botswana and 10.9% are from Namibia. The second most common type of funding is by using public funds with a 35.9% of the sample; from this group 27.2% are women and 8.7% are men, as for the country of origin, 30.4% are from Botswana and 5.4% are from Namibia.

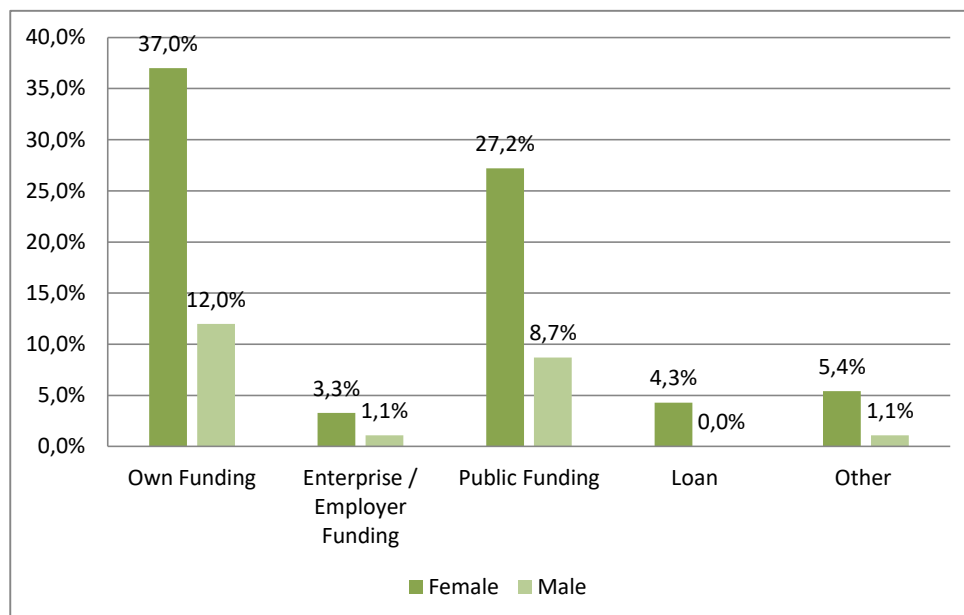
**Graph 15: Different ways to finance the participation on the TVET program by country**



Source: Own elaboration from collected data (questionnaires).

The lowest percentages appeared related to the funds provided by employers (4.3%) of total; of which 3.3% are women and 1.1% men; 2.2 % are from Botswana and another 2.2% from Namibia; loans represent a low percentage as well (4.3%) of total; all cases within this group are represented by a common profile, women from Namibia; Finally, there is a 6.5% of the sample that finance the participation on the program through other sources, of these 5.4% are women, 1.1% are men, as for the country of origin, 4.3% are from Botswana and 2.2% from Namibia, as shown in the table below.

**Graph 16: Different ways to finance the participation on the TVET program by gender**



Source: Own elaboration from collected data (questionnaires).

- In order to relate the type of funding used to finance the participation on the TVET program and the highest educational level attained by participants, we have use 90 cases, where it is observed that from students who have funded the studies by their own way (own funding) 48.9% of total, 3.3% have an ISCED 2; 8.9% have ISCED 3; a 7.8% have ISCED 4 and a 28.9% have tertiary education; of those participants who have financed the program with the help or financial assistance of the company they are employed (enterprise/employer funding) which represents a 4.4% of the total sample; 2.2% have ISCED 2; another 2.2% have tertiary education; of the participants who have obtained financial support from the public funds, 3.3% have ISCED 2; 1.1% have ISCED 3; a 2.2% have ISCED 4 and 28.9% have tertiary education.

Moreover, from the students who have requested loan (4.4%), 3.3% have an ISCED 3 and 1.1% have ISCED 4; and from those students who have used other way of funding the program (6.7%) , 3.3% have ISCED level 3 and another 3.3% have attained tertiary education.

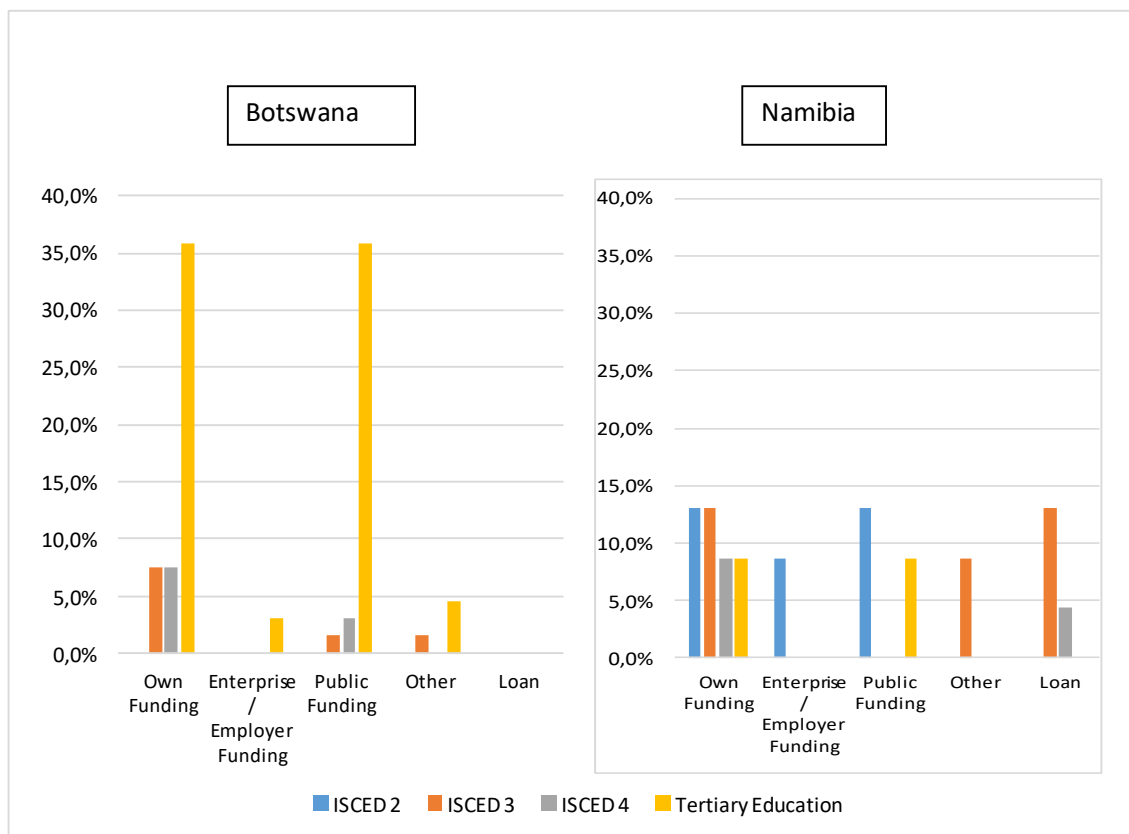
**Table 36: Different ways to finance the participation on the TVET program according to the highest level of education attained by the student in total**

How was financed the participation on the TVET program		Highest Level of Educational Attainment				Total
		ISCED 2	ISCED 3	ISCE D 4	Tertiary Education	
Own Funding	Frequency	3	8	7	26	44
	Percentage	3,3%	8,9%	7,8%	28,9%	48,9%
Enterprise Employer Funding	Frequency	2	0	0	2	4
	Percentage	2,2%	0,0%	0,0%	2,2%	4,4%
Public Funding	Frequency	3	1	2	26	32
	Percentage	3,3%	1,1%	2,2%	28,9%	35,6%
Loans	Frequency	0	3	1	0	4
	Percentage	0,0%	3,3%	1,1%	0,0%	4,4%
Other	Frequency	0	3	0	3	6
	Percentage	0,0%	3,3%	0,0%	3,3%	6,7%
Total	Frequency	8	15	10	57	90
	Percentage	8,9%	16,7%	11,1%	63,3%	100%

Source: Own elaboration from collected data (questionnaires).

A comparative analysis between countries on the different ways to finance the participation on the TVET program according to the highest level of education attained is showed on the following graph.

**Graph 17: Different ways to finance the participation on the TVET program according to the highest level of education attained by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana the relation between the highest level of education attained and how the students have financed its participation in the TVET program is described as follows: there is a 79.1% of participants who have attained tertiary education, of these students 35.8% have used their own funds to pay the studies, another 35.8% have received public funding to cover the cost of the studies and 3.0% have received funding from the enterprise they were working at, and finally 4.5% pay the cost using other financial sources.

As for the participants who attained an ISCED 4 level, they represent the 10.4% of the total sample. From this group, there is a 7.5% who use their own financial source to cover the cost of the studies and another 3.0% use public funding. As for the participants who attained ISCED 3, which represents the 10.4% of the total sample.

7.5% students from this group cover the cost of the TVET program using their own funding, 1.5% have done so with the support of public funds or other assistance.

In Namibia, the highest frequency corresponds to students who have attained an ISCED 2, representing a 34.8% of the total sample; of this group, 13% have used their own ways of funding, 8.7% have got the financial support of the company in which they were employed and another 13% have got the financial support coming from public funds. There is also a 34.8% of the participants who have attained an ISCED 3, of these subjects, 13% have use their own economical sources to finance their participation on the TVET program, another 13% have requested loans to deal with the cost, another 8.7% have used other source of funding. As for the subjects that have reached ISCED 4, they represent 13% of the total sample, participants from this group have use different financial sources to cope with the cost of the TVET program. 8.7% have used their own financial sources, 4.3% used loans. Finally 17.4% of the total stake have reached a tertiary education level, this participants have mainly used their own financial sources 8.7% and the support of public funds 8.7% to cope with the costs.

- In order to analyze the living standards' perception according to the way in which the TVET program has been financed, there are 80 cases in which the program has been financed with people's own funding, of whom 5% consider that the incomes allow them to live comfortably, a 15% think that are coping with present income, 12.5% find it difficult on present income and 18.8% who find it very difficult. As for the students involved with the financial support of the companies for which they are employed, 1.2% perceive that are coping with present income, 2.5% perceive that are living with difficulties, and 1.2% fining very difficult to cope with present income. Of those participants who are supported financially by public funds (5%), 1.2% believe that are living comfortably, 2.5% think they are coping with present income, 16.2% are living with difficulties and 15% find it very difficult with present income.

**Table 37: Perception of living standards according to the different ways of financing the TVET program, in total.**

Perception of living standard with Household Income						
How was financed the participation on the TVET program		Living Comfortably on present income	Coping with present income	Finding it difficult on present income	Finding it very difficult on present income	Total
Own Funding	Frequency	4	12	10	15	41
	Percentage	5,0%	15,0%	12,5%	18,8%	51,2%
Enterprise / Employer Funding	Frequency	0	1	2	1	4
	Percentage	0,0%	1,2%	2,5%	1,2%	5,0%
Public Funding	Frequency	1	2	13	12	28
	Percentage	1,2%	2,5%	16,2%	15,0%	35,0%
Loan	Frequency	0	1	1	1	3
	Percentage	0,0%	1,2%	1,2%	1,2%	3,8%
Other	Frequency	0	1	2	1	4
	Percentage	0,0%	1,2%	2,5%	1,2%	5,0%
Total	Frequency	5	17	28	30	80
	Percentage	6,2%	21,2%	35,0%	37,5%	100,0%

Source: Own elaboration from collected data (questionnaires).

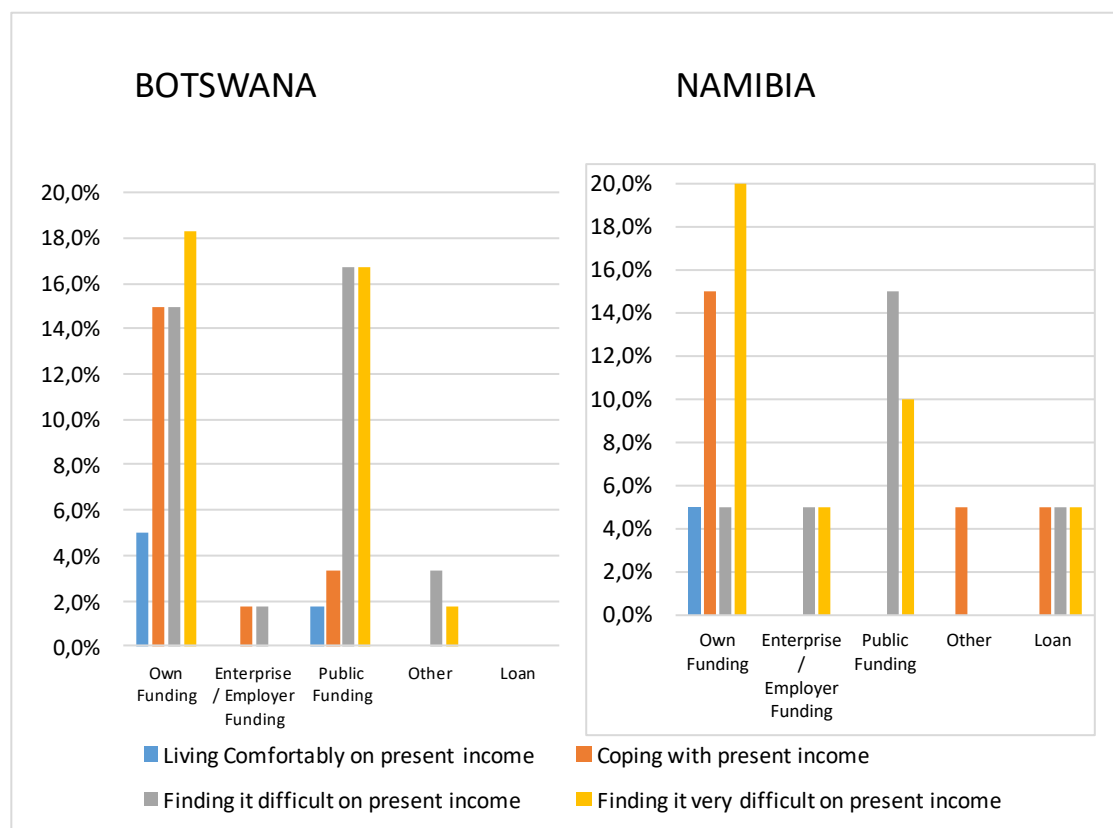
Similarly, from students who have obtained loans, 1.2% believe that are coping with present income, another 1.2% think that are living with difficulties and the remaining 1.2% are living with many difficulties; of those participants who have other funding sources, 1.2% perceives that can cope with present income, 2.5% living with difficulties and 1.2% living with many difficulties.

By focusing on the 33 cases that received funding from public funds, which representing 35.9% of the total share, the preference of study sectors by student are the following ones: 9 are attending to the fashion design sector (9, 8%), 15 travel management (16.3%), 4 to secretariat (4.3%), 3 CBET Namibia industry - carpentry and joinery (3.3%) and the remaining 2 to the plumbing sector (2.2%). Taking into consideration other features such as the study center, we find that most participants that get financial aid from public funds are from Botswana Francistown Technical College, 19 students receiving public funding (20.7%) of the remaining cases, 9 participants study at Gaborone Technical College – Botswana (9.8%), 3 to Namibia CBET (3.3%)

and the other 2 to Namibia NAMWATER (2.2%). In addition to what has been mentioned before, within this group, 24 subjects didn't have a job prior the beginning of the studies (26.1%) and 9 of them were working before starting the TVET program (9.8%).

The differences between countries regarding the perception of living standards according to the different ways of financing their participation on the TVET program are shown in the graph below.

**Graph 18: Perception of living standards according to the different ways of financing the participation on the TVET program by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, it is noted that 6.7% of the total participants consider that they are living comfortably, of these 5% has finance its participation on the TVET program using their own funding and 1.7% got financial support from public funds. There is also a 20% of participants who consider that they are coping with present income, of these group, there is a 1.7% that got financial support from their employers or companies in



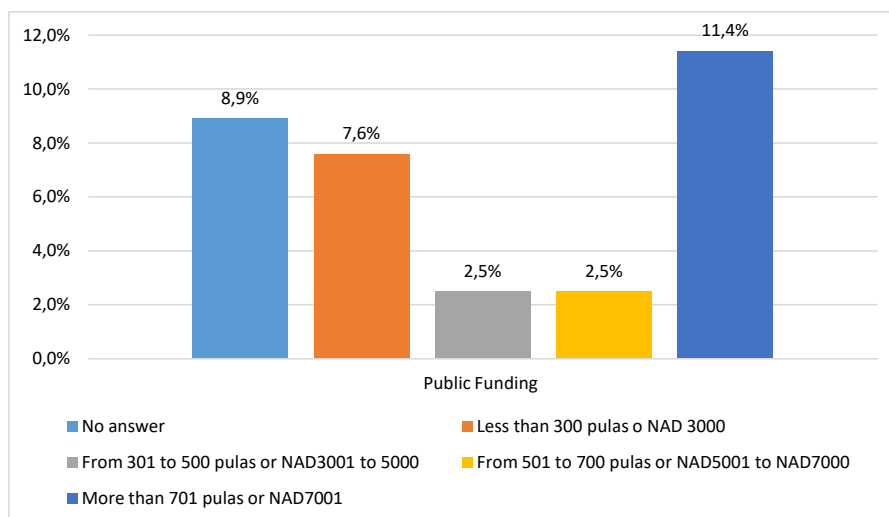
which they work, there is also a 3.3% of people that got funds to cover the cost from public funds. Moreover, there is a 36.7% of people who consider that they are living with many difficulties, of these group, there is a 15% who has financed their participation using their own funds, 1.7% have cover the cost of the program with the financial support of the company in which they are employed, 16.7% with the aid from public funds, and 3.3% with other funding. Finally, for those who consider that they are living with many difficulties, which represent a 36.7% of the total stake, 18.3% has financed its own participation using their own funds, 16.7% have got the support of public funds, and 1.7% have used other source of funding.

In Namibia, it is noted that 5% of the total stake consider that they are living comfortably, of this group, there is a 5.0% who have used their own funding. In addition to this, there is a 25.0% of the participants who think that income allow them to meet their needs, as they are coping with present income, 15% of them have use their own funds to pay the cost, 5% of them have used a loan or other ways of funding. There is a 30% of the total participants who consider that they have many difficulties to cope with present income, students from this group have financed the program cost using different ways, 5% of them have used their own funds, meanwhile, another 5% have got the financial support from their company where is employed, 15% of them have got public funds and 5% through a loan. Finally, for those who consider that are living with many difficulties, who represent 40% of the total sample and is the highest frequency, 20% of them have financed the cost of the program with their own funds, 5% with the help of the company for which they work, 10% with the financial support of public funds and 5% through a loan.

- To report about the household income per month of those students who get financial support from public funds to join the TVET program. There are 26 registered cases (32.9%) of which 7 have not answered (8.9%), 6 have a family household income below 300 pula or 3000NAD (7.6%) per month, 2 subjects have monthly income from 301 to 501 pula or NAD3001 to 5000 (2.5%), another 2 subjects have a family household income from 501 to 700 pula or NAD5001 to NAD7000 (2.5%) and the remaining 9 have a household monthly income above 701 pula or NAD7001. These participants have an average age of 27 years old with a standard deviation of 4.17, with

a minimum of 21 and a maximum of 38 years old; the average number of adults living in these households is 4.23 with a standard deviation of 2, with a minimum of 1 and a maximum of 10 and the average number of children living in these households is 3.50 with deviation typical 3, with a minimum of 0 and a maximum of 15.

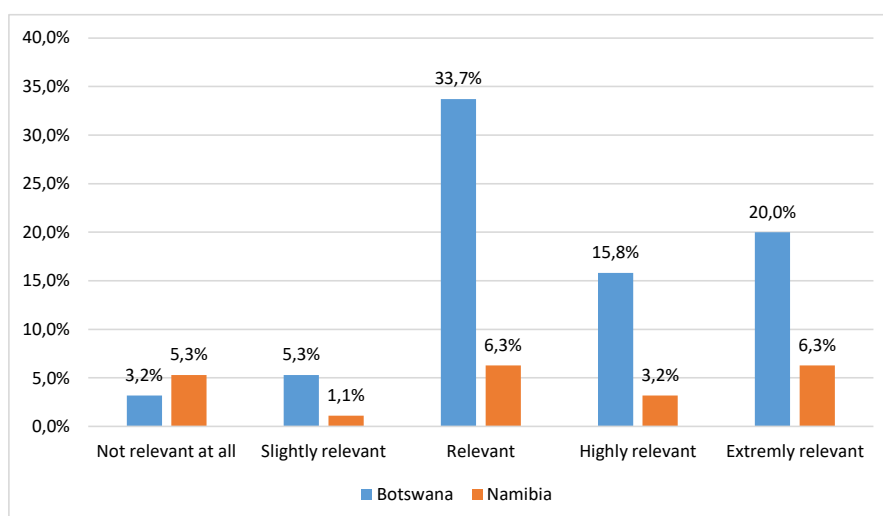
**Graph 19: Public funding distributed among students according to their monthly income generation**



Source: Own elaboration from collected data (questionnaires).

- Finally, it is essential to know how relevant is for students to be enrolled in the TVET program according to their future professional expectations. The variable has been measured on an ordinal scale of 5 categories, with the following percentages: 1= Not relevant at all, 2 = Slightly relevant (6.3%), 3= Relevant (40%), 4= Highly relevant (18.9%) and 5= Extremely relevant (26.3%); data by country have recorded, 74 of total in Botswana (77.4%) and 21 in Namibia (22.1%) The results of the analysis show that:

**Graph 20: Perceived importance of the TVET program according to the students' professional future expectations by country**

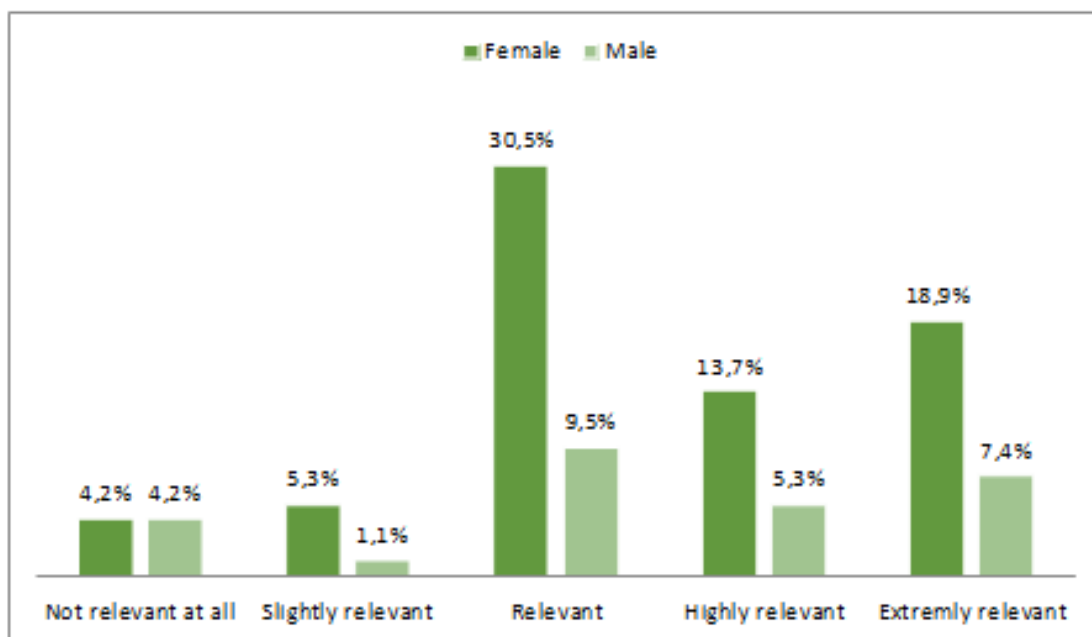


Source: Own elaboration from collected data (questionnaires).

As shown in the above bar chart, the option “Not relevant at all” has been the less selected option by the participants in Botswana; in Namibia the less selected option by participants has been “Slightly Relevant”. The most selected option by participants in both countries is “Relevant” even though in Namibia, the option “Relevant” have the same response rate (6.3%) as “Extremely relevant”.

In relation to the existing gender differences related to the importance of the TVET program perceived as for the professional future expectations for students, It has been recorded 69 data from women (72.6%) and 26 data from men (27.4%) with the following distribution:

**Graph 21: Perceived importance of the TVET program according to the students' professional future expectations by gender**



Source: Own elaboration from collected data (questionnaires).

According to the above graphs, the most selected option by both genders is option 3 = "Relevant", and less selected choice for the female gender is option 1 = "Not relevant at all" and for males the option 2 = "slightly relevant".

- It is important to analyze the frequency of this variable, taking into consideration the students' perception of the living standard with their household income and how the participation in the program has been funded, these results are shown below:

**Table 38: Perceived importance of the program according to the living standards in total**

Importance of the program according to the professional future expectations		Perception of living standard with Household Income				Total
		Living Comfortably on present income	Coping on present income	Finding it difficult on present income	Finding it very difficult on present income	
Not relevant at all	Frequency	0	3	4	1	8
	Percentage	0,0%	3,5%	4,7%	1,2%	9,3%
Slightly relevant	Frequency	0	1	1	4	6
	Percentage	0,0%	1,2%	1,2%	4,7%	7,0%
Relevant	Frequency	1	7	15	12	35
	Percentage	1,2%	8,1%	17,4%	14,0%	40,7%
Highly relevant	Frequency	1	2	5	6	14
	Percentage	1,2%	2,3%	5,8%	7,0%	16,3%
Extremely relevant	Frequency	3	4	5	11	23
	Percentage	3,5%	4,7%	5,8%	12,8%	26,7%
<b>Total</b>	Frequency	5	17	30	34	86
	Percentage	5,8%	19,8%	34,9%	39,5%	100%

Source: own elaboration from the data collected (questionnaires).

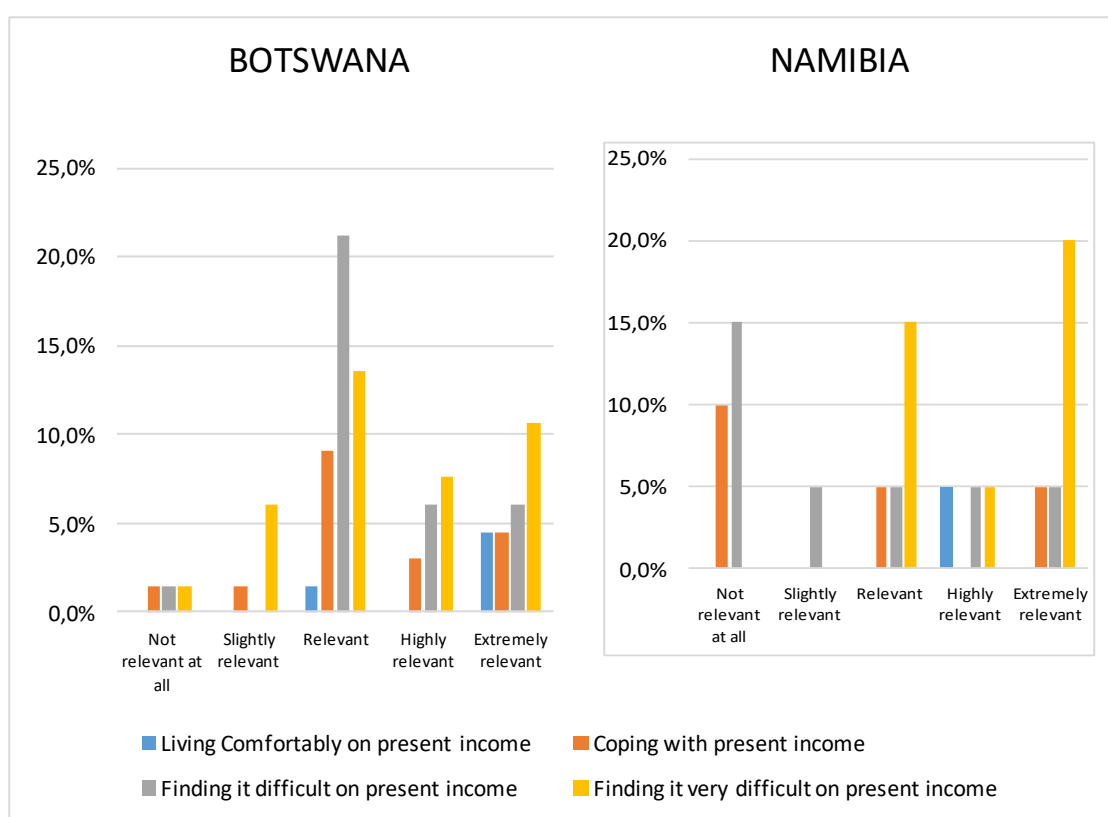
As it is shown in the table above, of those who consider that participation in the program is not relevant at all, 3.5% of them cope with present income, 4.7% of them find it difficult with present income and 1.2% find it very difficult with present income. Of the subjects who consider the program slightly relevant, 1.2% believe that revenues allow them to get ahead coping with present income, another 1.2% are living with difficulties and 4.7% are living with many difficulties. 40.7% of the total share perceived participation in the program as relevant, from this group 1.2% of them think that are living comfortably, 8.1% think that are coping with present income, 17.4% are living with difficulties and 14% with many difficulties.

Of the students who consider highly relevant their participation in the program, 1.2% think that are living comfortably, 2.3% perceive that they can cope with present income, 5.8% consider that are living with difficulties and 7% think that are living with

many difficulties; Finally, the group that assumes its participation on the program as extremely relevant, 3.5% think that they live comfortably, 4.7% think that they can cope with present income, 5.8% believe that they are living with difficulties and 12.8% think that are living with many difficulties.

The distribution of the perceived relevance of the TVET program according to the participants' living standards from each country is shown on the graph below.

**Graph 22: Perception about the relevance of the TVET program according to the living standards from participants by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, there is a 6.1% of participants who consider that they are living comfortably with present income, of these people there is a 1.5% who considered relevant their participation in the program and 4.5% believe it is extremely relevant. There is a 19.7% reporting that revenues allow them to meet household needs, of whom 1.5% does not consider relevant the program at all or consider that the TVET program has a little relevance, 9.1% think it is relevant, 3% very relevant and 4.5% extremely

relevant. There is a 34.8% of people who report that they are living with difficulties, of whom 1.5% considered completely irrelevant their participation in the program, 21.2% believe it is relevant, and 6.1% consider it very relevant or extremely relevant. Finally, there is a 39.4% of the total stake, representing the highest frequency, who claim to live with many difficulties, of these people, there is 1.5% who believe it is not relevant at all to participate in the program, 6.1% think it is very relevant, 13.6% relevant a 7.6% very important and 10.6% extremely relevant.

In Namibia there is a 5% of participants who claim that they are living comfortably all of them consider that their participation on the TVET program is highly relevant. There is also a 20% of people that consider that they are coping with present income, of whom 10% of them consider that the TVET program is relevant, 5% of them consider that the program is extremely relevant. As for the participants who report that they are living with difficulties, it represent a 35%, from this group, 15% consider that their participation in the program is completely irrelevant, and 5% consider that it is relevant, very relevant and extremely relevant. Finally there is a 40% of participants who consider that they have many difficulties of whom 15% consider relevant their participation on the program, 5% considered very important and 20% extremely relevant.

- The relation between the different ways in which it was financed the participation on the program and the perceived relevance of the program to their future professional expectations, it presented on the table below.

**Table 39: Perceived importance of the TVET program according to the way in which it has been financed the participation of students in total**

Importance of the program according to the professional future expectations	How was financed the participation on the TVET program						Total
	Own Funding	Enterprise / Employer Funding	Public Funding	Loan	Other		
Not relevant at all	Frequency	2	0	3	0	1	6
	Percentage	2,4%	0,0%	3,5%	0,0%	1,2%	7,1%
Slightly relevant	Frequency	2	0	4	0	0	6
	Percentage	2,4%	0,0%	4,7%	0,0%	0,0%	7,1%
Relevant	Frequency	16	2	15	1	0	34
	Percentage	18,8%	2,4%	17,6%	1,2%	0,0%	40,0%
Highly relevant	Frequency	9	0	5	2	1	17
	Percentage	10,6%	0,0%	5,9%	2,4%	1,2%	20,0%
Extremely relevant	Frequency	11	2	6	0	3	22
	Percentage	12,9%	2,4%	7,1%	0,0%	3,5%	25,9%
<b>Total</b>	Frequency	40	4	33	3	5	85
	Percentage	47,1%	4,7%	38,8%	3,5%	5,9%	100%

Source: Own elaboration from collected data (questionnaires).

From those students who think that the participation on the program is not relevant at all, 3.5% have received public funds to finance their participation, 2.4% have used their own economic resources and 1.2 using other sources. Of those who consider that their participation on the program is slightly relevant to fulfill their future professional expectations, 4.7% have obtain funds from the public institutions and 2.4% have used their own financial sources.

Of those participants who consider that their participation is relevant according to their future expectations, 18.8% have used their own financial sources, 17.6% have obtain the economical support from public funds, 2.4% of them have obtained the financial support from their companies and 1.2% by getting a loan.

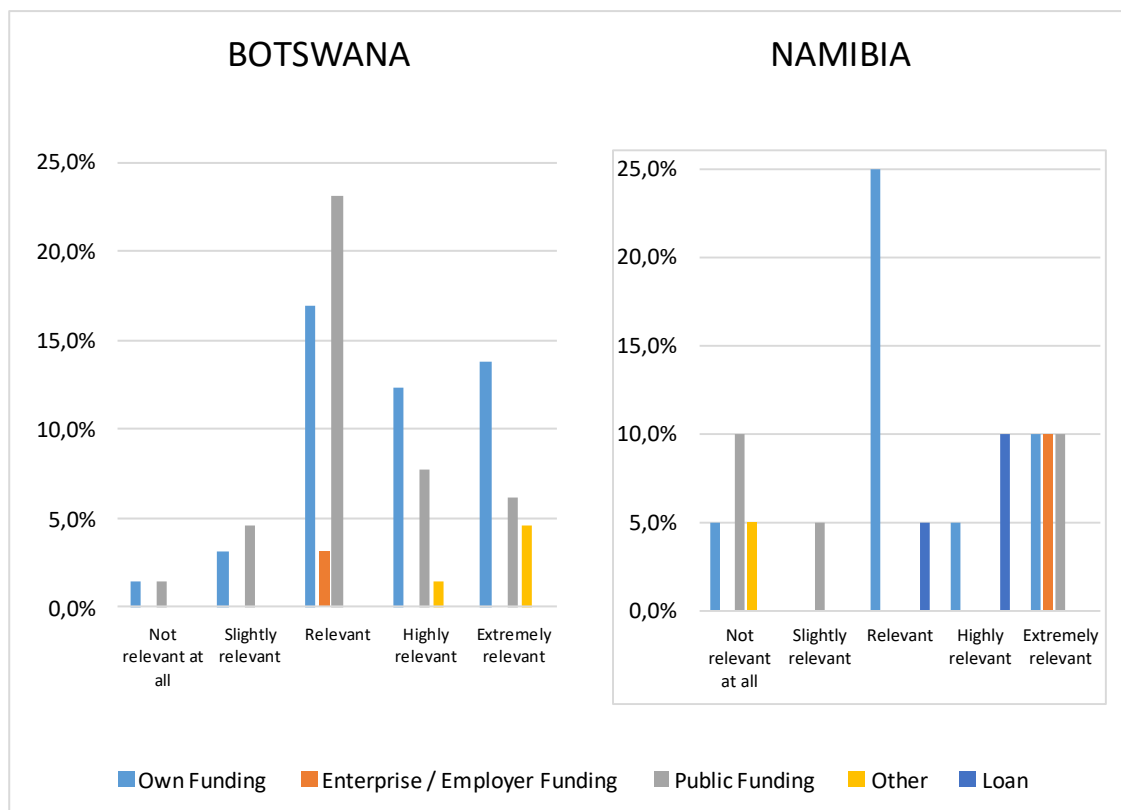


Moreover, of those students who believe their participation is very important to achieve their future professional aspirations, 10.6% used their own financial sources, 5.9% got the support of public funds, 2.4% by getting a loan and 1.2% with through other financial sources. There is another group of participants who feel that their participation on the TVET program is extremely relevant to their future, 12.9% of them have financed autonomously, 2.4% with the help of the company where they are employed, 7.1% by getting the support from public funds and 3.5% through other funding sources.

In the graph below it is shown the comparison among two countries in relation to the different ways in which the students have financed its participation on the TVET program and the importance they give to the program according to their professional future expectations.

**Graph 23: Perceived importance of the TVET program according to the different ways in which it has been financed the participation of students by country**

Source: Own elaboration from collected data (questionnaires).



In Botswana, there is a 47.7% of participants who have financed their participation of the TVET program using their own funding, of whom 16.9% consider relevant, 13.8% extremely relevant, 12.3% highly relevant, 3.1% slightly relevant and a 1.5% who consider that the TVET program is completely irrelevant.

At the same time there is a significant percentage of participants who have obtained different forms of public funding, representing a 43.1% of the total stake. Of these people, there is a 23.1% who consider relevant, 7.7% who consider it highly relevant, 6.2% extremely relevant, 4.6% slightly relevant and 1.5% not relevant at all. Moreover, there is a 3.1% of the total stake who obtained the funds through the support of the enterprise, all of them consider that the TVET program is relevant for their future professional development and expectations. To conclude, there is a 6.2% of people who have financed the program using other sources.

In Namibia, the highest frequency corresponds to the 45% of the participants who have used their own funds to pay their participation on the TVET program, of whom 10% consider it is extremely relevant, 25% relevant, 5% highly relevant, 5% not relevant at all. There is a 25% of the sample who have obtained the funds through public funding, the people of this group, consider in equal percentage 10% that the participation on the program is not relevant at all versus it is extremely relevant. As for the 15% of participants who have obtained a loan to cover the costs 10% of them consider the program is highly relevant, 5% consider that is relevant. To conclude there is also a 10% of participants who have obtained the financial resources from the enterprises in which they work, or the employers, all of them consider that the program is extremely relevant for their future profession.

#### **9.1.2.2. Socio Effective variables**

A description about the analysis on social effective variables it is presented in this section. Firstly focused on the outcome parameters. There is a description about the human capital dimension and a precise description on the analysis of each indicator: motivation, initial expectation, actual expectation and perceptions will be provided on a complementary basis. Followed by an analysis on the cultural capital dimension is

described for both indicators: expected learned outcomes and satisfaction. The social capital variable: networking, it is not described as it was eliminated from the questionnaire due to the missinterpretation of the questions related to this variable for most participants in both countries.

Secondly, the analysis focuses on the social benefits parameters, including all the relevant dimensions that it includes, as social mobility, balance of time, economic security (future economic situation and future employment prospects) and intellectual development for both countries.

#### **a) Outcomes - Human capital**

Following the program information analysis, the quantitative analysis focuses on the human capital analysis, therefore, this part reports on the results of the inferential tests used to compare countries and genres within the main dependent variables, which include: motivation, initial expectations, future expectations and perception.

The test used for the analysis is the Student t test, which is used to determine whether or not two groups differ in some quantitative variable of interest (A. Ruiz Pardo and San Martin M. R. (2009), the effect sizes will be interpreted according Ferguson C. (2009), who stated that in the case of Hedges  $g'$ , the representative effect in practice advisable to discuss within social sciences has a minimum recommended value of 0.41; from values of 1.15 it would have moderate effects and higher values than 2.70 indicate large or bigger effects.

			N	M	SD	SE	T	gl.	Sig.	Confidence Intervals		g'
										Inferior	Superior	
Motivations	Country of origin	Botswana	67	46,20	5,64	,68	4,024	86	<,0001	3,43	10,13	1,12
		Namibia	21	39,42	9,49	2,07						
	Gender	Female	67	45,25	5,27	,64	1,066	22,66	,298	-2,62	8,17	0,43
		Male	21	42,47	11,56	2,52						
Initial Expectations	Country of origin	Botswana	75	18,70	3,32	,38	2,285	27,61	,030	,30342	5,58324	0,75
		Namibia	24	15,75	6,02	1,23						
	Gender	Female	75	18,78	3,67	,42	3,487	97	,001	1,43	5,22	0,83
		Male	24	15,45	5,15	1,05						
Future Expectations	Country of origin	Botswana	71	31,40	4,91	,58	5,076	90	<,0001	3,89	8,89	1,16
		Namibia	21	25	5,60	1,22						
	Gender	Female	71	30,59	5,03	,59	2,061	90	,042	,10	5,65	0,54
		Male	21	27,71	7,33	1,59						
Perception	Country of origin	Botswana	76	46,25	5,39	,61	2,683	20,74	,014	1,79	14,20	1,07
		Namibia	20	38,25	13,04	2,91						
	Gender	Female	73	45,60	5,26	0,61	1,458	24,08	,158	-1,76	10,27	0,51
		Male	23	41,34	13,68	2,85						

**Table 40: Inferential test to compare countries and genres in relation to the motivation, initial expectations, future expectations and participants' perceptions in total**

Source: Own elaboration from collected data (questionnaires).

Regarding the motivation, participants from Botswana ( $M = 46.20$ ,  $SD = 5.64$ ) have a higher degree of motivation than the participants from Namibia ( $M = 39.42$ ,  $SD = 9.49$ ); this difference is statistically significant,  $t_{(86)} = 4.024$ ,  $p = <.0001$ ,  $g' = 1.12$ , which would indicate that there is a small but significant effect within the practice of the social sciences. Similarly, women ( $M = 45.25$ ,  $SD = 5.27$ ) have a higher level of motivation than men ( $M = 42.47$ ,  $SD = 11.56$ ); however, there is insufficient evidence to say that this difference is significant,  $t_{(22,66)} = 1.066$ ,  $p = 0.298$ .

As to initial expectations, participants from Botswana ( $M = 18.70$ ,  $SD = 3.32$ ) have a higher degree of initial expectation than subjects in Namibia ( $M = 15.75$ ,  $SD = 6.02$ ) this difference is significant  $t_{(27,61)} = 2.285$ ;  $p = 0.03$ ;  $g' = 0.75$ . Also, female gender ( $M = 18.78$ ,  $SD = 3.67$ ) showed a higher degree of initial expectation compared to men ( $M = 15.45$ ,  $SD = 5.15$ ), this difference was also statistically significant  $t_{(97)} = 3.487$ ;  $p = 0.001$ ;  $g' = 0.83$ . Both differences have effect sizes that allow us to consider that the differences found are relevant to the practice of the social science.

The results related to the future expectations show that Botswana subjects ( $M = 31.40$ ,  $SD = 4.91$ ) have a higher degree of future expectations than the subjects from Namibia ( $M = 25$ ,  $SD = 5$ ,  $60$ ); this is significant difference  $t_{(90)} = 5.076$ ;  $p = <0.0001$ ;  $g' = 1.16$ , this particular size effect is considered moderate. Likewise, women ( $M = 30.59$ ,  $SD = 5.03$ ) reveal greater expectations for the future than men ( $M = 27.71$ ,  $SD = 7.33$ ), this difference are also significant  $t_{(90)} = 2.061$ ;  $p = 0.042$ ;  $g' = 0.54$ . This size effect meets the minimum required to be considered relevant.

Finally, in relation to the perception, participants from Botswana ( $M = 46.25$ ,  $SD = 5.39$ ) show a greater awareness of the key elements for learning than the subjects from Namibia ( $M = 38.25$ ;  $SD = 13.04$ ), this difference is statistically significant  $t_{(20,74)} = 2.683$ ;  $p = 0.014$ ;  $g' = 1.07$ . The size effect meets the minimum required to be considered relevant in practice.

Similarly, women ( $M = 45.60$ ,  $SD = 5.26$ ) reported a greater degree of perception than men ( $M = 41.34$ ,  $SD = 13.68$ ), however, there is insufficient evidence to consider this difference as significant  $t_{(24,08)} = 1,458$ ;  $p = 0.158$ .

An specific analysis of all output dimension descriptors referred to the human capital (motivations, initial expectations, actual expectations, perceptions) has been conducted and it is described below.

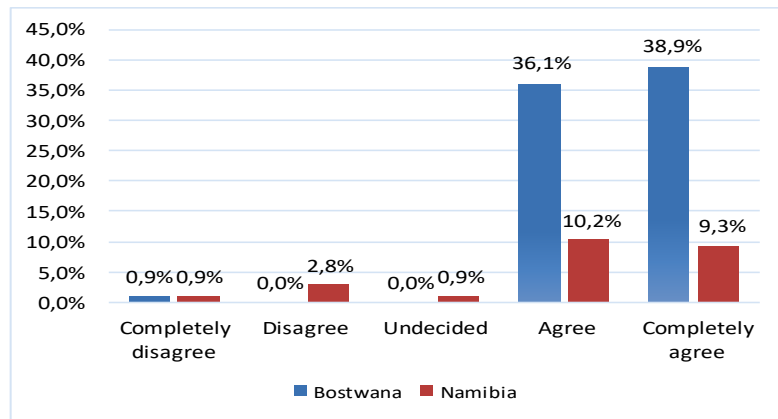
- **Motivations:**

All the motivational elements have been analyzed individually, item by item according to the responses of the questionnaire. Therefore a further comparative for each item in both countries have been conducted.

- Motivation A: I wanted to develop knowledge and skills that I could use in my professional career. In total, 94.4% of all interviewees believe that the relation about participant's motivation to develop their own knowledge and skills that could be used on their professional career in order to participate in the BEAR program is correct for them. From them 48.1% is in complete agreement; 46.3% agree; 0.9% are undecided; 1.9% strongly disagree and 2.8% disagree with this statement.

Comparing the answers from all participants across countries, it is observed that the majority of them in both countries, Botswana and Namibia, completely agree or agree with this particular motivational statement. Furthermore from the minority that have chosen a different answer, in Namibia there is a 0.9% of participants who are undecided and 2.8% who disagree with the idea. To conclude there is a 0.9% of people from both countries who completely disagree with the statement.

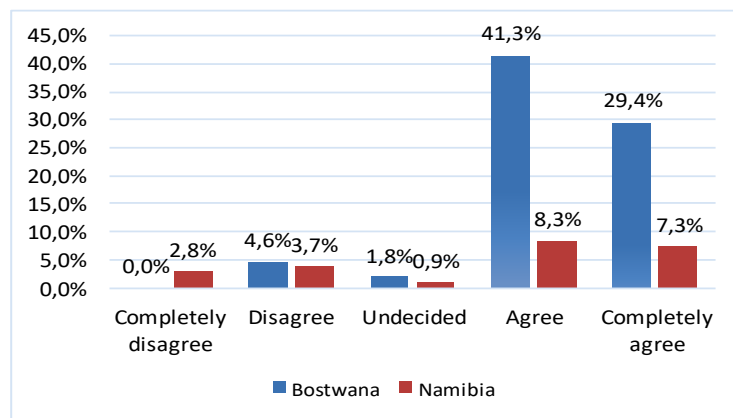
**Graph 24. Motivation A: I wanted to develop knowledge and skills that I could use in my professional career, by country.**



Source: Own elaboration from collected data (questionnaires).

- Motivation B: I hoped that the things I learnt would help me to develop as a person and broaden my horizons. In total 86.2% of the total stake, believe that this statement is correct, of these 49.5% agree and 36.7% completely agree with the idea. Nevertheless, there is also a 2.8% of the total stake who are undecided, and 2.8% who strongly disagree and 8.3% who disagree.

**Graph 25. Motivation B: I hoped that the things I learnt would help me to develop as a person and broaden my horizons, by country.**

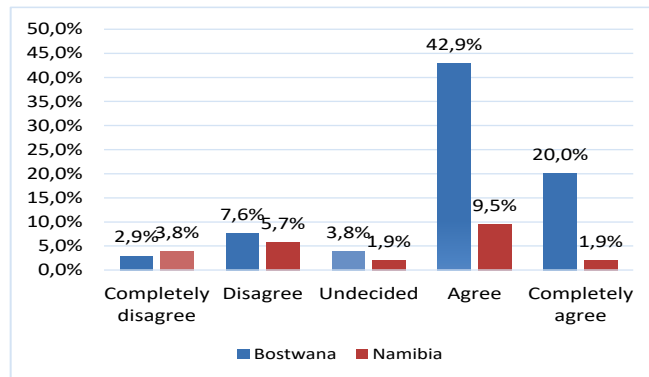


Source: Own elaboration from collected data (questionnaires)

Analyzing the answers from participants by country of origin, it shows that there are not significant differences. Most participants from Botswana and Namibia, agree or completely agree with the motivational statement, they think that the participation on the course will help them to broaden their professional horizons, and to develop as a person. As for the undecided, there are 1.8% of participants in Botswana and 0.9% in Namibia who are undecided. From the other alternative answers, there is 3.7% of participants in Namibia who disagree and 2.8% who completely disagree; as for Botswana there is a 4.6% who disagree.

- Motivation C: I was focused on the opportunities here to have an active social life. Most participants agree with this statement, more specifically, 52.4% of the total stake of participants agrees, of those, 21.9% completely agree. From the rest of participants, about 5.7% are undecided, 13.3% disagree and 6.7% completely disagree.

**Graph 26. Motivation C, I was focused on the opportunities here to have an active social life, by country.**



Source: Own elaboration from collected data (questionnaires)

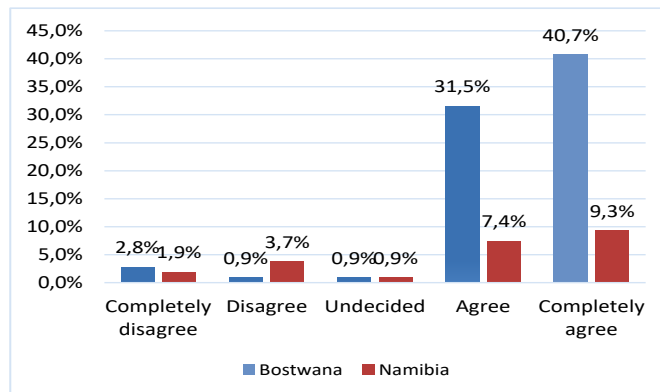
The country analysis reflect that most participants from Botswana and Namibia agree with the new opportunities that the TVET program brings in order to have an active social live,



which was an important motivational factor for them to join the program. 20% of total participants in Botswana and 1.9% in Namibia completely agree with this statement. As for the undecided subjects, there are 3.8% of them in Botswana and 1.9% in Namibia. In disagreement with this motivational statement there is 7.6% of participants in Botswana and 5.7% in Namibia, there are also 2.9% of people in Botswana and 3.8% in Namibia who are in completely disagreement.

- Motivation D: I hoped the whole experience here would make me more independent and self-confident. Almost 90% of the total stake of interviewees believes that this statement is true, of those, 50 % completely agree and 38.9% agree. There is also a 1.9% of the interviewees that are undecided and 4.6% who completely disagree, as well as disagree.

**Graph 27. MOTIVACIÓN D: I hoped the whole experience here would make me more independent and self-confident, by country**



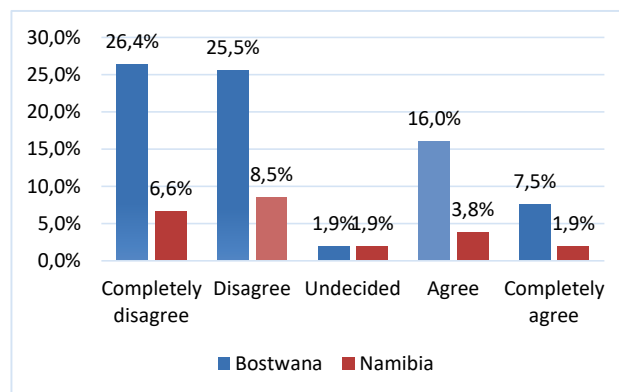
Source: Own elaboration from collected data (questionnaires)

Noting the responses for each country, it shows that most participants from Botswana and Namibia agree and completely agree to be motivated by the program to become more independent and confident. The other alternative options have low frequencies, to be more precise, there are 0.9% of undecided subjects 0.9% in both countries, there is also a 3.7% of people in disagreement with this statement in Namibia 0.9% in Botswana. There is also a group of people who is completely in disagreement, 2.8% of them from Botswana and 1.9% from

Namibia. In comparative terms there is a slightly higher disagreement in Namibia rather than Botswana.

- Motivation E: I mainly came here because it seemed like a natural thing to do. In total, around 70% of the total interviewees disagree with this statement, as it does not match into their motivations. From this group, 33% participants completely disagree and 34% disagree; 3.8% of the total is undecided, and from the people who does consider that this reason reflect their motivation, there is a 19.8% who agree and 9.4% who completely agree.

**Graph 28: Motivation E, I mainly came here because it seemed like a natural thing to do, by country.**

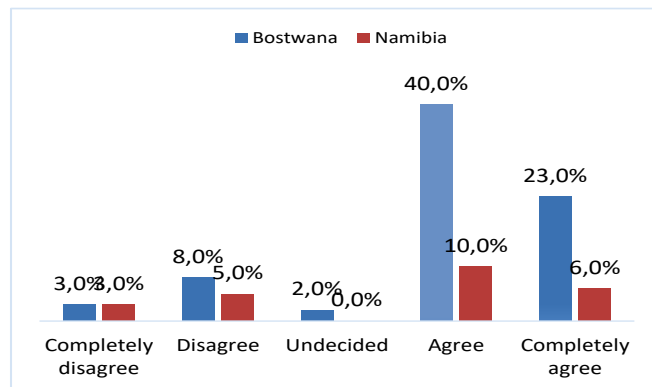


Source: Own elaboration from collected data (questionnaires)

When comparing the responses in both countries, it is observed that most of the participants from Botswana and Namibia disagree or completely disagree with the idea that the participation in the program was the natural thing to do for them. There are also 1.9% of undecided subjects in each country. As for the people who is in agreement with this statement, there is a 16.0% in Botswana, and 3.8% in Namibia; there is also 7.5% of participants who completely agree in Botswana and 1.9% in Namibia. The main difference that appears in the table and graph, refer to the fact that in Namibia there is a higher percentage of participants that disagree 8.5% rather than completely disagree (6.6%) and in Botswana it is the opposite, a higher amount of participants completely disagree (26.4%) than disagree (25.5%).

- Motivation F: I wanted to study the subject in depth by taking interesting courses. In total, around 80% of the total interviewees considers that this statement is correct, of those, 29% completely agree and 50% agree; however, there is a 13% of the total stake that disagree, 2% are undecided, and 6% completely disagree.

**Graph 29. Motivation F: I wanted to study the subject in depth by taking interesting courses, by country.**

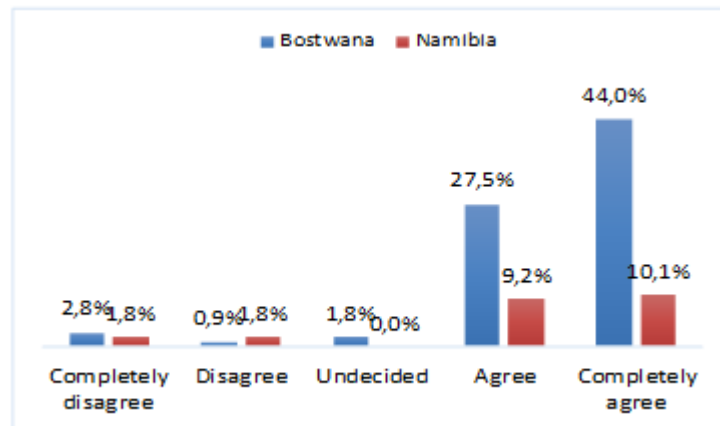


Source: Own elaboration from collected data (questionnaires)

When comparing the two countries, it appears that most of the participants from Botswana and Namibia agree and completely agree to be motivated to study the subject in depth by taking interesting courses. 40% in Botswana and 10% in Namibia agree and 23% in Botswana and 6% in Namibia completely agree with this. The other answers, have significantly lower frequencies in both countries. 2% of participants in Botswana are undecided. Of those who are in disagreement, 5% are from Namibia, and 8% from Botswana. There is also a 3% of participants from both countries who completely disagree.

- Motivation G: I mainly needed the qualification to enable me to get a good job when I finish. Almost 90% of the total interviewees consider that this statement fits their case, of these, 54.1% completely agree with the statement, and 36.7% agreed; In relation to the others 1.8% are undecided, 2.8% disagree and 4.6% completely disagree.

**Graph 30: Motivation G: I mainly needed the qualification to enable me to get a good job when I finish, by country.**

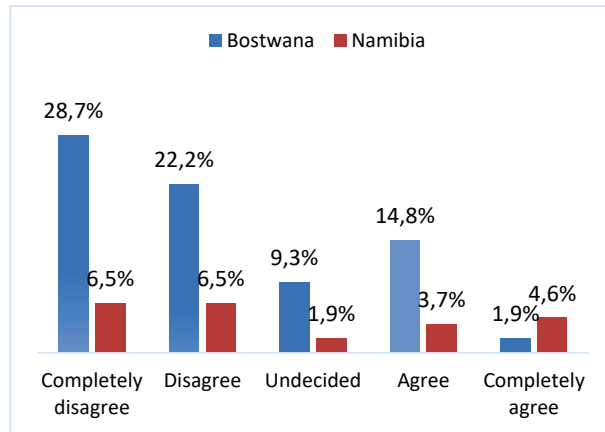


Source: Own elaboration from collected data (questionnaires)

Noting the responses for each country, it shows that most participants from Botswana and Namibia agree and completely agree to be self-motivated to get a diploma granting the improvement of their future employment situation. The other response options have low frequencies, as for the undecided subjects which represents 1.8% of the participants from Botswana. Of those who disagree 1.8% are from Namibia and 0.9% from Botswana. And those who are completely at odds, 2.8% are from Botswana and 1.8% from Namibia. Both countries follow the same pattern of response.

- Motivation H: When I look back, I sometimes wonder why I ever decided to take this programme. Most of students 63.9% do not agree with this statement, of these 35.2% completely disagree and 28.7% disagree. A part from them, there is an 11, 1% of the total participants who are undecided. Respect to those who believe that is correct, 18.5% agree and 6.5% completely agree.

**Graph 31. Motivation H: When I look back, I sometimes wonder why I ever decided to take this programme, by country.**



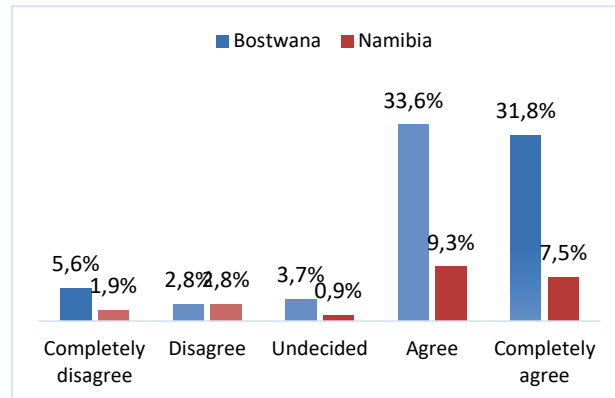
Source: Own elaboration based on collected data (questionnaires).

When comparing both countries responses, it is evident that a large percentage of participants in both countries are in completely disagreement and also disagree with the idea that they did wonder why they decided to participate in the program, which implies that most of the students have had a clear idea about why they wanted to join the program. 28.7% of the total stake of Botswana and 6.5% in Namibia completely disagree, and 22.2% in Botswana and 6.5% in Namibia disagree. As for the other answers with lower frequencies, there is a 9.3% of participants in Botswana and 1.9% participants in Namibia who are undecided, which means that in Botswana participants may have more difficulties in identified the added value that the TVET program brings to their lives. Moreover, of those who wonder why they ever decided to take this program, 14.8% and 3.7% agree with the idea in Botswana and Namibia respectively. To conclude there is a 1.9% of participants in Botswana and 4.6% participants in Namibia who completely agree with the statement. In relative terms the amount in Botswana is relatively higher than the Namibia one.

- Motivation I: I needed to learn things that would help me to face changes in my work place. About 80% of the participants believe that this statement it fits their personal motivations, more specifically, 39.3% fully agreed and 43% agreed. 4.7% of the total stake is undecided, and

from those persons who do not agree with this statement, 5.6% disagree and 7.5% completely disagree with it.

**Graph 32. Motivation I: I needed to learn things that would help me to face changes in my work place, by country.**



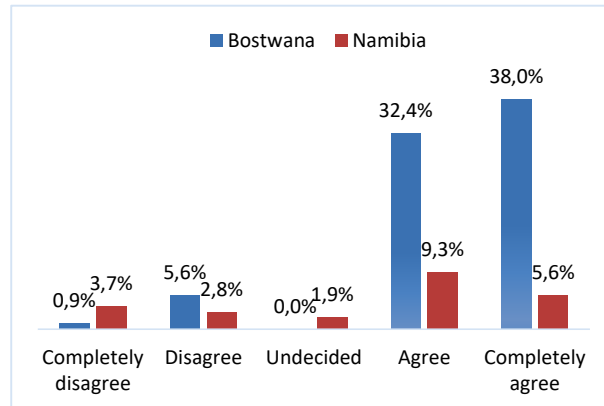
Source: Own elaboration from collected data (questionnaires)

When analyzing the answers by countries, the graph and table show that most participants in both countries agree (33.6% in Botswana and 9.3% in Namibia) and completely agree (31.8% in Botswana and 7.5% in Namibia) to be motivated to cope with the job changes in their working place. As for the undecided participants there represent the 3.7% in Botswana and 0.9% in Namibia. The participants who represent 2.8% of the total population for each country who disagree with this statement. And those who are completely in disagreement represent a 1.9% of total stake in Namibia, and 5.6% in Botswana, as for this last percentage, it is noted a relatively higher amount of completely disagreement in Botswana than in Namibia.

- Motivation J: I mainly need the certificate to progress on my professional career. Motivation J, refers to the students' willingness to participate in the program in order to get the certificate that will allow them to progress on their professional career. Around 90% of the participants believe that this statement is true in their specific case. Of those, 43.5% completely

agree with the statement and 41.5% agreed; as for the other participants 1.9% of the total stake is undecided, 8.3% disagree and 4.6% completely disagree.

**Graph 33. Motivation J: I mainly need the certificate to progress on my professional career, by country.**

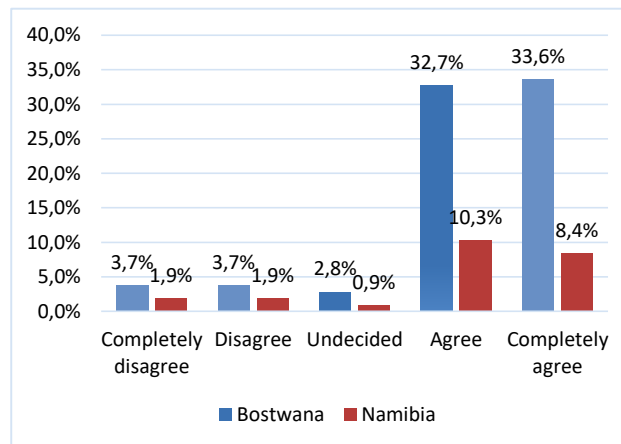


Source: Own elaboration from collected data (questionnaires)

Comparing the participant's responses from each country, it shows that a large percentage of students in both countries completely agree (38% in Botswana and 5.6% in Namibia) and also agree (32.4% in Botswana and 9.3% in Namibia) to be motivated to get a certificate that allows them to advance in their career. There is a 1.9% undecided participants only the country of Namibia. As for the subjects who disagree there is a 2.8% and 5.6% in Namibia and Botswana respectively, and of those who completely disagree there are 3.7% from Namibia and 0.9% from Botswana. Even though the percentage of disagreement is relatively higher in Botswana than in Namibia, in absolute terms including the completely disagreement, it shows that both countries follow the same trends.

- Motivation K: I mainly needed the qualification to enable me to get better jobs. Motivation K, refers to the willingness of the participants in the program to get qualified in order to get better jobs. About 85% of the total stake considers that this statement fits their case, more specifically, 42.1% fully agreed and 43% agreed with it. As for the rest of participants 3.7% are undecided, 5.6% disagree and 5.6% completely disagree with this statement.

**Graph 34. Motivation K: I mainly needed the qualification to enable me to get better jobs, in total, by country.**

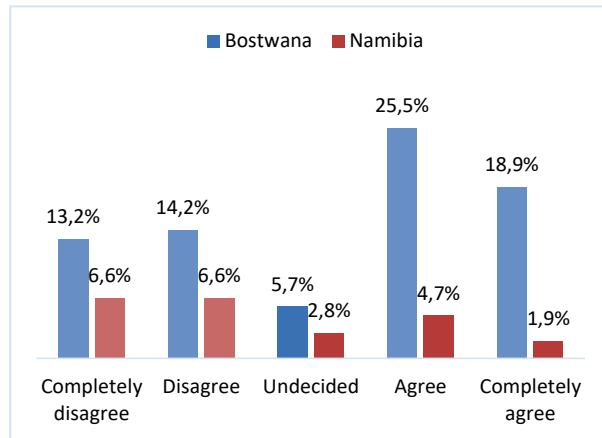


Source: Own elaboration from collected data (questionnaires)

By disaggregating the data according to the country of origin, it shows that both countries follows the same pattern of response among its students. A large percentage of participants in both countries are in complete agreement (33.6% in Botswana and 8.4% in Namibia) or agree (32.7% in Botswana and 10.3% in Namibia) that one of the main motivations they had to join the program was to obtain a qualification that allowed them to advance in their professional career. As for the undecided participants there is 0.9% from Namibia and 2.8% from Botswana, and those who completely disagree represent the 3.7% in Botswana and 1.9% in Namibia; which represent the same figures for the participants who just disagree.

- Motivation L: I was focused on opportunities for networking. In terms of motivation to find networking opportunities within the program, opinions are very divided, a 20.8% fully agree, 30.2% agree, 8.5% are undecided, 20.8% disagree and 19.8% completely disagree.



**Graph 35. Motivation L: I was focused on opportunities for networking, by country.**

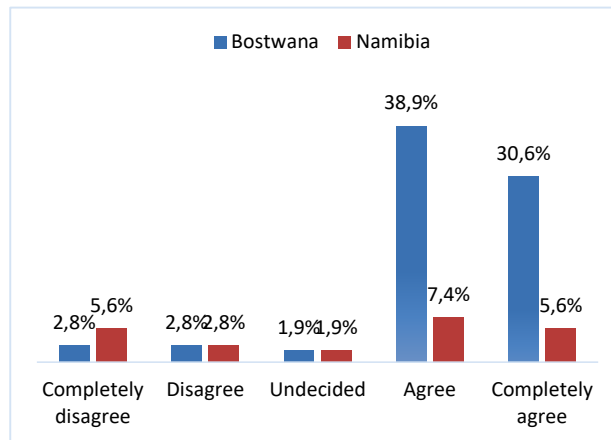
Source: Own elaboration from collected data (questionnaires)

Noting the responses for each country is evident that most participants in Botswana agree (25.5%) and completely agree (18.9%) with the idea that their participation on the program will bring them new networking opportunities, which was a motivational factor. This situation is not reflected in Namibia, where the majority of participants mostly disagree (6.6%) and strongly disagree (6.6%) with this motivation. As for the undecided subjects there are 2.8% in Namibia and 5.7% in Botswana. As for the participants that completely agree with this statement in Namibia, they represent the 1.9% of the total sample and the 4.7% of Namibian's simply agree. The existing difference between Namibia and Botswana on regards to this motivation is based on the understanding of the concept "network" within the questionnaire. Meanwhile in Botswana participants understood the concept of network opportunities as a way to get to know more and new professional peers, in Namibia the opportunities for networking was misunderstood, as most of students consider the conceptualization of networking as the use of personal social media, like Face-book and twitter. Therefore the participants did not find the use of this social media application (Facebook, ....) as a principal motivation for them to join the TVET programme.

- **Initial Expectations:**

- Initial expectations A: When I had the choice, I opted for a program that seemed useful to me for my present or future profession. The first initial expectation from participants, reflect the student's perception about how useful the participation in the program will be, most participants 82.4% believe that this statement reflect clearly their expectations prior to join the program. Of this 36.1% completely agree, 46.3% agree. There is also a 3.7% of the total participants who are undecided, 5.6% disagree and 8.3% completely disagree.

**Graph 36. Initial Expectations A: When I had the choice, I opted for a program that seemed useful to me for my present or future profession, by country**

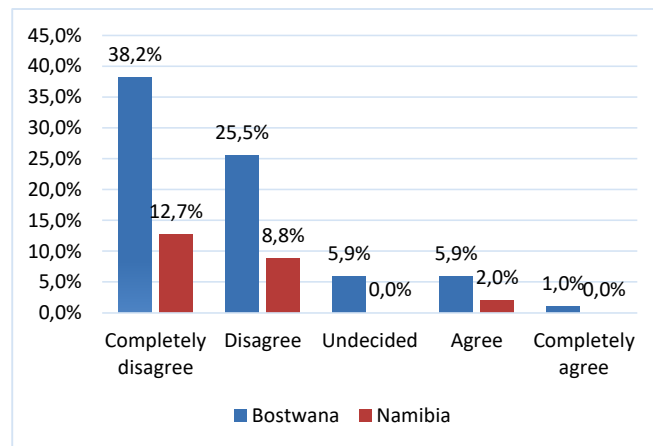


Source: Own elaboration from collected data (questionnaires)

Comparing the responses among both countries, it is evident that the highest frequencies from both countries refer to the agreement or completely agreement (38.9% of total participants in Botswana and 7.4% in Namibia agree) 30.6% of Botswana people and 5.6% completely agree with the idea that joining the TVET program is useful for their present and future profession. There is a 1.9% of undecided subjects from each country, and those who disagree represent the 2.8% from each country. Of those who do not agree or completely disagree with this statement, there is a 5.6% of participants from Namibia and 2.8% from Botswana. Therefore both countries follows the same pattern of response.

- Initial expectation B: I had no choice, the company which I worked for, oblige me to participate. In general, 8.8% of the participants on the TVET program considered that they had no choice in deciding to join or not the program, as the company where they worked obliges them to be enrolled and participate in it, from the participants of this group (1.0% completely agree and 7.8% agree). In contrast almost 85.3% of the total stake are against this statement, of these, 51.0% completely disagree, and 34.3% disagree; meanwhile 5.9% were undecided.

**Graph 37. Initial expectations B: I had no choice, the company which I worked for, oblige me to participate, by country**

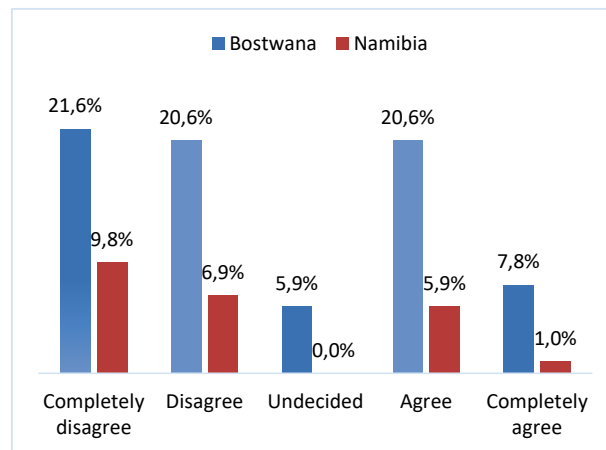


Source: Own elaboration from collected data (questionnaires)

Noting the answers for each country it is evident that a large percentage of participants from Botswana and Namibia completely disagree and disagree with the idea that the Company in which they work force them to join the programme, which means that they were not obliged to join it. 38.2% in Botswana and 12.7% in Namibia completely disagree; in addition to this 25.5% of participants in Botswana and 8.8% in Namibia disagree. There is also a 5.9% undecided subjects from Botswana, meanwhile there is no undecided persons in Namibia. To conclude from those who agree with the idea, 5.9% are from Botswana and 2.0% from Namibia. There is a small group of people 1.0% in Botswana that completely agree with it and feel forced to join the program, which is slightly higher in Botswana comparing to Namibia.

- Initial expectations C: I had no choice; the certification is required to be employed in the profession. This particular initial expectation refers to the requirement needed to be employed in the profession. Therefore, students do not consider that the selection of their participation in the program was a choice as they wanted to be employed in that profession. 35.3% of the total stake consider that this statement is true, 8.8% of these are completely agree with this statement and 26.5% agree on this issue as well. Meanwhile 5.9% do not feel agree or disagree, they are undecided. In contrary, the majority of participants 58.9% do not agree with this statement, of these 31.4% are completely disagree and 27.5% disagree.

**Graph 38. Initial expectations C: I had no choice; the certification is required to be employed in the profession, by country**



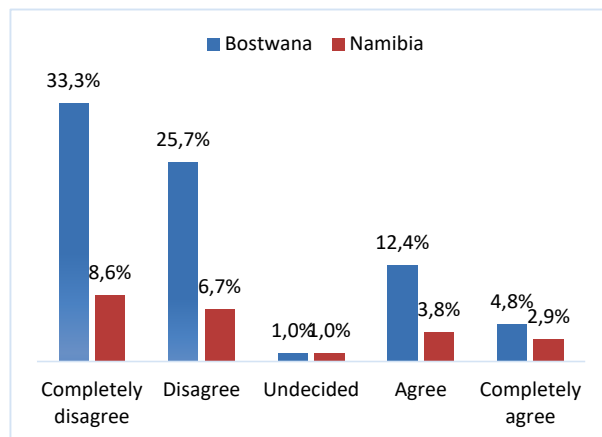
Source: Own elaboration from collected data (questionnaires)

By comparing the answers of all participants in each country, we will analyze the participant's perception considering that they had no choice to join or not to join the TVET programme, as the certification was required to be employed in their respective professions, both countries follow the same pattern. The highest frequencies are completely disagree (21.6% in Botswana and 9.8% in Namibia), disagree (20.6% in Botswana and 6.9% in Namibia) and agree

(20.6% in Botswana and 5.9% in Namibia) There are also 5.9% of the Botswana participants who are undecided. To conclude there is a 7.8% and 1.0% in Botswana and Namibia respectively who completely agree with the idea. The answers shows that there in both countries even if there is a clear policy to hire only certified professional staff to do the job, the reality shows that this is not true in many cases.

- Initial expectation D: When I chose the programme, I was in a critical labour situation. This initial expectation reflects the participant's intentions on joining the program due to their critical labor situation prior to their enrolment in it. 74.3% of the total stake considers that this statement it is not true, of this group, there is a 41.9% who completely disagree and a 32.4% who disagree. In addition to that, there is a 1.9% of people who do not want to decide if they agree or not with the statement. In contrary there is a 23.8% of participants who decide to participate in the program due to the critical labor situation that were facing prior to the beginning of it.

**Graph 39. Initial expectation D: When I chose the programme, I was in a critical labour situation, by country**



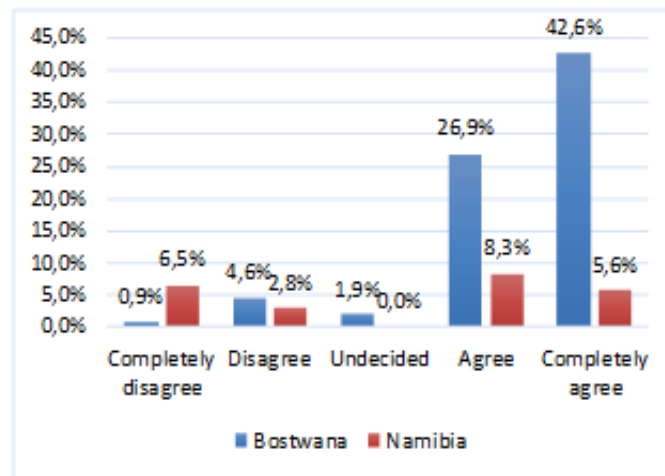
Source: Own elaboration from collected data (questionnaires)

Comparing the responses in both countries it shows that a large percentage participants in both countries completely disagree (33.3% in Botswana and 8.6% in Namibia) or disagree (25.7% in Botswana and 6.7% in Namibia) with the fact that at the time that they decided to join

the program there were suffering a critical labor situation that could have force them to enroll in it. Which means that the enrolment on the TVET programme was chosen by almost all students in both countries, it was a personal election to doing it. There is also a 1% of undecided subjects in each country. Finally, of those who agree with the statement, 4.8% were from Botswana and 2.9% from Namibia. As it can be seen in the graph and tables both countries follow the same pattern.

- Initial expectation E: I chose this programme, because it prepares me for the type of work I am highly interested in. In total there is a 83.3% of the participants that consider that the selection of the program was done based on that criteria, as it imporves and prepares them for the type of work they are interested in. Of this group 48.1% are completely agree and 35.2% agree. Moreover 1.9% of total participants are undecided, and 14.8% do not agree on that ideas, from this group 7.4% completely disagree and 7-4% disagree.

**Graph 40. Initial expectation E: I chose this programme, because it prepares me for the type of work I am highly interested in, by country**



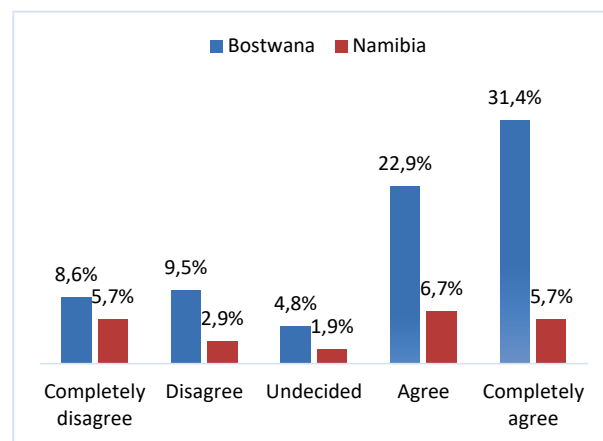
Source: Own elaboration from collected data (questionnaires)

Noting the different data from the graph and table for both countries, it shows that most participants in Botswana and Namibia are in completely agreement (42.6% in Botswana, and 5.6% in Namibia) or in agreement (26.9% in Botswana and 8.3% in Namibia) with the

statement, they think that the TVET programme gives them the skills and attitudes needed to be prepare for the type of work they are interested in. There is also a 1.9% of undecided subjects in the country of Namibia, meanwhile in Botswana there is no undecided people. As for the subjects who do not agree with this statement Botswana has a 4.6% and Namibia holds a 2.8% who disagree. To conclude there is also a 0.9% of participants in Botswana who completely disagree, Namibia has a bigger amount with 6.5%, as the participants from this country seems to be more skeptical regarding their future professional options, as the youth unemployment rate is relatively higher than it exist in Botswana for the same population.

- Initial expectations F: For the kind of work I would like to do, I needed to have done a TVET programme. For this expectation, there is a 66.6% of participants in general that consider that for the type of work and profession they wanted to do, it was compulsory for them to participate on the TVET programme. Of these, 3, 7.1% completely agree and 29.5% agree with the statement. Furthermore there is a 6.7%, who is undecided, and a 26.7% of total participants who do not agree with this idea; of these, 12.4% do not agree with the affirmation, and 14.3% completely disagree with it.

**Graph 41. Initial expectation F: For the kind of work I would like to do, I needed to have done a TVET programme, by country.**



Source: Own elaboration from collected data (questionnaires)

Comparing the results among Botswana and Namibia, it is evident that most participants both agree and completely agree with the statement that consider that joining the TVET programme was a request to be able to find a TVET related job. From them 31.4% in Botswana and 5.7% in Namibia completely agree. The highest frequency in Botswana is completely agree, meanwhile that in Namibia is agree. Therefore there was a 6.7% in Namibia and 22.9% in Botswana who agree. There is also a percentage of participants that were undecided (4.8% in Botswana and 1.9% in Namibia). In contrary, there is a 9.2% of people in Botswana and 2.9% in Namibia who disagree, and 8.6% and 5.7% who completely disagree respectively.

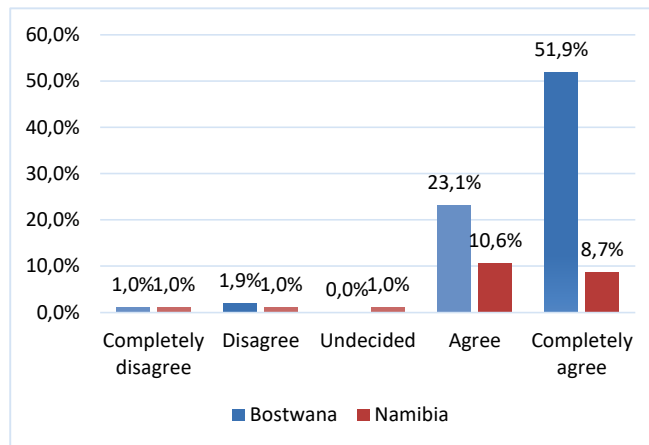
It is also important to mention that Namibia has the same percentage of participants that completely agree and disagree 5.7%, this situation does not happen in Botswana where over 30% of the simple is completely agree. The reason for this is that the existing informal market for TVET professions is something common, and there is no inspections at industry level to guarantee that the workers have got a specific certificate.

- **Actual expectations:**

- Actual expectation A: The main goal I pursue in my studies is to pass exams. Almost 94, 3% of total participants in the program expect in the moment of the interview to pass the exams, this was one of the major actual expectations. From those who expected to pass the exams 60.6% completely agree and 33.7% agree with the statement. There is 1% of the interviewees that was undecided, and finally there is a group of 3.8% of total participants who disagree with this initial expectation, of these 1.9% completely disagree and 2.9% disagree.



**Graph 42. Actual expectation A: The main goal I pursue in my studies is to pass exams, by country.**

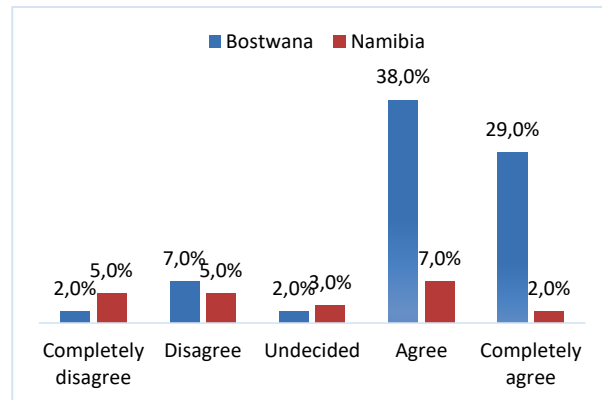


Source: Own elaboration from collected data (questionnaires)

Noting the frequency of responses for each of the countries is evident that most participants are both agree and completely agree that its main objective is to perform well and pass their exams (51.9% in Botswana and 8.7% in Namibia, completely agree) and (23.1% and 10.6% agree respectively). Therefore we can notice that the highest frequency in Botswana rather than the highest in Namibia which is agree. As for the undecided subjects, there is only a 1% in Namibia. As for the subjects that do not agree with the idea, the percentage in both countries is very low, 1.9% in Botswana and 1% of Namibia who disagree and 1% in both countries who strongly disagree.

- Actual expectation B: The only aim of my studies is to enrich myself. In total there is 76% of the total stake agrees on the statement. Of these people (45% agree and 31% completely agree) they do consider that the aim of their studies in to enrich themselves. There is also a 5 % of persons who are undecided and 19% of the stake who do not consider that enriching themselves as an actual expectation.

**Graph 43. Actual expectations B: The only aim of my studies is to enrich myself, by country.**



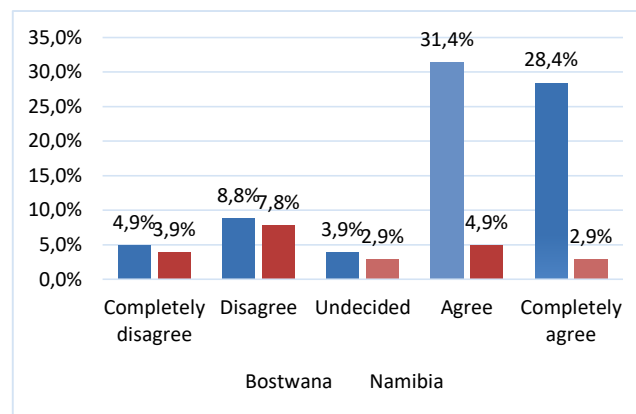
Source: Own elaboration from collected data (questionnaires)

By analyzing responses among countries in relation to the participants' expectation related to the aim of their studies as a way to enrich themselves. The highest frequencies that are shown in the above table and graph, for both countries, reflect that in Botswana most students agree 38.0% or completely agree with this statement 29.0%. As for Namibia the highest frequencies shows that most students agree 7% or completely disagree 3%. In absolute terms the participants in Botswana rather agree 9.0% (sum of agree and completely agree) than disagree 9.0% (sum of disagree and completely disagree), as for the participants in Namibia in absolute terms, most of them disagree 10.0% (sum of completely disagreement and disagreement) rather than agree which represents 9.0% (7% agree and 2.0% completely agree).

The reason that may explain why in Botswana most participants wanted to join the TVET program aiming mostly to enrich themselves is due to the fact that they are mostly entrepreneurs and their attitude is based on the inner enrichment that will provide them with the tools needed to succeed running their own business. As for the undecided subjects, there are 2% in Botswana 2% and 3% in Namibia.

- Actual expectation C: What I want with these studies is to earn credits to obtain an official qualification. There is a 67.7% of participants consider this statement as correct (36.3% agree with it and 31.4% completely agree). There is a 6.9% of the share who is undecided about this idea and a 25.5% who do not consider that this idea reflects their actual expectations, of these 16.7% disagree and 8.8% completely disagree.

**Graph 44. Actual expectations C: What I want with these studies is to earn credits to obtain an official qualification, by country.**

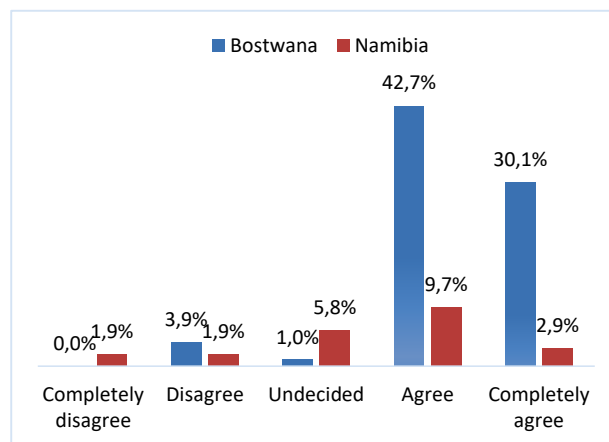


Source: Own elaboration from collected data (questionnaires)

By observing the above table and graph, the cross-country analysis shows that the highest frequency in Botswana is 31.4% that refers to the agreement with the expectation that the TVET programme will allowed them to obtain credits to obtain an official qualification. Meanwhile in Namibia the highest frequency is the disagreement 7.8% with the statement. This shows two opposite scenarios for each country. As In Botswana the requirement of the certification is compulsory to enter into the labor market, and is not the case in Namibia, where there is a lot of workers that are not certified and may be qualified entering into the labor market without problems. It is also noted that the participants in Botswana that are undecided is slightly higher than the ones in Namibia.

- Actual expectation D: I want to discover my own skills, the things I am capable and incapable of. In total, there is an 85.4% of the stake who consider that their current expectations in relation to their participation on the program are to discover their own skills and things that they are capable of. Of this group, there is a 33% who completely agrees and 52.4% who agree. Moreover there is a 6.8%, who is undecided, and 7.7% of persons who do not consider that discovering their own skills motivates them in this moment, of these people, 5.8% disagree and 1.9% completely disagrees.

**Graph 45: Actual expectations D: I want to discover my own skills, the things I am capable and incapable of, by country.**



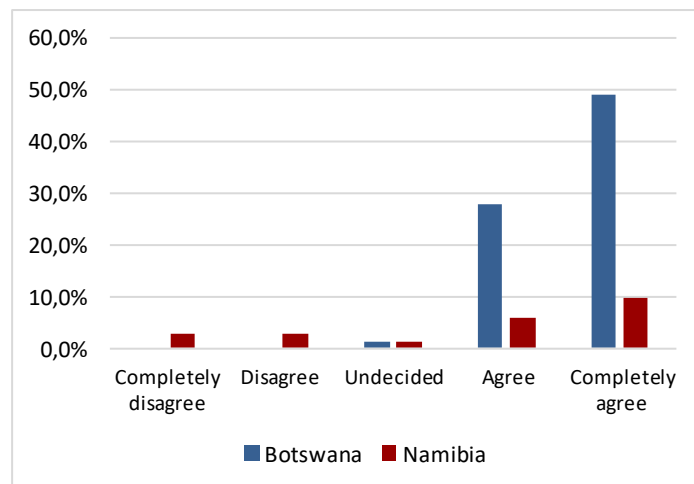
Source: Own elaboration from collected data (questionnaires)

Noting the responses among both countries country, it is observed that a large percentage of participants from Botswana agree (42.7%) and completely agree (30.1%) with the will of discovering their own skills and capabilities. However, in Namibia shows the same highest frequency as Botswana, with agreement from 42.7% of the participants, followed by a 5.8% of undecided people. As for the subjects that completely disagree with this expectation, 1.9% are from Namibia, there is none from Botswana who completely disagree. Nevertheless, there is a

3.9% of people in Botswana who disagree and 1.9% in Namibia. The undecided persons in Botswana represents 1.0% of total participants.

- Actual expectation E: What I want to acquire through my studies is above all professional skills. In relation to the current expectations that the participants have in relation to the aim of acquiring professional skills. There is a 92.4% of the total participants that agree with this statement, of these 58.7% completely agree and 33.7% agree. There is also a 1.9% of the sample who is undecided, and 5.8% who do not consider that this is an expectation for them, of these 2.9% disagree and 2.9% completely disagree.

**Graph 46. Actual expectations E: What I want to acquire through my studies is above all professional skills, by country**

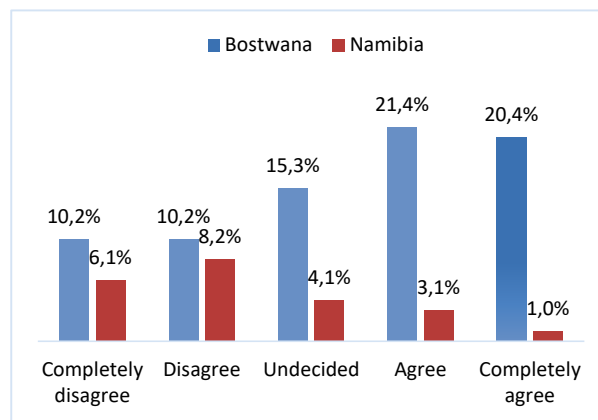


Source: Own elaboration from collected data (questionnaires)

Noting the answers from each countries show that most subjects in both countries have common expectations as to acquire professional skills through the TVET program, that justify why 49.0% in Botswana and 9.6% in Namibia completely agree and 27.9% in Botswana and 5.8% in Namibia agree with this statement. As for the undecided subjects there is 1% in each country. And for subjects who do not agree with this statement, all of them 2.9% are in Namibia, to conclude there is also a group of 2.9% people who completely disagree in Namibia, and none in Botswana.

- Actual expectation F: I wonder whether these studies are worth all the effort. There is a 45.9 % of participants who question themselves about the effectiveness of their participation in the program in term of the relation between effort and learning outcome and 24.7% disagree with this assessment, there is also a 19.4% who does not decided whether they agree or disagree.

**Graph 47. Actual expectations F: I wonder whether these studies are worth all the effort, by country.**

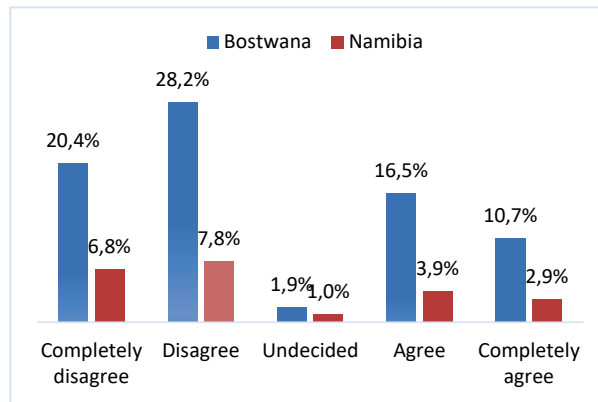


Source: Own elaboration from collected data (questionnaires)

Comparing the responses between Botswana and Namibia, both countries show that most subjects agree with the uncertainty about the worth of the studies in Botswana (21.4%) and Namibia (3.1%) wonder that these studies are worth all the efforts; at the same time, there is a high percentage of people who completely agree (20.4% in Botswana and 1.0% in Namibia). As for the people who is undecided, there are 15.3% in Botswana and 4.1% in Namibia. On the other hand there is a significant amount of people who completely disagree. 10.2% from Botswana and 6.1% from Namibia, and to conclude there is a 10.2% of people in Botswana who disagree and 8.2% in Namibia. Therefore it is visible that Botswana population is more skeptic about added value that the program brings to their lives, and Namibia shows the opposite position.

- Actual expectations G: I am afraid these studies are too demanding for me. As for the this expectations, after participation in the program, they may believe that these studies are too demanding for them, although opinions are divided, over 50% do not consider that this statement is consistent with their case, more specifically, 27.2% completely disagree and 35.9% disagree, on the other hand, 2.9% are undecided, and about 30% consider that the statement is applicable to them, in more detail, 20.4% of the total agree and 13.6% completely agree.

**Graph 48. Actual expectation G: I am afraid these studies are too demanding for me, by country.**

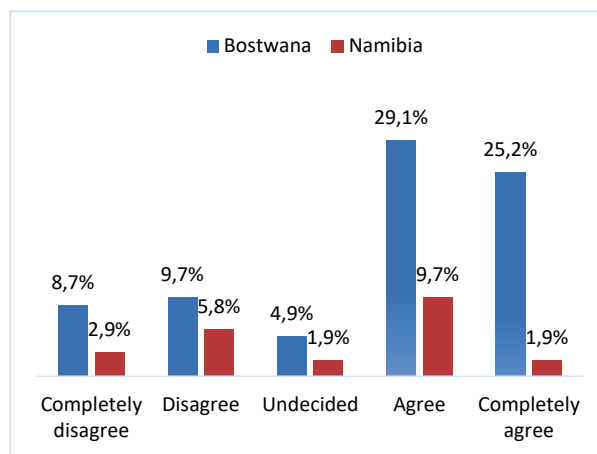


Source: Own elaboration from collected data (questionnaires)

As for the students' fears on their own lack of capacities to cope with the demanded capabilities required to successfully complete the TVET programme. Both countries follow the same pattern of response. The highest response frequencies are disagree (Botswana 28.2%; Namibia 7.8%) followed by completely disagree (Botswana 20.4%; Namibia 6.8%). There is also a significant percentage of students who doubts about their own capacities to conclude successfully the programme, that are represented in absolute terms with 27.2% in Botswana and 6.8% in Namibia. This data corresponds to the sum of data from the participants that agree with the statement (16.5% in Botswana and 3.9% in Namibia) and completely agree (10.7% in Botswana and 2.9% in Namibia). There is also a 1.9% of students who are undecided in Botswana and 1.0% in Namibia.

- Actual expectation: I do these studies because I like to learn and to study. Participants acknowledge that they have enrolled in these studies because they wanted to learn and study. There is a 65.0% of participants who consider that they do enroll in the program because they like to learn and study. From this group 27.2% completely agree and 38.8% agree with it. Moreover, there is a 6.8% undecided people, and on the other side there is 38.8% of people who do not agree and 27.2% of people who completely agree.

**Graph 49. Actual expectations H: I do these studies because I like to learn and to study, by country.**



Source: Own elaboration from collected data (questionnaires)

When analyzing responses among countries, the above table and graph shows that in both countries Botswana and Namibia the highest frequency observed is to agree with the student's perception that they have joined the programme because they wanted to learn and to study (29.1% in Botswana and 9.7% in Namibia). There is also a 25.2% of the participants in Botswana and 1.9% in Namibia, who completely agree. As for the undecided subjects, there are 4.9% in Botswana and 1.9% in Namibia. To conclude, there is a 9.7% of people who disagree in

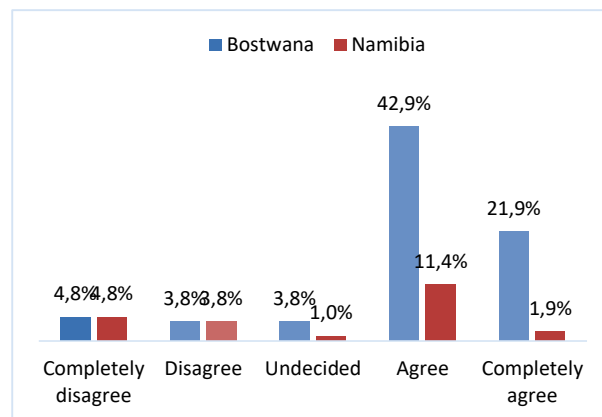


Botswana and 58% in Namibia; and 8.7% in Botswana and 2.9% in Namibia who completely disagree.

### ▪ Perceptions

- Perception A: The topics I learn need to be useful for solving practical problems. As for the first item, related to the participant's perception in relation to the purpose of the courses, that should be useful for solving practical problems. Most and almost 75% of students consider that this statement is in line with their perceptions, more specifically, 23.8% completely agreed and 54.3% agreed, meanwhile 4.8% were undecided and on the other hand 7.6% disagree and 9.5% strongly disagree.

**Graph 50. Perceptions A: The topics I learn need to be useful for solving practical problems, by country.**



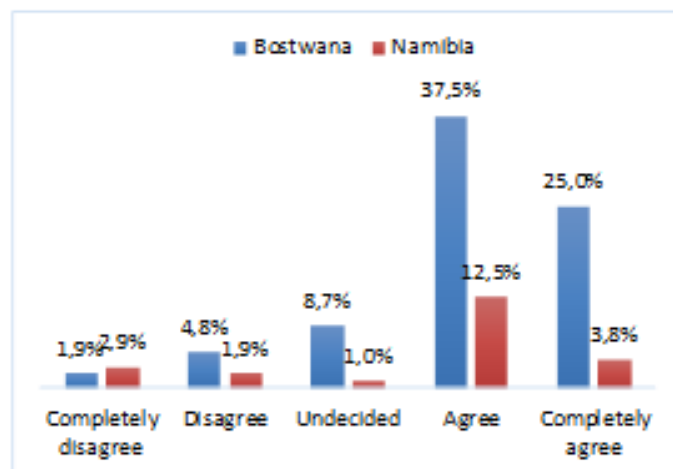
Source: Own elaboration from collected data (questionnaires)

Comparing the responses from Botswana and Namibia is evident that participants from both countries follows the same pattern of response. The highest frequency observed refers to

the agreement by students that the topics learned need to be useful for solving practical problems (42.9% in Botswana and 11.4% in Namibia) followed by completely agreement (21.9% in Botswana and 1.9% in Namibia) with this perception. As for the undecided subjects there are 3.8% in Botswana and 1% in Namibia. Those participants that do not agree with this perception, represent 3.8% in both countries, and there are also a 5.8% who completely disagree.

- Perception B: I like to be given precise instructions as how to carry out a task or do an assignment. Most participants 78.8% agree with this statement, they do consider that this affirmation is in line with their perceptions, more specifically 28.8% completely agree and 50% agree. There are a 9.6% of participants who are undecided and on the other hand, there is a 6.7% who disagree with this perception and 4.8% who completely disagree.

**Graph 51. Perceptions B: I like to be given precise instructions as how to carry out a task or do an assignment, by country.**



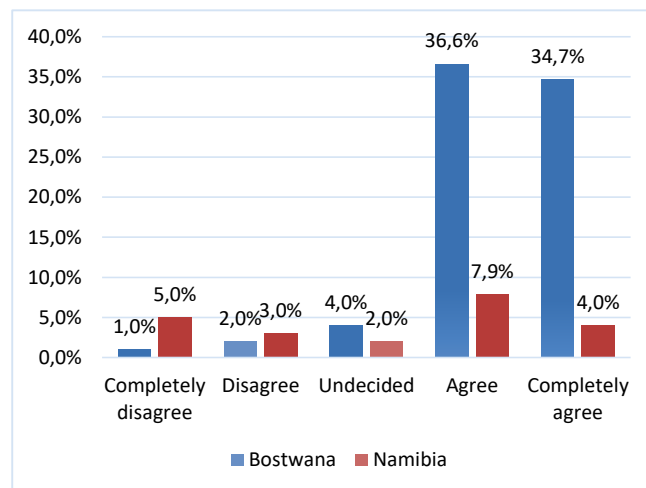
Source: Own elaboration from collected data (questionnaires)

When comparing responses from the above table and graph, we could see that both countries follow the same tendency. The highest frequency relates to the agreement with the perception that states that students' like to receive precise instructions on how to carry out a task or do an assignment. Representing a 37.5% in Botswana and 12.5% in Namibia, and completely agree with 25.0% of the total share in Botswana and 3.8% in Namibia. As for the undecided

participants they represent 8.7% in Botswana and 1.0% in Namibia. To conclude, the participation representing the opposite vision (disagreement and completely disagreement) represents 4.8% in Botswana and 1.9% in Namibia (disagree); and 1.9% and 2.9% completely disagree respectively.

- Perception C: To me, learning is making sure that I can reproduce the facts presented in a course. As for the third perception, on the appreciation of learning understood as the way to reproduce the contents and facts presented in the courses. 83.2 % of the total stake considers that this statement is in line with their perceptions, of this there is a 38.6% completely agree and 44.6% agree. In addition to this there is a 5.9% who is undecided. In contrast there is a 10.9% who do not agree with it, of this group, there is a 5.9% who completely disagree and 5.0% who disagree.

**Graph 52. Perceptions C: To me, learning is making sure that I can reproduce the facts presented in a course, by country.**



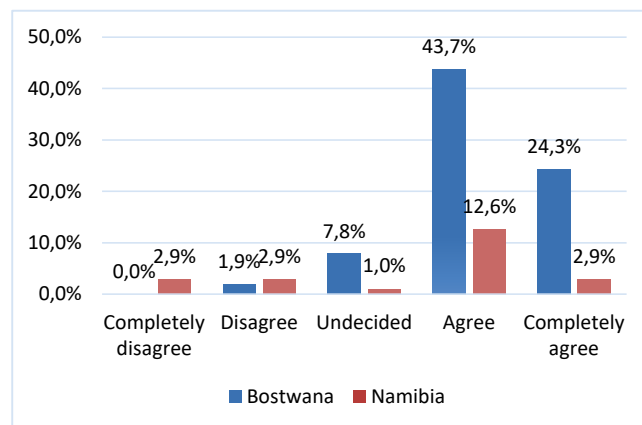
Source: Own elaboration from collected data (questionnaires)

Noting the responses from both countries is evident that despite some differences, most participants from both countries Botswana and Namibia share a common perception regarding the understanding they have on what does learning mean 'making sure that they can reproduce

by themselves the facts presented in a course'. In absolute terms 71.3% of the students are in agreement with the perception in opposition to the 3.0% who are in disagreement. Being more specific there is a 36.6% of students in Botswana who agree with the perception and 34.7% who completely agree; in Namibia the percentage of students who agree is 7.9% and 4.0% of those who completely agree. As for the undecided subjects there are 4% in Botswana and 2% in Namibia. To conclude of the subjects who do not agree with this statement, there are 2% and 3% in Botswana and Namibia respectively, and of those who completely disagree represent 1% in Botswana and 5% in Namibia.

- Perception D: I should try to look for connections within the subject matter without having told to do so. As for this perception, in total 83.5 % of the participants consider that they should try to look for connections within the subject matter without having told to do so. Of these participants 27.2% completely agree with this statement and 56.3% agree. In addition to this, there is an 8.7% who are undecided. Moreover, there is a contrast of 7.8% who do not share the same perception as it is described on the statement, of these participants 4.9% disagree and 2.9% completely disagree.

**Graph 53: Perceptions D, I should try to look for connections within the subject matter without having told to do so, by country.**

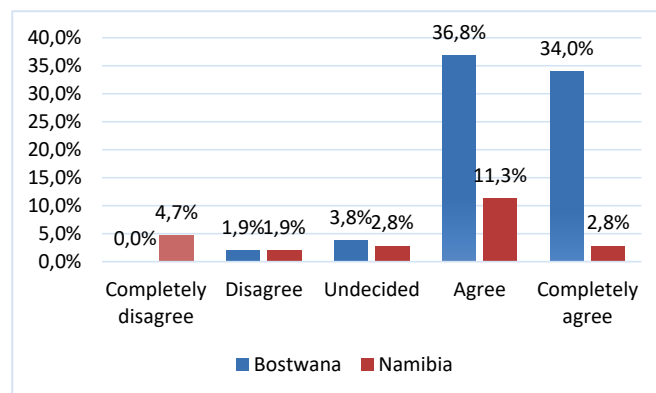


Source: Own elaboration from collected data (questionnaires)

When doing a comparative analysis among countries, it is shown that participants from both countries reflect a high perception or agreement (43.7% in Botswana and 12.6% in Namibia) and completely agreement (24.3% in Botswana and 2.9% in Namibia) with the statement, that refers to the fact that students should try to find themselves connections within the subject matter without having told to do so. As for the undecided subjects there are 7.8% in Botswana and 1% in Namibia. To conclude from the subjects who disagree with this statement, they represent a 1.9% and 2.9% in Botswana and Namibia respectively, in addition to that there is a 2.9% of Namibians that are completely disagree but none in Botswana.

- Perception E: I should try to apply the theories dealt during the course to practical situations. The analysis of the next perception, relates the importance that participants give to the theory application to learned in the courses to the practical situations. 84.9 % of the stake believe that this statement is in line with their perceptions, more specifically a 36.8% of these, completely agree and 48.1% agree. In contrast, 6.6% are undecided, and 8.5% do not share this particular believe or agree with this perception, of these 4.7% completely disagree and 3.8% disagree.

**Graph 54: Perceptions E: I should try to apply the theories dealt during the course to practical situations, by country.**

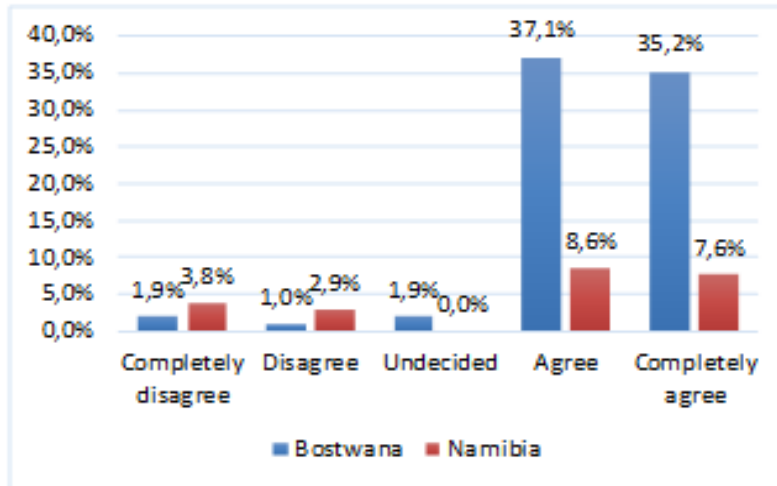


Source: Own elaboration from collected data (questionnaires)

Comparing the two countries responses is evident that both follow the same pattern of responses. The highest frequencies of responses indicate that most participants agree and completely agree with the idea that they should try to apply the theories dealt during the course to a practical situation. In Botswana there is a 36.8% of people who agree and 34.0% of people who completely agree; meanwhile in Namibia there is 11.3% of people who agree and 2.8% of people who completely agree. As for the undecided subjects there is one perceptual point difference among participants in Botswana 3.8% and Namibia 2.8%. Of the subjects who do not agree with this statement, there is 1.9% in both countries and 4.7% in Namibia who completely disagree, meanwhile there is no subject who completely disagree in Botswana. It is important to notice that meanwhile in Botswana the majority of participants agree, in Namibia there is a significant amount of subjects who disagree (to completely disagree is the second highest frequency selected in Namibia).

- Perception F: If I have difficulties understanding a particular topic, I should consult other books without having told to do so. The analysis of this perception shows us that 88.6% of the participants are in line with the perception that considers that in order to confront learning difficulties on understanding a particular topic; they should consult books to find solutions by their own, without having told to do so. Of these 42.9% completely agree and 45.7% agree on that. Nevertheless there is a 1.9% who is undecided, and in contrast there is a 9.5% of participants who do not share the perception, and therefore disagree with the idea.

**Graph 55. Perceptions F: If I have difficulties understanding a particular topic, I should consult other books without having told to do so, by country.**

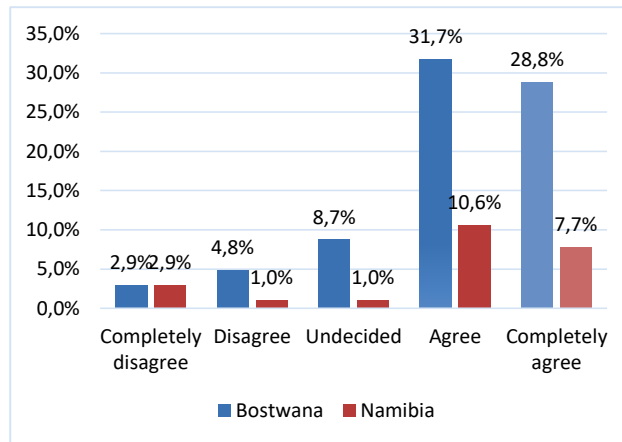


Source: Own elaboration from collected data (questionnaires)

Noting the responses from both countries is evident that the highest frequencies of response for both countries are in agreement with the perceived statement, as it is shown on the graph and table there is a 37.1% of participants in Botswana who agree and 35.2% who completely agree with this fact, meanwhile in Namibia there is a 8.6% of the participants who agree and 7.6% who completely agree. As for the undecided subjects there is a 1.9% of Botswana and none of the participants of Namibia do question their answer. Of the subjects who do not agree with this statement, there is a 1% of Botswana and Namibia 2.9% who disagree; and finally a 1.9% in Botswana and 3.8% in Namibia that are completely at odds.

- Perception G: Teachers should clearly explain what it is important for me to know and what is not that important. As for the perception that refers to the consideration that teachers should have in order to explain and specify what is the most and least important for students to learn. Most of participants 78.8% of the total, agree that their perception is in line with the statement, of those 36.5% completely agree and 42.3% agree. There is a 9.6% who is undecided, and 11.6% who disagree with the statement, of whom 5.8 % disagree and another 5.8% completely disagree.

**Graph 56. Perceptions G, Teachers should clearly explain what it is important for me to know and what is not that important, by country.**



Source: Own elaboration from collected data (questionnaires)

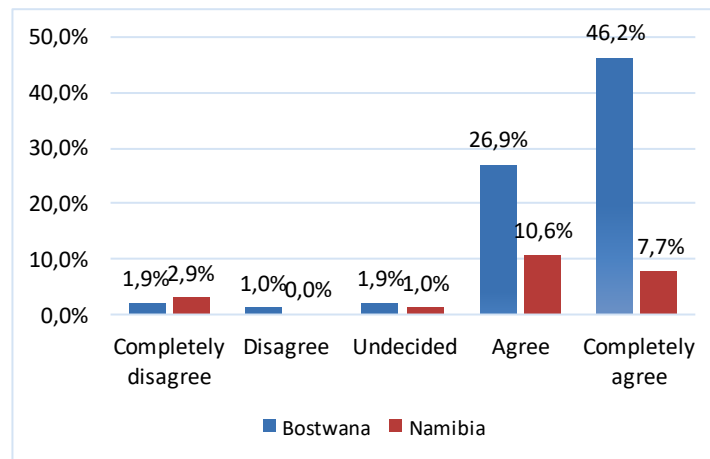
By relating the different answer selected by participants in both countries (Botswana and Namibia) it is evident that most of them, as show in graph and table, indicate their agreement and completely agreement about the fact that one of the most important roles of the teacher is to indicate clearly what are the essential parts of the subject to be known and explain them very clearly. 31.7% of the participants agree, 28.8% of them completely agree in Botswana; as for Namibia, 10.6% of them agree and 7.7% completely agree. As for the undecided subjects there are in Botswana 8.7% and 1% of Namibia. Of those subjects who do not agree with this statement, there are 4.8% in Botswana and 1% in Namibia who disagree; In addition to that there is a 2.9% in both countries who strongly disagree.

- Perception H: For me, learning means acquiring knowledge that I can use in daily life. The next perception refers to the association of learning with the Process of acquiring knowledge that can be used in the daily life. Most of participants 91,3% perceive this statement as real in their personal cases, they do use the knowledge acquired through the learning process in their daily life, within this group 53.8% completely agree, and 37.5% agree. On the other hand



there is a 2.9% of the total share who is undecided and 5.8% who disagree with this perception, of this people 1.0% disagrees and 4.8% completely disagree.

**Graph 57. Perceptions H: For me, learning means acquiring knowledge that I can use in daily life, by country.**



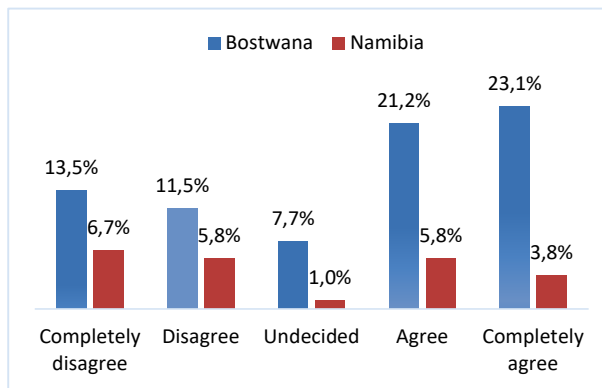
Source: Own elaboration from collected data (questionnaires)

By noting and comparing the different responses among participants from each country, it is clearly visible and evident that for most students in both countries the highest percentage of responses refer to the agreement and completely agreement with a common understanding of the concept "learning". There is a 26.9% of participants in Botswana and 10.6% in Namibia who agree with the fact that learning means and implies acquiring knowledge that can be used on daily life. There is also a 46.2% in Botswana (the highest frequency for this country) and 7.7% in Namibia who completely agree. As for the undecided subjects there are 1.9% in Botswana and 1.0% in Namibia. To conclude, it is important to mentioned that there is also a group of participants who disagree, representing 1.0% for Botswana and 0% in Namibia, and also a 1.9% of students in Botswana and 2.9% in Namibia who completely disagree.

- Perception I: I prefer that teachers tell me exactly what I need to know to pass an exam. There is an uneven perception, in regard to the students' preference of having teachers indicating and specifying what do they need to know to pass the exams, opinions are divided.

There are 53.8 % of participants who agree with this assumption, of this 26.9% completely agree and 26.9% agree. In contrast there are a 37.5 % of participants who do not agree with this perception, of whom 17.3% disagree and 20.2% completely disagree. To conclude there is also an 8.7% of the total sample who is undecided.

**Graph 58. Perception I: I prefer that teachers tell me exactly what I need to know to pass an exam, by country.**



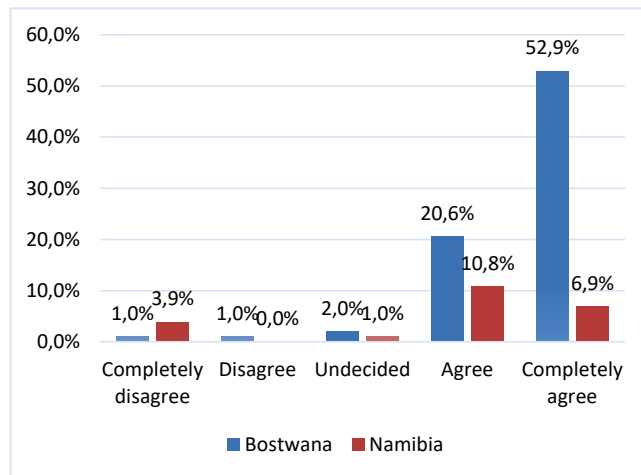
Source: Own elaboration from collected data (questionnaires)

As for the comparative analysis among countries based on the participant responses on this particular perception, it is recognized, as it is shown in the above table and graph that students most likely want to hear from teachers exactly what they need to know in order to success on the exams. In Botswana the highest frequency refers to a completely agreement of this statement 23.1% followed by an agreement 21.2%. Meanwhile the participants in Namibia does not follow the same pattern, as the highest frequency for it is 6.7% of participants in completely disagreement and 5.8% who disagree. As for the undecided subjects, there is a 7.7% of students in Botswana and 1.0% in Namibia. On the opposite side, there is a 13.5% and 11.5% of participants in Botswana who completely disagree and disagree respectively and also a 5.8% and 3.8% in Namibia who agree and completely agree.

- Perception J: for me, learning means acquiring knowledge and skills that I can later put into practical use. As for perception J, on the importance of acquiring knowledge and skills

that they can put into practice later. Mostly all participants 81.2 % are in line with the statement, of these 59.8% are completely agreed and 31.4% agree. On the other hand there is 5.9% who disagree, from these 1.0% disagrees and 4.9% completely disagree. Finally there is 2.9% of the total participants who are undecided.

**Graph 59: Perception J: For me, learning means acquiring knowledge and skills that I can later put into practical use, by country.**

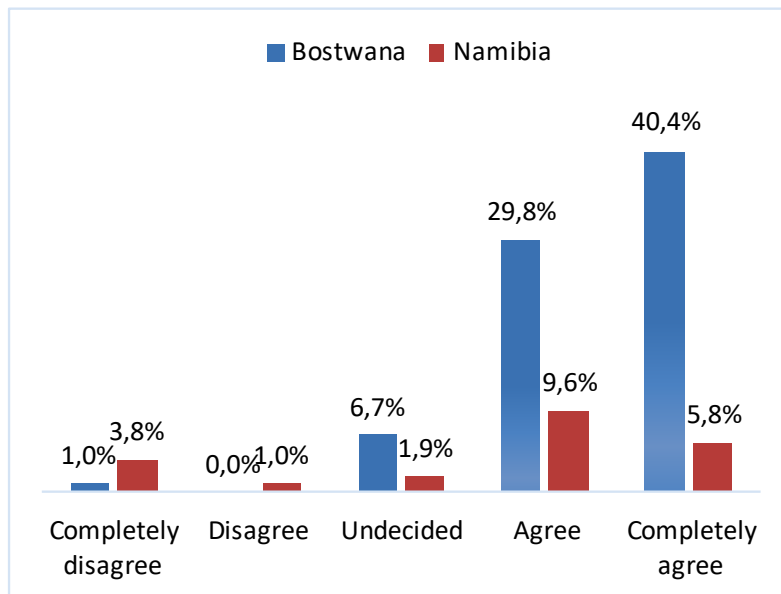


Source: Own elaboration from collected data (questionnaires)

By noting the responses of participants from both countries, it is evident that most of them consider that learning means acquiring knowledge and skills that later can be applied practically. There is a 52.9% of participants in Botswana who completely agree with this perception (the highest frequency for this country) meanwhile in Namibia the highest frequency, representing 10.8% of the participation is related to the agreement of the participants with this idea. Moreover there is a 20.6% of participants in Botswana who agree and 6.9% of participants in Namibia who completely agree. As for the undecided subjects there are 2.0% in Botswana and 1.0% in Namibia. To conclude, it is also important to mention that there is a 1.0% of participants in Botswana and 3.9% in Namibia who completely disagree with the statement, there is also a 1.0% of students in Botswana and 0% in Namibia who disagree.

- Perception K: I should try to think of the main points to study without having to be told to do so. As for the last perception, most participants 85.6% consider that this statement is in line with their perceptions, more specifically 46.2% completely agree, and 39.4% agree; on the other hand 5.8% disagree, of whom 1.0% disagrees and 4.8% completely disagree. In addition to that there is an 8.7% who is undecided.

**Graph 60: Perception K: I should try to think of the main points to study without having to be told to do so, by country.**



Source: Own elaboration from collected data (questionnaires)

By noting the responses in both countries is evident that for most participants are in agreement with this perception that refer to the student's initiative to study by themselves, rather than to be told to study. In Botswana the highest frequency corresponds to 40.4% of students who completely agree and 29.8% who agree, as for Namibia the highest frequency observed correspond to 9.6% of participants who completely agree and 5.8% who agree. As for the undecided subjects there is a 6.7% in Botswana and 1.9% in Namibia. To conclude as for the subjects who do not agree with this statement, there is a 1% of Namibia who disagrees

meanwhile there is no one in Botswana who disagrees; additionally there is a 1.0% of the total stake in Botswana and 3.8% in Namibia who completely disagree.

### b) Outcomes - Cultural capital

In this section we report on the one hand, on the results of the comparison between countries and genders in the assessment made by participants on the expected learned outcomes, as shown on the table below, and on the other hand, the satisfaction degree will be described, categorized, analyzed and compare among countries and genres.

**Table 41: Appreciation on expected learned outcomes by country of origin and gender**

		N	M	SD	SE	<i>t</i>	gl.	Sig.	Confidence		<i>g'</i>	
									Intervals			
									Inferio	Superio		
									r	r		
Appreciation	Country of Origin	Botswana	7	59,6	13,4	1,5	2,75	24,92	,011	3,21	22,34	,87
		Namibia	9	8	3	1						
Expected Learned Outcomes	Gender	Female	78	57,7	14,9	1,6	,882	98	,038	-4,22	10,98	0,19
		Male	22	54,3	18,9	4,0						
				6	9	5						

Source: Own elaboration from collected data (questionnaires).

When comparing countries, it is found that subjects from Botswana ( $M = 59.68$ ,  $SD = 13.43$ ) show a greater appreciation of their expected learned outcomes than the participants from Namibia ( $M = 46.90$ ;  $SD = 20,12$ ) this difference is statistically significant  $t_{(24,929)} = 2,752$ ;  $p = 0.011$ ;  $g' = 0.87$ . The effect size is sufficient to be considered relevant in practice. Similarly, women ( $M = 57.74$ ,  $SD = 14.90$ ) report higher appreciation in their expected learned outcomes

than men ( $M = 54.36$ ,  $SD = 18.99$ ), there is a statistically significant difference  $t_{(98)} = 0.882$ ;  $p = 0.0380$ ;  $g' = 0.19$ , this effect size may be irrelevant in practice.

As already mentioned, the results about participants' satisfaction once the program ended, is described. From the results shown below the category "none" has eliminated due to the very low existing frequencies. The results will be explained first based on an overall analysis and then by country and gender. The relationship between satisfaction and levels of educational attainment, the source of income, the perception on the household income, the source of funding and the importance/ relevance given by students to the participation in the program will also be explained.

**Table 42: Participants' satisfaction on the TVET program, in total.**

Satisfaction	Frequency	Percentage	Age
Very Low	34	32,4%	M=24,81 SD=3,56
Low	13	12,4%	M=26,15 SD=3,57
Neutral	19	18,1%	M=25,59 SD=3,14
Medium	22	21,0%	M=27,41 SD=5,06
High	17	16,2%	M=26,87 SD=3,37
Total	105	100%	

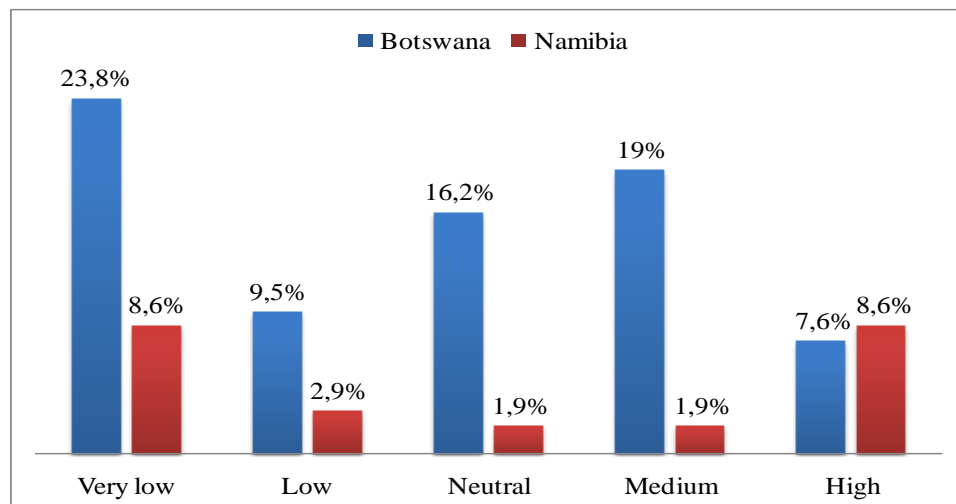
Source: Own elaboration from collected data (questionnaires).

As shown in the above table, the highest frequencies and thus the highest percentages are in the categories: "very low" (32.4%) of these, the average age is 24.81 years old, with a standard deviation of 3.56; and the "medium" (21%) category whom have an average age of 27.41 years old with a standard deviation of 5.06. Less common categories are: "low" (12.4%) where the average age is 26.15 years old with a standard deviation of 3.57, and "high" (16.2%) where the average age here is 26,87 years old with a standard deviation of 3.37; Therefore, the

remaining data are located in the "neutral" category (18.1%) with an average age of 25.59 years old and a standard deviation of 3.14.

This pattern is maintained, when dividing the groups by country and gender.

**Graph 61: Participants' satisfaction on the TVET program, by country.**

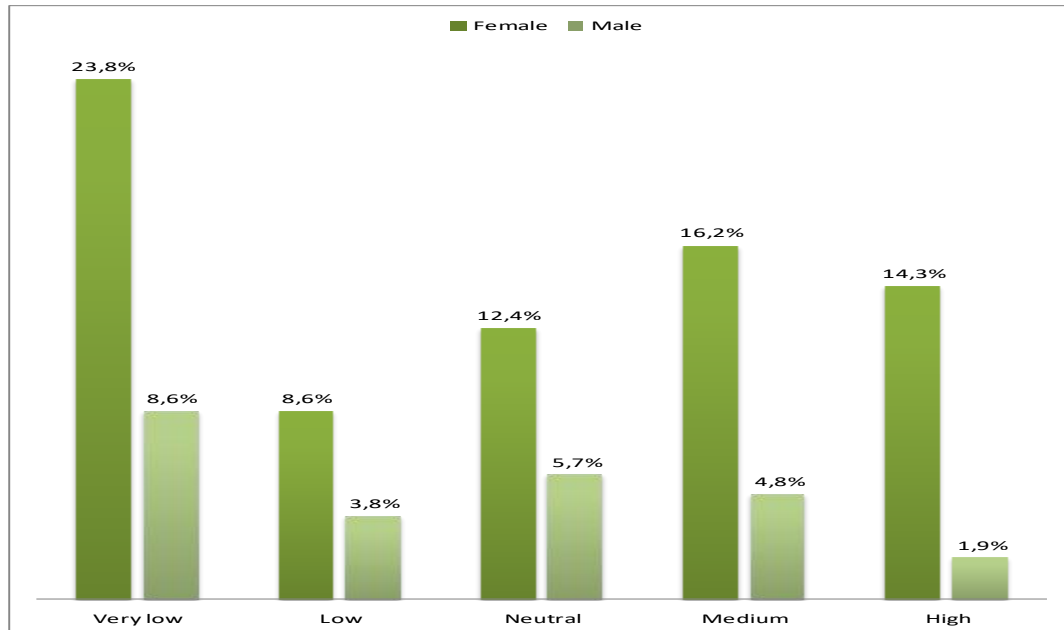


Source: Own elaboration from collected data (questionnaires)

As shown in the above graph, the highest levels of Satisfaction rated by participants from Botswana, are "very low" (23.8%) and "Medium" (19%) categories, however, the highest rates for the Namibian participants are "high" (8.6%) and "Very low" (8.6%) equally, it is important to mentioned that "high" is the only category in which Namibia has a higher percentage than Botswana; less common categories rated by Botswana participants are "High" (7.6%) and "Low" (9.5%) as for Namibian's participants the lowest categories rated are: "Neutral" (1.9%) and "Medium" (1.9%); these results allow us to see, that although there is no repetition of a common pattern related to previous answers, most participants usually locate their responses in the lower or medium categories, especially in the case of Botswana participants.

The distribution on participant's satisfaction on the TVET program by gender it is shown on the table below.

**Graph 62: Participants' satisfaction on the TVET program, by gender.**



Source: Own elaboration from collected data (questionnaires).

It is observed that there is a higher participation of women in all categories. The categories with the highest frequency for women are "very low" (23.8%) and "Medium" (16.2%), and for men "very low" (8.6%) and "Neutral" (5.7%); Less common categories for women are: "Low" (8.6%) and "Neutral" (12.4%) while for men the lowest are: "High" (1.9%) and "Low" (3.8%). It is also noted that subjects tend to be located in areas of low or medium satisfaction.



- By linking satisfaction with the highest level of educational attainment achieved by students the following results are found:

**Table 43: Level of satisfaction with the TVET program according to the highest level of education attained in total**

Satisfaction with the program	Level of Educational Attainment					Total
	ISCED 2	ISCED 3	ISCED 4	Tertiary Education		
Very low	Frequency	5	7	5	17	34
	Percentage	4,9%	6,8%	4,9%	16,5%	33,0%
Low	Frequency	1	3	2	5	11
	Percentage	1,0%	2,9%	1,9%	4,9%	10,7%
Neutral	Frequency	0	1	2	16	19
	Percentage	0,0%	1,0%	1,9%	15,5%	18,4%
Medium	Frequency	0	3	1	18	22
	Percentage	0,0%	2,9%	1,0%	17,5%	21,4%
High	Frequency	3	2	2	10	17
	Percentage	2,9%	1,9%	1,9%	9,7%	16,5%
Total	Frequency	9	16	12	66	103
	Percentage	8,7%	15,5%	11,7%	64,1%	100%

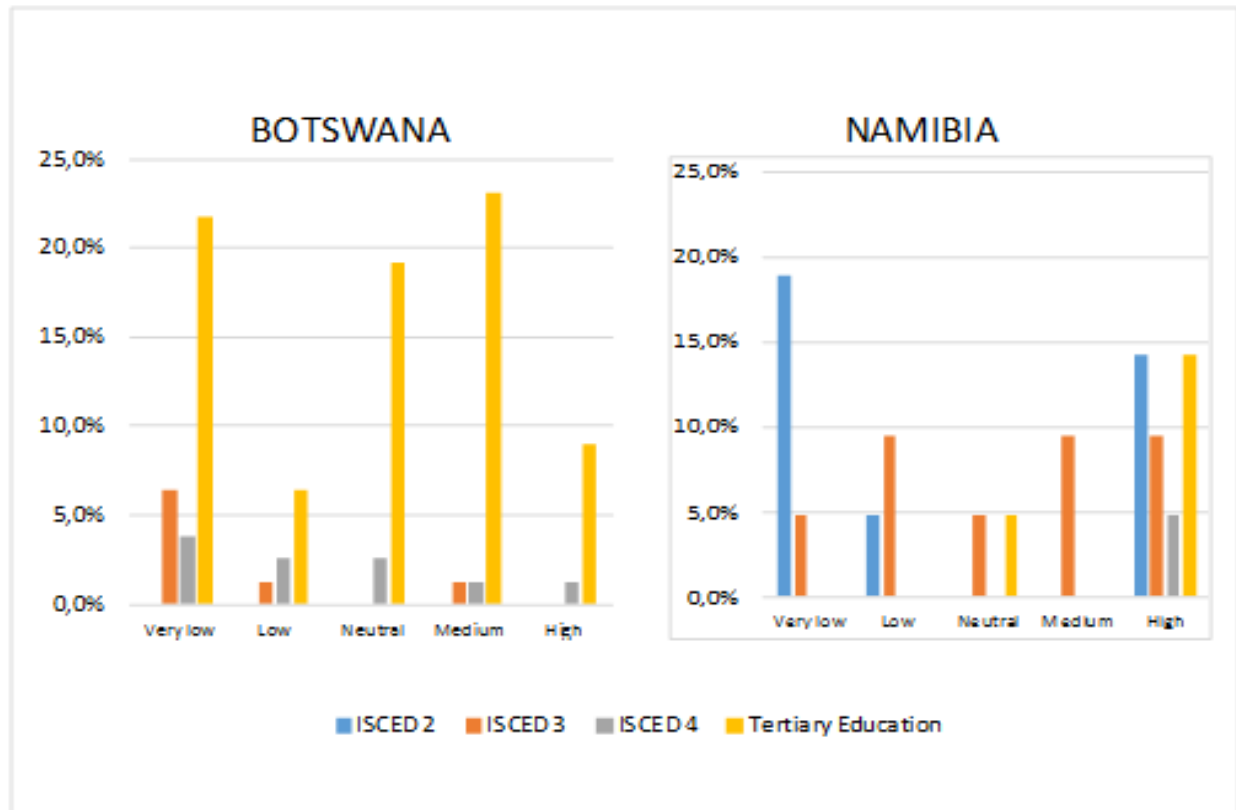
Source: Own elaboration from collected data (questionnaires).

To report about the satisfaction in relation to the highest level of educational attainment we have 103 data, 33% of the total share claim to have a very low satisfaction, of which 4.9% have an ISCED 2, 6.8% have an ISCED 3, 4.9% an ISCED 4 and 16.5% tertiary education. As for the 10.7% of subjects that state to have a low satisfaction level with the program, a 1% have ISCED 2, 2.9% have ISCED 3; 1.9% ISCED 4 and 4.9% tertiary education. Of those who have a neutral position in terms of satisfaction, 1% has a level ISCED3, 1.9% have an ISCED 4 and 15.5% have attained tertiary education.

Moreover, of those who have “Medium” satisfaction, which represents a 21.4% of the total sample, 2.9% have a level of education ISCED 3, a 1% ISCED 4 and 17.5% tertiary education, and finally from those students who are “highly” satisfied with the program, 2.9% of them have ISCED level 2, 1.9% have an ISCED 3, a 1.9% have an ISCED 4 and 9.7% have tertiary education.

A comparative overview of the satisfaction with the highest level of educational attainment achieved by students by country is presented in the graph below.

**Graph 63: Satisfaction level with TVET program according to the level of educational attainment by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, there is a 9% of the total share who have attained an ISCED level 3, most of them (6.4%) reported a very low level of satisfaction and 2.6% claim that their satisfaction level is low (1.3%) or medium (1, 3%). There is also a 11.5% of participants who have attained an ISCED 4, and as in the previous case, most of the people of this group (3.8%) said that their satisfaction level is very low, 2.6% low or remains neutral and 1.3% consider to have a medium or high level of satisfaction. Finally, for those who have a tertiary education 79.5% of the total stake (representing the highest frequency), most of them (23.1%) say they have a medium level

of satisfaction, however, 21.6% it reported to be very low, low 6.4% , 19.2% retained neutral and 9% high.

in Namibia, there is a 38.1% of participants with an ISCED 2, the majority of students from this group 19% reported that their level of satisfaction with the program is very low and 4,8% low, however 14.3% reported that their level of satisfaction is high. There is 38.1% of people with an ISCED level 3, if these group, there is a 4.8% having a very low level of satisfaction or remains neutral, there is also a 9.5% that claim a low, medium and high level of satisfaction. There is a 4.8% of people that has attained an ISCED 4 and all of them consider that their level of satisfaction is high. Finally, for those who have a tertiary education level, representing 19% of the total sample, the majority 14.3% consider to have a high level of satisfaction and 4.8% remain neutral about their perceptions.

- To relate the satisfaction with the perceived relevance on the participation in the program by students we have 92 data, from the students who have a very low level of satisfaction (35.9%), 7.6% do not considered their participation relevant at all, 4.3% believe that is slightly relevant, 9.8% see it as relevant, 2.2% as very relevant and 12% consider their participation as extremely relevant.

**Table 44: Level of satisfaction with the TVET program according to the perceived relevance of it, in total.**

Satisfaction with the program		Perceived Relevance of participating in the program					Total
		Not relevant at all	Slightly relevant	Relevant	Highly relevant	Extremely relevant	
Very Low	Frequency	7	4	9	2	11	33
	Percentage	7,6%	4,3%	9,8%	2,2%	12,0%	35,9%
Low	Frequency	0	0	7	2	3	12
	Percentage	0,0%	0,0%	7,6%	2,2%	3,3%	13,0%
Neutral	Frequency	1	0	12	5	0	18
	Percentage	1,1%	0,0%	13,0%	5,4%	0,0%	19,6%
Medium	Frequency	0	2	6	5	4	17
	Percentage	0,0%	2,2%	6,5%	5,4%	4,3%	18,5%
High	Frequency	0	0	3	2	7	12
	Percentage	0,0%	0,0%	3,3%	2,2%	7,6%	13,0%
Total	Frequency	8	6	37	16	25	92
	Percentage	8,7%	6,5%	40,2%	17,4%	27,2%	100%

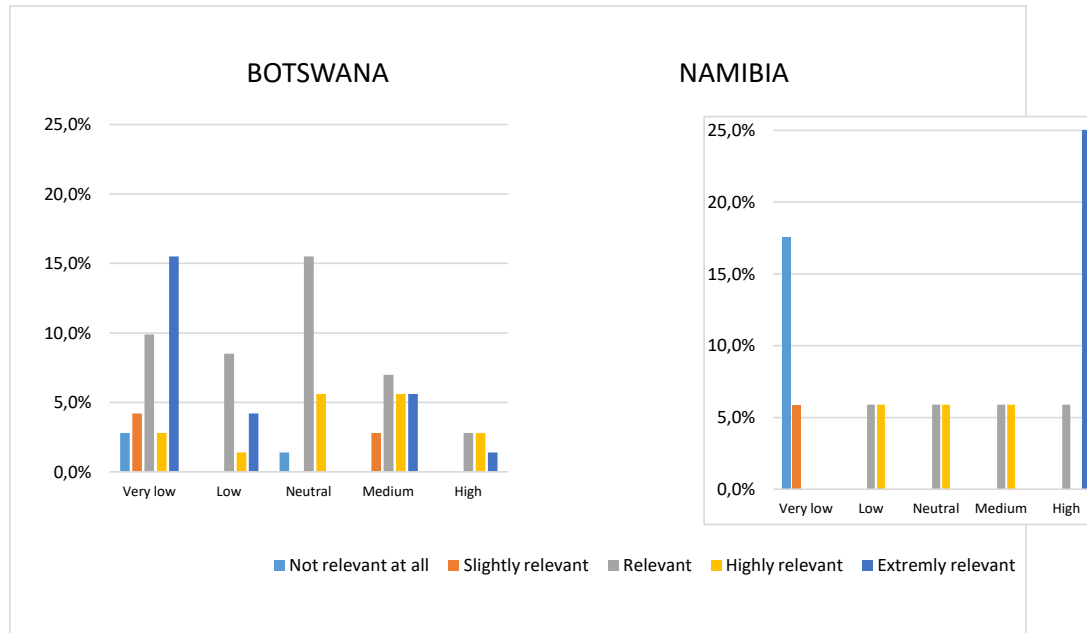
Source: Own elaboration data collected (questionnaires).

From the students who have a low level of satisfaction (13%), 7.6% of them consider their participation in the program as relevant, 2.2% very relevant, 3.3% extremely relevant. Of those who maintain a neutral position (19.6%) in regards to satisfaction, 1.1% consider irrelevant their participation, 13% relevant and 5.4% very relevant.

Moreover, there is a 18.5% of the total share of students who state to have a Medium satisfaction level, of those 2.2% believe that their participation is slightly relevant, 6.5% that is relevant, 5.4% very relevant and 4.3% extremely relevant; and from those subjects who are highly satisfied, 3.3% believe their participation is relevant, 2.2% very relevant and 7.6% extremely relevant.

The relation between the degree of satisfaction with the program and the perceived relevance of it according to participants' personal expectations among countries is shown below.

**Graph 64: Satisfaction level according to the perceived relevance of the TVET program by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, it is found that 4.2% of the total stake do not consider relevant to participate in the program, of whom 2.8% have a very low satisfaction level, 1.4% remains neutral. There is another 7% of participants which consider that the program is slightly relevant, 4.2% of them consider that their level of satisfaction is very low and 1.4% remains neutral. There is another 43.7% participants who consider that their participation is relevant, from this group, 9.9% of the participants consider that the satisfaction is very low, 8.5% low, 15.5% neutral, 7.0% medium, and 2.8% are highly satisfied. There is a 18.3% of people who consider that the TVET program is highly relevant, from this group, there are 2.8% who assess the satisfaction with the program as very high and very low, 5.6% who consider that it is neutral or medium in terms of satisfaction and there is a 1.4% who thinks is low. To conclude the second

highest frequency observed after relevant correspond to extremely relevant with a 26.8% of participants, of whom 15.5% consider that their satisfaction is very low, 4.2% low, 5.6% medium, 1.4% high.

In Namibia, there is a 17.6% of participants who consider that their participation on the program is not relevant, all people from this group consider that their level of satisfaction is very low. There is a 5.9% of people who consider that their participation is slightly relevant and all of them consider that their satisfaction is very low. There is 23.5% of people claiming that their participation is relevant, 5.9% of people from this group consider that their satisfaction is low, medium or high, and another 5.9% prefer to remain neutral to this question. There is 17.6% of participants who believe on the high importance of participating in the program, there is a 5.9% of this people who prefers to remain neutral when asked about their satisfaction in the program and another 5.9% reported that their satisfaction level is rather neutral or low. Finally there is a 35.3% of participants (the highest frequency) claiming that participating in the program is extremely relevant, all of them report that their level of satisfaction with the program is high.

- The relation between satisfaction and the perceived living standards with household income is relevant and analyzed below with a total of 94 data from the sample.

**Table 45: Satisfaction with the TVET program according to the participants' living standards in total**

<b>Perception of living standard with household income</b>						
<b>Satisfaction with the program</b>		<b>Living comfortably with present income</b>	<b>Coping on present income</b>	<b>Finding it difficult on present income</b>	<b>Finding it very difficult on present income</b>	<b>Total</b>
Very Low	Frequency	2	5	11	12	30
	Percentage	2,1%	5,3%	11,7%	12,8%	31,9%
Low	Frequency	1	2	2	7	12
	Percentage	1,1%	2,1%	2,1%	7,4%	12,8%
Neutral	Frequency	0	6	8	3	17
	Percentage	0,0%	6,4%	8,5%	3,2%	18,1%
Medium	Frequency	2	4	7	7	20
	Percentage	2,1%	4,3%	7,4%	7,4%	21,3%
High	Frequency	1	2	3	9	15
	Percentage	1,1%	2,1%	3,2%	9,6%	16,0%
<b>Total</b>	Frequency	6	19	31	38	94
	Percentage	6,4%	20,2%	33,0%	40,4%	100%

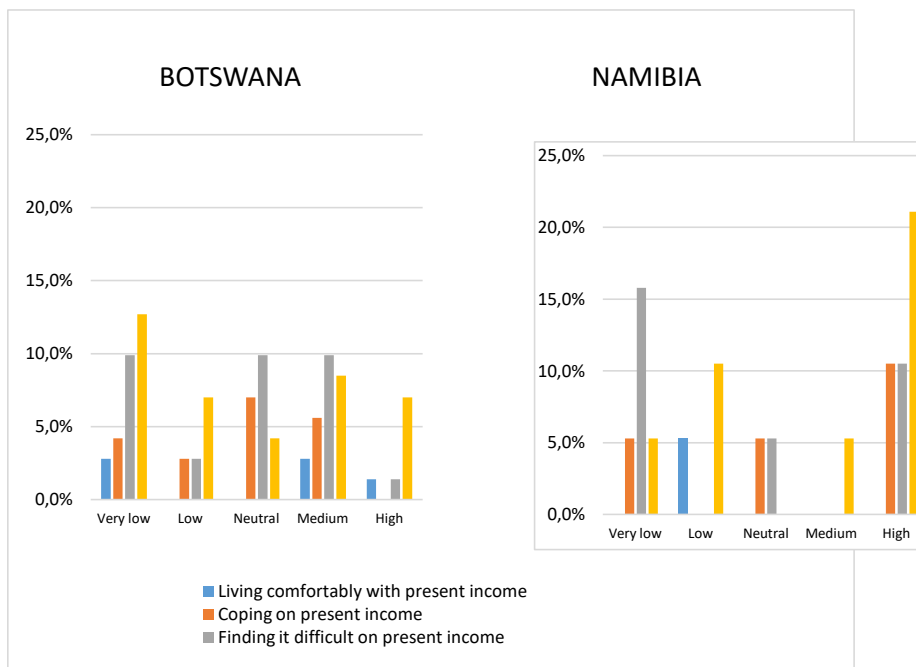
Source: Own elaboration from collected data (questionnaires).

Participants who have a very low satisfaction (31.9%), 2.1% of them perceived that the household incomes allow them to live comfortably, 5.3% think that they are coping with present income, 11.7% of them are living with difficulties, and 12.8% are living with many difficulties. From the students who have a low satisfaction level (12.8%), 1.1% of them considered living comfortably, 2.1% think that are coping with present income, another 2.1% are living with difficulties, and 7.4% with Many difficulties. And from those who remain neutral in its perception about satisfaction (18.1%), 6.4% believe that are coping with present income, 8.5% are living with many difficulties and 3.2% living with many difficulties. Moreover, participants who consider having a “Medium” level of satisfaction (18.1%), of these 2.1% perceived household incomes allow them to live comfortably, 4.3% think that cope with present income, 7.4% are living with difficulties and another 7.4% are living with many difficulties. And those who are highly satisfied, which represents the 16% of the sample, from those 1.1% consider that

are living comfortably, 2.1% are coping with present income, 3.2% live with difficulties and 9.6% live with many difficulties.

A comparative review of the satisfaction with the TVET program according to the perceived living standards with household income among countries is presented below.

**Graph 65: Satisfaction with the TVET program according to the perceived living standards with household income by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, there is a 39.4% of participants, representing the highest frequency of the table, that find it very difficult to cope with present income, 12.7% of the people from this group consider that the satisfaction they get is very low, 7% low, 4.2% which remains neutral, 8.5% neutral and 7.0% high. There is also a 33.8% of the total stake representing participants who find it difficult with present income, of whom 9.9% report a very low satisfaction, 2.8% low, 9.9%



neutral and high, and 1.4% very high satisfaction. As for the 19.7% of participants who consider that are coping with present income, there is a 4.2% who does think the satisfaction is very low, 2.8% low, 7.0% neutral and 5.6% medium. Finally there is a 7% of people who is living comfortably with present income of whom 2.8% reports a very low and medium satisfaction, and 1.4% very high.

In Namibia, as the table shows the relation between the level of satisfaction with the program and the perception about the household income for this particular country. There is a 5.3% participants claiming to live comfortably or coping with present income, all of them perceived a low satisfaction. There is a 21.1% who report to cope with present income, of whom 5.3% consider to have a very low and neutral satisfaction, and 10.5% high one. There is also a 31.6% who find it difficult with present income, of whom 15.8% report a very low satisfaction, 5.3% neutral and 10.5% high. To conclude there is a 42.1% people who find it very difficult to cope with present income, of whom 26.5% consider a very low satisfaction, 15.8% low, 10.5% neutral, 5.3% medium and 42.1% high.

- To report about the relation between the satisfaction and how was financed the participation of the TVET program, we have in total 88 data, the students who have a very low level of satisfaction represent 33% of the total sample, of whom 14.5% financed its participation on the program by its own, 1.1% got the funds from the enterprise or employer, 12.5% financed their participation with the help of public funds, and the rest 4.5% finance it with other source of funding. Of the participants who have a low level of satisfaction (12.5%), 9.1% of them have financed the program by their own, 3.4% obtained help through public funds; of those who remain neutral in satisfaction level (19.6%), 6.8% have financed by their own, 1.1% with the help of the company they are employed, 10.2% with the help of public funds and 1.1% with a loan.

**Table 46: Satisfaction with the TVET program according to the different ways to finance the participation in it, total**

Satisfaction with the program	How was financed the participation on the TVET program						Total
	Own Funding	Enterprise / Employer Funding	Public Funding	Loan	Otra		
Very Low	Frequency	13	1	11	0	4	29
	Percentage	14,8%	1,1%	12,5%	0,0%	4,5%	33,0%
Low	Frequency	8	0	3	0	0	11
	Percentage	9,1%	0,0%	3,4%	0,0%	0,0%	12,5%
Neutral	Frequency	6	1	9	1	0	17
	Percentage	6,8%	1,1%	10,2%	1,1%	0,0%	19,3%
Medium	Frequency	11	0	5	2	1	19
	Percentage	12,5%	0,0%	5,7%	2,3%	1,1%	21,6%
High	Frequency	4	2	4	1	1	12
	Percentage	4,5%	2,3%	4,5%	1,1%	1,1%	13,6%
<b>Total</b>	Frequency	42	4	32	4	6	88
	Percentage	47,7%	4,5%	36,4%	4,5%	6,8%	100%

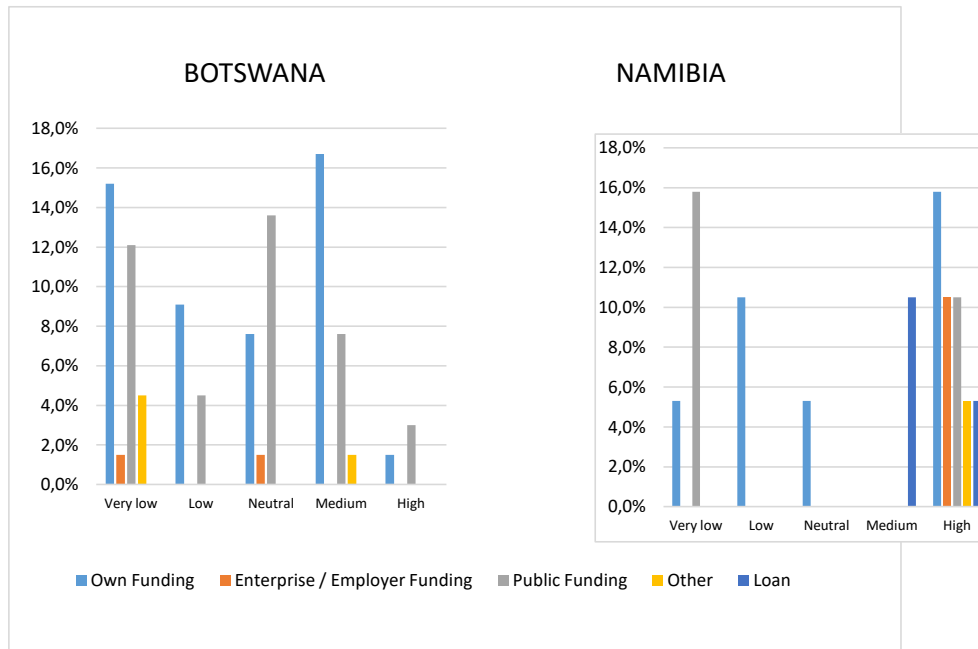
Source: Own elaboration from collected data (questionnaires).

Moreover, from those who show a medium satisfaction (21.6%), 12.5% of them have financed their participation in the program by their own, 5.7% with the help of public funds, 2.3% from the funds of a loan and 1.1% with other source of funding. And from those who report a high satisfaction with the program (13.6%), 4.5% of them have financed their

participation by their own; 2.3% with the help of the companies they are employed, 4.5% with the help of public funds, 1.1% in loans and 1.1% with other source of funding

The graph below presents the different distribution of participants' satisfaction in relation with the different ways of financing its participation on the TVET program by country.

**Graph 66: Satisfaction according to the ways of financing the participation on TVET program by country.**



Source: Own elaboration from collected data (questionnaires).

In the case of Botswana, is significant that 50% of the participants, half of them, have financed their participation using their own private funding, of this group, there is a 15.2% who consider that their satisfaction is very low, 9.1% low, 7.6% neutral, 16.7% medium, and 1.5% high. The second highest frequency in relation to the different ways of financing the cost of the program is getting the support of public funding with a representation of 40.9% of the total participants, of whom 12.1% consider that their satisfaction is very low, 4.5% low, 13.6%

neutral, 7.6% medium, 3.0% high. There is also a 3.0% of the total sample who finance the program costs with the financial support of the enterprise or employer funding, participants of this group consider in 1.5% that the satisfaction is very low or medium. To conclude there is a 6.1% who get funds using other sources.

In Namibia, as it is shown on the graph there is a 36.8% of participants who have financed their participation using their own sources, of whom 5.3% refers to a very low satisfaction level, a 10.5% low, a 15.8% high and a 5.3% neutral. The percentage of the persons who have reported to get financial support from their employer or enterprise is 10.5% , all of them consider that the participation on the TVET program is highly satisfactory. As for the 26.3% who get financial support from public funding, 15.8% have a very low satisfaction, and almost the same percentage 15.3% have a high satisfaction. To conclude there is a 5.3% of people who finance the TVET program cost using other sources of finance, most of them have a medium 10.5% or high 5.3% satisfaction perception.

- To report on the relation between satisfaction with the program and the main source of household income, we have 92 data in total. 29.3% of the sample shows a very low level of satisfaction with the program, of who 8.7% have as main source of household income wages or salaries, another 8.7% received the income from self-employment without regard to farming, 1.1% has farming as its main source of income, 5.4% of the participants receive their income from pensions and another unemployment benefits.

**Table 47: Satisfaction with the TVET program according to the main source of household income, in total**

		Main Source of Household Income								Total
		Wages or Salaries	Income from self-employment (excluding farming)	Income from farming	Pensions	Unemployment / Redundancy benefit	Any other social benefits or grants	Income from investment, savings, insurance or property	Income from other sources	
Very Low	Frequency	8	8	1	5	5	0	0	0	27
	Percentage	8,7%	8,7%	1,1%	5,4%	5,4%	0,0%	0,0%	0,0%	29,3%
Low	Frequency	6	1	2	1	1	1	0	0	12
	Percentage	6,5%	1,1%	2,2%	1,1%	1,1%	1,1%	0,0%	0,0%	13,0%
Neutral	Frequency	6	1	3	2	0	1	1	3	17
	Percentage	6,5%	1,1%	3,3%	2,2%	0,0%	1,1%	1,1%	3,3%	18,5%
Medium	Frequency	9	3	0	2	2	0	0	4	20
	Percentage	9,8%	3,3%	0,0%	2,2%	2,2%	0,0%	0,0%	4,3%	21,7%
High	Frequency	7	1	0	3	4	0	0	1	16
	Percentage	7,6%	1,1%	0,0%	3,3%	4,3%	0,0%	0,0%	1,1%	17,4%
Total	Frequency	36	14	6	13	12	2	1	8	92
	Percentage	39,1%	15,2%	6,5%	14,1%	13,0%	2,2%	1,1%	8,7%	100%

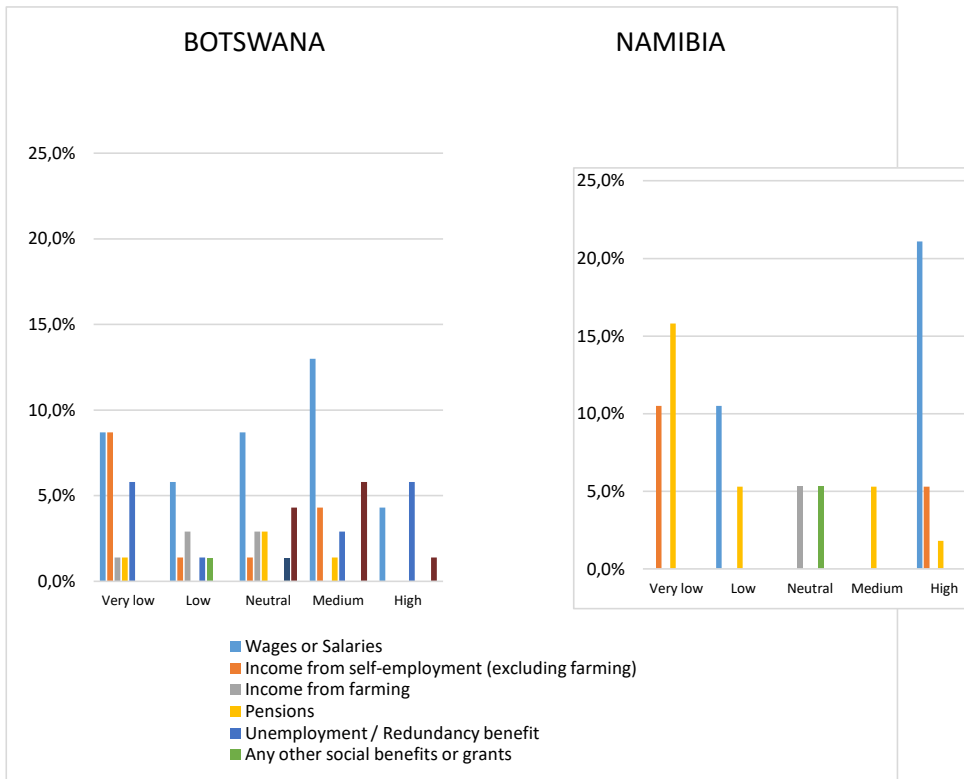
Source: Own elaboration from collected data (questionnaires).

Moreover, of participants who have a low level of satisfaction (13.0%), 6.5% of them perceive their main household income from wages or salaries, 1.1% thanks to self-employment excluding agriculture, 2.2% from farming 1.1% pension, another 1.1% from unemployment benefits and 1.1% from social benefits or grants. Of those students who report a neutral

satisfaction in the program (18.5%), 6.5% of them receive their income from wages or salaries, 1.1% from self-employment income excluding farming, 3.3% from farming, 2.2% from pensions, 1.1% from social benefits or grants another 1.1% from investments, savings, insurance or property; and 3.3% from other sources of income. Moreover, from those participants who have a Medium satisfaction level (21.7% of total) 9.8% of them receive incomes of wages or salaries, 3.3% of them are self-employed excluding farming, 2.2% have as main source income pensions, 4.3% received unemployment benefits and 1.1% from other sources of income. As for the participants who have a High level of satisfaction (17.4%), 7.6% of these receive income from wages or salaries, 1.1% of them from self-employment excluding farming, 3.3% from pensions, 4.3% from unemployment benefits and 1.1% from other sources of income.

The table below shows the differences in the relation among the participant’s satisfaction on the program and the participant’s main source of household income in both countries.

**Graph 67: Satisfaction with the TVET program according to the main source of household income by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, there is a 40.6% of participants whose main source of income comes from salaries, from this students there is a 8.7% that indicated a very low satisfaction with the program, 5.8% low, 13% medium, 4.3% high and 8.7% prefers to remain neutral on this regard. There is a 15.9% of participants whose revenues comes from their own work as they are self-employed but excluding farming, of this people 8.7% report that their satisfaction with the program is very low, 1.4% low, 4.3% medium and 1.4% neutral. In addition to this, there is a

7.2% of people who gets their income from agriculture, from this group 1.4% of participants indicate that their satisfaction is very low, 2.9% low or neutral. There is also a 5.8% of people whose income is associated with the pension they get, of whom 1.4% reported that their satisfaction is very low or medium, and there is also a 2.9% who prefer to remain in a neutral position. As for the individuals who are unemployed, they represent the 15.9%, of whom 5.8% indicate that their satisfaction level is very low, 1.4% low, 2.9% medium and 5.8% high. In addition to this there is a 11.4% whose income come from other social benefits and according to them their satisfaction level is low (1.4%). To conclude there is a 11.6% of participants who has received income from other sources, of whom 5.8% indicates that their satisfaction is medium, 1.4% high and 4.3% prefers to remain neutral.

In Namibia, as it is shown on the graph 31.6% of total stake report to get their income from wage and salaries, within this group, 10.5% of students indicated that their satisfaction with the program is low and there was 21.1% who reported it high. There is a 15.8% of participants whose revenues come from their own business, self-employment excluding farming, of whom 10.5% reported to be very low satisfied and 5.3% highly satisfied. There is another 5.3% whose income come from agriculture but all of them prefer to remain neutral when they are asked about the satisfaction of the program. The highest frequency is represented by 42.1% of the total stake and their main source of income is related to pensions, of this group, there is 15.8% who reported that their satisfaction is very low, 5.3% who considered low, 5.3% medium and 15.8% high. Finally, the last 5.3% of the sample get the income from other social benefits and they all remains neutral when asked about the satisfaction with the program.



**Social Benefits:** A description about the analysis on social benefit parameters it is presented within this section. A concise description about the analysis done regarding the social mobility dimension, balance of time, economic security (future economic situation and future employment prospects) and intellectual development for both countries. The analysis will be done in general, and by country of origin and by gender.

**c) Social Benefits - Balance of life prior to the participation on the program**

To report the results on the balance of life perceived by the students prior to participation in the program, we have 77 data, of which the majority (29.87%) say they had a good standard of living, this group has an average age of 25.33 years old with a standard deviation of 4.18, They live with an average of 3.55 children per household, with a standard deviation of 3.37, and an average of adult living on the household of 4.68 with a standard deviation of 2.41. Similarly, a 28.57% state that they had an Acceptable standard of living, in this group the average age is 26.90 years old with a standard deviation of 4.24, in addition to that there is average children of 4.68 lining on the household with a standard deviation of 5.13 and an average of 4.79 adults living, with a standard deviation of 2.72. Also there is a 20.77% of the all subjects, who mentioned that they have a poor level of life, the average age of this group is 26.73 years old, with a standard deviation of 5.88, of this group there is an average of 4.13 children living in the household, with a standard deviation of 2.03, and an average of 5.60 adults living within the household with a standard deviation of 3.52.

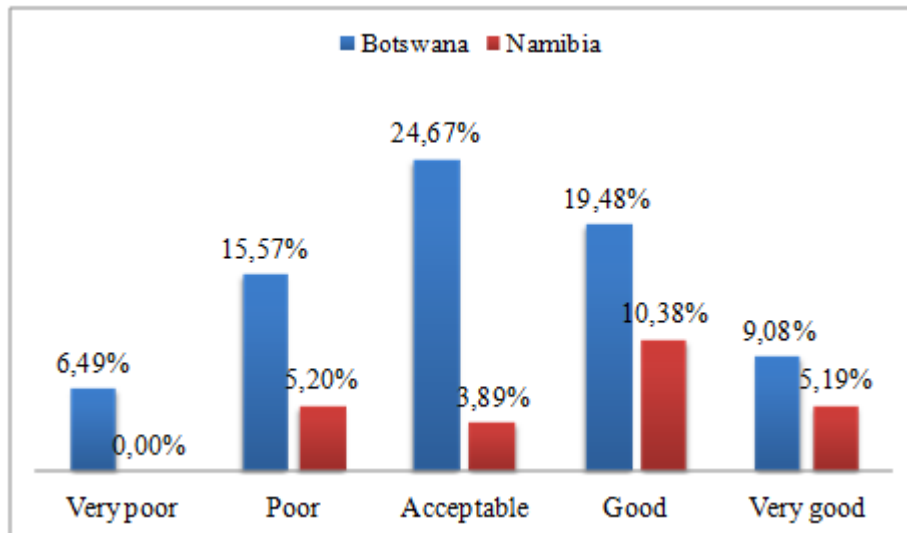
**Table 48: Balance of life prior the participation on the TVET program in total**

Balance of life prior to the Participation on the Program	Frequency	Percentage	Age	Persons living at the Household	
				Children	Adults
Very Poor	5	6,49%	M=27,80 SD=4,14	M=4,13 SD= 2,03	M=5,60 SD=3,52
Poor	16	20,77%	M=26,73 SD=5,88	M=4,13 SD=2,03	M=5,60 SD=3,52
Acceptable	22	28,57%	M=26,90 SD=4,24	M=4,68 SD=5,13	M=4,79 SD=2,72
Good	23	29,87%	M=25,33 SD=4,18	M=3,55 SD=3,37	M=4,68 SD=2,78
Very Good	11	14,28%	M=27,56 SD=2,96	M=5,50 SD=3,86	M=4,40 SD=2,41
Total	77	100%			

Source: Own elaboration from collected data (questionnaires).

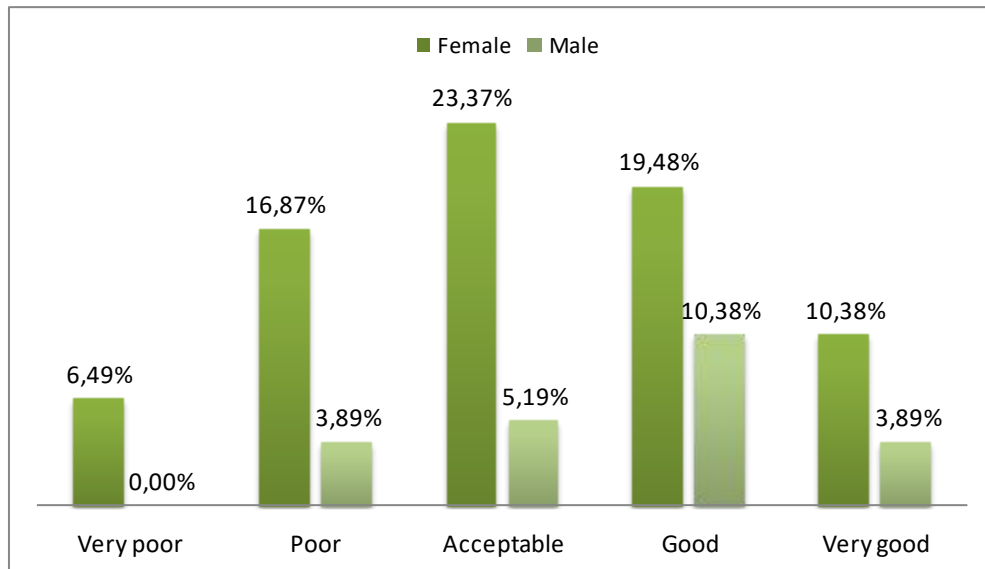
Moreover, 14.28% of the total subjects perceive that have a very good level of life, this group has an average age of 27.56 years old with a standard deviation of 2.96, in this group there is an average of 5.50 children per household and an average of 4.40 adults per household with a standard deviation of 2.41 and 3.86 respectively. And finally, a level of 6,49% of the total sample consider to have a very poor life, in this group there is an average age of 27.80 years old, with a standard deviation of 4.14, the average number of children per household is 4.13 with a standard deviation of 2.03 and an average adult living within the household is 5.60 with a standard deviation of 3.52.

In addition to that, the results are presented taking into consideration the variables: country of origin and gender, as well as the frequencies and percentages of the highest educational attainment, the income perception, source of income, the relevance/ importance given by students to their participation in the program and the source of funding to pay the program.

**Graph 68: Balance of life prior the participation on the TVET program by country**

Source: Own elaboration from collected data (questionnaires).

As shown in the above graph, Botswana has higher frequencies, in all categories, however, it is also evident that for this country the most common categories are: "Acceptable" (24.67%) and "Good" (19.48%) and for Namibia are: "Good" (10.38%) and "Poor" (5.20%); the lowest frequencies for Botswana are: "Very good" (9.08%) and "Very Poor" (6.49%) and the lowest ones for Namibia are: "Acceptable" (3.89%) and "Very Poor" (0, 0%).

**Graph 69: Balance of life prior the participation on the TVET program by gender**

Source: Own elaboration from collected data (questionnaires).

As in the previous case, for all categories there is a higher frequency from female than male. For both genders, the highest categories are “Acceptable” and “Good”, however, in the lower categories, however in the lower categories the participation of female and male do not match, as women are closer to the extreme categories “Very poor” (6.48%) and “Very good” (10.38%) and for men are “Very poor” (0.0%) and “poor” and “very good” with 3.89% each.

- In order to inform about the subjects perception on their balance of life prior to the participation on the program and the relation that it has with the highest level of educational attainment, we have 76 data.

**Table 49: Prior balance of life according to the highest level of education attained**

		Highest level of Education Attained				
		ISCED 2	ISCED 3	ISCED 4	Tertiary Education	Total
<b>Balance of life prior to the participation on the program</b>						
Very poor	Frequency	0	0	0	5	5
	Percentage	0,0%	0,0%	0,0%	6,6%	6,6%
Poor	Frequency	3	2	0	11	16
	Percentage	3,9%	2,6%	0,0%	14,5%	21,1%
Acceptable	Frequency	1	4	5	11	21
	Percentage	1,3%	5,3%	6,6%	14,5%	27,6%
Good	Frequency	3	2	0	18	23
	Percentage	3,9%	2,6%	0,0%	23,7%	30,3%
Very good	Frequency	2	2	1	6	11
	Percentage	2,6%	2,6%	1,3%	7,9%	14,5%
Total	Frequency	9	10	6	51	76
	Percentage	11,8%	13,2%	7,9%	67,1%	100%

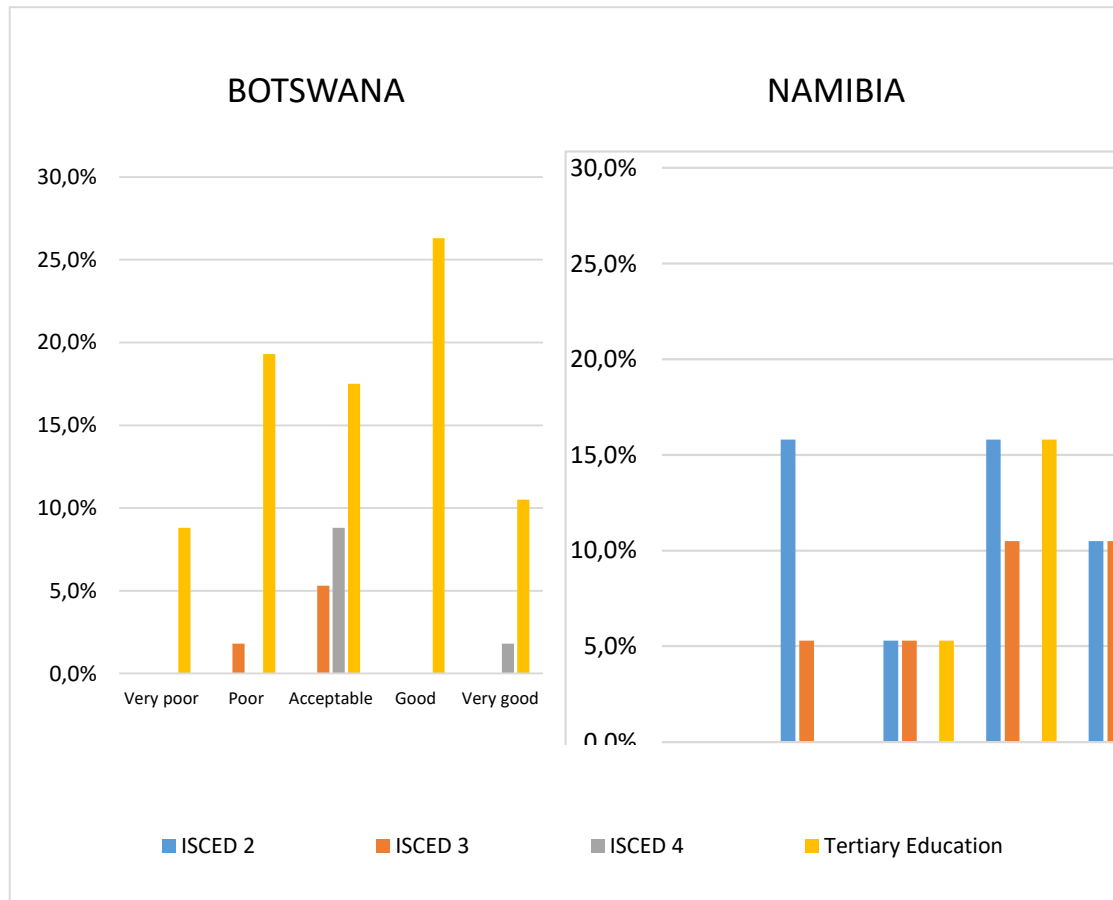
Source: Own elaboration from collected data (questionnaires).

On the one hand, those who consider that their balance of life is very poor (6.6%), in all cases are participants with tertiary education. Those who consider that they have a poor balance of life represent the 21.1% of the total sample, of who 3.9% have ISCED 2, 2.6% have ISCED 2 and 14.5% have tertiary education. Of those who balance its life as “Acceptable”(27.6%), 1.3% have an ISCED 2, 5.3% have an ISCED 3, 6.6% have an ISCED 4 and 14.5% have attained tertiary education.

On the other hand, from the participants who consider their balance of life as “Good”(30.3%), 3.9% of them have an educational attainment of ISCED 2, 2.6% have ISCED 3, 1.3% have an ISCED 4, and 23, 7% have attained tertiary education. Those who perceive their balance of life as “Very Good” (14.5%), 2.6% of them have ISCED 2, another 2.6% have an ISCED 3, 1.3% have an ISCED 4 and 7.9% have attained tertiary education.

The difference between Botswana and Namibia in relation to the balance of life prior joining the TVET program according to the highest level of educational attainment by country are shown below:

**Graph 70: Balance of life prior to join the TVET Program according to the highest level of education attained by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, there is a 7.0% of participants who have attained an education level ISCED 3, of this group, there is a 1.8% who consider that their life balance prior to the start of the program was poor and 5.3% who considered acceptable. There is a 10.5% of participants who attained an ISCED 4, of whom 8.8% reported an acceptable live balance and 1.8% a very good one. As for the highest frequency, corresponds to the students that have attained tertiary education, representing 82.5% of the total stake, within this group there is a 8.8% who consider that their life balance was very poor, 19.3% poor, 17.5% acceptable, 26.3% good and 10.5% very good.

In Namibia, there is a 47.4% of participants who have completed successfully an ISCED 2 (The highest frequency on this table), students from this group consider in a 15.8% that their live balance was poor, 5.3% acceptable, 15.8% good, 10.5% very good. There is also a 31.6% of participants who attained an ISCED 3, of whom 5.3% consider a poor satisfaction or acceptable, 10.5% think is good or very good.

- To report on the frequencies and percentages related to the perception of participants about their own life balance prior to the start of the program and the perception on the household income situation, there are counted 71 cases.

**Table 50: Prior balance of life according to participants' household income situation in total**

Balance of life prior to the participation on the program	Perception about Household Income situation					Total
	Living comfortably with present income	Coping on present income	Finding it difficult on present income	Finding it very difficult on present income		
Very poor	Frequency	0	0	2	3	5
	Percentage	0,0%	0,0%	2,8%	4,2%	7,0%
Poor	Frequency	1	2	7	4	14
	Percentage	1,4%	2,8%	9,9%	5,6%	19,7%
Acceptable	Frequency	1	7	7	6	21
	Percentage	1,4%	9,9%	9,9%	8,5%	29,6%
Good	Frequency	1	3	8	8	20
	Percentage	1,4%	4,2%	11,3%	11,3%	28,2%
Very Good	Frequency	1	2	3	5	11
	Percentage	1,4%	2,8%	4,2%	7,0%	15,5%
Total	Frequency	4	14	27	26	71
	Percentage	5,6%	19,7%	38,0%	36,6%	100%

Source: Own elaboration from collected data (questionnaires).

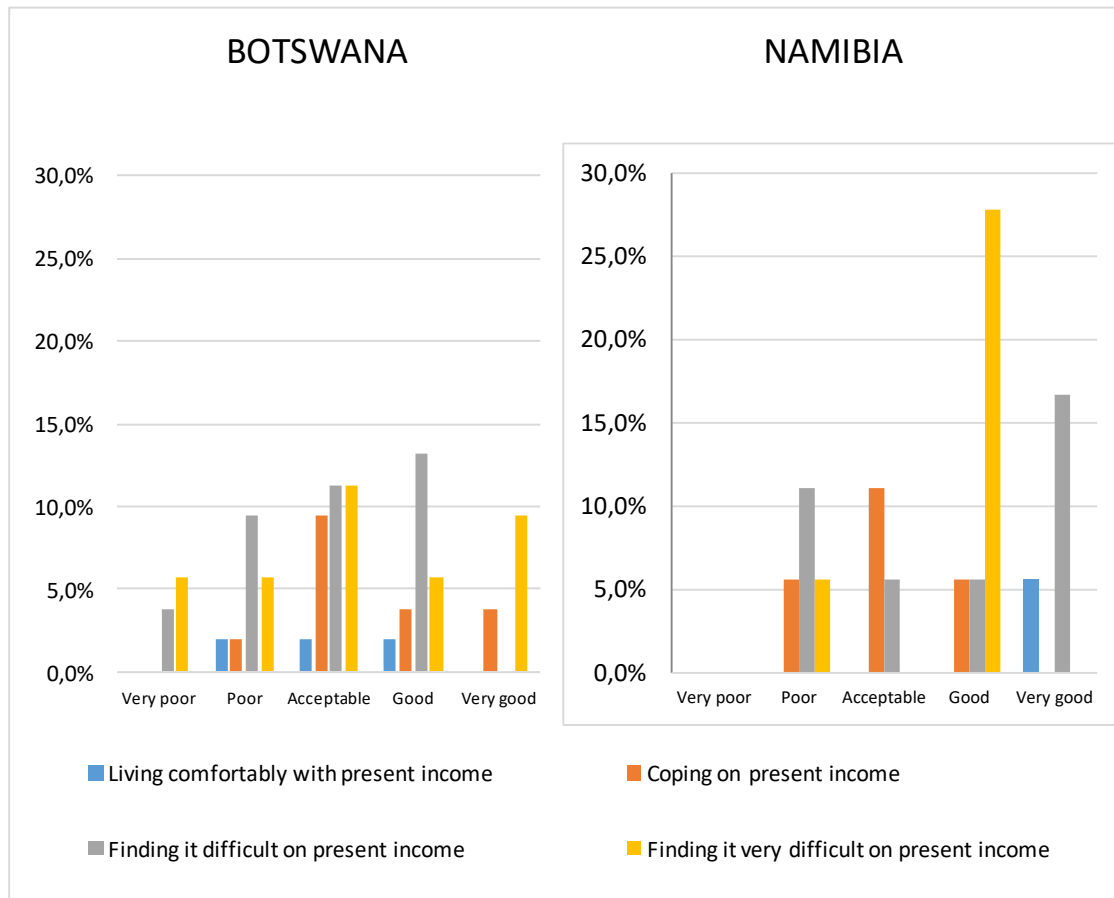
Those who consider a “very poor “ balance of life represents 7.0% of the total sample, of this group 2.8% comment that are living with difficulties and 4.2% are living with many difficulties. Of those which report a poor balance (19.7%), 1.4% perceive that household income allow them to live comfortably, 2.8% are coping with present income, 9, 9% are living with difficulties and 5.6% are living with many difficulties; Of those participants who make Acceptable balance of living, 1.4% perceive they are living comfortably, 9.9% are coping with present income, another 9.9% are living with difficulties and 8.5% are living with many



difficulties. Also, of those students who consider that they have a “good” life balance (28.2%) , 1.4% say they are living comfortably, 4.2% are coping with present income, 11.3% are living with difficulties, 11.3% are living with many difficulties; and from those who report a very good balance of life, 1.4% consider that are living comfortably, 2.8% are coping with present income, 4.2% are living with difficulties and 7% are living with many difficulties.

The difference among countries in relation to the perceived balance of life prior joining the TVET program according to the participant’s household income situation by country is described below.

**Graph 71: Perceived balance of life before joining the TVET program according to the participant’s household income situation by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, there is a 5.7% of participants who consider that they are living comfortably with present income, of whom 1.9% thinks that the balance of life is poor or acceptable. There is also a 18.9% of people who consider that are coping with present income, from this group 1.9% refer to a poor balance of life, 9.4% acceptable, 3.8% as good or very good. Moreover there is a 37.7% of people who find it difficult or very difficult with present income. From the group that find it difficult, there is a 3.8% reporting a very poor balance of life, 9.4% poor, 11.3% acceptable and 13.2% good. To conclude, there is a 37.7% of people who find it very difficult with present income, of whom 9.4% report a very poor balance of life, 18.9% poor, 34.0% acceptable, 24.5% good, 13.2% very good.

In Namibia there is a 5.6% of participants who report that they are living comfortably with present income, all of them consider that their balance of life is very good. There is also a 22.2% of students who consider that are coping with present income, 5.6% of them think that their balance of life is poor, 11.1% consider that it is acceptable and 5.6% that is good. The highest frequency of the table corresponds to the 38.9% of participants who report that they find it difficult with present income, of whom 11.1% consider that their life balance is poor, 5.6% acceptable or good, and 16.7% very good. Finally, there is also a 33.3% who reports many difficulties to cope with present income, of whom 22.2% thinks their live balance is very poor, 16.7% acceptable, 38.9% good, and 22.2% very good.

- It is also important to describe the relation between the main source of household income and the perceived balance of life prior to the participation on the TVET program by students.

**Table 51: Prior balance of life according to the main source of household income in total**

Balance of life prior to the participation on the program	Main Source of Household Income									Total
	Wages and Salaries	Income from self-employment (excluding farming)	Farming	Pensions	Unemployment / Redundancy Benefit	Any other social benefit or grants	Income from investment, savings, insurance or property	Income from other sources		
Very Poor	Frequency	0	0	0	1	2	0	0	0	3
	Percentage	0,0%	0,0%	0,0%	1,4%	2,9%	0,0%	0,0%	0,0%	4,3%
Poor	Frequency	8	3	1	1	0	0	0	0	13
	Percentage	11,6%	4,3%	1,4%	1,4%	0,0%	0,0%	0,0%	0,0%	18,8%
Acceptable	Frequency	9	4	1	1	2	1	1	1	20
	Percentage	13,0%	5,8%	1,4%	1,4%	2,9%	1,4%	1,4%	1,4%	29,0%
Good	Frequency	7	2	2	4	3	1	0	3	22
	Percentage	10,1%	2,9%	2,9%	5,8%	4,3%	1,4%	0,0%	4,3%	31,9%
Very Good	Frequency	4	3	1	1	1	1	0	0	11
	Percentage	5,8%	4,3%	1,4%	1,4%	1,4%	1,4%	0,0%	0,0%	15,9%
Total	Frequency	28	12	5	8	8	3	1	4	69
	Percentage	40,6%	17,4%	7,2%	11,6%	11,6%	4,3%	1,4%	5,8%	100%

Source: Own elaboration from collected data (questionnaires).

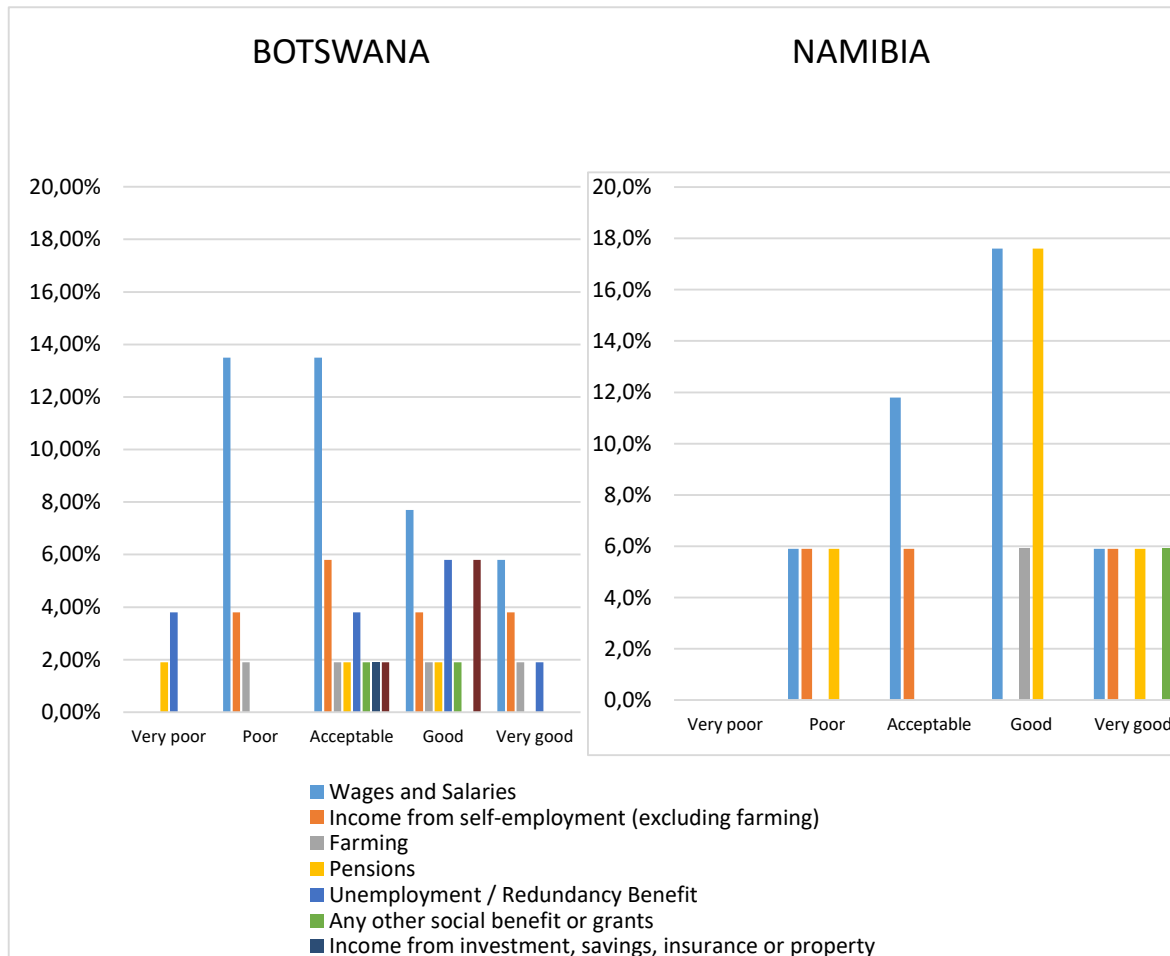
There are 69 cases to report in relation to the balance of life and the main source of household income. The students that make a “very poor” life balance represent the 4.3% of the total sample, of whom 1.4% have pensions as the main source of income, 2.9% received their main income from unemployment subsidies. From those participants that consider having a poor balance of life (18.8%) 11.6% of them receive their income from wages or salaries, 4.3% receive their income from self-employment excluding farming; 1.4% receive their main income from farming and another 1.4% from pensions. From those who makes an Acceptable balance of life

(29.0%) 13% have as main source of income, wages or salaries; 5.8% receive their main source of income from self-employment excluding farming; 1.4% from farming, another; 1.4% from pensions; 2.9% from unemployment benefits; 1.4% from social benefits or grants ,another 1.4% from investments, savings, property and the last 1.4% from other source of income.

Similarly, from those who make a “good” life balance (31.9%), 10.1% receive the main income from wages or salaries; 2.9% from self-employment wages excluding farming, 2.9% receive it from farming, 5.8% from pensions, 4.3% from unemployment benefits, 1.4% from social benefits or grants and 4.3% from other sources of income. Finally, from those who consider to have a “very good” balance of life, 5.8% receive their incomes from wages or salaries, 4.3% from self-employment excluding farming, 1.4% from farming, another 1.4% from pensions, another 1.4% from unemployment benefits and the remaining 1.4% from social benefits or grants.

The differences between countries are reported and presented on the following graph.

**Graph 72: Balance of life before joining the TVET program according to the main source of household income by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana most participants 40.4% obtain their main source of income from wages and salaries, from this group, there is a 13.5% who consider that their balance of life was poor or acceptable, another 7.7% who consider that was good and 5.8% who thinks they do very good. As for the people who are self-employed excluding farming, which represent a 17.3% of the total sample, 3.8% have a poor balance of life, 5.8% is acceptable, 3.8% consider that is good or very good. There is also a 7.7% that earn its income from farming, of whom 1.9% consider to

have a poor, acceptable, good or very good life balance. As for the people whose main source of income come from pensions (5.8%) there is a 1.9% of these, who consider their life balance as very poor, acceptable or good. The second highest frequency correspond to the group of unemployed people (15.4%) where 3.8% of them consider to have a very poor or acceptable life balance, and there is also a 5.8% good, 1.9% very good.

Moreover, there is a 3.8% of people whose income are generated by some social benefits or grants, of whom 1.9% consider to have an acceptable or good life. To conclude there is on one hand a 1.9% of participants whose main income comes from savings or investment considering all of them that are doing fine, and on the other hand there is a 7.7% of people whose income come from other sources.

In Namibia, it is evident that the more frequent source of income corresponds to the one relate to the earning generating from wages and salaries with 41.2% of the total stake. Of this group, there is a 5.9% of people who consider that their life balance is poor, 11.8% acceptable, 17.6% good, and 5.9% very good. There is also a 17.6% of participants who are self-employed excluding farming, of whom 5.9% consider that they are doing poor, acceptable and very good balancing their lives. Moreover, there is only a 5.9% of people whose main source of income comes from farming activities, all of them consider that they are doing fine balancing its life. There is also a significant amount of participants whose main source of household income come from pensions (29.4%) from this group, there is a 5.9% who think that they have a poor life balance, 17.6% who are doing fine, 5.9% doing very good. To conclude, there is a 5.9% of the total stake who have get any other social benefit or grant and all of them consider they are doing very well in their life.

- To report about the perception on the life balance prior to the participation in the program and the relevance that is given by students to their participation on the program according to their future professional expectations there are 68 cases. There is a 7.4% of the total sample who consider a “very poor” balance of life, of those 2.9% consider that their participation on the program is not relevant at all, another 2.9% think that is slightly relevant, another 1.5% consider it highly relevant. Of those who considering their balance of life as “poor” (17.6%) 2.9% consider irrelevant their participation in the program, 1.5% slightly relevant, 5.9% relevant, 2.9% highly relevant and 4.4% extremely relevant. Of those who consider to have an “Acceptable” balance of life (29.4%) 2.9% think that their participation is irrelevant, 1.5% is slightly relevant, 13.2% considered relevant, 8.8% highly relevant and 2.9% extremely relevant.

**Table 52: Prior balance of life according to the relevance of the TVET program in total**

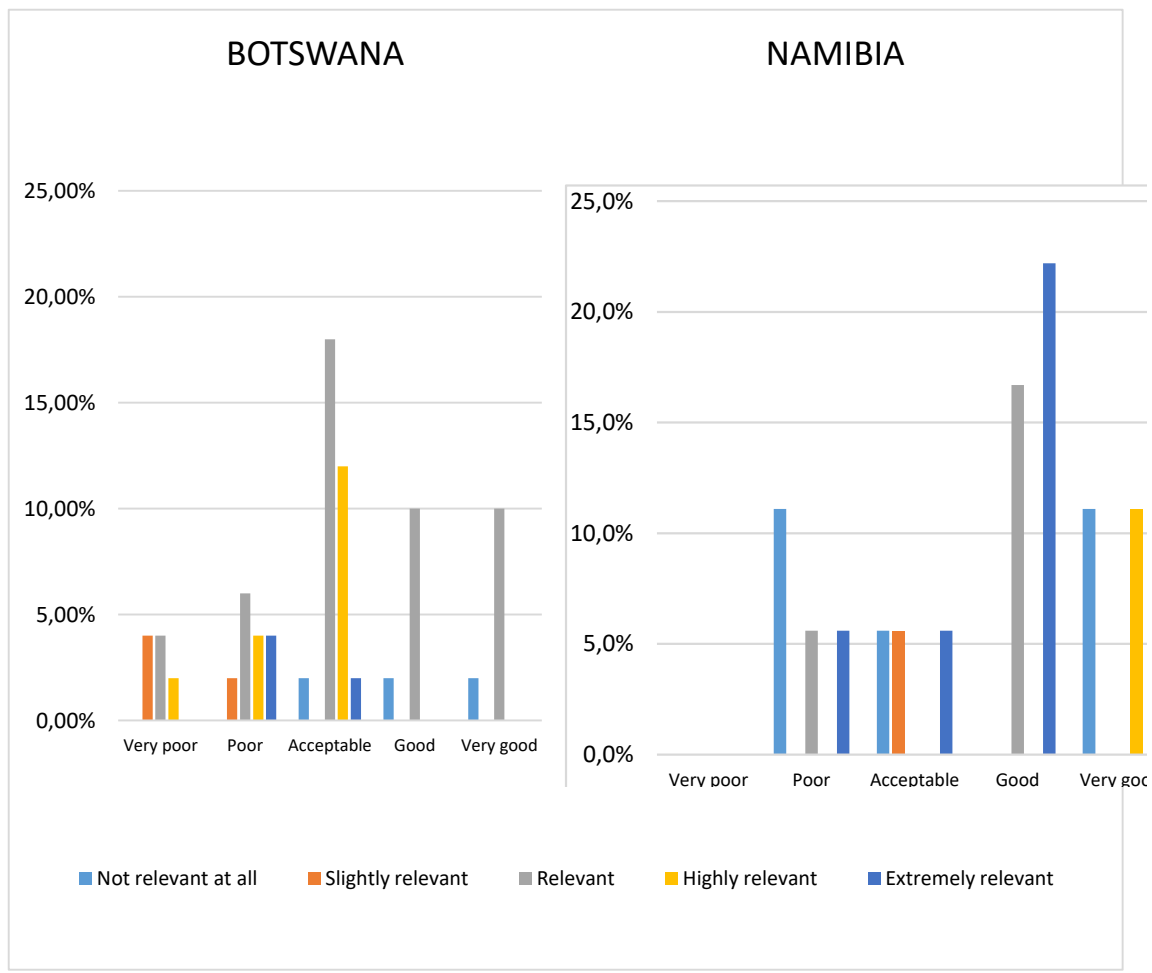
Balance of life prior to the participation on the TVET program		How relevant is the participation in the program according to your future professional expectations					Total
		Not relevant at all	Slightly relevant	Relevant	Highly relevant	Extremely relevant	
Very poor	Frequency	0	2	2	1	0	5
	Percentage	0,0%	2,9%	2,9%	1,5%	0,0%	7,4%
Poor	Frequency	2	1	4	2	3	12
	Percentage	2,9%	1,5%	5,9%	2,9%	4,4%	17,6%
Acceptable	Frequency	2	1	9	6	2	20
	Percentage	2,9%	1,5%	13,2%	8,8%	2,9%	29,4%
Good	Frequency	1	1	8	2	9	21
	Percentage	1,5%	1,5%	11,8%	2,9%	13,2%	30,9%
Very Good	Frequency	3	0	5	2	0	10
	Percentage	4,4%	0,0%	7,4%	2,9%	0,0%	14,7%
Total	Frequency	8	5	28	13	14	68
	Percentage	11,8%	7,4%	41,2%	19,1%	20,6%	100%

Source: Own elaboration from collected data (questionnaires).

On the other hand, from those students who consider a “good” balance of life (30.9%), 1.5% of them think their participation is on the program is not relevant at all, another 1.5% think that is slightly relevant, 11.8% think that is relevant, 2.9% highly relevant and 13.2% extremely relevant; From those participants that consider to have a very good balance of life(14.7%), 4.4% of them consider irrelevant their participation in the program, 7.4% relevant and 2.9% highly relevant.

The table below represent the relation between the balance of life prior to the participation on the TVET program

**Graph 73: Balance of life before joining the TVET program according to the perceived relevance of the TVET program by country**



Source: Own elaboration from collected data (questionnaires).



In Botswana according to the perceived relevance of the program according to the future professional expectations.. As it is reflected there is a 6% of participants who considered irrelevant the participation in the program, of this people, 2% consider to have an acceptable, good or very good balance of life. There is a 8.0% of people who consider the program slightly relevant, of whom 4.0% consider to have a very poor balance of life, 2.0% poor and good ones. Most of participants, representing 48.0% of the total sample, consider that they program is relevant to improve their profession, of these people, there are 4% who consider to have a very poor and 6% poor balance of life, but there is also a 18.0% of participants from this group who consider to have an acceptable, and 10% good and very good balance. In addition to that there is a 22% people who consider highly relevant, from this group most of participants consider to have an acceptable balance of life 12%, and there is also a 4.0% who consider to have a good or poor balance. To conclude, there is a 16% of all participants who consider that the program is extremely relevant, of whom 10% have a good life balance, 4% poor and 2% acceptable.

In Namibia there is a 27.8% of participants who consider irrelevant their participation in the program, of these people, 11.1% consider that they have a poor life balance, 5.6% an acceptable one and 11.1% very good. There is a 5.6% of the total stake that consider that the relevance of the program is slightly relevant, all of them consider to have an acceptable life balance. Moreover, there is a 22.2% of participants who perceived the program as relevant, of whom 5.6% consider to have a poor life balance and 16.7% a good one. There is also a 11.1% of participants considering to have a highly relevant perception of the program, all of them consider to have a very good life balance. To conclude, there is a 33.3% of participants who rate the program as extremely relevant, from this group, there is a 5.6% who consider to have a poor or acceptable life balance and 22.2% good.

- The relation between the perceived life balance prior to the participation on the TVET program and the different ways in which the participants have financed the cost of joining the TVET program are presented below.

**Table 53: Prior balance of life according to the different ways of financing the participation on the TVET program in total**

<b>Balance of life prior to the participation on the TVET program</b>		<b>How was financed the participation on the TVET Program</b>					<b>Total</b>
		<b>Own Funding</b>	<b>Enterprise / Employer Funding</b>	<b>Public Funding</b>	<b>Loan</b>	<b>Other sources</b>	
Very Poor	Frequency	1	1	3	0	0	5
	Percentage	1,6%	1,6%	4,8%	0,0%	0,0%	7,9%
Poor	Frequency	9	0	3	0	1	13
	Percentage	14,3%	0,0%	4,8%	0,0%	1,6%	20,6%
Acceptable	Frequency	10	1	6	0	1	18
	Percentage	15,9%	1,6%	9,5%	0,0%	1,6%	28,6%
Good	Frequency	7	2	6	1	2	18
	Percentage	11,1%	3,2%	9,5%	1,6%	3,2%	28,6%
Very good	Frequency	2	0	6	1	0	9
	Percentage	3,2%	0,0%	9,5%	1,6%	0,0%	14,3%
<b>Total</b>	Frequency	29	4	24	2	4	63
	Percentage	46,0%	6,3%	38,1%	3,2%	6,3%	100%

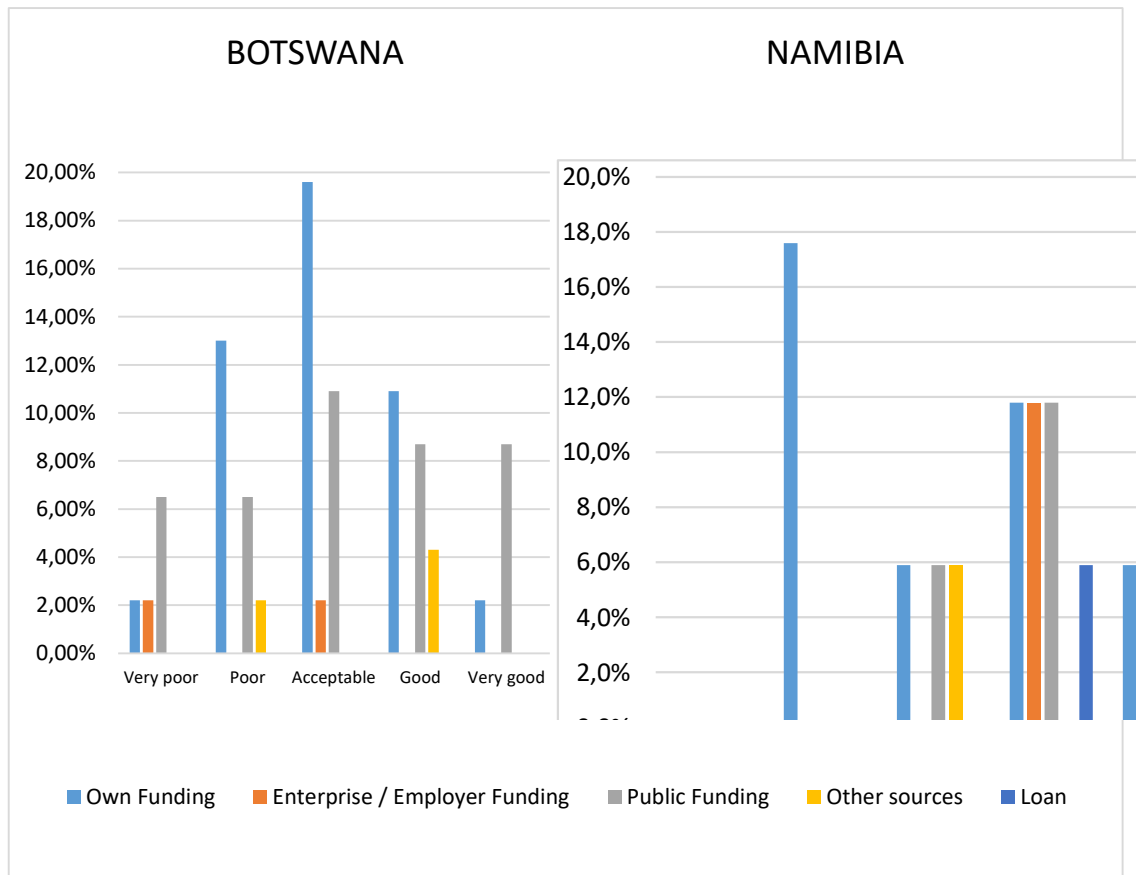
Source: Own elaboration from collected data (questionnaires).

There are 63 cases, that have been used to report on the balance of life and its relation to how students have financed their participation in the program. From those students who considered to have a “very poor” life balance (7.9%), 1.6% of them have financed their participation with its own funding, another 1.6% have obtained the funds with the help of the company for which they are employed, and 4.8% with the help of public funds; of those who report a poor balance of life(20.6%), 14.3% have financed their participation using their own funding, 4.8% use public funds and 1.6% have used other financial sources; Of those who balance their life “Acceptable” (28.6%) 15.9% have financed their participation in the program with their own funding, 1.6% got funds from the support of the enterprises, and 9.5% with the support of public funds, and 1.6% with other source of income.

Similarly, from those who perceive that are having a good life balance (28.6%), 11.1% have financed their own way share of 3.2% with the help of the company which they are employed, 9.5% with the help of public funds, 1.6% through a loan and 3.2% with other sources of funding; As for the group of students who rate their balance of life as “very good” (14.3%), 3.2% of them use their own funding, 9.5% finance their studies with the support of public funds and 1.6% with a loan.

The difference between countries on this regard are described and represented on the graph below.

**Graph 74: Balance of life before joining the TVET program according to the different ways of financing the participation in it by country**



Source: Own elaboration from collected data (questionnaires).

In the above graph, it is reflected in Botswana. Those who have financed their participation on the TVET program using their own funds represent the highest frequency with a 47.8% of the total sample, of whom 2.2% reported a very poor life balance, 13.0% poor, 19.6% acceptable, 10.9% good and 2.2% very good life balance. There is a 4.3% of participants who have got the financial support from their employers or enterprises, of whom 2.2% considered to have a very poor or acceptable life balance. As for the people who have received public funding to cover the cost, they represent the 41.3% of the total sample, from this group, most of participants 8.7% consider that they have a good or very good balance of life, on the contrary there is also a 6.5% who consider that they have a poor or very poor balance of life. Moreover there is a 6.5% of participants who have cover the cost using other financial sources, most of them 4.3% consider that their life balance is good.

In the above graph, it is also reflected the relation between the perceived life balance prior to the participation on the TVET program and the different ways in which the participants have financed the cost of joining the TVET program in Namibia. Those who finance the cost of the TVET program with their own sources, represent 41.2% of the total stake, representing the most common way of finance. From this group, there is a 17.6% of people who consider that their life balance is poor, 5.9% acceptable, 11.8% good, 5.9% very good. There is also an 11.8% of participants who obtained the money to cover the cost of the program with the support of the employers or enterprise (11.8%) all subjects from this group consider that their life balance is good. As for the ones who used public funding to cover the cost 29.4%, 5.9% consider to live an acceptable life, meanwhile 11.8% consider to have a good or very good life balance. In addition to this, there is a 11.8% of the population who have obtained a loan to cover the cost, from this group, there is a 5.9% who consider that their life balance is good or very good. To conclude there is also a 5.9% of people that have used other financial sources, and all of them report to have a good live balance.

**d) Social Benefits - Social Mobility ( Future employment expectations)**

To report on the results in terms of future employment expectations there are 102 data. It is observed that the majority of participants are entrepreneurs and they would like to generate employment. For the majority of students (44.1%) of the total sample who are self-employed with employees, participants of this group have an average age of 25.67 years old with a standard deviation of 3.46, the average number of children per household is 3.41 with a standard deviation of 2.33 and on average the number of adults living at the household is 4.24 with a standard deviation of 2.70. As for the second highest group we find the participants who expect to be employed once the program is finished (24.5%) of total sample, this group has an average age of 26.86 years old and a standard deviation of 3.83; the average number of children within the household is 3.57 with a standard deviation of 3.47, and the average number of adults per household is 4.78 with a standard deviation of 2.92.

**Table 54: Future employment expectations in total**

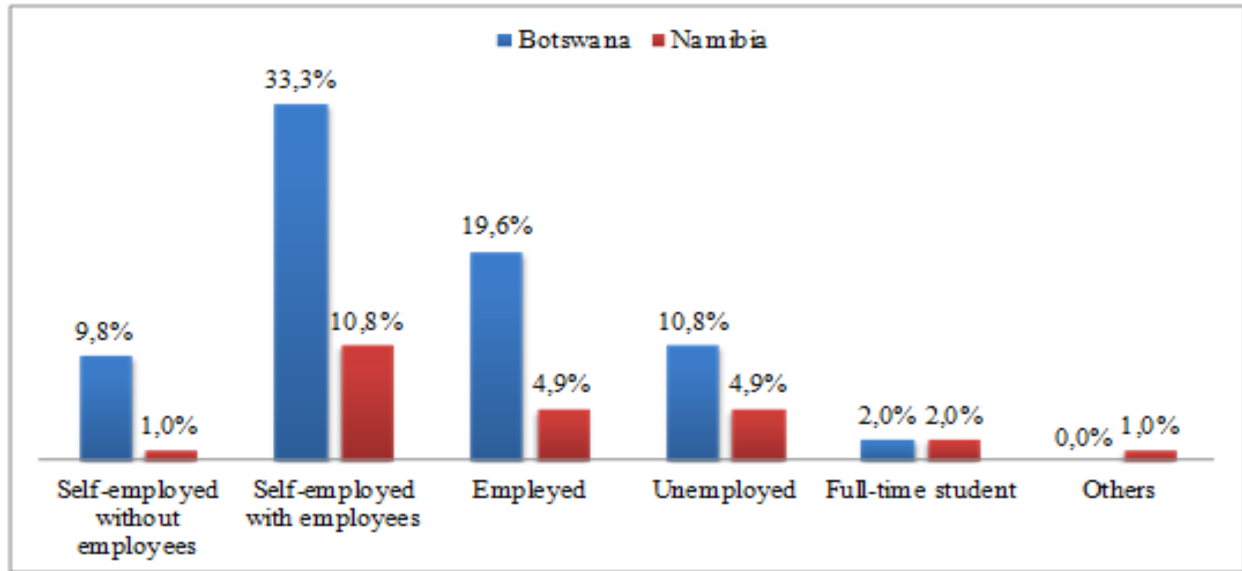
Expected labor situation after completion of the Program		Frequency	Percentage	Age	People living within the household	
					Children	Adults
Self-employed employees	without	11	10,8%	M=28,90 SD=3,90	M=6,64 SD=7,37	M=5,82 SD=2,82
Self employed with employees		45	44,1%	M=25,67 SD=3,46	M=3,41 SD=2,33	M=4,24 SD=2,70
Employed		25	24,5%	M=26,86 SD=3,83	M=3,57 SD=3,47	M=4,78 SD=2,92
Unemployed		16	15,7%	M=25,25 SD=2,76	M=4,63 SD=2,89	M=4,63 SD=2,87
Full-time Education		4	3,9%	M=24 SD=2,30	M=3 SD=2,90	M=4,25 SD=2,21
Other		1	1,0%	M=21 SD=0,0	M=5 SD=0,0	M=3 SD=0,0
Total		102	100%			

Source: Own elaboration from collected data (questionnaires).

On the other hand, we find students whom their main expectations are not positive and as they expect to remain unemployed, this represents 15.7% of the total sample, this group has an average age of 25.25 with a standard deviation of 2.76, the average children per household is 4.63 with a standard deviation of 2.89 and an average number of adults living on the household of 4.63 with a standard deviation of 2.87.

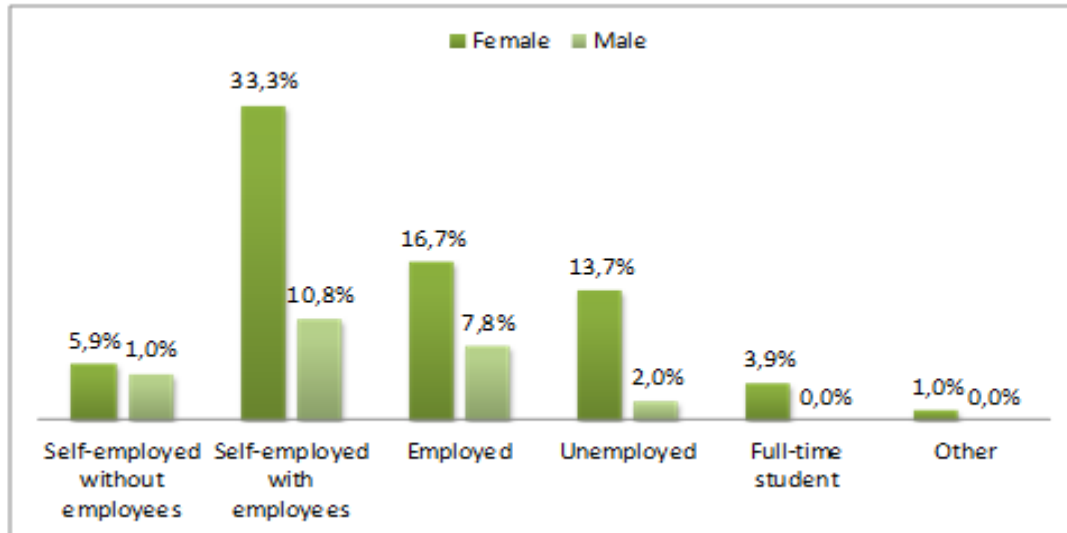
Moreover, 10.8% of the total sample would like to initiate their own business without having their own employees. The average age of this group of people is 28.90 years old with a standard deviation of 3.90, the average children per household is 6.64 with a standard deviation of 7.37, there average of adults at the households are 5.82 with a standard deviation of 2.82

The lowest expectations from the participants (3.9%) refer to the full-time students where the average age is 24 years old, with a standard deviation of 2.30. within the participants of this group we can see that there is an average of 3 children per household with a standard deviation of 2.90 and an average of adults within the household of 4.25 with a standard deviation of 2.21. In addition to that, we find that there is a unique case, that represents from a 21 year old participant that have a different future labor expectations, where in his household life 5 children and 3 adults.

**Graph 75: Future labor expectations by country**

Source: Own elaboration from collected data (questionnaires).

As shown in the above table and graph participants from Botswana have a higher frequency on their participation in most categories, except for “Full-time students” where there is a 2% participation for both countries Botswana and Namibia, and also for the option “Other” where there is a 1% participation from Namibia and none from Botswana. Moreover, participants from both countries agree that the most striking option after the program is completed is to be self-employed and also generate employment (self employed with employees) the second best option within both countries still is to find a job.

**Graph 76: Future labor expectations by gender**

Source: Own elaboration from collected data (questionnaires).

As for gender differences, it is noted that there is greater presence of women in all categories, there is a total absence of men in two of them: full-time student and the category named “other”; Moreover, both genders agree that the most common options are being self-employed with employees or be employed, and the following options are self-employed without employees and being unemployed.

- To inform about the expected labor situation after completion of the program according to the highest level of educational attainment of the participants, we consider 100 data cases. Of those who expect to be self-employer without employees, 1% have an ISCED 2, another 1% ISCED 3, other 1% ISCED 4, and 7% have tertiary education. Of those students who want to be self-employed with employers, 5% have ISCED 2, 2.8% have an ISCED 3, 4% have an ISCED 4 and 28% have tertiary education. From those students who expect to find a job and be employed, a 1% have an ISCED 2, a 3% have an ISCED 3, a 4% have an ISCED 4 and 16% have tertiary education.



**Table 55: Expected labor situation according to the highest level of education attained in total**

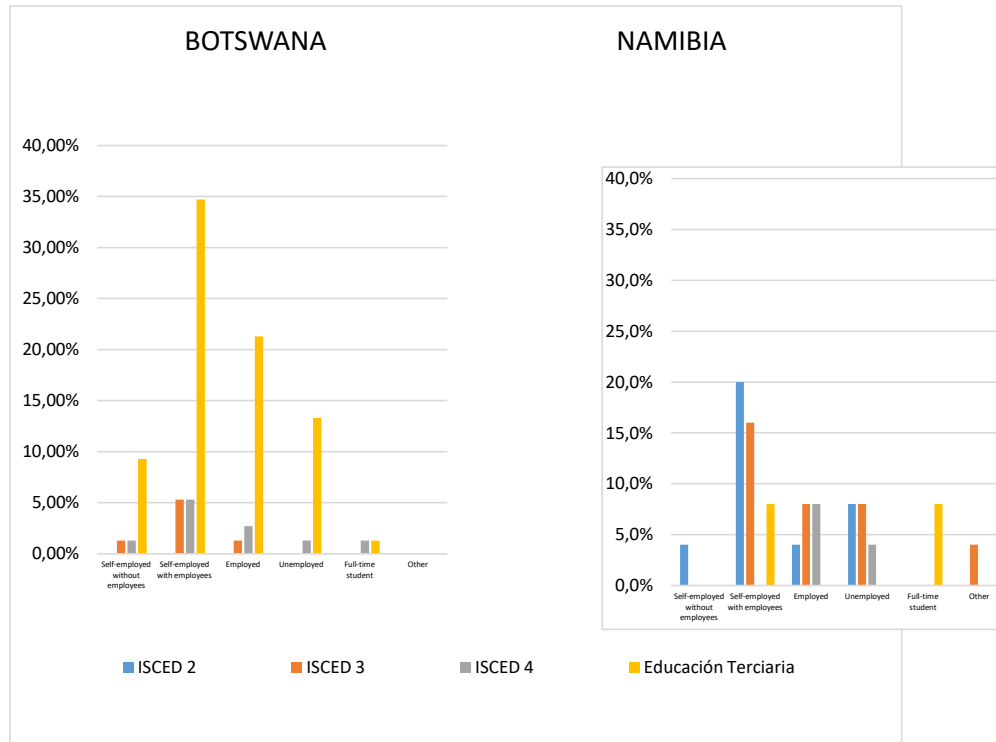
Expected labor situation after completion of the Program		Highest Level of Educational Attainment				Total
		ISCED 2	ISCED 3	ISCED 4	Educación Terciaria	
Self-employed without employees	Frequency	1	1	1	7	10
	Percentage	1,0%	1,0%	1,0%	7,0%	10,0%
Self-employed with employees	Frequency	5	8	4	28	45
	Percentage	5,0%	8,0%	4,0%	28,0%	45,0%
Employed	Frequency	1	3	4	16	24
	Percentage	1,0%	3,0%	4,0%	16,0%	24,0%
Unemployed	Frequency	2	2	2	10	16
	Percentage	2,0%	2,0%	2,0%	10,0%	16,0%
Full-time student	Frequency	0	0	1	3	4
	Percentage	0,0%	0,0%	1,0%	3,0%	4,0%
Other	Frequency	0	1	0	0	1
	Percentage	0,0%	1,0%	0,0%	0,0%	1,0%
Total	Frequency	9	15	12	64	100
	Percentage	9,0%	15,0%	12,0%	64,0%	100%

Source: Own elaboration from collected data (questionnaires).

Moreover those who expect to remain unemployed 2% have an ISCED 2, another 2% have an ISCED 3, another 2% have an ISCED 4, and a 10% tertiary education; of participants who expect to be full-time students once the TVET program finished, 1% have an ISCED 4, and 3% tertiary education; From those who have reported another expectation all of them have an ISCED 3.

On the graph below it is shown the differences among countries in relation to the expected labor situation that the participants in the TVET program and the highest educational attainment

**Graph 77: Future labor expectations according to the highest level of education attained by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, there is a 8.0% of subjects who have attained an ISCED 3, of those ones there are 5.3% who are self-employed with employees, 1.3% self-employed without employees and another 1.3% employed, there is no unemployment for people with this profile. There is also a 12% of participants who have attained an ISCED 4, of whom 1.3% are self-employed without employees, 5.3% are self-employed with employees, 2.7% are employed and there are also 1.3% who are either unemployed or are full time students. Nevertheless, most of the participants have attained tertiary education studies, representing 80% of the total sample. Of this group, there are 12% who are self-employed without employees, 45.3% who are employed with employees, 14.7% unemployed, and there is also a 2.7% who are still full time students.

In Namibia, there is a 36% of people who has attained an ISCED level 2, participants of this group are represented by 20% of self-employed with employees, 4% self-employer without employees, and employed, 8% unemployed. There is also another 36% of participants who have attained ISCED level 3, of whom, 16% are self-employed with employees, 8% employed, 8% unemployed. As for the participants who have attained an ISCED 4 level, they are represented by a 12% of the total sample, of whom 8% are employed and 4% are unemployed. To finalize there is a 16% of subject that have attained tertiary education level, of whom 8% are self-employed with employees and 8% full-time students.

- To report on the existing relation between the expected labor situation after the completion of the program and the main source of household income, there are 91 cases, of which of those who expect to be self-employed without employees(11.0%) 3.3%obtain their main source of household income from wages or salaries, 2.2% from self-employment excluding farming, another 2.2% from farming and 3.3% from unemployment benefits.

**Table 56: Expected labor situation according to the main source of household income in total**

Expected labor situation after completion of the Program		Main Source of Household Income								Total
		Wages and Salaries	Self-employment (excluding farming)	Farming	Pensions	Unemployment / Redundancy Benefit	Any other social benefit or grants	Income from investment, savings, insurance and property.	Income from other sources	
Self-employed without employees	Frequency	3	2	2	0	3	0	0	0	10
	Percentage	3,3%	2,2%	2,2%	0,0%	3,3%	0,0%	0,0%	0,0%	11,0%
Self-employed with employees	Frequency	18	9	2	3	2	2	1	4	41
	Percentage	19,8%	9,9%	2,2%	3,3%	2,2%	2,2%	1,1%	4,4%	45,1%
Employed	Frequency	9	2	1	2	5	0	0	3	22
	Percentage	9,9%	2,2%	1,1%	2,2%	5,5%	0,0%	0,0%	3,3%	24,2%
Unemployed	Frequency	6	1	1	4	2	0	0	0	14
	Percentage	6,6%	1,1%	1,1%	4,4%	2,2%	0,0%	0,0%	0,0%	15,4%
Full-time student	Frequency	1	0	0	2	0	0	0	0	3
	Percentage	1,1%	0,0%	0,0%	2,2%	0,0%	0,0%	0,0%	0,0%	3,3%
Other	Frequency	0	0	0	1	0	0	0	0	1
	Percentage	0,0%	0,0%	0,0%	1,1%	0,0%	0,0%	0,0%	0,0%	1,1%
Total	Frequency	37	14	6	12	12	2	1	7	91
	Percentage	40,7%	15,4%	6,6%	13,2%	13,2%	2,2%	1,1%	7,7%	100%

Source: Own elaboration from collected data (questionnaires)

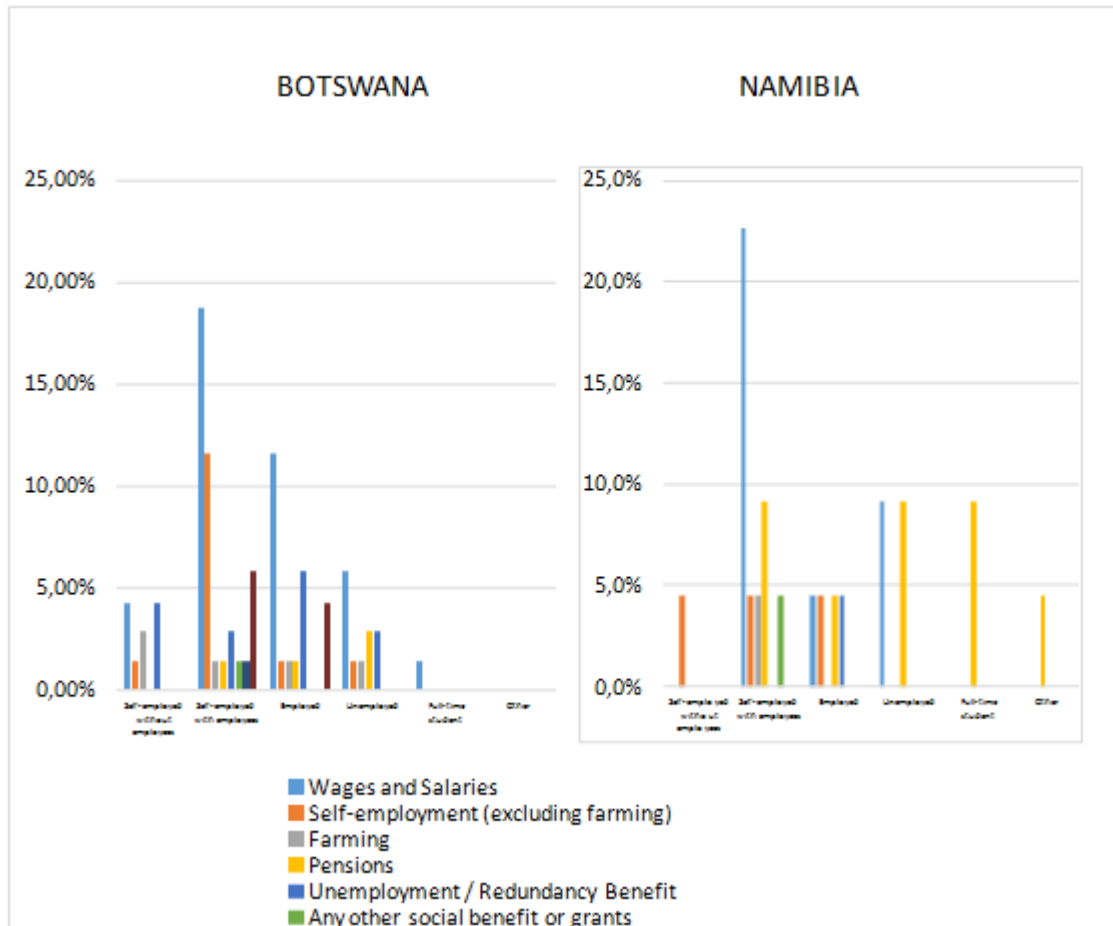
Of those who expect in the near future to be self employed with employees (45.1%) which represent the majority of the sample, 19.8% receive their main income from wages or salaries, 9.9% from self-employment excluding farming, 2.2% from farming, 3.3% from

pensions, 2.2% from unemployment benefits another 2.2% from other social benefits or grants, 1.1% From investments, savings, insurance or property and 4.4% from other source of income. Of those students who expect to be employed (24.2%), 9.9% have as main source of household income wages or salaries, 2.2% from self-employment excluding farming, 1.1% from farming, 2.2% from pensions, 5.5% from unemployment benefits and 3.3% from other source of funding.

Moreover, of those who expect to be unemployed (15.6%) , 6.6% receive their main source of income from wages or salaries, 1.1% from self-employment excluding farming, another 1.1 % from farming, 4.4% from pensions and 2.2% from the unemployment benefits. There is a group of subjects representing the 3.3% of the total sample who expect to be full-time students, 1.1% receive their main source of income from wages or salary and 2.2 % from pension,. From those subjects who have other job expectations (1.1%) the main source of household income comes from pensions.

The graph below shows the difference between countries regarding the relation between the main sources of household income and job prospects and expectations once the participation in the TVET program finished.

**Graph 78: Future labor expectations according to the main source of household income by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana there is a 42% of participants whose main source of income is related to wages and salaries, of this group there is 4.3% of self-employed without employees, there is also 18.8% of self-employed with employees, 5.8% of unemployed subjects and 1.4% of full-time students. There is a 15.9% of the total stake whose main source of household income relates to self-employment excluding farming, of this group there is 1.4% of self-employed without employees, 11.6% of self-employed with employees. 1.4% employed and unemployed. As for the participants whose main income activity generator is farming, it is represented by 7.2% of the total participants; from this group there is 2.9% of self-employers without employees, 1.4% of self-employed with employees and unemployed. There is a 5.8% of participants whose main

source of household income comes from pensions, of whom 1.4% are self-employed with employees or employed, and 2.9% unemployed. There is a 15.9% of the total stake whose main source of household income comes from the redundancy benefit or unemployment one. From this group of people there is a 4.3% who are self-employed without employees, 2.9% self-employed with employees, 5.8% employed and 2.9% unemployed. There is a 1.4% of participants whose main source of income comes from either any type of social benefit or grant or from income, investments, and savings, in both cases it is the case of self-employers with employees.

In Namibia there is a 36.4% of participants whose main income come from salaries and wages, from this group, there is 22.7% who are self-employed with employees, 4.5% who are employed and 9.1% who are unemployed. There is also a 13.6% of people whose main source of income comes from self-employment excluding farming, of whom 4.5% are self-employed without employees or self-employed with employees, or employed. As for the 4.5% representing the participants whose main source of household income come from farming, all of them are self-employed with employees. There is another 36.4% of the total stake whose main source of income come from pensions, of this group 4.5% are employed, 9.1% are unemployed and full time students. To conclude there is a 4.5% of participants who either get the main source of income from unemployment benefits or from any other social benefit or grants.

- To report on the expectations of the future labor situation and the perception of living standards according to the main source of household income there are 93 cases in total.

**Table 57: Expected labor situation according to the perception of living standards with household income in total**

		Perception of living standard with Household Income				Total
Expected labor situation after completion of the Program		Living Comfortably on present income	Coping on present income	Finding it difficult on present income	Finding it very difficult on present income	
Self-employed without employees	Frequency	2	1	3	4	10
	Percentage	2,2%	1,1%	3,2%	4,3%	10,8%
Self-employed with employees	Frequency	2	12	14	14	42
	Percentage	2,2%	12,9%	15,1%	15,1%	45,2%
Employed	Frequency	1	3	11	9	24
	Percentage	1,1%	3,2%	11,8%	9,7%	25,8%
Unemployed	Frequency	1	3	3	5	12
	Percentage	1,1%	3,2%	3,2%	5,4%	12,9%
Full-time student	Frequency	0	0	1	3	4
	Percentage	0,0%	0,0%	1,1%	3,2%	4,3%
Other	Frequency	0	0	0	1	1
	Percentage	0,0%	0,0%	0,0%	1,1%	1,1%
Total	Frequency	6	19	32	36	93
	Percentage	6,5%	20,4%	34,4%	38,7%	100%

Source: Own elaboration from collected data (questionnaires).

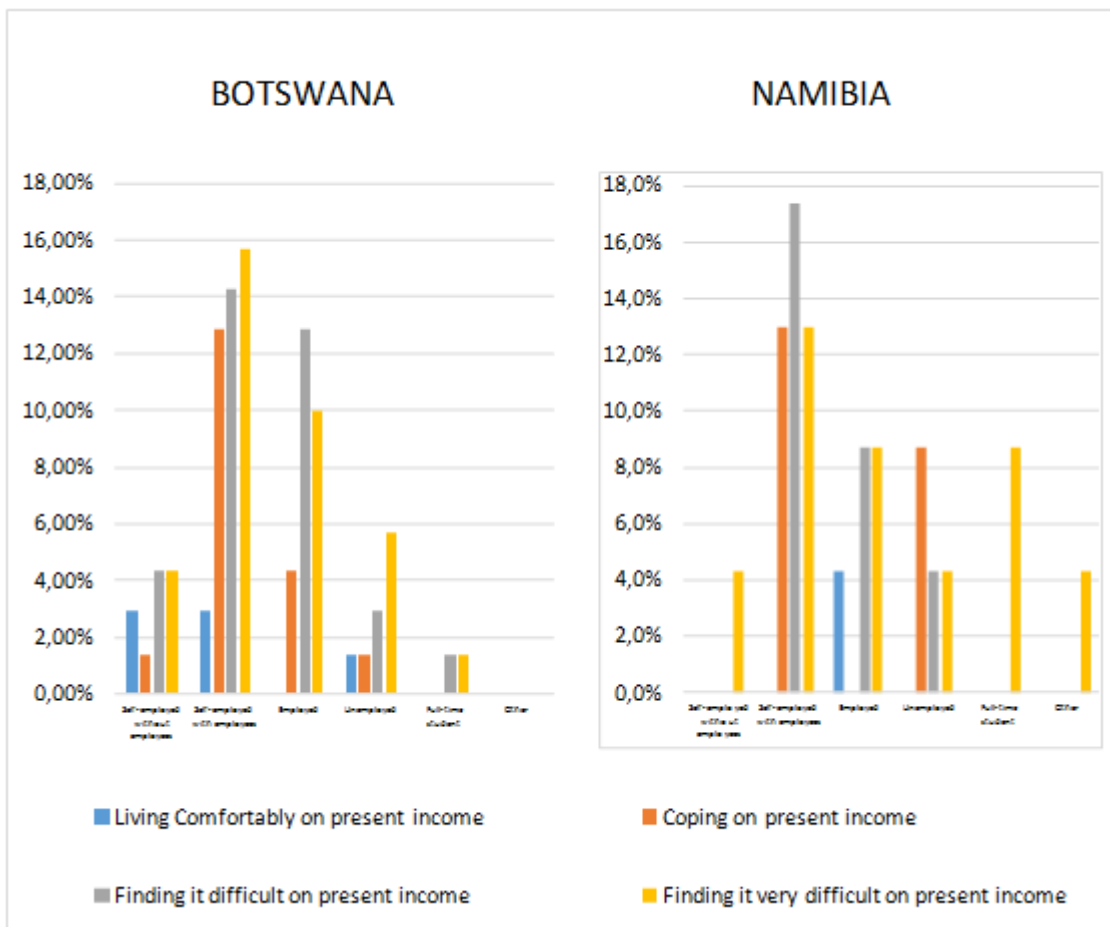
Of those who want to be self-employed without employees (10.8%), 2.2% consider that are living comfortably with household income 1.1% think that are coping with present income, 3.2% are living with difficulties and find it difficult on present income and 4.3% are living with many difficulties; of those who want to be entrepreneurs and create jobs(45.2%), 2.2% live comfortably, 12.9% are coping with present income, 15.1% are living with difficulties and another 15.1% living with many difficulties. From those who would like to be employed (25.8%), 1.1% think that their income allows them to live comfortably, 3.2% which are coping with present income, 11.8% are living with difficulties and 9.7% with many difficulties, as they find it very difficult to cope with present income. Also, those who expect to be unemployed at



the end of the program (12.9%), 1.1% of them believe that living comfortably, 3.2% coping with household income, another 3.2% find it difficult with present income and 5, 4% find it very difficult; of those who expect to be full-time students (4.3%), up 1.1% consider that they are living with difficulties and 3.2% with many difficulties; and from the 1.1% who have different job expectation, it is considered to have many difficulties as they find it very difficult with present income.

In the graph below it is shown a comparison between countries in relation to the participants perceived future labor expectations after the completion of the TVET program in Botswana and the perceived living standard with the actual household income.

**Graph 79: Future Labor expectations according to the perceived living standards by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana there is a 37.1% of participants, representing the highest frequency, who find it very difficult with present income, from this group, there is 15.7% who expect to be self-employed with employees, 4.3% who would like to be self-employed without employees, 10% who expect to be employed, 5.7% unemployed, and 1.4% who would like to be full time students There is also a 35.7% participants who find it difficult with present income, of whom 14.3% expect to be self-employed with employees, 12% are unemployed. Moreover there is 20.0% of the total stake who consider that they are living fine and cope with present income, of this group, there are 12.9% who expect to be self-employers with employees, 4.3% employed and 1.4% unemployed. To conclude there is a 7.1% of people who are living comfortably with present income, of whom 2.9% expect to be self-employed with or without employees.

in Namibia there is a 43.5% of the participants who find it very difficult on present income, of whom 13% expect to be self-employed with employees, 8.7% want to be employed, 4.3% consider that they will be unemployed, and 4.3% would like to remain being a full-time student. There is also a 30.4% of total stake who find it difficult on present income, of whom 17.4% would like to be self-employed with employees once the TVET program finalizes, 8.7% would like to be employed in different enterprises, 4.3% expect to be unemployed. In addition to this, there is a 21.7% who are coping with present income, of whom 13% participants expect to be self-employed with employees, 8.7% are unemployed. To conclude there is a 4.3% of subject who consider that they are doing fine and living comfortably with present income, all of them expect to be employed.

- To report about the future labor expectations and the relation about how was financed the participation on the TVET program, there are 85 data that allow us to analyze it

**Table 58: Expected labor situation according to the different ways of financing the TVET program in total**

Expected labor situation after completion of the Program		How was financed the participation on the TVET program					Total
		Own Funding	Enterprise / Employer Funding	Public Funding	Loan	Other	
Self-employed without employees	Frequency	7	0	2	0	0	9
	Percentage	8,2%	0,0%	2,4%	0,0%	0,0%	10,6%
Self-employed with employees	Frequency	17	2	15	2	4	40
	Percentage	20,0%	2,4%	17,6%	2,4%	4,7%	47,1%
Employed	Frequency	9	1	9	0	1	20
	Percentage	10,6%	1,2%	10,6%	0,0%	1,2%	23,5%
Unemployed	Frequency	7	1	2	2	0	12
	Percentage	8,2%	1,2%	2,4%	2,4%	0,0%	14,1%
Full-time student	Frequency	1	0	3	0	0	4
	Percentage	1,2%	0,0%	3,5%	0,0%	0,0%	4,7%
Other	Frequency	41	4	31	4	5	85
	Percentage	48,2%	4,7%	36,5%	4,7%	5,9%	100%

Source: Own elaboration from collected data (questionnaires).

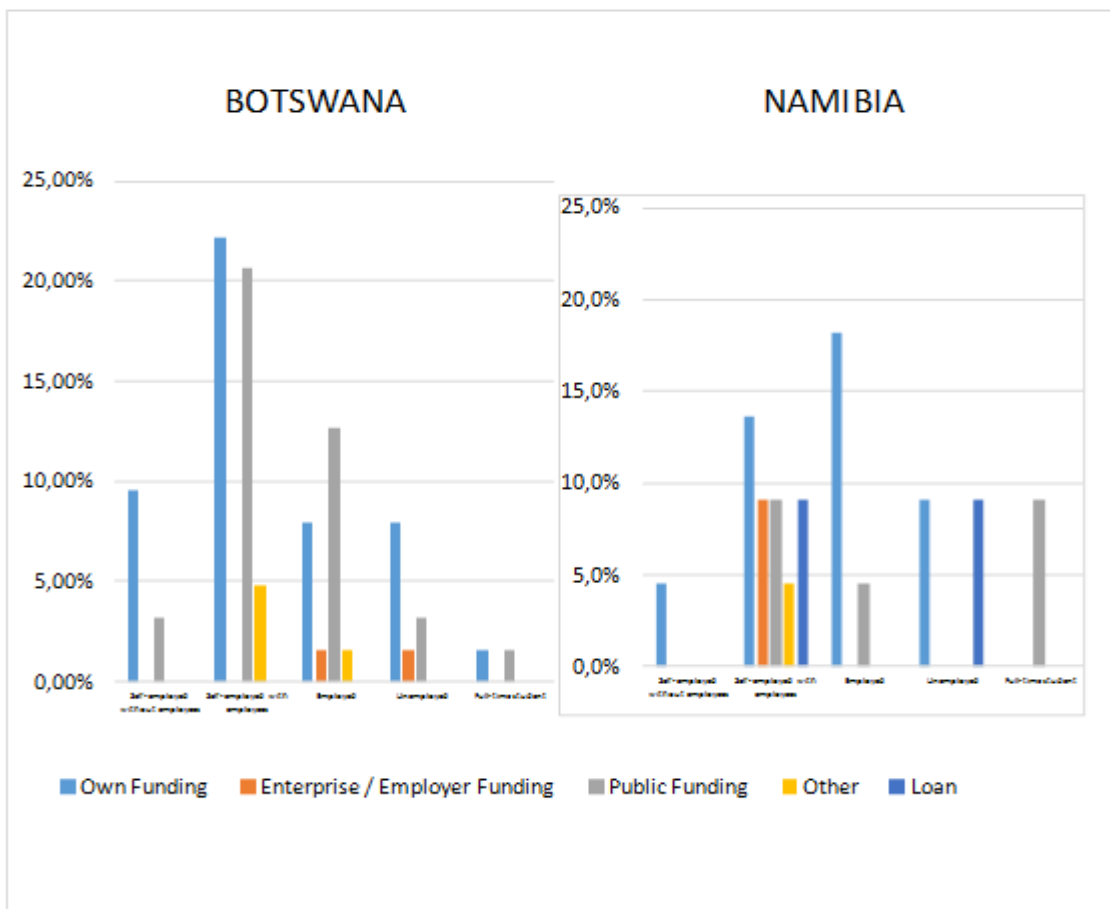
Of those who would like to be self-employers without employees (10.6%), 8.2% of them financed their participation on the program with their own funding, 2.4% with public funding. Of those who want to be self-employed with employers (47.1%), 20% was financed by its own funding, 2.4% with the support of the funds provided by the enterprises or companies for which they work, 17.6% with public funds, 2-4% through loans and 4.7% with other source of funding. Of those who expect to have a job and be employed (23.5%) 10.6% have financed by their own, 1.2% with the financial help of the company for which they work, 10.6% with the support of public funds and 1.2% from other source of funds.

Moreover, from those who believe that will be unemployed (14.1%) once they conclude the TVET program, 8.2% have financed their studies using their own funds, 1.2% has found support from the enterprise or employer, 2.4% through public funds and 2.4% have a loan.

Finally from those who think will continue being full time students (4.7%) 1.2% financed the program by their own, and 3.5% with the support of public funds.

The difference between countries are shown on the graph below and a description about the expected labor situation according to different ways of financing the participation on the TVET program by country is also provided.

**Graph 80: Expected labor situation according to different ways of financing the participation on the TVET program by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana there is a 49.2% of participants who have financed their participation using their own funding, of these 9.5% expect to be self-employers without employees, 22.2% self-employed with employees, 7.9% consider that they will be unemployed, and 1.6% would like to be full time students. As for the participants who have obtained financial support to cover the cost 3.2% half of them consider that they will be employed in the near future and the other half think that they will be unemployed. There is also a significant amount of participants who have got the financial support from public funding, representing a 41.3% of the total stake, of whom 12.7% expect to be employed, 20.6% would like to be self-employed with employees, 3.2% self-employed without employees and 1.6% full time students. To conclude there is also a 6.3% of subject who cover the cost of the TVET program using other type of sources, of whom most of them expect to be self-employed with employees 4.8% or employed 1.6%.

In Namibia, there is a 45.5% of participants who have used their own financial resources to cover the TVET program cost, of whom 13.6% expect to be self-employed with employees, 18.2% employed and 4.5% self-employed without employees, there is also a 9.1% who consider that they will be unemployed. The second larger group of participants have finance its participation on the TVET program thanks to the public funding received 22.7% of total stake. of whom, 9.1% expect to be self-employed with employees and 4.5% consider that will be employed. There is also a 18.2% of participants who asked for a loan to cover the related costs, as for them, there is a 9.1% of them whose expectations are either to be a self-employed with employees or to be unemployed. In addition to this, there is a 9.1% of people who received the financial support from their employers or enterprise, all of them expect to become employers with employees.

- In order to inform about the relation between the expected labor situation once the TVET program has been successfully completed by students and their perception regarding how important or relevant is their participation on the program, the analysis has been made from the 90 cases. Of those subjects who would like to be self-employed without employees (12.2%) 1.1% consider completely irrelevant the participation in the program, a 2.2% consider it relevant, 3.3% very relevant and 5.6% extremely relevant. Of those who would like to be self-employers with employees (46.7%) 5.6% think that the program is not relevant at all, 2.2% slightly relevant, 20% relevant, 5.6% very relevant and 13.3% extremely relevant. As for the group of students that would like to be employed (25.6%) 1.1% of them consider it slightly relevant, 16.7% relevant and 5.6% very relevant and 2.2% extremely relevant.

**Table 59: Expected labor situation according to the relevance of the TVET program in total**

Expected labor situation after completion of the Program		Relevance of participation in the program					Total
		Not relevant at all	Slightly relevant	Relevant	Highly relevant	Extremely Relevant	
Self-employed without employees	Frequency	1	0	2	3	5	11
	Percentage	1,1%	0,0%	2,2%	3,3%	5,6%	12,2%
Self-employed with employees	Frequency	5	2	18	5	12	42
	Percentage	5,6%	2,2%	20,0%	5,6%	13,3%	46,7%
Employed	Frequency	0	1	15	5	2	23
	Percentage	0,0%	1,1%	16,7%	5,6%	2,2%	25,6%
Unemployed	Frequency	2	2	2	2	3	11
	Percentage	2,2%	2,2%	2,2%	2,2%	3,3%	12,2%
Full-time student	Frequency	0	1	0	0	2	3
	Percentage	0,0%	1,1%	0,0%	0,0%	2,2%	3,3%
Total	Frequency	8	6	37	15	24	90
	Percentage	8,9%	6,7%	41,1%	16,7%	26,7%	100%

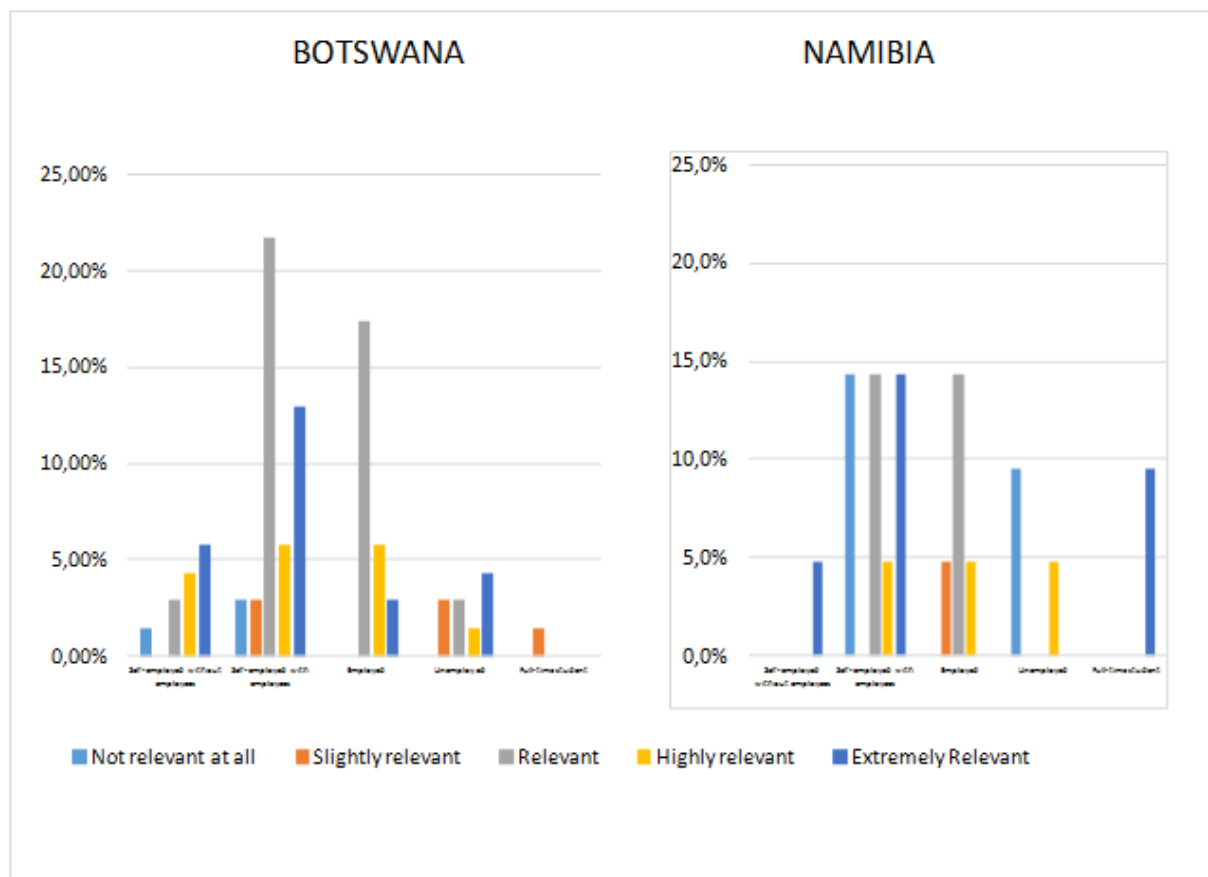
Source: Own elaboration from collected data (questionnaires).

Moreover, there is a group of participants whose does not have any positive expectation, as they see their near future being unemployed (12.2%) of whom 2.2% consider the program not relevant at all, 2.2% slightly relevant, 2.2% relevant, 2.2% very relevant and 3.3% extremely

relevant. Of those participants who would like to continue studying on a full-time bases (3.3%) of the total share, 1.1% consider that the program in itself in slightly relevant, and 2.2% extremely relevant.

The existing differences among the relation between the expected labor situation after the finalization of the program according to the perceived relevance of the program by students, in each country.

**Graph 81: Expected labor situation according to the relevance of the program by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana there is a 44.9% of participants who consider that their participation on the program is relevant, of whom 21.7% expect to be self-employed with employees, 2.9% self-employed without employees, 17.4% employed, there is also a 2.9% who consider that they will

be unemployed after their participation on the program. There is also a 26.1% of subject who consider that the program is extremely relevant, of whom 13% expect to be self-employed with employees, 5.8% would like to be self-employed without employees, 2.9% employed and 4.3% unemployed. Moreover, there is a 17.4% of participants consider highly relevant, of whom 5.8% expect either to be self-employed with employees or employed. As for the people who does not think the program is relevant at all, there is a 4.3% of the total sample who consider it not relevant at all and 7.2% slightly relevant. From the ones that do not think it is relevant at all, their will is to become self-employers with 2.9% or without employees (1.4%). To conclude from those who think it is slightly relevant 2.9% expect to either be unemployed or self-employed with employees.

In Namibia there is 28.6% of the subject, representing the highest frequency who consider the program extremely relevant, of whom 14.3% expected to be self-employed with employees, 4.8% would like to be self-employed without employees, and 9.5% full-time students. There is also another 28.6% of the total stake considering the program relevant, of whom 14.3% of the subjects in this group expect to be either self-employed with employees or employed. Moreover, there is a 14.3% who consider it highly relevant, of whom 4.8% of the subjects either expect to be self-employed with or without employees, or unemployed. To conclude there is a 23.8% of all participants who do think that the program is not relevant at all, of whom 14.3% expect to become self-employed with employees, and the most pessimistic ones consider that they will be unemployed 9.5%. To conclude, there is a 4.8% of the sample who consider the program slightly relevant expecting all of them to be employed in the near future.



## e) Social Benefits - Social Mobility (Future employment prospects)

Table 60: Future employment prospects in total

Future Employment Prospects in comparison with the ones prior to the participation on the TVET program	Frequency	Percentage	Age	People living at home	
				Children	Adults
Much Better	30	37,97%	M=27,08 SD=3,77	M=3,75 SD=3,48	M=4,50 SD=2,76
A Little better	25	31,64%	M=26,92 SD=4,30	M=4,96 SD=3,06	M=4,96 SD=2,90
About the same	15	18,98%	M=25,29 SD=2,75	M=4,86 SD=5,82	M=5,14 SD=2,71
A Little worse	5	6,32%	M=25,80 SD=3,56	M=4 SD=1,87	M=5,60 SD=2,88
Much worse	4	5,06%	M=26,75 SD=4,27	M=3,75 SD=2,21	M=5,25 SD=3,86
Total	79	100%			

Source: Own elaboration from collected data (questionnaires).

According to the above table what we would like to know is if there is any improvement on the employment prospects once the students complete the TVET program and in comparison with the existing ones prior to the participation on the TVET program. In order to analyze this there is 79 data in total. 37.97% of the total sample consider that their future employment prospects are much better, this group has an average of 27.08 years old with a standard deviation of 3.77; with an average of 3.75 children and 4.5 adults on average living within the household and a standard deviation for adults of 2.76.

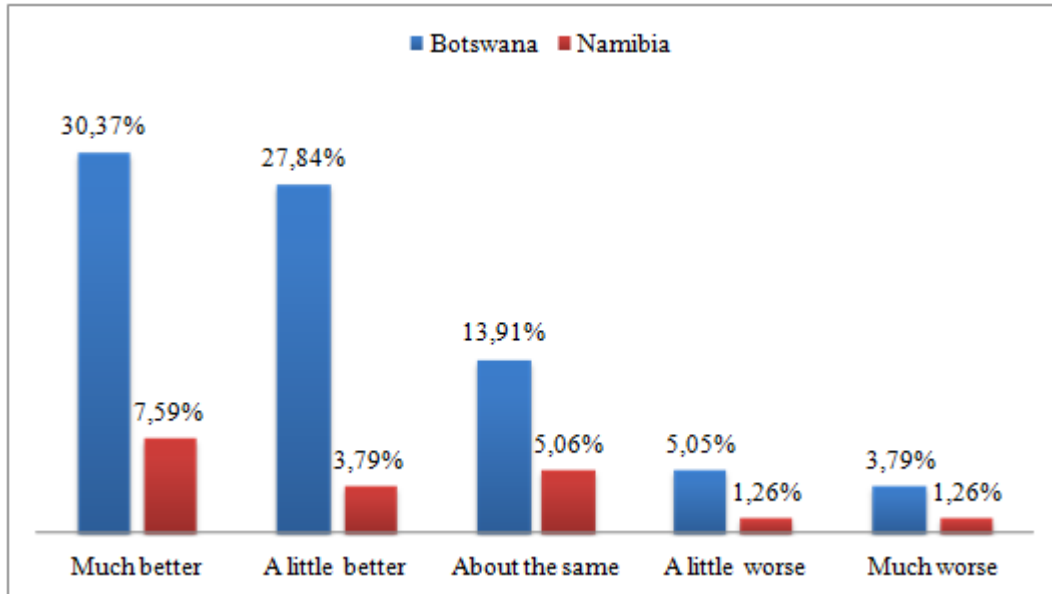
There is also a 31.64% of subjects that consider to have a litter better employment expectations once they complete the program, the average age of this group is 26.92 years old, with an standard deviation of 4.30; and the average children in this group household is 4.96, with

a standard deviation 3.06 and an the average of adults within the households is 4.96 with a standard deviation of 2.90.

As for the group of participants who think that the future employment prospects and opportunities will remain the same as there were prior to their participation on the TVET program (18.98%) the average age is 25.29 years old, with a standard deviation of 2.75, the average number of children per household is 4.86, with a standard deviation of 5.82, the average adults at the household is 5.14 with a standard deviation of 2.71.

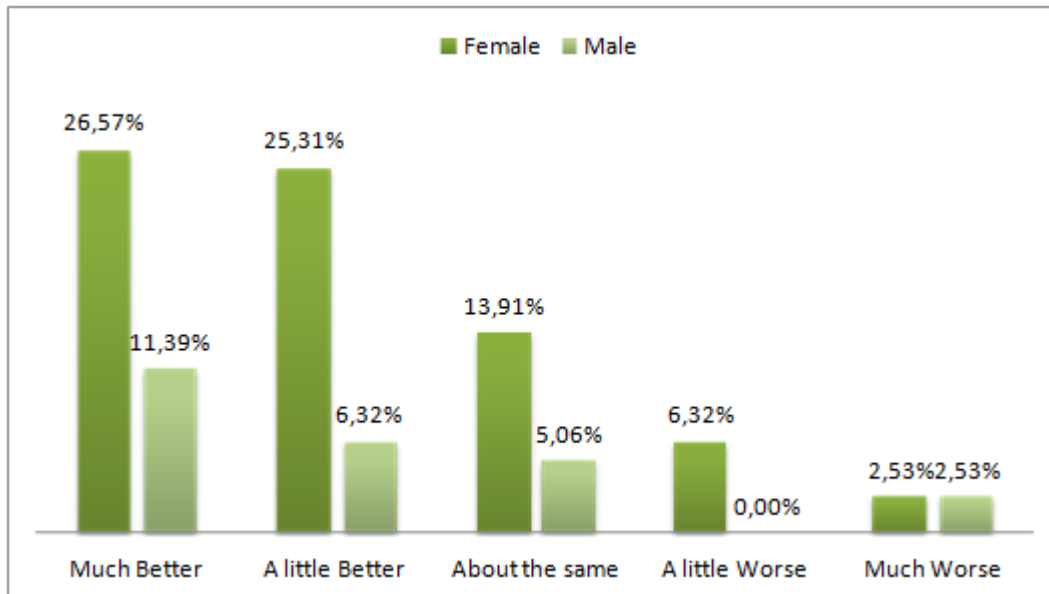
Furthermore, there is a 6.32% of the total sample who considered that the future employment prospects are “little worse”, the average age of this group is 25.80 years old with a standard deviation of 3.56, there is an average of 4 children per household with a standard deviation of 1.87 and an average adult of 5.60 with a standard deviation of 2.88 for this group. Finally there is a 5.06% of subject who think that their employment prospects after the completion of program are “much worse”, of these, the average age is 25, 80 years old with a standard deviation 4.27, an average of 3.75 children per household and 5.25 adults with a standard deviation of 2.21 and 3.86 respectively.

From the information above we can deduce that although many participants are not satisfied with the program, most of them have the perception that their future employment prospects have improve in relation to the existing ones prior to join the program.

**Graph 82: Future employment prospects, in comparison to the previous ones, by country**

Source: Own elaboration from collected data (questionnaires).

As it is shown in the above table and graphic, there is a higher frequency of responses from the Botswana students than Namibian ones in all categories. For this country (Botswana) the highest frequency refers to “Much better” future employment expectations (30.37%) and a “little better” (27.84%). Meanwhile the highest frequencies in Namibia refers to “Much Better” (7.59%) and “About the same” (5.06%). Both countries agree that there is a very low frequency regarding the worsening perception on the future employment prospects. Therefore, we should highlight that in both countries there is a clear tendency from all participants in the TVET program to think that they have better employment prospects than before.

**Graph 83: Future employment prospects in comparison with the previous ones by gender**

Source: Own elaboration from collected data (questionnaires).

As for the gender difference, in almost all categories there is a higher frequency of responses from women than men. If we consider the group of students who think that their future employment prospect are “much worse” (5.06%) of the total share, there is the same percentage of men and women (2.53%) and from those who consider that their future prospects are “a little worse” (6.35%) there is no male.

Moreover, the higher frequencies for both genders are "much better" (37.97%) and "a little better" (31.64%) followed by "About the same" (18,98%); This information show us that the vast majority of participants regardless of the genre, consider that the program improves the employment prospects of the subjects, and do not worsen them.

- To report about the future employment prospects in relation to the highest level of educational attainment from students, we will base our analysis in 78 cases, of those who believe their future prospects are “much better” (38.5%), 3.8% of them have an educational level ISCED 2, a 6.4% ISCED 3 , 1.3% ISCED 4 and 26.9% tertiary education; of those who see their future a “little better” (32.1%) , 3.8% have ISCED 2, 1.3% ISCED 3, a 3.8% ISCED 4 and 23.1% tertiary education; of those who believe that have “about the same” opportunities (17.9%) , 1.3% have a level of ISCED 2, a 5.1% ISCED 3, a 5.1% ISCED 4 and 6.4% tertiary education. Likewise, from those who perceive their future prospect “a Little worse” (6.4%), 1.3% have ISCED 2 and 5.1% tertiary education; and finally from those who they believe they are “much worse” (5.1%) all of them have attained tertiary education.

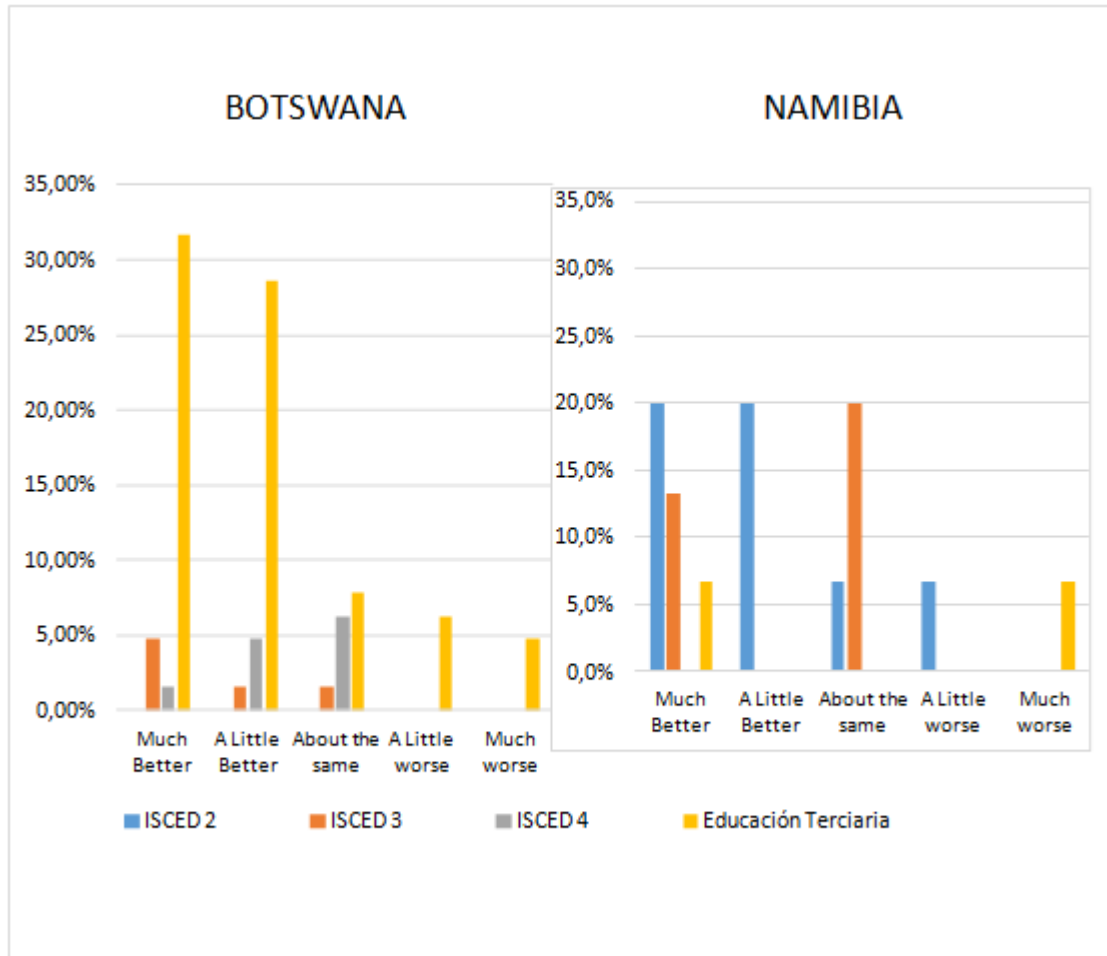
**Table 61: Future employment prospects according to the highest level of educational attainment in total**

Future Employment Prospects		Highest level of Educational Attainment				Total
		(ISCED 2)	(ISCED 3)	(ISCED 4)	Educación Terciaria	
Much Better	Frequency	3	5	1	21	30
	Percentage	3,8%	6,4%	1,3%	26,9%	38,5%
A Little Better	Frequency	3	1	3	18	25
	Percentage	3,8%	1,3%	3,8%	23,1%	32,1%
About the same	Frequency	1	4	4	5	14
	Percentage	1,3%	5,1%	5,1%	6,4%	17,9%
A Little worse	Frequency	1	0	0	4	5
	Percentage	1,3%	0,0%	0,0%	5,1%	6,4%
Much worse	Frequency	0	0	0	4	4
	Percentage	0,0%	0,0%	0,0%	5,1%	5,1%
Total	Frequency	8	10	8	52	78
	Percentage	10,3%	12,8%	10,3%	66,7%	100%

Source: Own elaboration from collected data (questionnaires).

The existing differences between countries in relation to the future employment prospects for the participants on the TVET program according to the highest level of educational attainment are shown on the graph below and described.

**Graph 84: Future employment prospects according to the highest level of education attained in by countries**



Source: Own elaboration from collected data (questionnaires).

In Botswana, there is a 79.4% of participants who attained tertiary education, of whom 31.7% consider that they will have much better future employment prospects, 28.6% a little better, 7.9% about the same, there is also some of the subjects of this group who are more negative in this regard and as 6.3% consider that they future employment prospects will be a little worse and 4.8% much worse. On the meantime there is a 12.7% of people who have attained an ISCED 4, all of them consider that their future employment situation will improve at different degrees, 1.6% consider that they will be much better, 4.8% a little better, 6.3% about the same. To conclude there is 7.9% of the total sample who have attained an ISCED 3, as it

happens with the previous group all of them have a positive vision about their future employment prospects, as 4.8% of them consider that the employment prospects will be much better, 1.6% a little better or about the same.

In Namibia, there is 53.3% of Namibian participants on the TVET program who have attained a maximum level of ISCED 2, of these participants, 20% consider that the future employment prospects are much better or a little better, meanwhile 6.7% consider that they are about the same or a little worse. There is a 33.3% of participants who attained an ISCED 3, of whom 13.3% consider to have much better future employment prospects and 20% about the same. To conclude there is a 13.3% who have attained a tertiary education level, of whom 6.7% consider either to have much better or in opposition much worse employment prospects.

- As for the analysis related to the future employment prospects and the relation to the main source of household income, there are 73 cases.

**Table 62: Future employment prospects according to the main source of household income in total**

Future Employment Prospects	Main Source of Household Income									Total
	Wages and Salaries	Income from Self-Employment (excluding farming)	Farming	Pensions	Unemployment / Redundancy benefit	Any other social benefit or grant	Income from investment, savings, insurance or property	Income from other sources		
Much Better	Frequency	13	5	2	2	7	0	0	0	29
	Percentage	17,8%	6,8%	2,7%	2,7%	9,6%	0,0%	0,0%	0,0%	39,7%
A Little Better	Frequency	8	7	1	1	3	2	0	2	24
	Percentage	11,0%	9,6%	1,4%	1,4%	4,1%	2,7%	0,0%	2,7%	32,9%
About the same	Frequency	5	1	1	3	0	1	1	2	14
	Percentage	6,8%	1,4%	1,4%	4,1%	0,0%	1,4%	1,4%	2,7%	19,2%
A Little worse	Frequency	4	0	0	1	0	0	0	0	5
	Percentage	5,5%	0,0%	0,0%	1,4%	0,0%	0,0%	0,0%	0,0%	6,8%
Much worse	Frequency	0	0	1	0	0	0	0	0	1
	Percentage	0,0%	0,0%	1,4%	0,0%	0,0%	0,0%	0,0%	0,0%	1,4%
Total	Frequency	30	13	5	7	10	3	1	4	73
	Percentage	41,1%	17,8%	6,8%	9,6%	13,7%	4,1%	1,4%	5,5%	100%

Source: Own elaboration from collected data (questionnaires).

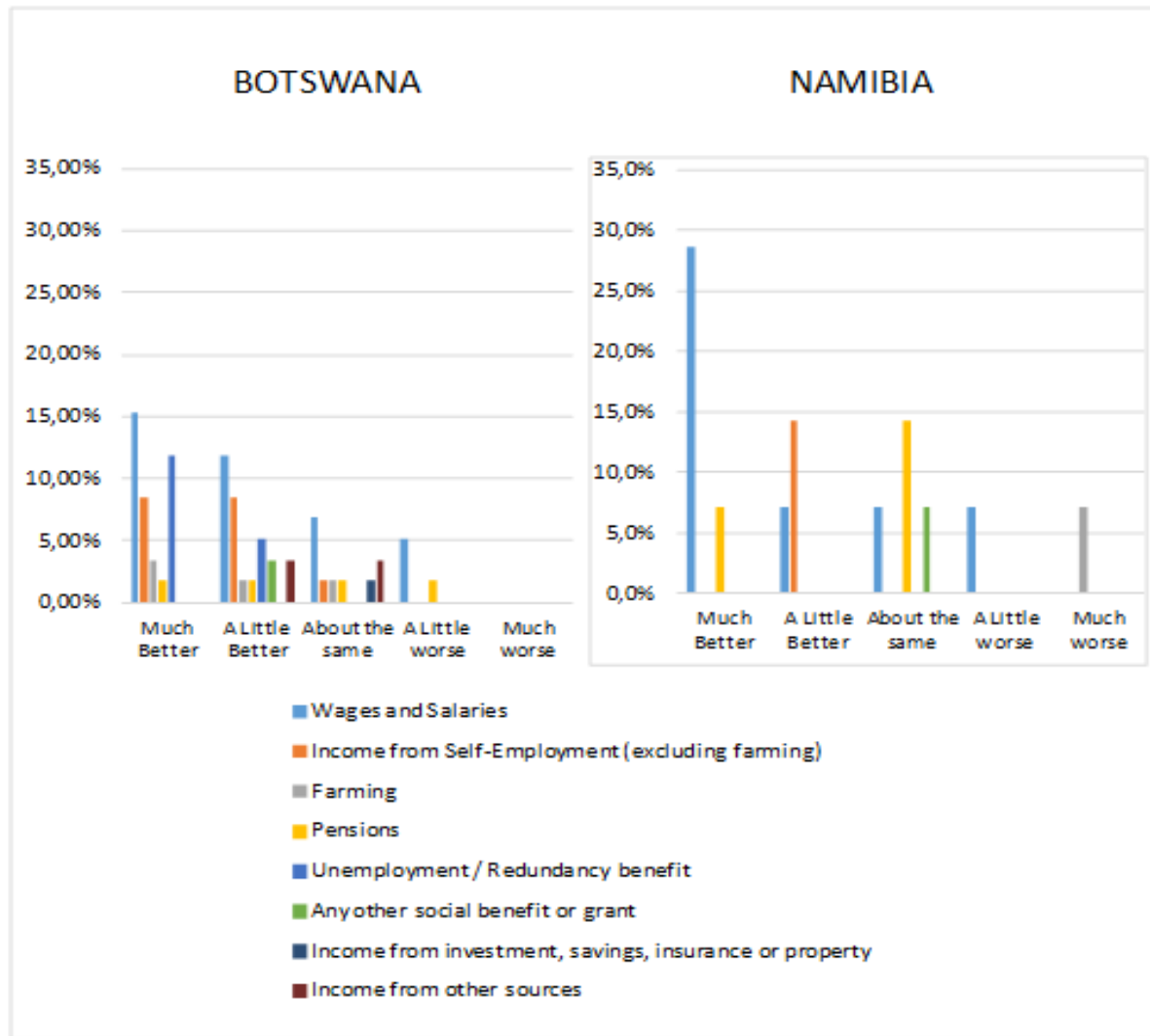
Of those who consider to have “much better” future prospects (39.7%) 17.8% receive the main source of household income from wages and salaries, a 6.8% from self-employment excluding farming, 2.7% from farming, another 2.7% from pensions and 9.6% from unemployment benefits. Of those who consider that the future prospects are “little better” (32.9%) 11% receive the main source of the household income from wages and salaries, 9.6% from self-employment excluding farming, 1.4% from farming, another 1.4% from pensions, 4.1% from the unemployment benefits, 2.7% from social benefits or grants and 2.7% from other sources of funding. Moreover, of those who believe their future is “About the same” (19.2%), 6.8% receive the main source of income from wages and salaries, 1.4% from self-employment



excluding farming, another 1.4% from farming, 4.1% from pensions, 1.4% from the social benefits or grants, 1.4% from investments, savings, insurance or property, and the rest 2.7% from other sources; of those participants who believe that their future prospect are a “little worse” (6.8%), 5.5% have their main income from wages or salaries, 1.4% from farming; and finally from those who believe that their situation is “much worse”(1.4%) their main source of income comes from farming activities.

The comparison among countries in relation to the perceived future employment prospects according to the main source of household income, is shown above.

**Graph 85: Future employment prospects according to the main source of household income by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana. Most of participants in the TVET program, representing a 39% of the total sample have salaries and wages as the main source of household income, of this group, 15.3% consider their future professional opportunities are much better, 11.9% a little better, 6.8% about the same, and 5.1% a little worse. There is 18.6% of the total stake whose income from self-employment excluding farming, of whom 8.5% consider that their future employment prospects are much or little better and 1.7% consider that would be about the same. There is a 6.8% of subject whose main source of income either come from farming or pensions, of whom mostly

consider that their future employment prospects will be about the same or a little better. In addition to this, there is a 16.9% of subjects whose income come from unemployment benefit, of this group, there is a 11.9% who considering that their future prospect will be much better and 5.1% a little better. As for the 3.4% of persons whose income from another source of another social benefit or grant, all of them consider that they will be a little better. Moreover, there is a 1.7% of participants whose income comes from savings or investments they all think that their future professional prospects would be about the same. To conclude, there is a 6.8% of people whose main household come from other source of income, of whom 3.4% consider that their future professional expectations are about the same or a little better.

In Namibia, there is 50% of the total participants in Namibia whose main source of income comes from salaries or wages, of whom 28.6% consider that their future employment opportunities will be much better, there is also 7.1% of them who consider that the future employment prospects would be a little better, about the same or may be a little worse. There is also a 21.4% of the total stake whose main source of household income comes from pensions, most of people from this group thinks that their future employment opportunities would be about the same 14.3% or much better 7.1% There is a 14.3% of the subjects who get the main source of income from self-employment excluding farming, all of them consider that their future will be much better. Moreover from the 7.1% participants who either get their income from farming or any other social benefit or grand, it is significant that all people from the first group consider that their future professional prospects would be much worse and all participants from the second group, which refer to the ones that get some social benefit consider that they would be more or less in the same situation as they are now.

- To report about the relation between the perception of future employment prospects and the perception of the living standards with the existing household income, we have 74 data. Of those student who think that their future employment prospects are “much better” 5.4% of them believe that are living comfortably with their present income, another 5.4% think that are coping with present income, 17.6% are living with difficulties as they find it difficult on present income and 9.5% are living with many difficulties. Of those who think they are future prospects are a “little better” (32.4%), 6.8% are coping with present income, 8.1% are living with difficulties and 17.6% are living with many difficulties.

**Table 63: Future employment prospects according to the perceived living standards with household income in total**

Future Employment Prospects	Perception of living standard with Household Income					Total
	Living Comfortably with present income	Coping with present income	Finding it difficult on present income	Finding it very difficult on present income		
Much Better	Frequency	4	4	13	7	28
	Percentage	5,4%	5,4%	17,6%	9,5%	37,8%
A Little Better	Frequency	0	5	6	13	24
	Percentage	0,0%	6,8%	8,1%	17,6%	32,4%
About the same	Frequency	1	4	4	6	15
	Percentage	1,4%	5,4%	5,4%	8,1%	20,3%
A Little worse	Frequency	0	1	2	2	5
	Percentage	0,0%	1,4%	2,7%	2,7%	6,8%
Much worse	Frequency	0	1	0	1	2
	Percentage	0,0%	1,4%	0,0%	1,4%	2,7%
Total	Frequency	5	15	25	29	74
	Percentage	6,8%	20,3%	33,8%	39,2%	100%

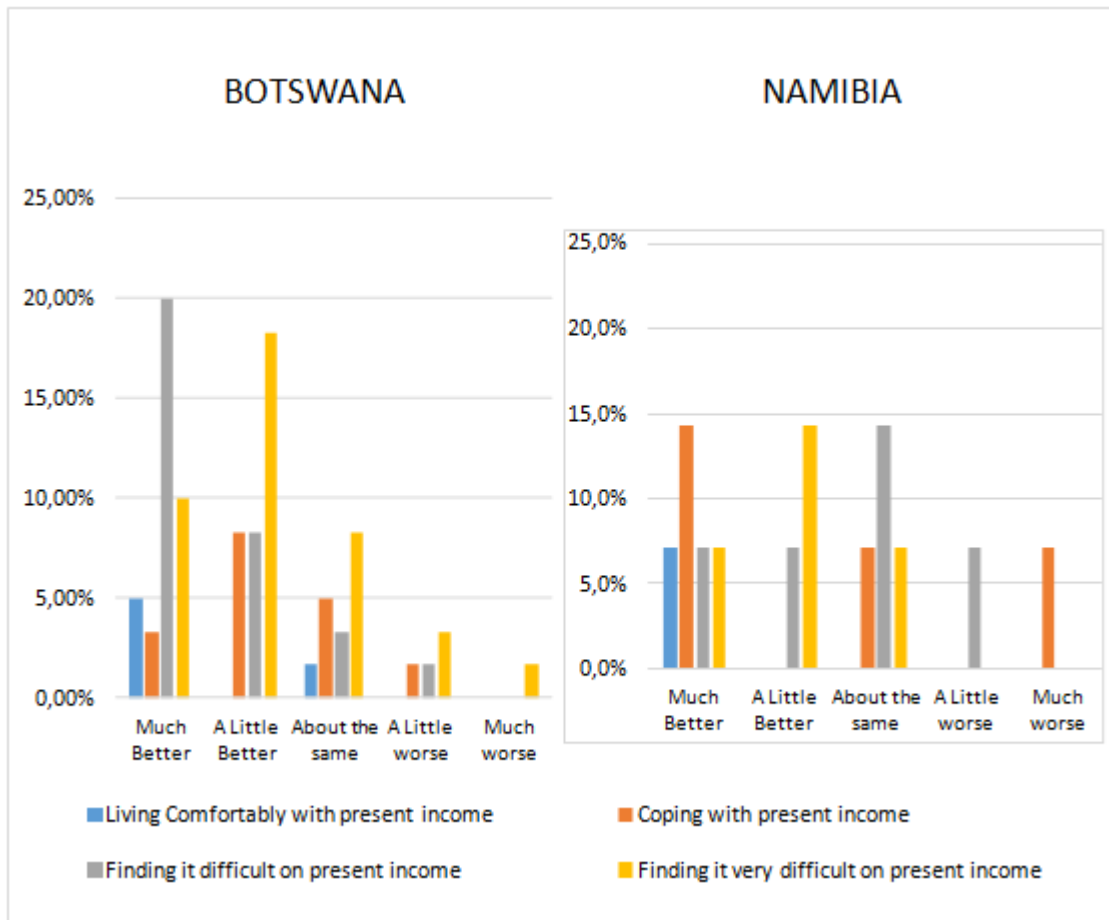
Source: own elaboration from collected data (questionnaires).

Also those who consider having “about the same” future prospects (20.3%), 1.4% of those consider that are living comfortably with present income, 5.4% consider that they are coping with present income, another 5.4% are living with difficulties as they find it difficult on present income, and 8.1% find it very difficult on present income. As for students who perceive that the situation will get a “little worse” (6.8%), of whom 1.4% are coping with present income,

2.7% live with difficulties, another 2.7% find it very difficult on present income. Finally of those cases, where the subjects believe that their future will be “much worse”, of them 1.4% are coping with their present income and the remaining 1.4% find it very difficult to cope with present income.

The difference between countries are presented below showing the relation between the future employment outlook and the perception of the living standards with household income.

**Graph 86: Future employment prospects according to the perceived living standards with household income by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, as it is visible, there are 41.7% of total participants, representing the highest frequency, who find it very difficult on present income, of whom 18.3% consider that their future employment prospects would be a little better, 10% much better, 8.3% about the same, 3.3% a little worse and 1.7% much worse. As for the 33.3% representing the participants who find it difficult on present income, there is 20% whose future employment prospects are much better, 8.3% a little better, 3.3% about the same and 1.7% a little worse. In addition to this, there is a 18.3% of participants who are coping with present income, 3.3% subjects from this group consider that they will do much better, 8.3% a little better, 5.0% about the same and little worse. To conclude the smallest relative frequency corresponds to the ones who are living comfortable on present income 6.7%, from this group there is a 5% who consider that their future employment situation would be much better and 1.7% about the same.

In Namibia, there is a 28.6% of the participants who are either coping with present income or find it difficult with it, these are the second highest frequencies regarding the perception of living standards. People from the first group consider in 14.3% that their future employment prospects will be much better, 7.1% about the same or much worse. Participants from the second group, consider in 7.1% that they will do much better or about the same, meanwhile 14.3% a little better. Moreover, there is a 35.7% of participants, highest frequency, who find it difficult on present income, of whom 7.1% consider to have much better, a little better or worse future employment prospects, and 14.3% about the same. Finally, there is a 7.1% of subjects who are living comfortably with present income and all of them consider that their future employment prospects will be much better.

- To report about the existing relation between the future employment expectations and the ways in which each student has financed the participation on the program, we have 64 data in total.

**Table 64: Future employment prospects according to different ways of financing the participation on the TVET program in total**

Future Employment Prospects		How was financed the participation on the TVET Program					Total
		Own Funding	Enterprise / Employer Funding	Public Funding	Loan	Other	
Much Better	Frequency	12	2	6	1	1	22
	Percentage	18,8%	3,1%	9,4%	1,6%	1,6%	34,4%
A Little Better	Frequency	10	1	10	0	2	23
	Percentage	15,6%	1,6%	15,6%	0,0%	3,1%	35,9%
About the same	Frequency	5	0	4	1	1	11
	Percentage	7,8%	0,0%	6,2%	1,6%	1,6%	17,2%
A Little worse	Frequency	2	0	2	0	0	4
	Percentage	3,1%	0,0%	3,1%	0,0%	0,0%	6,2%
Much worse	Frequency	1	0	3	0	0	4
	Percentage	1,6%	0,0%	4,7%	0,0%	0,0%	6,2%
Total	Frequency	30	3	25	2	4	64
	Percentage	46,9%	4,7%	39,1%	3,1%	6,2%	100%

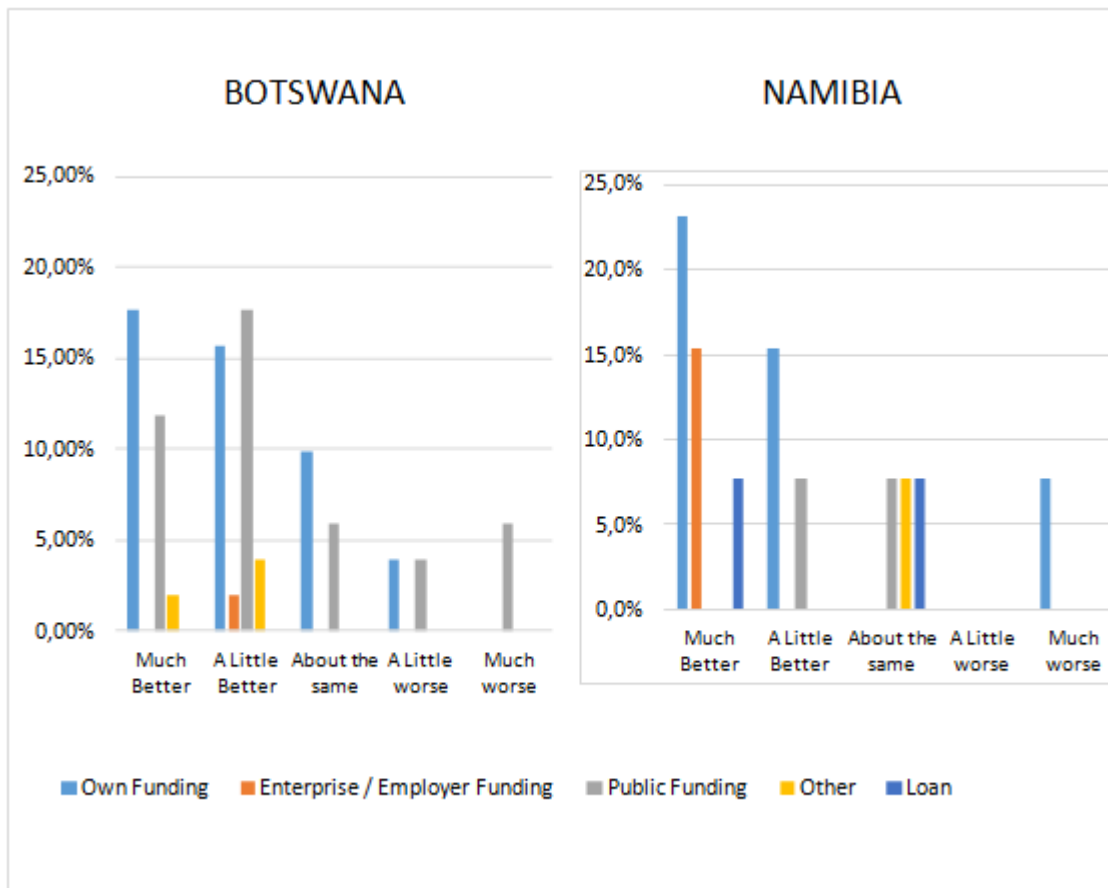
Source: Own elaboration from collected data (questionnaires).

Of those who believe that their future employment situation will be “much better” which represent 34.4% of the total sample, 18.8% have finance their participation on the program with their own resources, 3.1% with the financial support of the employer or enterprise where is working at, 9.4% with public funds, 1.6% through a loan and another 1.6% using other source of income. Of those persons who consider that their future professional situation will be a little better (35.9%), 15.6% of the intake is paying the cost of the TVET course using their own money; 1.6% got financial subsidies from the company for which they are employed; 15.6% with the government support through the public funds and the last 3.1% from other sources of funding. From the group of people who think that they will have about the same opportunities, which represent the 17.2% of the total sample, 7.8% have financed its participation with their

own resources, 6.2% with the government support (public funds), 1.6% through a loan and the rest 1.6% through other ways of funding; As for those who believe that their future professional options will be a “little worse” (6.2%); 3.1% of those has financed its participation using their own economic resources, another 3.1% using public funds (subsidies from government/ grants). Finally of the group of students who expect “much worse” labor expectations in the future, represented by 6.2% of the total sample, 1.6% have used their own economic sources to be enrolled on the TVET program, and 4.7% have used public funds.

In the graph below the difference among countries in the relation between the future employment prospects or outlook and the different ways in which the participants on the TVET program have cover the cost of the training is described.

**Graph 87: Future employment prospects according to different ways of financing the participation on the TVET program by country**



Source: Own elaboration from collected data (questionnaires).



In Botswana, there is a 47.1% of participants who have use their own funding, of which 17.6% consider that their future employment prospects are much better, 15.7% a little better, 9.8% about the same and 3.9% a little worse. There is a 45.1% of participants who have financed the cost of the program with the financial support received from public funding, of whom 11.8% consider that their future employment prospects are much better, 17.6% are a little better, 5.9% about the same, 3.9% a little worse and 5.9% much worse. In addition to that there is 2% of the total stake who have obtained the economic resources needed by the enterprise or employer, of whom 2% consider that their future employment prospect would be a little better. To conclude there is a 5.9% that cover the cost using other financial sources.

In Namibia, there is a 46.2% of participants who have used their own source of funding to cover the cost of the TVET program, of whom 23.1% consider that their future employment prospects will be much better, 15.4% a little better and in the contrary 7.7% much worse. Moreover, there is a 15.4% of the total stake who have cover the cost of the program either by getting public funding or by getting the financial support from the enterprise, or employer. From the first group, 7.7% of participants consider that their future employment prospects would be about the same or a little better, meanwhile all participants from the second group are optimistic and consider that they will do much better. To conclude there is also a 15.4% of participants who have asked for a loan in order to cover the cost of the course, from this group there is 7.7% of the people who thinks they will do much better or about the same in relation to their future professional outlook.

- There are 71 cases that report about the relation between the existing future employment prospects and the considered relevance or importance from students about their participation in the TVET program.

**Table 65: Future employment prospects according to the relevance of the TVET program in total**

Future Employment Prospects	Relevance the TVET program						Total
	Not relevant at all	Slightly Relevant	Relevant	Highly Relevant	Extremely relevant		
Much Better	Frequency	3	1	8	6	9	27
	Percentage	4,2%	1,4%	11,3%	8,5%	12,7%	38,0%
A Little Better	Frequency	0	2	13	3	4	22
	Percentage	0,0%	2,8%	18,3%	4,2%	5,6%	31,0%
About the same	Frequency	3	1	5	3	1	13
	Percentage	4,2%	1,4%	7,0%	4,2%	1,4%	18,3%
A Little worse	Frequency	1	1	2	0	1	5
	Percentage	1,4%	1,4%	2,8%	0,0%	1,4%	7,0%
Much worse	Frequency	0	1	1	1	1	4
	Percentage	0,0%	1,4%	1,4%	1,4%	1,4%	5,6%
Total	Frequency	7	6	29	13	16	71
	Percentage	9,9%	8,5%	40,8%	18,3%	22,5%	100%

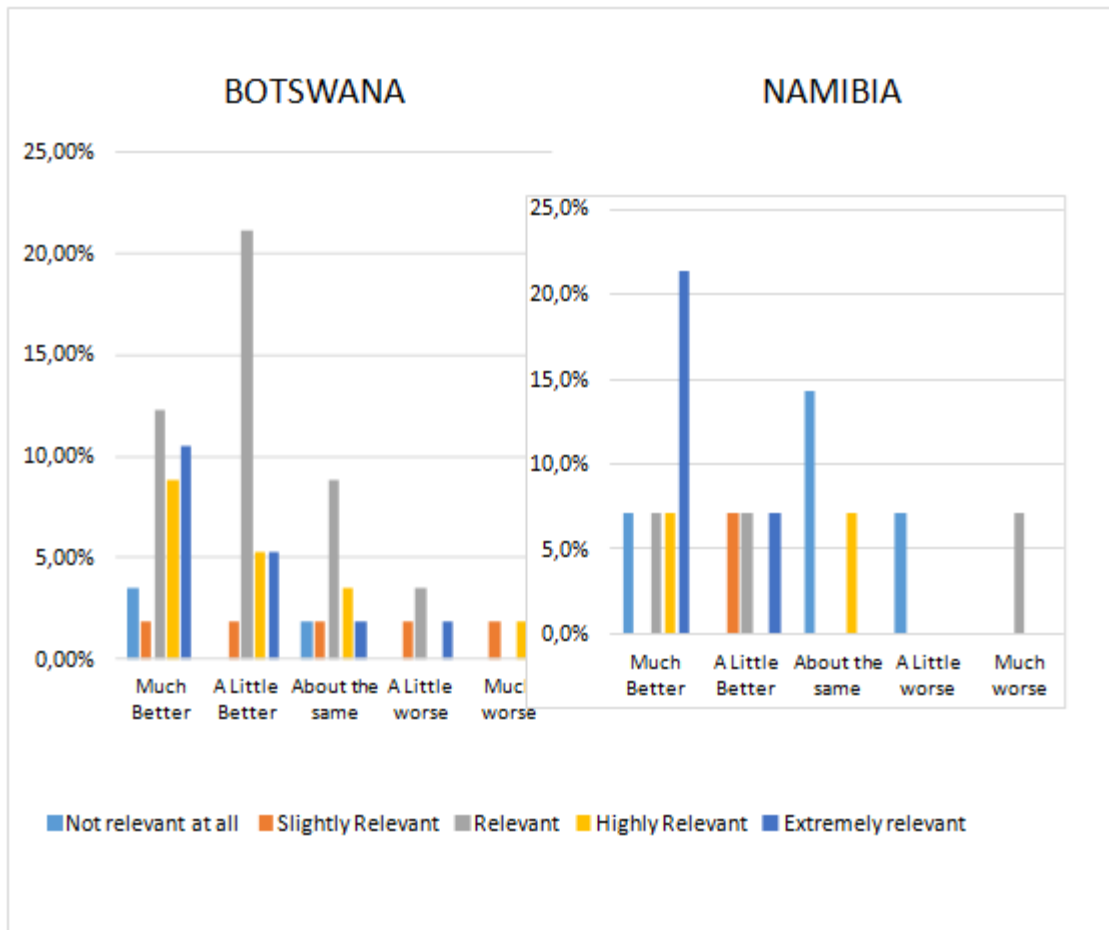
Source: Own elaboration from collected data (questionnaires).

Of those students who have a “much better” expectations in regard to their future employment situation (38% of the total sample), of those 4.2% assume that their participation in the program is not relevant at all, 1.4% think it is slightly relevant, 11.3% relevant, 8.5% highly relevant and 12.7% extremely relevant. Of those participants who think the employment prospects are “a little better” (31%), 2.8% think that their participation is highly relevant, 18.3% relevant, 4.2% highly relevant and 5.6% extremely relevant. Moreover, those who assume that their future situation is going to be “about the same” 18.3% of total sample, of whom 4.2% don't give any relevance or importance to their participation on the program, 1.4% consider it slightly relevant, 7% relevant, 4.2% very relevant and 1.4% extremely relevant. Of those who consider to have a “little worse” future employment prospects (7.0%), 1.4% do not give any importance to their participation on the program, another 1.4% think that it is slightly relevant, and 1.4%

extremely relevant, 3,8% consider it relevant. To conclude this analysis there is a group of 5.6% of the total sample, who consider that their future job opportunities will be “much worse”, of whom 1.4% think their participation is completely irrelevant, 1.4% relevant, 1.4% very relevant and the remaining 1.4% extremely relevant.

In the graph below it is shown the difference among countries related to the employment prospects and the perceived relevance of the participation in the program by participants

**Graph 88: Future professional expectations according to the perceived relevance of the TVET program by country**



Source: Own elaboration from collected data (questionnaires).

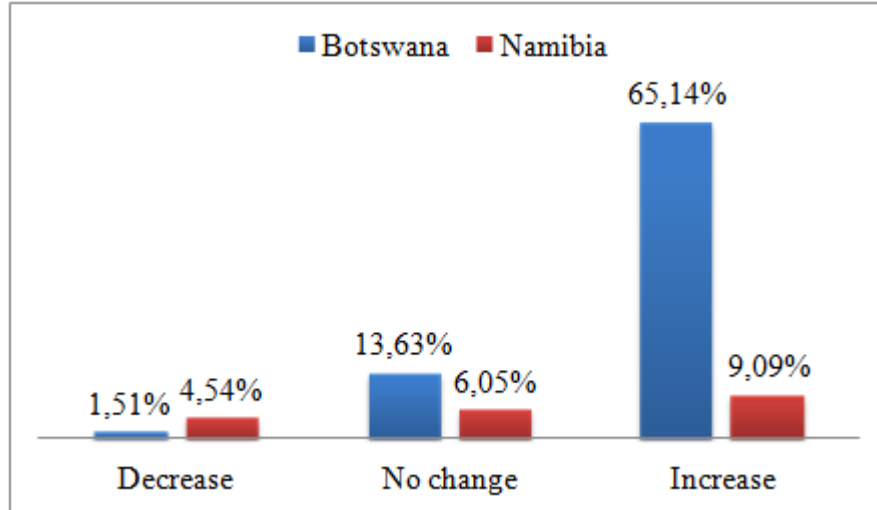
In Botswana from the 45.6% of participants who consider the TVET program relevant, there is a 12.3% who expect much better employment prospects, 21.1% a little better, 8.8% about the same and 3.5% a little worse. There is also a 21.1% of the total stake who think the program is extremely relevant, of whom 10.5% expect to have much better future outlook, 5.3% a little better, 1.8% about the same, a little or much worse. In addition to this, there is a 19.3% of the participants who consider the program highly relevant, of these people, there are 8.8% who consider to have much better future employment prospects, 5.3% a little better, 3.5% about the same and 1.8% much worse. On the other side, there is a smaller percentage of people who consider the program is slightly relevant 8.8% or not relevant at all 5.3%. From the first group, the participants are divided equally 1.8% thinking that their future professional opportunities could be either a little better, about the same, a little or much worse; and from the second group, the participants are divided thinking either it will be much better for their future 3.5% or about the same 1.8%.

In Namibia, the highest frequency in this table corresponds to a 28.6% which is represented by both extremes of the table, participants that consider that the TVET program is not relevant at all or the ones who consider it as extremely relevant. From the first group, there is a 7.1% of subjects who consider that their future employment prospects will be much better or a little worse and 14.3% thinking that they will be about the same. From the second group, there is a 21.4% who consider that the future employment prospects will be much better and 7.1% a little better. In addition to what it has been mentioned there is a 21.4% of people who consider that the program is relevant, of whom 7.1% thinks it will have a much positive impact on their future professional outlook, a little better or a little worse. To conclude there is a 14.3% of the total sample who thinks it is highly relevant, of these people, there is 7.1% who consider it will have a much better influence on their future professional development and another 7.1% that consider that it will be about the same.

**f) Social Benefits - Economic security**

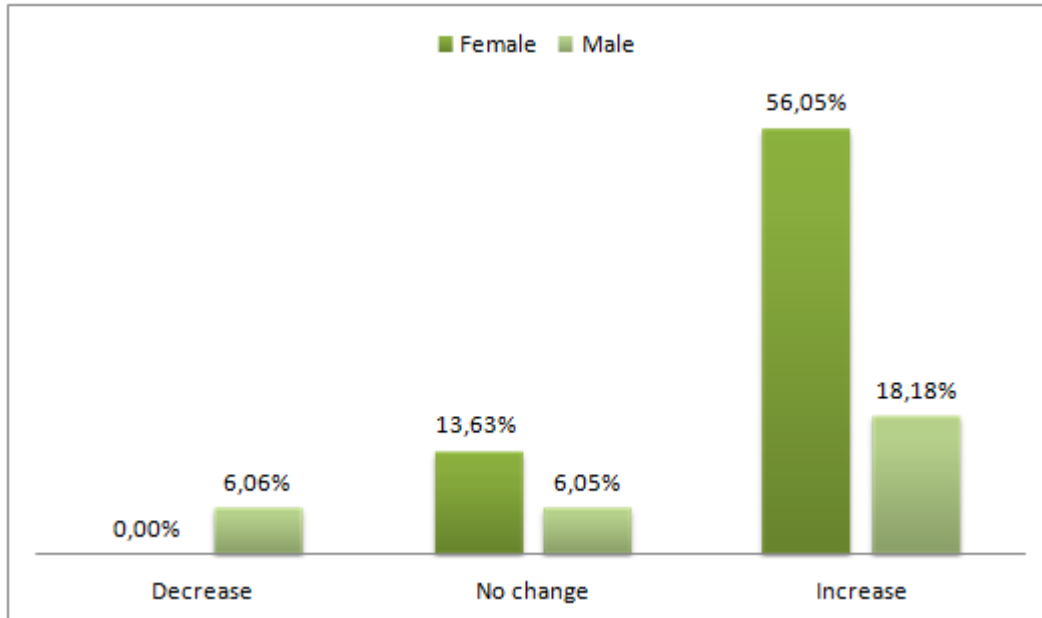
In this section the results about the economic security will be explained in general terms, and also there will be an analysis specifically differentiating gender and country of origin as independent variables, moreover, there will be a cross-cutting analysis comparing not only gender and country of origin variables, but also with the impact that the participation on the program is expected to have according to their future economic/income expectations, professional projections and motivation for professional success.

To report about the expected income expectations, there is 66 data, of which 74.24% of the total sample consider that their future income expectations will increase, this group of subjects, have an average age of 26.93 years old with a standard deviation of 3.91; within this group of subject's household there is an average of 3.47 children and 4.47 adults, with a standard deviation of 3.04 and 2.63 respectively. There is a 19.69% of the participants who consider that their income expectations will not change once the TVET program is completed, for this group the average age is 25.54 years old, with a standard deviation on 3.12; there is an average age of 3.42 children and 4.50 adults on average living at the households, with a standard deviation of 2.61 and 3.06 respectively. As for the group of people who thinks that their economic or income expectations will decrease (6.06%) those share a 25.25 years old average, with a standard deviation of 1.25; and the average children within the household is 4.5 with a standar deviation of 2.38 and an average of 5.25 adults with a standard deviation of 3.94.

**Graph 89: Future income expectations by country**

Source: Own elaboration from collected data (questionnaires).

As for the analysis that relates the future income expectation of the subjects and the country of origin. It is noted that for both countries, the most frequently expectation is an increase on the future income is a (65.14% for Botswana and 9.09% for Namibia which represents the 74.24% of the total sample. However, 13.63% of subjects in Botswana think that their economic situation in the future will not change (19.69% of the total) represents a higher percentage than Namibia with 6.05%, ranking the second position regards future income expectations. The inverse situation is lived as for the subjects who think that their future income expectations will decrease (6.06%) where Namibian participants indicates a higher frequency (5.4%) than Botswana ones (1.51%).

**Graph 90: Future income expectations by gender**

Source: Own elaboration from collected data (questionnaires).

Regarding the gender analysis, it is observed that 56, 05% of total women, consider that their future income will increase, 13.63% believe that their income won't change, and there is no female that think that will have a worse economic situation once the program finalize. As for men a 6.06% think that their income will decrease, although the majority of them (18.18%) think that their will increase and 6.05% believe that their income situation will stay still.

- To report on which are the future income expectations according to the highest level of education attainment by students we have to consider 65 data.

**Table 66: Future income expectations according to the highest level of education attained in total**

Future Income Expectations	Highest Level of Education Attainment					Total
	(ISCED 2)	(ISCED 3)	(ISCED 4)	Educación Terciaria		
Decrease	Frequency	1	1	1	1	4
	Percentage	1,5%	1,5%	1,5%	1,5%	6,2%
No change	Frequency	2	1	1	9	13
	Percentage	3,1%	1,5%	1,5%	13,8%	20,0%
Increase	Frequency	3	7	3	35	48
	Percentage	4,6%	10,8%	4,6%	53,8%	73,8%
Total	Frequency	6	9	5	45	65
	Percentage	9,2%	13,8%	7,7%	69,2%	100%

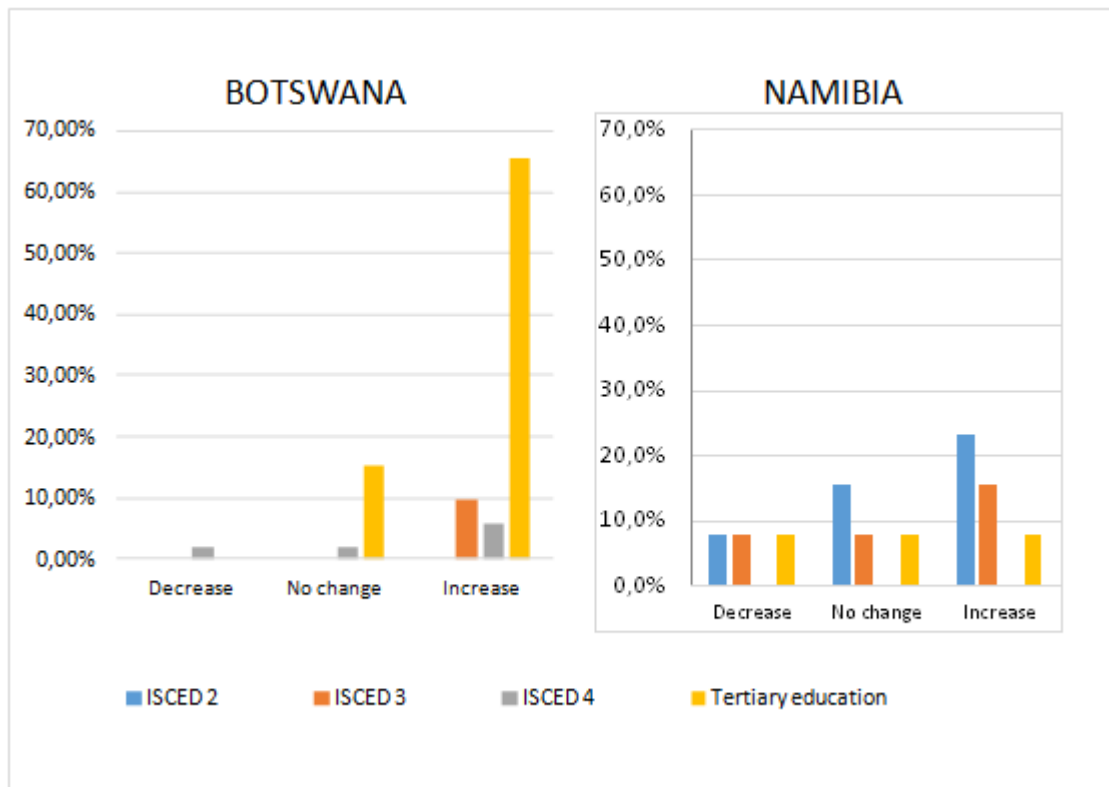
Source: Own elaboration from collected data (questionnaires).

Of those students who believe that their wages or income will decrease (6,2%) 1.5% have an educational ISCED 2, 1.5% have ISCED 3, 1.5% have an ISCED 4 and the remaining 1.5% have attained tertiary education. Of those who consider that their economic situation will not change (20%), 3.1% have an ISCED 1, 1.5% have an ISCED 3, another 1.5% have an ISCED 4 and 13,8% have attained tertiary education. As for the group of participants that consider that their future income will increase (73.8%) 4.6% have an ISCED 2, 10.8% have an ISCED 3; 4.6% have an ISCED 4 and 53,8% tertiary education.

A comparison between countries in relation between the participant's future income expectations and the highest level of education attainment is done below.



**Graph 91: Future income expectations according to the highest level of education attained by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana there is an 80.8% of the subjects who have attained tertiary education, of whom 15.4% consider that their future income expectations won't change, and 65.4% consider that will increase. There is also a 9.6% of the total stake who has attained an ISCED 4, of whom 5.8% consider that the future income expectations will increase and 1.9% consider that their future professional opportunities will either remain the same or decrease. To conclude there is a 9.6% of the total participants who had attained an ISCED 3, all of them consider that the future income expectations will increase.

In Namibia, there is a 46.2% of all participants who have attained an ISCED 2 level, of whom 23.1% consider that their future income expectations will increase, 15.4% think that it won't change and 7.7% thinks that they will decrease. There is a 30.8% of the total stake who

has attained an ISCED 3 level, of whom 15.4% of them consider that their future income expectations will increase, another 7.7% think that they will decrease or it won't represent a significant change. To conclude, from the 23.1% subjects that have attained tertiary education level, 7.7% of them consider that their future income expectations will either remain the same or may increase or decrease.

- To continue, it is important to see the relation among the future income expectations from students and the main source of household income, in order to proceed, we have 61 cases.

**Table 67: Future income expectations according to the main source of household income in total**

		Main Source of Household Income								Total
		Wages and Salaries	Income from self-employment (excluding farming)	Farming	Pensions	Unemployment / Redundancy benefit	Any other social benefit or grant	Income from investment, savings, insurance or property	Income from other sources	
Decrease	Frequency	1	0	1	1	0	0	0	0	3
	Percentage	1,6%	0,0%	1,6%	1,6%	0,0%	0,0%	0,0%	0,0%	4,9%
No change	Frequency	5	0	0	4	0	0	0	2	11
	Percentage	8,2%	0,0%	0,0%	6,6%	0,0%	0,0%	0,0%	3,3%	18,0%
Increase	Frequency	18	9	3	1	9	2	1	4	47
	Percentage	29,5%	14,8%	4,9%	1,6%	14,8%	3,3%	1,6%	6,6%	77,0%
Total	Frequency	24	9	4	6	9	2	1	6	61
	Percentage	39,3%	14,8%	6,6%	9,8%	14,8%	3,3%	1,6%	9,8%	100%

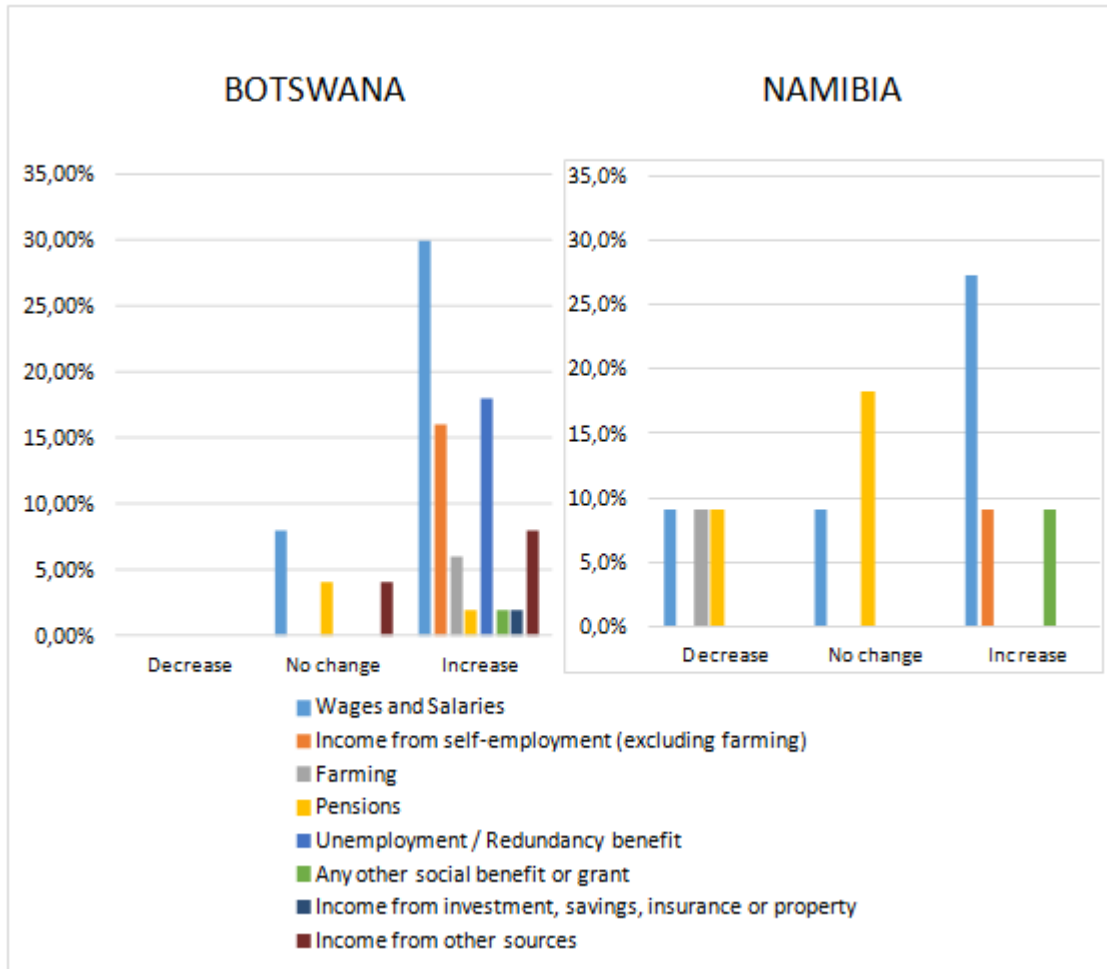
Source: Own elaboration from collected data (questionnaires).

4.9% of the total sample, perceive that in the future the income received will decrease, of those, 1.6% receive income from wages or salaries, another 1.6% receive the main source of household income from farming, and the remaining 1.6% from pensions. The second group of people who refers to the students who don't expect the income situation change in the future

(18.0%) 8.2% consider their main source of household income coming from wages or salaries, 6.6% from pensions and 3.3% from other sources; In addition to this, there is a 77% of the total sample that consider that their income situation will improve by increasing their household income, of whom 29.5% receive wages or salaries, 14.8% are self-employed excluding farming, 4.9% receive their income from farming activities, 1.6% from pension, 14.8% from unemployment benefits, 14.8% from benefits or grants; 1.6% from investments, savings, insurance or property and the remaining 6.6% from other source of income.

A comparative analysis among countries is done in relation to the future income expectations and the main source of household income, as shown in the next graph.

**Graph 92: Future income expectations according to main source of household income by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, there is a 38% of people whose main source of household income comes from wages and salaries, representing the highest frequency, from this group, there is a 30% of subjects who consider that their future income expectations will increase and 8% think that it won't represent any change at all. There is a 16% of people whose income comes from self-employment excluding farming, all of them expect that their future income expectations will increase. There is also a 18% of the sample whose income comes from the unemployment or redundancy benefit all of them have the same perception as the previous group, all of them expect that their future income expectations will increase. Moreover, there is a 6% of

participants whose income come from pensions or farming, 4% of people from the first group (pensions) consider that their future income expectations will not change and 2% consider that their future income expectations will increase. All subjects from the second group (farming) expect their future income expectations to increase. To conclude there is also a 2% of the total stake of people whose main source of household income either come from investments, savings; or from other social benefits or grants, all subjects from both groups consider that their participation on the TVET program will have an impact on the increase of any future professional expectations.

Meanwhile, 45.5% of all participants in Namibia got their income mainly from salaries and wages, from them there is a 27.3% who consider that their future income expectations will increase, and another 9.1% who think that it may not change or it might decrease. There is a 27.3% of the total stake whose main source of income comes from pensions, subjects from this group consider that in 18.2% that their future employment expectations won't change, and another 9.1% will decrease. As for the participants whose main income comes from self-employment excluding farming, they represent the 9.1% of total stake, all of them consider that their future employment opportunities will increase. In addition to what has been mentioned, there is also a 9.1% of people whose main income comes from farming, all of them have the perception that their future income expectations will decrease. To conclude there is a 9.1% of participants whose main source of main income come from any other social benefit, all subjects from this group consider that their future income expectations will increase.

- There are 62 cases to report about the perceived future income expectations and the subject's perception of the living standard with the existing household income.

**Table 68: Future income expectations according to the perception of living standards with household income in total**

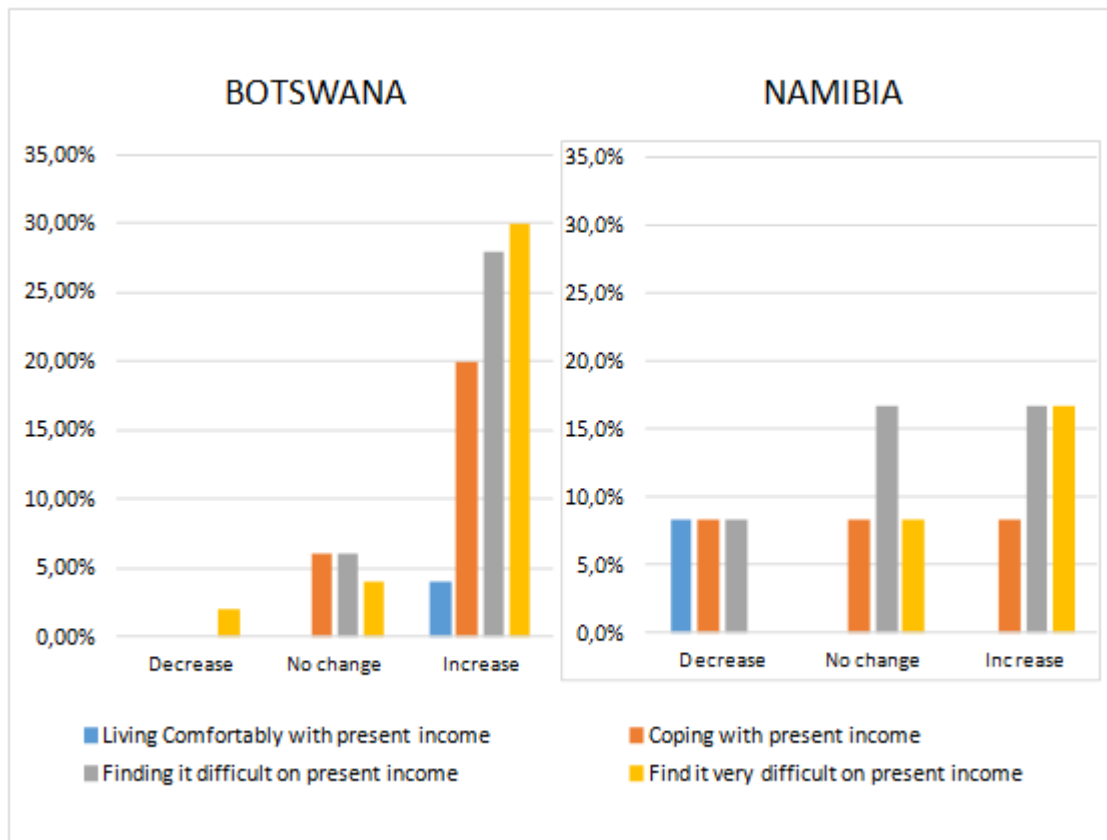
Future Income Expectations		Perception of living standard with Household Income				Total
		Living Comfortably with present income	Coping with present income	Finding it difficult on present income	Find it very difficult on present income	
Decrease	Frequency	1	1	1	1	4
	Percentage	1,6%	1,6%	1,6%	1,6%	6,5%
No change	Frequency	0	4	5	3	12
	Percentage	0,0%	6,5%	8,1%	4,8%	19,4%
Increase	Frequency	2	11	16	17	46
	Percentage	3,2%	17,7%	25,8%	27,4%	74,2%
Total	Frequency	3	16	22	21	62
	Percentage	4,8%	25,8%	35,5%	33,9%	100%

Source: Own elaboration from collected data (questionnaires).

Of those who think that their income will decrease in the future (6.5%) 1.6% feel comfortable living with present income, 1.6% are coping with present income, another 1.6% find it difficult and very difficult on present income. Of those who think that their income prospects will remain the same without any change (19.4%) 6.5% are coping with present income, 8.1% find it difficult on present income, and 4.8% find it very difficult on present income. Finally, those who believe that their earnings will increase after the completion of the TVET program (72.40%) 3.2% feel that are living comfortably, 17.7% assume that they can cope with present income, 25.8% find it difficult on present income and 27.4% find it very difficult.

The graph below shows the comparison among countries in relation to the future income expectations and Namibian participant's perception on living standards with the household income.

**Graph 93: Future income expectations according to the perception of living standards with household income by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana there is a 4% of the total stake who claims to live comfortably with present income, all the people from this group consider that their future income expectations will increase. There is a 26% of participants who consider that they are coping with present income, of whom 20% of them think that their future income expectations will increase and the other 6% consider that it won't change. In addition to that, there is a 34% of people who find it very difficult on present income, from this group there is a 28% of subjects who consider that their future income will increase, a 6% consider that it won't change. To conclude there is a 36% of the total stake, which represent the highest frequency on the table, that states to have serious difficulties to cope with present income, of whom 30% expect that their future income will

increase, 4% consider that their income will remain the same and 2% consider that will decrease.

In Namibia, there is a 8.3% of the total stake who are living comfortably with present situation, all of them think that their future expectation will decrease. There is also a 25% of participants in the country who are coping with present income, of whom 8.3% consider that their future income expectations will either increase, remain the same or decrease. In addition to that there is a 41.7% of the total subjects in Namibia who find it difficult on present income, of whom 16.7% consider that their future income expectations won't change or will increase and 8.3% that will decrease. To conclude there is a 25% of individuals who find it very difficult on present income, from this group, there is 16.7% who consider that their future income expectation will increase and 8.3% think that will remain about the same.

- To inform about the existing relation between the future income expectations and the way in which the participation on the TVET program has been financed, there is 54 data.

**Table 69: Future income expectations according to the different ways in which the TVET program has been financed in total**

		How was financed the participation on the TVET Program					Total
		Own Funding	Enterprise / Employer Funding	Public Funding	Loan	Other	
Future Income Expectations							
	Decrease	Frequency	3	0	1	0	0
Percentage		5,6%	0,0%	1,9%	0,0%	0,0%	7,4%
No change	Frequency	6	1	5	0	0	12
	Percentage	11,1%	1,9%	9,3%	0,0%	0,0%	22,2%
Increase	Frequency	19	2	13	2	2	38
	Percentage	35,2%	3,7%	24,1%	3,7%	3,7%	70,4%
Total	Frequency	28	3	19	2	2	54
	Percentage	51,9%	5,6%	35,2%	3,7%	3,7%	100%

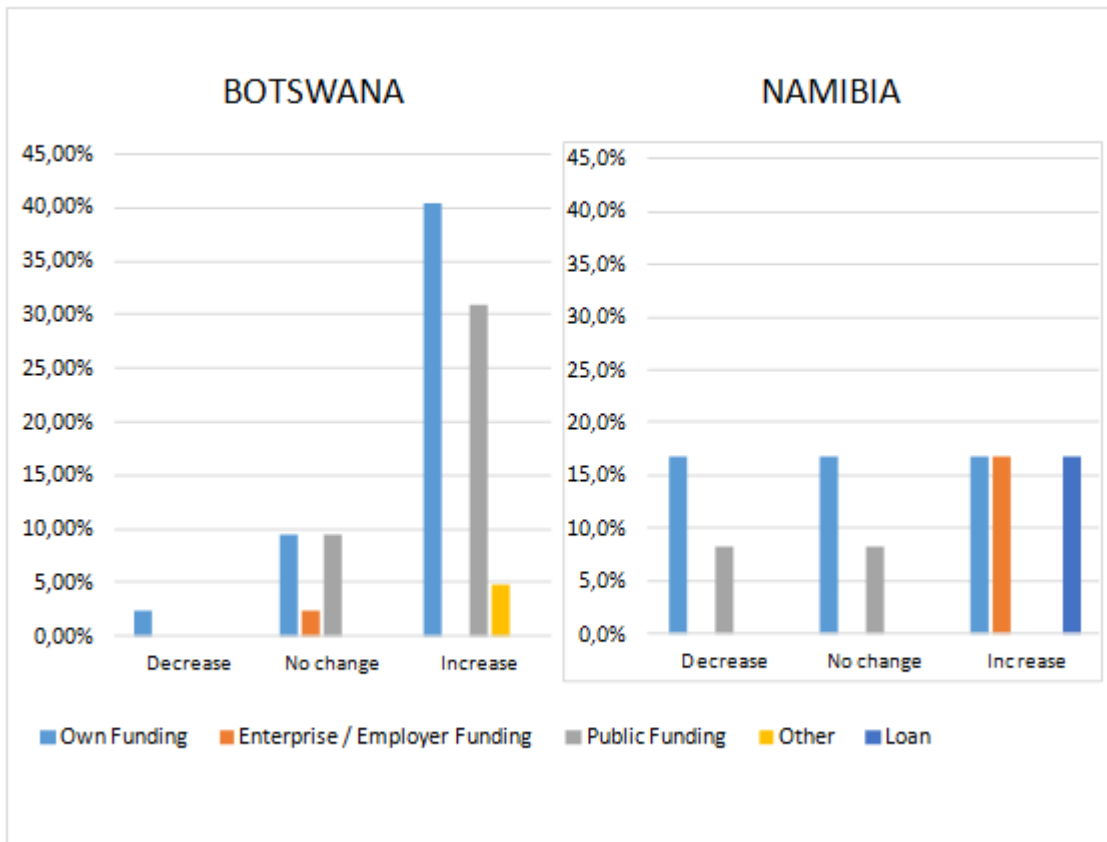
Source: Own elaboration from collected data (questionnaires).



Those who believe that their income will decrease in the future (7.4%) 5.6% of them have financed their participation on the program using their own funding; 1.9% have benefited from public funding. Of those subjects who think that their income situation will remain equal in a near future (22.2%) 11, 1% have use their own income to fund their studies, 1.9% have the economic support from their enterprises, and 9.3% have got the support from public funds. There is also a group of participants representing 70.4% of the sample, who believe that their economic situation will increase and improve in the near future, within this group 35.2% of them are using their own financial resources, 3.7% are financing the program with the support of the organizations where they are employed, 24.1% by using public funds, 3.7% with a loan and another 3.7% using other type of economic source.

The comparison between countries in to between the future income expectations and the different ways in which the subjects have financed their participation in the TVET program is shown below.

**Graph 94: Future income expectations according to the different ways in which the TVET program has been financed by country**



Source: Own elaboration from collected data (questionnaires).

In the above table, it is shown that in Botswana there is a 52.4% of the total participants who have used their own funds to cover the costs, of whom 40.5% consider that their future income expectations will increase, 9.5% think that it will remain the same and 2.4% decrease. There is also a 40.5% of the total stake who have obtained the financial support to cover the cost through public funding, by obtaining grants and scholarships, 31% of subjects from this group consider that their future employment expectations will increase and 9.5% think that it won't be any change. In addition to that, there is a 2.4% of subjects who have obtained economically support from the employer or enterprise where they are working at, all people of this group consider that their future employment expectations won't change. To conclude there is a 4.8% of

people who have financed their participation using other source of income all of them consider that their future employment expectation will increase.

In Namibia, as it is shown on the table, half of the participants have used their own funds to cover the cost of the TVET program, of whom 16.7% consider that their future income expectations will either increase, don't change or decrease (in equal proportion). There is a 16.7% who have got the funds from the financial support of the enterprise where they work or from the employer, all of subjects of this group consider that their future income expectations will increase. As for the people that got money to cover the cost coming through public funding, which represent 16.7% of the total sample, 8.3% consider that their future income expectations will either remain the same or decrease. Finally there is also a 16.7% of the total sample who asked for a loan, all of this persons expect to improve their future income.

- To report on the future income expectations and the participant's perception on how relevant has been their participation on the program, there are 61 cases.

**Table 70: Future income expectations according to the relevance of the TVET program in total**

Future Income Expectations		Relevance of the TVET program					Total
		Not relevant at all	Slightly Relevant	Relevant	Highly Relevant	Extremely Relevant	
Decrease	Frequency	1	0	1	2	0	4
	Percentage	1,6%	0,0%	1,6%	3,3%	0,0%	6,6%
No change	Frequency	2	2	6	0	3	13
	Percentage	3,3%	3,3%	9,8%	0,0%	4,9%	21,3%
Increase	Frequency	2	2	16	11	13	44
	Percentage	3,3%	3,3%	26,2%	18,0%	21,3%	72,1%
Total	Frequency	5	4	23	13	16	61
	Percentage	8,2%	6,6%	37,7%	21,3%	26,2%	100%

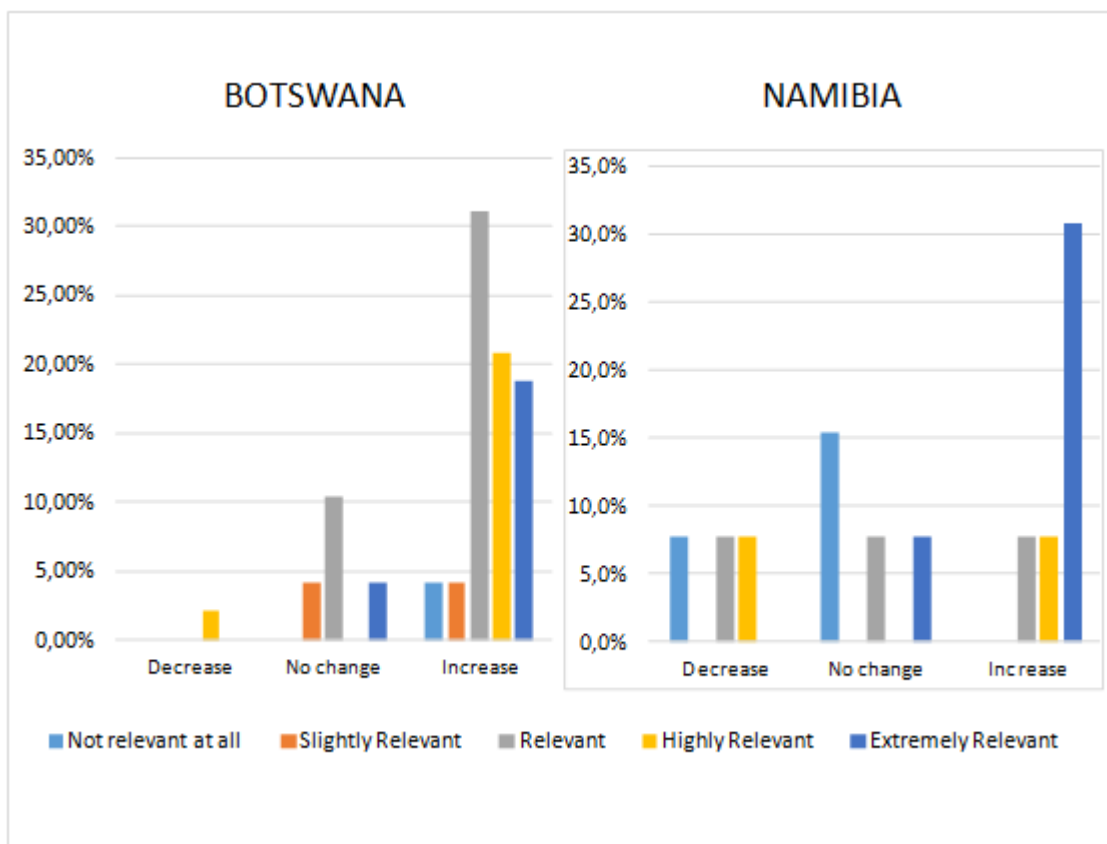
Source: Own elaboration from collected data (questionnaires).

Of those who believe that the income situation will decrease (6.6%) , 1.6% of them considered that the program was not relevant at all, 1.6% relevant, 3.3% highly relevant. Of

those who considered that there will be no change in the future income situation (21.3%) 3.3% believe it is not relevant at all, another 3.3% think it is slightly relevant, 9.8% relevant, and 4.9% extremely relevant.

The comparison between countries related to the expected revenues and the participants' perception of the program's relevance, is described below.

**Graph 95: Future income expectations according to the relevance of the TVET program by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana there is a 41.7% of participants who consider that the program is relevant to them, from this group a 31.2% consider that their future income will increase and 10.4% consider that it won't change at all. There is also a 22.9% of participants who consider that the

TVET program is highly relevant or extremely relevant. 20.8% of people from the first group (highly relevant) consider that their future income expectations will increase, and 2.1% that might decrease. From the second group (extremely relevant) there is a 18.8% who consider that their future income expectations will increase and 4.2% consider that it won't change. In addition to this, there is a 8.3% of all subjects who think that the TVET program is slightly relevant of whom 4.2% of them consider that their expected revenues will remain more or less the same and another 4.2% expect to increase their future revenues. To conclude, there is a 4.2% of participants in Botswana who do not think that the program is relevant at all, all people from this group expect to get better income revenues after the completion of the TVET program.

In Namibia there is a 38.5% of total participants who consider that the TVET program is extremely relevant (highest frequency), of whom 7.7% do not consider that their future income will change at all, 30.8% think that their income will improve. There is a 15.4% of people in Namibia who the program is highly relevant, people from this group consider that the program will help to increase their future economic expectations in 7.7%, nevertheless the same percentage of people consider that the future economic revenues may decrease. In addition to what has been mentioned before, there is a 23.1% of the total stake who consider the TVET program relevant, from this group there is a 7.7% who consider that their expected revenues will either decrease, increase or may not vary. To conclude, there is another 23.1% of participants in Namibia, who consider that the participation on the program is not relevant at all, of whom 7.7% consider that their expected revenues will decrease, 15.4% think that the economic situation won't change at all, and no one from this group consider that the expected revenues will improve.

### g) Social Benefits - Intellectual development

In this last section we find the results to the questions that refer to the influence that the program has had on the participant's intentions to continue learning and the general balance of time that students perceive to have between their participation on the course and their actual life situation.

**Table 71: Intentions to continue studying in total**

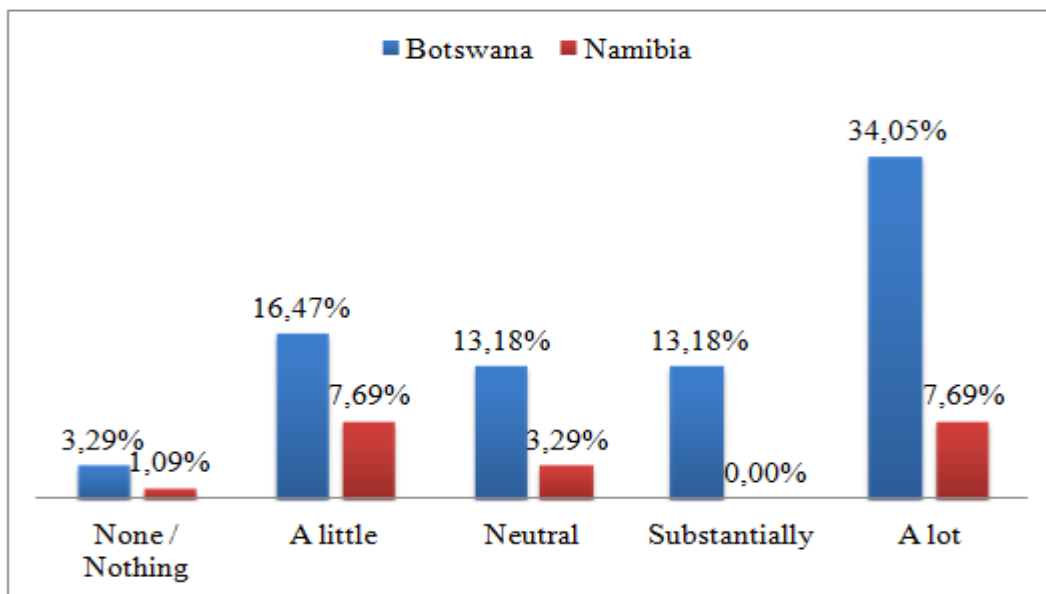
Intentions to Continue studying	Frequency	Percentage	Age	N. Persons Living at the household	
				Children	Adults
None / Nothing	4	4,39%	M=25,25 SD=0,50	M=8 SD=10,86	M=4 SD=2,94
A little	22	24,17%	M=24,86 SD=3,19	M=4,14 SD=3,35	M=4,14 SD=2,86
Neutral	15	16,48%	M=26,50 SD=3,98	M=2,64 SD=2,09	M=4,86 SD=2,87
Substantially	12	13,18%	M=27,36 SD=4,20	M=3,70 SD=2,90	M=5,20 SD=3,42
A lot	38	41,75%	M=26,54 SD=4,66	M=4,41 SD=3,57	M=5,26 SD=2,76
Total	91	100%			

Source: Own elaboration from collected data (questionnaires).

As for the perceived intellectual development that participants perceived. In general, most participants 41.75% have the intentions for further study, this group has an average age of 26.54 with a standard deviation of 4.66; there is an average of 4.41 children per household with an average adult of 5.26 with a standard deviation of 3.57 and standard deviation of 2.76 respectively; there is also a 24.17% of the total sample which has little intentions to further study, this group is represented by an average age of 24.86 with a standard deviation of 3.19, an average of 4.14 children per household with a standard deviation of 3.35 and an average of 4.14 adults with a standard deviation of 2.86. There is a group of respondents that have substantial

willingness to continue studying (13.18%) with an average age of 27.36 and a standard deviation of 4.20, within the this group, there is an average of 3.70 children per household with a standard deviation of 2.90 and the average of adults per household is 5.20 with a standard deviation of 3.42; Furthermore there is a group of 16.48% of the stake that does not have any intentions in further study (neutral) with an average of 26.50 and a standard deviation of 3.98, there is an average of 2.64 children per household with a standard deviation of 3.98; there is an average of 2.64 children per household with a standard deviation of 2.09 and an average of 5.20 adults per household with a standard deviation of 3.42. Finally, there is a 4.39% of the sample that have no intentions on further study, this group has an average age of 25,25 years old with a standard deviation of 0.50, an average of 8 children per household with a standard deviation of 10.86 and an average of 4 adults per household with a standard deviation of 2.94.

**Graph 96: Intentions to continue studying by country**

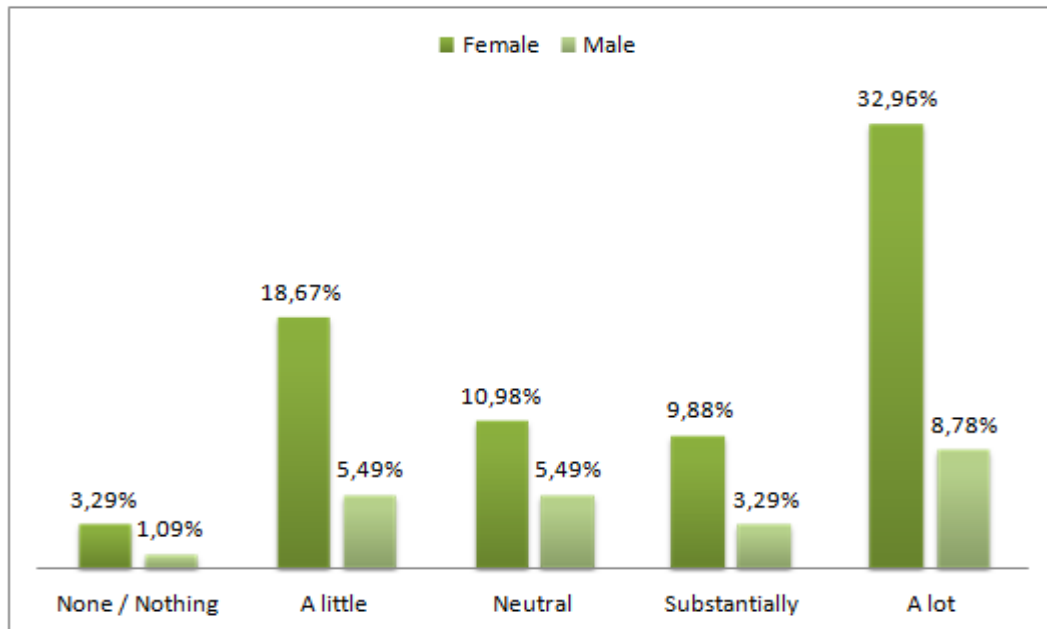


Source: Own elaboration from collected data (questionnaires).

As it is shown on the above graph, there is a higher number of participants from Botswana in all categories, most of them are eager to continue studying 34.05% of the total sample, followed by a 16.47% who have little intentions to further study; there is a 13.18% of subjects that either do have substantial intentions nor have neutral ones (which means that they

do not care at all) there is only a 3.29% of whom do not have any intentions to continue with other studies once they successfully accomplished the BEAR program. As for Namibia, the highest categories represented by a lot and a little are the most frequent ones with a share of 7.69%. The lowest category would be none / nothing (1.09%) and Substantially with 0.00%

**Graph 97: Intentions to continue studying by gender**



Source: Own elaboration from collected data (questionnaires).

As the intentions for continue studying according to the gender; there is a higher frequency of women in all categories. The highest frequency for both genders are “a lot” 32.96% and 8.78% for women and men respectively; followed by little intentions 18.67% and 5.49% for female and male. The lowest category selected for both genders is no having any intention to keep studying (3.29% and 1.09%)



- To report about the intentions of all participants to continue studying according to the highest level of education attainment, we consider 89 cases.

**Table 72: Intentions to continue studying according to the highest level of education attained in total**

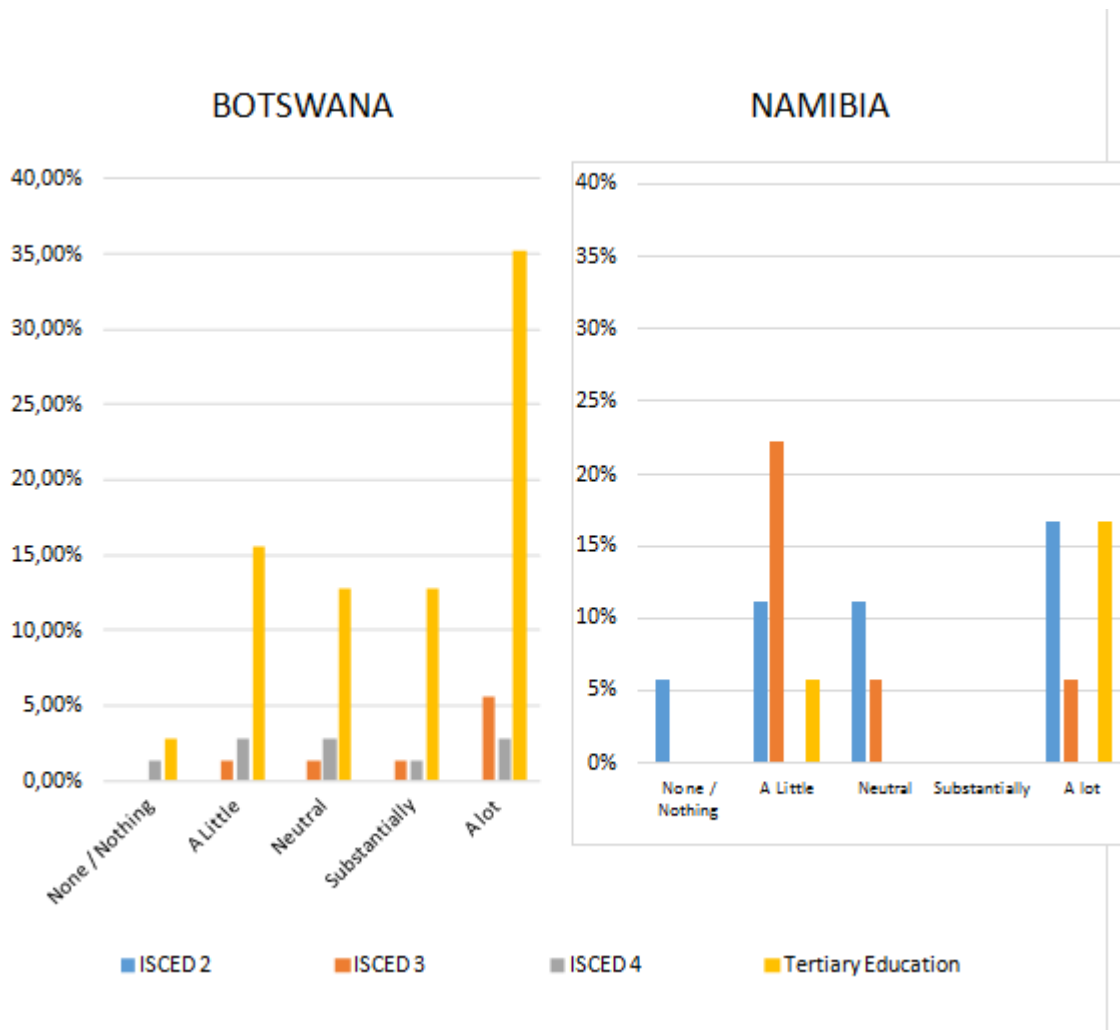
Intentions to continue studying	Highest level of Education Attainment					Total
	(ISCED 2)	(ISCED 3)	(ISCED 4)	Educación Terciaria		
None / Nothing	Frequency	1	0	1	2	4
	Percentage	1,1%	0,0%	1,1%	2,2%	4,5%
A Little	Frequency	2	5	2	12	21
	Percentage	2,2%	5,6%	2,2%	13,5%	23,6%
Neutral	Frequency	2	2	2	9	15
	Percentage	2,2%	2,2%	2,2%	10,1%	16,9%
Substantially	Frequency	0	1	1	9	11
	Percentage	0,0%	1,1%	1,1%	10,1%	12,4%
A lot	Frequency	3	5	2	28	38
	Percentage	3,4%	5,6%	2,2%	31,5%	42,7%
Total	Frequency	8	13	8	60	89
	Percentage	9,0%	14,6%	9,0%	67,4%	100%

Source: Own elaboration from collected data (questionnaires).

In general 4.5% of the total sample do not want to continue studying, of whom 1.1% have an ISCED 2, another 1.1% have an ISCED 4, and 2.2% have tertiary education. Of those who have little intention to continue studying (23.6%) 2.2% have an ISCED 2, 5.6% have an ISCED 3, 2.2% have an ISCED 4 and 13.5% tertiary education. Those who do not know if they want to continue or not (neutral) represent a 16.9% of the total, of who 2.2% have an ISCED 2, 2.2% have an ISCED 3, another 2.2% have an ISCED 4 and 10.1% tertiary education. In addition, of those who respond that their intentions to continue studying have substantially increase (12.4%) of these, 1.1% have an ISCED 3, another 1.1% have an ISCED 4, and 10.1% have tertiary education. To Finalize, those subjects that have a lot of willingness to continue studying represents the 42.7% of the total sample, of these 3.4% have an ISCED 2, 5.6% have an ISCED 3, 2.2% have an ISCED 4 and 31.5% have attained tertiary education.

A comparison among countries in relation to the participant’s intentions to continue studying once the TVET program has been completed and the highest level of education attained from their side, is described above.

**Graph 98: Intentions to continue studying according to the highest level of education attained by country**



Source: own elaboration from the data collected (questionnaires)

In Botswana, there is a 9.9% of total participants who have achieved an ISCED level 3, of whom 1.4% consider that their intentions to continue studying are either little, neutral or substantial, meanwhile there is a 5.6% who have stronger intentions to continue studying. Moreover, there is a 11.3% of the total stake who have attained an ISCED 4, from this group,

there is a 1.4% of subjects who do not have any intentions to continue studying, 2.8% have little ones, 1.4% have substantial intentions and 2.8% have a strong willingness on continue studying. The majority of the Botswana participant's in the TVET program attained tertiary education, of whom 43.7% have a strong desire on continue studying, 15.5% have substantial intentions to remain studying, 19.7% have little intentions and 4.2% have no intentions at all.

In Namibia, the highest frequency corresponds to the participants that have attained an ISCED level 2, with a representation of 44.4% of the total sample, 11.1% participants from this group do have little intention to continue studying, 5.6% have no willingness at all, and 16.7% have a strong willingness to continue studying. There is a 33.3% of participants with an ISCED 3 level, of whom 22.2% have little intentions to continue studying and 5.6% have a strong intention to do so. To conclude, there is a 22.2% of participants who have attained tertiary education, of whom 16.7% have strong intentions to continue studying meanwhile a 5.6% have little ones.

- To report about the subject's intentions to continue their studies once they finish the BEAR program, in relation to the main source of household income, we have 83 data in total.

**Table 73: Intentions to continue studying according to the main source of household income in total**

		Main Source of household income								Total
		Wages and salaries	Income from self-employment (excluding farming)	Farming	Pensions	Unemployment / Redundancy benefits	Any other social benefit or grants	Income from investment, savings, insurance or property.	Income from other sources	
None / Nothing	Frequency	0	0	1	1	0	0	0	0	2
	Percentage	0,0%	0,0%	1,2%	1,2%	0,0%	0,0%	0,0%	0,0%	2,4%
A little	Frequency	9	2	2	5	1	0	0	1	20
	Percentage	10,8%	2,4%	2,4%	6,0%	1,2%	0,0%	0,0%	1,2%	24,1%
Neutral	Frequency	5	5	1	0	1	1	0	2	15
	Percentage	6,0%	6,0%	1,2%	0,0%	1,2%	1,2%	0,0%	2,4%	18,1%
Substantially	Frequency	6	3	1	0	1	0	0	0	11
	Percentage	7,2%	3,6%	1,2%	0,0%	1,2%	0,0%	0,0%	0,0%	13,3%
A lot	Frequency	12	4	1	4	8	1	1	4	35
	Percentage	14,5%	4,8%	1,2%	4,8%	9,6%	1,2%	1,2%	4,8%	42,2%
Total	Frequency	32	14	6	10	11	2	1	7	83
	Percentage	38,6%	16,9%	7,2%	12,0%	13,3%	2,4%	1,2%	8,4%	100%

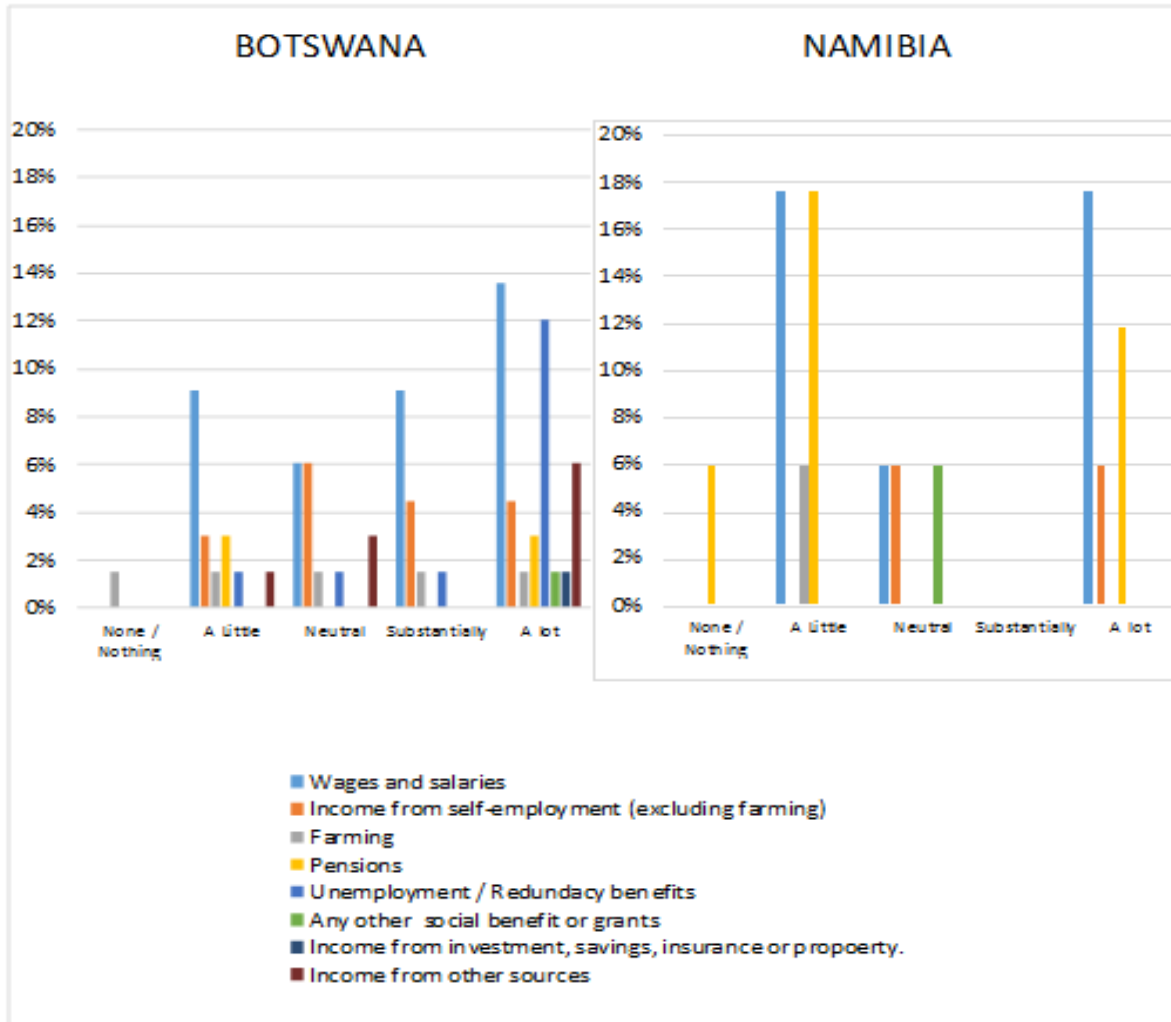
Source: Own elaboration from collected data (questionnaires).

2.4% of the total sample do not have any intention of further study once finished the TVET program, of whom 1.2% of their main source of income comes from farming, 1.2% from pensions; of those who have little intentions to continue study (24.1%) 10.8% receive wages or salaries as main source of income, 2.4% are self-employed excluding farming, another 2.4% from farming, 6% from pensions and 1.2% from unemployment benefits. Of those who do not know if they will continue or not studying (18.1%) 6% receive their income from wages or

salaries, another 6% are self-employed excluding farming, 1.2% from farming, 1.2% from other subsidies or unemployment, 1.2% from social benefits or grants and 2.4% from other income sources. Similarly, there is a 13.3% of the total sample who believe that their intentions to continue study increases substantially 13.3%, of these subjects, 7.2% receive income from wages or salaries, 3.6% are self-employed excluding farming, 1.2% are farmers, and 1.2% receive unemployment benefits. Finally, those who have a higher motivation to further study (a lot, 42.2% represent the highest frequency of the sample, of those 14.5% receive income from wages and salaries, 4.8% are self-employed excluding farming, 1.2% from farming, 4.8 % from pensions, 9.6% from unemployment benefits, 1.2% from social benefits or grants, another 1.2% from investments, savings, insurance or property and 4.8% from other source of income.

The next graph reflects the comparison between countries in relation to the participant's intentions to continue studying and the main source of household income.

**Graph 99: Intentions to continue studying according to the main source of household income by country**



Source: Own elaboration from collected data (questionnaires).

As it is notice in Botswana there is a 37.9% of the total stake who obtain their main of household income through salaries or wages, of whom 9.1% do have little intentions or substantial intentions to continue studying after completing the TVET program and 13.6% have strong intentions to continue studying. From the 18.2% of participants whose main source of household income comes from self-employment excluding farming, there is a 3% with little, 4.5% substantial and 4.5% strong intentions to continue studying. As from the subjects who obtain their household income from farming, representing a 7.6% of the total stake, there is a equal distribution of 1.5% of them who either have no intentions, little, neutral, substantial and

strong intentions to continue studying. In addition to mentioned above there is a 6.1% of people whose main source of household income comes from pensions, of whom 3% either have little or strong intentions to continue studying. Moreover, there is a 16.7% of people whose main source of household income comes from unemployment benefit (this is the third highest frequency) of whom most of them 12.1% have strong intentions to continue studying, meanwhile there is 1.5% of the people on the same group who have little intentions to study. To conclude, the table also show that there is a 1.5% of participants in Botswana whose main source of income either comes from any other social benefit or grants or from investments, all of them have strong intentions to continue studying.

In Namibia, there is a 41.2% of participants in Namibia whose main source of household income comes from wages and salaries, 17.6% of people from this group either have strong intentions to continue studying or little ones in the same proportion. There is a 11.8% of subjects whose income comes from self-employment excluding farming, of whom 5.9% have a strong intention to continue studying. In addition to this, there is a 5.9% of the participants on the TVET program in Namibia whose main income come from farming, none of them have strong intentions to continue studying in fact they have little intentions to do so. To conclude beside the 5.9% of people whose income come from different sources, there is a 35.3% of them whose income come from pension benefit, subjects from this group consider positively their willingness to continue studying in 11.8%, meanwhile a major part of subjects from the same group 17.6% have little intentions to do so.

- As for the report about the relation between the subject's intentions to continue studying once the Bear program finished and the perceived balance of life that these subjects have.

**Table 74: Intentions to continue studying according to the perceived living standards with household income in total**

<b>Perception of living standard with Household Income</b>						
<b>Intentions to continue studying</b>		<b>Living Comfortably</b>	<b>Coping with present income</b>	<b>Find it difficult on present income</b>	<b>Find it very difficult with present income</b>	<b>Total</b>
None / Nothing	Frequency	0	0	1	2	3
	Percentage	0,0%	0,0%	1,2%	2,4%	3,5%
A little	Frequency	1	8	5	7	21
	Percentage	1,2%	9,4%	5,9%	8,2%	24,7%
Neutral	Frequency	1	2	8	4	15
	Percentage	1,2%	2,4%	9,4%	4,7%	17,6%
Substantially	Frequency	0	1	8	2	11
	Percentage	0,0%	1,2%	9,4%	2,4%	12,9%
A lot	Frequency	4	7	8	16	35
	Percentage	4,7%	8,2%	9,4%	18,8%	41,2%
Total	Frequency	6	18	30	31	85
	Percentage	7,1%	21,2%	35,3%	36,5%	100%

Source: Own elaboration from collected data (questionnaires).

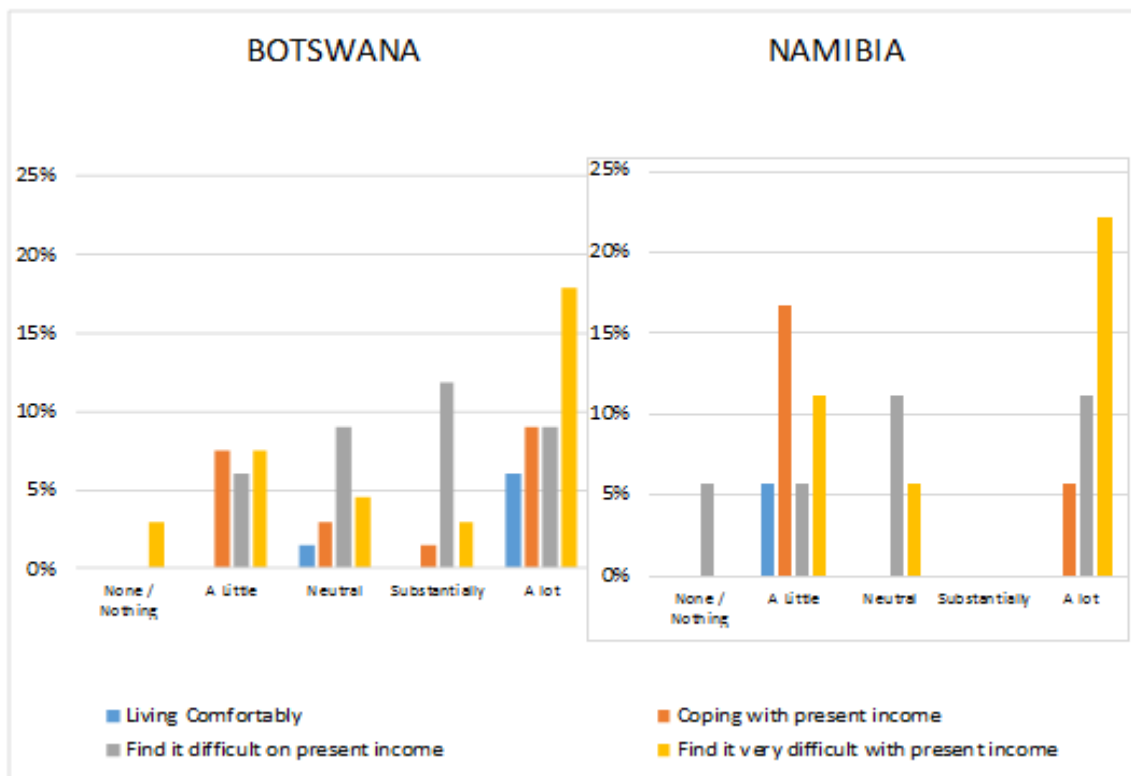
There are 3.5% of the total sample, who have no intention to continue studying, of those 1.2% consider that they are living with difficulties, and 2.4% with many difficulties. Of those who have little intentions to further study (24.7%), 1.2% perceive that are living comfortably, 9.4% consider that are coping with present income, 5.9% are living with difficulties, and 8.2% are living with many difficulties. From the group of participants who remained neutral on their future intentions (17.6%) 1.2% consider that they are living comfortably, 2.4% thinks that they are coping with present income, 9.4% are living with difficulties and 4.7% with many difficulties. Moreover, of those who have increased substantially their intentions to further study (12.9%) 1.2% consider that they are coping with actual household income, 9.4% consider that are living with difficulties and 2.4% with many difficulties; of those subjects who are eager to further study (41.2%) 4.7% consider that their income situation allows them to live comfortably,



8.2% think that are coping with present income, 9.4% are living with difficulties and 18.8% consider that are living with many difficulties.

In the graph below it is shown the comparison among countries between the intentions to further study once the TVET program is finished and the participants’ perception on living standards with household income.

**Graph 100: Intentions to continue studying according to the perception of living standards with household income by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana as it is shown on the graph there is a 35.8% of participants who find it either difficult of very difficult on present income, from the first group (find it difficult) there is a 9% of the subjects who have strong intentions to continue studying, 11.9% have substantial intentions and 6% have little intentions. As for the second group (find it very difficult with present income) 3% have no intentions at all to further study, 7.5% have little intentions,

nevertheless a 3% of them have substantial intentions or 17.9% substantial intentions to continue studying. In addition to this, there is a 20.9% of people who is coping with present income, of whom 7.5% have little intentions, or 1.5% substantial or 9% substantial intentions to continue their studies. To conclude, there is a 7.5% of participants who consider that they are living comfortably with present income, from this group there is a 6% who would like to continue study.

In Namibia there is a 38.9% of participants who find it very difficult with present income, of whom 22.2% have strong intentions to continue studying and 11.1% have little willingness to further study. There is also a 33.3% of people who find it difficult on present income, of whom 11.1% have strong intentions to continue studying, meanwhile a 5.6% of people from that group either have little intentions or none. In addition to that there is a 22.2% of participants who consider to cope with present income, of whom 16.7% have little intentions to continue study and in contrary 5.6% have strong intentions to do it. To conclude there is a 5.6% of people who states that they are living with present income, all subjects from this group have little intentions to continue studying.

- To report about the existing relation between the participant's intentions to continue studying and how was financed the participation on the TVET BEAR program there is 75 data.

**Table 75: Intentions to continue studying according to the different ways in which the TVET program has been financed in total**

		How was financed the participation on the TVET Program					
Intentions to continue studying		Own Funding	Enterprise / Employer Funding	Public Funding	Loan	Other	Total
	None / Nothing	Frequency	1	0	2	0	0
Percentage		1,3%	0,0%	2,7%	0,0%	0,0%	4,0%
A little	Frequency	8	2	5	0	4	19
	Percentage	10,7%	2,7%	6,7%	0,0%	5,3%	25,3%
Neutral	Frequency	7	0	5	1	0	13
	Percentage	9,3%	0,0%	6,7%	1,3%	0,0%	17,3%
Substantially	Frequency	4	0	6	0	0	10
	Percentage	5,3%	0,0%	8,0%	0,0%	0,0%	13,3%
A lot	Frequency	20	2	7	0	1	30
	Percentage	26,7%	2,7%	9,3%	0,0%	1,3%	40,0%
Total	Frequency	40	4	25	1	5	75
	Percentage	53,3%	5,3%	33,3%	1,3%	6,7%	100%

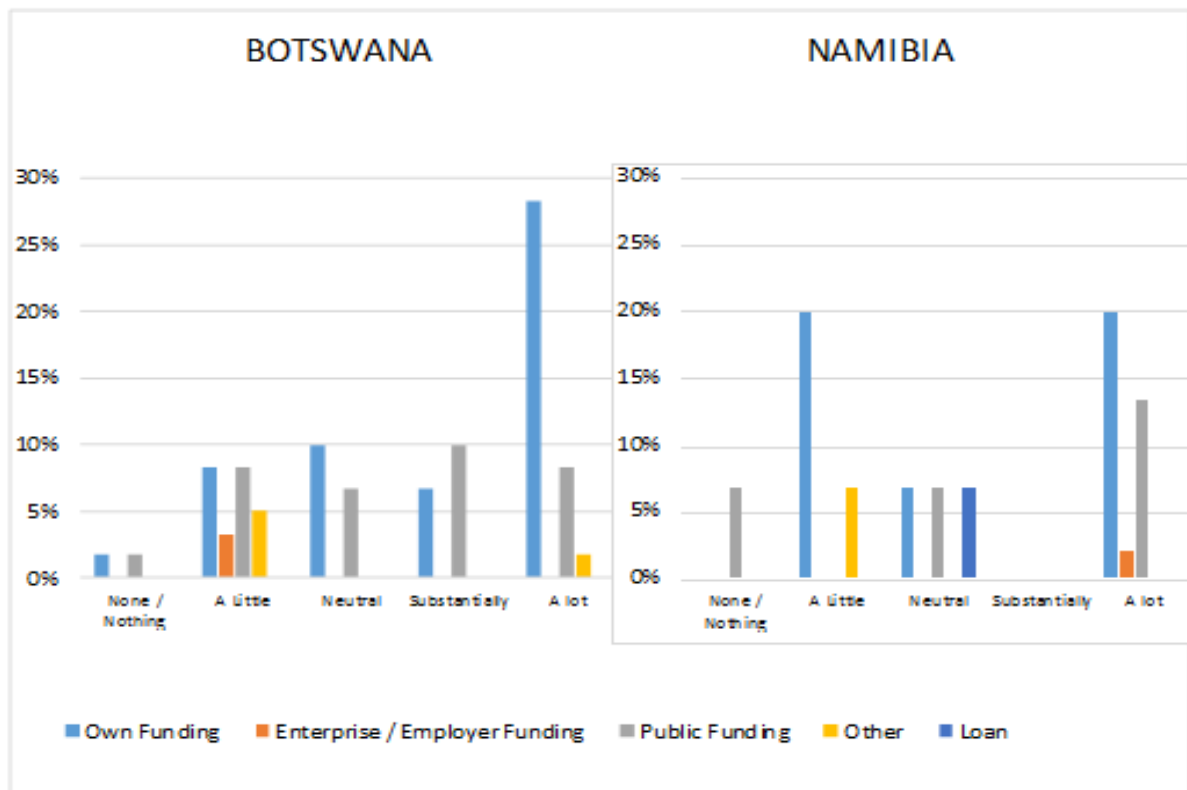
Source: Own elaboration from collected data (questionnaires).

There is a group of participants representing a 4.0% of the total sample, that have no intention to further study, of those 1.3% are paying the TVET program using their own financial sources, 2.7% using public funds; of those subjects who have little intentions to continue studying (25.3%) of the total share, 10.7% have used their own funds, 2.7% have the economic support of their employers, 6.7% from public funds, 5.3% have used other source of funding; Of those subjects that do not know either to continue studying or not (neutral) 17.3%; 9.3% have financed their participation with their own funds, 6.7% using public funds, and 1.3% with the financial support they have as they got a loan. Moreover, those who have increase substantially their intentions to continue studying represent 13.3% of the total share, of those 5.3% used their own funding sources and 8% have used public funds. Finally those who consider to have a strong willingness to continue studying (40.0%), 26.7% have used their own funds, 2.7% have

received financial support from their enterprise, 9.3% from public funds, and 1.3% using other type of funding.

The graph below shows the comparison among countries in relation to the participants' intentions to further study and the different funding sources used by participants in order to cover the cost of the TVET program.

**Graph 101: Intentions to continue studying according to different ways of finance the TVET program by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, of those who financed the cost using their own funding, which represent a 55.0% of the total stake, there is a share of 1.7% who does not have any intention to continue studying, there is a 8.3% of them who have few intentions, 6.7% have substantial intentions and

28.3% have many or strong intentions to continue studying. There is a 3.3% of the total participants in Namibia, who have financed the program with the financial support of their enterprise or employer, all of them have little intentions to further studying. In addition to this, there is a 35% of people who have received funds from public funding in order to be able to pay the TVET program related expensed, of whom 1.7% do not have any intention, 8.3% little intention to further study, meanwhile a 10% of individuals of the same group have substantial intentions and 8.3% have strong intentions to further study. To conclude there is a 6.7% of people who have used other financial sources to cover the cost, of whom 1.7% would strongly like to continue studying and 5% have little intentions to do so.

In Namibia, there is a 46.7% of participants who have financed their participation using their own funds, of whom 20% have either little intentions to continue studying or strong intentions to do so. There is also a 13.3% of participants who have obtained the financial resources to cover the cost by the support provided from the enterprise or employer, all of them would like to continue studying. As for the 26.7% of students that obtained public funds, 13.3% would like to continue studying and 6.7% have little intentions to do so. To conclude there is a 6.7% of people who got the money to cover the cost by getting a loan or through other sources.

- To report about the relation about the intentions to continue studying according to the perception of the student's relevance on their participation in the program, there is 80 cases.

**Table 76: Intentions to continue studying according to the relevance of the TVET program in total**

Intentions to continue studying	Relevance of the TVET program						Total
	Not relevant at all	Slightly Relevant	Relevant	Highly Relevant	Extremely Relevant		
None / Nothing	Frequency	2	1	1	0	0	4
	Percentage	2,5%	1,2%	1,2%	0,0%	0,0%	5,0%
A little	Frequency	4	2	5	2	6	19
	Percentage	5,0%	2,5%	6,2%	2,5%	7,5%	23,8%
Neutral	Frequency	1	3	7	1	1	13
	Percentage	1,2%	3,8%	8,8%	1,2%	1,2%	16,2%
Substantially	Frequency	0	0	8	2	1	11
	Percentage	0,0%	0,0%	10,0%	2,5%	1,2%	13,8%
A lot	Frequency	0	0	11	6	16	33
	Percentage	0,0%	0,0%	13,8%	7,5%	20,0%	41,2%
Total	Frequency	7	6	32	11	24	80
	Percentage	8,8%	7,5%	40,0%	13,8%	30,0%	100%

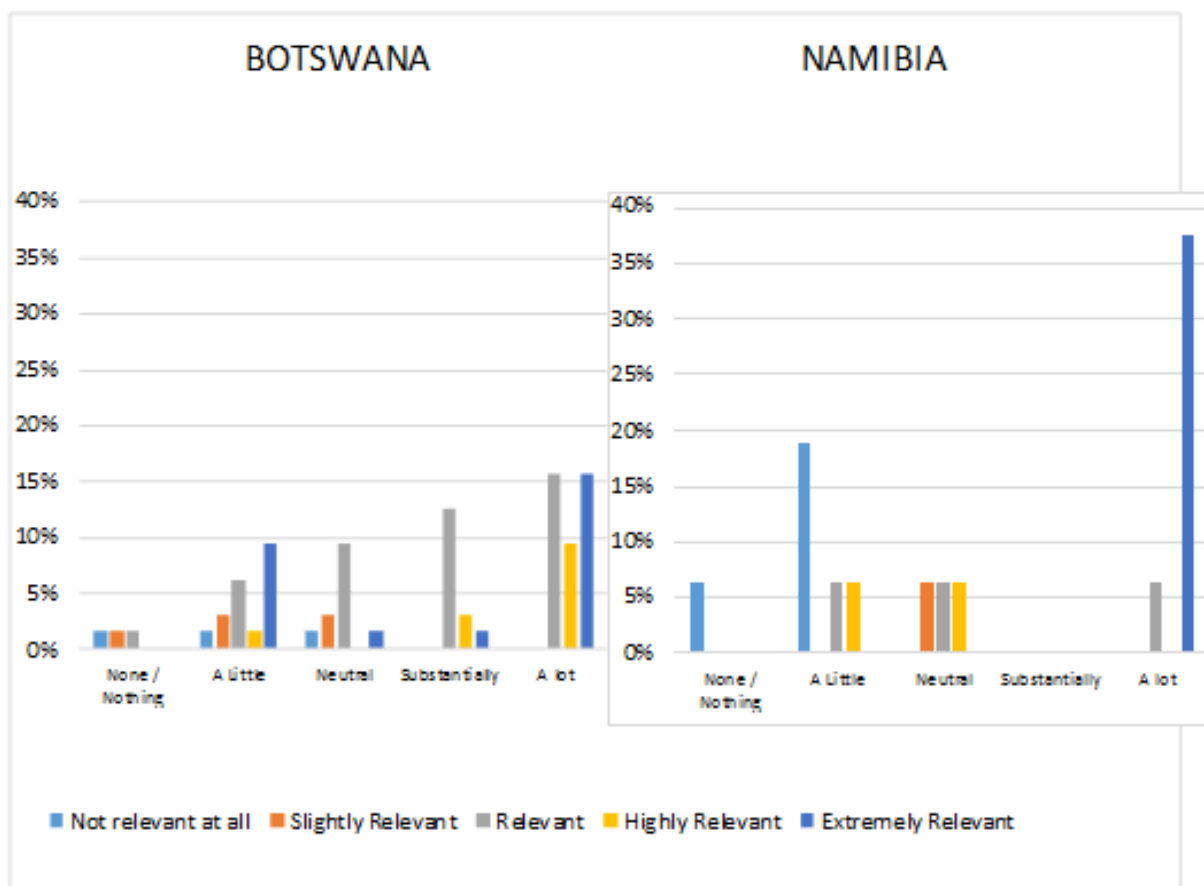
Source: Own elaboration from collected data (questionnaires).

There is a 5.0% of the total participants who does not want to continue study, of these, 2.5% consider irrelevant or not relevant at all their participation on the program, 1.2% seems it as little relevant and a remaining 1.2% consider it relevant. From those who have little intentions to continue studying 23.8% of stake, 5% thinks their participation is not relevant at all, 2.5% think is slightly relevant, 6.2% thinks is relevant, 2.5% highly relevant and 7.5% extremely relevant; There is also 16.2% of the total sample, that do not know whether continue studying or not (neutral) of those, 1.2% considered not relevant at all their participation in the program, 3.8% slightly relevant, 8.8% relevant, 1.2% highly relevant and 1.2% extremely relevant. In addition to this, of those who have increased substantially their future academic intentions 13.8%; 10% considered relevant their participation in the program, 2.5% highly relevant, 1.2% extremely relevant. Of those who consider to have strong intentions (a lot) to continue studying

41.2%; 13.8% perceived relevant their participation in the program, 7.5% highly important and 20% extremely relevant.

In the graph below it is shown the difference among countries in relation to participants' perceived relevance of the program in relation to their intentions to continue studying.

**Graph 102: Intentions to continue studying according to the relevance of the TVET program by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, there is a 45.3% of total subjects who consider that the program is relevant, of whom 1.6% have no intention to further study, 6.2% have little intentions, 12.5% have substantial intentions and 15.6% have strong intentions to further study after the completion of

the TVET program. There is a 28.1% of the stake who think that the TVET program is extremely relevant, of this group, most subjects 15.6% have strong intentions to continue studying, 1.6% have substantial intentions and 9.4% little ones. In addition to what has been mentioned before, there is a 14.1% of the total stake who thinks that the TVET program is highly relevant, most subjects from this group 9.4% will continue studying. As for the percentage of people who do not consider that the program is not relevant at all, there is a 4.7% of the total stake, of whom 1.6% have either no intention at all to continue studying or have very little ones. To conclude there is a 7.8% of the sample who perceived the program as slightly relevant, most of participants from this group 3.1% have no intention to continue studying after the finalization of the TVET program.

In Namibia, of those who considered irrelevant participate in the program (representing 25% of the total stake), 6.2% consider not to have any intention to further study and 18.8% has little intentions to do it. There is a 6.2% of all participants who consider that the program is slightly relevant, all of the people from this group remains neutral when considering their willingness to further study. In addition to this, a 18.8% of all Namibian participants state that the program is relevant, of whom 6.2% have either a lot or little intentions to further study. In addition to what has been mentioned before, there is a 12.5% of people who consider that the program is highly relevant of whom 6.2% of them have little intentions to continue studying. To conclude, there is a 37.5% of all stake who consider that the program is extremely relevant, all subjects from this group have strong intentions to continue their studies once the TVET program is finished.

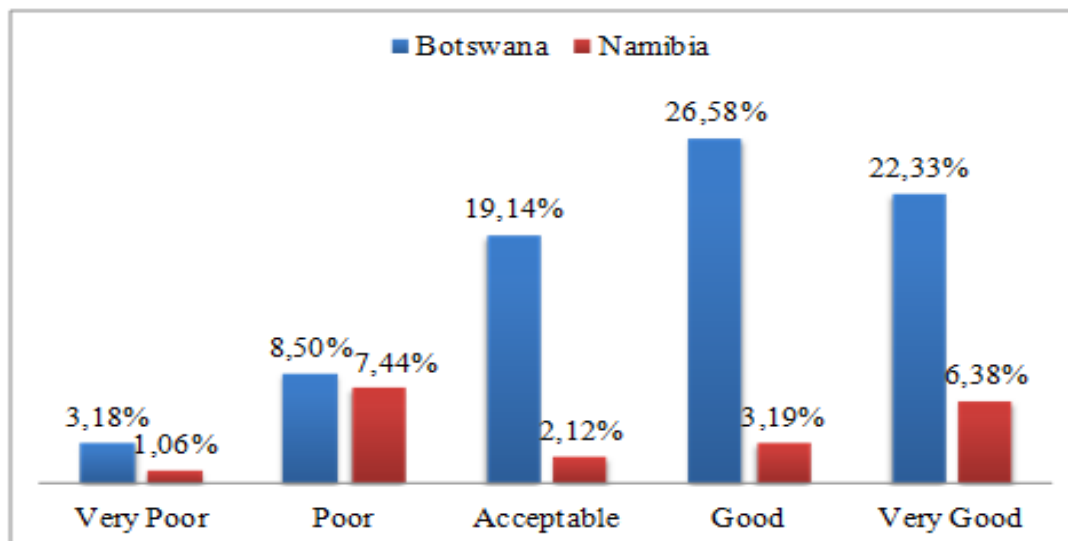
#### **h) Social Benefits - Expected balance of life after completion of the TVET Program**

The analysis in relation to the expected balance of life after the program finalization/ completion has been done with all the 94 existing data. 28.72% of all participants consider a very good balance of life, the average age of the subjects within this group is 26.81 years old, with a standard deviation of 3.27 with an average of 4.12 children with a standard deviation of



3.95; and an average number of adults per household of 4.73 with a standard deviation of 2.58. From those participants that consider to have a good balance of life (29.78%), these have an average age of 26.50 years old with a standard deviation of 4.36; the number of children and adult per household is 3.74 and 4.37, with a standard deviation of 2.29 and 2.70 respectively. As for the subjects that consider to have an acceptable balance of life (21.27%) their profile correspond to a 26.38 years old student, with a standard deviation of 2.91, an average of 3.75 children per household with a standard deviation of 2.69 and an average of 5.06 adults per home with a standard deviation of 2.88. Moreover, there is a 15.95% of the total participants considering that their balance of life is poor, with an average age of 24.86 years old and a standard deviation of 3.52, with a number of 5.86 children and 5.29 adults per household, with a standard deviation of 6.41 and 3.62 respectively. Finally there is a 4.25% of the total stock that have a very poor balance of life, of these the average age is 25.25 years old with a standard deviation of 0.50 and an average of 2.50 children per household with a standard deviation of 1.73 and an average of 5 adults, with a standard deviation of 1.41.

**Graph 103: Expected Balance of life after finalization of TVET program by country**



Source: Own elaboration from collected data (questionnaires).

As noted above, on the one hand Botswana has its highest frequency as a representation of a good balance of life (26.58%), and the lowest frequencies representing a very poor balance of life (3.18%); on the other hand, Namibia show its highest frequency in a poor balance of life (7.44%) and the lowest one referring to a very poor balance of life (1.06%) and acceptable (2.12%), nevertheless the frequency related to a very good life (6.38%) it is not a low frequency.

**Graph 104: Expected Balance of life after finalization of TVET program by gender**



Source: own elaboration from the data collected (questionnaires).

As for the gender comparison, as shown on the above graph, women in general make a more positive life balance than men. The group of men, record very similar percentages in the categories "acceptable" (5.31%), "poor" (6.38%) and "very good" (7.44%), however women have higher frequencies in "acceptable" (14.88%), "good" (26.58%) and "very good" (21.27%). Both genders agree that the category "very poor" balance of life is the least common balance (3.18% for females and 1.06% for males).

- As for the analysis related to the expected balance of life once the completion of the TVET program has finalized successfully, according to the highest level of education attainment from students, there is 92 cases.

**Table 77: Balance of life after completing TVET program according to the highest level of education attained in total**

Balance of life after finalization of TVET program		Highest level of Education Attainment				
		ISCED 2	ISCED 3	ISCED 4	Tertiary Education	Total
Very poor	Frequency	1	0	1	2	4
	Percentage	1,1%	0,0%	1,1%	2,2%	4,3%
Poor	Frequency	2	4	1	8	15
	Percentage	2,2%	4,3%	1,1%	8,7%	16,3%
Acceptable	Frequency	1	1	2	16	20
	Percentage	1,1%	1,1%	2,2%	17,4%	21,7%
Good	Frequency	1	5	0	20	26
	Percentage	1,1%	5,4%	0,0%	21,7%	28,3%
Very good	Frequency	3	2	3	19	27
	Percentage	3,3%	2,2%	3,3%	20,7%	29,3%
Total	Frequency	8	12	7	65	92
	Percentage	8,7%	13,0%	7,6%	70,7%	100%

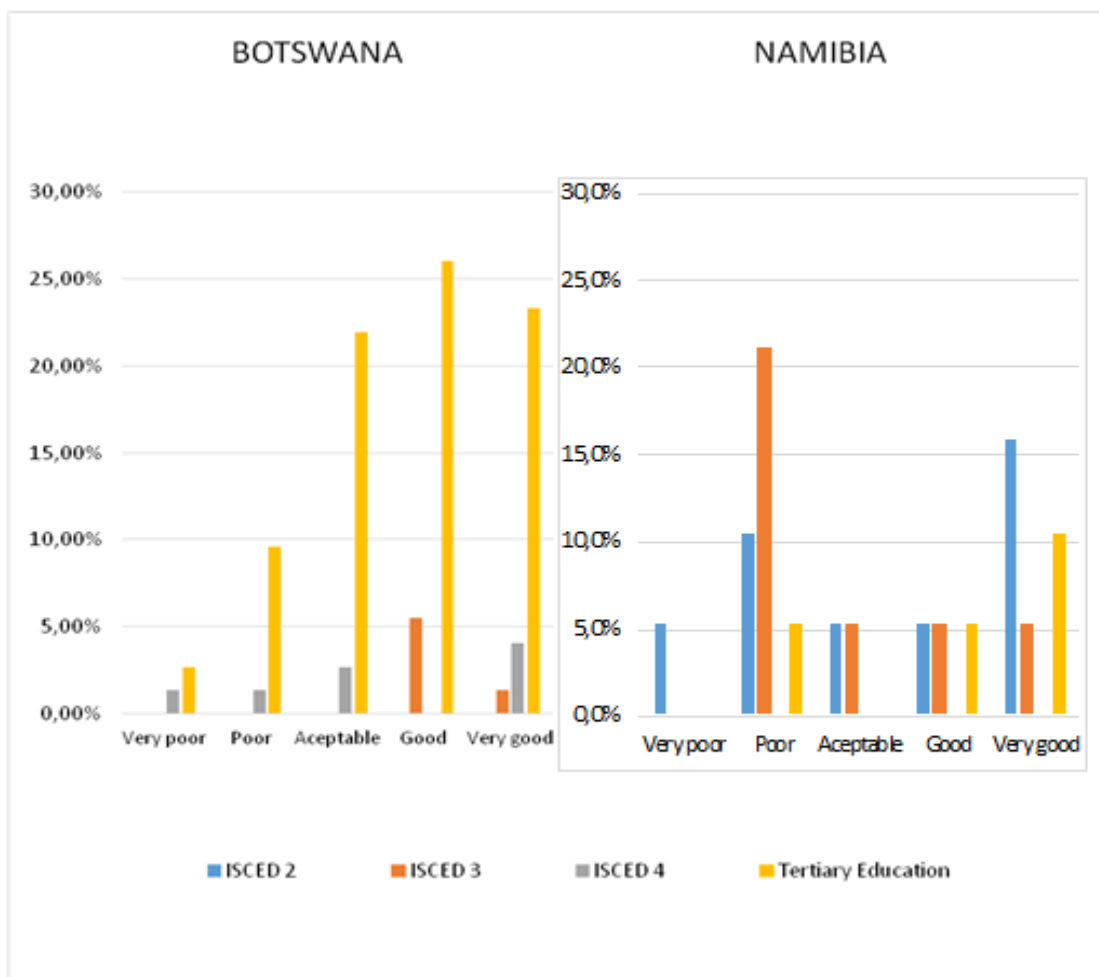
Source: Own elaboration from collected data (questionnaires).

From the group of participants that consider that their balance of life will be “very poor” (4.3%) 1.1% of these have an ISCED 2 level, another 1.1% have an ISCED 4, and 2.2% have attained tertiary education. Of those who expect to have a “poor” balance of life (16.3%) 2.2% have ISCED 2, 4.3% have ISCED 3, 1.1% ISCED 4 and 8.7% tertiary education. Of the group of subjects that consider to have an acceptable balance of life, 1.1% have an ISCED 2, a 1.1% ISCED 3, other 2.2% ISCED 4 and 17.4% tertiary education. Moreover, of those who expect to have a good life balance (28.3%), 1.1% of those have ISCED level 2, another 5.4% ISCED 3 and

21.7% tertiary education; Finally those who expect to have a very good balance of life (20.7%), 3.3% of those have an ISCED 2, a 2.2% ISCED 3, 3.3% ISCED 4 and 20.7% tertiary education.

In graph below it is noted the differences between countries in relation to participants life balance once the TVET program is finished according to their highest level of educational attainment obtained.

**Graph 105: Expected balance of life after finalization of TVET program according to the highest level of education attainment by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana as it has been mentioned before, there is a 83.6% of participants in Botswana who have attained tertiary education, of these subjects there are 23.3% who consider

that their balance of life once the TVET program is completed will be very good, 26% good, 21.9% acceptable, 9.6% poor and 2.7% very poor. There is a 9.6% of the total stake who have attained an ISCED level 4, of whom 4.1% consider that they will have a very good balance situation, 2.7% acceptable, and 1.4% either poor or very poor. To conclude there is a 6.8% of people who have attained an ISCED level 3 in Botswana, from this group, there is a 1.4% who expect to have a very good balance of life after completion of the TVET program and 5.5% a good one.

In Namibia of those who have obtained a tertiary education level, representing the 21.1% of the total sample, there is a 10.5% who expect that their balance of life after finalization of the TVET program is very good and 5.3% either good or poor. There is also a 36.8% of participants who have attained an ISCED 3, of whom 5.3% of them consider that will have a much better balance of life 5.3%, good or acceptable in the same extend, there is also a 21.1% who consider that their future balance of life will be poorer. To conclude there is a 42.1% of participants who attained an ISCED level 2, of whom 15.8% expect to have a much better balance of life, 5.3% better, acceptable or much worse and 10.5% a poorer one.

- To report about the expected balance of life post TVET program and the main source of household income, there are counted 85 cases.

**Table 78: Balance of life after finalization of TVET program according to main source of household income in total**

Balance of life after finalization of tvet program		Main Source of Household Income								Total
		Wages and Salaries	Income from self-employment (excluding farming)	Farming	Pensions	Unemployment Benefit	Any other social benefit or grants	Income from investment, savings	Other sources	
Very good	Frequency	0	1	0	2	0	0	0	0	3
	Percentage	0,0%	1,2%	0,0%	2,4%	0,0%	0,0%	0,0%	0,0%	3,5%
Poor	Frequency	5	3	3	3	0	0	0	0	14
	Percentage	5,9%	3,5%	3,5%	3,5%	0,0%	0,0%	0,0%	0,0%	16,5%
Acceptable	Frequency	7	4	1	1	3	0	1	2	19
	Percentage	8,2%	4,7%	1,2%	1,2%	3,5%	0,0%	1,2%	2,4%	22,4%
Good	Frequency	14	3	1	2	2	1	0	1	24
	Percentage	16,5%	3,5%	1,2%	2,4%	2,4%	1,2%	0,0%	1,2%	28,2%
Very good	Frequency	9	2	1	2	6	0	0	5	25
	Percentage	10,6%	2,4%	1,2%	2,4%	7,1%	0,0%	0,0%	5,9%	29,4%
Total	Frequency	35	13	6	10	11	1	1	8	85
	Percentage	41,2%	15,3%	7,1%	11,8%	12,9%	1,2%	1,2%	9,4%	100%

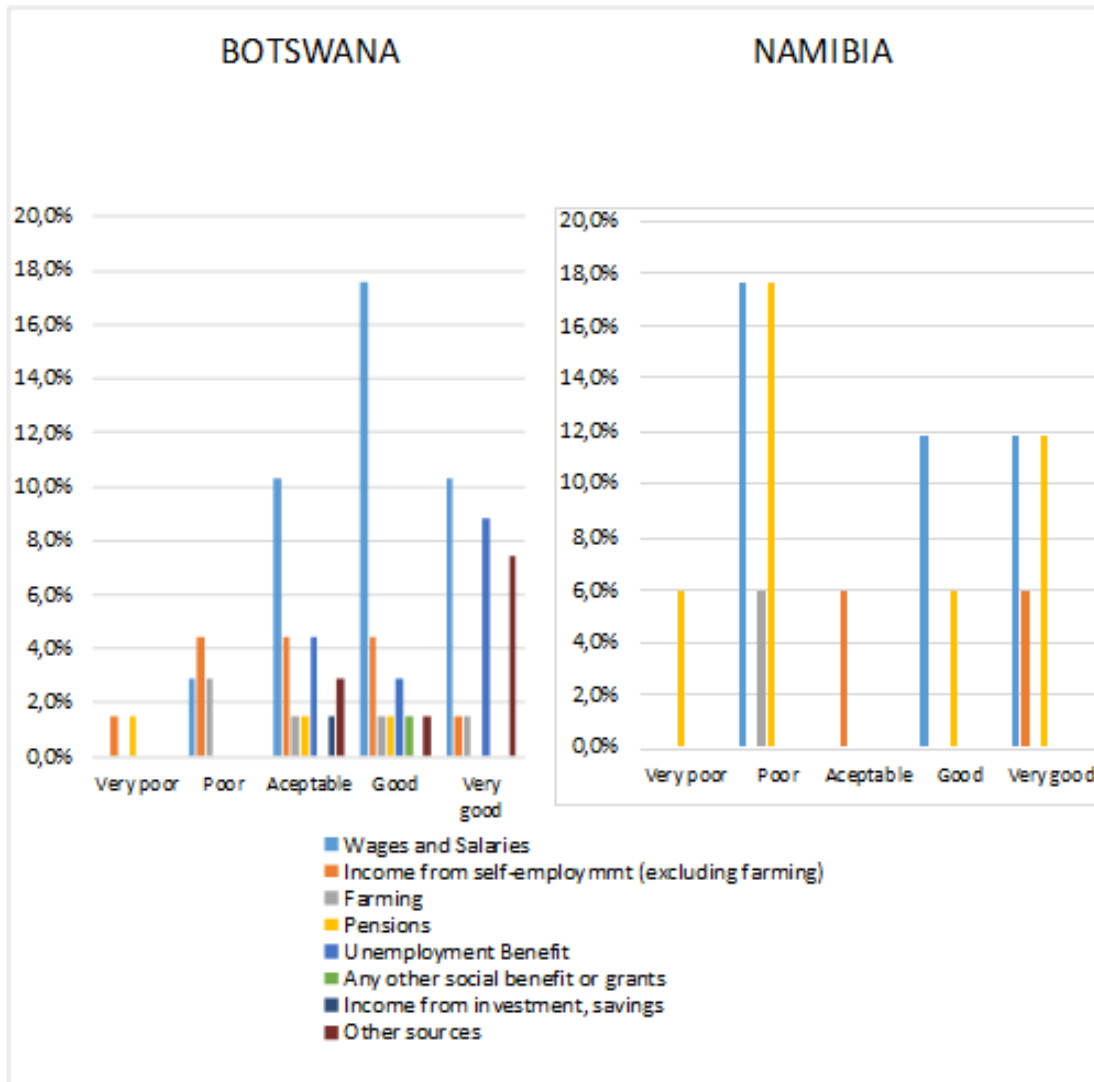
Source: Own elaboration from collected data (questionnaires).

From the group of people who consider that will have a “very poor” balance of life (3.5%) 1.2% have financed the program using their income from self-employment excluding farming, 2.4% using their pension funds. Of those subjects who expect a “poor” balance of life (16.5%), 5.9% have financed their participation on the program, from their wages/salaries, 3.5% from self-employment excluding farming, another 3.5% from farming, and 3.5% through pensions. There is a 22.4% of the total sample that consider that their future balance of life will be “acceptable”, of these, there is a 8.2% who have financed their participation using their wages

and salaries, 4% from their salaries as self-employers excluding farming, 1.2% from incomes from farming activities, another 1.2% from pension funds, 3.5% from unemployment benefits, 1.2% from investments, savings, etc. and a 2.4% from other sources of income. Of those who expect to have a “good” balance of life (28.2%) 16.5% have financed their participation on the TVET program using their own salaries or wages, 3.5% from income coming from self-employment without regard to farming, 1.2% from farming, 1.4% from pension, another 2.4% from unemployment benefits, 1.2% from social benefits or grants and 1.2% from other sources of income; and finally those subjects who project a “very good” balance of life (29.4%), 10.6% Of those have financed their studies from wages or salaries, 2.4% from self-employment excluding farming, 1.2% from farming, 2.4 % from pension, 7.1% from unemployment benefits, and 5.9% from other sources of income.

In the graph below it is shown a comparative analysis on the relation between the perceived balance of life after the finalization of the TVET program and the main source of household income.

**Graph 106: Balance of life after completing TVET program according to the main source of household income by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, most of the subjects participating on the TVET program have financed their participation using their salaries or wages to cover the cost, representing a 41.2% of the total stake, from this group, there is a 10.3% of the participants who expect to have a very good balance of life after completing the TVET course, 17.6% good, 10.3% acceptable and 2.9% consider that it will be poor. There is also a 16.2% of people whose main source of household income comes from the income generated from self-employment excluding farming, of whom



1.5% expect to have a very good balance of life or very poor, 4.4% either good, acceptable or poor. As for the people in Namibia who obtain their income from farming, representing a 7.4% of total, 2.9% expect to have a poor balance of life after the program completion, meanwhile 1.5% of the rest either think that will be acceptable, good or very good in equal basis. There is also a 4.4% of participants whose main source of household income comes from pensions, of whom 1.5% of them expect to have either very poor, acceptable or good future balance of life in equal basis, as for 1.5% each. In addition to this, there is a high number of people in Namibia whose main source of household income comes from unemployment benefits 16.2%, people from this group expect to have very good life balance (8.8%), good (2.9%) or acceptable (4.4%). To conclude there is also 1.5% of total stake whose main source of household income either come from other social benefits or income from investments, all people from the first group expect to have a good balance of life and from the second group an acceptable balance of life.

In Namibia, the most frequent source of income from participants in this country correspond to salaries or wages and pensions with a 41.2% of the total share for each of them. From the first group, people whose main income comes from salaries, there is a 11.8% of them who expect that their balance of life after finalizing the TVET program will be very good or good and there is 17.2% who think will be poor. From the second group, those persons whose main source of income comes from pensions, there is a 11.8% who consider that their future balance of life will be very good, 5.9% good, in contrary for this group there is a 17.6% who do think will be poor or 5.9% very poor. In addition to this there is a 11.8% of the total share whose main source of household income comes from self-employment excluding farming, of whom 5.9% consider their future expectations will be very good or acceptable. To conclude there is a 5.9% of people whose income comes from farming, all subjects from this group consider that their life balance will be poorer.

- To report about the expected life balance once the TVET program was successfully finalized, according to their present economic status, we have 86 cases.

**Table 79: Balance of life after finalization of TVET program according to the perception of living standards in total**

		Perception of living standard with Household Income				
Balance of life after finalization of tvet program		Living comfortably on present income	Coping on present income	Finding it difficult on present income	Finding it very difficult on present income	Total
		Frequency	0	1	1	
Very poor	Percentage	0,0%	1,2%	1,2%	1,2%	3,5%
	Frequency	1	3	4	6	14
Poor	Percentage	1,2%	3,5%	4,7%	7,0%	16,3%
	Frequency	0	3	14	3	20
Acceptable	Percentage	0,0%	3,5%	16,3%	3,5%	23,3%
	Frequency	1	7	8	9	25
Good	Percentage	1,2%	8,1%	9,3%	10,5%	29,1%
	Frequency	4	3	3	14	24
Very good	Percentage	4,7%	3,5%	3,5%	16,3%	27,9%
	Frequency	6	17	30	33	86
Total	Percentage	7,0%	19,8%	34,9%	38,4%	100%

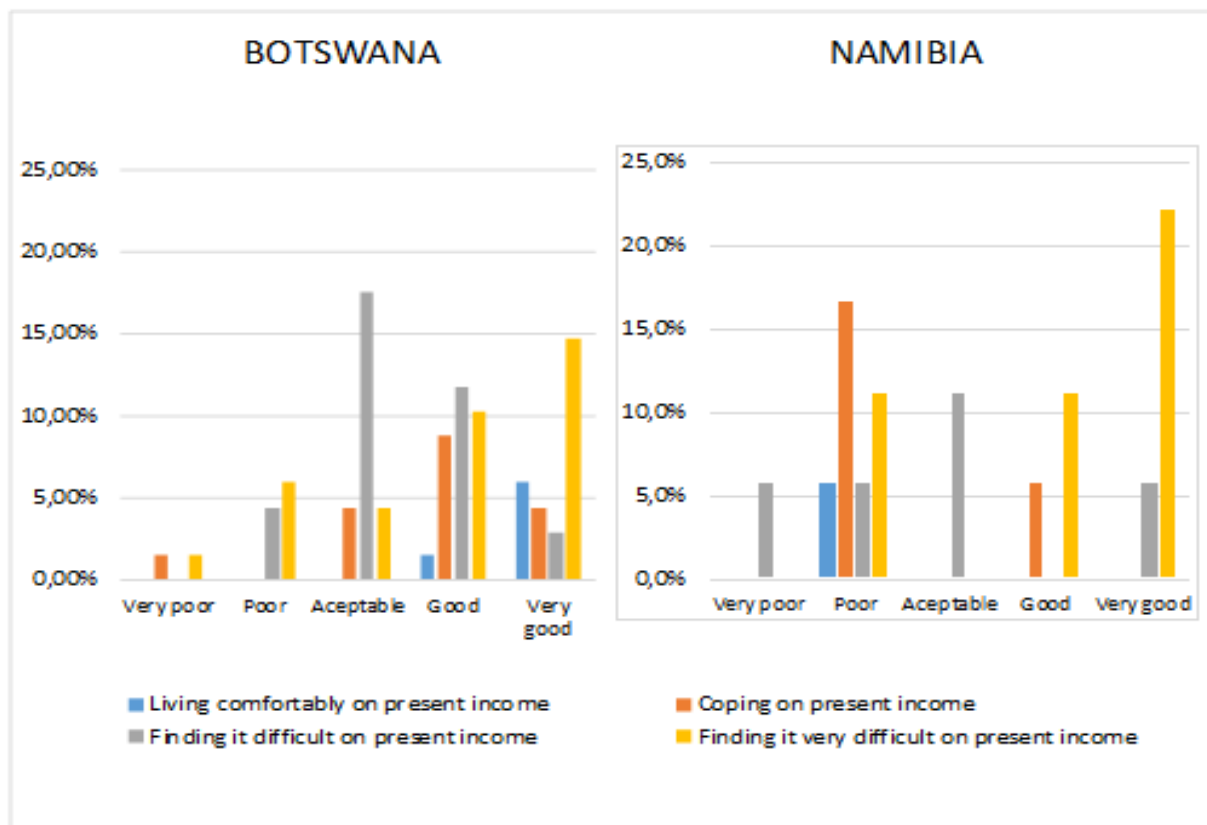
Source: Own elaboration from collected data (questionnaires).

There is a small group of subjects who consider that the future life balance will be “very poor” corresponding to the 3.5% of total stake, of those 1.2% consider that they are coping with present income, another 1.2% think that they are living with difficulties, 1.2% with many difficulties. Of those subjects who report a “poor” balance of life (16.3%), 1.2% perceive that they are living comfortably with household income, 3.5% they are coping with present income, 4.7% believe that are living with difficulties and 7% are living with many difficulties. There is a 23.3% of the total participants that consider that will have an “acceptable” balance of life, of those 3.5% consider that are coping with present income, 16.3% that are living with difficulties and 3.5% living with many difficulties. In addition to this, there is a group of subjects who consider that they will have a “good” life balance (29.1%), of these 1.2% perceive to live

comfortably, 8.1% consider that are coping with present income, meanwhile 9.3% of people from this group believe to live with difficulties and 10.5% with many difficulties; Finally, there is a 27.9% of the total stake who expect to have a “very good” balance of life, of these 4.7% consider to live comfortably, 3.5% are coping with present income, another 3.5% are living with difficulties and 16.3% are living with many difficulties.

A comparative graph is shown below where it is noted the relation between the expectations about participant’s life balance once the TVET program has finalized and the perception on their living standards, in both countries.

**Graph 107: Balance of life after finalization of TVET program according to the perception of living standards by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana of those who claim to live comfortably on present income, representing 7.4% of total participants there is a 5.9% who expect to have a very good live balance and 4.5% a good one. There is a 19.1% of subjects who are coping with present income, of these there are 4.4% who expect a good live balance, 8.8% a good one and 1.5% whose expectations are very poor. In addition to what we have mentioned, there is a 36.8% of people who find it difficult and very difficult on present income. Of those people who find it very difficult, there is a 14.7% whose expectations for their future live balance are very good, 10.3% good, 4.4% acceptable, 5.9% poor and 1.5% very poor. As for the ones who find it difficult (36.8%) there is a 2.9% who expect to have a very good life balance, 11.8% good, 17.6% acceptable and 4.4% poor.

In Namibia, the smallest frequency corresponds to those participants who consider to live comfortably with present income, representing a 5.6% of the total sample, all of this subjects consider that their future life balance once the program is completed will be poor. There is a 22.2% of the total sample, who consider that are coping with present income, of whom 16.7% expect to have a very poor life balance, and 5.6% a good one. In addition to this, there is a 27.8% of participants who find it difficult on present income, of whom 5.6% expect to have either a very poor, poor or very good life balance. To conclude, the majority of participants 44.4% of all of them consider that they are living with many difficulties to cope with present income, most of subjects in this group expect that their future life balance will improve substantially (a lot: 22.2%) and 11.1% consider good or poor expectations for their future.

- To report about the expected life balance after the finalization of the TVET program according to how was financed the participation on the program, there is 77 cases.

**Table 80: Balance of life after finalization of TVET program according to different ways in which was financed the participation on the TVET program**

		How was financed the participation on the TVET Program					
Balance of life after finalization of tvet program		Own Funding	Enterprise / Employer Funding	Public Funding	Loan	Other	Total
	Very poor	Frequency	2	0	2	0	0
Percentage		2,6%	0,0%	2,6%	0,0%	0,0%	5,2%
Poor	Frequency	4	0	4	0	2	10
	Percentage	5,2%	0,0%	5,2%	0,0%	2,6%	13,0%
Acceptable	Frequency	7	1	9	0	1	18
	Percentage	9,1%	1,3%	11,7%	0,0%	1,3%	23,4%
Good	Frequency	14	1	7	1	2	25
	Percentage	18,2%	1,3%	9,1%	1,3%	2,6%	32,5%
Very good	Frequency	11	2	6	1	0	20
	Percentage	14,3%	2,6%	7,8%	1,3%	0,0%	26,0%
Total	Frequency	38	4	28	2	5	77
	Percentage	49,4%	5,2%	36,4%	2,6%	6,5%	100%

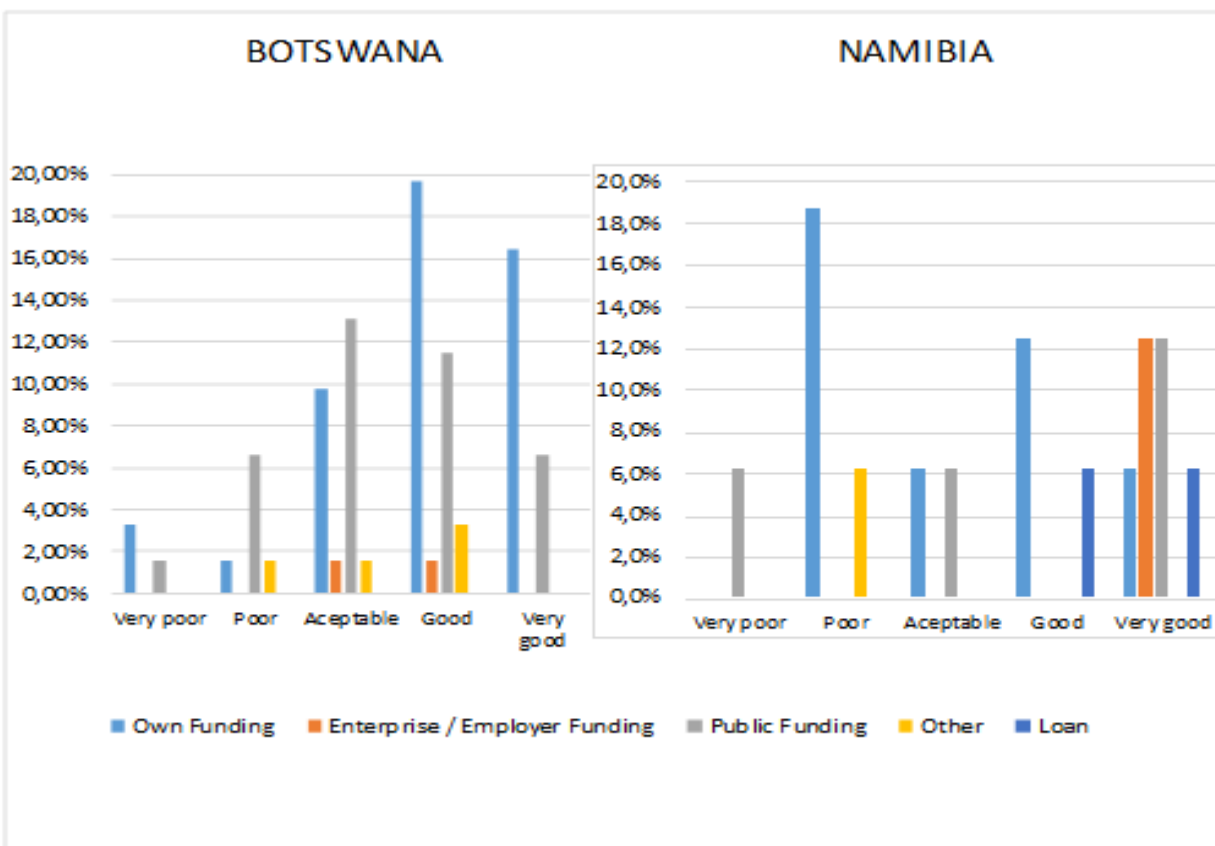
Source: Own elaboration from collected data (questionnaires).

From the group of subjects that expect a “very poor” balance of life (5.2% of total) 2.6% have financed its participation using their own source of income, another 2.6% with the financial support received from public funds. From those subjects who do a “poor” balance of life (13.0%) 5.2% have used their own sources, another 5.2% have used public funds, 1.6% have used other source of funding. Of those who expect to have an “acceptable” balance of life (23.4%) 9.1% used their own financial sources, 1.3% got the financial support from their companies in which they work, 11.7% got public funds and 1.3% used other financial sources. Moreover, of those who expect a “good” life balance (32.5%), 18.2% of those funded the

program using their own economic sources, 1.3% got the support of the company from which they are employed, 9.1% with the help of public funds, 1.3% got funds from a loan and 2.6% using another source of funding. From those who expect to have a “very good” balance of life (26%), 14.3% of those have financed their participation autonomously, 2.6% with the financial support of the company for which they work, 7.8% with the help of public funds and 1.3% by getting a loan.

In the graph below it is shown the difference among countries within the relation between the expected balance of life after the TVET program completion and the different ways in which the participants have financed their participation on the TVET program.

**Graph 108: Balance of life after finalization of the TVET program according to the different ways in which has been financed the participation on the program by country**



Source: Own elaboration from collected data (questionnaires).

As it is shown above most of subjects in Botswana have finance the cost of the program using their own funding 50.8%, of these ones 16.4% consider that their expectations would meet

a very good balance of life, 19.7% a good one, 9.8% acceptable, 1.6% poor and 3.3% very poor. There is also a 39.3% of participants who have finance their participation on the program using public funding, of whom 6.6% expect to have a very good balance of life, 11.5% good, 13.1% acceptable, 6.6% poor and 1.6% very poor. In addition to this, there is a 3.3% of subject who cover the cost using the money obtained from their enterprises or employers, of whom 1.6% expect to have either an acceptable one or a good life balance. to conclude there is another 6.6% of people who have used other financial ways to cover the cost, of whom 3.3% expect to have a good life balance in the future.

For Namibia, most of participants in Namibia, and it happens the same in Botswana have financed their participation on the program using their own funding (43.8%) of whom 6.2% expect to have a very good life balance after finalizing the TVET program, 12.5% good, 6.2% acceptable and 18.8% are more skeptical and consider that their life balance will be poor. There is also a 12.5% of subjects who have cover the cost with the support of the employer or enterprise all of them consider that their future life balance will be very good. As for the people who have obtained public funding to cover the costs of the program, they represent the 25% of the stake, of whom 12.5% have very good expectations, 6.2% acceptable or very poor. To conclude there is a 12.5% of individuals who have ask for loans to cover the cost, of whom 6.2% expect to have either a very good or a good life balance of life.

- To report on the expected life balance after the finalization of the TVET program in relation to what extend the participants think about the relevance of the TVET program, there are 84 cases.

**Table 81: Balance of life after finalization of the TVET program according its relevance in total**

Balance of life after finalization of tvet program		Relevance of the TVET program					Total
		Not relevant at all	Slightly relevant	Relevant	Highly relevant	Extremely relevant	
Very poor	Frequency	2	1	1	0	0	4
	Percentage	2,4%	1,2%	1,2%	0,0%	0,0%	4,8%
Poor	Frequency	4	2	3	1	3	13
	Percentage	4,8%	2,4%	3,6%	1,2%	3,6%	15,5%
Acceptable	Frequency	0	2	11	3	1	17
	Percentage	0,0%	2,4%	13,1%	3,6%	1,2%	20,2%
Good	Frequency	1	1	14	5	5	26
	Percentage	1,2%	1,2%	16,7%	6,0%	6,0%	31,0%
Very good	Frequency	0	0	5	5	14	24
	Percentage	0,0%	0,0%	6,0%	6,0%	16,7%	28,6%
Total	Frequency	7	6	34	14	23	84
	Percentage	8,3%	7,1%	40,5%	16,7%	27,4%	100%

Source: Own elaboration from collected data (questionnaires).

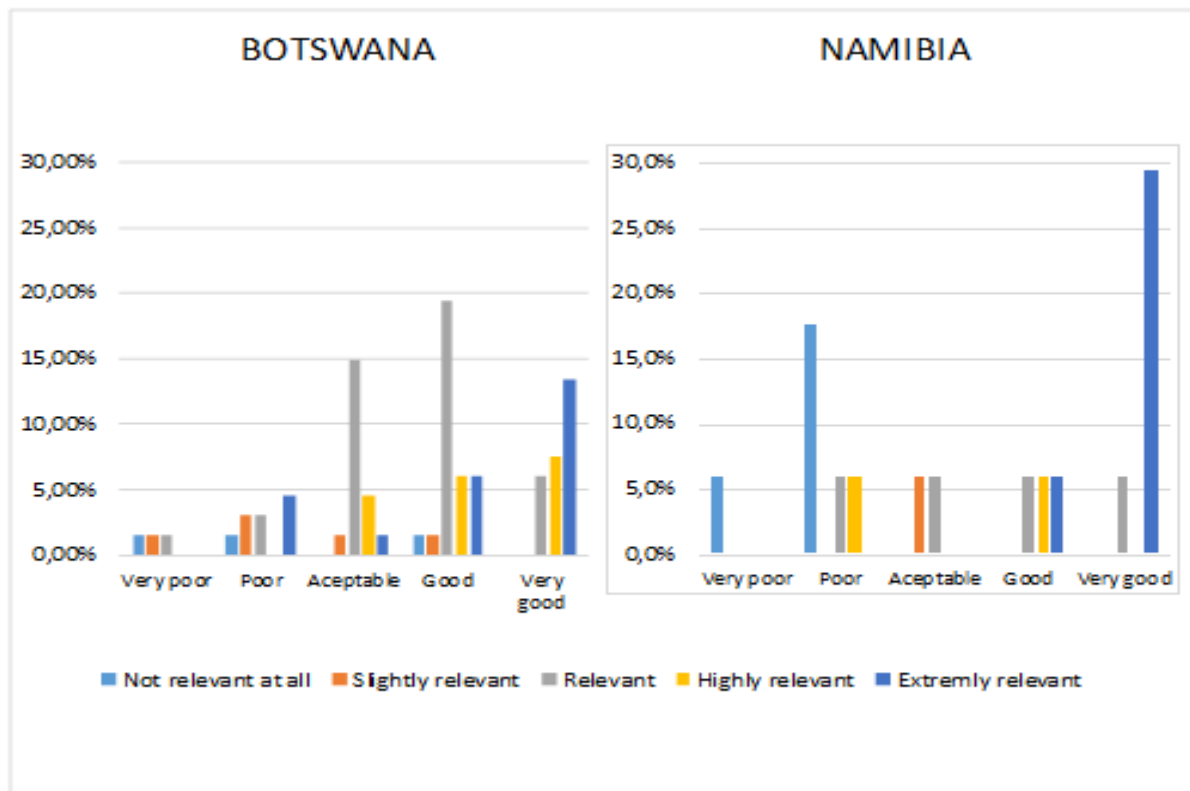
The first group of people, represents the subjects who expect to have a “very poor” balance of life (4.8%), of those 2.4% consider that their participation on the program is not relevant at all, 1.2% slightly relevant, 1.2% relevant. Of those who expect to have a “poor” balance of life (15.5%) 4.8% consider that their participation in the program is not relevant at all, 2.4% slightly relevant, 3.6% relevant, 1.2% highly relevant, and 3.6% extremely relevant. From the group of participants that expect an “acceptable” balance of life (20.2%) a 2.4% consider slightly relevant their participation in the program, 13.1% relevant, 3.6% highly relevant and 1.2% extremely relevant.



Moreover, those who expect to have a “good” life balance represent the 31.0% of the total sample, of those, 1.2% considered irrelevant their participation in the program, another 1.2% slightly relevant, 16.7% relevant, 6% highly relevant and other 6% extremely relevant; and of those who expect to have a “very good” balance of life (28.6%), a 6% consider their participation on the program as relevant, another 6% as highly relevant important and 16.7% as extremely relevant.

The graph below shows the differences between countries on the perceived relevance of participating in the program by participants and the expected balance once the TVET is completed by students.

**Graph 109: Balance of life prior to the finalization of the program according to its relevance by country**



Source: Own elaboration from collected data (questionnaires).

In Botswana, there is a 25.4% of total stake who consider that the TVET program is extremely relevant, of whom 12.4% expect to have a very good balance of life once the TVET program is finished, 6% good, 1.5% acceptable and 4.5% poorer. There is also a 17.9% of participants who consider that the program is highly relevant, of whom 7.5% expect to have a very good balance of life, 6% a good one and 4.5% acceptable. In addition to this, there is a 44.8% of people that states that participating on the TVET program is relevant in their lives, from this group, there is 6% of subjects who expect a very good life balance, 19.4% good balance, 14.9% acceptable, 3% poor and 1.5% very poor. There is also a 7.5% of participants who consider that the program is slightly relevant of whom 1.5% expect to have a good or acceptable life balance and 3% a poor one. To conclude there is a 4.5% of the whole stake who consider that the TVET program is not relevant at all, of whom 1.5% expect either to have a very poor, poor or good life balance.

In Namibia 35.3% of the total stake consider that the participation on the TVET program is extremely relevant, of whom 29.4% expect to have a very good, 5.9% good balance of life. There is a 11.8% of people who consider that the program is highly relevant, of whom 5.9% expect to have a poor or good life balance. 23.5% of people consider that the program is relevant, of whom 5.9% of participants either expect very good, good, acceptable or poor future life balance. Moreover, there is a 5.9% that thinks the program is slightly relevant, all of this people expect to have an acceptable life balance once the program ends. To conclude there is a 23.5% of the total stake who consider that the program is not relevant at all, from this group there is a 5.9% of people who expect a very poor future, or 17.6% poor one.

### **9.1.2.3. Key effects produced by the implementation of the BEAR program**

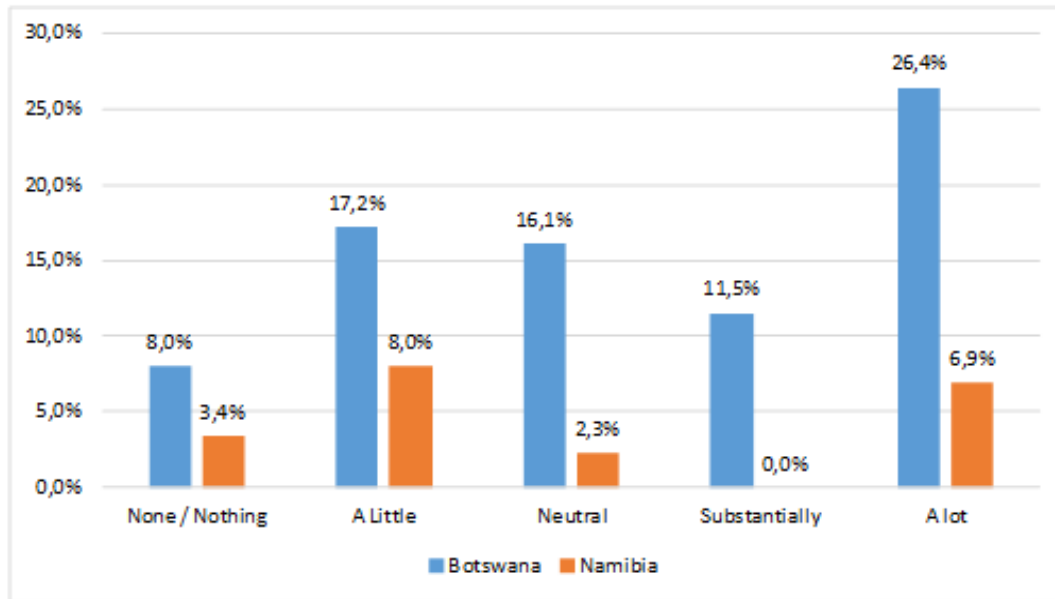
In addition to the above analysis, this research study have introduce a complementary assessment on key factors that could show us a broad overview about some of the main effects produced by the implementation of the BEAR program in both countries. Nevertheless, as mention before, this final element of this chapter is complementary to the previous analysis that have been conducted and described in detail.

- **Expected improvement on future economic situation**

The expected improvement on the future economic situation of participants by country. Meanwhile in Botswana the highest frequency corresponds to the participants expectations related to a significant improvement on the future economic expectations (a lot: 26.4%), in Namibia the highest frequency corresponds to the participants who have are quite skeptical about the improvement of their future economic expectation (little: 8%). Moreover, it is clear that participants in Botswana are more optimistic in their expectations, as 11.5% of the total stake in the country consider that their future economic expectations will improve substantially, at the same time there is a 16.1% who remain neutral on their thoughts and 17.2% who states that there will be a little improvement in their future economic expectations, to conclude there is an 8% of people who do not have any improvement expectations on their future economic situation.

In Namibia, as mentioned above, participants are more skeptical about the future improvement on their economic situation based on the effects of having participated on the TVET program. Beside the 8% of participants who consider that the future improvement will be little, there is a 3.4% of the total stake in the country who do not have any improvement expectation, another 2.3% remain neutral on their answer and 6.9% consider that the economic prospects will improve substantially (a lot).

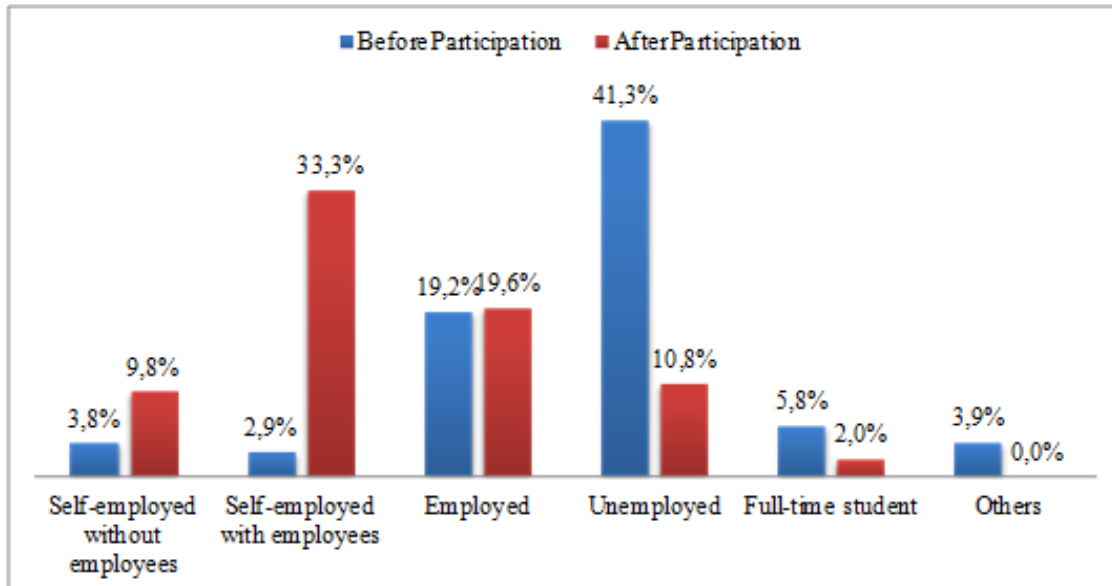
**Graph 110: Expected improvement on future economic situation by country (after completing the TVET program)**



Source: Own elaboration from collected data (questionnaires)

- **Expected improvement on getting new professional opportunities**

As for the expected future professional opportunities, it is found that before joining the BEAR program most of students' employment expectations were to be unemployed (41.3% of the total sample) or to be employed (19.2%), the perception changed and participant's perceptions on their future professional expectations once they started the TVET program shifted as most of them consider that they will be self-employed with employees (33.3%) or employed (19.6%). Therefore it is shown in the graph below that the BEAR program has brought hope and an optimistic view of their future and it enhanced the entrepreneurship skills of the BEAR program students.

**Graph 111: Participant's employment expectations before and after the TVET program**

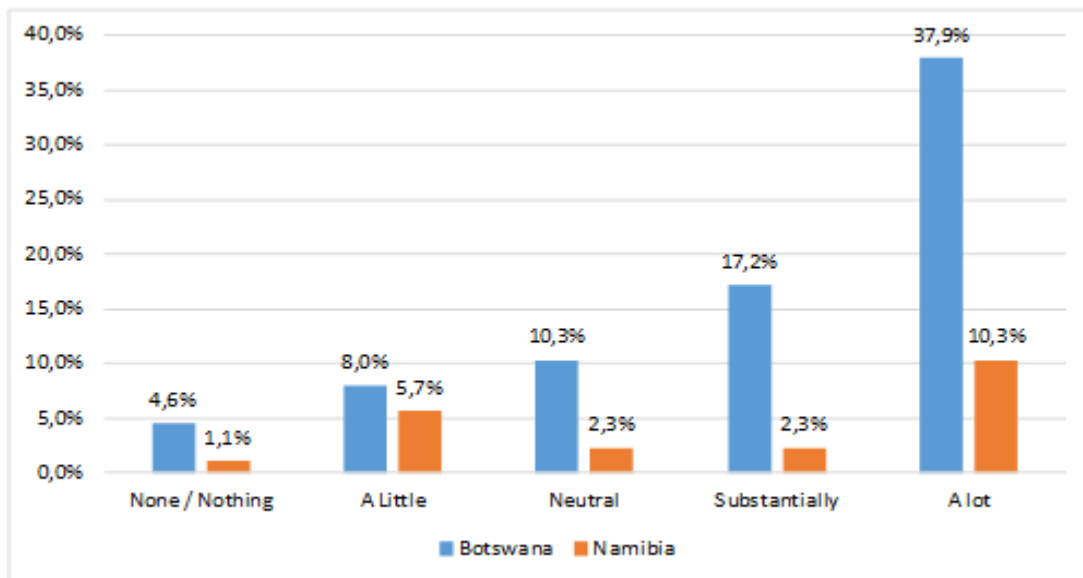
Source: Own source based on collected data (questionnaires).

Moreover, if the analysis is done by country there is 32.5% of the stake consider that the future professional opportunities improve a lot, 25.3% consider that improve substantially, 19.3% have a neutral opinion (do not consider that there is any change) 14.5% thinks that there is a little change on the future expectations and 8.4% think that there is none.

- **Participants perceptions on the improvement of their own professional success.**

- Finally, the expectations that the participants in the BEAR program have in order to achieve their own perceived professional success (according to their own goals) in their careers show that most of them consider that participating on the program has improve their expectations a lot 48.3%, 19.5% substantially, 12.6% neutrally, 13.8% a little and 5.7% think that it haven't affect it at all.

**Graph 112: Changes on participants' expectations about their own professional success by country**



Source: Own elaboration from collected data (questionnaires).

In the above graph it is shown the participant's perception in both countries about the expected professional success once they finalize the TVET program. In this case, the highest frequency corresponds to the same category of expectations in both countries, participants in Botswana and Namibia consider mostly that they professional success will improve a lot once they complete the TVET program, representing a 37.9% of the total sample in Botswana and 10.3% in Namibia. Moreover, there is a 17.2% of participants in Botswana who consider that there will be a substantial improvement on their professional success. Beside that a 10.3% of subjects in Botswana are neutral on this perception, an 8% thinks that they will have a little improvement on their professional success, and 4.6% will be no professional success at all.

In relation to the expectations from the Namibian participants, beside the highest national frequency there is a 5.7% of subjects who expect a little professional success, in addition to this there is a 2.3% of participants who consider either a substantial professional success or hold a neutral position, and finally a 1.1% who think there will be no success.

As it has been done with other dependent variables, the scores of these three different types of future expectations have been added, as a single and common score, and it has been applied the *t* Student test in order to compare and analyze the differences among countries and gender.

**Table 82: Impact of the TVET program in total by gender and country of origin**

		N	M	SD	SE	<i>T</i>	gl.	Sig.	Confidence Intervals		<i>g'</i>		
										Inferior	Superior		
Impact of the TVET program	Country of Origin	Botswana	64	10,96	3,54	,44	,836	21,80	,412	-1,43	3,37	,00	
		Namibia	17	10,00	4,41	1,07							
	Gender		Female	60	10,767	3,80	,49	,005	79	,996	-1,89	1,90	,00
			Male	21	10,762	3,63	,79						

Source: Own elaboration from collected data (questionnaires).

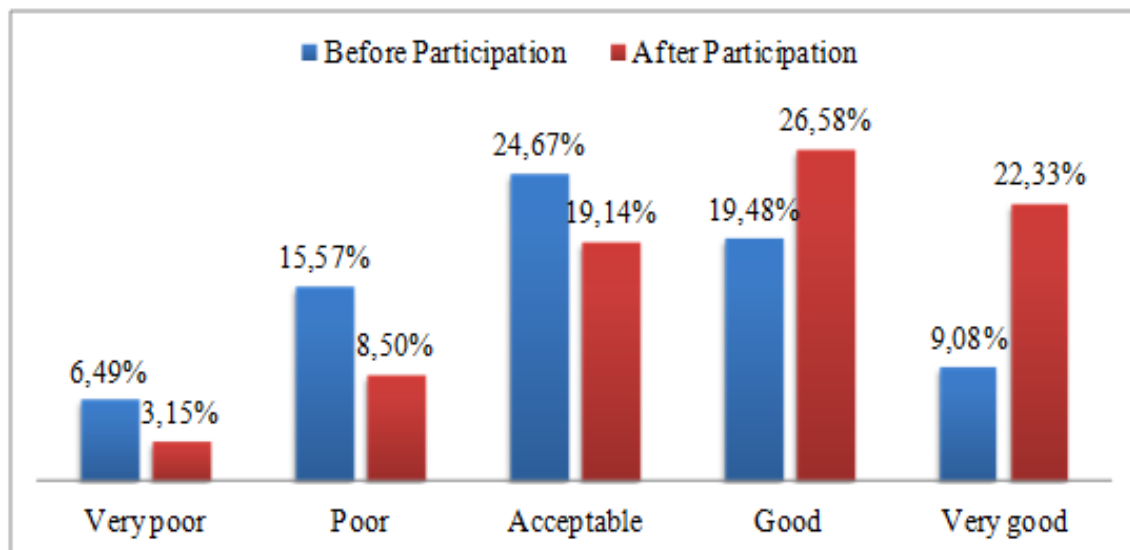
When comparing countries we found that participants from Botswana ( $M=10$ ,  $SD=3.54$ ) perceive a higher level of impact from the participation of the program (higher future expectations) than participants from Namibia ( $M= 10.00$ ,  $SD= 4.41$ ) However, this difference is not statistically significant  $t_{(21,80)}= 0.836$ ;  $p = 0.412$ ;  $g' = 0.00$

As regard for the comparison among gender, women ( $M= 10.767$ ,  $SD= 3.63$ ) report higher scores on the impact of the program than men ( $M=10.762$ ;  $SD = 3.63$ ) this difference is not statistically significant  $t_{(79)}=0,005$ ;  $p=0,996$ ;  $g' = 0,00$ .

- **Improvement on the Socio Economic Status**

The final graph shows clearly the change on the perception about the social economic status (SES) before and after the participation on the TVET program. Before joining the BEAR project, participants consider that their social economic status was mainly acceptable or on a lower degree good; once the participants joined the TVET program they changed their perception as they expected that their social economic status after participating in the BEAR would be good or very good.

**Graph 113: Change of perception about Social Economic Status (SES) before and after the participation in the TVET program**



Source: Own elaboration based on collected data (questionnaires)



### 9.1.2 Qualitative Analysis

This part of the research is focused on the qualitative analysis of the interviews. The structure of the semi-interview is divided in several parts; the first part includes questions related to socio-demographic variables in order to understand the characteristics of the interviewees participating. The second part includes the analysis of the different social impact dimensions that UNESCO's TVET Program has had in both countries at different levels in order to determine the existing relation between the social impact and the pressures of implementing mass education. The third and final part focuses on the one hand on the influence of the UNESCO and its role as international organization on the development of national TVET systems, and on the other hand, on the existing relation between development of national TVET education systems and the pressures of implementing ways of mass education worldwide. The focus of the interview structure is linked with the research problem, and will be crucial to achieve the research goals and therefore to refute the research hypothesis.

As mentioned before, the first part begins with the description of some socio-demographic variables, including a description of the person's background: position, sex, nationality, academic and professional background, current position and the description about the involvement and main role on the development at UNESCO BEAR project. The second part, focused on the social impact analysis related to the development of new TVET systems at national Level, include the following questions: Do you think the implementation of the project was needed? Why?; Do you think UNESCO TVET project is a successful project? Why?; Which are the main goals achieved by the project? How do you think UNESCO project benefits: The country development process in general terms?; The national education system?; The TVET system in particular?; The life of civil society?; What are the changes in the curriculum process (or implementation process) made to the "system" of TVET education?; How this experience in the project affects future development of other sectors?; Which have been the main barriers faced during the implementation of the project?; What strategies undertaken by UNESCO do you think have been essential for the success of the project?; Would you tell us any suggestions to make the project better if you have any?. The third part is divided into two different areas, the

first one wants to know if there is any existing relation between development of national TVET education systems and the pressures of implementing ways of mass education worldwide, it includes the following questions: Do you think that there is a relation among the development of national education policies from the international organizations and the pressures on developing ways of mass education?; Do you think this project aims to improve the quality of the education system or it follows the pressure for the implementation of mass education processes?; The national government has enough capacity to develop the national TVET system by its own, without external support with greater success?; Do you think the goals achieved by the project could be replicated and achieved by the national experts once UNESCO stop financing the project?; Do you think the national state could developed their own systems and policies with greater success? The second area aims to identify which is UNESCO's role as an international organization on the development of national TVET system and the questions associated to it are: Which role UNESCO has had on the development of the national TVET system?; Which role do you think UNESCO or any other international organization should have regarding the development on national education policies?; What UNESCO can do to contribute on the development of national capacities related to TVET?; Which strengths and weaknesses have UNESCO as international organization in the development of national TVET systems?

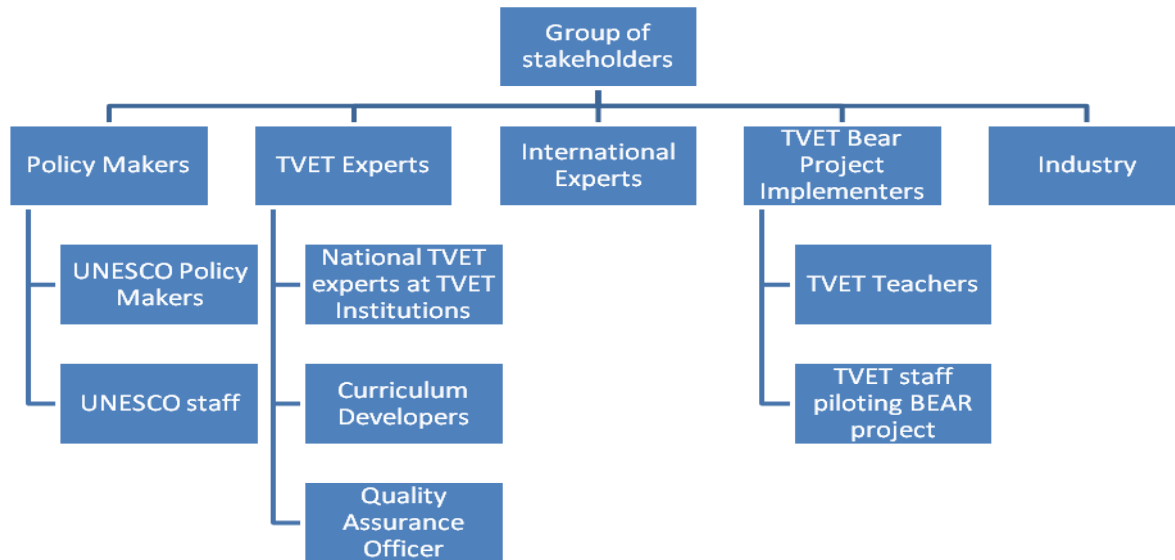
In total there have been 28 persons interviewed. 17 in Botswana (4 of them with interviews and 13 through a focus group) and 11 in Namibia (9 interviews and 2 through focus groups). The selection of the interviewees was based on a clear criteria (a) involvement on the BEAR Project (b) Expertise in TVET and (c) professional involvement at UNESCO. Therefore the analysis of the interviews has covered a broad and wide spectrum of the stakeholders that provide the whole range of perspectives needed to do the required holistic analysis about the development of national TVET systems through the implementation of the BEAR project in Botswana and Namibia. The interviews were conducted during the research field tryp that took place from the 15th to the 24th of July 2015 (see Annex 12: Field trip interview schedule in Botswana and Namibia. The transcriptions for all the semi structured-interviews and focus groups are included within Annex 13: Interviews transcriptions. and Annex 14: Focus groups transcriptions respectively.

**Table 83: Selection criteria for the interviewees**

Involvement within the BEAR Project implementation
Expertize in TVET
Professional Involvement at UNESCO

Source: Own elaboration.

The analysis will consider five different groups of representative stakeholders: (1) Policy makers this group includes (UNESCO policymakers and Staff); (2) TVET experts (national experts at TVET Institutions, curriculum developers, quality assurance officers, etc.); (3) International expertise (KRIVET Staff); (4) TVET BEAR project implementers (TVET teachers at technical and vocational institutions and piloting centers for BEAR project), (5) industry representative in the sectors of study; for both countries in Botswana and Namibia.

**Table 84: Group of stakeholders at UNESCO TVET project**

Source: Own elaboration.

The analysis will follow the structure of the interviews.

#### 9.1.2.1. Analysis on the Social impact related to the development of new TVET systems at national level

##### - Do you think the implementation of the project was needed? Why?

All the interviewees in both countries (Botswana and Namibia) agreed that the implementation of the Better Education for Africa's Rise project was needed in their respective countries. At the policy maker level the implementation of UNESCO's project responds to the request made by the SADC member states in 2008 and the approved proposed strategy at the 181<sup>st</sup> session of UNESCO's Executive Board, for supporting technical and vocational education and training (TVET) in 2010-2015.

According to the Chief Manager of the BEAR project at UNESCO HQ, the implementation of the BEAR project also responds to the willingness of the Korean government

that wanted to share their funds and expertise with some developing countries, by financing an extra budgetary UNESCO south-south cooperation project.

The south-south cooperation is a broad concept that refers to a wide range of collaborations between developing countries, and more specifically refers to cooperative activities between newly industrialized southern countries and other less developed nations of the south. The aim of this type of cooperation is to promote self-sufficiency among Southern nations and to strengthen economic ties among states (Corbin, 2006).

“The Korean government wanted to share their expertise in terms of economic and national development, because South Korea has a lot of experience which is not different from the reality that the BEAR developing countries are experiencing now. So the Korean government wants to help other countries by sharing knowledge and experience” (Chief Manager of the BEAR project at UNESCO HQ).

UNESCO representatives at the National Commission in both countries also agreed on the necessity of the project, they see TVET as key element to improve the national economic development in their countries. According to them the importance of the project implementation is based on the reinforcement of the existing capacities at the national TVET institutions and training authorities, and they perceived that the project could be a solution for the youth unemployment.

“The bear project, like any other project, considering where Namibia is today in terms of the development of its vocational education and training sector and our ongoing method to develop a TVET regime, is relevant to our country” (NATCOM, Namibia).

"Botswana has been struggling with youth unemployment, especially for the graduates who have just completed their degree and diploma program, there are a lot of them roaming the streets with no jobs and the BEAR project has brought us to realize that what we have been training so far was not really what it was needed by the labor market" (NATCOM, Botswana).

According to both UNESCO National Project Officers in Botswana and Namibia, the project was needed in both countries.

In Botswana the NPO consider that *“the project came at the right time”* (NPO, Botswana). The reason for this statement, which is also shared by the TVET experts from the national TVET institutions (DTVET; BQA; QAA) and also by TVET teacher at the technical colleges is that there was a general consensus on the des-prestige and dysfunctionality of the previous TVET program named BTEP (Botswana Technical Education Program Policy), the experts’ dislike the program, their perception about the BTEP was that it was not well developed, according to them:

“The TVET colleges were abandoning the system and they were buying franchised programs to fill the gaps in the provision. The reason for this was that the curriculum was very low level, it was over-complicated, including the validation approval process” (NPO, Botswana).

The previous program BTEP didn’t motivate the TVET trainers “Teachers didn’t feel that were challenged or motivated to deliver, so need a change to more professional courses” (NPO, Botswana).

Moreover, in Botswana the quality of the TVET provision was not well recognized by the industry and the society:

"Whenever there is a job opening, this job is filled by people from outside; this is a clear indication that what we are training is not what it was needed by industry"(NATCOM, Botswana).

The TVET teachers at Botswana technical colleges consider that the idea of the BEAR project was well conceived; “it helped identifying some existing gaps in the hospitality industry programs“ (Principal at the GTC, Botswana) It introduced a new approach of exchanging knowledge, ideas and expectations between the industry, the developers and the implementers; this interaction between all parties and stakeholders seems to be identified as an explanation of why the BEAR project was needed.

“In the past, the industry did not know what our expectations are and we did not know what they were expecting from us. The BEAR Project is bringing an exchange of ideas, exchange of knowledge.....There are these workshops or meetings in which we get to share ideas with the industry and with the implementers of the BEAR Project where the industry get to tell us what their expectations are and we also tell them what our expectations are in the colleges. This is what the BEAR Project has brought, which I think is a very good thing” (GTC BEAR Coordinator, Botswana).

In addition to that, in Botswana TVET experts mentioned that the importance of the BEAR project rely partly on support received at the national TVET institutions like DTVET, BQA and QAA; to review the existing TVET programs and trying to address the problems that they encountered there.

“Through the BEAR project somehow we tried to address the problems we have encountered in our programs. It has help us with the revision of our local programs” (Head of QAA, Botswana).

“It was desperately needed” (Program Development and the Delivery unit of DTVET, Botswana).

“It was needed and it came at the right time because we were really struggling with the review of the curriculum” (Officer at the Policy and Development Division at DTVET, Botswana).

National experts on TVET qualification emphasized on the one hand, the necessity of the BEAR project as it has introduced the development of a program at a diploma level. According to them, over the years the Botswana National Education System had offered certificate level programs in TVET, which stop their possibilities for further study and upgrade their qualifications, it was crucial to gave students new opportunities to continue learning and further progress.

“We believe it was needed because as maybe you are aware, over the years, most our institutions have been offering Certificate level programs and obviously the students or the graduates from

those particular programs. They did not have opportunities to further study, so the BEAR Project in a way gave them opportunity for them to progress, to upgrade their qualifications.” (Head of BQA, Manager Capacity Building).

On the other hand, they emphasized the need of the BEAR program in terms of capacity development for all TVET national experts that were involved in the BEAR project. Through the approach used by UNESCO, eight workshops were conducted, during these workshops a small group of international TVET experts from the international implementing partner (KRIVET) in the Republic of South Korea, built capacities on local experts, in order to guarantee the sustainability of their own curriculum development in the selected industry sectors, using the DACUM approach.

“I believe that all those who were involved in the BEAR project they were actually given an opportunity to learn skills, acquire skills in developing competency based programs. We do not have many people in this country who are familiar with those approaches, so the BEAR Project through the DACUM approach, I think allowed people to acquire knowledge and skills in developing TVET programs” (Qualification Development Officer, QAA).

The industry, also consider that the BEAR project was needed. According to them the national TVET institutions in Botswana were developing the curriculum by themselves and facilitating the training and the BEAR project manage to close this gap by involving the industry.

“Yes there was need for the BEAR project because the TVET institutions in Botswana have been developing curriculum by themselves and them facilitating the training. There was a gap in between and I believe the BEAR Project was closing that gap by involving the industry” (Executive Director of the Construction Industry Trust Fund – CIFT).

The perception of the necessity of the project in Namibia differs a bit from Botswana one, meanwhile most part of the participants and stakeholders do think that the BEAR project was needed, including the perception from the Namibia NPO that considers that the implementation of the BEAR project was needed in the country, as “it creates awareness on the



importance of TVET at national level” (NPO, Namibia), the TVET Teachers for the carpentry sector initially consider, that the implementation of the project was needed, but they also showed their skepticism about it, as the pilot phase for the carpentry sector is been conducted on the NAMWATER technical school, and they could perceived if there is any gap or problem with the curricula that has been developed.

“Yes it was needed. By piloting the project we see whether what is right and what is wrong and if something is wrong, to rectify for the future ...I will be honest with you, we implement the BEAR program but I don't think that is what the country needs. The country needs the combination of both CBET and BEAR (to combine theory and Practice (School director, Namwater pilot school for carpentry, Namibia).

The necessity and relevance of the BEAR project have been justify by the TVET experts from the Namibian institutions (QAA and NTA) not only in terms of national development and economic growth but also, in terms of development of TVET capacities.

“This project is important not only for NTA but for Namibia as whole. And particularly from the NTA perspective, it continues to help with the improvement of the curriculum development processes and practices and it also helps to achieve strategic targets in terms of development of unit standards qualifications and capacity building for VET trainers” (Chief of Operations Officer Namibia-NTA, Namibia).

According to the curriculum development officers at NTA, it helped the country to develop new occupational areas based on the governmental willingness of creating new ways of development for the country. The BEAR project developed the carpentry and process plan operations sector, the last one, did not exist prior to the implementation of the project.

“In Namibia there is no formal national course registered in the country for Process Plant Operations and we are so much in a dying need and currently Namibia is moving up to the ranks to be under the ten (10) countries for mining investment. I think from that angle, we definitely need to train our people and to have qualified people in Process Plant Operations because that is

the core of processing minerals in the mining environment “(Carpentry Curriculum Team Leader – NTA).

As for the national experts on VET standards (NTA) they emphasize the necessity of the Bear project in terms of the development of the Namibian National Skills Competition and the support provided to build a national team on Carpentry to compete at the World Skills Competition that was held in Brazil in 2015 (August).

The importance of Benchmarking also appears in both countries.

“This project it is essential for Namibia, because the students can learn the skills and compete on a global level, and to see which areas they can still improve” (Communication Officer NTA, Namibia).

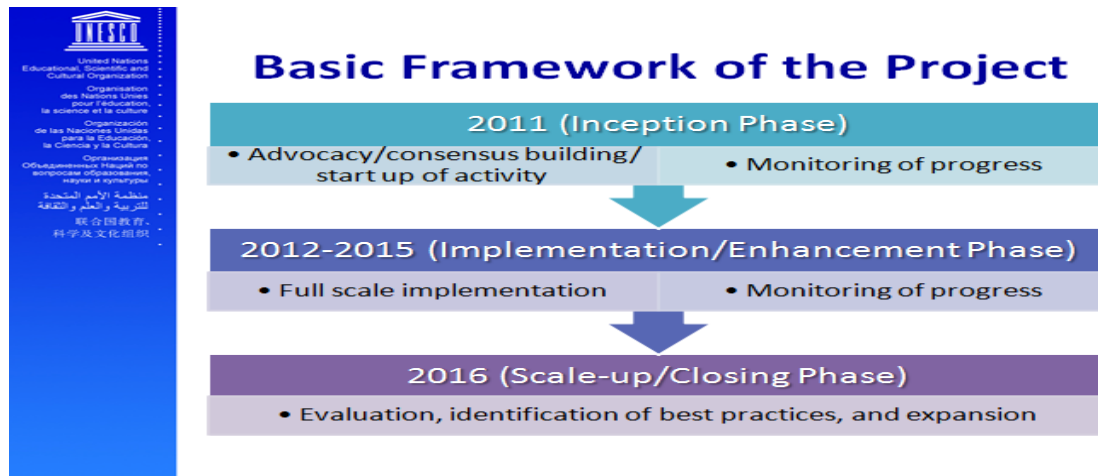
“Doing international benchmarks and comparing our own system with that with other countries, we have achieved assessing the TVET system, which becomes a key importance”. (Communication Officer NTA, Namibia).

“The last thing is we were benchmarking, we think that the graduates of these programs will not only be able to serve in the country but can actually work even outside the country where services are required” (Head of BQA, Botswana).

### **- Do you think UNESCO TVET project is a successful project? Why?**

In order to analyze people’s perception regarding the success or failure of the BEAR project, up to august 2015. It is worth mentioning that this research study focuses only on the curriculum development result, referred as result number one. The implementation of the BEAR project as a whole is distributed on three different phases, lasting 5 years (2011-2016) and it comprises three different components, the first one, already mentioned refers to the curriculum development for the selected sectors, the second one is associated to the TVET teacher training and the third one is the management information systems.

Figure 17: Phases of the BEAR project



Source: Preckler, M. (2014). Second workshop of the BEAR project in Botswana.

Therefore the analysis of this question refers exclusively to the curriculum development component. At the particular moment in time where the interviews were conducted, August 2015, the curriculum development process for the different sectors in both countries was completed: the labor market analysis was conducted; the DACUM process developed, as well as the unit specifications and the TVET Technical Colleges were piloting the curriculum at their centers.

At first, the question was understood by the interviewees as the success of the overall project, including the other two results, even though we are not analyzing this, it is interesting to notice that none interviewee's wanted to respond to this question as the majority of participants mentioned that until the end of the project implementation, there is no room to say if it is successful or not. Nevertheless, once that it was explained that the question referred to the curriculum development component, all participants' interviewees considered that the development of this component has being successful.

“So far it is good, but I am not sure about the success of the next two results that are at this particular moment in time still ongoing, so we could only say that the BEAR project is successful when all the activities are finished” (chief manager of the BEAR project at UNESCO HQ).

"The project is still ongoing we cannot say that it has failed or it has been successful, so far, despite the fact that some aspects of it has been very successful" (head of QAA, Botswana).

"We cannot talk about the BEAR as a whole, as we have two more components. We have a lot of things to do in order to achieve in order to say it is successful" (Policy and Development Division at DTVET, Botswana).

"I think it is premature to discuss the successes at the moment, we still need to see if the industry accepts the graduates that will be an indicator for us to say at least this one is acceptable. It has closed the gaps and it is addressing the gaps it was intended to do" (Principal at the Gaborone Technical College, Botswana).

In addition to this, from the Donor perspective it is too early to consider that the project is been successful, as the Korean Loan expert for the BEAR project mentioned it could be only consider a success when all the activities and components are finished. Nevertheless, in relation to the curriculum development component, which is the one that we are focusing at in this research study, this person thinks that it has been successful.

"Now is too early to say that BEAR project is wonderful or successful, but in relation to result number 1 (curriculum development) yes, so far so good" (Chief Manager of the BEAR project at UNESCO HQ).

From his perspective, the main goal achieved regarding the implementation of the curriculum development, and which differentiate this project with the previously ones funded by the European Countries, is the south-south cooperation approach.

In Botswana, UNESCO representative at the National Commission consider that the curriculum development component has been successful as it has enable the national TVET system to close the gaps between the employment demand from the labor market and the technical colleges or trainer providers. The labor market analysis conducted in these selected sectors prior to the development of any curricula, has been the foundation for the success.

“We have been able to close the gap between the employment demand from the market and the training provided, because training will no longer be done haphazardly, it will be done according to the needs of the country” (NATCOM, Botswana).

“With the BEAR project we were able to realize with the labor market analysis which areas of training are needed in the country that we can sponsor our learners to train on” (NATCOM, Botswana).

As a result of the perceived success of the BEAR project in the country the National Commission for UNESCO would like to upgrade the project into a program, due to the good practices the country has learnt through the implementation of BEAR.

“We want now to upgrade it into a program because we have learnt very good practices through the project” (NATCOM, Botswana).

In addition to this, the National Project Officer in Botswana considers that the success of the curriculum development component is a reality at different levels, at a macro level, it gives Botswana the confidence to develop their own programs and systems, at a micro level, it is able to produce curricula with the industry support to a high standard; to introduce assessment systems which were challenging for staff and for students; and it allow to take the ideas that the staff was talking about for many years and implement them as improvements.

“A Macro level, it gives Botswana the confidence to develop their own programs and systems, it proved to them that they can do it and does it well. A micro level it was able to produce curricula within industry to a high standard; it was able to introduce assessment system which were challenging for staff and for students; it allow us to take the ideas that the staff were talking about for many years and implement them as improvements” (NPO, Botswana).

The assistant National Project Officer mentioned “looking at the developed curriculum, it is a success” (Assistant NPO, Botswana) and this success it is based on three factors: (1) it ensured that the skills meet the need of the industry, through the labor market analysis conducted. (2) The target

number for students was met within one year and half, the number of the people involved was very high, close to a hundred. (3) The number of teachers involved in curriculum development was something like 40 members of staff, which it is considered a significant number. To quantify the success, we will register the number of students who get employed once they finish the program, the pilot at schools will end in June 2016.

“We have to measure the success of the BEAR Project by first waiting to see the graduates who are absorbed by the industry but I am looking at the success in other parts” (Assistant NPO, Botswana).

Moreover, the curriculum development process can be regarded as successful in terms of capacity building of teacher trainers and lectures, as they were taking part in the DACUM development process, enhancing their knowledge and skills on writing examinations and developing curricula.

“I am looking at the lecturers; they now have a huge knowledge on curriculum, the BEAR Project it is expanding their knowledge on writing examinations, developing curricula on what they are teaching. So I think it is a success that way, I know we have to measure the success of the BEAR Project by first waiting to see the graduates who are absorbed by the industry but I am looking at the success in other parts” (Assistant NPO, Botswana).

According to the different National TVET experts from the different intuitions, the project is successful. The officers from the QAA highlighted the importance of the approach used by UNESCO to build capacities, as it provided the institutional support it was needed in the country, as well as the effective management for the implementation process at the centers where the program is piloted and will be offered.

"The support provided by UNESCO in the form of the workshops conducted to build capacities within the national TVET institutions was good enough to make this project a success" (head of QAA, Botswana).

The experts from DTVET recognized their satisfaction in relation to the curriculum development component “we are happy about curriculum development, but is just a component” (Program Development and the Delivery unit of DTVET, Botswana) but they also mentioned the importance of the other areas in order to improve the efficiency of the TVET provision at national level, like the labor market analysis, the training of students and the empowerment of trainers and to monitor whether it is successful or not. All of this are very critical steps to achieve.

The experts from the BQA (Botswana Qualification Authority) highlighted the success in terms of engagement from industry; BQA is the institution that ensures the relevance of qualifications and programs, related to the industry needs. At the same time BQA has identify a clear challenge, one critical factor for the potential failure of the project: the welfare situation of student’s and how the sponsorships for students are distributed is a challenge to be address as some of the students that have obtained an scholarship for the first year have not get it for the subsequent ones and force them to drop the program.

“The issue of sponsorship should be quite clear in terms of how learners are to be supported in terms of their welfare. It should not necessarily be an issue where we should blame UNESCO for, let me put it that way” (Head of BQA, Capacity Building Manager, Botswana).

“It would be very difficult to say the project would be success, it will only be a success if those challenges are addressed” (Head of BQA, Capacity Building Manager, Botswana).

From the industry side, they consider the project is successful so far, for the same reason that TVET expert and the National Project Coordinator consider it a success, due to their own involvement in the curriculum development process. Their involvement in the process have a special meaning for them, as it allows them to show which are the real existing job requirements and professional needs, that students need to learn during the learning process. Moreover, the increasing commitment from the industry side, has generated new partnerships between the technical schools and the private organizations, providing in-training services, and worked based learning and institutional based learning.

“For so long TVET institutions in Botswana have been developing curriculum by themselves and them facilitating the training.....there should be more interaction; the industry must develop the standards and the institutions must develop the curriculum based on the standards from industry. That is why the BEAR Project has been successful, as I said I gave them thumbs up” (Executive Director CIFT, Botswana).

In this regard, TVET trainers at vocational schools share the same perception that the industry has, and consider the same factor, as key element for the success of the Curriculum development component. The interaction and exchange between TVET institutions and industry is makes the difference for the success.

“The fact that the BEAR project it is bringing industries and colleges together is key. In the past that has not been happening but now, the industry is accommodated in our institutions and we are also accommodated in the industry. There is an exchange of ideas, exchange of knowledge which the BEAR Project is bringing. They are also involved in the production stage which was a bit minor in the past” (GTC Bear Coordinator, Botswana).

In Namibia, UNESCO representative at the National Commission, consider on the first place, that the role from the implementing partner experts from the republic of South Korea and from the Ministry of Education in Namibia is a key element to achieve the success:

“On a basis of specific indicators, the success has been achieved, the roles from the republic of South Korea and the ministry of education here, were very clear and key to achieve the successes” (NATCOM, Namibia).

Secondly the NATCOM representative considers that the overall project implementation is progressing well, because some of the key milestones that were set during the project formulation stage have been already achieved: the development of the curriculum up to level 4, and the participation of the formed Namibia team at the World skills Competition.



“I think the results they have achieved so far makes successful the implementation: the participation of the world skills competition in Brazil, the workshops conducted to develop the curriculum on carpentry and PPO up to level 4. These have already been achieved, it has been done right successfully” (NATCOM, Namibia).

The UNESCO National Project Officer for the BEAR project, shares a more critical perspective, this person considers that the project it is not successful at all so far, due to the following issues:

- There have been some efficiency problems that forced a delay on the implementation process according to the timing planned on the logical framework of the project; much time was lost in developing terms of reference for work to be done by the international implementing partners. In addition to this, there is also a perception about the lack of proper delegation of work from the overall coordinator of the project at UNESCO HQ who did not delegate properly on his staff, and it causes significant delays, as things were pending for authorization in the office table for quite a significant period of time.

“If you look at the logical framework, at all the output that was intended from the start, a lot of things have not been addressed. It has passed two years and half since the start of the implementation of the activities started and I think two of the three results (the world skills and teacher training) have not been started by 2015, I think there was a lot of time lost in developing the Terms of Reference for those contracts for the International Implementing Partners, which made the activities of the project coordinator on the ground, very limited for the capacity building was limited” (NPO, Namibia).

- Another factor for considering the project not to be a success is that some of the elements that initially were planned to be part of the project have never been developed, as for example, the recognition of prior learning, the twinning program between technical schools, the scholarship grants system from the republic of South Korea, the development of open learning and distance learning module, which has not been addressed either.

“We are not very successful in terms of what we intended to do, because if we do go back to the initial planning, or to the logical framework there are elements that have not received any attention, for example the development of recognition of prior learning plan in the curriculum” (NPO, Namibia).

“There is another component on the development of open learning and distance learning module which has not been addressed either. When I look back at the documents, it was clear for the implementing partner (KRIVET), UNESCO and NTA didn’t address and it is not getting any attention” (NPO, Namibia).

According to Head of UNESCO national office in Windhoek, it is a successful project so far but still in a pilot phase, there is a need to create more TVET centers and to increase the number of sectors for TVET training according to the National development plans.

“Yes, according to the witnesses of the decision makers in this country, it is a successful project, but it is still a pilot project, we need to have more TVET centers in this country, we need to increase or extended in other domains (not only carpentry and mining) in TVET, and I believe that after this phase we will need to have an extension to other sectors. But so far I think it is a very successful project” (Head of Windhoek Office, Namibia).

The Director of the Namwater TVET centers agreed on how successful is the project, especially regarding the Pilot of the BEAR project, even though they think there are some lacking points, as the lack of delivery equipment.

“Yes, so far it is a successful project though there are still lacking points the equipment is not here yet” (School director, Namwater pilot school for carpentry, Namibia).

Nevertheless, at the technical Schools in Namibia the staff that are implementing the pilot of the BEAR project, have a bad perception about the success of the project in terms of providing the necessary skills to students for their professional development and performance

within industry. They do not perceive that the project will affect positively on the future development of other sectors.

“If NTA can listen to what we instructors comment. We want the old system back, because the new one has introduced subjects like for example HIV-AIDS, ICD (Information Communication Development) and these subjects have nothing to do with the job to be delivered. Do you think that if I fail ICT I won't be able to make a table or a desk? (Namwater pilot school for carpentry, school director).

In Namibia, the TVET experts have a diverse perception on how successful has been the BEAR project so far. The chief operations officer, from NTA consider that the project has been relatively successful, as most of the targets have been achieved, the reason why it is not been considered completely successful is because there have been some delays on the finalization of the curriculum development, to be more specific, on the development of the PPO curriculum. It is important to mention that as the Process Plant Operation curriculum started from scratch, it was difficult to get the involvement of the industry.

“I think yes, it is relatively successful in my view; I think so far, most of the targets have been achieved, we have experienced some delays for several reasons, but on the whole also thinking back about the matter that has been done last year, it has been very successful” (Chief of Operations Officer NTA, Namibia).

The experts on VET standards highlighted the success in relation to the participation of Namibia at the world skills competition in Brazil, as it has been highlighted previously.

“I think it is, even though that is still ongoing and there are other components that still need to be implemented, in terms of the skills competition, yes I think it is a success” (VET standards NTA, Namibia).

For the communication officer at NTA the BEAR project it is a successful project, the evidence on which he base this statement is that the project has been running for the last three years, and if it wouldn't be successful, it would have failed after year 1.

"The BEAR project has been a successful project, yes. It has been running for 3 or 4 years, if it wouldn't be a successful project it would have fail after year one. We are working with our partners, to make this project work and to get maximum benefit with our agreement with UNESCO and also South Korea through the BEAR project" (Communication Officer, Namibia).

**-Which are the main goals achieved by the project?**

In general, all interviewees (UNESCO staff, Industry, TVET teachers or TVET experts on national institutions) from both countries agree about the common goals that have been achieved so far, but the perceptions about the outputs delivered are different according to the country.

In Botswana, according to the National Project Officer, the first goal achieved is the finalization of the labor market analysis that made possible the matching among the skills requirements from the industry and the curricula offered by the technical schools. This goal improves the national development in general terms.

"One of the main goals, it is that the curriculum team have aligned the curriculum development process with the skills required by the industry in order to develop the skills on students that will be required by the industry once the program is accomplished" (Assistant NPO, Botswana).

Secondly, the TVET experts consider the development of curricula for the selected trades (Chef and tourist consultant sectors) are the main goal achieved. The curriculum development has been considered a highly cost-effective process, where the team has met regularly to review, reflect on the on-going process and make the necessary improvements. It has brought policy developers and implementers together, closing gaps and getting feedback from each other.

"The Curriculum development it was effective, fast and precise to the point. Curriculum Development was very cost-effective; the Curriculum Development process was faster than usual

and Effective because it was well coordinated, relevant to stakeholders and with the involvement of the industry" (Head of QAA, Botswana).

The group of teachers at the Technical schools considers that the incorporation of work placement training on the curricula, for a significant number of hours, it is definitely one of the main goals achieved. In addition to that, the new opportunity to get a diploma level is considered as a backbone. Until the date the BEAR started, students could only go for a certificate and the BEAR project generate the possibility for students to further study and got a diploma. This element has been strongly emphasized from the teachers at the technical schools.

“When the BEAR project came on board they put an advert, a large number of students showed interest to progress to do a diploma so if students are no longer ailing the streets. They have available option of studying up to a diploma level. Our other programs they were up to Certificate but now at least those kids can now progress and do a diploma. I think that is where I see the success because they used to be stuck with just a level; one certificate” (Clothing Design-Senior lecturer - GTC, Botswana).

"I firmly believe that it is a success in a sense that previously we did not have these students doing a diploma programme in the areas of Hospitality as well as Tourism" (GTC Business Studies - Head of Department, Botswana).

All the interviewees in Botswana emphasize the importance of measuring the outcomes and outputs resulting from the implementation of the project, quantitatively. In two years time, after completion of the program, there will be empirical evidences on how the private and public sector reacted once the students finalized the program and went to industry, and the impact on the labor market will be measurable by knowing how the labor market absorbs the new graduates from the TVET schools.

“We cannot measure the impact until the students go to industry and we can see the reaction of the private and the public sector. You will be able to see if there is a difference or not and if you think there is something different that could make any difference in the long run, you will certainly know at that time” (GTC Business Studies-Head of Department, Botswana).

According to the national project officer, the number of industry people involved in the curriculum development process is close to a hundred, this amount guarantee that the work done will meet the needs of industry, moreover, the number of teachers involved in the process is close to 40 members, what shows a high commitment and a strong capacity building factor. This quantification of the outputs shows an empirical evidence of the perceived success of the project, by the national project officer.

The industry consider that one of the main goal achieved, which make the project successful, is that the national project officer was able to identify the right people to be involved in the project and gave them the role of facilitators, otherwise, it could have been a waste of time and energy because the project would have been a failure.

“As industry, we have identified people who needed to be involved in this project who were key to ensure that the success of the project, therefore we have to identified the right people from industry” (Executive Director CIFT, Botswana).

In Namibia, the perceived goals achieved so far by the different actors, not always do follow a common pattern. The representative of UNESCO at National Commission in Namibia, clearly enumerates the goals achieved. According to this person, the most important goal is that the project has repositioned TVET within the national development agenda. Secondly, it has build capacities on curriculum development to national TVET experts through the workshops that have been conducted.

"But the main goal achieved is the prominence that TVET deserve in the present global situation. That governments can now see that a lot of the population can be caught on skills development" (Namibian NATCOM).

The national project officer in Namibia considered that the project has not been completely successful so far, but considers that there have been relevant achievements obtained

so far, starting with the biggest achievement: the National TVET system have been able to move from the modular system to the CBET system.

"The most relevant and particular achievement is that we were able to move from the modular system to the CBET system, which that brings all the challenges, but we are moving into the right direction" (NPO Namibia).

In addition to that, this person also considers that the development of National Qualifications means that the companies must use local qualifications that can be aligned with the actual international qualification standards and this is in itself is a great achievement. The qualifications of the curriculum have been finished, and the unit standards for the carpentry sector as well.

"We've achieved to finish the qualifications of the curriculum, the qualification existed before the unit standards were designed, so it was easy design and to develop the curriculum, for carpentry from level 1 to 4, and I think we didn't realize how big the Endeavour that was, and what a huge achievement was" (NPO Namibia).

Thirdly, the collaboration with the private sector on the development of the project and specifically, their involvement in the qualification development is regard as a challenge and a great achievement.

"Another achievement is to bring the private sector on board on this project, is a sensitive sector in terms of economic support and to get them involved in qualification development is an achievement, is a great challenge, but they are willing to assist." (NPO Namibia).

Moreover, the generation of new partnerships at international level, amplifies the national network and improves the bilateral relations between different countries, to further cooperate in new domains.

"Establishing relationships with credible international partners like HRD Korea, and like KRIVET and those there is a possibility to open new collaboration in other areas, and beyond the

bear project, the Koreans is very ready to help, it is just a matter of setting down and to see which are out needs and how they can assist" (NPO, Namibia).

From the TVET teacher trainer's perspectives at the BEAR pilot institutions (Technical schools), the goals achieved are mainly: firstly the development of the curriculum and unit standards, and secondly the acquisition of new tools (books, equipment) that will be finally purchased despite the delay on the acquisition. The first goal is completely aligned and shared with the perceived one from the Quality Assurance (QAA), the Curriculum Development team and the VET Standards TVET experts.

"Main goals achieved so far is actually the finalization of the curriculum and unit standards, and the tools that have been provided" (BEAR program teacher at Namwater, Namibia).

"The development of the curriculum" (Quality Assurance Officer, Division of Curriculum Implementation & Assessment, Namibia).

" We now have curriculum for PPO, as well for carpentry developed" (Curriculum Development Officer - NTA, Namibia).

"The development and realignment of unit standards and qualifications to be custom fit, the development of a curriculum, the implementation of this curriculum" (Curriculum Development Officer- NTA).

In addition to what has been mentioned above, the experts on VET standards include also the creation of the Namibian Skills Competition, as an achieved goal.

"In terms of skills competition component is also progressing well, because it entailed sending the Namibian students to Korea for preparation, it also entails assisting with sources of toolboxes and shipment of that tool to Brazil also with eventual participation of the Namibian team at the world skill. The Korean counterparts will also accompany the Namibian team to Brazil for the World skills competition, and then the Korean will go to Namibia to help the establishment of the world skills structure in the country. Namibia" (Manager VET Standards, Namibia).



Moreover the experts for Communication and the Operation ones from the Namibian Training Authority, share a common vision on what they consider it has been achieved, which is aligned with their explanation on why the project was needed. Doing international benchmarking, and comparing the national system with other countries, improve the internal assessment of their national TVET system, and also it capitalize on best practices, not only in relation to the processes of curriculum development, but also regarding capacity building.

"From the NTA perspective, is international benchmarking, capitalizing on best practices, particularly in terms of the improvement of our curriculum development processes and practices and then capacity building for VET practitioners, not only trainees". Namibia (Chief of Operations Officer, Namibia).

"Doing international benchmarks and comparing our own system with that with other countries, we have achieved assessing the TVET system, which becomes a key importance" (Communication Officer – NTA, Namibia).

**-How do you think UNESCO project benefits the country development process in general terms?**

According to the Chief Manager of the BEAR project at UNESCO HQ, the BEAR project could benefit both (Namibia and Botswana) country development process in terms of economic development gained by the expertise and experience from the donor country.

"The Korean government wanted to share their expertise in terms of economic development and national development, because South Korea has a lot of experience which is not different from the reality that developing countries are experiencing now. So the Korean government wants to help other countries sharing knowledge and experiences" (Chief manager of BEAR project, UNESCO HQ).

In Botswana, the National Project Officer summarizes simply, in one single sentence,

how the BEAR project benefits the country development process "Transform rather than transpose is the key for the project in terms of development" The BEAR project has transform the existing TVET system according to the needs of the country, considering not only the context but also the culture and the society where this system is implanted. Rather than transposing or imposing a foreign system or approach, the BEAR project has taken advantage of the existing skills from national and international staff, so that the independent learning has been the approach developed.

"We use the skills of the staff to transform what already exist and not to just buy systems from overseas. Therefore what you will find is more suited to the college environment and to the needs of the country and it is also culturally suited to the staff and students" (NPO Botswana).

"Rather than bringing an strange assessment system or a strange method of teaching, we can talk about independent learning. "The BEAR project promotes independent learning and traditional teaching methods, which is more relevant to the capabilities of Botswana". (NPO Botswana).

The representative of UNESCO at the National Commission (NATCOM) as well as the Assistant NPO considers that the project will benefit the country development process in terms of the investment that the government is doing on national human capital. This is perfectly aligned with the National Development Plan 10 (NDP10) for the period 2009 - 2016 and Vision 2016; outlining the national aspirations to become "an informed and educated society that would turn to a productive, prosperous and innovative society" (vision 2016). According with the interviewees the government is sponsoring all the tertiary students, so that once that they complete their studies, they will enter into the labor market, and get back the investment from their taxes.

"The government wants to invest in Human Resources. The idea of the government is that they pay for the training of students, and when the learners go into the market, they get employed, and pay back the taxes, and invest into the country economy so that other learners can continue being sponsored" (NATCOM, Botswana).

"The graduates produced under the BEAR project would be absorbed by the industry. This means that they will get paid properly and they will be paying taxes, so there is a percentage of their revenue that goes back to the economy of the country and it also helps by improving the economy that is how the BEAR project will help the country development "(Assistant NPO - Botswana).

The National TVET experts from DTVET, share the same perception as the NATCOM representative and the Assistant Project Officer, according to them the project benefit the country development process in general. The Human Resource Development Council (HRDC) which is responsible for planning the priority areas for the country development process, selected Tourism as one of the ten priority areas for the national development, and as a key driver of Botswana Economy. It is expected that the BEAR project will improve the tourist sector and improve the national income generation.

"The Human Resource Development Council (HRDC), which is responsible for planning the development for the whole country, has set ten priority areas to focus; one of these areas is the Tourism sector and the BEAR Project has contributed to that. Tourism is one of the key drivers of our economy, we think if we are able to develop adequate and well trained human resource that is going to somehow improve the sector it will improve the income generation" (Chief Education Officer at DTVET).

The experts from the Botswana Qualification Authority (BQA) consider that at this particular moment in time, the government is trying to diversify the economy, so far the economy depends on the diamond industry but the government would like to reinforce other sectors, and Tourism has been selected as one, to further develop its potential. Therefore, the BEAR project will contribute to the national development as it develops the potential from the tourist sector, improving the learning process for the students in this area, which will at last affect the delivery of good quality service.

"The country wants to diversify our economy. I think we are aware that mainly we have been depending on diamonds" (Qualification Development Officer – BQA, Botswana).

"Tourism is one of the areas that this country is actually leveraging on and therefore since these qualifications and programs are been targeted by BEAR it maybe be an improvement of services in those areas" (Qualification Development Officer 2- BQA, Botswana).

Moreover, through the provision of good training on this sector the BEAR project will eventually attract more tourist and increase the income generation. Attracting more people from outside the country, will create a platform upon which the country will improve other services, and create more opportunities in other sectors.

"You may be aware that Botswana has been one of those countries where for example customer service has been quiet lacking. Therefore, at least in this area, offering this qualification through the BEAR that service might be improved and even attract more tourists to actually boost our income generating revenues especially in the area of Tourism and Hospitality" (Head of BQA, Manager Capacity Building, Botswana).

"The good thing is, if Tourism can actually attract more people from outside the country to come here, they will probably be exposed to other offerings that are available in this country. Therefore, I think that it will also create a platform upon which the country could provide other services, and maybe create more and more opportunities in other areas, not necessarily targeted within the tourism sector" (Qualification Developer Officer, 2. QAA, Botswana).

The experts from QAA go more into the details of how the development of this curricula, have a positive impact on the development of the country. They consider that the DACUM approach, is most cost-effective approach in economic terms and if benefits the country.

"The DACUM process is faster and cheaper than the usual CD process that have been used previously (BTEP) in Botswana". So, "it benefits the development of the country in general because is faster and cheaper, it is more cost-effective and it will help us in the revision of other programs" (Head of QAA, Botswana).

In Namibia, there is also a clear vision on how the BEAR project does benefit the country development process. The Head of UNESCO office in Windhoek states clearly that

"TVET is and will be the future of Africa" emphasizing the importance not only in Namibia but in all Africa. According to this person, there is a social stigma about these jobs, generated by TVET, these jobs are the future for the development of the African nations, this existing stigma socially impede that the good students freely select TVET as the preferred path way for study, they are socially forced to go to university and study a bachelor or master degree that will bring them to unemployment just because study at the university is socially very well considered. There is a clear need to reform the education system in the nation; all the education system has to be changed completely, to find the adequation between the needs of the labor market and the studies offered by the education system. The first requirement to succeed on the country development process is to revitalize the TVET sector.

UNESCO project can benefit the general development process by, "giving more value to the TVET System". To uplift the social recognition of the TVET professions, to visualize socially that not everybody can do TVET, by upgrading the requirements to be accepted for studying TVET courses as if there were same the requirements needed to go to the University. This will be the essence to re-bump the value of the TVET system within the National Context, according to the Head of UNESCO Windhoek office.

"UNESCO project in particular should give more value to TVET system. Let's not give the impression that to be a mechanic or a plumber is when you did not succeed to be a lawyer, here is where UNESCO will need to give value to do TVET. Not everybody can do TVET if you want to do TVET you need at least an A level, like if you were going to University" (Head of UNESCO Windhoek office, Namibia).

Secondly, UNESCO could contribute to re-bump the national TVET system involving the civil society in this process.

"The social society should be involved into this process, it means that you will have a lot of people from civil society doing these jobs that are now neglected and considered and a second zone jobs, and are main and important jobs. UNESCO has to involve the civil society to re-bump the TVET system" (Head of UNESCO Windhoek office, Namibia).

Moreover, the reality for most of the African countries is that their economies are based on the primary sector activities derived from agriculture, mine,... therefore, there is a clearly gap between the needs required from the labor market and the skills delivered by educational institutions. The education systems continue to deliver thousand of bachelor and master degree students specialized on activities from the service sector. This is another reason why the reform of the education system is justified, by the head of UNESCO office in Windhoek.

"The Education system should be completely reformed" (Head of UNESCO Windhoek office, Namibia).

If the Education System is not reformed, the system itself will continue to deliver unemployed youth, that will end up having a bad perception of the importance of education in their lives, as they cannot fulfill their expectations and get any opportunities to develop their future professional ambitions, and therefore it will directly affect their personal life project, as they won't be able to generate any income to start building a family, or to develop any personal ambition they have. In a mid-long term run this could generate social problems, riots, and a clear opposition from youngsters to not support the governors and as mentioned before a disintegration of the perceived benefits that education brings to their life's, so the value of education will be devaluated and stigmatized.

"After 5 years of school, there is no job, they cannot work so they sit at home. Sitting at home they are also giving a bad perception of what is education, education does not mean anything for them" (Head of UNESCO Windhoek office, Namibia).

UNESCO has to have the courage to advice the government, to tell them that they need a reform of their education systems. As mentioned previously, they cannot not continue producing thousand of graduates that will not be absorbed by the job market, governments know that UNESCO should be strong enough to advocate and change this situation, the political dimension of Education policies should put aside from the political intentions. To implement good policies on education you need a reform.

"The head of states they know this, and this situation it is a bomb that will explode at sometime if you do not do the reform soon. The Education system should be completely reformed" (Head UNESCO Windhoek office, Namibia).

"To implement good policies on education you need a reform, If we want to change this, we need to put the political dimension aside. This needs to be done by UNESCO, because it should be strong enough to say to the government, stop the way you are producing students like in a factory. like degrees, masters, PhDs .. in all kind of faculties ...because the market cannot absorbed the offer you create"(Head of UNESCO Windhoek office, Namibia).

To conclude, the responsibility to overcome inequalities and fight poverty at national level it is a responsibility that belongs completely to the national government, the national commitment as well as the fight against corruption is crucial for the developing the country in general terms.

"The main African countries the economic growth is basic on mine, agriculture and oil, but the distribution of the income generated by this activities is too bad. why if there is a national economic growth of 5%, the poverty is there?" (Head of UNESCO Windhoek office, Namibia).

For the Namibian Training Authority experts (NTA) UNESCO project is well aligned not only to the Namibian national economic growth strategy, named Vision 2030, but also to the National strategy for the VET sector, which implies that the project will benefit directly on the general economic development process at national level. The sectors developed by the BEAR project are considered key sectors, in terms of national economic development, so UNESCO will help to position these sectors as key drivers for economic growth.

"I think the overall objective of the project is very much aligned to our own strategy for the VET sector. The construction and mining sector are consider Key economic sectors in terms of National economic development. In terms of our own macro economic growth strategies, vision 2030, these sectors are key sectors, and also become key drivers for economic growth" (Communication Officer- NTA, Namibia).

"The NTA five year strategies is not only strategy for the organization but for the country VET sector at large. Because the NTA is the custodian of VET and we are responsible for ensuring that we establish that relevant VET regime" (Communication Officer –NTA, Namibia).

"The strategy is an overall strategy for the NTA but at the same time is a strategy for the country's vet sector; in term of how the NTA and which role has NTA to play as a custodian of the VET sector in our country" (Communication Officer –NTA, Namibia).

During the field mission, the government officials from the Namibian Ministry of Education share a new political discourse within different means of communication. The discourse emphasized the importance of TVET as the driver for Economic growth in the country; this statement is aligned with the explanation provided by the head of UNESCO Windhoek office. So the importance of UNESCO project within the general development of the country is reinforced.

"Today, our minister said that TVET is the driver for the Economic growth in our country, that elevates the importance of NTA and the role that needs to play in establishing the VET sector as key driver for economic growth and ensuring that it indeed lets up to that expectation: to drive all country economic growth and to support other goals that follows after that which is overall development in terms of our education sector and the empowerment of our young people" (Communication Officer – NTA, Namibia).

The Representative of Namibian National Commission (NATCOM) and the Curriculum Developers Officers at NTA consider that the BEAR project brings economic stability in terms of the absorption of TVET skill people, in the job markets.

"I believe that in general this project brings economic stability for more absorption of the job market. It is important because the BEAR project develops and educates for diverse skills" (NATCOM, Namibia).



"The whole development of the country is now supplied with skilled people coming out of the training from carpentry, for the Process Plant will start soon, because more mines are currently set up in the country and more of our local people can be benefitting through UNESCO program by getting employment from this work" (Curriculum Developers Officer – NTA, Namibia).

The chief operations officer at NTA, states that the benefits of UNESCO project on the country development process are not tangible yet, but they will become visible once the trainees that are piloting the project go into the job market, and will see if they are absorbed by it or remain unemployed.

"I think the benefits to the country are not yet visible, but those will become visible once the qualifications are implemented and the trainees go into the job market. Once those trainees can enter into the job market, there will be real tangible benefits to the country and there will be visible" (Chief of Operations Officer, Namibia).

#### **- How do you think UNESCO project benefits the National Education System?**

In Botswana, the Representative of UNESCO at the National Commission, states that the BEAR project has shown good practices in relation to the improvement of the national response on education policy, that will be included into the Education Training Sector Strategic Plan (ETSSP).

"The National Response for education include the ETSSP (Education Training Sectors Strategic Plan) we have been able to pick some good practices from the BEAR project that are going to improve our responses on education policy" (NATCOM, Botswana).

The National Project Officer, considers that the BEAR project benefits the National Education System, clearly as it has upgrade the TVET qualifications from the certificate level to the diploma level. In addition to this, the previous TVET program used at national level, named BTEP needed five years to develop a single curricula, but with UNESCO's BEAR project, the

efficiency of the curriculum development process has improved substantially, in terms of time, quality and assessment.

"In terms of development of National Education Systems, when we did the Labor Market Analysis we found that there were far too many graduates at lower levels (certificate levels) so with this project we were able to develop a diploma level" (NPO Botswana).

"With the BTEP program it took five years to develop the curricula of a single program but with the BEAR project we did it in a year so the system that has been brought is very efficient" (NPO Botswana).

TVET experts, as for the ones at Botswana QAA, agree on the benefit brought by UNESCO project on the National Education System, by the introduction of new assessment methods and through the development of the DACUM approach, it will save money and time.

"Through this project we have learnt that a lot can be changed to benefit the nation. Introducing the final examinations as it has been done with the BEAR program, will save a lot of money on assessment" (Head of QAA, Botswana).

"If we use the Curriculum development approach (DACUM) a lot of programs would be able to be developed in a short period of time, which obviously will save a lot of money to our nation in return" (Head of QAA, Botswana).

Experts from DTVET, include two other elements in which UNESCO's BEAR project is contributing to the benefit of the National Education System, the first one -which is linked to the next interview question-, is that the BEAR project is strengthening the TVET provision in the country, as the project involved private providers in education, the capacity that has been built goes beyond the public institutions.

"It strengthened the TVET provision and also contributing to the relevance of the Provision, as the project involved private providers in education, the capacity that was built and the

experiences that were shared extended even beyond the public institutions" (Chief of education officer at DTVET, Botswana).

The second one is that the BEAR project increases the access in the technical schools.

"We cannot talk much about quality because we have not had any graduates to see how they are doing. In terms of access, they are increasing the number in institutions, we have been struggling with increasing the numbers, and it is improving access" (Development and delivery unit of DTVET, Botswana).

To conclude the experts from BQA, mentioned that the BEAR project has benefit the national education system from the benchmarking conducted and will serve the students to compete on a global market not only at national but an international level.

"The last thing is that because we were bench marking, we expect that the graduates of these programs will not only be able to serve in the country but can actually work even outside the country where services are required" (Qualification Development Officer – BQA, Botswana).

In Namibia, the Head of UNESCO Windhoek office emphasizes what this person was previously mentioning: UNESCO through the implementation of the BEAR project should advocate for a reform of the National Education System, and this is the way in which UNESCO project will benefit the National Education System.

"I think that the Country Development Process will be pushed by TVET education. You need to reform the Education system to find the adequation between the needs of the market and the people you are training" (Head of UNESCO Windhoek office, Namibia).

The experts from NTA highlight, that UNESCO project is benefiting the National Education System, by taking the lead in the development of qualifications that were not existing before as Process Plant Operations and by reviewing and improving those qualifications that have been registered already (Carpentry).

"In terms of the National Education System, UNESCO project is involved in the development of the specific qualifications that have not been necessarily been in existence before and to also review and improve on those qualifications that have been registered already, so in terms of the overall national education system, yes I think they bring support" (Communication officer - NTA, Namibia).

**.- How do you think UNESCO project benefits the TVET system in particular?**

This question has a common answer from all the interviewees, in Botswana. On the first place, the BEAR project didn't transpose a foreign TVET system that was not suitable for the country, UNESCO project transformed what it was existing, improving the efficiency and adapting to the existing needs of the country.

"The previous TVET system (BTEP) was imported from Scotland and there were many concepts that were not suitable for Botswana, so we were able to adjust the system with the Blueprint and the assessment approach and even with the DACUM approach, the writing of the curricula, which means that the TVET system now is more efficient and relevant, that what it was previously" (NPO, Botswana).

Secondly, UNESCO project benefit the TVET system through the curriculum development approach used (DACUM) it has been considered a successful approach and it is expected to be applied to other programs for all TVET sectors.

"The DACUM process it strengthened the processes that we had" (Chief Education Officer - DTVET).

"The curriculum development approach used with the BEAR program can be adopted to all TVET programs not just for the tourist sector (for Hospitality and Tourist Management)" (Head of QAA, Botswana).

"The very same approach might be considered for been applied to other programs" (Program Development and the Delivery unit of DTVET).

Thirdly, the implementation of the labor market analysis prior to the curriculum development process, helped to close the gaps between the labor market requirement and the type of training that was offered at Technical schools.

"Through the BEAR project we have been able to incorporate the labor market into our TVET practices, into our TVET processes. The BEAR project help us to get to know which were the gaps in the TVET system from the employers perspective" (NATCOM, Botswana).

Fourthly, the BEAR project close the existing gaps in the TVET provision at national level, providing new opportunities for everybody, not just a people with a particular profile.

"The BEAR projects close the existing gaps in the TVET system, for those without skills or those with skills but without education, it does not only look just at certain people, it looks at everyone" (Assistant NPO, Botswana).

Fifthly, the introduction of examinations, rubrics, and workplace learning is benefiting the TVET system. On one hand the teachers and industry appreciate it, as it can measure the competency of students, and on the other hand, workplace learning ensures that the skills that students acquire are the ones required by industry.

"UNESCO introduced workplace learning where students learn, making sure that they acquire the latest skills and trends we used in the industry" (Executive Director, CIFT).

"The BEAR project has introduced examinations and rubrics, the industry appreciates that because they are able to measure the competency of our students" (Business Studies-Head of Department, GTC).

In Namibia, the interviewees also agree on the same perception about how UNESCO contributes to the improvement of the national TVET system.

First of all, UNESCO project adds value to the national TVET system in itself, through the transformation of the existing TVET system, by improving the efficiency and adapting to the existing needs of the country, as it has been done in Botswana as well.

"UNESCO project has shown us what the existing gaps within our system at this point in time, the project is highlighted the fundamental changes required in our structure and in our systems, and processes, we have to create our own system on the basis of existing context in the country" (NPO, Namibia).

"UNESCO project benefit the general development process by giving more value to the TVET System" (Head of UNESCO Windhoek office, Namibia).

In addition to this, the development of the National Skills Competition in Namibia, it has helped to add value and recognition to the TVET system, as the team formed is participation with the support and training of the international experts in the World Skills Competition.

"By introducing the Namibian skills competition, people get exposure, to come, realize and see people performing, and it will uplifting the standards of VET through that advocacy and that promotion in general" (Manager VET standards).

Secondly the curriculum development process used by UNESCO project has shown a more efficient approach and cost-effective one, which can be adapted to the national context and is able to build national capacities easily if implemented with the support of the DACUM experts. Moreover, the assessment introduced by UNESCO project is perceived as more relevant and accurate, in terms of measuring student's competences and capabilities.

"In terms of how curriculum is been developed and it is been implemented, UNESCO project is already improving the quality of our TVET curricula in Namibia" (Manager VET standards, Namibia).

Thirdly, the equipment provided, donated by UNESCO will remain and will benefit the TVET system in terms of the capacities that the students can acquire, by the learning process obtained when they use this equipment.

"In general the equipment donated through UNESCO, will benefit the training for many many years to come, as students will use it" (Director General Manager of Operations-NTA, Namibia).

### **- How do you think UNESCO project benefits the life of civil society?**

The same answer has been mentioned by all interviewees in both countries: "Providing the students with a job is the key, because it helps all part of society" (NATCOM representative, Botswana).

In both countries, it is expected that the graduates produced by UNESCO project will be absorbed by the job market, once they are employed, they will be able to earn money, pay taxes, support their families and be the catalyst to improve other people's life.

"The students who got qualified through UNESCO project, they can be employed later so the skills that they are acquiring here can relief the socio-economic status. Not just of the student's but of their family as well". (Director General Manager of Operations, Namibia).

"Botswana is a very social oriented country, so if you have a job and you earn money you help your brothers, and sisters, so you earn salary is not just for yourself, it is to help everybody else" (NPO, Botswana).

"We hope that after completing these programs, they will be employable". (Curriculum Developer Officer, DTVET, Namibia)

"The lives of the civil society obviously if these people you know, they have what it take that this is the end product. The graduate, they will be able now to get employment. In terms of the society, the civil society; there will be employment and the students from this program, will be

quality and qualified workers so it will also improve the economy of the country” (CIFTS, Botswana).

In Botswana, there was an employment gap, within the Tourist sector there are around 3000 vacancies. The Bear project increases the utilization of the colleges, so the number of graduates increases to fulfill the human capital needs from the sector.

"In terms of civil society providing the students with a job is the key. The projected employment gap, for hospitality and tourism industry, was something about 3000 vacancies, through UNESCO project, we were able to increase the utilization of colleges, increase the number of graduates, we have the potential for employ graduates and to go into society, to be productive, to earn money, to pay taxes, to support their families and use them as a catalyst to improve the life of people" (NPO, Botswana).

In addition to what has been mentioned above, the BEAR project improves the opportunities for all (people who have the skills but no education, and people with education but not skills) improves the access for better education and professional opportunities, through the changes introduced by the BEAR project.

"The BEAR project is closing gaps within the civil society, as there is people out there who have the skills but not education and vice versa, there are people with education but not skills. The BEAR project is matching the gaps and improving the opportunities for all". (Assistant NPO, Botswana).

In Namibia, special importance is given to the benefit provided by UNESCO project to overcome the existing stereotypes related to TVET within the civil society; on one hand fighting the stereotypes gives the opportunity to the children who are more technically incline, to live their passion, and on the other hand, the participation of Namibian on the World Skills Competition helps change the mindset.



"Overcoming some of this stereotypes that are still attached to TVET, is one of the benefits of UNESCO program ..... this perceptions are not fair to some children which are more technically incline, most of them are been pushed into career path which they have no passion for, our campaign is always about live your passion, this is the key message, find a job you love that you and you will never work a single day of your life" (Communication officer -NTA, Namibia).

"We are using the World Skills Program to enhance and support the TVET system, in order to change the mindset of people about TVET system and the BEAR project has help us, by supporting us on the participation at the World Skills Competition, the perception of TVET within the society is changing" (Communication officer - NTA, Namibia).

**- What are the changes in the curriculum process (or implementation process) made to the "system" of TVET education?**

The chief manager of the BEAR project at UNESCO HQ, states that the main change in the curriculum process made to the TVET systems is the introduction of the DACUM approach. According to this person, even though the DACUM process was initially developed and introduced 20 years ago, is a very popular and useful approach and is beneficial for both countries.

"I think the DACUM process was introduced 20 years ago, even though it is an old approach to develop curriculum, is still a popular and useful approach in this area, my question is why the five beneficiary countries did not use this DACUM approaches for develop the curricula before?. The introduction of DACUM approach for Curriculum development is good for the five countries" (Head of BEAR project at UNESCO HQ).

In Botswana the same consideration is shared by the Experts in QAA.

"The main change in the curriculum processes made through the BEAR Project, has been the introduction of the DACUM Approach. If we actually adopt that model across the board, we reckon our aspiration for achieving a competency based system will be very much realized.

Therefore at some point in terms of the quality of skills produced, we should be able to achieve that and do well in our economy” (Qualification Development Officer, Botswana).

In addition to what has been mentioned above the experts from the industry and the assistant to the NPO in Botswana, specify that a key element that has been successful within the DACUM introduction (as major change) is the industry involvement.

“With the BTEP the industry was not involved in the Curriculum Development Process, but the BEAR project introduced the DACUM Approach for development the curriculum and it imply that the team was responsible to gather information, and get the involvement of the industry, in order to develop the Curriculum according to the real existing needs from the industry” (Assistant NPO, Botswana).

“I think the DACUM, the approach that we took under the BEAR project is a very good example of the linkage between the industry, the employers, and the civil society, this is the main changed introduced, we must be able to train for the needs of the industry” (Executive Director, construction Industry trust fund (CIFT), Botswana).

NATCOM Representative at UNESCO and the TVET experts from DTVET consider that the introduction of the labor market analysis incorporates a significant change in curriculum development process.

"The identification of the labor market needs on the curriculum development process" (NATCOM, Botswana).

“I think it is the inclusion of the market analysis was the major change and its linkage with the DACUM process (Program Development and the Delivery unit of DTVET, Botswana).

Botswana NPO as well as the Head of QAA, and the experts from the Gaborone Technical College consider that the curriculum development process implemented introduced as major change a “Fit the size” approach, which has been very successful, three factors are highlighted: the first one is the introduction and development of the Blueprint, the second one is

the introduction of the examinations as the new assessment methods, and the third is the introduction of work placement.

“Before it was one size fits all, but now we suggest it is fit the size approach, now every sector has the potential to develop their own Blueprint” (NPO, Botswana).

“The introduction of assessments and examinations, it is very important, because it creates competition between students, between colleges and industry” (NPO Botswana).

“The DACUM approach, the BLUE PRINT and the introduction of examinations into an outcome based system” (Head QAA, Botswana).

“To place the students into a working environment that it is appropriate for them” (Head QAA, Botswana).

In Namibia, the same considerations have been taken by the interviewees. According to the head of the UNESCO office in Windhoek and the Representative of the National Commission for UNESCO (NATCOM) the DACUM approach and the curriculum development process are the main changes made to the system.

“The transformation of the curriculum” (NATCOM, Namibia).

According to the Namwater pilot school director for the BEAR project, the curriculum development process has introduced an added value in comparison to the previous one -the modular training – (CBET). The DACUM approach is more practical. Nevertheless the director, highlighted that the best approached for the country would be a mixture of the former one and the DACUM introduced by BEAR.

“There is a new value that the old curriculum did not have; the new one introduced by the BEAR project in carpentry is more practical” (Namwater pilot school for carpentry, school director, Namibia).

“I will be honest with you, we implement the program but I don’t think that is what the country needs. The country needs the combination of both, CBET and BEAR (to combine theory and Practice)” (Namwater pilot school for carpentry, school director, Namibia).

“The DACUM approach is improving the TVET system. It is good but, it should be tailor made in order to suit the circumstances, the situation, it should address our needs. (Quality Assurance Officer / Division of Curriculum Implementation & Assessment, Namibia).

More skeptical is the teacher at NAMWATER who is in charge of implementing the BEAR program. According to this person, even though he consider the curriculum development process is the main change, he thinks that the new system could have been developed better, he states that the new system has two major gaps: the first one is that some of the foundational skills that the students need to learn are missing in the new curricula, and secondly the new difficulties that the new approach has generated if the students would like to continue studying.

“The new curriculum development system is correctly, is better. The good thing on the CBET is that it is very practical but there are other foundation subjects that are missing, it is important to have mathematics, it is important to have science, it is crucial to have drawing to understand things that we are going to produce” (The Teacher at NAWATER for the BEAR program, Namibia).

“The transformation from the old system to the new CBET system, could be better, rather what it has been created only for the CBET” (The Teacher at NAWATER for the BEAR program, Namibia).

“Because not all students will go to work right they finish their studies (three or four year studies), there are some students want to go to further studies and it will help them if they have had technical subjects, rather than just foundational ones.” (The Teacher at NAWATER for the BEAR program, Namibia).

The experts at the Namibian Training Authority, agreed on the importance of the changes introduced by the DACUM approach, and mentioned the labor market analysis introduced, as one of the main changes.

“The labor market analysis introduced, help us in searching for different occupations to be developed” (Curriculum Development Officer, NTA).

To conclude the Quality Assurance Officer, consider that the new approach introduced (DACUM) is improving the system, it is good. Nevertheless this person also considers that it lacks suiting to the national context, circumstances and situation.

"They are making a new approach; we had the traditional approaches, but they are building new approaches, which are improving the system. It is good, but it should be tailor made, to suit the circumstances, to the situation, it should address our needs" (Quality Assurance Officer, Curriculum Implementation and Assessment Division, Namibia).

#### **- How this experience in the project affects future development of other sectors?**

The Chief manager of the BEAR project at UNESCO HQ highlighted the uniqueness of this project for two reasons, the first one is the approach used which is based on a “fit to size” model, so the context and the socio-cultural factors determine the way in which the implementation takes place, and secondly the capacity building methodology used, based on the implementation of 8 different workshops where the international experts facilitated the labor market analysis and the curriculum development process carried out by the nationals.

“This is a very unique project, because other projects say you have to follow this and this and this, and do this and this and this, but this project they just saw what to do that and facilitate and then wait, which is a completely different approach and I think this will be useful for other sectors” (Chief manager of the BEAR project at UNESCO HQ).

“I think that the experiences with KRIVET which were focused on curriculum development and labor market analysis and sustainable approaches, were developed through by holding already 8

workshops where KRIVET have tried to facilitate the fact that the countries were able to do it by themselves, this was very useful and priceless experience” (Chief manager of the BEAR project at UNESCO HQ).

“The fit to size model can be use and replicated in all other sectors” (NPO, Botswana).

According to the chief manager of the BEAR project at UNESCO HQ, and all interviewees in Botswana (the head of QAA in Botswana, TVET experts, industry representative and UNESCO staff) this experience can be replicated and be used in other sectors:

“This experience can be use to other sectors” (Head of BEAR project at UNESCO HQ).

"It can be applied to all other TVET programs, so it is perfect" (Head of QAA, Botswana).

“The BEAR program brings change, in the grading system and the materials used by students; it could have a very positive impact if replicated in other sectors” (Assistant NPO, Botswana).

“I think it could have a very positive impact in other sectors. The BEAR Project brings change. For instance, she was talking about the material for their students; the grading system it is changed” (Assistant NPO, Botswana).

“From my experience in this BEAR project, I wish it could cascade down to other institutions so that we take the same approach” (Executive Director at CIFT, Botswana).

In Botswana, UNESCO representative at the National Commission consider that this project has taught a good lesson to the Ministry of Education. This project has shown that there is a real need at a country level, to work with all education providers, stakeholders and government officials and institutions together, as a unique system.

“What we have learnt is that, as a Ministry, as a country, we need to work as system. All education providers, all stakeholders with the mandate of providing education should work

together as a system and this lesson will have an impact on the future development for other sectors” (NATCOM, Botswana).

“Whenever you develop a curriculum, you should understand that it is not for you to implement it, so you need to bring in the implementer during the development phase so that they give you advice on what needs to be done, at the end everybody understands what is needed” (NATCOM, Botswana).

Finally in Botswana, the representatives from the Industry expect that the project will introduce the work placement within the industry sector.

“My wish and vision is that the graduates of these institutions, either the brigades, technical colleges, universities. Those who were doing TVET programs they should be able to come at least six weeks or even more on attachment before they even graduate” (Industry- Executive Director at CIFT).

In Namibia, the interviewees agree with the Botswana ones and with the Head of the BEAR project at UNESCO HQ, they all consider that the project affects the future development of other sectors by its replication. The Namibian NPO, and the Curriculum Development Officers and the Chief of Operation Officer at Namibian Training Authority identified the importance of the capacity building component developed through this project, as the factor that could be used for the future development of other sectors.

“NTA has to sit down and say this is what KRIVET has brought in, and in order to replicate it we have to train and Build capacities of NTA staff through facilitating similar workshops (capacitating) and eventually they will be able to repeat and create the training to other people” (NPO, Namibian).

“The knowledge gain can be used in the future. The involvement on the DACUM process, and also on the labor market analysis, during the curriculum development process through the workshops” (Curriculum Development Officer / Team leader of carpentry. NTA, Namibia).

“We can use the learning from this process, because the focus is very specific on those two areas, and we can replicate what we have learnt now in terms of the development of unit standards and qualifications for other occupations and trades” (Chief of Operations Officer - NTA, Namibia).

Secondly, UNESCO representative at the National Commission in Namibia, consider as well as the Botswana ones, that the project has shown the need of incorporating all stakeholders into the process, this will also affect the development of other sectors.

“The minister of higher education, need to know that you need to have your private sector on board because your private sector should collaborate with other sectors, the private sector should liaise with NTA and other institutions. That is the collaboration needed among sectors. This it is the basis of the future development of our sectors” (NATCOM, Namibia).

According to the Manager of VET Standards, the support provided by the international partners in building capacities and systems (like the Namibian Skills Competition) provide the benchmark needed in this project necessary for the future development of other sectors.

“Mostly, this interactions from the south Koreans and the support we are getting from institutions such as GIFTS and the training institution, it is not only historic, it is really giving us the benchmark that we never had. This is what we need to strive towards to other sector” (Communication officer – NTA, Namibia).

To conclude, as mentioned before, the teacher staff at the technical schools in Namibia, where the BEAR project is being piloted have a bad perception about the success of the project in terms of providing the necessary skills to students for their professional performance within industry, and therefore they do not perceive that the project will affect positively on the future development of other sectors.

“If NTA can listen to what the instructors comment. Unfortunately our students have very negative views about the CBET. They want the old system back, because the new one has introduced subjects like for example HIV-AIDS, ICD (Information Communication Development) and these subjects have nothing to do with my job. Do you think that if I fail ICT I



won't be able to make a table or a desk? We could have subjects like HIV and AIDS, ICT as complementary ones, which are supportive. It is good to understand, it is good to have computer, but it must not be qualified (Namwater pilot school for carpentry, school director, Namibia).

**- Which have been the main barriers faced during the implementation of the project?**

The chief manager of the BEAR project at UNESCO HQ didn't mentioned any barrier faced during the implementation of the project.

In Botswana, the representative of the National Commission for UNESCO pointed out two main barriers faced during the implementation of the project. The first one is the delay on the starting date for the project implementation, as it was approved in 2012, but only started eight months later. The second one is the need to conduct an assessment of the BTEP program prior to the implementation of the BEAR project, in order to identify the existing gaps.

“The main barrier in my opinion is that we have not started in time. When the project was approved in 2012, we were not able to start immediately, we could only appoint the National Project Coordinator at that time and started eight months latter” (NATCOM, Botswana).

“We needed to assess and review the BTEP program with the national coordinator before we started the BEAR project. So that when we started the BEAR Project, we already know what was not working for BTEP what gaps we need to close as a country” (NATCOM, Botswana).

The National Project Officer in Botswana mentioned some crucial points that could be considered as barriers. The first one refers to the lack of consideration about the quality processes needed in the country prior to introduction the new curriculum officially into the education system, particularly during the planning phase, and the development of its theoretical framework.

“UNESCO in the design of the project did not consider quality, and what I mean by quality is the units that were written they had to go through quality processes within the country. The certification of students has to be within an awarding body within the country. I get the

impression that UNESCO felt like we can write a curriculum put it in a college and that would be it, but there is a lot of other organizations that we have to work with, to get the curriculum into the college, to make sure everything was aligned. That was one particular barrier” (NPO Botswana).

The second one, refers to the existent resistance from the society and the experts within the country about the role and activities conducted by UNESCO due to the national historical background of the foreign support provided to the nation by the foreign agencies (donor or aid agencies), people was worried and have significant doubts about the support provided by UNESCO. Changing people mindset was a barrier that was overcome through the involvement of people in all the stages of the process implementation process and giving them the ownership.

“The second barrier and this has more to do with the mindset of Botswana, but I am sure you will find this mindset in most developing countries. Because of the experiences Botswana had before with the Aid agencies from the German system, the British system, the Scottish system, and so on. Botswana became very worried about new initiatives coming from outside the country, so at the beginning there was a lot of negativity and doubts about whether it will work, maybe due to misunderstanding and may be also because prejudice because what we went before, so we were able to overcome that barrier through ownership and involvement, and that was key” (NPO Botswana).

In addition to what has been mentioned above the Assistant NPO in Botswana, added that the delay on the delivery of the equipment and textbooks, to the technical schools due to internal bureaucracy at UNESCO was a critical barrier as well.

“The delivery of the equipment. Colleges have been complaining a lot that we have promised them equipment and books for the library, but the delivery has been delay for so long due to the UNESCO procedure” (Assistant NPO, Botswana).

“To date, the students are in the middle of the program and no support has been offered to that extent” (Gaborone Technical College, Bear Coordinator, Botswana).

As mentioned before, the lack of the resources required for the project implementation (for example. Equipment for the TVET centers) and the delay on the delivery according to what it was established on the project plan is a recurrent barrier mentioned by different TVET Experts and the TVET teachers at the technical schools.

“The Lack of resources required for the project implementation (Ex. Purchase equipment for the TVET centers)” (Head of QAA, Botswana).

“Part of the gaps that were prevalent, were due to shortage of resources particularly for text books for students to learn, for teachers, and on software for learning purposes and so forth. Initially we were told that UNESCO would assist in the procurement of text books so that these gaps are closed” (Gaborone Technical College, Business Studies-Head of Department, Botswana).

In relation to the lack of resources and delay of the equipment delivery, it is specifically highlighted by the head of QAA that the approval from the UNESCO Headquarter took longer than necessary.

“The approval of the program took longer than necessary” (Head of QAA, Botswana).

“I think one barrier that the BEAR Project has to be accountable for is that there has been a gap between the curriculum development and teacher training components. That is what UNESCO Headquarters is guilty of because the problem that we have had on this is that we want to find the best expertise in order to train the teachers. To find the best expertise globally it is not easy and the procedure to hire them, it takes so long. So we did not make the timing properly and that is our mistake. I think it has to be highlighted because we have to learn from the lesson. You are right, we cannot provide a course with the quality we want if the teachers are not ready”. (Qualification Development Officer - BQA, Botswana).

Another barrier identified by the Experts at QAA, is related to the TVET teacher’s instruction process on the new curriculum developed, it must be done prior to the implementation and even the piloting of the BEAR program at the TVET technical schools.

“Manpower constraints in terms of staff qualifications and” (Head of QAA, Botswana).

“So, another concern, was the preparation of teachers or lecturers, maybe in terms of timing did not go well, because ideally speaking, they should have been trained before the start of the program” (Qualification Development Officer – BQA, Botswana).

“The other one will be the trainers for the actual program, if we have a program; we need people to deliver the program” (Qualification Development Officer – BQA, Botswana).

The TVET experts from DTVET identify as an initial barrier, the different vision that the International Implementing Partner had in terms of what Botswana and UNESCO HQ wanted, the goals to achieve. They have a preconceived idea of what they had to do, and which were the country and UNESCO’s expectations, but there were different from the real ones.

“The Korean partner had a different vision of what UNESCO Head Quarters and Botswana wanted. What UNESCO wants is what Botswana wants and asks for. The Korean partner has a different vision of what we wanted to do and it was hard for them to realize that they could not do what they wanted to do. They had to listen to what the country wanted, to transform their desires into something new. (Policy and Development Division at DTVET, Botswana).

The language barrier, for the communication with the International Implementing Partner is one of the most evident barriers, as it has been highlighted by most of the interviewees:

“Language. Sometimes it is huge barrier. There were times when it was a bit difficult to get points across” (Program Development and the Delivery unit of DTVET).

The BQA experts enumerate two main barriers: In first place, the entry requirements for the program have been set up so highly so that not all students can directly enter into the diploma level.

“The entry requirement which were set for the programs, were set too high. As a result, the students that were not coming from work places could not cope. So it was suggested that

probably it would be best if they could start at certificate level so that they get the basics before they go to the diploma program” (Botswana Qualification Authority, Manager capacity building).

Secondly, according to them the sponsorship program for students was not well developed.

“I think she gave some highlights earlier on in terms of the student welfare; the sponsorship was not maybe done well. In terms of having all the support services readily available for learners, student allowances obviously if they are not there you either boycott or quit. So, that is an obvious one”. (Qualification Development Officer, BQA).

A potential barrier identified by the experts at Botswana Qualification Authority refers to the difficulties associated with the industrial attachment or workplace learning, the barrier may appear at the moment when the technical schools have to find places for students within the industry.

“Looking at industrial attachment within the industry. It may be an issue when it comes to trying to find places for students whom are to go on attachment” (Assistant Program Specialist, BQA).

The Industry in Botswana, did not consider that the project on their regard faced any problem.

“For the BEAR Project, I think our approach was great, was defined from the beginning and the right people from industry was identify from the start”(Executive Director CIFT).

In Namibia, the Representative of UNESCO at the National Commission does not specify clearly any barrier but states the nature of them, if any. This person mentioned that if there is any barrier for the implementation of the project it should have come from a personal dimension, in terms of understanding the different concepts and roles given.

“The barriers for the project, if any, come more from a personal nature, in terms of logistics, maybe planning, conceptualization, did the people understand this concept? Do they understand the ministry how to implement it? Did the implementing partner and the donors understand the terms of reference? Did they understand the project design?” (NATCOM, Namibia).

The language barrier seems to be the first and major concern at national level, in Namibia, as it has been pointed out by different stakeholders (the national project officer, the communication officer from NTA, Namwater pilot school director, quality assurance experts, manager VET standards ....)

“I would say that communication has been a battle of concern” (Communication Officer – NTA, Namibia).

“The language barrier” (Namwater Pilot school for carpentry, school director, Namibia).

“The language barrier, the Koreans they know the things, but to communicate is a problem because the language” (Quality Assurance Officer / Division of Curriculum Implementation & Assesment, Namibia).

“Language barriers, because not everybody could express themselves well in English” (VET standards, NTA Namibia).

Particularly relevant on this regard is the potential problem that this barrier may have cause, as on the one hand the communication officer from NTA clearly states that the communication barrier led to the generation of some clashes, as non-sensitivity was perceived from the international experts on the relation with the national experts and working teams, and this could have undermine the finalization of the project.

“I would say that communication has been a battle of concern. In terms of the International Experts that have been engaged, their intention was to communicate with us, but sometimes, due to their cultural background, there were some clashes, The no-sensitivity of some particular persons create clashes, he will try to impose things (Koreans), and small things like that have the potential to undermine the project. But a part of that the willingness from both sides it has been very encouraging” (Communication Officer – NTA, Namibia).

“At the end of the day, successful implementation depends on partnership, small things like that (try to impose unilaterally something) have the potential to undermine the project, if you don’t have the partnership, you do not have the commitment, if you don’t have the commitment, you cannot succeed on project Implementation” (Communication Officer – NTA, Namibia).

On the other hand, the VET standard officer, consider that the communication barrier, reduce the speed of the implementation process.

“Language barriers, it definitely slow down the process a little bit, because not everybody could express themselves well in English but I think as time went on, people that barrier was over come and people got used to and found a way to communicate, otherwise it would have been a very difficult barrier” (VET standards – NTA, Namibia).

The national project officer in Namibia mentioned that the two main barriers faced have been, on the first place the language barrier - previously mentioned-, and the second one the bureaucracy processes, faced in the relation with all different partners to which it has been reporting (UNESCO HQ, the national Counterpart in TVET: NTA; and the International Implementing Partner, KRIVET).

“The language and bureaucracy at three different very high levels, starting with NTA, KRIVET and UNESCO HQ have been the barriers. As Project coordinator reporting to these three high institutions with high responsibility is very difficult” (National Project Officer, Namibia).

The experts on Quality Assurance had the perception that the DACUM approach wasn’t developed following “fit to size” approach, and this is considered as a barrier due to its lack of consideration to the context and the socio-cultural circumstances.

“The DACUM approach it should be tailor made in order to suit the circumstances, the situation, it should address our needs” (Quality Assurance Officer – NTA, Namibia).

The Chief of Operation Officer at NTA mentioned that the availability of funds create some barriers, specially the last one as it introduce difficulties on the output delivery process.

"The availability of funds, which create some challenges occasionally, and also the availability of the VET practitioners who are involved but not necessary employed by NTA, it has been a challenge to get people to get into the workshop and participate" (Chief of Operations Officer, Namibia).

The unavailability of materials and equipment is a recurrent barrier mentioned by the staff from the TVET school centers where the BEAR project is being piloted.

"The unavailability of materials, for example the promised books, because some books came very late. The unavailability of equipment as we had to use our own resources. If it was not for our machines that we trained the students with, if we waited for NTA, or UNESCO to provide the material we could have started only now because the machines were not available and ready. Everything should be in place before start piloting the program" (Namwater pilot school for carpentry, school director, Namibia).

"At this moment we have stopped, because the machine is not finished to be stored in the workshop. If we planned in the beginning we could have avoid this timing problem" (BEAR programme Teacher at Namwater, Namibia).

"If you start running or piloting the programs you need to buy the equipment, facilities, you need to look at the whole holistic approach"(Quality Assurance Officer – NTA, Namibia).

**- What strategies undertaken by UNESCO do you think have been essential for the success of the project?**

In Botswana, the Representative of UNESCO at the National Commission highlighted two main strategies that have been essential for the success of the project in the country, the first one refers to UNESCO's efforts in promoting TVET at national level, by providing expertise and allocating resources for the development of the TVET system, and the second one relates to the best practices learnt through the BEAR project that will allow the national government to replicate and expand to other sector in order to fully develop their TVET systems.



"UNESCO has been promoting TVET in the country continuously by allocating resources (financial and technical) for the development of the TVET system" (NATCOM, Botswana).

"We were using best practices that we learnt from the BEAR project to take them forward at national level" (NATCOM, Botswana).

The National Project Coordinator and the Assistant NPO, consider that the approach used to involve the experts and all persons on the project development and implementation has been a key factor for the success of the project. Named as a "talked strategy" it follows the Botswana Cultural traditions and culture on how discuss and solve the problems, which is traditionally named as "Kotgla"; as consequence of the use of this approach the involvement of all participants has been very significant, and they are focused on thinking about solutions rather than thinking about problems.

"Talk strategy (discuss with people what/how/why to do) in order to involve as many people as possible, getting ideas" (NPO, Botswana).

"I think one of the successes of the project in Botswana is that we are able to get people to think about, not just about what the problems are, but to think about how to make solutions, this is key to Botswana psychology in term of the next project, and the next project and so on and so on, if they can think solutions on an entire approach rather than on negative, negative, negative we can move things forward very quickly. And as a middle income country we have to be thinking like this" (NPO Botswana).

"The strategy we are following "is not talk to is talk with" Talk with strategy, whether other people might come in and say, you do this, this and this. What UNESCO do is, go on, and say what do you want to do? Let see if we can make this work out, a talk with strategy. This is something essential for UNESCO, and is should be done for all UNESCO's project, not only this one". (Assistant NPO, Botswana).

In addition to what has been mentioned above, the assistant NPO, refers to the involvement of all stakeholders and especially the industry during the curriculum development process, this is a new approach introduced by the BEAR project that is key and essential for its success.

"The involvement of the industry in the Curriculum Development process (it was a new approach different from BTEP), the involvement of the students and the lectures who are delivering the program (with their feedback, changes were made on the curricula according to their queries)" (Assistant NPO, Botswana).

The Head of QAA consider that until the project is completely finished it is not possible to assess how successful or not has it been, therefore until that moment in time, this person is not able to consider which strategies have been more successful.

"So far you cannot say that the project has been successful, so I do not know how to respond to this question" (Head of QAA, Botswana).

The experts from BQA, consider two successful strategies implemented by UNESCO, the first one is the composition of the curriculum development working teams, bringing together the experts from the TVET sectors, from the national TVET policy makers, as well as the TVET teachers and staff at the technical schools, and specially the consideration to introduce the participation of the industry experts, is considered as successful. The second one is the opportunity the UNESCO project has introduced to benchmark the selected sectors.

"I think one thing that one would admire again is the composition of the team because even the industry is well represented. So, all the issues can be addressed and industry can know exactly what to do to contribute meaningfully to towards the implementation of such a project" (Qualification Development Officer, Botswana).

"Also the issue of benchmarking, I think we have benefitted from the project immensely. To be able to see where something is working and just not get it and use it as it is, and try to make it fit into the context" (Head of BQA, Manager Capacity Building, Botswana).

The industry representatives, emphasize again that the DACUM approach is the key strategy put in place by UNESCO for the success of the project.

“It was the DACUM approach because you had to train people on this; it has been a great success” (Executive Director of CIFT, Botswana).

In Namibia, the Representative of UNESCO at the National Commission considers that the technical provision and expertise provided by UNESCO has been and will be essential for the success (as in Botswana).

“The provision of technical advice and skills by UNESCO, it is an important strategy” (NATCOM, Namibia).

In addition to that, the Namwater school director mentioned that the introduction of a specific provision for equipment within the implementation strategy has been essential for the success of the project.

“The strategy is actually the provision of equipment because being honest. If UNESCO could not assist us financially, providing the equipment, the project could not have succeeded” (Namwater school director, Namibia).

The Head of UNESCO Windhoek Office, highlighted two strategies; the first one is the importance of the role and activities conducted by the national project officer, as responsible for the coordination of the project in the field, and key for the success; the second one is a Partnership strategy for the selection of the International Implementing Partner, to conduct the work.

“First one, is bringing one responsible person as project coordinator is a good idea, because then you have a person being responsible for the activities, and being able to report and say what is happening. The Second one is bringing the National Implementing Partner and the job developed by them” (Head of UNESCO Windhoek Office, Namibia).

The second strategy mentioned by the Head of UNESCO at the Namibian Office, is the formula used to introduce International Implementing Partners, and other partnerships strategies generated (the agreement with different implementing partners as KRIVET, GIFTS) that could facilitate the knowledge sharing and expertise among experts from different countries.

“I think a good strategy used by UNESCO is the generation of partnerships between entities from different countries with different cultural backgrounds” (Communication Officer, Namibia).

The Quality Assurance Officers at NTA in Namibia, point out the same strategy that was raised by the Assistant NPO in Botswana in relation to the participatory approach and the involvement of all stakeholder during the curriculum development process, it is seen in both countries as a strategy element for the success of the project.

“The good thing they do is that the approach is very much participatory, there are people from the private sector involved, for the mining area, which is very good, because it will be co-owned by the project” (Quality Assurance - NTA, Namibia).

In addition to what has been mentioned above, the Chief Operation Officer in NTA, consider that the UNESCO strategy to determine the specific focus of the project implementation has been critical for the success of the project.

“In terms of strategies, when I look at this project it has a very specific focus, scope is not too big or too wide, and because it does a specific focus, the impact must be in a specific area, I think this is probably one of the reasons why the project has been successful, because trying to do so much in a very short period of time you need to focus” (Chief of Operation Officer, Namibia).

**- Would you tell us any suggestions to make the project better if you have any?**

The chief manager of the BEAR project at UNESCO HQ, as well as the head of UNESCO Windhoek office mentioned that in order to gain efficiency and efficacy, the

implementation of the project should be conducted by the regional office with autonomy, rather than by UNESCO HQ.

"Headquarters should allow the regional office to have more autonomy. The regional office should have more responsibility to implement this project, they are just a liaison office, but they should have more responsibility to implement the project" (Chief manager of the BEAR project, UNESCO HQ).

"It is impossible to implement or to monitor the implementation of the project done by the field offices or in the field from UNESCO HQ that is why I think it should given more responsibility to the regional office. If you give more responsibility to the regional offices it does not consume such a big amount of time, otherwise the system is inefficient" (Chief manager of the BEAR Project, UNESCO HQ).

"Based on my experience in the field, to improve the implementation of the project, if the regional offices could manage the project as UNESCO HQ does, it will be more effective and efficient according to the initial implementation plan" (Chief manager of the BEAR Project, UNESCO HQ).

"There is a very strong hierarchy system at UNESCO, the top is UNESCO Headquarters, then at the medium level are the regional offices, and then on the bottom is the field. So it takes a lot of time to ask something and to give some live to it" (Head of UNESCO Windhoek office, Namibia).

"So I think that the regional base implementation process it would be better than headquarter base implementation process, this is what I think" (Head of UNESCO Windhoek office, Namibia).

"I am worried about the corruption within the African countries, because we cannot trust their activities, and this is a problem, but if we can control or delete those corrupted practices, the regional base implementation will be the perfect approach to the implementation of this project" (Head of UNESCO Windhoek office, Namibia).

The same suggestion is made by the assistant NPO, in Botswana, as mention that if some of the decisions were delegated to the NPO, more efficiency would be gained.

"The problem is that UNESCO's processes are extremely time consuming, if there was someone in Botswana in charge of the finance of the project directly, then there would not be any delay at all" (Assistant NPO, Botswana).

According to UNESCO representative at the National Commission in Botswana, the model used to implement the project is very useful, the suggestion that this person suggest is to replicate the model introduced by the project to other sectors.

"I can safely say that the model is very good, I wish the country will never leave it. We need to take other programs on board, other sectors new ones (different from Tourism, Hospitality and Chef) using the same model" (NATCOM, Botswana).

The National Project Officer makes three main suggestions to improve the implementation of the project. The first one refers to the curriculum development process, that should be automatically followed or should be developed at the same time, as the teacher training process, to build capacities on the teachers and train them into the new approach introduced by the BEAR project prior to the pilot, in this way it follows the natural coherence of the project development and it fits into the real expectations that the experts on TVET and the TVET trainers at the Technical schools have.

"Running result 1 (Curriculum development) and result 2 (teacher training) at the same time, would have been very beneficial, we made have seen a longer time for the results to come out, but it would have benefit the quality of the outcomes" (NPO, Botswana).

Secondly, is related to the scope of the project; during the planning stage and the construction of the logical framework, it should have been considered all elements that would be significant for the implementation of the project, some more elements could have been introduced as for example the student's welfare, and the related cost that the BEAR program at

the TVET schools implied and the resources that the TVET schools should have. The experts at the Gaborone Technical College also agree on this regard.

“UNESCO needs to understand the scope of the project, in terms of who are dealing with this within a country, we are talking about for example the lack of the colleges not being able to deal with students welfare, the colleges being unable to deal with the resources, of course is beyond of the scope of the project at the moment, but we can be always help and push” (NPO, Botswana).

“When UNESCO launched this project, UNESCO should have thought about the resources needed to facilitate students to conduct the project activities, and I am thinking about the work placement. If the work placement is a component of the project, the transportation cost for students should be considered and allocated, otherwise who is going to fund the students to go back and forth to the work placement?” (GTC Bear Coordinator, Botswana).

“What I am saying is that all this (student welfare) should have been discussed from the onset, the conception stage. So that the government knows the role it has to play. Issues of student welfare and so forth should have been clarified so whoever takes care would have prepared it according to their roles” (NPO, Botswana).

Thirdly, the importance of the National Project Officer’s role should be emphasized and more support from UNESCO HQ should be given to the NPO, in the field.

“The NPO has to be very strong and being able to make decision, because when the NPO seek advice from HQ, even though UNESCO HQ have run a thousand projects, the NPO does not get anything, nothing, not a simple advice” (NPO, Botswana).

The Experts from DTNET suggest that the implementation of the project could have included trades from two different sectors; in order to ensure that the same approach could be used was well.

“If the BEAR could have included more than one sector, for example the Tourism sector and the service sector. We could verify if the needs and the approaches are different for instance, if you

are training engineering it going to be different when you are training people in the Tourism sector. (Chief Education Officer at DTVET, Botswana).

The experts from the Gaborone Technical College in Botswana emphasize the suggestion mentioned before; they think that UNESCO should include an economic allowance that facilitates students to success on the learning process.

“There is the issue of candidates having kind of living allowance. If you want to encourage people to do a certain program and you want this program to be the leading program, then you need to have some kind of basic allowance that you can give to these candidates. Especially in terms of work placement allowance” (Principal, Gaborone Technical College, Botswana).

“There is the issue of candidates having kind of living allowance. If you want to encourage people to do a certain program and you want this program to be the leading program, then you need to have some kind of basic allowance that you can give to these candidates. Especially in terms of work placement allowance” (Principal, Gaborone Technical College, Botswana).

“So the candidates enrolled, some of them they come from as far as hundred kilometers or more from here, they have to commit every day” (Business Studies-Head of Department – GTC, Botswana).

“In this program most people are not necessarily first class students. So UNESCO did not make a plan of how they are going to fund those kids who will be coming from faraway places to study here. So students have to run around trying to say ‘where do I get money for transport to go to school’ (Clothing Design-Senior Lecturer – GTC, Botswana).

The experts from the Botswana Qualification Authority (BQA) suggest increasing the number of industry representatives for the curriculum development process.

“To increase the representation from the industry because I think the number of representatives is too low. Of course there was involvement but the representation was low”. (Head of BQA, Manager Capacity Building, Namibia).



In addition to what has been mentioned above, the industry representatives highlight that UNESCO should reinforce the support of the work done by the NPO.

“I know that the NPO has been on the forefront of the project. I only wish there could be somebody who could be attached to Ray” (Executive director CIFT, Botswana).

In Namibia, the suggestion made by the TVET Technical schools experts is, to reconsider the work done in the curriculum development process within the BEAR project, to reconsider which subjects need to be included on the curriculum. They think that some essential courses that were existing on the previous curriculum and have disappeared on the new curriculum should be maintained (drawing, math and science) they consider that this subjects improve the cognitive skills of students.

“To Reconsider the curriculum and introduce the other subjects that were existing previously (drawing, math, science...) Before in the old curriculum there was drawing, math and science and this curriculum has removed them and include other subjects, but the previous ones help students to open their thinking, their mindset” (Namwater pilot school for carpentry, school director, Namibia).

“Let’s get rid of numeracy, financial, HIV subjects, and those ones that are not technical subjects, TVET are about technical. We need technical foundation subjects. The transformation from the old system to the new CBET system could be better, rather than what it has been created only for the CBET” (BEAR programme Teacher at Nawater, Namibia).

In addition to this, they highlighted once again the importance of reconsidering the essential courses that the new curriculum should include, as the program should encourage the students to further learning or to continue studying if they want to, once they finalize the program.

“Because not all students will go to work right away, once they finish their studies (three or four year studies), there are some students who want to go to further studies and it will help them if

they have had technical subjects, rather than just foundational ones”. (BEAR programme Teacher at NAMWATER, Namibia).

Moreover, the director of the TVET School mentioned that the curriculum development team of the BEAR project should have listened to the teachers, and discuss with them about what are their impression related to the new program.

“If NTA can listen to what the instructors will comment, unfortunately our students are finished already, those one who had BEAR Project. They have very negative views about the CBET” (Namwater pilot school for carpentry, school director, Namibia).

The head of UNESCO Windhoek office in Namibia share the same suggestion as the one made by the chief manager of the BEAR project at UNESCO HQ and the Botswana assistant NPO and NPO himself. The suggestion refers to the delegation of the project responsibilities and management, to the field offices in order to gain efficiency and efficacy. Therefore the regional office should lead the project with autonomy.

“What we (the head of the regional offices) are criticizing, because for us, those projects should be management from here, not from Paris, this is very clear, and is one point that will be discussed during the meeting on the 28th October in Paris, and it was highlighted as an important point of the IOS evaluation report about the African reform. With the reform this projects should be manage from the field, not from Headquarters” (The head of UNESCO Widhoek office in Namibia).

The experts from NTA, the chief of operation officer and the communication officer, both make a clear suggestion: to articulate ways **to continue the partnership** with the International Implementing Partners, and to continue generating a good exposure from the national officers to the best practices from the international counterparts in order to learn from best practices and benchmark.

“Expose us more to the best practices and fund, and resources” Namibia (Quality Assurance Officer / Division of Curriculum Implementation and Assessment, Namibia).

“I hope UNESCO would be able to render us further support, to be able to continue with these partnerships with the South Koreans, especially as the world skills competition is concerned. Namibia” (Communication Officer, Namibia).

To conclude, the experts on management VET standards, the Chief of Operations Officer and the Quality Assurance Officer from the Namibian Training Authority suggest that improving the communication with the international partners is key for the project implementation, especially what refers to understand and speak the language.

“I could say of course to enable easy communication. It would be expected that working on the program, should be easier if people could have reach some level where communication would be easier. I do not expected to be bilingual in English as it is not their mother language but to have met some levels where communications it would have been easier” (Manager VET Standards, Namibia).

“In terms of communications there might have been some challenges, but it is very difficult for me to do any specific suggestions” (Chief of Operations Officer, Namibia).

“They (the international Implementing Partner staff) must open up Namibia (Quality Assurance Officer / Division of Curriculum Implementation and Assessment, Namibia).

### **9.1.2.2. The existing correlation between development of national TVET education systems and the pressures of implementing ways of mass education worldwide**

The second part includes the analysis of the different social impact dimensions that UNESCO’s TVET Program has had in both countries at different levels in order to determine the existing correlation between the social impact and the pressures of implementing mass education.

Firstly, the questions focus the attention on the actions conducted by the international organizations and its influence, if any, on the development of National Education Policies. Secondly, it puts the focus at national level in order to establish any existing relation among the quality of education, the national capacity to develop national education policies and systems (in TVET) and the external support provided by international organizations. Thirdly, it aims to analyze the perceived sustainability of the national capacities developed through the implementation of the project and the existing potentialities to replicate the results in other areas. Fourthly, it aimed to assess the national system capacities on education.

The questions are the following ones: Do you think that there is a relation among the development of National Education Policies from the International Organizations and the pressures on developing ways of mass education?; Do you think this project aims to improve the quality of the education system or it follows the pressure for the implementation of mass education processes?; The national government has enough capacity to develop the national TVET system by its own, without external support with greater success?; Do you think the goals achieved of the project could be replicated and achieved by the national experts once UNESCO stop financing the project?; Do you think the National State could developed their own systems and policies with greater success?

**Do you think that there is a relation among the development of National Education Policies from the International Organizations and the pressures on developing ways of mass education?**

The Chief Manager of the BEAR project at UNESCO HQ, states that in his view there is a clear relation. He points out two relevant points on this regard. Firstly, he states that even though the International Organizations set up a common agenda for education at a global level, it seems that there is no real commitment by member states to put in practice this agenda (specially from the developed countries).

“This is right. From my experience, when I join the World Education Forum, I couldn’t feel any passion or interest from member states (especially Europe and North America) in order to set a common agenda at the WEF. I think they think it is not their own business; they are not interested in those agendas. I think these countries think that this agenda are only for Africa and some limited areas. This is one problem” (Chief Manager of BEAR Project, UNESCO HQ).

Secondly, the approaches needed should be contextualized, as the reality differs from country to country. UNESCO as the specialized United Nation agency for Education, would find difficult to implement the education agenda that is approved at global level, on a country basis, there are two crucial elements for UNESCO in order to improve its efficiency and efficacy: the first one is to focus on the undeveloped countries and secondly generating partnership.

“The number of UNESCO staff is being reduced, due to its financial situation, it is impossible and ridiculous that small teams with reduce staff can do everything. That is why I think it is important to do partnerships with other agencies or UNESCO should be honest and say that they do not have capacity to be involved on the agendas for each member states. (Chief Manager of BEAR Project, UNESCO HQ).

“What I want to say is that each country has its special and specific context and circumstances, and I don’t think UNESCO can do everything for all member states. UNESCO should be focus on underdeveloped countries, to improve its efficiency”. (Chief Manager of BEAR Project, UNESCO HQ).

In Botswana, the UNESCO representative at the National Commission (NATCOM) does not agree with the Chief Manager of the BEAR project at UNESCO HQ. This person consider that there is none relation between the development of National Education Policies from the International Organizations and the pressures on developing ways of mass education at national level. A clear clarification is provided as a description on the articulation process carried out by UNESCO and the development of the Global Sustainable Development Goal number 4 is provided: starting with a consultation at national level, followed by the preparation of a report at regional level that is the base for the discussion during the global consultation that took place in

May 2015 at Incheon, South Korea at the World Education Forum. The articulation of this procedures allow to all countries have voice at a global level.

“No. Nothing is imposed on us. For example on the development of the Global Sustainable Development Goals, and even for the preparation of the 37th General conference at UNESCO HQ, the Director General prepared a consultation at national level, and then it was generated a report at a regional level, that were taken to the global consultation, where one voice was raised, in our case was the African voice that was took to Incheon, Korea” (NATCOM, Botswana).

According to the National Project Officer, there is an existing and predominant pressure on the government of Botswana to implement ways of mass education, due to the high youth unemployment rates in the country. In general to face this situation governments normally look for quick solutions, in order to stabilize socially the country and avoid tensions. The pressure could in some cases, like the ones in the North African countries as Tunis generates riots and social movements against governors. Nevertheless, quick solutions imposed from abroad do not benefit the country development, the only way that the country could properly developed and face its problems it is by creating their own development of solutions, this could be supported from outside, but the ownership and the solutions should be generated from the inside by locals.

“Pressure is the right word. There is a lot of unemployment, there is a lot of disaffected youth, and you know that youth unemployment and poverty leads to change in government, as we have seen in Tunisia and countries like this” (National Project Officer, Botswana).

“Governments are looking for a quick win solutions, so you have a developed country which see first something, and people are going to try and take it on to our country, but you will find that it does not link into the existing structure of the country, it does not link into the experience of the country, it may not link into the resources of the country and in some cases, it does not link into the culture of the country. It just cause a chaos or more of a mass, and that is why the process has to change, it has to be developed within the country it may take a little bit longer, but if you have to developed by yourself it takes time, but the benefits of developing by yourself are far that way in the long run, than the benefits of buying something in” (National Project Officer, Botswana).

The assistant NPO, consider that in Botswana historically there were existing pressures for implementing foreign educational models, specifically the BTEP program developed by the Scottish, which was not successful at all, as it was not contextualized and developed by the locals, this situation generated gaps that couldn't make succeed the program, it was socially not accepted.

“Yes, there were existing pressures on implementing foreign educational models, this happened in Botswana previously with the BTEP. The BTEP was a Scottish system and they wanted us to be introduced into our system, but it failed as there were gaps that couldn't be overcome in order for the program to be successful” (Assistant NPO, Botswana).

“We are not a Scottish Nation so we cannot adopt Scottish things” (Assistant NPO, Botswana).

All the TVET experts from DTVET agree that in general terms, there is an existing pressure on developing ways of mass education, nevertheless, they also agree that it is not the case of Botswana. In Botswana, the government tries to align the national needs with the development processes, it is very confident about the goals to achieve as a Nation. Therefore, the government takes in very careful consideration that there is no duplication even if the development program comes from an international organization.

“We do not normally do that. We really try to align to the national needs and in most cases we have to report all these developments to the Ministry of Finance and Development Planning. So they will not even allow us to bring a lot of duplication simply because it is from the international Agencies Focus (Chief Education Officer - DTVET, Botswana).

“Yes, we get pressures from developed countries not to adapt, just to copy and paste what they are bringing. But it is not out case because we always spell out our needs. Most of the time we really argue our case. We can even take it to the wire if possible, when we say this is a duplication, we will not do it” (Policy and Development Division - DTVET, Botswana).

“In Botswana we are very confident on who we are as a nation and where you want to go. The speed you want to give to that development” (Program Development and the Delivery unit - DTVET, Botswana).

At the Gaborone Technical College, the experts mentioned that in the Botswana case, and with this particular project, the project was tailor made trying to address the existing needs.

“The project was being tailor made looking at the responses of what the people were saying was lacking with the programme that was being run. So with that, we would say it is trying to address that but we haven’t seen the results we have achieved with this regards because we are still piloting. We would say it when we are graduating our students and we get the feel of what the industry is saying now about our products” -(GTC Bear Coordinator, Botswana).

The expert from the Botswana Qualification Authority (BQA) consider that in Botswana there are no existing pressures to develop or introduce way of mass education through the support of international organizations, the reason why this happens according to the experts from BQA is because the approach used by the government is always national oriented and focused on local people. The consultation process is a tradition in Botswana, as previously mentioned the “kgotla” tradition refers to the public meeting, community council or traditional law court, used as customary court. In Botswana the community decisions are always arrived by consensus, every single person is allowed to speak and no one may interrupt while someone is having their say.

“Well I do not think there is any pressure in Botswana because the model that the government has used to developing policies by an International Organization from a long time back, it is to engage the local people. All the times, that there is a benchmark that the government proposes to people, there is a wider consultation on that policy and an input from the locals so that they develop the policy the way people would like to have it” (Head of BQA, Manager Capacity Building, Botswana).



Moreover, a deeper reflection is done on this regard by the BQA experts. They consider that even though the international organizations should not impose any policies at national level, they have the capacity to articulate and create a common platform with a set of common international standards in order to somehow homogenize the access requirements to study from one country to another by students without entering barriers. This alignment of the education systems is certainly needed in a globalized world.

“The way I see it, I think that as long as the International Organizations are not imposing any policy on any country, there should not be any problems, because it is actually important to also note that while each country do its own thing, there is also an avenue to ensure an articulation of the system to other systems, because if our system has not been aligned to other systems, it may mean that we are not able to prepare our people adequately to be eligible for what is being offered outside” (Qualification Development Officer 2 - BQA, Botswana).

“UNESCO and other international organizations are actually providing a platform upon which countries, like our country can actually network with other countries. To ensure that they develop systems which are comparable or similar to those which exist out there, to ensure that your system is able to speak to other systems so that whatever training you are offering can prepare your citizens to be eligible for further training out there” (Head of BQA, Manager Capacity Building, Botswana).

“Without that kind of alignment or articulation, it may mean that our people go out but they are not actually eligible to actually gain access to further education and training out there” (Assistant Program Specialist - BQA, Botswana).

The Industry representatives state that the relation among the development of National Education Policies from the international organizations and the pressures on developing ways of mass education, could perfectly exists. The main reasons are, on the one hand once a nation or a country gets funding from an international organization, normally there are some conditions that should be accepted from the assisted part. On the other hand, it is important at national level to set common education standards, if you want that your education system is competitive.

Nowadays we live in a globalized world, where there is a lot of interaction among actors, and completely isolation does not bring prosperity to any country.

”It could be possible, because if you are going to get funding, for instance from International Monetary Fund (IMF), to improve your education system, it establish conditions; by saying we will fund you, so you have to do A,B,C and D. That is imposing” (Executive director CIFT, Botswana).

“Every country must look at developing its educational system without having in mind that we are living in a globalization world nowadays. If we are in Botswana we must look at the standards in other countries so that the mobility of people moving from one country to another is possible. So I think standards could also help to compare yourself because we cannot live in isolation”. (Executive director CIFT, Botswana).

In Namibia, the representative of UNESCO National Commission (NATCOM), mentioned that this issue has been already discussed during the World Education Forum in Incheon, Republic of South Korea, in May 2015. During the discussion it was emphasized that the mandate of the global community should be to set a macro frame of education, as all countries with the globalization process are becoming part of the global village, therefore the national education systems should adapt to this macro frame.

“I had this debate as well at the World Education Forum” (NATCOM, Namibia).

“We need to consider the global trends and the global context, because if you do not consider them, then you will remind behind in this global village. However you need to adapt your own education systems within this macro frame of education, but some countries may perceive them as prison” (NATCOM, Namibia).

The NATCOM representative also comments that in relation to Namibia, as a country. There is no perceived pressure for the development of the National Education Policies from the international organizations that impose ways of mass education, according to this person; Namibia has a clear set of national priorities on Education: global citizenship education and

TVET that guides the development of education policies and are articulated on the strategies and development plans.

“In Namibia, from my perspective, we are not pressurized by any country, we are sovereign, we made careful decisions in education, and we have our own national priorities that guide our policies: global citizenship, TVET. That is why you discover the priorities of Namibia when you see our strategies and within the development plans” (NATCOM, Namibia).

According to the Namibian National Project Officer, there are two way street relations among the development of National Education Policies from the International Organizations and the pressure on developing ways of mass education. Firstly, it points out that to develop national education systems, developing countries use to benchmark and they do it against the developed countries.

“There is definitely a correlations, it is a two way street. If you see countries as Namibia who is developing, we want to benchmark so you will do it against the countries that have already developed their system, when you have an agreement to bring in their expertise, you have to decide if you accept what they say or you are to take what it fits to our system” (National Project Officer, Namibia).

Secondly, when planning the intervention with the international organizations to support the development at national level, what it tends to happen, even though the idea is not to impose anything, is that the experts from the international organizations have preconceived ideas about what it is going to work in an specific context and this might not be true.

“When you are in a planning stage the idea is never to impose, the idea is always to take what is suits, but when you work with an international organization or a developing partner, it is difficult because they already have preconception ideas about what they works for them” (NPO, Namibia).

In relation to the Namibian case, the national project officer mentioned that Namibia is not a case where the National Education Policies are imposed by the international organizations,

following pressures on developing ways of mass education. In Namibia there is a total population of two million people, which facilitate that, the priorities for the Education Policies are learned oriented, rather than copy and paste from systems where the population is massive and general.

“In terms of Mass Education, I don't know if we can say that” (National Project Officer, Namibia).

“In Namibia due to the population and in terms of TVET is difficult to impose something because of the nature of the outcome base education that has to be learned oriented. At the end of the day, we do have to decide what it suits us” (National Project Officer, Namibia).

The head of UNESCO Windhoek Office, consider that rather than imposing Education Policies, what the international organizations should do is to involve the people from the communities, and share the ownership of the National Policies development process with the communities themselves. Without the ownership of the communities, the development of National Policies will be always a failure, because no effective change will be made in the country.

“You can expend money in policies, programs, but if you do not get involve people, money will be lost, and there will be no results” (Head of UNESCO Windhoek Office, Namibia).

“If you do not have the ownership of the communities themselves, before implementing any policy, they will fail. If they are not involved, they are not interested, and after 20 years, there will be no change. If you do not involved the community at the beginning, if you do not discuss with them, you cannot succeed. All policies must start with that step” (Head of UNESCO Windhoek Office, Namibia).

The TVET experts from the Namibian Training Authority: the Quality Assurance Officer, the Manager of VET Standards, they do agree that the international organizations are not imposing National Education Policies.

The Manager of VET standards at NTA, considers that the pressures on developing ways of mass education through the action of the international organizations on the development of National Education Policies depends on development level of the country where the policies are been developed. This is justify by the idea that if a country has a clear goal and strategy to achieve at national level, the international organization could provide the expertise and knowledge to fulfill de strategy, but if there is no existing strategy, the international organization will tend to impose a model that have been already used and put in place somewhere else.

“No really, I think it depends on how well prepare the country is. If the country has developed its own strategies, and the idea is to get the organization to assist them to fulfill the strategy, I do not think there is a possibility of one to get bulldozed in terms of doing what other countries wants. Of course it can happen if you do not have a strategy of your own. Because if you do not have any plan, then any plan will work for you” (Manager VET Standards, Namibia).

“But such things can be expected, of course, because people try to impose what they think has work better for them in the system, and nowadays systems come from developed countries, they just come from a proved approved system, but it shouldn't be imposed as such. It should still be scale down in to the context in which it would be implemented, because context it would never be the same, you cannot just take it as it is and adapted here just as it is, so one needs to have an strategy in the first place, that speaks to their context, to know how and to what to take from the assistance that they are getting, and also to be able to differentiate what is not good for their system” (Manager VET Standards, Namibia).

The Quality Assurance Officer from the division of curriculum implementation and assessment, does not consider that the international organizations impose ways of mass education, nevertheless he presumes that the international organizations have their own interest when they do conduct and develop education policies in specific countries.

“I don't think they are imposing because; the meetings are at the high level, with the ministry” (Quality Assurance Officer / Division of Curriculum Implementation & Assessment, Namibia).

“We all know what the international organizations want, but I do not think they are really imposing something, they have the expertise”. (Quality Assurance Officer / Division of Curriculum Implementation & Assessment, Namibia).

According to the Chief Operation Officer, it would be difficult for an international organization to impose something to a country. The role the international organizations normally have is to support the countries in terms of sharing best practices, amplifying the national networks and providing expertise. It is the responsibility from the national governments to discuss with the international organizations and partners about what to do and how to contextualize these policies.

“I find it hard, that an entity like UNESCO can necessarily impose, what UNESCO can bring to the table is international best practices, and we can benefit from the network. But it is up to us, as a country to contextualize all of that in the policy development process, and in terms of implementation plans, we need to make sure that whatever UNESCO offers, it is fully contextualized, and I think this link is often messy” (Chief Operation Officer, Namibia).

“Whenever the international partner says this is what is available, use it and the country does not go into an additional look to check if this is going to work for us, as a country? and how do we contextualize the information and those policies? if we can contextualize, and achieve that we can get all the answers. (Chief Operation Officer, Namibia).

Nevertheless, mass TVET education at national level in Namibia, is considered to be a challenge, from one side it could be useful to increase the number of students attending to this type of education, but from the other side, a special attention should be given to maintain the quality of it.

“Massification of Education, particularly, massification of TVET in Namibia is a real challenge; we need to increase our numbers of students, without compromising the quality of the education”. (Chief of Operations Officer, Namibia).

"Mass education, it is always the easy way to do things. We are supplying the global village with international workers now" (Curriculum Development Officer - NTA, Namibia).

"The International organizations from other countries sometimes impose their systems to our countries without consulting, but things do not work here in the same way". (BEAR program teacher at Namwater. Namibia)

"The project was made looking at the responses of the programme that was being runned. Trying to address the existing challenges" (GTC Bear Coordinator, Botswana)

**Do you think this project aims to improve the quality of the education system or it follows the pressure for the implementation of mass education processes?**

All persons interviewed, agreed that the BEAR project aimed to improved the quality of the education system, the reasons argumented differ from one to another, but there is an unanimity about the answer.

According to the chief manager of the BEAR project at UNESCO HQ, the aim of the project as it was conceived is to improve the quality of the education system, by showing new approaches on the curriculum development process and introducing the participation of the industry on the curriculum development process.

"I do not think it is imposing, UNESCO is just showing new approaches of curriculum development, and the importance of connecting education with the industrial sector" (Chief Manager of BEAR Project, UNESCO HQ).

The UNESCO representative at the National Commission in Botswana, considers that the project aimed to improve the national human capital in Namibia, therefore improve the quality of education.

"To improve the quality of education: it aims to improve the Human Capital at national level. Nothing is imposing on us" (NATCOM, Botswana).

The National Project Officer in Botswana, thinks that this project improve the quality of the education system according to the specific needs of the country. UNESCO has strongly emphasized on setting up a collaborative framework that allow an enriching reflection and discussions between the country team and the experts from UNESCO, where UNESCO's role is to suggest and support the country implementation of the project and build capacities on the local experts to transform what it was already in place, rather than transposing a foreign system.

“Definitely, it improves the quality of education, based on the countries needs” (National Project Officer, Botswana).

“It is not just UNESCO coming and saying, we can improve the quality of your country if you follow us. Is UNESCO coming in and saying, you want to improve, let's have a look to what you are doing, let's see where can you improve, give us suggestions and we will help you to implement. Every country is different, but I think the approach of gathered within to transform rather than transpose is the right approach” (National Project Officer, Botswana).

The Assistant National Project Officer fully agrees with the perception from the National Project Officer; rather than imposing anything the goal of this particular UNESCO project is to give the opportunity to Botswana to develop the curricula by building capacity on the local TVET experts.

“The BEAR project aims to improve the quality of the national education system. UNESCO is giving the opportunity to Botswana to develop its own curriculum by building capacities in their local people, because these people are the ones who know what it is needed” (Assistant Project Officer, Namibia).

The head of BQA in Botswana, emphasizes two elements that proved that the approach used by UNESCO improved the quality of the education system, firstly, it fully involved the participation of the national experts on the process, this involvement, lead to a high degree of commitment from all participants and this generates ownership from participants, that were happy to be engaged and finalize assimilating of the goal as a personal Endeavour.



"UNESCO did NOT impose the approach to use; they involved us fully in order to improve our system". UNESCO did not told us what to do, UNESCO ask us how we wanted it to be done, and then they got involved"(Head of BQA, Botswana).

For the TVET experts from DTVET, this project aimed to improve the quality of the education system, as a result of the curriculum development process conducted. There are other factors that are significant evidences of the quality improvement of the system. Nevertheless, these evidences are perceptions and may be proven or not, once the pilot is finished and the program runs normally in every TVET school.

“With an improved curriculum, we expect improved quality but those are just expectations (Chief Education Officer at DTVET).

“There are so many things that have contributed to increase the quality: the delivery methods, the quality of trainers, also the availability of resources in our institutions” (Chief Education Officer at DTVET).

The experts from the Botswana Qualification Authority consider that building capacities and facilitating that the new curriculum developed achieves the international standards are two crucial factors that prove that the final aim of the project is to improve the quality of the education system. Once the curriculum is upgraded into global standards, it can compete with others.

"To me I think in that sense, UNESCO facilitates improving the quality, in terms of ensuring that whatever we do, it is also somehow aligned to international systems out there" (BQA, Qualification Development Officer 2).

"I do think that they are trying to increase the quality of the education system by building capacities in locals and trying to enrich their capacities. It will put Botswana education system into the global market. I mean, you will be able to build capacities in the students and they will

be able to travel abroad. So that is like bringing the education at international level but doing it with your local developers"(Qualification Development Officer BQA).

"I think it is upgrading our system, the process of development has reached a level in which we are inserted into the global market. The quality of the education, it could compete with the others. That is my impression" (Qualification Development Officer BQA).

The industry experts thinks that the project improve the quality of the education system for two main reasons: firstly and foremost because it develops capacities on local people improving their skills to further develop the education system by their own, and secondly, because it identifies the existing weakness of the education system.

"The BEAR Project is certainly developing the capacity of the people because it is training people within a country and they should be the ones to do. The other thing is the merit in terms of improving and identifying the weaknesses ourselves, we identify those weaknesses on the education system and say 'this approach that is coming from the BEAR Project is going to assist us to address the problem" (Executive Director CIFT, Botswana).

In Namibia, UNESCO representative at the National Commission thinks that the project improves the quality of the education system by providing good quality services through TVET, upgrading the TVET standards to an international level, without losing the contextualization of TVET nature in the country.

"TVET is always contextualize, but it is also international (because the trades are the same worldwide with the context specifications), It improves the quality of the education system. Quality in terms of the provision of the quality services for Namibia through TVET" (NATCOM, Namibia).

The head of UNESCO Windhoek office agrees with UNESCO representative of the National Commission in Namibia, and suggest creating a regional network of TVET schools within the SADC region, as it exist in other regions, would also increase value to the project in terms of the quality improvement of the education systems.

"First you talk to reach a consensus, to know what can be done by UNESCO and what the community can do. I have told them about the regional approach, why not creating regional network of TVET schools (like in the SADC and the ECOWAS)" (UNESCO head office in Namibia).

The National Project Officer in Namibia considers that the final goal of the project is to improve the quality of the education systems, but clarifies that sometimes the process of benchmarking is so tight that there is no room for choosing, rather than accept what is suggested.

"We want to improve the quality, but sometimes we benchmark so much that it is very difficult to choose"(National Project Coordinator).

In relation to the TVET experts at the National Training Authority (NTA) the communication officer, the project improves the quality of the Namibian education system in terms of TVET provision and also, about sharing the Namibian expertise based on the national successes and key lessons learnt on the process of improving the quality of the education system through the implementation of the project.

"For us, in Namibia, we learn from the best practices, and we integrate those key aspects into our system. For us is never an approach of copying and pasting what others do, for us it is about, assessing, evaluating other systems, see what we can draw from that and adapting into our own circumstances, to at the end of the day suit our needs and at the same time we also share our expertise, because we have also learnt some key lessons, we are always eager to share those the lessons, not only lessons in term of challenges that we overcome but also in terms of our own successes. (NTA Communicator Officer, Namibia).

In addition to that the Namibian Quality Assurance Officer, the manager of the VET standards and the Chief of Operations Officer, all of them consider that the project aimed clearly to increase the quality of the education system, as mentioned before due to its capacity to

benchmark and streaming at national level, and also in terms of building capacities at national level.

"We needed external support, to be benchmarking and streaming at National Level (Quality Assurance Officer / Division of Curriculum Implementation & Assessment, Namibia).

"The BEAR project is really helping the system" (NTA, Manager VET Standards, Namibia).

"It is about quality, it helps us to enhance the curriculum development processes, the processes we use for capacity building on VET practitioners, it adds value to the education system" (Chief of Operations Officer, Namibia).

The curriculum developer experts from NTA consider that the implementation of the project imposed ways of mass education, the reason that justify this thought or perception is that the curriculum experts consider that Implementing Partners didn't have a good knowledge of the context and of Namibian national and TVET background prior to the implementation of it, according to them a deep research study is compulsory to establish an approach focused on the quality improvement of a national education system.

"I had the feeling also that there is kind of a pressure to impose this system from the Implementing Partner because if you really want to develop ours it could have been nice that you do a thorough background check on what is ours" (Team leader of Curriculum Development, Namibia).

"On the other side also, the technology available for us to do things can also not be compared to what the people have on the other side. So that is the reason why they could have thoroughly done a research before they start doing the way things are done, because if you do not do that, the opinion that the national people will have about you is that you are trying to impose your way of doing things. They should have encouraged people to do their things...do their things" (Curriculum Development Officer, Namibia).

The school director at the TVET technical school in Namibia, NAWATER, has a different perception, he consider that the project follows the pressure for implementing ways of mass education. The perception that this person has is that there has been no identification and enough discussion with the TVET experts at the schools in terms of identifying the existing gaps in the education system and therefore the measures conducted through the project have been seen as something imposed from the International Implementing Partners.

"It is a little bit difficult... what I observed is that the International Partners, they expect us to do what they are doing; and at this point, what I said is that if you want us to do X, Y and Z they must provide support, they must rather ask or evaluate first about what is the situation, and if they see the loop holes they must try to support there, not impose what they want on us" (Namwater pilot school for carpentry, school director, Namibia).

The same perception is shared by the teachers at the TVET technical schools (Namwater) they consider that discussions between the international partners in charge of the curriculum development process and the curriculum implementers at the technical schools (teachers) is a must if the final goal of the project is to improve the quality of the education system, because is essential to evaluate the gaps within curriculum and because the people that work in a daily basis with the existing curriculum are the ones who can contextualize the new curriculum better.

"If you want to implement or improve a national system, I think the International Partners are suppose to ask for advice. They have to discuss with us what subject do we think are the best for the system in the country. For example, the HIV subject, what are the people going to do with HIV?" (BEAR programme Teacher at NAMWATER, Namibia).

**The national government has enough capacity to develop the national TVET system by its own, without external support with greater success?**

The Chief Manager of the BEAR project at UNESCO HQ, consider that there are significant differences between both countries. According to this person, Botswana has a higher GDP per capita than Namibia, which means that the population is healthier, and the government

has more capacity to develop the country in itself, and these factors helps UNESCO to develop the project with higher success, in comparison with Namibia were the conditions are considered to be good but the government has lower capacity to develop the national TVET system by its own.

"Depending on the beneficiary countries. I think Botswana has the highest GDP per person in Africa, so this specific circumstances it helps UNESCO to implement the project. Namibia is good, but I think Malawi and Zambia, would have problems" (Chief Manager of the BEAR project at UNESCO HQ).

"I think Botswana would be the best country to implement the BEAR project. One of the reasons for saying that is the context existing in the county" (Chief Manager of the Bear project at UNESCO HQ).

UNESCO representative at the National Commission in Botswana consider that the country has little capacity to develop their own national TVET system that is why the technical support was requested to UNESCO. The region in general and the country in particular need to collaborate and share best practices in order to learn from each other and been able to benchmark.

"The country had little capacity that is why we requested technical support. There is a need for collaboration and sharing of best practices because it is important to benchmark. There is a need for us to learn from each other" (Natcom, Botswana).

As for the Botswana National Project Officer and the Assistant to the NPO, both consider that there is enough human capacity at national level to develop their own national TVET systems, but what it lacks it is the confidence to realize that they can do it by themselves and that is what the project has brought.

"Yes, in terms of Human capacity I think it has, but it needs to have confidence to do it and I think that is what the project has given, the confidence to do it and the approach as well" (National Project Officer, Botswana).

"The national government needed external support, and UNESCO provided that support" (Assistant NPO, Botswana).

The head of the QAA consider that the country has enough capacity to develop the TVET system by its own, but the political will is not good enough and affects the efficiency and effectiveness on the development of the public education systems.

"Yes and No, this is a controversial question. Yes, it has enough capacity but the political will sometimes comes up with some kind of circles that reduce the effectiveness development and implementation of systems, especially in comparison with the private institutions (which do things faster and easier, just because they can take their own decisions)" (Head of QAA, Botswana).

There is a shared perception within the TVET experts from DTVET about the existing national capacities to develop the TVET systems by themselves, the chief education officer, the policy and developer and the program developed, they all think that there is no enough existing capacity to do that.

"We all need support" (Chief education Officer, NTA, Namibia).

"We do not have capacity. We need a lot of support actually. Maybe to just give you an example, even the development of the curriculum, we do have officers but they are not yet trained. We still have a long way to go" (Policy and Development Division at DTVET, Namibia).

"Not yet" (Program Developer and the Delivery unit of DTVET).

The TVET experts at the Gaborone Technical College (GTC) share a common vision about the need of external support, starting with the considerations of the GTC principal, that states that the capacities are missing, but that are covered by the support of the international organizations, who helps to close the existing gaps and also to diversify the economy. Secondly, there is a lack of expertise at national level that can be fulfilled with external support.

"I think we really still need external support in developing a comprehensive TVET system that not only closes the existing gaps but that can only help the country to diversify its economy"(Principal at the GTC, Botswana).

"Currently I think we lack capacity, we need to do a comprehensive review and development of the TVET system that can benefit the learners and the country in the long term and I am not sure if with the prevailing capacity, we are able to do it" (Principal at the GTC, Botswana).

"So yes I agree that we need to be assisted to develop a national TVET system. We cannot do it on our own; in the first place we are not that capacitated. We have countries that have done extremely well in the TVET sector; we can look at Germany, Finland, Australia and so many other countries. We can bring those experts on board to assist us, we can go out there and benchmark and come back, and together come up with a comprehensive system. I think if UNESCO or any organization can provide that support it would help Botswana to develop" (GTC Bear Coordinator).

Moreover, the experts add another evidence that proves the lack of capacity from the government side to develop the national TVET system, is the fact, the private provision of education in the country have opted for training people by themselves to work on specific trades.

"Already we have indicators which do not have capacity, the mining sector they have opted to take training themselves. The Chamber of Mines is doing training for people who can be engaged by the mines. This shows that they have identified that lack of capacity" (Business studies - Head coordinator).

The experts from the Botswana Qualification Authority (BQA) think that country does not have enough capacity to develop the TVET system for two main reasons, the Qualification Developer Officer explains the first one by saying; livelihoods is the first priority of the government, not education. When the majority of people are living under the poverty line, focus may be taken away from education, that is one reason why external support is needed.



"I think the government is pressurized by people's needs. You know we have a lot of needs and the government prioritizes other things as opposed to education. For example currently we are faced with the issues of people's livelihoods. Majority of the population living below the poverty thing, then the government will obviously be geared towards addressing that issue. Focus may be taken away from education, so in this regard we need external support"(Qualification Development Officer, Namibia).

The Qualification Developer Officer 2 explains the second reason, there is a lack of expertise at national level to develop the national education systems:

"I believe almost every other country within the region, obviously they will continuously be seeking support from other organizations and other countries. I have ran out from a system like, you know people feel they can do everything alone. We still need to engage experts from wherever you know" (Qualification Development Officer 2).

Finally, the representatives from the industry consider that there is enough capacity within the country to develop the national education systems by their own; nevertheless they consider it is significantly relevant to get foreign assistance in order to benchmark and learn from best practices from other countries that can be useful for your own national development.

"We can develop the TVET system in the country but we still need assistance to know what other countries are doing. We need to benchmark, in other words you should go and take what is working in Korea, in Hong-Kong,... and see if it can work in Botswana otherwise we cannot just adapt. What we call one size fits all, it cannot work that way. (CIFT, Executive Director).

In Namibia, there is not a common consensus regarding the perception about the existing national capacities to develop national TVET education systems. On the one hand there is people who consider that there is no enough capacity existing at national level that help to develop the national TVET systems, this group includes: the head of UNESCO office in Windhoek, UNESCO Natcom Representative, Quality Assurance Officer, Manager of VET standards, Chief of operation officer in Namibia, Curriculum development officer. On the other hand, there are

experts that consider that Namibia has enough capacity to develop the national TVET systems, as: the National Project Officer, communication officer.

As mentioned above, the representative at the National Commission for UNESCO in Namibia considers the country lack's technical, financial and human capacities. The importance of benchmarking from other's countries policies and practices is highlighted, and through benchmarking the policies can be streamlined and contextualized for Namibia, and this capacity is existing within the Namibian Training Authority.

“No, when it comes to technical and financial support. We also need Human support. There are certain countries that are good in TVET and we must learn from them, but the capacity can be gradually improved” (NATCOM, Namibia).

“I think NTA has the capacity to consult and to analyze foreign policies and to streamline through benchmarking and contextualize for Namibia” (NATCOM, Namibia).

The Head of the Namibian UNESCO office states a clear critic to the UN system; it states that the UN System has lost the ability and its mandate to transfer knowledge and skills to nationals for one simple reason, the sense of urgency to get results and outcomes from the action conducted by the UN, force to implement the activities without transferring the knowledge and skills to the local people, the ones that are responsible and will be committed to develop their own country. The time bond is a key element for success as UN agency, if what it is aimed for within the programs or project implementation is to generate and create enough capacity on locals to develop their own national TVET systems by their own, without external support.

“The UN system has lost its mandate of transferring knowledge and skills to the nationals, I remember in the 90st when I arrived at the UN, that it took 10 year to transfer the skills to the nationals, the time bond is very important ... we need to go back to this programs, the nationals are able to do ... but there is a very big issue of transferring skills, technology, methodology, methods, and knowledge, How do we do it?? You need to build capacities in nationals first; you need time to develop skills and capacities in locals. (Head of UNESCO Windhoek office in Namibia).

The National Project Officer in Namibia considers that there is enough capacity at national level, but there is a lack of expertise and discipline.

“Yes, we have the capacity but we do have the expertise, we do not have the discipline (you have to be dedicated and hard worker) (National Project Officer, Namibia).

In contradiction with the opinion from the National Project Officer, the Quality Assurance Officer experts from the Namibian Training Authority consider that the government has the expertise but to enhance and development good policies and systems at national level, it is also needed the support and from the international organizations.

“The government has some kind of expertise but it is important that we get support from International Organizations to enhance the development of good policies and systems” (Quality Assurance Officer, Namibia).

The Manager of VET standards, point out the importance for Namibia to be in partnership with other countries, to learn from others and to be part of the global village, in order to empower the nation to be able to develop the national TVET systems.

“Not really, Namibia is not isolated, it is part of the globe, so you cannot do these things in isolation, you need to learn from others, and you can only learn from others when you are with them. Namibia really needs partners from other countries to learn from. Namibia hasn't build this capacity jet, to deal with the system by its own, so assistance is still needed. (Manager VET Standards, Namibia).

The chief of operation officer in Namibia consider that at national level, there is always need for external support from the international organizations In order to address the TVET challenges, according to this person, there is no government that can address the TVET challenges by its own.

“No government can address the TVET challenges by its own. There is always a need for external support from organizations like UNESCO and others. (Chief of Operations Officer, Namibia).

The communication officer at the Namibian Training Authority thinks that beside the fact that the government has enough capacity to develop the national TVET systems by its own, Namibia in general and the government in particular is in a good position to share the key lessons learnt to others in a weaker position than Namibia.

“Despite the fact that we might be small or might be deemed by others as having an underdeveloped or not so well established VET sectors, we have also learnt some key lessons, we are always eager to share those lessons, not only lessons in term of challenges that we overcome but also in terms of our own successes” (Communication Officer, Namibia).

The curriculum developer officer, as well as the team leader for carpentry curriculum development considers that there will be always need for external support, no matter the existing internal capacity at national level.

“Technical support and financial support will always be needed in whatever capacity”. (Team Leader of Carpentry - Curriculum Development, Namibia).

Both experts at the TVET technical schools, the school director of the Namwater pilot school for carpentry and the Bear teacher program at Namwater, consider that there is enough capacity at national level, but support from the international organizations is still needed, in terms of expertise and also financial support is required.

“Let me say, on the side of capacity, at the moment I think we can develop. The only thing that I would say is that we need financial support. May be in the near future NTA will have the financial capacity, as with the implementation of the levy, that started in 2014 will get funds” (School director, Namwater pilot school for carpentry, Namibia).

“People are there to do the job without people from outside; it is just a matter to advice. Whether NGO and UNESCO they just need to give advice and people will do it”(BEAR programme Teacher at NAMWATER, Namibia).

**Do you think the goals achieved by the project could be replicated and achieved by the national experts once UNESCO stops financing the project?**

The chief manager of the BEAR project at UNESCO HQ, states that the main goal of the project is to achieve the sustainability of the outputs and processes developed by the BEAR project.

“This is one of the main goals of the project, I hope so, but I am not sure” (Head of BEAR project at UNESCO HQ).

UNESCO representative at the NATCOM in Botswana, consider that the sustainability of the project is an important issue and the transformation of the BEAR project to a program is something that should be done in order to guarantee the sustainability of the results achieved so far.

“Yes, that is why I say that we want to take it further from being a project to a program, that stays over the time, which is sustainable” (NATCOM, Botswana).

The National Project Officer and the Assistant NPO, both consider that the goals of the project could be replicated, due to a very single but crucial reason, the government is aware of the capacities that the project has developed on the national TVET experts and would like to ensure that this expertise is used for the further development of the TVET system by replicating the approach used in other trades. The project has offered the possibility of lifelong learning.

“Yes, I think it can. The government is smart; it ensures the BEAR focal team and uses this key people, in term of development. But it needs to use that new begin capacity or knowledge to do” (National project Officer, Botswana).

“What makes the project or a policy successful is the entire approach. No project is successful after one or two years, it has to evolve and develop itself” (National Project Officer, Botswana).

“We can teach people to look for solutions and take it further. Teach a man how to learn and he can do anything and it is true, “learning is about making mistakes and trying to improve it, find solutions. The way we have developed the project here, is a lifelong learning approach, is to get it from the people, rather than to impose” (National Project Officer, Botswana).

The Head of QAA in Botswana is sure about the continuity of the project once UNESCO stops financing the project, for two reasons, the first one is that, in terms of the implementation cost of the project is cheaper than the old TVET system, the second reason is that the capacities that have been developed make possible the replication of the curriculum development process to other trades.

“A very big yes. We have learnt a lot, the BEAR Project implementation and assessment is cheaper than the current BTEP one. So even if we consider introducing the final examinations as it is with the BEAR Project in the BTEP, we will be able to save a lot of money on assessment” (Head of QAA, Botswana).

“If we use the curriculum development approach, we will be able to develop a lot of programs in a very short period of time, which obviously will save the nation a lot of money in return. The only challenge is to have qualified people to do what is required” (Head of QAA, Botswana).

The TVET experts at DTVET agree with the importance of replicating the curriculum development process to other areas and trades. The chief education officer considers that the capacities developed on the TVET staff makes it possible to replicate the model in other areas.

“Not only in the institutions but also in DTVET, we have officers that have been working with the BEAR UNESCO office in curriculum development. So we feel they will be able to support other areas” (Chief Education Officer, Botswana).

“Actually that is what we are planning to do, it our intention” (Policy and Development Division at DTVET, Botswana).

“That is what we are doing, like now we are reviewing the whole system”. (Program Development and the Delivery unit of DTVET, Botswana).

The staff from the Gaborone Technical College (GTC) is the only one in Botswana that do not consider that the project could be replicated once UNESCO stops financing the project. The principal of the GTC, shows his doubts about the sustainability of the project as considers that the capacity built by UNESCO so far it is not enough.

“I doubt that UNESCO has indeed built capacity to that extent, where we could be in a position to sustain the project”. (Principal GTC, Botswana).

In Namibia, UNESCO representative for the National Commission consider that financially the sustainability will be ensured by the money collected from the TVET levy.

“The collection of the TVET levy every April will help with the financial” (Natcom, Namibia).

The National Project Officer thinks that the national government has enough capacity to replicate the project once UNESCO stop financing the project, in addition to the financial independence that the TVET levy provides.

“Yes, we definitely do. The national government has the capacity. NTA has now the training funds; we do know how to attract donors, even though we do not want to attract donors” (NPO, Namibia).

In addition to what has been mentioned before, all the TVET experts in Namibia, consider that the national government has enough capacity to replicate the project once UNESCO stop financing the project. The Namibian Quality Assurance Officer, consider in contrary to the National Project Officer and the NATCOM representative that the financing could represent an obstacle for the replication of the project.

“Yes, it is possible, but financing might be an issue, a challenge” (Quality Assurance Officer, Namibia).

The Manager of VET standards, consider that the empowerment and capacities built in Namibian local experts would make possible to develop and replicate some activities in the future with greater success. Nevertheless external support or assistance is a an asset, despite the existing capacities at national level.

“I think so, the Namibian experts that have been participating together with the International Implementing counterparts, I think they have learnt a lot and they would be able to develop some activities by themselves with greater success” (Manager VET Standards, Namibia).

“Yes, with some assistance. I am not really support the notion of we work in isolation, even though I could confidently say that we can do, the capacity is there” (Manager VET standards, Namibia).

The Chief operations officer emphasizes the importance that the project has given to the sustainability and therefore its replication is guaranteed into other initiatives.

“Sustainability has been a big consideration in this project, and yes, we can mostly replicate what has learnt through this project into other initiatives” (Chief of Operations Officer, Namibia).

The Curriculum developer officers at NTA consider that in terms of replicating the activities the project set up a clear and functional articulation that allow the national experts to further replicate and develop activities by their own.

“Yes, because now we have developed our technical working groups, we have developed team leaders which can drive activities. We have already built also some plans, monitor and evaluate and we can drive it now and go forward” (Curriculum Development Officer, Namibia).



The TVET teacher staff at the technical schools considers that despite the challenges and the slow speed of the implementation of the project, it can be sustainable, if those things are addressed.

“I think, if NTA could bring the success of the project it can be sustainable. If they could just address the challenges I mentioned I think really it would be” (Namwater pilot school for carpentry, school director).

“The implementation of the project has gone very slow in Namibia” (BEAR programme Teacher at NAMWATER).

**Do you think the national state could developed their own systems and policies with greater success?**

Few interviewees have answer this question, most of them, considered that the aim of the question was the same as the previous question referred to: The national government has enough capacity to develop the national TVET system by its own, without external support with greater success?

Even though the first question is broader and it is referred to the systems and policies in general terms, and the second one is more specific related to TVET, people refuse in most cases to answer this question by mentioning that they have already answer it.

In Namibia there has been no answer, as for the ones that answer in Botswana the Assistant National Project Officer and the Head of the QAA, consider that the government could develop their own systems and policies but always with external support. The experts from DTVET highlight that the consultant’s work sometimes undermines the national capacities to develop the national capacities.

“Yes. Botswana government can develop their own systems and polices because they know the existing reality better than people from outside, but we will need a little help from external people to provide little direction or coordinator” (Assistant NPO, Botswana).

“A little bit of involvement of an external body will be necessary for us to get used to what is exactly required because we acknowledge that there is a bit of resistance on new forms of management, we need to further train our curriculum developers in curriculum development” (Head of QAA, Botswana).

“The thing is that currently we are relying on consultants to help us, so I am not sure if we are ready to stand on our feet, to be independent on developing standards. We do not even have the capacity to do some of the things on our own” (Policy and Development Division at DTVET, Botswana).

“We hope to gain skills from those consultancies but sometimes unfortunately it does not happen. I think there are local people who are competent, those that have the skills and the commitment to do these things. This is how we will build our capacity instead of having somebody to come and work on that thing” (Program Development and the Delivery unit of DTVET).

### **9.1.2.3. The identification of UNESCO’s role as an international organization on the development of the national TVET systems**

The third and final part focuses on the one hand on the influence of the UNESCO and its role as international organization on the development of National TVET systems, and on the other hand, the description of UNESCO's strengths and weakness on the development of TVET systems.

The questions articulated on this regard are the following ones: Which role UNESCO has had on the development of the National TVET system; Which role do you think UNESCO or any other international organization should have regarding the development on National

Education Policies?; What UNESCO can do to contribute on the development of national capacities related to TVET? And which strengths and weaknesses have UNESCO as international organization in the development of National TVET systems?

The analysis of this part will be done following the structure of the questions as it has been done before.

### **Which role UNESCO has had on the development of the national TVET system?**

The chief Manager of the BEAR project at UNESCO HQ explain UNESCO's main role, as facilitator for the member states in their own development processes. According to this person, UNESCO has the perfect answer to any existing question for the education sector. Nevertheless, UNESCO should facilitate rather than impose policies and practices, according to the national context. Moreover, as main role UNESCO should also try to find more partnerships with other agencies and professionals, because it cannot succeed in isolation.

“I think UNESCO has the perfect answer to any question for the education sector” (Chief Manager of BEAR project, UNESCO HQ).

“If the international agencies want to help member states, the first step is to take a look to the specific background, and then they have to facilitate, not to impose, just facilitate because all countries can develop by themselves. I think that UNESCO has to focus on the special situation and the context of each country, because each country has its own special background or situation” (Chief Manager of BEAR project, UNESCO HQ).

“From my perspective UNESCO is arrogant; they just impose over the developing countries. UNESCO staff is very professional but they cannot do everything by themselves, they should have more partnerships with other agencies, or other professionals” (Chief Manager of BEAR project, UNESCO HQ).

In Botswana, the UNESCO representative at the National Commission, mention that UNESCO has been involved on the development of the national TVET system in Botswana since the conception phase, during the consultative meetings, facilitating all the support and assistance needed.

“The National Commission for UNESCO in Botswana has been involved since the beginning, facilitating every area that needs our assistance, even before the NPO was appointed. We were leading the discussions, driving the consultative meetings, everything...” (UNESCO Commission, Botswana).

The National Project Officer in Botswana listed the task under the role of UNESCO within the implementation of this project. The first task was to pilot the conceptualization of the project in the selected trades and once the assessment certifies that the project has been successful, the Ministry of Education and Skills Development can see the benefit that the project brings to the country and decided to implemented it in other sectors.

“To pilot the concept and see if it works, and that is why the review of the pilot is deemed so important. So that the Ministry can see that the BEAR works, so they decided to put it into other sector” (NPO, Botswana).

Secondly, UNESCO’s role is to take a risk that the national governments won’t assume and develop and implement new contextualized policies that are able to prove that the particular practice on developing national.

“UNESCO took the risks out of the development process for the Government. The role UNESCO had was to take that risk and to see if it works; if it works, Botswana could develop further the National TVET System” (NPO, Botswana).

“The cost spent at this moment is like 130.000US\$, the government does not have that money to spend and not to spend on an experiment, the only thing that the Government put into the project was time and expertise, so the fact that the BEAR came in and UNESCO take the risks and pays for it. We will see what comes out of it, if the money is well spend then the government can take that

initiative forward, and guarantee that the money that they put in could also be successful so UNESCO took the risks out of the development process for the Government. (NPO, Botswana).

In addition to what has been mentioned above the Assistant National Project Officer in Botswana, mentioned that UNESCO's role is to give support to the national parties for the development of the TVET systems.

“The role of UNESCO is to give support for the development of the TVET systems” (Assistant NPO, Botswana).

The TVET experts from DTVET, point out that UNESCO has been assisting the development of National TVET policies in the country already in the past, and with its support, the nation could have developed policies which are more relevant to the economy, especially in terms of the alignment with the national development strategies.

“I think it has been very supportive and not only through the BEAR Project, because UNESCO has been assisting even in the past in Education and Training in Botswana. UNESCO's support through the BEAR Project was focused on looking at our programs, trying to improve them in such a way that they become more relevant to the economy” (Chief Education Officer, DTVET).

Moreover, it is highlighted that UNESCO's role include the revision of the TVET existing programs in the country, as it is been done with the hospitality and tourism sectors, and from the revision the national TVET expert have built capacities.

“I would say that UNESCO's role is a major role within the TVET system in Botswana because like now we have been battling with the review of our programs, the BEAR Project focused mainly on the revision of the Hospitality and Tourism sector programs. We see ourselves now getting the best practices out of it or even benefiting the country more from that. So I think it is a major role in transforming the system on its own (Policy and Development Division at DTVET).

The program development and delivery unit of DTVET consider that UNESCO is a key player in improving the TVET sector, especially in relation for finding technical expertise or generating international partnerships that add value to the existing reality.

“I see UNESCO as a key player in improving the TVET sector especially as a platform for finding technical expertise or creating that collaboration and provision for interaction with experts from elsewhere because you may have your system, you may think you know what you are doing, you know where you are going but it adds more value when there are people who have experience and they bring in those expertise. Like where we were dealing with the International development partner in the BEAR Project. That part has been very important and I think it has helped us a lot as a country” (Program Development and the Delivery unit of DTVET).

The capacity building manager from BQA, consider that as a country they haven't benefit from the support that could have been provided by UNESCO, even though the NATCOM have guided them, and discussed with them.

“I feel as a country we have not actually done our best in terms of requesting UNESCO to help us” (Head of BQA, Manager Capacity Building, Botswana).

“The Botswana National Commission for UNESCO, they have actually told us how we can benefit as a country but I do not think we are actually utilizing the resources that are available” (Head of BQA, Manager Capacity Building, Botswana).

The Qualification development officer from BQA , explains that UNESCO's role beside the releasing of funds for training have been to built capacities on national TVET experts, as to be able to replicate and cascade down the knowledge and skills acquired by them.

“We are aware that UNESCO has been around for quite a number of years. We are also aware that as we speak UNESCO has released I think it is about two hundred and fifty thousand pula to train a few more people in curriculum development. About twenty five (25) have been marked for such training. When these people are back after training or once they have been trained, they should be able to maybe in way cascade the same kind of approaches into other trade areas.

These are people from different backgrounds and they are going to be taught the same kind of model and therefore in principle; this is a way of cascading the kind of skills that UNESCO has developed in terms of preparing the team which have developed the qualifications and programs under the discussion” (Qualification development officer 2, BQA, Botswana).

The Principal at the Gaborone Technical College, consider that UNESCO’s role is mainly to coordinate the activities and the program in itself, because the ones that have developed are the local national experts.

“UNESCO played the role of coordination because I think in all fairness, the curriculum has been developed by the staff and the assessment has been developed by the staff, so in my view UNESCO played a role of just coordinating the development of the curriculum” (Principal, GTC).

“UNESCO wants to play a supportive role to developing TVET in developing countries either to assist also with capacity building or resources” (Principal, GTC).

The BEAR coordinator at the Gaborone Technical College, critics that UNESCO did not have a clear idea of which was its own role at the beginning of its implementation.

“I feel that though UNESCO is doing a noble job of promoting TVET it should be honest from the onset, specify what its role very clearly. It should not leave any expectations on other parties that would not be fulfilled” (GTC Bear Coordinator).

“From the onset it should stated what role UNESCO will be playing and what the expectations are for the colleges to fit into the ongoing project” (GTC Bear Coordinator).

The industry representatives consider that UNESCO’s role has been primarily to bring expertise, knowledge and resources to the country.

“I think in terms of the TVET system, UNESCO has played a part in terms of participation in international conferences and also in terms of bringing in material. That has been very helpful

because we ended up knowing what other countries are doing. I think there was an interchange of knowledge (Executive Director CIFT).

“I think UNESCO I think it has been assisting TVET for some time, funding of some projects has also been a key factor” (Executive Director CIFT).

In Namibia, the NATCOM representative, clarifies that UNESCO’s role on the development of National TVET systems and particularly in Namibia, was settled by the Executive Board with the aim of provide technical assistance and training to the nationals in the country.

“Based on the decision made by the Executive board, UNESCO has provided technical assistance and training, to focus on the TVET in the post 2015 development agenda” (NATCOM, Namibia).

As a critic, the Namibian National Project Officer considers that even though UNESCO’s role has been clear, it should have been considered more time to plan and prepare the project prior to the start.

“More time needs to be spent on planning and preparations. The timelines and contract needs to be finalized already and set before the implementation phase, this and this and this has to be completed. Spending more time in planning and to ensure that the capacities are there. Then the implementation itself should go quicker and smoothie” (NPO, Namibia).

The communication officer at NTA, consider that UNESCO’s role has been very important, emphasizing the importance of the support provided to exchange practices across the world, not only at this moment but also previously, and its recent focus on TVET as a priority.

“I think UNESCO has played an important role up to this point. And from our side, we are very eager to continue with this partnership with UNESCO” (Communication Officer, Namibia).



“UNESCO has played an important role, and I am confident that going forward UNESCO will continue play an important role on the development of our own system” (Communication Officer, Namibia).

“UNESCO’s mandate is to support the exchange across the world, and UNESCO has been present in Namibia for quite some time now, UNESCO has a clear commitment in TVET now, with the establishment of NTA we have the appropriate channels and structures” (Communication Officer, Namibia).

According to the TVET experts in Namibia, UNESCO’s role has been focused mainly on the development of the TVET curricula in the selected trades, through the provision of technical support, equipment and the training of locals.

“Providing of technical support and Financial support” (Namwater School director, Namibia).

In addition to what has been mentioned before, the manager on VET standards in Namibia emphasizes the importance of UNESCO’s role on the preparation and participation of nationals to the World Skills Competition.

“In Namibia, UNESCO has really played a role in improving TVET, the BEAR project entails a lot of things, the development of curriculum, and the implementation of such, the sourcing of equipment and to training providers, and of course the role they are going to play on funding for the preparation and sending of the Namibian team to the Brazil world skill, it will be a great benefit to the Namibian TVET system” (Manager VET Standards, Namibia).

According to the UNESCO head office in Windhoek he considers that UNESCO’s role should also be to put the political dimension aside for the development of national education systems and advocate for an education reform at national and even at regional level, that could force the existing situation where universities produce more graduates that the labor market can absorbed.

“We need to put the political dimension aside, this needs to be done by UNESCO, because it should be strong enough to say to the government, stop the way you are producing students like in a factory because the market cannot absorb the offer you create and also to implement good policies on education you need a reform” (UNESCO head of office in Namibia).

In addition to that, the head of Windhoek office highlighted that UNESCO’s priority on TVET education determines and defines TVET strategies within UNESCO offices; it also mentioned that UNESCO’s role on improving the partnerships.

“TVET it is a mayor issue within UNESCO offices, they have a very big component of TVET, they have TVET specialist in the offices, and they are working in collaboration with the francophone in TVET and also with African union and ECOWAS but it is not sufficient and you cannot do it with the current education system, first of all try to change the system” (Head of the UNESCO Office, Namibia).

The Namwater school director consider that UNESCO’s role starts with the provision of technical and financial support.

“Starts providing technical and financial support” (Namwater school director, Namibia).

**Which role do you think UNESCO or any other international organization should have regarding the development on national education policies?**

In Botswana, the NATCOM representative considers that UNESCO and other international organizations should provide technical expertise for the development of national policies in member states.

“To provide technical expertise in order to guide the development of national policies in member states. UNESCO is working with the global community and they know what is working so they can assist with the perfect policy” (NATCOM, Botswana).

“UNESCO will only come as an advisory body, as a knowledge hub to say, ‘you want to do this, and this is how you can do it’ (NATCOM, Botswana).

The national project officer in Botswana, clearly states that UNESCO’s and any other international organization role should be, to act as a catalyst and clear house for ideas, to bring international and national experts working together, and to facilitate the development of National Education Policies.

“The role that UNESCO should have is to facilitate the development of National Education policies, to act as a catalyst to be a clear house for ideas, to bring people together, that is what UNESCO should be doing and the same with the other international organizations.” (NPO, Botswana).

The Assistant NPO in addition to what the NPO mentioned adds the capacity building support that UNESCO should provide to the national government in terms of the response to the development of their own education systems.

“The role of UNESCO is fine, to support the government of Botswana as per their request in developing their own educational systems. To build capacities on the country” (Assistant NPO, Botswana).

The qualification development officer 2, from the Botswana Qualification Authority (BQA) consider that UNESCO’s role should be focused mainly in training because capacity building is the only way that the nationals from the country could develop the country by themselves in a mid-term long-term perspective, sponsorships are also needed.

“I would still talk about training because training on locals is the best capacity building which they can do for the country. If there is capacity building at some point people can begin to run on their own. To me training of locals would be a major component, to sponsor a student (Qualification Development Officer, Botswana).

In addition to what has been mentioned above, the Head of BQA and the Qualification Development Officer of BWA, specifies that among UNESCO's role on the development of capacity building activities, to bring experiences, for people to learn from different practices (within exchange programs), will allow them to benchmark.

“Experience is the best teacher. I think at times, where opportunities arise it is best for people to benchmark so that they get to see things happening. People learn better when they see something happening. It lasts longer”. (The Head of BQA, Botswana).

“Exchange programs will also help and if you bring in the other guys from outside to work with us here. While they are here, you learn from them. So that will be another avenue for building capacity. (The Head of BQA, Botswana).

The Head of QAA in Botswana, thinks that the role of the International Organizations and UNESCO on the development of national policies includes, institutional capacity building, curriculum development during the development and the implementation phases.

“Not only in institutional capacity building, also in curriculum development, for both phases the development and implementation” (Head of QAA, Botswana).

The industry representatives in Botswana consider that UNESCO's role and the one from International Organizations should be provide assistance on developing the policies and also provide the support required at national level to implement those policies, including the financial funds that must be provided.

“The donor agencies must come and assist Botswana in terms of developing a very sound policy. Also in terms of funding, donor agencies they still need to assist” (CIFT, Botswana).

“UNESCO must assist Botswana government on implementation of these policies that are developed because we keep developing, we do not have the capacity to implement and I think this is where now we need to focus on, implementation” (CIFT, Botswana).

In Namibia, the Head of the Windhoek office considers that the role that UNESCO and other international organizations should have are on the development of national education systems is firstly to provide assistance on the education system reform that is needed. According to this person the education system has created expectations about what the education system brings to your life, that do not much with reality, the youngsters want to work at offices and they do not know how to work with their hands, and there is an agriculture economy so there is not much offer of work at the service sector, therefore the education system is generating more graduates than what can be absorbed by the market.

“The education system has failed we have created expectations about what the education system is bringing to your life, that is why the educational reform is needed. The mindset of the young people needs to be changed; they want to be only in offices but not to work with hands” (Head of Windhoek office, Namibia).

“The reform is needed because the system is not good, in most of African countries after 50 years of independence; they are facing the same problems. The situation is not going forward, it is going backwards” (Head of Windhoek office, Namibia).

Secondly to promote good governance. Governments should be the only responsible to address their development from an autonomous way, there are countries that ask for financial foreign assistance and support when they have a 4-5% annual growth rate.

“The Good governance is the first issue to address, in all development sectors in our countries in Africa, and then the anticorruption fight” (Head of Windhoek Office, Namibia).

“Governance and the autonomous way of development your own country needs to be address. How do you have countries that have a 5 or 11% annual economic growth, because they have petrol and they still ask for money from outside?” (Head of Windhoek Office, Namibia).

Thirdly, to fight corruption within the education sector, which is one of the biggest problem in Africa, specially related to the public policy sector.

“To fight corruption. Corruption in Education sector is the highest in Africa. This is a big problem in Africa. The last government has gone to court, due to three billion corruption problem” (Head of Windhoek Office, Namibia).

Fourthly, the provision of technical assistance to implement good project is on the field.

“Implement and have good project in the field. Working in the field is crucial” (Head of Windhoek Office, Namibia).

Lastly, to incorporate transparency and accountability processes within the International Organization Agencies.

“Transparency and Accountability from the international organizations” (Head of Windhoek Office, Namibia) .

There is a final remark, specifically for UNESCO’s role, it has to regain its mandate on education within the UN System, for the last decades UNICEF is taking the lead on education in some African countries, this could affect or have a direct relation with the lack of funds, and financial support to the agency.

“UNESCO has to regain its core mandate within the UN system, because UNICEF is taking the lead on education, and no one is saying anything. There is a deviation on UNESCO’s mandate, and it is also crucial to provide enough funds. if you do not have enough funds you cannot do anything, and education is the basement of anything in life” (Head of Windhoek Office, Namibia).

The NATCOM representative in Namibia consider that the role UNESCO should have on the development of National Education Policies, at this moment in time, where all the countries are aligned with the Sustainable Development Goals and its agenda for 2015 – 2030 is; firstly to prioritize, to understand which are the national priorities and setting up a clear roadmap for an specific goal to achieve.

“Nowadays we are all now aligned with the post 2015 education agenda, the role that UNESCO should have is to always make the priorities clear to national government, so they can understand where we are going. It understands and also leaving the national governments to decide own their priorities, so it is global versus contextualize national development (Natcom, Namibia).

Moreover, UNESCO and any other international organization should share the best practices and expertise and let the government decide if they want to implement it nationally or not.

“Other international organization can proclaimed what works best in education, whether is general education or whether is TVET, they can show best practices of many countries, and then the national governments they can decide if they will go with the idea or not. Share the expertise and sharing the best practice, is UNESCO and other international organization’s role” (Natcom, Namibia).

The National Project Officer in Namibia, consider that UNESCO’s role due to its nature as international organization should be focused on its advisory function, guiding and offering interventions.

“Because the nature of this international organizations, with a mandate in Education, I think the responsibility and the role should be more guiding, offering intervention, but is always only be in an advisory form at the end of the day the national government need to implement what is good for them” (National Project Officer, Namibia).

The Namwater TVET school director, consider that any international organization including UNESCO should focus its role on training and empowering people.

“I would have said that any organization should have training and development to empower” (Namwater school director, Namibia).

The BEAR program teacher at the Namwater TVET center consider that the main role of UNESCO when implementing a program that aim to improve and develop the national education systems is to check and monitor that the process goes well, and if not to stop the implementation.

“I think the role is to check that the project must go smoothly without a gap in between and also to see that that system works in a specific country, if it does not work it has to stop” (BEAR program Teacher Namwater, Namibia).

The communication officer, at NTA, consider that the main role from the International organizations according to their solid and reputable background and experience is to share their baste implementation experience.

“I think is pretty straight forward, if any entity whether if it is UNESCO or other reputable international organization with a solid background in the development of national frameworks and policies, it make sense to type into the experiences, and it gives you the channels through which you can get access to the information and experiences, but in terms of learning from the experience about this and more particularly about national policies, institutions as UNESCO has got a baste experience in terms of what has been implemented in other countries, if they can share those experience with us” (Communication officer, Namibia).

According to the manager of VET standards, at NTA, Namibian TVET system is not as developed as other countries, the International Organizations and UNESCO can play an important role on generating partnerships in order to further develop the systems and learn from existing ones in other countries. Moreover these organizations can show models to improves the system and ensure that the systems build the capacities needed to fully equip students with relevant skills.

“Namibia is still lagging behind in terms of its VET system, and we need to bring it to the level of other countries. Organizations as UNESCO and others can partner us with world cast institutions in terms of how such models can be adapted to Namibia. I think if those organizations could also assist us, in getting some models that can improve the system and ensure that people



exiting the system are fully equipped with relevant skills that would be the best idea” (manager VET standards, Namibia).

The chief of operations officer at NTA, consider that UNESCO should have a more prominent leading role in terms of National Policy Development, providing support to the national institutions, and also to amplifying the national network in order to open up to the international landscape, and benefiting from the international best practices.

“I think UNESCO should take a more leading role in terms of National Policy Development and providing that assistance to entities like NTA. UNESCO should assist us, because they have an international network and we can base what we do here on international best practice” (Chief of operations officer at NTA, Namibia).

The curriculum development officers at the NTA comment that the role of the international organizations on the development of national education policies is mainly related to a support and assistance function.

“National education policies are developed by the country itself and any international organization should rather assist in developing it or from providing an assistance support function, seeking the consultation with relevant stakeholders on behalf of the body responsible for the development of the national education policies, and also reporting to that body the findings” (Curriculum Development Officer, Namibia).

“What is very crucial at a certain point, is to identify the proper strategies and the ways of doing things, which should not be in contradiction with our own educational policies that we have” (Team Leader of Carpentry - Curriculum Development).

## **What UNESCO can do to contribute on the development of national capacities related to TVET?**

The NATCOM representative in Botswana, as mentioned previously, consider that what UNESCO can offer is the provision of expertise in order to build capacities within the national member states, rather than provide with any financial contribution.

“UNESCO is not a funding organization but they do have the experts in all areas. So these experts can assist National Member States in developing their capacities” (NATCOM, Botswana).

The National Project Coordinator in Botswana considers that UNESCO can contribute significantly on the development of national capacities related to TVET. Firstly, by setting standards on TVET teacher training, for skills transfer there is a need to recognize that the teacher is no longer a teacher it is a facilitator, is a person who guides, the learning should be based on creative and active learning.

“In terms of national Capacity is about setting standards for skills transfer and being able to recognize that there is no longer a teacher it is a facilitator. It is not longer a lecture is a person who guides; it is no longer a passive learning is an active learning. And those processes require a different standards, different ways of doing things than normal teaching, a different way of teaching. So if you want to upgrade your capacity or of your students, you have to upgrade the ability of your staff” (NPO, Botswana).

“Empower the teachers. You cannot sent a person to teacher training college and realize that when they came out and they do not know how to lecture, they do not know how to skills transfer” (NPO, Botswana).

In addition to what has been mentioned above the Assistant NPO in Botswana, consider that UNESCO could contribute with the selection of key potential people, individuals who are committed and passionate and empower them in order to make the capable to take the lead, and have the ownership of the national development.

“Identify potential individuals; UNESCO should not just pick people who are not committed. The selection has to be based on specific criteria, someone who is going to do this with passion. To help progress and determination” (Assistant NPO, Botswana).

The head of the QAA agree with the National Project Officer and consider that UNESCO can contribute on the development of national capacities, but in this case it is specified the importance of building capacities on the national curriculum developers, which aim of developing and implement the TVET curricula at national level.

“Building institutional capacity for the development and implementation of TVET curriculum. Our curriculum developers are not trained and qualified to develop programs; they are not trained in curriculum development, so UNESCO can help by providing training and guidance in curriculum development and evaluation” (Head of QAA, Botswana).

The experts from the Botswana Qualification Authority think that UNESCO can contribute on the development of national capacities by training local people and benchmarking.

“I think by training locals and Benchmarking” (Qualification Development Officer, Botswana).

The Industry representatives in Botswana also agree, and consider that UNESCO can train people and build capacities on educational planning and implementation.

“You need to build capacity for implementation. UNESCO should train people on educational planning and implementation. I know UNESCO, in Paris, it has an institution on educational planning and something...we need to train people on those approaches” (Executive Director, CIFT).

Another consideration from the Industry representatives is that UNESCO should consider the introduction of job shadowing, for example to the national project officer, as a way to guarantee the leadership and the effectiveness of the work done by UNESCO

“There is job shadowing also” (Deputy Executive Director, CIFT).

In Namibia, the NATCOM representative to UNESCO consider that the organization could contribute on the development of national capacities by providing training (building capacities), and sharing the best practices.

“Training, sharing the best practice, and may be If the trainers are trained the program will work” (NATCOM, Namibia).

The head of UNESCO's Windhoek office is very clear on what it he consider to be the main elements in which UNESCO can contribute to the development of national capacities. First of all, to do a reform of the education system, and re-bump the value of the TVET system within the society (change people mindset) and also to include within the primary education curricula some TVET aspects.

“First of all to conduct a reform of the education system, if we can push that we can then improve the TVET situation. Give value of the TVET sector, not only at the educational system but also to change young people and parent’s mindset. Include TVET in the curriculum of primary education” (Head of UNESCO Windhoek office).

The National Project Coordinator, in Namibia, states that the selection of people from UNESCO side is key and crucial in order to build national capacities at National level in Namibia.

“I think in our case, what it could be done, in terms of capacity development, it is to identify people, you need to be proactive and to select a group of people and give them the exposure (send the people to different places) and engage this people on the national institutions for a period of time to assist” (NPO, Namibia).

The TVET experts, all have a clear idea, about UNESCO's contribution to for the development of national capacities. The Quality Assurance Officer in Namibia, thinks that

UNESCO should invest more in human resource development (capacity building) in terms of improving the quality and the quantity of the courses for students and teacher training and also include exposure for training abroad.

“They must link us to the well-known institutions, invest more in Human Resource development, send us to various courses, send the students, and expose us to other experienced countries, and train technicians, craftsmen’s .... And technical teachers” (Quality Assurance Officer, Namibia).

The Manager VET standards, in Namibia, emphasizes that UNESCO could contribute with the establishments of new partnerships, and exchange programs to exchange expertise.

“UNESCO can also assist identifying other countries with which Namibia can partner things like secondments or exchanging of staff, to make possible to exchange people to learn from other system and also to bring in people from other countries to come and assist teams here. That also would be of great benefit for Namibia” (Manager VET Standards, Namibia).

The chief operation officer, and the communication officer, agree with the director of the Namwater pilot school for carpentry, they do consider that UNESCO should contribute with the provision of support on capacity building, particularly for TVET trainees in order to raise the quality of the teacher provision and also.

“The support we are getting now through the BEAR project particularly in capacity building for VET trainers and practitioners, I think if UNESCO can continue to assist us with that, because that is where we can have a real impact that is where we can make a difference in terms of the quality of the training we are offering” (Chief of Operations Officer, Namibia).

“The creation of opportunities, in terms of capacity development, especially in the TVET sector, and more particularly in the training of trainer’s sub-sector2 (Communication officer, Namibia).

“Capacity building” (School director, namwater pilot school for carpentry).

The communication officer, in addition to what has been mentioned before states that UNESCO should generate more partnerships that bring further opportunities on building capacities at national level.

“If UNESCO could facilitate more partnership to support the training of trainers would be good”  
(Communication Officer, Namibia).

The experts from the Namibian Training Authority agree with the Manager of VET standards, about the idea that UNESCO should provide international exposure of students.

- international exposure of students like what is already happening with (Curriculum Development Officer, Namibia).

### **Which strengths and weaknesses have UNESCO as international organization in the development of national TVET systems?**

The Chief Manager of the BEAR project at UNESCO HQ, consider that the strengths that UNESCO has as international organization is firstly the big network in which is incorporated, as there are 198 member states within the United Nations Organization for Education, Culture and Science, and therefore it has direct access to a baste amount of quantity and quality information that is able to obtain through its network.

“The international organization has big networks; every member states can connect and get more resources and information. International organizations can get the best amount on quantity and quantitative information this is the most important (Chief Manager of the BEAR project, UNESCO HQ).

In Botswana, the NATCOM representative firstly emphasizes the existing great capacities of the staff, working at UNESCO, secondly consider that UNESCO is in a better position to access all existing strategies and policies from member states and for sharing good practices.

“UNESCO has the brains; it has all brilliant people working there. They have also access to all the strategies, all the policies that are running at global level. So they can be able to share the best practices with other member states so they can learn from others” (NATCOM, Botswana).

The National Project Officer, consider that one of the biggest strength that the organization has is its brand, to represent United Nations it opens doors and facilitates the work, but the brand also links the responsibility of doing things properly, with the highest quality, top of the range, as everything reflects on the brand.

“The brand: UNITED NATIONS. It really opens doors, because everything we do reflects on United Nations. So we have to make sure that everything we do is quality, top of the range. (National Project Officer, Botswana).

In addition to that, the National Project Officer also emphasize that work UNESCO does on Education it is not visible enough, as people think that the E from the acronym UNESCO stands for Environment.

“When you talk about UNESCO, people think the E from the acronym stands for Environment; they never realize it stood for Education. When we said we do an educational program for UNESCO it is hard for people to believe. (National Project Officer, Botswana).

The Assistant Project Officer, consider that one strength that UNESCO has as organization is that its action is done globally, as mentioned before, benefit not just a particular geographical area or region, but the globe in general terms.

“UNESCO has very good initiatives; they get involved worldwide not just for benefiting an area but worldwide as well” (Assistant NPO, Botswana).

The head of QAA, enumerates several strengths that UNESCO has. Firstly, UNESCO’s approach to develop national education systems is faster; secondly, the final goal of UNESCO is

to make possible that the countries itself are able to develop their education systems by themselves, to strength what it is existing. Thirdly, in term of costing, this particular project implemented has optimized the cost of the new TVET system in Botswana, is cheaper than the previous system that was existing previously.

“UNESCO approach is faster” (Head of QAA, Botswana).

"UNESCO did not prescribe us what we wanted, instead UNESCO simply involved us in strengthening what we wanted to improve from what it was already existing. UNESCO involved the TVET experts on the national institutions helping us to develop our own system for those programs that were identified” (Head of QAA, Botswana).

“The BEAR project implementation and assessment is cheaper than the current BTEP one” (Head of QAA, Botswana).

The TVET experts from DTVET, consider that UNESCO has different strengths, the first one it adds to the previous perceived strengths from the head of QAA, and refers to UNESCO's goal focused on building capacities within the country.

"The strength, one would say looking at the BEAR Project, that although we were working with the international partner, we were building capacity within the country because when it came to curriculum development, we involved people from industry, we also involved people from our institutions and that could go a long way even after or at the end of the partnership with KRIVET" (Chief Education Officer).

"With the BEAR project, we see the project engaging locals. We think it is also contributing to the development of the country because it is capacitating locals" (Policy Development Division at DTVET, Botswana).

The TVET experts from the Botswana Qualification Authority (BQA) consider that UNESCO strengths are, on the first place the institutional website from UNESCO, where all



people around the world could have access to the information, and benefit from it. Secondly, the UNIVOC centers, being part of the UNIVOC network is UNESCO strength.

"On the strengths, I would say the UNESCO website it has got services which we can benefit" (Head of BQA, Manager Capacity Building).

In Namibia, the NATCOM representative for UNESCO mentioned firstly the high quality and qualified staff of the organization who have a broad capacity in terms of knowledge, skills and expertise. Secondly, its mandate as laboratory of ideas, facilitates the articulation of the infrastructure needed to facilitate the dissemination of research products. Lastly, UNESCO privilege position to create and establish partnerships among different countries.

"The strength is the capacity they have, the knowledge and the expertise, the skills (they have people that are very qualified)" (NATCOM, Namibia).

"They have also the facilities, and the infrastructure (as a laboratory of ideas) to disseminate well research products to various systems, on TVET systems for example" (NATCOM, Namibia).

"The international collaboration that they can easily liaise with countries, they can easily seek support from other countries" (NATCOM, Namibia).

The Head of UNESCO Windhoek office in Namibia, enumerates the following strengths that UNESCO has: The first one is UNESCO expertise on Education for 70 years, and specially in terms of implementing programs in the field, despite the actual situation of funds lack. The second one is the talent of UNESCO staff.

"UNESCO's expertise. Even though it is not like 35 years ago, due to the lack of funds, as there is no money to implement the programs on the field" (Head of Windhoek Office, Namibia).

"UNESCO has intelligent people" (Head of Windhoek Office, Namibia).

The TVET experts, the Manager VET standards, consider that UNESCO has a clear strength in terms of financial capacity to develop projects in the member states, and also there is a very significant pool of expertise at UNESCO.

"The financial strength to support, the projects is there, and also to source the relevant experts to support such implementation is there. I think those are the key strengths UNESCO has access to the funds, and also to the pool of expertise that can be used under the project" (Manager VET Standards, Namibia).

The Chief operations officer considers that the main strength is the capacity that UNESCO has to benchmark and to establish an international network to share best practice worldwide.

"International Benchmarking, International Network, and we can benefit from best practices elsewhere" (Chief Operations Officer, Namibia).

The Quality Assurance Officer, from the Division of Curriculum Implementation and Assessment considers that UNESCO strengths are in first place the prestige of the United Nations brand, secondly the experience on project implementation

"Is a big and renowned organization, with a proactive role; they have been involved in a lot of projects" (Quality Assurance Officer, Namibia).

The Director of the Namwater Technical School states the same strength that the Manager VET standards mentioned, the technical and financial support that UNESCO provides.

"The strengths as I have mentioned, is the technical support and financial support" (School director, Namwater pilot school).

The teacher of the BEAR pilot programme at the Namwater Technical School, consider that UNESCO strength is based on the capacities that the UNESCO's project build in local people, (capacity building).

"To bring a system in a country it helps the people in the country to growth in that technical field, which is something good" (Teacher at BEAR programme NAMWATER, Namibia).

In relation to UNESCO's weaknesses: the Chief manager of BEAR project consider that UNESCO could be more responsive to the demands of the member states if there was more competition with other international organizations.

"There are no competitors, if there were two agencies focusing on education; I think UNESCO would be more responsive on the demands of member states" (Chief Manager of BEAR Project, UNESCO HQ).

In Botswana, the NATCOM representative considers that the main weak point is the existing internal bureaucracy at UNESCO that is caused due to the complexity and time delay in its own internal processes.

"Bureaucracy is a challenge. It is really complex to implement a project on time due to UNESCO internal processes. Our internal national processes are also very bureaucratic (NATCOM, Botswana).

The National Project Officer in Botswana considers that the main weakness is that UNESCO has not a clear strategy on TVET Education; and secondly it lacks experience on what a TVET project is about and a clear understanding on how to put together a project for TVET. To explain this statement the National Project Officer refers to the quality verification systems.

"I do not think UNESCO has a clear Strategy on TVET Education, or a clear understanding on how to put together a project for TVET. It was clear in some of the documents that they lack

experience; they lack the real understanding of what a project is about in terms of TVET, and what it means?" (National Project Officer, Botswana).

"To give you a simple example of that, I go back to the quality; whenever I talk about verification systems with UNESCO they just get over their head, they do not get it. But in TVET systems around the world verification is very important" (National Project Officer, Botswana).

Thirdly, the National Project Officer states that UNESCO people are mainly from academia but there is need of more TVET experienced experts.

"The other weakness is that at UNESCO you have academics, but what you really want is TVET people. If UNESCO is about bringing people together, your mechanic, that works in BMW - or a hairdresser- is much more applicable than your academic who does a power point presentation. They may only have a diploma but they have plenty years of experience" (National Project Officer, Botswana).

In addition to that, the Assistant NPO, in Botswana consider that UNESCO has three major weakness, the first one refers to the undelivered facilities promised, and the permanent delay from UNESCO side, the delay on the delivery rest reliability to the organization. Secondly the prominent focus and importance given by UNESCO on getting outcomes rather than on planning; thirdly, the lack of a clear establishment of roles for each implementing actor in relation to the project.

"The promises made by UNESCO (Equipment) are not delivered on time" (Assistant NPO, Botswana).

"It seems that UNESCO is focused more on outcomes rather than on planning" (Assistant NPO, Botswana).

"Establishing clear roles for each actor implementing the project is crucial and sometimes a clear definition of roles is lacking" (Assistant NPO, Botswana).

The Head of the QAA in Botswana agrees with the Assistant Project Officer about the delay on the delivery of the promised facilities.

"UNESCO promised some facilities when the implementation plan was developed but it took a very long period of time to get them during the implementation of the project" (Head of QAA, Botswana).

The TVET experts from DTVET share a common perception and vision about the weakness of the organization, the chief education officer and the programme development officer, think that the different phases of the project implementation should have been developed at the same time, in parallel, so there is a transversal understanding from the different international implementing partners about the goals and the background of the project.

"I think the challenge was that we had the Implementing Partner working on result one, and then we had another organization working on result two; that made the transition a bit difficult because if you wanted to have more than one organization, it would have been better if they started together because then the transit becomes much easier. You still had to convince the new next person coming in on how things are done to understand what has been done". (Chief education officer QAA, Botswana).

"We were meant to implement three result areas, we did not successfully move. I think we did a lot in one area, result area one, which is the curriculum review, but when we got to the other result areas, very little was achieved. In the transition from results, there was a gap on the timing because there is a lack of continuity between result number one and the other two" (Program Development Officer, DTVET).

The TVET experts from BQA consider as the Manager Capacity Building BQA, and the Qualification Development Officer in Namibia thinks, that UNESCO should give more visibility to the information that it is available on its website regarding the services that UNESCO offer, and also in relation to the publications and the work done by the organization.

"The weakness is that of course there is information on the internet but for people who rarely visit that website, they would not know how they can benefit. So I feel like the local offices in every country should promote their services especially to the organizations which they know would benefit from UNESCO. Give more visibility" (Manager Capacity Building BQA, Botswana).

"UNIVOC Centre, I only learnt what it was last year. It is not that visible. It is not coming out" (Qualification Development Officer BQA, Botswana).

"Give visibility; it is very true I think that would help" (Qualification Development Officer 2, Botswana).

In Namibia, the NATCOM representative for UNESCO considers that the main weakness of the organization is the lack of financial support to implement specific project, the National Project Officer also agree with this statement.

"Budget issues, In terms of developing TVET systems the financing is always an issue" (NATCOM, Namibia).

"The weakness is the lack of funding and particularly in this project" (NPO, Namibia).

The National Project Officer also consider that UNESCO has another weakness, according to this person UNESCO underestimated the capacity that was needed to implement this project, and there was not a clear communication among parties (UNESCO, Implementing Partner and National TVET Institutions)

"Transparency, it has not always been clear from the start, as project coordinator, where exactly things are going. It is a matter of communication not only UNESCO HQ, it is also the Implementing Partner and the national TVET institutions. I think it is because all parties underestimate the capacity that was necessary to implement this project" (National Project Officer, Namibia).

The head of UNESCO office in Windhoek, Namibia, considers firstly that the organization should leave aside the influence of politics when taking decisions, to leave the political dimension aside is important.

“The Political intention or orientation of the organization, and the influence of politics in our decision: we need to leave that” (Head of UNESCO Office, Namibia).

Secondly, it agrees with the National Project Officer in Botswana about the importance of including technicals with experience that could implement the projects in the field.

“We have technical experts, very high level technical expert, but we are now losing the expertise of the best technical’s, because they are losing the tecnicity as they cannot go to the field to implement projects” (Head of UNESCO Windhoek office, Namibia).

To conclude the head of UNESCO Windhoek office consider as weakness the delay on the internal organizational processes at UNESCO HQ, that delays the purchase and delivery of facilities, as for example the equipment in the field.

“The Project coordinator, she had problems in order to purchase equipment, she will be waiting for HQ to get the green light, and then she will have to wait, due to the procedures of delivering the equipment takes a while, so there is a big delay due to the procedures” (head of UNESCO office in Namibia).

The Chief Operation Officer, consider that there were some components that were planned on the inception phase that didn’t progress, for example the twinning and partnering between TVET institutions in Namibia and other institutions in Korea. In addition to that, the language problems faced are considered also as a weakness.

“Where are the twining and partnering programs for the TVET institutions, language could also became a barrier, that could be potentially be regarded as a weakness” (Chief of Operations Officer, Namibia).

The Manager of VET standards, agree with the head of UNESCO Windhoek office, about what is considered as a weakness, in terms of the slow rhythm of the internal processes of the organization.

“The snowlines in terms of processing things, there is still more bureaucracy in the system, something related on time in respect of approval of this and this and that” (Manager VET standards, Namibia).

The Namwater school director, consider that the bureaucratic processes at UNESCO is the main weakness, as well.

“The weakness is that it took very long before funds have been released. Maybe the bureaucratic decision making. Maybe it took a long way before the final decision was being made”. (Nawater school director, Namibia).

The Communication officer at NTA, Namibia, considered that the main weakness is the initial attitude from the international partners to impose things, rather than dialogue to identified problems and implement solutions.

"The no-sensivity of some particular persons create some clashes, as it was seems that they wanted to impose things, successful implementation depends on partnership, if you don't have the partnership, you do not have the commitment, if you don't have the commitment, you cannot succeed on project implementation" (Communication officer, NTA- Namibia)

To conclude the qualitative analysis some relevant issues will be mentioned, there are issues that could not be categorized as answers of any specific question but that bring significant and relevant information to continue on the next phase of the study, the juxtaposition phase.



**¿Which is the role of the national project on the development of UNESCO project, and therefore the development of national TVET systems?**

The chief manager of the BEAR project at UNESCO HQ clearly considers that the role of the National Project Officers in each country is vital for the success of the development new TVET systems in the selected countries and the implementation of UNESCO project.

The key features that the National Project Officer should have in order to make succeed the project are: on the first place passion for the job he/she does, with their personal commitment to develop the knowledge of people in the country. Secondly, the support UNESCO or any other international organization in adapting the approach that would be used to the national context, the traditions and the society, and the third one a good knowledge and expertise on the TVET area.

“In order to implement the BEAR project successfully, we have to select the best national Project coordinators, who has the best knowledge, professionalism with TVET system and a strong network (government, industry, ...), the most important thing is that they need to be passionate and have a good vision. The commitment and Motivation are essential to succeed” (Chief Manager of the BEAR project at UNESCO HQ).

The chief manager of the BEAR project mentioned that there is a clear difference between the roles of National Project Officer, in Botswana and Namibia. The NPO in Namibia does not have the expertise in TVET that the Botswana NPO does.

“The National Project Officer in Namibia does not have professional knowledge on TVET” (Chief Manager of the BEAR project at UNESCO HQ).

“The National Project Officer in Botswana is critical, he has passion, he wants to learn and develop the knowledge of local people in the country. With his help the approach used at the bear project has been tailor maid to the country specificities and needs. Passion is the key” (Chief Manager of the BEAR project at UNESCO HQ).

**How important is the work placement within the TVET learning process?**

According to all the TVET community, the introduction of work placement within the TVET learning process is crucial for students to acquire the skills and knowledge required to become a good professionals in their sectors. Nevertheless the National Project Officer in Botswana considers that the work placement should be adaptable and flexible according to the nature of the TVET trades that are taught at the TVET centers.

“In hospitality and tourism we do work placement and it is easy for us to place the students into a working environment, but for hairdressing and beauty therapy, which is a mostly informal element of society, to put students into the working placement is not appropriate, we use an alternative work placement for entrepreneurship which is better, because they need to teach the kids the entrepreneurship skills, so they can set up their own hairdressing business or pedicure and manicure business, so we have been able to introduce a new concept of work placement to “fit the size”, so the hairdressing and beauty will do it their way, hospitality and tourism will do it their way (National Project Officer, Botswana).

# **PART III**

## **GLOBAL CONCLUSIONS**

## Chapter 10

### Conclusions, Limitations of the study and Recommendations

This final chapter of the dissertation aims to expose the main reflections and conclusions from the results obtained in the previous chapters. In this regard, in addition to the provision of a brief recapitulation of the results from the comparative, quantitative and qualitative studies, references to the theoretical framework have also been established to a better understanding and interpretation of the results.

It is considered that the comparative study has shed within the synthetic and juxtaposition phase a number of significant results that become arguments justifying some conclusive findings about the influence of UNESCO on the development of National TVET systems in Botswana and Namibia, not only on country development process, but also in the life of civil society, on the development of national education systems and on the development of national TVET systems. It has also described the social impact perception on the development of the TVET systems by UNESCO; the distribution of mass education worldwide through the action of the international organizations and UNESCO's role on the development of national TVET systems.

The chapter also includes a recapitulation of the main limitations of this research study as well as a reflection on further research lines to be developed. The limitations that have been enumerated here, are considered as new opportunities for the future, not only to expand this research study, but also to open new research thematic pathways to improve TVET and the development of national education systems by the international organizations

To conclude, based on the results of the research study, a significant number of recommendations are suggested to improve the development of the national TVET systems in

both countries: Botswana and Namibia. These recommendations could be part of the national education reform suggested by stakeholders.

## 10.1 CONCLUSIONS

This research study proves that UNESCO has had a direct and positive influence on the development of national TVET systems in Botswana and Namibia. This influence is based on UNESCO's role acting as a facilitator to member states in their own development process. Through the implementation of UNESCO's TVET project, the organization assumed the risks that the national governments were not able to assume, by developing and implementing new contextualized policies that were able to prove their efficacy, efficiency and practicality.

First of all, UNESCO's influence is described by the perceived benefits that this international organization has brought to **the country development process**, through the implementation of the BEAR project in both countries. It has directly affected the economic development process; not only in terms of the gained expertise and experience from the international partners, but also by selecting critical economic sectors to work with, that will lead the national income generation in a moment where the governments are trying to diversify the economy. The reality for most African countries is that their economies are based on activities from the primary sector derived from agriculture, farming, mines,... therefore, there is a clear gap between the needs required from the labor market and the skills delivered by the formal educational system which is mainly focus in covering activities from the service sector. UNESCO's TVET project has transformed the existing TVET system according to the needs of the country, considering not only the context but also the culture and the society where this system is implanted. Moreover, the project has benefited the country development process in terms of the investment done to improve the national human capital. In addition to that, in the case of Botswana, the provision of good training will eventually attract more tourist and increase income generation. Attracting more people from outside the country, will create a platform upon which the country will improve other services, and create more working opportunities in other

sectors. UNESCO through the BEAR project brought economic stability in terms of the absorption of TVET skilled people into the job markets; despite the fact that the education systems in both countries continue to deliver thousands of bachelor and master degree students specialized on activities from the service sector. This is one reason why the reform of the education system could be justified.

Secondly, the main impact that the influence of UNESCO is having **in the life of civil society**, through the implementing the BEAR project, is the new provision of employment opportunities, especially to youth. It is expected that the graduates produced by the UNESCO TVET project will be absorbed by the job market and once they are employed, they will be able to earn a living, pay taxes, support their families and be the catalyst to improve other people's life. Moreover, the BEAR project also improves the learning opportunities for all (people who have the skills but no education, and people with education but no skills) to have access to a better education, and increases the utilization of the colleges, so the number of graduates increases to fulfill the human capital needs from the sector. In addition to that, UNESCO has helped the civil society to overcome the existing stereotypes related to TVET; on one hand fighting the stereotypes gives the opportunity to the children who are more technically inclined, to live their passion, and on the other hand, it helps change the mind-set.

Thirdly, there is a common perception about the benefits that UNESCO brings **to the National Education System** in both countries. First of all, through the implementation of the BEAR project, UNESCO has shown good practices regarding the national response on education policy that will be included into the Education Sector Strategic Plans. Secondly, the benchmarking conducted will serve the students to compete on a global market not only at national but an international level. Fourthly, it has developed and upgraded the national TVET new and existent qualifications from the certificate level to the diploma level. Fourthly, it has improved the efficiency of the national curriculum development process in terms of time, quality and assessment in both countries, through the introduction of the DACUM approach. Fifthly, it has strengthened the TVET provision in the country, by involving private providers in education,

the capacity that has been built goes beyond the public institutions. To conclude, UNESCO, through the implementation of the BEAR project, has increases access to the technical schools.

Fifthly, UNESCO's influence on **the development of the national TVET systems** is wide and broad but similar in both countries. It should be highlighted that TVET is seen as the educational future of all Africa. Enumerating the benefits that UNESCO brings to the national TVET systems in particular, it is clear that, firstly and foremost UNESCO didn't transpose a foreign TVET system that was not suitable for these countries. UNESCO, through the BEAR project transformed what it was already existing, improving the efficiency and adapting to the existing needs of each country. Secondly, UNESCO through this project benefited the TVET system by introducing a contextualized new curriculum development approach (DACUM) that has shown to be more efficient, cost effective, successful approach and it is expected to be applied to other programs within all TVET sectors. Thirdly, the implementation of the labor market analysis prior to the curriculum development process, helped to close the gaps between the labor market requirement and the type of training that was offered at technical schools. Fourthly, the BEAR project has closed the existing gaps in the TVET provision at national level, providing new opportunities for everybody, not just for people with a particular profile. Fifthly, the introduction of examinations, rubrics, and workplace learning is benefiting the TVET system and it is perceived as more relevant and accurate, in terms of measuring student's competences and capabilities. On one hand it can measure the competency of students, and on the other hand, workplace learning ensures that the skills that students acquire are the ones required by industry. To conclude, the TVET equipment provided and donated by UNESCO will benefit the TVET system in terms of the capacities that the students can acquire, by the learning process obtained when they use this equipment. All this elements and the implication of the civil society in this process are the essence to reinforce the value of the TVET system within the National Contexts. In addition to what has been mentioned above, the development of the National Skills Competition in Namibia, and the participation of a Namibian TVET team at the World Skills Competition, has helped the national TVET system to gain visibility and get recognition to the National TVET system, as mentioned before.

The influence of UNESCO on the development of the national TVET systems is also measured through the stakeholder's assessment on how important was the implementation of UNESCO's TVET project. The importance of implementing the Better Education for Africa's Rise project is evident for all stakeholders in both countries as a) UNESCO's project responds to the request made by the SADC member states in 2008, and the approved proposed strategy at the 181<sup>st</sup> session of UNESCO's Executive Board, for supporting technical and vocational education and training (TVET) in 2010-2015; b) It also responds to the willingness of the Korean government that wanted to share their funds and expertise with some developing countries, by financing an extra budgetary UNESCO south-south cooperation project; c) The project is seen as a possible solution for youth unemployment in both countries, TVET is perceived as key element to improve the national economic development in Botswana and Namibia.

At the time the BEAR project was planned, the TVET education system in both countries suffered from a significant de-prestige and dysfunctionality: a) The quality of the TVET provision was not recognized from industry nor from society; b) The previous TVET curricula that was being taught at the TVET schools/centers was stigmatized; and the TVET trainers suffer from lack of motivation and quality training. The UNESCO TVET project, on the one hand, has helped identifying existing gaps on the TVET programs and it has introduced a new approach of exchanging knowledge, ideas and expectations between industry, the curriculum developers and implementers; on the other hand it has create awareness on the importance of the TVET provision at national level.

UNESCO TVET project was needed for different reasons: a) It introduced a Labor Market Analysis of the selected sectors in order to follow a demand driven approach; b) It introduced a lifelong learning approach with new mechanisms that allow the TVET students to further studying after completion of the program, upgrading the certificate to diploma level; c) Introduced actively the participation of industry on the curriculum development process for the selected sectors; d) It helped the country to develop new occupational areas based on the governmental willingness of creating new ways of development for the country; e) It



benchmarked their existing TVET systems with others upgrading its standards and facilitating the students to learn the skills and compete on a global level.

The importance and success of the BEAR project relies on national ownership and the capacities built at national level that guarantee the sustainability of the project and the commitment from the national TVET institutions -DTVET and NTA- in Botswana and Namibia, respectively. Probably it is early to make a conclusive statement about the success or failure of the whole UNESCO TVET project due to some ongoing activities that are still being implementing, and we do not know yet which is the absorption rate of the BEAR project students into the labor market. Nevertheless, the analysis on the failure or success of the curriculum development component can be done, as a separate element, at this point in time.

On one hand, the success on the curriculum development process is perceived at different levels, at a macro level: it has given the country the confidence to develop their own programs and systems, at a micro level: a) It ensured that the skills meet the need of the industry for each sector and trades, through the labor market analysis conducted; b) It has been able to produce curricula with the industry support to a high standard; c) It introduced assessment systems which were challenging for staff and for students; d) It has built capacities of teacher trainers and lecturers; and e) It has engaged TVET teachers, providers and stakeholders in the process, allowing them to take their ideas and implement them as improvements. To measure the impact of the UNESCO TVET project, and to quantify the success, as mentioned before, the program will analyze the registered number of students (enrolment) who get employed once they finish the BEAR program, (the pilot at schools will end in June 2016). Nevertheless, the target number for students was met within one year and half, and the number of people involved in the curriculum development process has been significant.

As mentioned before, the perception of success depends on the commitment of every single stakeholder on the curriculum development process. The commitment of the stakeholders has directly depended on its direct and active participation on the process. Their participation has depended directly on the efficiency and effectiveness of the national project coordinator in identifying the right people to get involved in the process communicate and coordinate the activities and partners, and to lead the project giving all the project ownership to them.

The communicating approach and leadership from the project coordinators in Botswana and Namibia differ, and it has affected the way the participants were committed. In Botswana all stakeholders were participating actively, they did have a positive perception of the success of the BEAR program. Meanwhile in Namibia teachers at the TVET training centers consider that they did not have an active participation during the curriculum development process, and they think that their voices were not heard. As a consequence of this, their perception about the CD component is that it is a failure; they do consider that the new curriculum has introduced subjects that are not technical and not useful for the professional development of the students, meanwhile some essential courses have been removed from it.

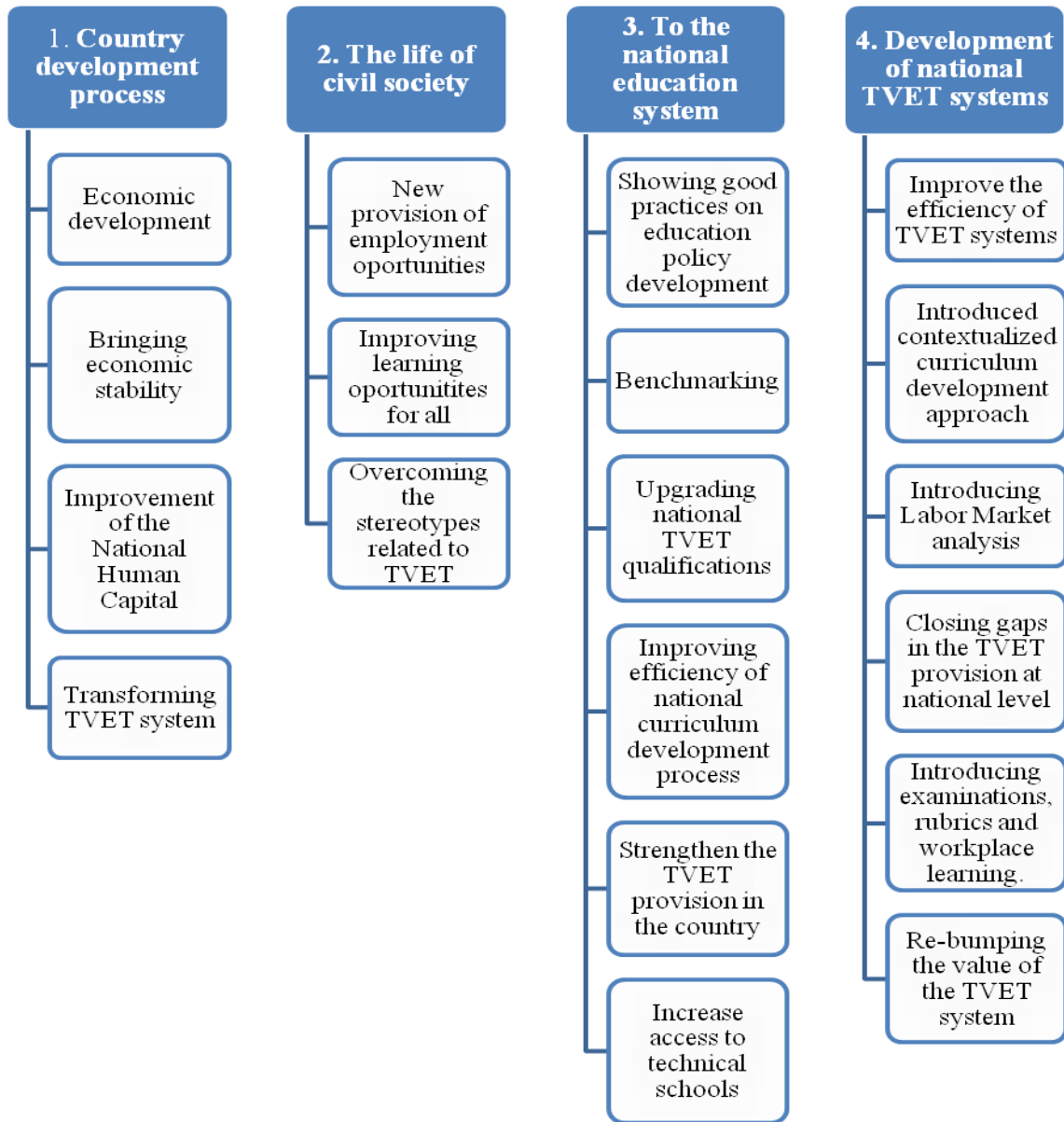
In addition to what has been mentioned before, the perceived success is also related to the involvement of industry on the curriculum development process that allowed to introduce the real existing job requirements and professional needs during the learning process. The commitment from the industry, has also generated new partnerships between the technical schools and the private organizations, providing in-training services, and worked based learning and institutional based learning.

There were some obstacles faced in both countries that directly affected the perceived success of the curriculum development process: a) The internal UNESCO bureaucracy, that forced a delay on the implementation process according to the timing planned on the logical framework and operational and annual work plans; b) The delay on delivering the equipment promised.

On the other hand, there is a key potential factor that could make the whole BEAR project fail, and not only in relation to the curriculum development component. This factor is the actual welfare situation of the students and the existing national grant and sponsorship policies that could force students to drop the program if they do not get any grant or scholarship to cover the cost of the program (UNESCO does not provide any financial support to cover the cost of the students that are piloting the BEAR program). Moreover, there are some other factors arise awareness on a potential failure, as some elements of the project that were initially planned to be part of the project have never been developed: a) The recognition of prior learning, the twinning

program between technical schools, the scholarship grants systems from the Republic of South Korea.

**Figure 18: UNESCO’s influence: Perceived benefits in different domains**



Source: Own elaboration.

### 10.1.1. The Social impact perception on the development of TVET systems by UNESCO

The analysis of the social impact questionnaire posits the existent differences in perception regarding the development of national technical and vocational training systems implemented by UNESCO through the development of the BEAR project, in Botswana and Namibia.

First of all, there is a common perception about the achieved goals and generated outcomes in both countries. The main goal achieved is that the project has repositioned TVET within the national development agenda. In addition to that, there are some subsequent goals achieved which are: a) The finalization of the labor market analysis that made possible the matching of the skills requirements from industry and the curricula offered by the technical school. This achieved goal has had a positive impact on the national development process in general terms; b) The curriculum development (DACUM) processed used has been considered a highly cost-effective process. It has brought policy developers and implementers together, closing gaps and getting feedback from each other; c) The development of National Qualification Frameworks will allow the alignment of the program qualification requirements to the international qualification ones; d) It has built capacities on curriculum development of the national TVET experts; e) The introduction of work placement learning and in-training service for a significant amount of hours; f) The opportunity to get a diploma level and continue their studies once they finished the TVET program, is a backbone of the goals achieved. To conclude the acquisition of new tools (books and equipment) is also seen as a goal achieved.

In relation to the generated outcomes, both countries have created new partnerships at international level, amplifying the national networks and improving the existing bilateral relations between different countries, to further cooperate in new domains. In the case of Namibia, setting up the National Skills Competition at national level, which was an extra element of the BEAR project has brought a tremendous impulse to the national TVET system, allowing the best TVET students to participate on the World Skills Competition, and international event, where Namibia has gained the acceptance of the international TVET community. The Namibian national TVET system has gained recognition and visibility

worldwide. Moreover, it is also important to emphasize the relevance of measuring the outcomes and outputs resulting from the implementation of the project, quantitatively. In two years time, after completion of the program, there will be empirical evidences on how the private and public sector reacted once the students finalized the program and went to industry. The impact on the labor market will be measurable by knowing how labor market absorbs new graduates from the TVET schools.

More specifically to UNESCO's TVET project, the social impact perception regarding the relevance or importance of the BEAR project, according to the future professional expectations have shown that all participants consider that their participation on the TVET program is relevant or extremely relevant. Nevertheless there is a slight difference among countries, where participants in Namibia are more sceptical about their future professional expectations in comparison with the Botswana ones; this could be explained by the existing total and youth unemployment rates, which are higher in Namibia than Botswana. There are not significant differences between gender. The perceived relevance of the program is significantly higher for those people who find it very difficult with present income in both countries.

In relation to the perceptions regarding **the Human Capital** dimension (motivation, initial expectations, future expectations and perceptions [dependent variables]) comparison of both countries and genres conclude that in relation to motivation, participants from Botswana have a higher degree of **motivation** than the participants from Namibia. This difference is statistically significant, which would indicate that there is a small but significant effect within the practice of the social sciences. This is explained on the one hand by the high commitment achieved from all stakeholders and involvement from the private sector on the curriculum development process and on the other hand by introducing work-place training as key element of the learning process in Botswana, which does not exist in Namibia at the same extend. Similarly, women have a higher level of motivation than men, however, there is insufficient evidence to say that this difference is significant.

As to **initial expectations**, participants from Botswana have a higher degree of initial expectation than subjects in Namibia, this difference is significant. This could be explained by the fact that in Botswana prior to the development of UNESCO's TVET program, there was in

place TVET programs for the tourism sector, meanwhile in Namibia, there was not any prior program related to the selected sector, so the TVET program had to be developed from scratch. Therefore, it is understood that the initial expectations were higher in Botswana than Namibia as participants could have an idea about what to expect from the prior programs. Also, females showed a higher degree of initial expectation (a belief about how successful, someone or something will be) compared to men, this difference was also statistically significant. This could be partially explained by the distribution of the family responsibilities among the household members, where females in most countries in Africa are directly responsible of the wellbeing of each member of the family. Both differences allow us to consider that the differences found are relevant to the practice of the social science.

The results related to the **future expectations** show that Botswana subjects have a higher degree of future expectations than the subjects from Namibia, this is significant difference. Likewise, women reveal greater expectations for the future than men, this difference is also significant. This size effect meets the minimum required to be considered relevant. The difference between countries and gender follow the same rational as the initial expectations, as both variables are correlated.

Finally, in relation to the **perception of learning**, participants from Botswana show a greater awareness of the key elements for learning than the subjects from Namibia, this difference is statistically significant. The size effect meets the minimum required to be considered relevant in practice. This is evidenced by the Namibian teachers and students on UNESCO TVET project, when they mentioned that the new curriculum developed eliminated essential subjects from the prior curriculum, as drawing, science or mathematics and were substituted by others that were not perceived as useful to improve their learning for their professional development. Similarly, women reported a greater degree of perception than men however, there is insufficient evidence to consider this difference as significant.

As for perceptions related to the **Cultural Capital and Satisfaction** when comparing countries, it is found that subjects from Botswana show a greater appreciation of their **expected learning outcomes** than the participants from Namibia. This difference is statistically significant. The effect size is sufficient to be considered relevant in practice. This variable is

directly related with the perception of learning and shares a common rationale on its cause. Similarly, women report higher appreciation in their expected learned outcomes than men. Although there is a statistically significant difference, this effect size may be irrelevant in practice.

As already mentioned, the results on **participants' satisfaction** of the BEAR project learning process differs between countries. In Botswana the student's satisfaction is significantly lower than Namibian ones. This result is not in line with the general results obtained by the general analysis; it is concluded that this particular element has been influenced by a particular factor existing during the data collection days, where the students participating on the TVET program got to know that the government will not further give them scholarships to cover the cost of their studies, and this announcement clearly impacted their satisfaction. There are also gender differences in this regard, as female's satisfaction reports to be significantly lower than male's one, which means that their initial expectations in some cases have not been met. The perceived satisfaction according to participant's living standards shows that those people who find it very difficult with present income in Namibia are more satisfied, meanwhile in Botswana the same group of people score very low levels of satisfaction. Those participants whose main source of household income comes from wages are more satisfied in both countries.

The results obtained regarding **Social Mobility**, compares the life balance before joining the TVET program and the expected participant's life balance once they conclude successfully the TVET program shows the movement of individuals through a system of social hierarchy or stratification, involving vertical or horizontal changes.

Participant's perception of **life balance prior to their participation on the program** is positive and significantly better in Botswana than Namibia. This is explained by the macro results where it is shown that the economic and development indicators are significantly better in Botswana than Namibia (e.g. the national income per capita is significantly higher, the unemployment and vulnerable employment rates lower, etc.) Females have a better perception on this regard. The highest educational level attained the better is the perception on the life balance.

Participants from both countries consider that their **future professional expectations** are to be self-employed with employees or to be employed in a company. This results shows a high degree of entrepreneurship skills among the participants in both countries. Females are more sceptical about future employment prospects than males, as there are more women than men considering unemployment as the most feasible future employment prospects. This is aligned with the national statistics related to unemployment and vulnerable rates by gender in both countries.

As for the **future employment prospects** in comparison with the ones prior to the participation in the program participants in Botswana and Namibia consider that are much better, without significant differences among countries. Both genres have the same projection about their future employment prospects, without significant differences. This result is linked with the expected outcomes existing in both countries, the more learning outcomes participants expected to acquire, the more employment prospects they have for their future.

The results about **Economic security** compile participants' perception about the future economic/income expectations, professional projections and motivation for professional success. All participants considered that their future income expectations as well as their income expectations will increase in both countries without gender differences.

The participants' perception about their **social economic status** after joining the TVET program had increased significantly in comparison with the ones before. It turns from an acceptable economic situation to a very good one. All participants consider that their **future economic expectations** will improve significantly (slightly higher for people in Botswana without significant differences).

Participant's **initial employment expectations** was mostly to be unemployment, once the program started the expectations turned into self-employment with employees. **Future employment prospects** improve in relation to the existing ones. This significant change shows clearly that the UNESCO project has had an important impact in relation to the improvement of their future professional expectations and also to the rise on their living standards. This fact also reflects the entrepreneurial character of the participants in the TVET program. **Future**



**professional expectations** are higher in Botswana, where most of participants consider that they will increase substantially or a lot, than in Namibia where the perception fluctuates between a lot and a little,. This is explain by the existing job opportunities in the labor market in both countries as it is much higher in the tourism sector in Botswana than in carpentry and joinery in Namibia. It is also linked with the participant's entrepreneurial skills. In relation to the **expected professional success**, both countries are positive on this regard, although Botswana expectations are much higher than Namibia. It is also worth it to note that Namibian participants are more cautious about their future, than people in Botswana due to their historical background.

As for the perceived **intellectual development**, most participants in Botswana are eager to continue studying. Iin Namibia most of participants either have a lot or little intention to further study. This could be explained by the fact that in Botswana the unemployment rates by level of education attained are significantly different. Meanwhile in Nambia the differences are not that evident. There are more women likely to continue studying than men. And participants from a maximum level of education attained ISCED 2.

The participant´s projection about their future **balance of life after finalizing the TVET program** differ among countries. In Botswana participants consider that their future life balance will be good or very good. Meanwhile in Namibia, the results are polarized, on the one hand the most vulnerable participants consider that their future life balance will be very good (people who find it very difficult to cope with present income, receiving public funding to cover the cost of their studies); on the other hand the most accommodated group participants (those who are coping with present income and using their own funds to finance the cost) do not see clearly the added value of the studies and have poor projection of their balance of life. This might be due to a higher degree of existing inequalities within the Namibian society.

### **10.1.2. The distribution of mass education worldwide through the international organizations**

There is a two way street in relation to the development of national education policies from the international organizations and the pressure of developing ways of mass education.

Firstly, to develop national education systems, developing countries used to benchmark and they do it against the existing policies in developed countries. Secondly, when planning the intervention with international organizations to support the development at national level, experts from the international organizations have preconceived ideas about what it is going to work in an specific context, even though the idea is not to impose anything. These preconceived ideas shape the way in which things are done. Rather than imposing education policies, the international organizations should involve the people from the communities, and share the ownership of the national policies development process with the communities themselves. Without the ownership of the communities, the development of national policies will be always a failure, because no effective change will be made in the country.

In addition to what has been mentioned before, on the side of the supporters, people who consider that there is a clear and direct relation among the development of national education policies and the influence from the international organizations on developing ways of mass education describe their ideas by explaining that nowadays we live in a globalized world where there is a lot of interaction among actors, and complete isolation does not bring prosperity to any country. They justify their vision by saying: on the one hand, international organizations are the ones who set up a common agenda for education at a global level and that is the origin of their influence. This issue was discussed during the World Education Forum in Incheon, Republic of South Korea, in May 2015. During the discussion it was emphasized that the mandate of the global community should be to set an educational macro frame, as all countries are becoming part of the global village due to the globalization process; therefore the national education systems should adapt to this macro frame. However it seems that there is no real commitment from member states to put in practice this agenda (especially from the developed countries). It would be difficult for an international organization to impose something on a country. The role the international organizations is to support the countries in terms of sharing best practices, amplifying the national networks and providing expertise. It is the responsibility from the national governments to discuss with the international organizations and partners about what to do and how to contextualize these policies. Moreover, the international organizations have the capacity to articulate and create a common platform with a set of common international

standards in order to somehow homogenize the access requirements to study from one country to another without entering barriers. This alignment of the education systems is certainly needed in a globalized world, and upgrades the national education systems making them competitive internationally.

On the other hand, the existing high youth unemployment rates, and other main educational problems in developing countries is putting pressure on the governments to solve the situation. To address this particular challenge governments normally look for quick solutions imported from international organizations, trying to avoid tensions and stabilize society in the country. In some cases it generates riots and social movements against governments. There is a common consensus that quick solutions imposed from abroad do not benefit the country development. The only way that the country could properly developed and face its problems is by creating their own development and solutions. This could be supported from outside. The ownership and the solutions should be generated from the inside by locals. In many cases the influence of international organizations is associated with the provision of funding to the country to implement articulate some particular ideas. These may relate to the implementation of ways of mass education, once the country that asked for support accepts the international support, there are some conditions that should be accepted, including the implementation of some ways of mass education. There is a preconceived assumption the international organizations have their own interests when they conduct and develop education policies in specific countries.

UNESCO as an international organization and the specialized United Nations agency for Education, would find difficult to implement the Global Education Agenda that is approved at global level for 2030, on a country basis. To influence the countries the approach used should be contextualized, as the reality differs from country to country. It should generate partnerships and be focused on undeveloped countries. In Africa, most countries have historically existing pressures for implementing foreign educational models, and more particularly in relation with the TVET system, in Botswana for example, the BTEP program was developed by the Scottish Qualifications Authority and was not successful at all. It was not contextualized nor developed

by the locals and it was socially not accepted. As a consequence this situation generated gaps that couldn't make the program succeed. In the case of UNESCO's TVET program, the BEAR project was tailor made to address the existing needs, which completely changed the social perception, the perceived relevance of the program and therefore the influence of UNESCO on the development of the national TVET system.

On the other side, there is also a group of people (UNESCO representatives at the National Commissions (NATCOM), experts from the Botswana Qualification Authority (BQA) and TVET experts from the Namibian Training Authority) who consider that there is no relation between the development of National Education Policies from international organizations and the pressures on developing ways of mass education at national level. An explanation is provided by describing the articulation process carried out by UNESCO on the development of the Global Sustainable Development Goal number 4. The process started with a consultation at national level, followed by the preparation of a report at regional level that was the basis for the discussion during the global consultation that took place in May 2015 at Incheon, South Korea at the World Education Forum. The articulation of this procedure allowed to all countries raise their voice at a global level.

In Botswana and Namibia there is no perception of existing pressures to develop or introduce way of mass education through the support of international organizations. The reason why this happens is because the approach used by the governments are always national oriented and focused on local people. The governments are confident about the goals to achieve as a Nation. They have a clear set of national priorities on Education that guide the development of education policies and are articulated on the national strategies and development plans, to align the national needs with the development processes. Therefore, the governments take in very careful consideration, that there is no imposition even if the development program comes from an international organization. A good example of this is explained by the Botswana traditional consultation process named as "kgotla" tradition, that refers to the public meeting, community council or traditional law court, used as customary court. The community decisions are always

arrived by consensus, every single person is allowed to speak and no one may interrupt while someone is having their say.

The pressures to introduce ways of mass education at national level may depend on the development level of the country and the national commitment and ownership on the development process of building their own policies. This is justified by the idea mentioned by the manager of VET standards at NTA, that if a country has a clear goal and strategy to achieve at national level, the international organization could provide the expertise and knowledge to fulfill the strategy, but if there is no existing strategy, the international organization will tend to impose a model that has been already used and put in place somewhere else.

### **10.1.3. UNESCO's role on the development of national TVET systems**

As mentioned before, UNESCO's main role on the development of TVET policies in both countries has been to act as the facilitator to member states in their own development processes. UNESCO has facilitated rather than imposed policies and practices based on a dialogue with national government institutions, according to their national context. UNESCO's role includes considers the risk that national governments won't assume to develop and implement new contextualized policies that are able to prove that they are practical to be developed.

UNESCO as the UN specialized agency on Education, should have the best knowledge and expertise to guide the development of any national education sector. UNESCO has been assisting the development of national TVET policies in both countries already in the past. With its support, the nations developed policies which were more relevant to the economy, especially in terms of the alignment with the national development strategies. At this moment in time, UNESCO has been involved in the development of the national TVET system since the conception phase of the BEAR project, supporting the national parties during the consultative meetings, facilitating all the support and assistance needed. It has revised the existing TVET

programs in the countries and from the revision it has helped to build capacities of national people. UNESCO has piloted the conceptualization of the project in the selected trades. Once the assessment certified that the curriculum development component of the project has been successful, the Ministry of Education and Skills Development can see the benefit that the project brings to the country and decide to implement the approach in other sectors.

The national TVET agencies in both countries, considered crucial UNESCO's role in terms of finding technical expertise and knowledge worldwide and for generating international partnerships that allowed the exchange best practices across the world. They also considered crucial the capacities built on national TVET experts that allow them to replicate the experience to other sectors and therefore guarantee the sustainability of the project at national level. It cannot be forgotten the important role of UNESCO mobilizing economic and financial resources as well as its role on the provision of material and equipment to some extent in both countries. Therefore, UNESCO's role has been primarily to bring expertise, knowledge and resources to the countries.

UNESCO's role specifically on the curriculum development process has been the introduction of significant changes to the national TVET systems. The main change has been the introduction of the DACUM approach. Even though the DACUM process was originally developed 20 years ago, it has been a very useful and beneficial approach for both countries, as it is based on a "Fit to size" approach, which has been very successful, three factors are highlighted: the first one is the introduction and development of the Blueprint; the second one is the introduction of the examinations as the new assessment methods; and the third one is the introduction of a structured work placement. Moreover, the key elements that have been new in the use of this approach is on the one hand the introduction of the labor market analysis as part of the process, on the other hand the industry involvement. Some critics to the use of the DACUM approach consider that it could be better to include a mixture of the former and the new approaches used. Major gaps identify in this new system are: some of the foundational skills that the students need to learn are missing in the new curricula, and the difficulties that the new

approach may generate if the students would like to continue studying. Nevertheless the DACUM approach it is understood as a most practical approach by the majority.

In addition to that, UNESCO's role on developing national capacities related to TVET is relevant. Firstly, by the selection of key potential people, individuals who are committed and passionate, capable of taking the ownership and the leadership of the work they do. Secondly, by setting standards on TVET teacher training, for skills transfer there is a need to recognize that the teacher is no longer a teacher, it is a facilitator, is a person who guides, the learning should be based on creative and active learning. Thirdly, by improving the quality and the quantity of the courses for students and teacher training and also include exposure for training abroad. Fourthly, UNESCO should generate more partnerships that bring further opportunities to building national capacities in a long term run. The different areas in which UNESCO has built national capacities are: curriculum development, education planning and education project managers (implementers).

**Figure 19: UNESCO's role on the development of national TVET systems**



Source: Own elaboration.

Some critics have been made in relation to UNESCO's role on the development of national education policies, as it is considered that UNESCO should be able to put the political dimension aside for the development of national education systems and advocate for an education reform at national and even at regional level, that could eradicate the existing situation where universities produce more graduates than the labor market can absorb. -the education system has created expectations about what the education system will bring to your life, but unfortunately does not match with reality. Secondly to promote good governance-. Governments should be the only responsible to address their development from an autonomous way, there are countries that ask for financial foreign assistance and support when they have a 4-5% annual growth rate. Thirdly, to help fighting corruption within the education sector, which is one of the biggest problems in Africa, specially related to the public policy sector. Fourthly, to provide technical assistance to implement good projects from the field offices. Lastly, to incorporate transparency and accountability processes within the international organizations

As a final remark to UNESCO's role regarding the development on national education policies, the Head of UNESCO office in Windhoek, Namibia, supported by (Mundy, 2006) stated that it is clear that UNESCO has to regain its mandate on education within the UN System, for the last decades UNICEF is taking the lead on education in some African countries, this could affect or have a direct and bi-directional relation with the lack of funds, and financial support to the agency.

To conclude this part a general overview of the role that any international organizations should have on the development of national education policies is: a) To provide technical expertise for the development of national policies in member states; b) To act as a catalyst and clear house for ideas, to bring international and national experts working together, and to facilitate the development of national education policies; c) To build capacity and providing training so that the nationals could develop the country by themselves in a mid-term long-term perspective; d) To provide sponsorships and financial support to students; e) Benchmarking; f) To allocate financial resources to support the development of national educational programs; g) To provide assistance on the education system reform that is needed; h) To share the best practices and expertise and let the government decide if they want to implement it nationally or



not; i) To support states to clarify national priorities in relation to the 2030 Sustainable Development Goals.

**- UNESCO's strengths, weaknesses as International Organization and Suggestions to improve the efficiency of its mandate and work**

As international organization, UNESCO has some strengths and weaknesses in order to support the development of the national education systems. UNESCO strengths are firstly, the high talented and qualified staff of the organization and consultants that brings an extraordinary capacity in terms of knowledge, skills and expertise. Secondly, it has a worldwide mandate, the final goal of UNESCO is to make possible that the countries itself are able to develop their education systems by themselves, it is not regionally focused. Thirdly, as UNESCO is formed by 198 member states, it has direct access to a baste amount of quantity and quality information that is able to obtain through its network. UNESCO is in a better position to access all existing strategies and policies from member states and for sharing good practices. Fourthly, in general UNESCO's approach to develop national education systems is faster, and more cost-efficient than other international organizations as mentioned by the National Project Officer in Botswana. Fifthly, its mandate as laboratory of ideas, facilities the articulation of the infrastructure needed to facilitate the dissemination of research products, for example, the institutional website is accessible to people all around the world that can freely have access to the knowledge shared and benefit from it. Lastly, UNESCO privilege position to create and establish partnerships among different countries based on its more than 70 years of experience.

**Figure 20: UNESCO's strengths as international organization**

UNESCO's strengths					
1. High talented and qualified staff and consultants working for the organization	2. Worldwide mandate	3. Access to a vast amount of quantity and quality information worldwide	4. As laboratory of ideas: Facilitates the articulation and dissemination of research products	5. It has a privilege position to establish worldwide partnerships	6. It's approach to support the development of national education system is fast and cost-efficient

Source: Own elaboration.

The main weaknesses that UNESCO faces as an international organization, on the one hand, in general terms are: First and foremost the tedious internal bureaucracy that directly affects its efficiency in terms of delivery its outputs and outcomes, which have a negative impact on UNESCO's reputation and reliability. Secondly, the lack of a faster response to the demands of member states, this is an existing reality that may be caused by not having enough competitors with similar mandate and scope of work at international level. Thirdly, there is a sensible weakness in terms of lack of visibility, UNESCO's work could be more visible and accessible worldwide. Fourthly the lack of financial support to implement specific projects due to the actual financial situation of the organization. Fifthly, the continued internal restructures on personel, it has increase significantly the personel turn-over over the last years, causing a brain drain of UNESCO's principal asset. Lastly, at UNESCO there is always a strong influence of politics when taking decisions, it is therefore important to leave the political dimension aside of UNESCO's mandate and work.

**Figure 21: UNESCO's weaknesses as international organization**

UNESCO's weaknesses					
1. Tedious internal bureaucracy	2. Lack of a faster response mechanism to the demands of member states	3. Lack of greater visibility of the organization worldwide	4. Lack of financial capacity to implement new relevant programs, within UNESCO's regular budget	5. Continued internal human resource restructures. Lead to a high turn-over rate and a constant brain drain, reducing the quality of UNESCO principal asset	6. Strong political orientation on all decision taken by the organization

Source: Own elaboration.

On the other hand, and particularly about the development of TVET policies and implementation of this project, UNESCO's main weakness on this regard is that there is not existing clear TVET strategy on Education, the main reason for this statement is that despite the written reports and policies developed by academia people, there is a serious lack of experienced TVET experts formulating a real, reliable and feasible TVET strategy (focusing much on better planning rather than on what seems to be the most important element for UNESCO: outputs and outcomes). It also lacks experience on what a TVET project is about and a clear understanding on how to implement it efficiently.

In order to improve UNESCO's efficiency supporting the development of the TVET system and especially in relation with the implementation of the BEAR project, several suggestions have been enumerated. First and foremost, the management of a country based, should be done with autonomy from the regional office. Otherwise, if it is done from a third and different country which has not physical proximity, there would be an important lose on efficiency and efficacy in managing and coordinating the project. Second, in order to guarantee

the sustainability and progression on the development of the TVET system, the BEAR project should be progressively transformed from a project to a program at national level and be replicated in different economic sectors. Third, within the different phases to implement the project, the curriculum development process should be planned to be done in parallel or automatically followed by teacher training, and prior to implementing the pilot, in this way it follows the natural coherence of the project development and it fits into the real expectations that the experts on TVET and the TVET trainers at the Technical schools have. Moreover, in relation to the scope of the project; during the construction of the logical framework, it is important to consider all elements that would be significant for the implementation of the project, for example the student's welfare, and the related cost that the BEAR program at the TVET schools implied and the resources that the TVET schools should have.

In addition to what has been mentioned above, the reinforcement of the work done by the National Project Officer is highlighted. In Namibia an specific suggestion to reconsider the incorporation of some essential courses (drawing, math and science) that were existing previously and have been now erase within the new curriculum, is important to encourage the students to further learning or continue studying.

**- UNESCO's role on the development and Implementation of the BEAR project in Botswana and Namibia.**

**a) Essential Strategies Undertaken by UNESCO essential for the success of the project:**

Two main strategies that have been essential for the success of the project in the country, the first one refers to UNESCO's efforts in promoting TVET at national level, by providing expertise and allocating resources for the development of the TVET system, and the second one relates to the best practices learnt through the BEAR project that will allow the national government to replicate and expand to other sector in order to fully develop their TVET systems.

Moreover, in Botswana, the approach used to bringing together the experts from the TVET sectors, from the national TVET policy makers, as well as the TVET teachers and staff at the technical schools, and specially the consideration to introduce the participation of the industry experts has been a key factor for the success of the project. Named as a "talked strategy" it follows the Botswana Cultural traditions and culture on how discuss and solve the problems, which is traditionally named as "Kgotla"; as consequence of the use of this approach the involvement of all participants has been very significant, and they are focused on thinking about solutions rather than thinking about problems.

The introduction of a specific provision for equipment and the importance of the UNESCO NPO, to conduct the activities and guide the process, within the implementation strategy has been essential for the success of the project.

#### **b) The main barriers faced by UNESCO during the implementation of the project**

Several barriers were faced during the implementation of UNESCO's TVET project. Firstly, the initial resistance from the society, the TVET experts and TVET providers in both countries about the role and activities conducted by UNESCO, due to the national historical background of the foreign support provided to the nation by the foreign agencies (donor or aid agencies), people was worried about the implications that the support provided by UNESCO would have in the society and the system (fear to the imposition of foreign TVET policies).

Changing people mindset was a barrier that was overcome through the involvement of people in all the stages of the process implementation process and giving them the ownership. Secondly, there language barrier between International partners and TVET experts in the country, considered as an important barrier, it generated some clashes that directly impact the speed of the implementation process, and potentially could have undermined the finalization of the project. Thirdly, the existing UNESCO's internal bureaucracy processes, faced in the relation

with all different partners (the national Counterpart in TVET: and the International Implementing Partner, KRIVET). Fourthly, in the inception phase, when planning there was a lack of consideration about the quality processes that the national institutions required in the country prior to introduction the new curriculum officially into the education system, this barrier have been crucial to get the endorsement from the national quality assurance entity. Fifthly, the lack of the resources required for the project implementation (for example: equipment for the TVET centers) and the delay on the delivery according to what it was established on the project plan is a recurrent barrier, the implementation priorities fluctuate constantly and creates expectations based on promises that were not put in practice at all, or at the time promised.

Moreover, other barriers had been identified, the lack of sponsorships program for students, the quality on the instruction process to TVET teacher's on the new curriculum developed, and additional difficulties associated with the distribution of TVET students on workplace learning or industrial attachment have been some important barriers that have been faced.

**c) How the UNESCO project will affect the future development of other sectors?**

In both countries, the development of the TVET system has shown that there is a real need at a country level, to further replicate the approach implement in other sectors in order to consolidate the new developed TVET system. Therefore, it will be crucial to work with all education stakeholders, government officials and institutions together, as a unique system. Incorporating all stakeholders into the process, will also affect the development of other sectors. The capacities that have been created through the whole process will be the seed to replicate it in the future.

In addition to that, the support provided by the international implementing partners in all phases and activities has provided the benchmark that was needed for the future development of

other sectors. The BEAR project experience has established the basement to be replicated in other sectors in the near future.

National governments have enough capacity to replicate the project once UNESCO stop financing the BEAR project, the two main reasons for this are: on the one hand, the empowerment and capacities built in local experts would make possible to develop and replicate the same activities successfully in the future; and on the other hand, financially the provision of the TVET levy will ensure the economic requirements needed. Nevertheless external support or assistance would be a an asset, despite the existing capacities at national level.

In addition to what has been mentioned above, the sustainability of the project is guaranteed based on two elements. Firstly, the simple fact that the goals of the project could be replicated, as the governments have become aware of the capacities that the project has developed on the national TVET experts and would like to ensure that this expertise is used for the further development of the TVET system by replicating the approach used in other trades and industry areas. The project has offered the possibility to develop a lifelong learning TVET approach not only within TVET students but also with the TVET experts and policy makers. Therefore the transformation of the BEAR project into a program is something that should be done and will guarantee the sustainability of the results achieved so far. Secondly, in terms of the implementation cost, as mentioned before, the project is cheaper and more cost- effective than the old TVET system, which will make easier the continuity of the project once UNESCO stops financing the project.

## 10.2. LIMITATIONS AND FUTURE RESEARCH LINES

In this final part, the study's limitations and new lines of research are discussed, since it is considered that, they can promote a rethinking of what has been done during the investigation.

### 10.2.1. Limitations of the Study

It is essential to identify any inherent limitations in the study. The limitations that have arose during the research process include the limitations that concern the nature of the object of study, and other ones that are linked to the design methodology.

Regarding limitations linked to the nature of the object of study, it is important to mention that the object of study in itself is broad and complex. Therefore, this comparative study has narrow down the scope of the study by selecting 2 countries of the Southern African Development Community (SADC). Even though the selection of both countries has been completely justified with evidence based arguments, given the different existing realities in each of the SADC member countries, the study could have been extended to a larger number of countries of this particular region.

As for the limitations associated with the design methodology, one of the main obstacles has been the lack of TVET literature related to these specific countries in which the research study has focus its attention. Very little on TVET in Botswana and Namibia has been published in international available sources. Therefore, several challenges have arisen in completing the literature review. First, the literature identified and examined is largely based on policy documents, with relatively little attention being paid to research on TVET, and secondly, as mentioned before, very little research exists, and that research and evaluation reports that may exist are not widely available.



There are non national TVET centers for research with archived publications either in Botswana or Namibia, and the national TVET institutions - DTVET and NTA- do not conduct national research on TVET either. This situation implied logistical problems in gathering literature, I had to move between institutions gathering documents and literature from a range of places during the field visit. My resources for travel were limited, with no possibility for gathering documents housed in distant locations. Many key documents are only available in hard copy, and often not publicly available. TVET colleagues were sometimes reluctant to loan their only copy of a document, and facilities and resources for copying documents were limited. Facilities for scanning documents for electronic transmission and storage are also limited and available scanners are often not suitable for an efficient conversion of larger documents. What we are left with is a research literature that is partial both geographically and thematically, and a policy literature that is heavy on rhetoric but light on detailed plans for implementation. This in itself is a finding with very significant implications for any future strategy for regional TVET renewal.

There is another possible limitation on the study, which is the potential influence that my person, as UNESCO staff member, could have had in the research process. As an integral member of UNESCO TVET section during the research study, the process was observed throughout the length of the BEAR project implementation in the field, it was inevitable that relationships were formed with the participants. Steps taken to mitigate this potential subjective influence were used, such as cross referencing observed behaviors with interviews and participant validation, or member checking, of transcribed interviews. I attempted to remain reflexive and aware of potential bias in observation or interpretation and reflected on her action throughout the fieldwork and writing process.

Moreover, the claim to collect information about UNESCO TVET project from the students piloting the BEAR project suggested to use a questionnaire. This entails a limitation, as the questionnaire is able to access only perceptions, which are certainly important, as it is

important to take into account the differences between these perceptions and the reality. Regarding the questionnaires answered by students, it can be considered that a few items have been difficult to interpret, therefore more concrete or detailed explanations on these items could have been considered. Another limitation related to the processes of data collection was that the interviews programmed for the industry representatives in Namibia could not be carried out.

The logistical arrangements to administrate the questionnaires and conduct the interviews were complex in both countries, due to several factors. The first challenge I found was to find someone in both countries to whom I could hire in order to provide assistance to the work I was doing from the field, as they should be located within both countries, prior to the field work. Once I identify and hired both persons, additional problems in terms of printing the material (questionnaires) force me to print all the questionnaires in Europe and send them by post to both countries, which implied a high and unexpected economic cost and also high level of uncertainty in terms of ensuring that the questionnaires will arrive in time to be administrated on the TVET centers on the date that was agreed with the principals of both centers. Once the questionnaires arrived they were properly administrated at the Gaborone Technical College and BTEP in Namibia but an additional journey had to be conducted by the assistant to administrate and collect the questionnaires in Francistown College, that was located 5 hours drive distance from Gaborone, in the case of Namibia, the administration of the questionnaires at the Namwater center was done by me during the field trip, due to the different problems that the assistant faced for doing that.

In addition to what has been mentioned before, during the period of data collection of the questionnaires in Botswana there were several strikes of all students enrolled in TVET programs, as they claimed a response to the the lack of financial support and scholarships that would provide a financial support to cover the cost of the ongoing TVET studies, so this discomfort is visible and reflected in the responses, as mentioned before.

In relation to the logistical arrangements to conduct the interviews to key selected interviewees have not been in general easy, first of all due to the busy agenda of the key interviewees as they held high relevant positions within the national institutions and organizations; secondly because all the interviews have to be conducted during the field trip (15th -23rd July 2015) as the communication between Europe and Southern African Countries is not only very expensive but also the quality of the phone and mobile phone network is not guaranteed for any of these countries. The final factor of complexity was to find the perfect moment in both countries to conduct the field trip and the interviews in a way that the trip started in Botswana and continued in Namibia, without being forced to do two separate field trips for each country.

Access to respondents has not been easy; but the support provided from the assistants and both National Project Coordinators had facilitated the logistical arrangements and authorization to conduct appropriate interviews.

The enumerated limitations have been detected from the experience and the research processes implemented. However, the limitations have not been an obstacle to successfully meet the research goal and create a constructive discussion align to the research topic: the Influence of UNESCO on the development of national TVET policies, that could transform some of the limitations in potential subjects for further research.

### **10.2.2. Further Research Lines**

The following represents key areas for future research in this area. Despite the consideration that this work captured the most up-to-date data existent at the time. Future research conducted around this area could complement findings contained in this work.

A longitudinal study would be required in order to measure not only the influence of UNESCO on the development of national TVET systems, but also to analyze which is the real impact on the society, the economy and the education system. It would be necessary to analyze which is the absorb rate for the new certificated students from the BEAR project into the labor market, the assessment that industry does to the just recent graduates skills and professional development to conduct their jobs, how much recognition gains the new TVET system within the society.

It would be also be interesting to introduce other international organizations like OECD, World Bank, UNICEF, ILO on the comparative study to measure the differences and similarities among all of them in terms of the Influence they have on the development of national TVET systems and policies.

An insight into participant experiences has not been the focus of this work. The way in which provision is experienced by different learner groups would benefit those within the sector and provide some insight into effectiveness and impact of the various provision forms. A qualitative study into experiences of learners, in particular provider contexts, would be especially useful. The post-provision experiences of those pre- and unemployed learners would be an especially useful way of identifying perceived areas of strength and weakness in the TVET system and specific trades or sectors.

Some perspective on curriculum and programs in terms of the skills developed by public and also private providers would be a valuable follow-up to this study. This would allow to include an insight into the practices of private providers and the extent of their resonance within the labor market. More comparative work between public and private TVET and skills providers needs to be undertaken. This will enable a comparison of best practice and mutual complementarity in the interest of national development.

Moreover, the development of a National Management Information System on TVET within the Ministries of Education, that will provide ongoing data base about the TVET sector and all trades at national level can quite effectively be used as a starting point for future research in this area. The typology developed for this study, together with this updated database, would enhance any future study of skills provision in the country.

More research about the workplace training, should be done in order to describe and analyze the value of the practical learning within the TVET curricula, in particular in these countries.

It has been noticed in this research study, as it was mentioned by Fourcade (2006) the necessity for sociologist to look at globalization as a critical factor in the transformation of professions and professional dynamics in the modern era, the development of technical education and vocational training policies and the impacts on society suggests that the fundamental role of technical education as an agent of globalization is not very well studied and understood by sociologists, partly because it has not been considered that the economy and the labor market play an important role in TVET.

The global or supranational, international have to be seen as part of a complex set of social forces and patterning's which change over time.

Finally, this research would like to raise the importance about the relevance of the self-assessment that international organizations should do, not only in terms of measuring outcomes or outputs of the projects or policies they develop and implement, but also and mainly on the influence that they have on the countries they develop their work, from an economic, social, cultural and ideological point of view at a macro, meso and micro level.

Hopefully this thesis really lead the future lines of research that have been raised here.

### 10.3. RECOMMENDATIONS

Based on the results of the research study, some recommendations are suggested to improve the development of the national TVET systems in both countries: Botswana and Namibia. These recommendations enumerated below, could be part of the national education reform suggested by stakeholders:

- 10.3.1. To enhance the role of TVET in supporting national (and regional) development objectives.
- 10.3.2. To expand access to technical vocational education and training.
- 10.3.3. To upgrade vocational teacher education.
- 10.3.4. To increase the productivity of TVET students.
- 10.3.5. To introduce examinations as part of the TVET learning assessment process.
- 10.3.6. To enhance the importance of work-place training.
- 10.3.7. To explore and include new models of TVET learning including distance TVET learning on the national TVET system.
- 10.3.8. To maximize the utilization of TVET resources.
- 10.3.9. To increase the engagement of the formal TVET system with micro and informal enterprises.
- 10.3.10. To consider the impact of HIV/AIDS on skills development at the national level.
- 10.3.11. To engage TVET colleges in educationally aligned income generation activities.
- 10.3.12. To develop new strategies for sponsorship.
- 10.3.13. To create a fast track pathway for highly skilled technicians to gain TVET teacher qualifications.
- 10.3.14. To develop management information systems.
- 10.3.15. To bring the private TVET into the National TVET system.

10.3.16. To reinforce the policy coordination across government departments and agencies.

10.3.17. The emergence and performance of qualifications systems.

### **10.3.1. To enhance the role of TVET in supporting national (and regional) development objectives**

This research study claims that TVET should be a major element of national (and regional) economic and social policies and also points to various national pronouncements about the role of TVET in meeting aspirations such as international competitiveness and poverty reduction.

Skills policies must be part of a broad set of policies that are conducive to high rates of growth and investment, including strong growth in good-quality employment and respect for worker's rights. Skills and employment policies should be viewed together.

### **10.3.2. To expand access to Technical and Vocational Education and Training**

Ensure broad access to training opportunities, for women and men, and particularly for those groups facing greater difficulties, in particular youth, lower skilled workers, workers with disabilities, rural communities should be included within all TVET policies. Dedicated policies are required to facilitate access to training and skills development by individuals and groups hindered by various barriers, including poverty and low income, ethnic origin, disability and migrant status (ILO, 2010).

There is a real need to give greater gender considerations to the profile of the workforce, in the industry at all occupational levels. Some of the recommendations on this regard are: a) A

greater proportion of females should be considered in bursaries and grant fundings; b) Efforts should be made at school level to encourage females to take subjects needed for employment in any sector of the industry, including those sectors which historical and socially are more male oriented; c) Encouragement in planning is needed in companies to promote women participation.

**10.3.3. To upgrade vocational teacher education.**

Any attempt to improve national TVET systems must include vocational teacher education reforms, upgrading vocational teacher education it is a compulsory requirement due to the poor conditions under which vocational teachers are working.

Requirements for teacher training include the need to provide in-Service training to staff at each of the TVET colleges, covering issues relating to pedagogy, technical and administration. Training and encouraging Life Long Learning by staff at Technical Colleges.

The training developed should always update the current pre-service training offered at Colleges of Technical and Vocational Education. It is also expected that colleges and staff will work closely with industry to develop the skills needs of trainers.

**Figure 22: TVET teacher training areas**

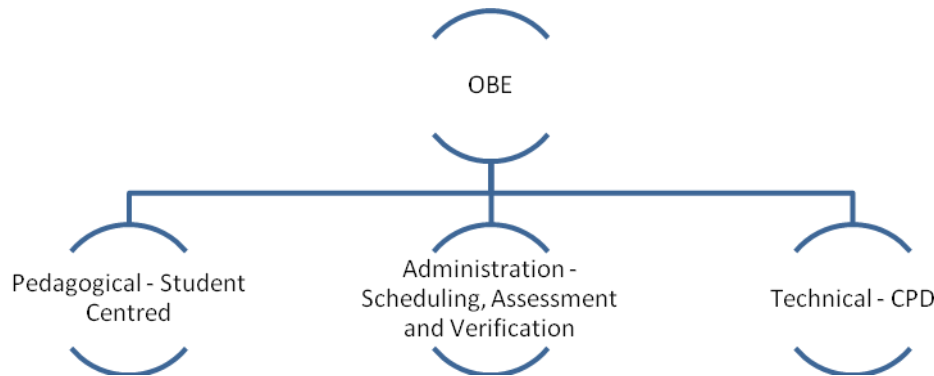
Pedagogical	Administration	Technical
<ul style="list-style-type: none"> <li>•OBE</li> <li>•Learning Styles</li> <li>•Classroom/Workshop practice in TVET</li> <li>•Pedagogic Theories</li> <li>•Assessment Theory and Practice</li> </ul>	<ul style="list-style-type: none"> <li>•Scheduling/Timetabling - staff and resources</li> <li>•Resource Management</li> <li>•Assessment Records</li> <li>•Verification Records</li> <li>•Team Leadership/Team work</li> <li>•Curriculum Development</li> </ul>	<ul style="list-style-type: none"> <li>•Continuous Professional Development</li> <li>•Expert List provided through scoping mission</li> </ul>

Source: Own elaboration.



Teacher training should be based on outcomes based education. The teacher training programmes must be certified by the Quality Assurance and Assessment units belonging to the Ministry of Education and be sustainable over the long term.

**Figure 23: Teacher training Outcome Based Education (OBE) areas**



Source: Own elaboration.

#### 10.3.4. To increase the productivity of TVET students

Each country's prosperity depends on how many of its people are working and how productive they are, which in turn rest on the skills they have and how effectively those skills are used (ILO, 2010). To increase the TVET students productivity, is a crucial factor not only to guarantee the success of the human capital investment from the TVET employers but also for the economic growth of the nation.

Attainment of qualification does not automatically lead to productivity, TVET employers consider that attitude of the graduates is the most important factor for an employer to employ and potential candidate, some time even more important than formal qualifications (HRDAC, 2013).

Therefore, within the students' learning process, good attitudes should be taught. The most valuable attitudes are (HRDAC, 2013):

- a) Skilled personnel who are dedicated and hardworking.
- b) Professional behaviour and how to conduct oneself in a business environment.
- c) Customer service and telephone manners.
- d) People who take pride in the work they are doing.
- e) Commitment to the job and work ethic.
- f) Reliability, punctuality, take responsibility.

The experience of graduates is the second most important factor to increase the productivity on TVET students. Employers believe that graduates with work experience require less supervision and less on the job training because they are familiar with the environment. Work experience also enables graduates to provide references, which are valued by employers.

The top 4 skills gaps from students are (BB, 2009):

- a) Personal Skills and Attributes.
- b) Management and Leadership Skills.
- c) Attitudes towards public.
- d) General understanding of the services offered by the business.

### **10.3.5. To introduce examinations as part of the TVET learning assessment process.**

Examinations represent an opportunity for TVET students to demonstrate their understanding of the content of the unit they have studied, as part of their assessment process. Examinations could take place at the end of a semester or end of year, and take the form of extended essay type questions which link together learning outcomes and performance criteria within a unit specification.

Examinations are timed to ensure that candidates provide relevant information relating to the question being answered, not just simply recalling what they have learnt.

**Figure 24: Roles on the TVET examination process**

Examinations are scheduled by the Department of Technical and Vocational Education and Training



Examinations are written by the Department of Technical and Vocational Education and Training



Examinations are vetted by the Quality Assurance and Assessment Unit



Examinations are distributed by the Department of Technical and Vocational Education and Training



Examinations are administered by Colleges at the same date and time as scheduled without exception



Examinations are marked by the Department of Technical and Vocational Education and Training



Results are verified by the Quality Assurance and Assessment Unit

Source: Own elaboration

### 10.3.6. To enhance the importance of work-place training.

Practical experience in an actual workplace, which is aligned to their field of study, is invaluable for students. Workplacement is where a student spends a period of time in a workplace and undertakes a number of pre-determined and agreed competencies.

There are several benefits of carrying out workplace training: a) Students gain an understanding of the type of work associated with a specific vocational area; b) Builds discipline in attendance, punctuality, receiving instructions, responding to supervision etc; c) Builds an

understanding of the relationship between study and work activities; d) Provides opportunities for gaining future employment.

The provision of workplace training activities should include a previous work with students regarding the following items: a) What to expect in the workplace; b) Punctuality, attendance, timekeeping requirements; c) How to receive and follow instructions; d) Safety and health requirements; e) What to do in cases of emergency; f) How to behave in the workplace.

### **10.3.7. To explore and include new models of TVET learning including distance TVET learning on the national TVET system.**

The globalization of markets is accelerating the diffusion of technology and the pace of innovation. New modes of delivery TVET education should be explored, these include the development of different modes of distance TVET education (ILO, 2010).

The educational policies are a powerful external driver for change and point in the direction of more flexible teaching and learning methodologies with an emphasis on distance learning provision and the use of technology to address issues of increased access and equity and improved quality with cost-effectiveness. The introduction of this new provision of TVET education is required to specifically meet the challenges of a modern labor force through diversified modes of delivery.

**10.3.8. To maximize the utilization of TVET resources.**

TVET resources when compared with the resources required for other educational institutions are extremely expensive. Skills training require workshops, specialist machines, tools, etc, all of which are expensive resources. Because of the high cost associated with TVET provision it is essential to maximize the use of these resources to their fullest capacity. This involves ensuring teachers time is fully and purposefully occupied, class sizes are at maximum operating sizes, facilities are used the maximum amount of hours per day, and machines and equipment are at their optimum safe working levels.

To maximize the use of resources managers of TVET institutions should:

- a) Establish the minimum equipment requirements.
- b) Ensure that the equipment is well maintained, and minimize the risk of injury.
- c) Apply effective space utilization practices.
- d) Develop operational parameters for teaching and non-teaching staff.
- e) Develop and implement resource management system.
- f) Establish an inspectorate for TVET centers that could monitor the safety in workshops and laboratories.

**10.3.9. To increase the engagement of the formal TVET system with micro and informal enterprises**

Industry engagement refers to the relationship between the TVET institution and key companies and employer groups, in which micro and informal enterprises should be part of it. TVET institutions must engage with these organizations to ensure that training activities meet the knowledge and skill requirements of employers and the broader economy.

Managers of TVET institutions should consider and apply some or all of the following strategies for building ongoing relationships with industry and employers:

- a) Develop a policy and procedure for engaging with industry at an institutional level.
- b) Employ staff with relevant industry experience.
- c) Include industry engagement in teacher duties.
- b) Develop guidelines for workplace attachment.
- e) Engage in educationally aligned income generation activities.
- f) Develop strategies for sponsorship.

The benefits of engaging with industry are: a) Industry provides key industrial advice which increases the relevance of TVET programs; b) Industry provides work placement opportunities for TVET staff to upgrade the currency of their vocational skills; c) Industry provides work experience for TVET students which allows them to experience the ‘world of work’ and adds purpose to their study; d) Sponsorship, joint promotional activities, etc. are other ways industry (including micro and informal enterprises) can link with TVET

#### **10.3.10. To consider the impact of HIV/AIDS on skills development at the national level.**

In Botswana and Namibia HIV/AIDS is seen as both exacerbating skills shortages and undermining current efforts at skills development. An exploration of what public TVET providers are doing and can do to address issues of access for people living with AIDS and of HIV/AIDS education should be done. The development of policies on this matter, should also be carried out not only in these two countries but for the region as well.

**10.3.11. To engage TVET colleges in educationally aligned income generation activities.**

TVET college generates discretionary income by engaging the outputs of its practical training in commercial activities that are related to the educational activities of the organization. This income could support the colleges to purchase additional equipment, engage in staff professional development activities, undertake facility upgrade etc.

There are several benefits of engaging in educationally aligned income generation activities: money is available for discretionary items as determined by the college; engaging in commercial activities exposes staff and students to external standards, practices and the broader economic environment; forges links between the brigade/college, the community and local industry.

**10.3.12. To develop strategies for sponsorship.**

To promote sponsorship, as a commercial arrangement in which a sponsor provides a contribution in money or in kind to support an activity in return for certain specified benefits.

The benefits of developing sponsorship; it provides mutual benefit to TVET institution and the sponsor in terms of marketing and promotion; it increases the relevance and status of TVET by being associated with reputable external organizations; it provides a budgetary benefit to the college by not having to provide the item themselves; it increases TVET external engagement.

**10.3.13. To create a fast track pathway for highly skilled technicians to gain TVET teacher qualifications.**

One way of building the technical competence of the TVET workforce is to encourage highly skilled technicians to move from industry and take up teaching positions in TVET institutions. There are often significant barriers to people making this type of career move. These include the lack of financial incentives to change careers, the length of time needed to gain TVET teaching qualifications and the absence of professional support provided for new entrants into the profession.

While acknowledging these problems, it is important to look at ways of attracting highly skilled technicians and highly qualified graduates into teaching and training positions. One response to this situation could be the development of fast track teacher training pathways for high calibre technicians and graduates seeking entry into the profession. These programs often consist of an intensive teacher education program, a structured placement in a school or training centre, and a mentoring arrangement in which the new teacher is supported by an experienced teacher or trainer.

The key benefits of a fast track teacher training pathway for highly skilled technicians seeking to become TVET teachers are: a) It increase the supply of TVET teachers with high level technical skills; b) It increase the supply of TVET teachers with recent industry experience; c) It improves the relevance of trade training programs by ensuring that TVET teachers have current industry knowledge and the skills required to train and assess others in advanced technical skills; d) It promotes the exchange of skills between industry and the TVET sector and finally it changes the work culture of TVET institutions by recruiting staff who have recent industry experience, are aware of the skill requirements of industry and are used to working in a business environment.



**10.3.14. To develop management information systems.**

National TVET management information systems are not well developed. The lack of systemic collection and aggregation of data presents severe challenges for monitoring the developmental status and performance of national TVET systems. Whilst there is no national TVET-MIS, some TVET data are available, providing some statistical information on TVET.

The development of a management information system is required to compile national data on key indicators (for example, total enrolment in TVET, number of providers, and numbers of staff) for the sector as a whole.

No country has sufficiently robust TVET-MIS to support sector wide forecasting and none of the systems is linked to labor market data systems. Initiatives to link skills development to labor market data should be implemented.

**10.3.15. To bring the private TVET into the national TVET system.**

The Private provision in TVET does have a potential to contribute to achieve the national developmental goals, and to be incorporated into an overall national model of TVET system

**10.3.16. To reinforce the policy coordination across government departments and agencies.**

This research study shows evidence that both governments are largely supportive of developing be better at developing evidence-led policies and cross-ministerial coordination. One of the main existing challenges is the reinforcement of better coordination mechanisms across

government departments, industry and training institutions, and indeed play all together an strategic role in anticipating future needs.

### **10.3.17. The emergence and performance of qualifications systems.**

This particular recommendation is supported by the South Africa National Skills Survey Paterson, A., McGrath, S., Badroodien, A. (2003) that show limited take up of new awards or the inability of qualifications authorities to break down barriers between education and training sub-systems, as in the previous point about lack of policy coherence.

Assesing the continue relevance and quality of training institutions and programmes, relative to their cost it is not simple. Tools and methods, including international comparisons, require further development.

In relation to the qualifications systems in the region, it is important to measure the impact of existing qualification frameworks. It seems that nowadays within the SADC region there is a wide range of meanings attributed to NQFs and the equally diverse pace of implementation.

## **PART V - ANEXES**

**Annex 1: UNESCO Acknowledge e-mail and authorization to conduct the PhD research study.**

**Annex 2: BEAR project leaflet.**

**Annex 3: Macro quantitative indicators, guideline.**

**Annex 4: Description of each macro quantitative indicator.**

**Annex 5: Comparative macro analysis between countries completed.**

**Annex 6: Social impact perception questionnaire - Botswana.**

**Annex 7: Social impact perception questionnaire - Namibia.**

**Annex 8: Social impact perception database.**

**Annex 9: Semi-structured interview cover letter.**

**Annex 10: Informed consent form letter for the semi-structured interview (sample).**

**Annex 11: Semi-structure interview guideline.**

**Annex 12: Field trip interview schedule in Botswana and Namibia.**

**Annex 13: Interviews transcriptions.**

**Annex 14: Focus groups transcriptions.**

**Annex 15. List of the key interviewees and focus group participants.**

**Annex 16: Information e-mail about the field trip to UNESCO HQ.**

**Annex 17: Invitation letter from Botswana to conduct the field trip.**

**Annex 18: Invitation letter from Namibia to conduct the field trip.**

**Annex 19. Correlation table (hypothesis, general problem, general and specific goals and analysis conducted).**

**Annex 20. Glosary of terms**

## REFERENCES

Abbott, A. (1988). *The system of Professions: An essay on the division of expert labor.* University of Chicago Press. Chicago

Abbott, A. (2005). *Linked Ecologies: States and Universities as Environments for Professions.* *Sociological Theory*, 23 (3), 245-74.

African Development Bank / The Organization for Economic Co-operation and Development [AfDB/OECD] (2007). *African Economic Outlook.* Report on Namibia.

AfDB/OECD (2008). *African Economic Outlook,* Report on Botswana.

African Development Bank (2010). *African Statistical Yearbook 2010 /Annuaire Statistique pour l'Afrique 2010.* Tunisia.

Africa Housing Finance Yearbook (2013). *A review of some of Africa's housing finance markets.* September 2013. Fin Mark Trust. South Africa.

African Union (2007). *Strategy to Revitalize Technical and Vocational Education and Training (TVET) in Africa.* African Union, Addis Ababa.

Akoojee, S. (2003). *Private further education and training.* *Human Resources Development Review 2003,* HSRC Press, Cape Town.

Akoojee, S., *et al.* (2005). *Vocational education and training in Southern Africa: A comparative study.* HSRC Press.

Akoojee, S., Gewer, A. and McGrath, S. (2005). *Vocational and Education and Training in Southern Africa*. HSRC Press, Cape Town.

Akoojee, S., McGrath, S. and Visser, M. (2008). *Further education and training*, in Kraak, A. and Press, K. (eds.) *Human Resources Development Review 2008*, HSRC Press, Cape Town.

Alter Chen, M. (2007). *Rethinking the informal Economy: linkages with the Formal Economy and the Formal Regulatory Environment*. DESA working paper No. 46.

Alexander W. Wiseman, M. Fernanda Astiz and David P. Baker (2013). Globalization and Comparative Education Research: Misconceptions and Applications of Neo- institutional Theory. *Journal of Supranational Policies of Education*, 1, 31-52.

Amerson, R. (2011). Making a case for the case study method. *Journal of Nursing Education*, 50 (8), 427–428. doi.org/10.3928/01484834-20110719-01

Anderson, Benedict. (1983). *Imagined Communities*. London: Verso

Archer, Clive. (2015). *International Organizations*. Routledge. Taylor and Francis Group. London and New York.

Badroodien, A. (2003). *Local labor environments and further education and training (FET) colleges: Three case studies*. In Cosser, M. et al (eds) *Technical College Responsiveness*. HSRC Publishers, Cape Town.

Baker, M. J., & Foy, A. (2008). *Business and management research: how to complete your research* (2nd ed.). Westburn: Scotland.

Bailey, T., Cloete, N. and Pillay, P. (2012). *Universities and Economic Development in Africa. Case study: Botswana and University of Botswana*. Higher Education Research and Advocacy Network in Africa (HERANA).

Baliyan, S. P. and Baliyan, P. S. (2013). Institutions and Organizations Contributing to Entrepreneurship Education and Skill Development in Botswana. *Journal of Sustainable Development in Africa*, 15, 5-6.

Barabasch, A., et al. (2009). Planned policy transfer: the impact of the German model on Chinese vocational education. *A Journal of Comparative and International Education*, 39 (1) 5-20.

Bartels, Frank L. and Suman Lederer (2009). *Outsourcing Markets in Services: International Business Trends, Patterns and Emerging Issues, and the Role of China and India*. United Nations Industrial Development Organization, Vienna. Retrieved from [http://www.unido.org/fileadmin/user\\_media/Publications/RSF\\_DPR/WP032009\\_Ebook.pdf](http://www.unido.org/fileadmin/user_media/Publications/RSF_DPR/WP032009_Ebook.pdf)

Beduwe, C., Germe, J-F., Leney, T., Planas, J., Poumay, M. and Armstrong, R. (2009). *New and emerging issues in vocational education and training research beyond 2010*. In *Cedefop Modernising vocational education and training*. Fourth report on vocational training research in Europe, 2. Thessaloniki, Greece: Cedefop

Benavot et al. (2010). International Aid to Education. *Comparative Education Review*. 54, 105-124. The University of Chicago Press.

Benavot, A; Yun-Kyun, C; Ka-mens, D; Meyer, J and Wong, S. (1991). Knowledge for the Masses: World Models and National Curricula, 1920- 1986. *American Sociological Review*, 56, 85-101.

Boli, J and Ramirez, F. (1984). *World Culture and the Institutional Development of Mass Education*. Hadbook of the Theory and Research in the Sociology of Education. Ed. John Richardson. Greenwood.

Boli, J; Ramirez, F.O and Meyer, J.W. (1985). Explaining the origins and expansion of Mass Education. *Comparative Education Review*, 29, 145-170.

Boli, J and Thomas, G. (1999). *Constructing World Culture: International Non government Organizations Since 1875*. Stanford, CA: Stanford University Press.

Botswana Board [BB] (2009). *Training Needs Analysis of the Botswana Industry*. Gaborone. Botswana.

Botswana Training Authority (BOTA) (2010). *Official BOTA Newsletter*, Issue number 1. Gaborone. Botswana.

Botswana Federation of Trade Unions (BFTU) (2007). *Policy on Education in Botswana*. March 2007. Retrieved from <http://library.fes.de/pdf-files/bueros/botswana/04922.pdf>

Botswana Population and Housing Census (2011). Government of Botswana, Gaborone. Retrieved at:  
<http://www.cso.gov.bw/templates/cso/file/File/Census%202011%20Preliminary%20%20Brief%20Sept.pdf>

Boyer, R. and Hollingsworth J.R. (1997). *Contemporary Capitalism: the embeddedness of Institutions*. Cambridge: Cambridge University Press.

Boyle, E.H. and Meyer, J (1998). *Modern Law as a Secularized and Global Religious Model: Implications for the Sociology of Law*, 49, 213-32. *Soziale Welt*.



British Broadcast Corporation [BBC] (2006). *Botswana brings back school fees*. Retrieved from: <http://news.bbc.co.uk/2/hi/africa/4601360.stm>

Brown, Lauder and Ashton (2011). *High Skills: Globalization, competitiveness and skills formation*. Oxford: Oxford University Press.

Caballero, A.; Manso, J.; Matarranz, M. and Valle, J. (2016). Investigación en Educación Comparada: Pistas para investigadores noveles. *Revista Latinoamericana de Educación Comparada*. 7 (9) pp.39-56.

Castells, M. (2000). *The Rise of the Network society*. Blackwell Publishers.

Castells, M. (2010). Comprendiendo la migración global: una perspectiva desde la transformación social. *Revista Relaciones Internacionales*. N.14, junio. pp. 141-169.

Chabbott, C. (2003). *Constructing Education for Development: International Organizations and Education for All*. New York: Routledge/Falmer.

Cedefop (European Centre for the Development of Vocational Training) (2009). *Modernizing vocational education and training: Fourth report on vocational education and training research in Europe: Synthesis report*. Publication Office of the European Union. Luxemburg. Retrieved from [http://Downloads/3043beta\\_en.pdf](http://Downloads/3043beta_en.pdf)

Cedefop and European Commission. (2010). *European Inventory on validation of non-formal and informal learning*. Retrieved from: <http://www.cedefop.europa.eu/EN/about-cedefop/projects/validation-of-non-formal-and-informal-learning/european-inventory.aspx>

Cedefop (2011). *Employment-Related mobility and migration, and vocational education and training*. Working Paper 9. Luxembourg, Office for Official Publications of the European Communities. Retrieved from: [http://www.cedefop.europa.eu/EN/Files/6109\\_en.pdf](http://www.cedefop.europa.eu/EN/Files/6109_en.pdf)

Centeno, M.A. (2001). Neoliberalism and the Creation of Inevitability. Paper presented at the annual *conference of the society for the advancement of socio-economics*. Amsterdam, June 29.

Central Intelligence Agency (CIA) (2014). *The world fact book, Botswana*. The World Bank, Washington DC. USA. Retrieved from <https://www.cia.gov/library/publications/the-world-factbook/geos/bc.html>

CIA (2015). *Namibia Overview: CIA World Fact Book*. Retrieved October 30, 2015, from <https://www.cia.gov/library/publications/the-world-factbook/geos/wa.html>

Clegg, A and Van Graan (2006). *Science, Mathematics and ICT Education in Sub-Saharan Africa*. the SMICT study Namibia Country Paper. Windhoek. Namibia.

Cohen, L, Manion, L & Morrison, K. (2007). *Research Methods in Education*. 5th edition London: Routledge Falmer.

Constitution of Namibia (1990). Government of the Republic of Namibia. Retrieved from <http://www.namibweb.com/const.htm>

Corbin, G. (2006). *South-South cooperation defies the north*. Global envision. Retrieved from <http://www.globalenvision.org/library/3/1371>.

Country Strategic Paper / National Indicative Programme - CSP/NIP - (2007). *Namibia Country Strategy Paper and National Indicative, CSP/NIP 2008-2013*. The 10th European Development Fund (EDF).

Corbin, G. (2006). *South-South Cooperation defies the North*. Global envision. Retrieved from <http://www.globalenvision.org/library/8/1371/>

Curran, J. & Blackburn, R. A. (2001). *Researching the Small Enterprise*. London: Sage

Dale, R and Robertson, S. (2007). *New arenas of Global Governance and International Organizations: Reflections and Directions*. Centre for Globalization, Education and Societies. University of Bristol, UK.

Demirguc-Kunt, Asli and Klapper, Leora (2012). *Measuring Financial Inclusion: The Global Findex*. World Bank Policy Research. Working Paper 6025.

Denzin Norman (1984). *The Research Act: A Theoretical Introduction to Sociological Methods*. Chicago IL. Aldine

Devlin, A. S. (2006). *Research Methods: Planning, Conducting, and Presenting Research*. Belmont, CA: Wadsworth/Thomson Learning.

Department of Technical and Vocational Education and Training, Ministry of Education and Skills Development (DTVET) (2009). Validation Document for BTEP Advanced Certificate in Professional Cookery, BTEP Advanced Certificate in Hospitality Operations and BTEP Diploma in Culinary Arts, BTEP Diploma in Hospitality Management. Gaborone.

Dul, J and Hak,T. (2008). *A Case Study Methodology in Business Research*. Butterworth-Heinemann is an imprint of Elsevier. Oxford. UK.

Education Database (2014). Retrieved from <http://www.classbase.com/Countries/Botswana/Education-System>

Education Encyclopedia - StateUniversity (2015). *Global Education Reference: Botswana, history background, constitutional legal foundations, educational system*. Retrieved from <http://education.stateuniversity.com/pages/190/Botswana-ADMINISTRATION-FINANCE-EDUCATIONAL-RESEARCH.html>

Education Encyclopedia - StateUniversity ( » Global Education Reference. Available at <http://education.stateuniversity.com/pages/1052/Namibia.html> [March, 2016\*]

Education and Training Sector Improvement Programme (ETSIP) (2006). *Planning for a Learning Nation*. Program Document: Phase I (2006-2011). Windhoek. Namibia.

Eichhorst, W., Escudero, V., Marx, P., and Tobin, S. (2010). *The impact of the crisis on employment and the role of labor market institutions*. IZA Discussion Paper 5320. Retrieved from <http://ftp.iza.org/dp5320.pdf>

Eichhorst, W., et al. (2012). *A Roadmap to Vocational Education and Training Systems Around the World*. Bonn: IZA.

ETF (European Training Foundation) (2005). *Integrating TVET into the Knowledge Economy: Reform and Challenges in the Middle East and North Africa*. ETF, Torino.

European Commission (2014). *A Short Version of Namibia Country Strategy Paper and National Indicative*. Brussels . Retrieved from [http://www.delnam.ec.europa.eu\\_home.htm](http://www.delnam.ec.europa.eu_home.htm)

European Union: External Action. Retrieved from [http://eeas.europa.eu/namibia/index\\_en.htm](http://eeas.europa.eu/namibia/index_en.htm)

European Union and Ministry of Higher Education: Training and Employment Creation, Republic of Namibia (EU-MHETEC) (2001). *Draft report of the Namibia Education Scoping study: Vocational Education and Training sub-sector Report*. Windhoek: MHETEC.

Eurostat-OECD (2004). *Methodological Guide for Developing Producer Price Indices*.

Eurostat (2015). *Eurostat regional yearbook 2015*. European Union. Eurostat statistical books. Luxemburg.

Fahad, G. A. (1986). Group discussions: A misunderstood technique. *Journal of Marketing Management*, 1 (3), 315-327.

Faure, E *et al.* (1972). *Learning to be: The world of education today and tomorrow*. UNESCO 1972

Faust *et al.* (2004). *European Industrial Restructuring in a Global Economy: Fragmentation and Relocation of Value Chains*. SOFI Berichte. Göttingen, Germany.

Ferguson C. (2009). *An Effect Size Primer: A Guide for Clinicians and Researchers*. Retrieved from <http://psychology.okstate.edu/faculty/jgrice/5314/AnEffectSizePrimer2009.pdf>

Finn, C. (1986). Rationale for the American Withdrawal from Unesco. *Comparative Education Review*, 30 (1), 140–147.

Fisher, G., Jaff, R., Powell, L. and Hall, G. (2003). *Public further education and training colleges*, in HSRC (eds.) *Human Resources Development Review 2003*, HSRC Press, Cape Town.

Fordham, P. E. (1993). *Informal, non-formal and formal education programs in YMCA*. George Williams College. Lifelong Learning Unit 2, London: YMCA George Williams College.

Foster, P. (1965). *The vocational school fallacy in development planning* in C. Anderson and M. Bowman (eds.) *Education and economic development*, Aldine, Chicago.

Fourcade, M. (2006). *The construction of a Global Profession: the transnationalization of Economics*. University of Chicago, 112, 145-94.

Fourcade, M and Babb, S. (2002). *The rebirth of the Liberal creed: paths to neoliberalism in four countries*. Iniversity of Chicago (3) 533-79.

Flyvbjerg, B. (2011). *Case study: The Sage Handbook of Qualitative Research*. in Norman K.Denzin and Yvinna S.Lincoln editions. Chapter 17, 301-316.

Francis M and Burger L. (2003). *Draft report of final evaluation of Namibia Human Resources Development Programme*. EU, Windhoek.

García Garrido, J. L. (1982). *Educación comparada. Fundamentos y problemas*. Madrid: Dykinson.

George, T; Meyer, J.W. Ramirez,F and Boli, F. (1987). *Institutional Structure: Constituting State, Society, and the Individual*. Beverly Hills, CA: Sage.

Ghauri, P., & Gronhaug, K. (2010). *Research methods in business studies* (fourth edition). London, UK: Prentice Hall.

Graaff, J. F. (1980). *The brigades of Botswana*. Social Dynamics, 6 (1) 25-35.

Gronlund, N. (1981). *Measurement and Evaluation in Teaching* (fourth edition). New York: Collier- Macmillan.

Guba, E. G., & Lincoln, Y. S. (1994). *Competing paradigms in qualitative research*. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research*, 105-117. Thousand Oaks, CA: Sage.

Gustafsson, I. (1987). *Schools and the transformation of work*, Institute for International Education, Stockholm

Government of Botswana (1966). *Botswana Statute Law, 50*. Gaborone. 32 March 1966.

Government of Botswana (1977). *National policy on education*. Gaborone, Botswana: Government Printers.

Government of Botswana (1991). *Botswana National Development Plan 7, 1991-1997*. Ministry of Finance and Development Planning. Gaborone, Botswana.

Government of Botswana (1993). *National commission on education*. Gaborone, Botswana: Government Printers.

Government of Botswana (1994). *Revised national policy on education*. Gaborone, Botswana: Government Printers.

Government of Botswana (1997). *National Policy on Vocational Education and Training*. Ministry of Labor and Home Affairs. Gaborone: Republic of Botswana.

Government of Botswana (2002). *The National Development Plan 9 2003-2009*, Government of Botswana. Gaborone.

Government of Botswana (2008). *Vocational Training Act N.22 of 1998*. Gaborone. Botswana.

Government of Botswana (2009a). *The National Development Plan 10 2010 -2016 (NDP 10) Towards Prosperity for All: Accelerating Achievement of Vision 2016 Through NDP 10*. Government of Botswana. Gaborone. Retrieved from [http://www.finance.gov.bw/index.php?option=com\\_content1&parent\\_id=334&id=338](http://www.finance.gov.bw/index.php?option=com_content1&parent_id=334&id=338)

Government of Botswana (2009b). *National Human Resource Development Strategy: Realizing our potentials*. Ministry of Education and Skills Development. Botswana, Gaborone.

Government of Botswana (2011). *Botswana Long-term Vision 2016*. Gaborone. Botswana. Retrieved from: <http://www.vision2016.co.bw/vision-publications.php?flag=pub>

Government of Botswana (2013). *Primary Education Statistics 2012*. N. 2013/1. Gaborone. February 2013. Botswana. Retrieved at <http://www.cso.gov.bw>

Government of Botswana (2014a). *Secondary Education Stats Brief – 2012*. N. 2014/01. Statistics of Botswana. Gaborone.

Government of Botswana (2014b). *Population and Housing Census 2011, Analytical Report*. Statistics Botswana. Gaborone. Retrieved from: [http://www.cso.gov.bw/images/analytical\\_report.pdf](http://www.cso.gov.bw/images/analytical_report.pdf)

Government of Canada (2009). *Canada Launches Major Vocational Training Initiative for Developing Countries*. The Canadian International Development Agency. Retrieved from <http://www.acdi-cida.gc.ca/acdi-cida/ACDI-CIDA.nsf/eng/NAT-3691851-JSU>

Government of the Republic of Namibia (1996). *Regulations setting-up the National Qualifications Framework for Namibia: Namibia Qualification Authority Act*. Republic of Namibia. No. 29 of 1996. Office of Prime Minister

Government of the Republic of Namibia (2001a). *Education Act*. Republic of Namibia. Windhoek, 27th December 2001. No. 16 of 2001. Office of Prime Minister.

Government of the Republic of Namibia (2002). *Education for All (EFA) National Plan for Action 2002-2015*. Windhoek, Namibia.

Government of the Republic of Namibia (2003a). *Teachers' Education Colleges Act, 2003*. Windhoek, 30 December 2003. Act No. 25 of 2003. Office of Prime Minister.



Government of the Republic of Namibia (2003b). *The Higher Education*, 2003. Windhoek, 31st December 2003. Act No. 26 of 2003. Office of Prime Minister.

Government of the Republic of Namibia (2004a). *Namibia Vision 2030: Policy Framework for Long-Term National Development*. Office of the President. Windhoek. Namprint. Namibia.

Government of the Republic of Namibia (2004b). *The National Disability Council Act*, 2004. Windhoek, 28th December 2004. Act No. 26 of 2004. Office of Prime Minister.

Government of the Republic of Namibia (2007). *Third National Development Plan (NDP3) 2008-2012 Volume I*. Windhoek

Government of the Republic of Namibia (2008). *The Vocational Education and Training Act N.1 2008*. Windhoek, 6 May 2008. Act No. 1 of 2008. Office of Prime Minister.

Government of the Republic of Namibia: Ministry of Education, Arts and Culture (2016). Available at: [http://www.moe.gov.na/m\\_ab\\_aboutus.php](http://www.moe.gov.na/m_ab_aboutus.php) [February, 2016]

Graziosi, A. (2011). *Training Institutions and Labor Market Needs: Bridging the Gap*. ILO-ITC. Retrieved from: <http://stcex.gotevot.edu.sa/program/pres/mon/p101.pdf>

Green, A., Oketch, M., Preston, J. (2004). *Global report on technical and vocational education and training*. University of London. Institute of Education. London. (Unpublished report for the UNESCO Institute for Statistics.)

Haas, P. (1992). *Introduction: Epistemic Communities and International Policy Coordination*. International Organization, 46 (1) 1-35.

Hanushek Eric, Woessmann Ludger, and Zhang Lei, (2011). *General Education, Vocational Education and Labor-Market outcomes over the life-cycle*. NBER Working Paper Series. Paper 17504. National Bureau of Economic Research. Cambridge. Massachusetts.

Hesse-Biber, S., and Leavy, P. (2011). *The practice of qualitative research* (second edition) Thousand Oaks California: Sage Publications.

Heintz, Peter (1972). *A Macrosociological Theory of Societal Systems; With Special Reference to the International System*, Bern: H. Huber

Henderson, W. (1974). *Brigades, Government, Enthusiasm and Development: A Critical Review of the Martin Report*. Botswana Notes and Records: 179-187.

Hermans, Q. (1974). *Towards Budgetary Independence: A Review of Botswana's Financial History, 1900 to 1973*. Botswana Notes and Records 6, 89-115.

Heyneman, S. (1985). Diversifying secondary school curricula in developing countries: an implementation history and some policy options. *International Journal of Educational Development* 5 (4) 283-288.

Hinchliffe, K. (1990). The returns to vocational training in Botswana. Research note. *Economics of education review*, 9 (4) 401-404.

Hoaglin, D.C., Rj. Light, B. McPeck, F. Mosteller, and M.A. Stoto (1982). *Data for decisions: Information strategies for policymakers*. Cambridge, MA: Abt Associates, Inc.

Hopkin, A. (1994). AID, education and development in Botswana: A qualitative analysis. *International Journal of Educational Development*, 14 (4) 393-407.

HRDAC (2013). *The Strategic Human Resource Development Plan for the Tourism Sector for the period 2013 to 2023 March 2013*. Technical document. Gaborone. Botswana.

Hynes, W and Scott, S. (2013). *The Evolution of Official Development Assistance: Achievements, Criticisms and a Way Forward*. OECD Development Co-operation working paper. Organization for Economic Co-operation and Development, France.

International Bureau of Education (IBE) (2010). *World Data on Education 2011*. VII Ed. 2010/2011. 7<sup>th</sup> edition. Revised version August 2010.

IIEP (UNESCO International Institute for Education and Planning) (2005). *Towards an AIDS-Free Generation: The Global Initiative on HIV/AIDS and Education*. International Institute for Educational Planning. UNESCO. Paris. France.

ILO (International Labor Organization) (2006). *Changing patterns in the world of work*, Report of the Director General. International Labor Conference, 95th Session 2006. Geneva, ILO.

ILO (2010). *A Skilled Workforce for Strong, Sustainable and Balanced Growth*. A G20 Training Strategy. International Labor Office. Geneva, November 2010.

ILO and IILS (International Labor Organization and International Institute for Labor Studies) (2011). *World of Work Report 201: Making markets work for jobs*. International Labor Office. Geneva: ILO.

INSSO (International Network of Sector Skills Organization) (2010). *Internal Network of Sector Skills Organization. Progress Report. July 2010*. Manufacturing skills Australia. Sydney. Australia.

IOM (International Organization for Migration) (2010). *World Migration Report 2010*. IOM, Geneva.

Jeffren Jensen Arnett (2007). *International Encyclopedia of Adolescence*. New York.

Johanson, R. and Adams, A. (2004). *Skills development in sub-Saharan Africa*. World Bank, Washington.

Johanson, R. and Kukler, R. (2003). *Vocational skill development in Namibia*. Report N. 03/05/03, EW-PO78682-ESW, World Bank, Washington.

Jones, P. (1988). *International Policies for Third World Education: Unesco, Literacy and Development*. Routledge, London and New York.

Kamberelis G., and Dimitriadis, G. (2011). Focus groups: Contingent articulations of pedagogy, politics, and inquiry. In Denzin & Lincoln (Eds.), *The SAGE Handbook of Qualitative Research*, 4, 545-561. Thousand Oaks, California: SAGE Publications

Kirsten Krüger, Marti Parellada, Montse Alvarez, Muir Huston and Mike Osborne (2013). *Core dimensions of Social Effectiveness in University Adult Education*. PASCAL Observatory/ University Glasgow. Barcelona/Oldenburg.

Keese, M and Tan J-P (2013). *Indicators of Skills for Employment and productivity: a conceptual framework and approach for low income countries*. A report for the Human Resource development pillar of the G20 multi action plan on development. OCDE.

Keevi,J. Chakroun, B. and Dejj,A. (2010). *Transnational Qualification Frameworks*. European Training Foundation, Italy.

King, K. (1971). *Pan-Africanism and Education*. Clarendon Press, Oxford.

King, K (1991). *Can we achieve outcome based education?*. Association for Supervision and Curriculum Development.

King, K. (2009). Education, skills, sustainability and growth: complex relations. *International Journal for Educational Development* 29, 175–181.

Kitschelt,H, Lange, P, Marks, G and Stephens, J.D. (1999). *Continuity and Change in contemporary capitalism*. New York. Cambridge University Press.

Kitschelt, Herbert; Lange, Peter; Marks, Gary and Stephens, J.D. (1999). *Continuity and Change in contemporary capitalism*. New York. Cambridge University Press.

Koro-Ljungberg, M., and E.P. Douglas (2008). State of qualitative research in engineering education: Meta-analysis of JEE. *Journal of Engeneering Education*, 7 (2) 163-76.

Konrad-Adenauer-Stiftung, V. (2015). *KAS Factbook April 2015*. Republic of Namibia.World. World Fact Book 2015: Namibia.

Kotecha, P, Wilson-Strydom, M and Fongwa, SN (2012). *A Profile of Higher Education in Southern Africa – Volume 1: Regional perspective*. Johannesburg: SARUA. Retrieved from [http://www.sarua.org/files/publications/SARUA%20leadership%20Dialogue%20Series/SARUA%20Profiles%20of%20HE%](http://www.sarua.org/files/publications/SARUA%20leadership%20Dialogue%20Series/SARUA%20Profiles%20of%20HE%20)

Lallement, M. (2001). *Globalización: ¿qué podemos decir de ella?*. En cuadernos relaciones, 2001. N.19. pp.31-68.

Lauglo, J. and Lillis, K (1988). *Vocationalising education*, Pergamon, Oxford.

Latorre, A; Rincón, D and Arnal, J (2005). *Bases metodológicas de la investigación educativa*. Barcelona: Ediciones Experiencia.

Lee, K. (1995). *A neo-Gramscian Approach to International Organizations: an Expanded Analysis of Current Reforms to the UN Development Activities*. In: MacMillan, J. *Boundaries in Question*. St. Martin's Press, New York, 144–162.

Lockheed, M., Jamison, D. and Lau, L. (1980). Farmer education and farm efficiency *Economic Development and Cultural Change* 29 (1) 37-76

Lofland, J., Snow, D.A., Anderson L and Lofland, L.H (2006). *Analyzing Social Settings*. Belmont, CA: Wadsworth, Cengage Learning.

Lukes, Steven (2005). *Power: A radical view*. 2<sup>nd</sup> Edition. Palgrave/Macmillan. London.

Maps of World (2014). Retrieved from: <http://www.mapsofworld.com>

Marshall, T.H. (1964). *Class, Citizenship and Social Development*. New York: Doubleday.

Masisi, R. (2004). *Reducing unemployment rates by producing the workforce that industry wants: the Botswana perspective*. IVETA: Vienna 2004 [Vocational education and training - a contribution towards global poverty reduction?]. E. Vocational and I. Training Association. Denkendorf.

Matangi, C. (2006). Skills under threat: the case of HIV/AIDS in the mining industry in Zimbabwe. *Journal of International Development*, 18 (5)

Marginson, S and Mollis, M (2001). The door opens and the tiger leaps?: Theories and reflexivities of comparative education for a global millennium. *Comparative Education Review*, 45 (4), 581-615.

Maxfield, Silvia (1997). *Gatekeepers of Growth: The International Political Economy of Central Banking in Developing Countries*. Princeton, N.J.: Princeton University Press.

McGrath, S. and Paterson, A. (2008). *Enterprise training*, in HSRC (eds.) 2003 Human Resources Development Review 2003, HSRC Press, Cape Town.

McGrath, S. and Akoojee, S. (2009). *Vocational Education and Training for Sustainability in South Africa: the Role of Public and Private Provision*. International Journal of Educational Development 29/2.

McNeely, C. (1995a). *Constructing the Nation-State: International Organization and Prescriptive action*. Westport, CN: Greenwood

McNeely, C. (1995b). Prescribing National Educational Policies: The Role of International Organizations. *Comparative Education Review* 39 (4), 483–507.

McNeely, C. (1995). *Constructing the Nation-State: International Organization and Prescriptive action*. Westport, CN: Greenwood

Meyer, J.M (1977). The Effects of Education as an Institution, *American Journal of Sociology* 83,.340-63.

Meyer, J (1988). *Society without Culture: A Nineteenth-Century Legacy*. 193-201 Rethinking the Nine-teenth Century, edited by Francisco Ramirez. New York: Greenwood Press.

Meyer, J.W (2000). *Globalization: Sources, and Effects on National States and Societies*. International Society 15, 235-250

Meyer, J.W. (2009). *Word Society*. Oxford University Press. New York.

Meyer, J.M. and Jepperson. R. L. (2000). The Actors of Modern Society: The Cultural Construction of Social Agency. *Sociological Theory*, 18, (1) 100-120.

Meyer, J.W., Nagel, J. and Snyder, C (1993). The Expansion of Mass Education in Botswana: Local and World Society Perspectives. *Comparative Education Review*. 37 (4). University Chicago Press

Meyer, J.W, Ramirez, O., and Nuhoglu,Y. (1992). World Expansion of Mass Education 1870-1980. *Sociology of Education Review*, 65 (2) 128-149

Meyer J.W., Francisco,O,. Ramirez,F. and Soysal, Y. (1992). World Expansion of Mass Education 1870-1970. *Sociology of Education* 65, (2) 128-49

Meyer, H. and Rowan, B. (2006). *The New Institutionalism In Education*. Albany, NY: State University of New York Press

Meyer, J. W., Nagel, J and Snyder, C.W. (1993). The Expansion of Mass Education in Botswana: Local and World Society Perspectives. *Comparative Education Review* 37 (4) 454-475.

Meyer, J.W., Boli, J., Thomas,G. and Ramirez, F. (1997). World Society and the Nation-State. *American Journal of Sociology* 103, 144-82.

Meyer, J.W. (2000). *Globalization: Sources, and Effects on National States and Societies*. *International Society* 15, 235-250

Meyer, J.W. (2009). *Word Society*. Oxford University Press. New York.



MHETEC (2000). *National Policy for Vocational Education and Training*. Draft, Ministry of Higher Education, Training and Employment Creation, Windhoek.

Middleton, J., Ziderman, A. and Adams, A. (1993). *Skills for productivity*, Oxford University Press, Oxford.

Millennium Challenge Compact (MCC) (2008). *Millennium Challenge Compact between the United States of America acting through the Millennium Challenge Corporation and the Republic of Namibia*. Draft Paper June 20, 2008. Windhoek.

Millennium Challenge Corporation (2008). *Namibia Strategic Environmental Assessment: Thematic Analysis Report-Education*. Volume 6. Namibia

Millennium Development Project (2005a). *Investing in Development: A Practical Plan to Achieve the Millennium Development Goals*. London: Earthscan and the UN Millennium Project. Retrieved from <http://www.unmillenniumproject.org>

Millennium Development Project. (2005b). *Toward Universal Primary Education: Investments, Incentives and Institutions*. Report from the Task Force on Education and Gender Equality. London: Earthscan and the UN Millennium Project. Retrieved from <http://www.unmillenniumproject.org>

Ministry of Education (2007). *Education Statistics 2007*. Windhoek: Education Management Information System

Ministry of Education (2012). *Strategic Plan 2012-2017*. Government of the Republic of Namibia. Windhoek.

Ministry of Education and Skills Development [MoESD] (2009). *National Human Resource Development Strategy: Realizing our potentials*. Government of the Republic of Botswana. Gaborone.

Ministry of Health and Social Services. (2015). *Namibia HIV Draft Estimates 2000-2014*. Windhoek. Namibia

Ministry of Labor and Home Affairs (MLHA) (2007). *National Policy on Vocational Education And Training*. Gaborone. Botswana.

Ministry of Labor and Manpower Development (1991). *Draft documents on vocational training*. Windhoek: MoLMD. Republic of Namibia.

Mogami, T. (1990). *The United Nations System as an Unfinished Revolution*. Alternatives XV, 177–197.

Modise, S., et al. (2007). *Status of vocational training in Botswana: establishing the baseline*. Knoxville, International Vocational Education and Training Association. 15, 41-53.

Molwane, O.B. (1993). *Developing Technology Education in Botswana*. IDATER 1993. Conference, Loughborough: Loughborough University.

Mundy, K. (1998). *Educational Multilateralism At A Crossroads*. In King, K., Buchert, L. (Eds.), *International Development Cooperation at a Cross-roads*. UNESCO and NORRAG, Paris.

Mundy, K. (1999). *Educational multilateralism in a changing world order: Unesco and the limits of the possible*. Stanford University School of Education, Stanford, CA. USA

Mundy, K. (2006). *Education for All and the new Development Compact*. review of education. Springer.

Mupimpila, C. and N. Narayana (2009). The role of vocational education and technical training in economic growth: a case of Botswana. *International Journal of Education Economics and Development* 1, (1) 3-13.

Murphy, L., and Mundy, K. (2002). *New Roles of INGOs in the Education for all Movement*. Paris. UNESCO.

Mutula, S. M., et al. (2004). *Information for the Vocational Education and Training Sector in Botswana*. Information Development, 20 (1) 51-60.

Murray, J. (1998). Qualitative methods. *International Review of Psychiatry*, 10 (4), 312-312.

Murray, P. J. (1997). Using virtual focus groups in qualitative research. *Qualitative health research review*, 7 (4), 542-54.

Myers, M. D. (2009). *Qualitative research in business & management*. London: Sage.

Namibia Statistics Agency (2011). *Namibia 2011 Population & Housing Census Main Report*. Retrieved from:  
<http://www.nsa.org.na/files/downloads/Namibia%202011%20Population%20and%20Housing%20Census%20Main%20Report.pdf>

Namibia Statistics Agency (2015). *Namibia Labor Force Survey 2014 Report*. Namibia Statistics Agency, Windhoek.

National Christian Council of Kenya (1967). *After School what?* NCCCK, Nairobi.

National Planning Commission (2008). *Second Millennium Development Goals Report*. Namibia, Progress at Mid-term. Windhoek, September 2008.

National Planning Commission (2015). *Namibian Annual Report 2014-2015*. Office of the President. Windhoek

Ndjoze-Siririka. (2002). *Reforming the Namibia VET System: Agenda for Change*. MHETEC, Windhoek.

Ndjoze-Siririka. (2003). *Vocational Education and Training in Namibia: The long term vision*. Paper presented at the First Joint Review of Namibian Education Sector.

Neuman, WL. (2006). *Social Research Methods: qualitative and quantitative approaches*. Boston MA: Pearson.

Namibian Qualification Authority (NQA) (2016). *Namibian Institutions and their programmes Accredited by the Namibia Qualifications Authority*.

Norrag (2015). *Best Practice in Education and Training: Hype or Hope*. Namibia: A Balanced Approach to TVET Training. pp. 36-38. Norrag news. Retrieved from: <http://www.norrag.org/es/publications/boletin-norrag/online-version/best-practice-in-education-and-training-hype-or-hope/detail/namibia-a-balanced-approach-to-tvet-training.html>

Norrag (2007). *Namibia: A Balanced Approach to TVET Training*. Retrieved from: <http://www.norrag.org/es/publications/boletin-norrag/online-version/be>

Parsons, Q. N. (2000). The Botswana Brigades: Botswana's Experience of Education for Employment, 1965-1989. *Southern African Review of Education*, 6. 77-87.

Phillip Brown, Hugh Lauder, and David Ashton (2011). *The Global Auction: The Broken Promises of Education, Jobs, and Incomes*. Oxford University Press.

Odora, R. J. (2010). Assessment of outcomes-based vocational education and training in sub-Saharan Africa: some lessons from South Africa and Botswana. *The Australian Journal of Vocational Education and Training in School*, 8, 67.

OECD (Organization for Economic Cooperation and Development) (2005). Glossary. Retrieved from: <http://stats.oecd.org/glossary/detail.asp?ID=1434>

OECD (2009). *Is informal normal? Toward more and better jobs*. Paris, OECD Publishing.

OECD (2013). *Indicators of Skills for employment and productivity : A conceptual framework and approach for low-income countries. A report for the Human Resource Development Pillar of the G20 Multi-year action Plan on Development*. OECD and the world Bank in collaboration with ETF, ILO and UNESCO

OECD/DAC (1972). *Development Cooperation. Annual Report of the Development Assistance Committee*. OECD, Paris.

OECD/DAC (2012). *Multilateral Aid Report*. The Development Assistance Committee: Enabling Effective Development.

Olds, B.M., B.M. Moskal, and R.L. Miller. (2005). Assessment in engineering education: Evolution, approaches and future collaborations. *Journal of Engineering Education*, 94 (1) 13-25

Oxford dictionary of English (2010). Edited by Angus Stevenson. Oxford Univeristy Press.

Palmer, R. (2009). Skills development, employment and sustained growth in Ghana: sustainability challenges. *International Journal for Educational Development* 29, 133–139.

Papadopoulos, G. (1994). *Education 1960–1990: The OECD Perspective*. OECD, Paris

Pardo A. Ruiz M. y San Martín R. (2009). *Análisis de datos en ciencias sociales y de la salud*. Ed. Síntesis. Madrid, España.

Paterson, A., McGrath, S., Badroodien, A. (2003). *South Africa National Skills Survey*. Department of Labour, South Africa. European Union. Brussels.

Patton, Michael (1980). *Quality Evaluation Methods*. Beverly Hills; CA. Sage.

Patton, Michael (1990). *Qualitative Evaluation & Research Methods*. Newbury Park, CA: Sage.

Patton, MQ (2002). *Qualitative Evaluation & Research Methods*. 3rd edition. Thousand. Oaks, CA: Sage.

Phelps Stokes Fund (1925). *Education in East Africa*, Phelps Stokes Fund, New York

Powell, L. and Hall G. (2000). *Quantitative Overview of South African Technical Colleges*. Department of Education, Pretoria.

Powell, L. and Hall G. (2002). *Quantitative Overview of the Further Education and Training College Sector: The New Landscape*. Department of Education, Pretoria.

Powell, L. and Hall G. (2004). *Quantitative Overview of the Further Education and Training College Sector: A sector in Transition*. Department of Education, Pretoria

Psacharopoulos, G. (1981). Returns to Education: an updated international comparison. *Comparative Education Review*, 17, (3) 321-41

Psacharopoulos, G. (1985). Returns to Education: a further international update and implications. *Journal of Human Resources*, 20 (4) 583-604.

Psacharopoulos, G. and Loxley, W. (1985). *Diversified secondary education and development*, John Hopkins University Press, Baltimore.

Preckler, M. (2014). Second workshop of the BEAR project in Botswana. Working document, not published.

Preckler, M. (2015a). Comparative and International Education Society Washington [CIES]. USA. Working document, not published.

Preckler, M. (2015b). Mid-term evaluation review of the BEAR project. Working document, not published.

Preckler, M. (2016). SPCE-SEC, Lisboa, Portugal. Working document, not published.

Preston, W., Herman, E., Schiller, H. (1989). *Hope and Folly: The United States and Unesco, 1945–1985*. University of Minnesota Press, Minneapolis.

Raffe, D. Blundell, I. and Bibby, J. (1989). *Issues arising from an educational survey*. The ethics of Educational Research. London. Falmer Press.

Ramirez, F., Boli, J. (1987). *Global Patterns of Educational Institutionalization*.

Ramirez, F. O and Meyer, J. W (1981). Comparative education: Synthesis and agenda. In S. J. F. JR (Ed.), *The State Of Sociology*, 215-238. Beverly Hills, CA: Sage.

Rensburg, P. V. (1987). *Education and the changing world of work in Southern Africa*. Paris: UNESCO.

Riddle, Phyllis. (1993). Political authority and University Formation in Europe. *Sociological Perspectives* 36 (1) 45-62.

Richardson, A. M. (2009). *Crossing the Chasm—introducing flexible learning into the Botswana Technical Education Programme: from policy to action*. *The International Review of Research in Open and Distance Learning* 10 (4) 1-18.

Robertson, Roland (1992). *Globalization: Social Theory and Global Culture*. London:Sage.

Ruggie, J.G. (1983). *International Regimes, Transactions and Change: Embedded Liberalism in the Postwar Economic Order*. In Krasner, S. (Ed.), *International Regimes*. Cornell University Press, Ithaca, NY, 195–231.

Ruggie, J. (1992). *Multilateralism: the anatomy of an institution*. *International Organization*, 46 (3), 561–597.

SADC (2005) *Concept Paper and Implementation Plan*. SADC, Gaborone.

SADC (1997). *SADC Protocol on Education and Training*. SADC, Gaborone

SADC (Southern African Development Community) (1992). *Declaration and Treaty of the Southern African Development Community*. August 1992. Windhoek, Republic of Namibia.

SADC (2003). *Regional Indicative Strategic Development Plan*. SADC, Gaborone.

SADC (2009). *Agreement amending the treaty of the southern African development Community*. Article 10A of the treaty. Windhoek.



SADC (2011). *SADC Statistics Yearbook 2011*. Retrieved from: <http://www.sadc.int/information-services/sadc-statistics/sadc-statiyearbook/>

SADC (2011b). *Concept paper and Implementation Plan for the SADC Regional Qualification Framework*. Gaborone. Botswana.

SADC (2012). *Country Profiles, Member States, Botswana*. Retrieved from: <http://www.sadc.int/member-states/botswana/>

Salim, A; Anthony G. and Simon McGrath (2005). *Vocational Education and Training in Southern Africa A Comparative Study*. Research Program on Human Resources Development, Human Sciences Research Council. Cape Town. South Africa.

Saffati-Larson, M. (1979). *The Rise of Professionalism: A sociological Analysis*. Berkeley and Los Angeles: University of California Press.

Samoff, J. (1999). No Teacher Guide, No Textbooks, No Chairs: Contending with the Crisis in African Education. *Comparative Education: The Dialectic of the Global and the Local*, ed. by Robert Arnove et al., 393-431. Boulder: Rowman and Littlefield.

Samoff, J (2001). *The Evolution of Education Aid to Africa: Changing Terminology, Persisting Practice*. Paper presented at the Annual Meeting of Comparative and International Education Society, March, 9th, Washington, DC.

SARC (2014). *Namibia Country Strategy Paper 2014-2018*. African Development Bank.

Schafer, Armin. (2006). A new form of governance? Comparing the open method of coordination to multilateral surveillance by the IMF and the OECD. *Journal of European Public Policy* (13) 70-88.

Sewell, J.P. (1973). *Unesco: Pluralism Rampant. in Cox and Jacobsen eds., Anatomy of Influence: Decision Making in International Organization*. Yale University Press, New Haven.

Sewell, J. (1975). *UNESCO and World Politics*. Princeton University Press, Princeton NJ.

Skowronek, Stephen (2002). *Building a New American State: The expansion of Natinal Administrative capacities*. Cambridge. Cambridge University Press

Steenekamp, M. Singh (2011). *Recognition and validation of non-formal and informal learning, and NQFs: critical levels for lifelong learning and sustainable skills development*. Comparative analysis of six African countries. DOC 050711. Tunis: ADEA.

Silverman, David. (2006). *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction*. London: Sage.

Simons, H. (2009). *Introduction: Situated Ethics in Educational Research*. London: RoutledgeFalmer, 1–11.

Stake, RE. (2005). Qualitative Case Studies, in *The Sage Handbook of Qualitative Research*. 3rd edition, edited by NK Denzin & YS Lincoln. London: Sage: 443- 466

Strike, K. (1990). Review article: Parents, the state and the right to educate. *Educational Theory*, 40, 237–248.

Swartland. J. R. (2008). *A study of Entrepreneurship Education in Botswana and the Significance of Institutional Preparation*, 2008 Biennale on Education in Africa. Tunis: ADEA.

Tabulawa, R. (2011). The Rise and Attenuation of the Basic Education Programme (BEP) in Botswana: A global–local Dialectic Approach. *International Journal of Educational Development* 31 (5): 433-442.

Thomas, E. (2000). *Financing vocational training in Namibia*. in Presidential Commission on Education, Culture and Training Report, Volume 2, Annexure (i). Windhoek. Capital Press.

Thomas, G., John W. M., Francisco O.R and John B. (1987). *Institutional Structure: Constituting State, Society and the Individual*. Beverly Hills, CA.

Thomas, J. et. al. (1987). *Institutional Structure: Constituting the State, Society and the Individual*. Sage, Beverly Hills, Calif, 150–172.

Tight, Malcom. (2002). *Key concepts in adult education and training*. Routledge Falmer, Taylor and Francis Group. London and New York.

Ulin, R. O. (1974). *The Brigades of Botswana Eight Years Later*. Botswana Notes and Records: 189-195.

UNAIDS (2014). *The Gap Report*. Joint United Nations Program on HIV/AIDS. Geneva. Switzerland.

UNDP (2012). *Supporting Capacity Development: the UNDP Approach*.

UNDP (2014). *Human Development Report 2014: Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience*. United Nations Development Programme. New York, USA

United Kingdom Commission for Employment and Skills (2011). *UK Commission's Employer Skills Survey 2011*. Evidence Report 45. UKCES. England

United Nations (UN) (1948). Article 26. *Universal Declaration of Human Rights*. Paris.

United Nations (2000). *United Nations Millennium Declaration*. The General Assembly (September 8, 2000). United Nations. Retrieved from: <http://www.un.org/millennium/declaration/ares552e.htm>

United Nations at a glance (2015). *The United Nations at a glance*. United Nations. Retrieved from: <http://www.un.org/en/aboutun/>

United States (1984). *Report to the Committee of Foreign Affairs and Committee on Science and Technology, House of Representatives, by the Comptroller General of the United States: improvements needed in Unesco's management, personnel, financial and budgeting practices*. U.S. General Accounting Office, GAO/NSIAD-85-32, 30 November 1984.

UN (2011). *UN in Bonn, working towards sustainable development worldwide*. Common Information Space of the United Nations Organisations in Bonn (CIS). UN Campus.

UNESCO (United Nations Educational, Scientific and Cultural Organization) (1945). *UNESCO Constitution*. Paris.

UNESCO (1960). *Convention against Discrimination in Education*. XI Session of the General Conference. Paris, 14 December 1960.

UNESCO (1972). *Learning to Be: The World of Education Today and Tomorrow*. Report to Unesco of the International Commission, E. Faure chair. Unesco, Paris.

UNESCO (1990). *World Declaration on Education for All*. World Conference on Education for All: Meeting Learning Basic Needs. Jomtien, Thailand. 5-9 March 1990. Paris, France.

UNESCO (1976). *First Medium Term Plan, 1977-1983*. 19C/4. Unesco, Paris.

UNESCO (1983). *Second Medium Term Plan, 1984-1989*. 4 X C/4. Unesco, Paris.

UNESCO (1996). *The Will to Reform: An Overview of Reforms*. Unesco, Paris.

UNESCO (1997). *Supplement 1997: The Will to Reform*. Unesco, Paris.

UNESCO (1996). *Learning: the Treasure Within*. UNESCO, Paris: UNESCO, Paris.

UNESCO (1999a). *Second International Congress on Technical and Vocational Education, Final Report*. 26-30 April 1999. Seoul, republic of Korea. Retrieved from: <http://unesdoc.unesco.org/images/0011/001169/116954e.pdf>

UNESCO (1999b). *Orienting Technical and Vocational Education and Training for Sustainable Development*. UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training. Bonn, Germany.

UNESCO (1999c). *Second International Congress on Technical and Vocational Education, Final Report*. Paris, UNESCO. Retrieved from <http://unesdoc.unesco.org/images/0011/001169/116954e.pdf>

UNESCO (2000a). *The Dakar Framework for Action. Education for All: Meeting Our Collective Commitments*. Adopted by the World Education Forum. Dakar, Senegal, 26-28 April 2000.

UNESCO (2000b). *The Education For All, Assessment: Country Reports - Botswana*. Retrieved from: [http://www.unesco.org/education/wef/countryreports/botswana/rapport\\_2.html](http://www.unesco.org/education/wef/countryreports/botswana/rapport_2.html)

UNESCO (2001). *The Development of Education: National Report of Botswana*.

UNESCO (2004). *The Bonn Declaration on Learning for Work, Citizenship and Sustainability Declaration of the UNESCO International Meeting of TVET Experts on Learning For Work, Citizenship and Sustainability 25-28 October 2004*. Bonn: UNESCO-UNEVOC International

Centre. Retrieved from  
[http://www.unevoc.unesco.org/publications/pdf/SD\\_BonnDeclaration\\_e.pdf](http://www.unevoc.unesco.org/publications/pdf/SD_BonnDeclaration_e.pdf)

UNESCO (2005). *UN Decade of Education for Sustainable Development 2005 – 2014. The DESD at a glance*. UNESCO. Paris, France.

UNESCO (2009a). *UNESCO strategy on Technical and Vocational Education and Training (TVET) International Consultation Meeting on TVET Bonn, Germany, 12th – 13th January 2009*. Retrieved from  
[http://www.unevoc.unesco.org/fileadmin/user\\_upload/docs/HalfdanFarstad.pdf](http://www.unevoc.unesco.org/fileadmin/user_upload/docs/HalfdanFarstad.pdf)

UNESCO (2009b). *Strategy for Technical and Vocational Education and Training (TVET) Executive Board at its 179th session and 181<sup>st</sup> session (179 EX/Decision 49, 181 EX/Decision 8)*, Paris, France.

UNESCO (2010). *The Moscow Framework for Action and Cooperation: Harnessing the Wealth of Nations*. World Conference on Early Childhood Care and Education Building the Wealth of Nations. 27 – 29 September 2010 Moscow, Russian Federation.

UNESCO (2011a). *UNESCO and Education: Everybody has the right to Education*. Retrieved from: <http://unesdoc.unesco.org/images/0021/002127/212715e.pdf>

UNESCO (2011b). *Global partnership for girls' and women's education: Better Life, Better Future* Paris. France.

UNESCO (2011c). *BEAR project: Summary formulation report for five beneficiary countries*.

UNESCO (2011d) *BEAR project consultation process*. Regional workshop March 2011. Gaborone, Botswana. Working document, not published.

UNESCO (2012a). *Education For All, Global Monitoring Report “Youth and skills putting education to work”* Retrieved from: <http://unesdoc.unesco.org/images/0021/002180/218003e.pdf>

UNESCO (2012b). *International Standard Classification of Education: ISCED 2011*. Unesco Institute of Statistics. Montreal, Canadá.

UNESCO (2012c). *Transforming TVET from idea to Action*. UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training. UN Campus

UNESCO (2012d). Basic Text is a composition of the following documents: *Constitution of UNESCO, Rules and Procedures of the General Conference, Character of National Commissions for UNESCO Adopted by the General Conference at its 20th session, Relations with Non-Governmental Organizations, XX*. Paris. October 2011

UNESCO (2012e). International Congress on Technical and Vocational Education and Training; 3rd; Shanghai; 2012: *Transforming technical and vocational education and training: building skills for work and life: Shanghai consensus*. Retrieved from <http://unesdoc.unesco.org/images/0021/002176/217683e.pdf>

UNESCO (2012f). *Bear project Kick of Meeting*. Working document, not published.

UNESCO (2013a). *Status of TVET in the SADC Region: Assessment and Review of Technical and Vocational Education and Training (TVET) in the Southern African Development Community Region and of the Development of a Regional Strategy for the Revitalisation of TVET*. Paris. France

UNESCO (2013b). Education for All Global Monitoring Report 2013/2014. *Teaching and learning: Achieving quality for all*. UNESCO, Paris. France

UNESCO (2013c). *Revised UNESCO Priority Gender Equality Action Plan for 2014-2021* Follow-up to 192 EX/Decision 16 Part II. Paris, France.

UNESCO (2014a). *2014-2021 Medium-term strategy 37/c4*. UNESCO's General Conference at its 37th session in November 2013. Paris. France.

UNESCO (2014b). *UNESCO Education Strategy 2014–2021*. Paris. France

UNESCO (2014c). *Better Education for Africa's Rise: The BEAR project Leaflet*. Paris. France.

UNESCO (2014d). *UNESCO Basic Text: Rules and Procedures of the General Conference*. pp. 5 -19. Paris. France.

UNESCO (2014e). *UNESCO Basic Text: Character of National Commissions for UNESCO* pp.145-153. Paris, France.

UNESCO (2014f). *UNESCO Basic Text: Relations with Non-Governmental Organizations*. pp. 153-167. Paris, France.

UNESCO (2014g). *Position Paper on Education Post 2015*. Paris, France.

UNESCO (2015a). *Education for all: 2000 -2015. Achievements and Challenges*. Education for All Global Monitoring Report. Paris. France

UNESCO (2015b). *Introducing UNESCO*. United Nations.  
Retrieved from: <https://en.unesco.org/about-us/introducing-unesco>

UNESCO (2015c). Revision of the 2011 Revised recommendation concerning TVE. Paris, France.



UNESCO (2015d). *Concept note on the Post 2015 education agenda*. Document submitted by UNESCO to the 37th Session of the General Conference. Paris, France.

UNESCO (2015e). *Proposal for the revision of the 2001 Revised Recommendation Concerning Technical and Vocational Education*. 38th session of UNESCO General Conference. 38C/32. Item 7.6 of the provisional agenda. Paris, France.

UNESCO (2015f). *Beyond 2015: The Education We Want*. Paris, France.

UNESCO (2016) *Draft Strategy for Technical and Vocational Education and Training (TVET) (2016 - 2021)*. 196 Executive Board/ Decision 6. 18th February 2016. Paris, France.

UNESCO-IBE (2010). *World Data on Education: Botswana*. VII Ed. 2010/2011. Geneva: UNESCO-IBE.

UNESCO-TVET (2012) *Section for TVET: Briefing on the implementation of the BEAR Project*. 3 December 2012, Paris, France.

UNESCO-UNEVOC and UNESCO-ISU (2006). *Participation in the formal Technical and Vocational Education and Training Programmes Worldwide: An initial statistical study*.

UNESCO-UNEVOC (2010). *World TVET Database - Country Profiles Botswana*). Retrieved from: <http://www.unevoc.unesco.org/go.php?q=World+TVET+Database&ct=BWA>

UNESCO-UNEVOC (2012). *World TVET database Botswana*. UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training. November, 2012. Germany. Retrieved from: [http://www.unevoc.unesco.org/wtdb/worldtvetedatabase\\_bwa\\_en.pdf](http://www.unevoc.unesco.org/wtdb/worldtvetedatabase_bwa_en.pdf)

UNESCO-UNEVOC (2014). *UNESCO-UNEVOC biannual report 2012- 2013*. Bonn, Germany.

UNICEF (United Nations Children's Fund) (1989). *The Convention on the Rights of the Child*. Articles 28 & 29. New York

UNDP (United Nations Development Programme) (2010). *Human Development Report 2010: The Real Wealth of Nations: Pathways to Human Development*. 20th Anniversary Edition. Published for the United Nations Development Programme (UNDP). New York.

UNDP (2011). *Human Development Report 2011. Sustainability and Equity: A Better Future for All*. Published for the United Nations Development Programme (UNDP). New York.

UNDP (2014). *Human Development Report 2014. Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience*. Published for the United Nations Development Programme (UNDP). New York.

University of Botswana (2015). *University of Botswana: an academic centre of excellence*. Gaborone.

Van Rensburg, P. (1974). *Report from Swaneng Hill: Education and Employment in an African Country*. Dag Hammarskjold Foundation, Stockholm

Valderrama, F. (1995). *A history of UNESCO*. UNESCO. Paris, France.

Veal, A. J. (2005). *Business Research Methods: A Managerial Approach* (2nd ed). Pearson Education, Frenchs Forest, Australia.

Vlaardingerbroek, B. (1999). The external efficiency of education in the manufacturing sector of Gaborone, Botswana. *International Journal of Educational Development* 19 (2) 141-146.

Walther, R (2007). *Towards a Renewal of Apprenticeship in West Africa: Enhancing the Professional Integration of Young People*. Agence Française de Développement Département de la Recherche. Paris, France.

Webb, G. (2000). *Becoming critical of action research for development*. In O. Zuber-Skerritt (ed.) *New Directions in Action Research*. London: Falmer, 137–61.

Weber, Max. (1927). *General Economic History*. New York: Greenberg

Weber, M. (1949). *The Methodology of the Social Sciences*, edited by EA Shils & HA Finch. Glencoe IL: Free Press.

Winberg, T. M., and Hedman, L. (2008). Student attitudes toward learning, level of preknowledge and instruction type in a computer-simulation: effects on flow experiences and perceived learning outcomes. *Instructional Science*, 36 (4), 269-287.

Wiseman, A. W., Astiz, M. F., and Baker, D. P. (2013). Comparative Education Research Framed by Neo-Institutional Theory: A Review of Diverse Approaches and Conflicting Assumptions. *A Journal of International and Comparative Education*.

Wiseman, A. W. and Baker, D. P (2006). *The Symbiotic Relationship between Empirical Comparative Research on Education and Neo-Institutional Theory*. In D. P. BAKER & A.

Wiseman, W. (2013). *The Impact of Comparative Education Research on Institutional Theory* (7) 1-26. Oxford: Elsevier.

Whitfield, L. and A. Fraser (2010). Negotiating Aid: The Structural Conditions Shaping the Negotiating Strategies of African Governments. *International Negotiation* 15 (3) 341-366.

Wilson, D. N. (2000). *The German 'Dual System' of Occupational Training: A Much-Replicated but Oft-Failed Transfer*. Paper presented at the Annual Meeting of the Comparative and International Education Society, San Antonio, TX

World Bank (1974). *Education Sector Working Paper*. World Bank, Washington.

World Bank (1986). *Financing Education in Developing Countries: An Exploration of Policy Options*. The World Bank, Washington.

World Bank (1991). *Vocational education and training*. World Bank, Washington D.C.

World Bank (1995). *Priorities and strategies for education*. World Bank, Washington DC.

World Bank (2002a). *Achieving Education for All By 2015: Simulation Results for 47 LowIncome Countries*. Washington, DC: World Bank.

World Bank (2002b). *Review of the Poverty Reduction Strategy Paper Approach: Main Findings*. Washington, DC: World Bank.

World Bank (2004). *Education for All-Fast Track Initiative. Accelerating progress towards quality universal primary education*. Framework, 2004.

World Bank (2009). *Namibia Country Brief*. The International Bank for Reconstruction and Development. The World Bank. Washington DC. USA.

World Bank (2012). *Doing Business in a More transparent world*. The International Bank for Reconstruction and Development / The World Bank. Washington DC.

World Bank (2014). *Botswana at a glance*. Retrieved from <http://www.worldbank.org/en/country/botswana> and <http://data.worldbank.org/>

World Peace Foundation. (1945). *Universal Declaration of Human Rights*. United Nations in the Making: Basic Documents. World Peace Foundation, Boston.

WTO and ILO (World Trade Organization & International Labor Office) (2011). *Making Globalization Socially Sustainable*. Edited by Marc Bacchetta and Marion Jansen. Geneva, Switzerland.

World Conference on Education for All, Jomtien, Thailand (1990). *Meeting basic learning needs: a vision for the 1990s*. New York.

World Trade Organization (WTO) (2008). *World Trade Report 2008: Trade in a Globalizing World*. Geneva, WTO.

Yezo, P. A. (2013). *Centralization of Education in Botswana: A Case Study of Stakeholder Response to the Government Takeover of Brigades on the Future of Education with Production* (Master's dissertation). University of the Witwatersrand.

Yin, RK. (2009). *Case Study Research: design and methods*. 4th edition. London, Sage.

Zaman, C. (2010). *Lessons from the Crisis: the Whys and Hows. Institutional and Transition*. Economics Policy Paper Series, Vol. 2, No. (4). Retrieved from [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1561602](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1561602)

# RESUMEN EJECUTIVO

**Español**

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La influencia de la Organización de Naciones Unidas para la Educación, la Ciencia y la Cultura (UNESCO) en el desarrollo de las políticas nacionales de Formación Profesional en Botsuana y Namibia en una perspectiva comparada.

**Miriam Preckler Galguera**

2016

Esta tesis explora la influencia de la UNESCO, como organización internacional en el desarrollo de las políticas nacionales de Formación Profesional (FP) dentro de la región del "Southern Africa Development Community" (SADC) en Botsuana y Namibia, a través de la puesta en marcha y desarrollo del proyecto denominado "Better Education for Africa's Rise" (BEAR).

Asimismo, el estudio explora el estado actual de los datos sobre Formación Profesional y los desafíos y oportunidades que existen al respecto tanto en Namibia como en Botsuana. Por tanto, el estudio no sólo contribuye a la mejora de la investigación sobre la FP, dentro del ámbito internacional, sino que apoya a los gobiernos nacionales en sus continuos esfuerzos por desarrollar sus sistemas educativos y su vínculo con la transición entre la educación y el mundo del laboral.

La influencia ha sido examinada en términos de: a) Las diferentes dimensiones del impacto social asociadas al desarrollo de nuevos sistemas de FP a nivel nacional; b) La relación entre la difusión y expansión de modelos de Educación de Masas a nivel mundial, mediante la Globalización y la influencia de las organizaciones internacionales (UNESCO) en el desarrollo de las políticas educativas de FP a nivel nacional en ambos países; c) El papel de la UNESCO, como organización internacional, en el desarrollo de los sistemas de educación nacional de FP en Botsuana y Namibia.

Partiendo de las teorías existentes en materia de globalización y difusión de la Educación de Masas (Mundy, 2006) (Castells, 2010) (Meyer, 2000). El marco teórico explora cómo la globalización de los sectores de FP en los países del SADC puede generar oportunidades para que los jóvenes en África obtengan empleos competitivos a nivel mundial. Como argumenta Meyer (2000), la globalización expande modelos comunes de orden social legitimándose en muchos casos a través del aumento de la interdependencia política y militar y la expansión de la fuerza de las organizaciones internacionales involucradas. El sistema político y cultural existente a nivel mundial, legitima la adopción de modelos comunes de modernidad, a pesar de las diferencias en los recursos y la cultura local (Meyer, 2000).

Para probar esta hipótesis, utilizo la metodología del "estudio comparado" en cada una de sus siete fases, por lo que llevo a cabo los siguientes análisis:

- **Análisis macro:** El análisis macro realizado en ambos países, nos muestra las tendencias históricas y las realidades socio-culturales-económicas y educativas existentes; y las dificultades a las que cada uno de estos países se enfrenta hoy en día, desde un punto de vista comparado.

El análisis se enmarca dentro de cinco parámetros interrelacionados: a) Factores contextuales, b) La adquisición de habilidades, c) La demanda de habilidades, d) Grado de coincidencia y e) Resultados. Cada uno de estos parámetros incluye un conjunto de indicadores establecidos, seleccionados utilizando criterios de pertinencia, viabilidad, comparabilidad y actualidad.

El inventario de la base de datos utilizada incluye las principales organizaciones internacionales, como la OIT, la OCDE, la UNESCO, la OMS y el Banco Mundial, así como el Eurostat y otras fuentes de datos internacionales sobre habilidades. Para muchos de los indicadores los datos existen, pero en algunos casos ha sido necesario volver a las fuentes primarias para obtener los datos y construir los mismos.

- **Análisis cuantitativo:** Se centra en medir y analizar la percepción de impacto social o beneficios socio-económicos proporcionados a los participantes en el proyecto BEAR, con el fin de determinar la influencia del proyecto y la organización en la vida de los participantes. Se

demuestra que la función social de la FP va más allá de la empleabilidad y del desarrollo económico, aspectos centrales en la discusión actual de la FP.

Un cuestionario ad hoc fue creado, validado y distribuido. El análisis se centra en las variables socio-demográficas, el aprendizaje y los beneficios sociales obtenidos. Incluyendo dimensiones como: a) Capital humano, b) Capital cultural, c) Capital social, d) Movilidad social, e) Seguridad económica y f) Equilibrio entre la vida profesional y personal.

- **Análisis cualitativo:** Se lleva a cabo a través de la realización de entrevistas semi-estructuradas, de grupos de discusión y la observación participante de los diferentes grupos de actores. Este análisis complementa a los dos anteriores, de forma que se capta y comprende el punto de vista personal, sobre la influencia percibida de la UNESCO en el desarrollo de los sistemas nacionales de FP sin predeterminedar respuestas.

El análisis comparado demuestra, en su fase final, que **la UNESCO ha tenido una influencia directa y positiva en el desarrollo de sistemas nacionales de FP en Botsuana y Namibia**. Esta influencia se basa principalmente en el papel de la UNESCO como facilitador del proceso de desarrollo nacional de los Estados miembros.

A través de la ejecución del proyecto BEAR, la organización ha asumido los riesgos que los gobiernos nacionales no estaban en condiciones de asumir, de forma que se han puesto en marcha nuevas políticas contextualizadas que han demostrado su eficacia, eficiencia y practicidad. Asimismo se hace evidente la escasez y falta de datos específicos sobre la FP en ambos países a pesar de las mejoras en la última década.

**La influencia la UNESCO** se describe mediante la percepción social de los beneficios que esta organización internacional ha aportado:

**1. En el proceso de desarrollo del país:** Mejorando el desarrollo económico; aportando estabilidad económica; empoderando y capacitando el capital humano nacional y transformando el sistema de formación profesional.

**2. En la mejora de la calidad de vida de la sociedad civil:** Generando nuevas oportunidades de empleo y de aprendizaje para todos e incentivando a la sociedad civil a eliminar los estereotipos existentes vinculados a la FP.

**3. En el desarrollo del sistema educativo nacional:** Mostrando buenas prácticas en el desarrollo de políticas educativas; mejorando el sistema de las calificaciones nacionales; mejorando la eficiencia del proceso nacional de desarrollo curricular; reforzando la provisión de cursos en los países; estableciendo evaluaciones comparativas del sistema educativo con otros sistemas extranjeros.

**4. En el desarrollo del sistema de formación profesional:** Mejorando la eficiencia de los sistemas de FP; introduciendo un enfoque de desarrollo curricular contextualizado; introduciendo el análisis del mercado laboral y cerrando las brechas en la provisión de FP a nivel nacional; introduciendo nuevos métodos de evaluación del aprendizaje para los alumnos de FP y prácticas en empresas; revitalizando el prestigio del sistema nacional de FP y aumentando el acceso a los centros de FP para la población.



Así mismo, con respecto a **la percepción del impacto social en el desarrollo de las políticas de FP, se demuestra que el prestigio social de la FP ha aumentado**, a la vez que la motivación y expectativas en la mejora de la calidad de vida por parte de los alumnos del proyecto BEAR también lo hacía. Existiendo en algunos casos diferencias significativas entre países.

Por otro lado, se comprueba que **la distribución directa de la educación de masas en todo el mundo posee una dinámica de desarrollo propia, diferenciada de la influencia que los organismos internacionales (UNESCO) tienen sobre el desarrollo de los sistemas de FP.**

Por último, se destacan las fortalezas y debilidades del papel de la UNESCO como organización internacional y se elaboran una serie de recomendaciones para dar continuidad al proceso de desarrollo de los sistemas nacionales de FP en Botsuana y Namibia. Entre las recomendaciones que planteo destacan: a) Reforzar el papel de la FP entre los objetivos de desarrollo del sistema educativo nacional, b) Expandir el acceso a la FP, c) Mejorar la formación del profesorado de FP, d) Mejorar la productividad de los alumnos de FP, e) Incluir al sector privado dentro de la estructura de desarrollo de las políticas de FP, f) Reforzar la coordinación intersectorial del gobierno, y g) Mejorar el sistema de calificación.

## REFERENCIAS

Castells, M. (2010). Comprendiendo la migración global: una perspectiva desde la transformación social. *Revista Relaciones Internacionales*. 14, 141-169.

Meyer, J.W. (2000). Globalization: Sources, and Effects on National States and Societies. *International Society*. 15, 235-250.

Mundy, K. (2006). Education for All and the new Development Compact. *Review of Education*. 8, 13-38

# **EXECUTIVE SUMMARY**

**English**

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The influence of UNESCO on the Development of National Technical and Vocational Education and Training (TVET) systems: a comparative study in Botswana and Namibia

**Miriam Preckler Galguera**

2016

This study seeks to provide not only a comparative analysis on UNESCO's influence on the development of national TVET systems through the implementation of the "Better Education for Africa's Rise"(BEAR) project, in two Southern African Development Community's (SADC) Member States: Botswana and Namibia; but also to explore the current state of data concerning skills and the challenges and possibilities that lie ahead in trying to develop a robust evidence on TVET in both countries.

Hence, this study contributes to a wider international process of improved research on TVET, and to support the national governments effort to enhance their TVET systems and better linkage to the world of work.

UNESCO's influence has been examined in terms of a) The different social impact dimensions associated with the national TVET development in Botswana and Namibia; b) The relation between the diffusion and expansion of Mass Education models worldwide and international organization's influence (UNESCO) on the development of TVET educational systems and policies at national level; c) UNESCO's role as an international organization, on the development of national TVET education systems in both countries.

Based on existing theories about globalization and diffusion of Mass Education models (Mundy, 2006) (Castells, 2010) (Meyer, 2000). The theoretical framework explores how globalization process within the TVET sectors in SADC countries can create new opportunities for young people in Africa to earn a global competitive job. As Meyer (2000) argues, globalization expands common models of social order and in many cases legitimized by the political and military interdependence and expansion of the international organizations involved. The actual political and cultural systems that exist globally legitimize the adoption of common models of modernity, despite the differences in resources and local culture (Meyer, 2000).

The present study has been conducted on the basis of the comparative approach, according to its seven different phases, where the following analysis have been conducted:

- **Macro Analysis:** The macro analysis conducted for both countries shows us the historical trends and the existing socio-cultural-economic and educational realities and the present complexity these countries face, from a comparative point of view.

The analysis is framed within five inter-related parameters namely: contextual factors; skills acquisition; skill requirements; degree of matching and outcomes. Each of these parameters includes a set of indicators selected using the criteria of relevance, feasibility, comparability and timeliness.

The inventory of databases used covered key international organizations including the ILO, OECD, UNESCO, WHO and the World Bank, as well as Euro stat and other sources of international data on skills. For many of the indicators, the relevant data already exist but in some cases it has been necessary to go back to the primary sources to obtain the data required to construct the indicators.

- **Quantitative Analysis:** It focuses on measuring and analyzes the social impact perception or socio-economic benefits provided to the participants of the BEAR project and to determine the perceived organization's influence on the participants' life.

It is proved that the social function of TVET goes beyond employability and economic development, which nowadays comprise the principal issues in the current TVET discussion.

A semi-structure questionnaire was developed, validated and administered.

The analysis focused on the socio-demographic variables, output and social benefits. Including dimensions as: a) Human capital, b) Cultural capital, c) Social capital, d) Social mobility, e) Economic security and f) Balance of time.

- **Qualitative Analysis:** It is conducted through semi-structured interviews, focus groups discussion of all stakeholders and participant observation to captures the different point of view on the perceived UNESCO's influence on the development of national TVET systems. This analysis complements the macro and quantitative ones.

The comparative analysis proved **UNESCO's direct and positive influence on the development of national TVET systems in Botswana and Namibia**. UNESCO's influence it is based on its role as a facilitator to Member States in their own development process. Through UNESCO's TVET project implementation, it assumed the risks that the national governments were not able to undertake. UNESCO developed and implemented new contextualized policies that proved its effectiveness, efficiency and practicality. Further, it is proved that Botswana and Namibia's specific data on TVET is insufficient despite the improvements over the past decade.

**UNESCO's influence is described** by the perceived benefits that this international organization has brought to:

**1. The country development process:** Improving the economic development processes, providing economic stability, empowering and training the national human capital and the vocational training system transformation.

**2. The life of civil society:** Creating new employment and learning opportunities for all and encouraging the civil society to eliminate existing stereotypes associated with TVET.

**3. To the national education system:** Showing best practices on the development of educational policies; benchmarking; improving the curriculum development process efficiency; reinforcing the provision of education courses in the country, increasing the population's access to education; and improvement of national qualification frameworks.

**4. To the development of national TVET systems:** Improving the efficiency of TVET systems; introducing a contextualized curriculum development approach; introducing labor market analysis; bridging the gaps in the provision of vocational training at national level; introducing TVET students assessment methods; introducing workplace learning; enhancing the prestige of the national TVET system.

Likewise, **in relation to the social impact perception, it is proven that the social recognition and TVET prestige has increased.** It has amplified the BEAR project student's motivation and future expectations even in some cases there were significant differences between countries.

It is also established that **the distribution of mass education worldwide follows its own expansion dynamics, different from the influence that the international organizations (UNESCO) have on development of TVET systems.**

To conclude, as international organization, UNESCO's strengths and weaknesses are highlighted and recommendations are provided to further develop Botswana and Namibia's national TVET systems. The recommendations are as follows: a) To enhance the role of TVET in supporting national (and regional) development objectives; b) To expand access to TVET; c) To upgrade vocational teacher education; d) To increase the productivity of TVET students; e) To increase the engagement of the formal TVET system with micro and informal enterprises. f) To reinforce the policy coordination across government departments and agencies; g) To develop the qualifications systems performance.

#### REFERENCES

Castells, M. (2010). Comprendiendo la migración global: una perspectiva desde la transformación social. *Revista Relaciones Internacionales*. 14, 141-169.

Meyer, J.W. (2000). Globalization: Sources, and Effects on National States and Societies. *International Society*. 15, 235-250.

Mundy, K. (2006). Education for All and the new Development Compact. *Review of Education*. 8, 13-38.

## **Capítulo 10.**

### **Conclusiones, limitaciones de la investigación y recomendaciones**

Este último capítulo de la tesis doctoral tiene como objetivo exponer las principales reflexiones y conclusiones de los resultados obtenidos en los capítulos anteriores. Para una mejor comprensión e interpretación de los resultados, a la breve recapitulación del estudio comparado y los análisis cualitativo y cuantitativo se añaden menciones al marco teórico.

Se considera que el estudio comparado ha arrojado, dentro de la fase sintética y de yuxtaposición, un número significativo de resultados que argumentan y justifican algunos hallazgos decisivos sobre la influencia de la UNESCO en el desarrollo del sistema nacional de FP en Botsuana y Namibia, no sólo en el proceso de desarrollo del país, sino también en la vida de la sociedad civil, en el desarrollo de los sistemas de educación nacional y en el desarrollo de los sistemas nacionales FP. Asimismo, también se ha descrito a) La percepción del impacto social en el desarrollo de los sistemas de FP que la UNESCO a puesto en marcha a través del proyecto denominado "Better Education for Africa's Rise" (BEAR); b) La relación existente o no respecto a la expansión y distribución del modelo de la Educación de Masas en el mundo a través de la acción de las organizaciones internacionales y por último c) El papel de la UNESCO en el proceso de desarrollo de los sistemas nacionales FP.

El capítulo también incluye una descripción de los principales límites de este estudio de investigación, así como una reflexión sobre las posibles líneas de investigación futuras a desarrollar. Ciertamente es que las limitaciones encontradas, son consideradas como oportunidades potenciales para expandir el estudio de investigación en un futuro, y para abrir nuevas sendas de investigación sobre la FP y de desarrollo de sistemas educativos nacionales por las organizaciones internacionales.

Para concluir, se elaboran recomendaciones, basadas en los hallazgos del estudio, que permitan a los estados nacionales y gobiernos de estos dos países mejorar los sistemas nacionales FP. Estas recomendaciones podrían formar parte de la reforma de la educativa nacional que proponen los participantes.

## 10.1 CONCLUSIONES

Esta investigación muestra que la UNESCO ha tenido una influencia directa y positiva en el desarrollo de los sistemas nacionales FP en Botsuana y Namibia, esta influencia está basada en el rol de la UNESCO actuando como facilitador para los Estados miembro en sus propios procesos de desarrollo. A través de la implementación del proyecto BEAR de FP de la UNESCO, la organización ha asumido los riesgos que los gobiernos nacionales no eran capaces de asumir mediante el desarrollo y la puesta en marcha de nuevas políticas contextualizadas que han probado su eficacia, eficiencia y utilidad.

En primer lugar, la influencia de la UNESCO se describe a través de los beneficios percibidos que esta organización internacional ha aportado **en el proceso de desarrollo del país**. La ejecución del proyecto BEAR en ambos países, ha afectado directamente al proceso de desarrollo económico, no sólo en términos de la pericia obtenida a través de experiencia de los socios internacionales, sino también por la selección de sectores críticos económicos con los que trabajar, elemento crucial para la generar ingresos nacionales en un momento donde los gobiernos están intentando diversificar la economía. La realidad para la mayoría de los países africanos es que sus economías están basadas en actividades del primer sector derivadas de la agricultura, ganadería, minería,... Por lo tanto, existe una clara diferencia entre las necesidades que requiere el mercado laboral y las capacidades que ofrece el sistema de educación formal que se focaliza principalmente en cubrir las necesidades laborales relativas a las actividades del sector servicios.

El proyecto de FP de la UNESCO ha transformado el sistema actual de FP de acuerdo con las necesidades de los países, considerando no sólo el contexto, sino también la cultura y la sociedad donde se desarrolla el sistema. Asimismo, el proyecto ha contribuido al proceso de desarrollo del país, en términos de la inversión realizada para mejorar el capital humano a nivel nacional. Por ejemplo, en el caso de Botsuana, la provisión de una buena formación profesional atraerá eventualmente a más turistas y aumentará la generación de los ingresos nacionales. Atraer más turistas creará las bases sobre las cuales el país podrá mejorar otros servicios y crear mayores oportunidades de trabajo en otros sectores. La UNESCO a través del proyecto BEAR ha aportado mayor estabilidad económica en términos de la absorción de los nuevos profesionales en los mercados laborales. Ciertamente es que los sistemas educativos en ambos países continúan formando a miles de estudiantes de grados y másteres especializados en actividades del sector servicios, que el mercado laboral no puede absorber. Esta es una de las razones por la cual la reforma del sistema educativo está justificada.

En segundo lugar, la influencia de la UNESCO **en la vida de la sociedad civil**, a través de la implementación del proyecto BEAR, se centra en la nueva provisión de oportunidades de trabajo, especialmente para los jóvenes. Se espera que los graduados del proyecto BEAR de FP se integren en el mercado laboral y sean capaces de ganarse la vida, pagar impuestos, apoyar a sus familias y ser por tanto los catalizadores en la mejora de la vida de otras personas. Además, el proyecto BEAR también mejora las oportunidades de aprendizaje para todos (personas que ya poseen habilidades técnicas pero no certificación educativa y personas con educación, pero sin habilidades técnicas) en cuanto al acceso a una mejor educación. Asimismo fomenta el aprovechamiento en la utilización de los centros educativos de FP para que el número de graduados se incremente hasta completar las necesidades de capital humano en el sector. A esto se suma que la sociedad civil a partir del proyecto BEAR comienza a superar los estereotipos negativos existentes relativos al FP; por un lado, combatir estos estereotipos ayuda a los jóvenes que tienen una clara orientación personal hacia la FP para poder aventurarse y elegir vivir su pasión y por otro lado, ayuda a cambiar la mentalidad de la sociedad.



En tercer lugar, existe una percepción común sobre las ventajas que la UNESCO ha aportado al **Sistema Nacional de Educación** de ambos países. La primera de ellas, a través de la puesta en práctica del proyecto BEAR, la UNESCO ha mostrado las mejores prácticas en relación al desarrollo de políticas educativas de FP que se incluirán en los Planes Estratégicos del Sector Educativo. La segunda referida a las nuevas oportunidades de aprendizaje que permitirá a los estudiantes graduados poder acceder a puestos de trabajo en el mercado internacional a nivel global y no sólo en el nacional. La tercera a través del desarrollo y actualización de nuevas formas de calificación de la FP que incluyen no solo la obtención de un diploma si no la certificación del mismo. La cuarta, se centra en la mejora de la eficiencia del proceso nacional de desarrollo curricular en términos de tiempo, calidad y evaluación en ambos países, a través de la introducción del enfoque DACUM. La quinta, refuerza la provisión de la FP en el país, mediante la inclusión en los procesos de aprendizaje de FP de proveedores privados. Para concluir, la UNESCO, a través de la implementación del proyecto BEAR, ha incrementado el acceso a la FP.

En cuarto lugar, la influencia **en el desarrollo de los sistemas nacionales FP** es amplia y extensa pero similar en ambos países. Es destacable que la FP es vista como el futuro en términos educativos para toda África. Enumerando los beneficios que la UNESCO en particular aporta a los sistemas nacionales FP, encontramos en primer lugar que la UNESCO no ha impuesto ningún sistemas de FP importado de otro país, si no que lo que se ha realizado es la contextualización de los mejores modelos adaptados a la realidad de cada uno de estos países. La UNESCO, a través del proyecto BEAR ha transformado lo que ya existía previamente, mejorando la eficiencia y adaptándose a las necesidades existentes en cada país. Segundo, a través de este proyecto, la UNESCO ha beneficiado al sistema FP introduciendo un nuevo enfoque de desarrollo curricular contextualizado (DACUM) que ha demostrado ser un enfoque más eficiente, rentable y exitoso y se espera que se aplique a otros programas dentro de todos los sectores FP. Tercero, el llevar a cabo el análisis del mercado laboral ha ayudado a eliminar brechas entre los requisitos del mercado de trabajo (demanda) y el tipo de formación que se ofrecía en las escuelas técnicas (oferta). Cuarto, el proyecto BEAR ha eliminado los problemas en el acceso a la FP a nivel nacional, dotando de nuevas oportunidades para

todos, no sólo de las personas con perfiles particulares. Quinto, la introducción de los exámenes como forma de evaluación y de prácticas en empresas beneficia al sistema FP y se percibe como relevante y adecuado en términos de medir las capacidades y competencias de los estudiantes. Por un lado, puede medir las competencias de los estudiantes y, por otro lado, el aprendizaje del lugar de trabajo asegura que las habilidades que adquieren los estudiantes son aquellas requeridas por la industria.

Para concluir, el **sistema educativo de Formación Profesional** se ha visto influenciado por la UNESCO en términos de un aumento y mejora de las capacidades que los estudiantes pueden adquirir, mediante el proceso de aprendizaje. Asimismo la implicación de la sociedad civil en el proceso de revitalización de la FP en ambos países es la esencia que impulsa el reconocimiento y revalorización del sistema de FP en los contextos nacionales. Es importante añadir que la creación de una Competición Nacional de FP en Namibia, y la participación de un grupo de estudiantes de FP en la Competición Mundial de FP, ha ayudado al sistema nacional FP en Namibia a ganar visibilidad y obtener mayor reconocimiento.

La influencia de la UNESCO en el desarrollo de los sistemas nacionales de FP también refleja la importancia de la puesta en práctica del proyecto *Better Education for Africa's Rise*, que se percibe como relevante para los interesados de ambos países ya que a) el proyecto de la UNESCO responde a la demanda realizada en 2008 por los estados miembros del SADC y cuya propuesta fue aprobada en la sesión 181 del Comité Ejecutivo de la UNESCO dentro de la prioridad estratégica de la organización que se centraba en apoyar la Educación Profesional (EP) en el periodo 2010-2015; b) también responde a la voluntad del gobierno de la República de Korea que quería compartir su experiencia con algunos países en desarrollo a través de la dotación extrapresupuestaria de un proyecto de cooperación sur-sur que debía ser ejecutado por la UNESCO. El proyecto es visto como la posible solución para el desempleo juvenil en ambos países.

En el momento en que se formuló el proyecto BEAR, el sistema educativo de la FP en ambos países sufría un gran desprestigio y una disfuncionalidad significativa: a) la calidad de la provisión de FP no era reconocida ni por la sociedad ni por los sectores

industriales; b) el antiguo currículo de FP que se enseñaba en los centros de FP estaba estigmatizado y los instructores sufrían una falta de motivación y de formación de calidad. El proyecto de FP de la UNESCO, por un lado, ha ayudado a identificar los fallos en los programas existentes y ha permitido la introducción de un nuevo enfoque basado en el intercambio de conocimientos, ideas y expectativas con la industria de forma que se incluye en el proceso de desarrollo curricular y de implementación de los procesos de aprendizaje; y, por otro lado, se ha creado conciencia sobre la importancia de la provisión EFTP a nivel nacional.

El proyecto de FP de la UNESCO era necesario por varias razones: a) la introducción del Análisis de Mercado Laboral para identificar la demanda en el mercado laboral; b) la introducción de un enfoque de aprendizaje para toda la vida que permite a los estudiantes de FP continuar estudiando una vez completado el programa; c) la participación activa de la industria en el proceso de desarrollo del currículo para los sectores seleccionados; d) ha ayudado al país a desarrollar nuevas áreas ocupaciones; e) compara los actuales sistemas de FP existentes con otros, aumentando sus estándares de calidad y facilitando que los estudiantes puedan aprender las capacidades y competir a nivel global.

La importancia y el éxito del proyecto BEAR se ha apoyado principalmente en la asimilación del proyecto por parte del gobierno y en las capacidades reforzadas a nivel nacional que garantizan la sostenibilidad del proyecto y el compromiso de las instituciones nacionales FP –DTVET y NTA- en Botsuana y en Namibia, respectivamente. Probablemente, es pronto para hacer una declaración definitiva sobre el éxito o fracaso de la totalidad del proyecto BEAR de la UNESCO debido a algunas actividades que se están llevando a cabo en la actualidad y ya que no sabemos todavía cuál es el porcentaje de absorción de los estudiantes del proyecto BEAR en el mercado laboral. A pesar de todo, el análisis del fracaso o éxito del componente de desarrollo curricular puede realizarse, en estos momentos, como elemento separado.

En primer lugar, respecto al desarrollo del currículo el país se ha dotado de confianza para crear sus propios programas y sistemas; en un nivel micro: a) ha permitido las necesidades de la industria por cada sector y comercio se tengan en cuenta; b) se ha podido producir un currículo de gran calidad gracias al apoyo de la industria; c) ha introducido sistemas de evaluación que han sido desafiados por el personal y por los estudiantes; d) ha creado capacidades para los instructores profesores y académicos; y e) ha involucrado a profesores de FP, proveedores e implementadores. Para medir el impacto del proyecto de la UNESCO y, para cuantificar el éxito, como se ha mencionado anteriormente, el programa analizará el número de alumnos registrados (inscripción) que consiguen empleo una vez terminan el programa BEAR, el piloto terminará en junio 2016. Sin embargo, el número de estudiantes fijado como meta se alcanzó en el primer año y medio y el número de personas involucradas en el proceso de desarrollo curricular ha sido significativo.

La percepción del éxito depende del compromiso de cada interesado en el proceso de desarrollo del currículo. Este compromiso depende directamente de la participación directa y activa en el proceso y la participación depende principalmente de la eficiencia y eficacia del coordinador del proyecto (project officer) en identificar a las personas correctas para involucrarse en el proceso y para comunicar y coordinar las actividades y socios, dirigir el proyecto dando toda la iniciativa a ellos.

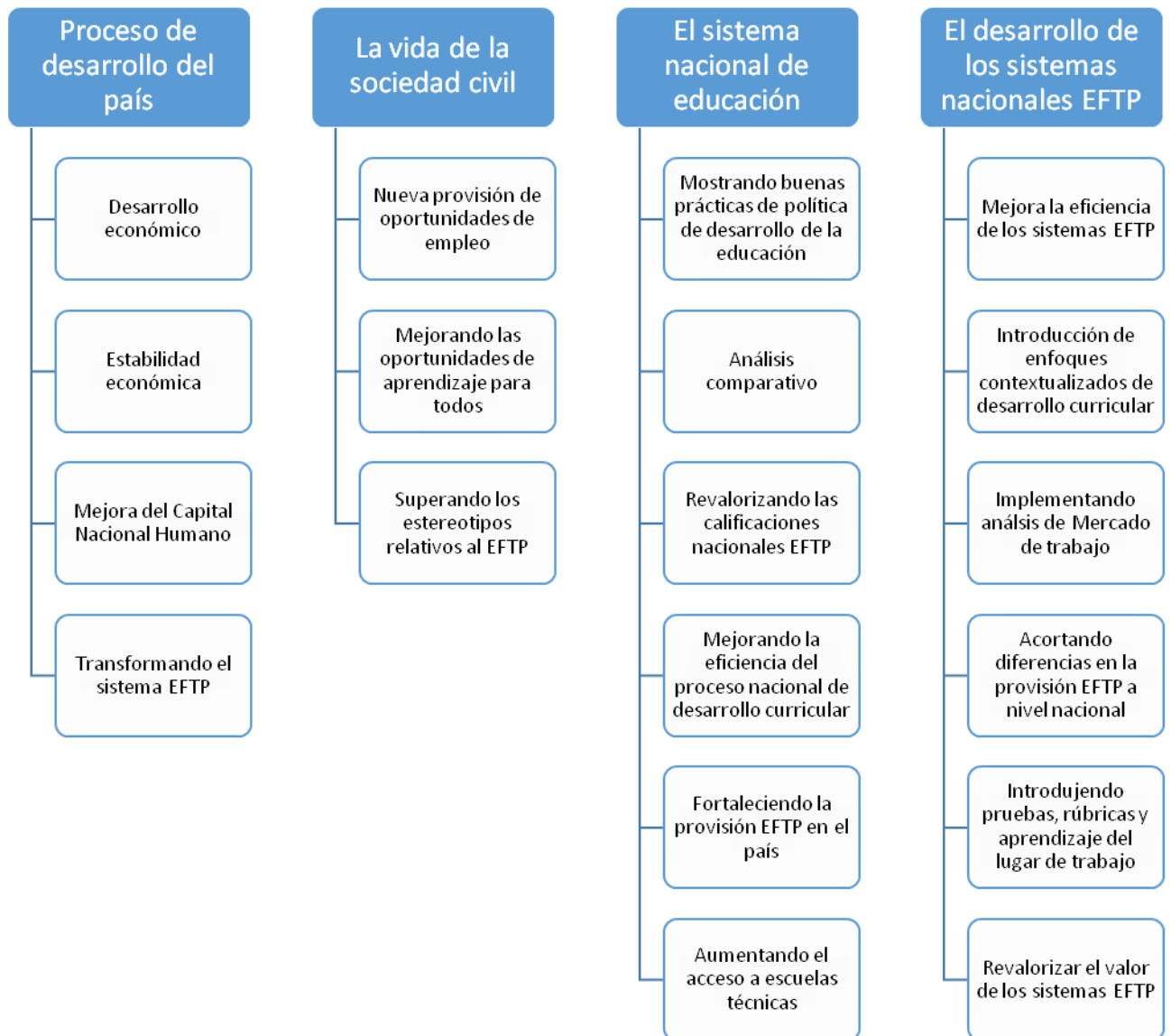
La estrategia comunicacional y de liderazgo de los coordinadores de proyecto en Botsuana y Namibia difieren y esto ha afectado a la manera en la cual los participantes se han comprometido. En Botsuana, todos los interesados han participado de forma activa y han tenido una percepción positiva del éxito del programa BEAR; mientras tanto, en Namibia, los profesores en los centros de formación profesional consideran que no han tenido una participación activa en el proceso de desarrollo curricular y piensan que sus ideas no han sido escuchadas. La consecuencia de ello, en Namibia consideran que el nuevo currículo ha introducido temas que no son técnicos y útiles para el desarrollo profesional de los estudiantes, mientras que algunas materias esenciales se han eliminado de éste.

Se han encontrado varios obstáculos en el proceso de desarrollo curricular: a) la burocracia interna de la UNESCO que obliga a un retraso en la implementación del proceso según el plazo planificado en la estructura lógica y en los planes operacionales y anuales de trabajo; b) la demora en la entrega del equipamiento prometido.

Por otro lado, hay un potencial factor principal que podría hacer que el proyecto BEAR fracasara por completo y no sólo en relación con el componente del desarrollo curricular. Este factor se trata de la situación actual de bienestar de los estudiantes que podrían forzar a dichos estudiantes a abandonar el programa si no obtienen ningún fondo o beca que cubra los gastos del programa (la UNESCO no ofrece ningún tipo de apoyo financiero para cubrir los gastos de los estudiantes que están poniendo a prueba el programa BEAR). Además, existen otros factores que podrían causar posible fracaso, debido a que varios elementos del programa que estaban planificados inicialmente nunca han sido llevados a cabo: a) la identificación de un aprendizaje previo, el programa de hermanamiento entre escuelas técnicas, los sistemas de becas de financiación de la República de Corea del Sur.

También, es importante resaltar que la UNESCO debería abogar por una reforma del Sistema Nacional de Educación. La UNESCO debería ser lo suficiente fuerte para defender que la dimensión política se deberían dejar a un lado. Es necesario reformar el sistema para poder implementar políticas buenas de educación. Si el Sistema Educativo no se reforma, entonces continuará generando jóvenes desempleados. Esta juventud acabará teniendo una mala percepción de lo que la educación ha implicado en sus vidas y no serán capaces de satisfacer sus futuras ambiciones profesionales y acabará teniendo un impacto negativo en su proyecto de vida. El valor de la educación se verá devaluado y estigmatizado y, en el término medio, podría generar problemas sociales como revueltas y enfrentamientos sociales hacia las políticas gubernamentales. La UNESCO debería abogar por la necesidad de una reforma educativa y recomendar a los gobiernos nacionales que no pueden continuar produciendo miles de graduados que no serán absorbidos en el mercado de trabajo cuando éstos lo saben.

**Figura 18. La influencia de la UNESCO: los beneficios percibidos en diferentes ámbitos**



Fuente: Elaboración propia.

### 10.1.1. La percepción del impacto social en el desarrollo de los sistemas FP por la UNESCO

El análisis de la encuesta sobre el impacto social nos permite obtener la percepción relativa al desarrollo de sistemas de formación nacional técnica y profesional implementados por la UNESCO en Botsuana y Namibia.

En primer lugar, existe una percepción común relativa a las metas alcanzadas y los resultados obtenidos en ambos países. El principal objetivo alcanzado es que el proyecto ha reposicionado la FP dentro de la agenda nacional de desarrollo. Además, existen otros objetivos subsiguientes que son: a) la finalización del análisis de mercado de trabajo; b) el desarrollo curricular (DACUM) utilizado ha sido considerado como un proceso altamente rentable; c) el desarrollo del Marco Nacional de Calificación permitirá alinear las necesidades de calificación del programa a las calificaciones internacionales; d) ha creado capacidades en desarrollo curricular en los expertos nacionales FP; e) la introducción de aprendizaje de prácticas de trabajo y de servicios de formación por una cifra significativa de horas; f) la oportunidad de recibir un nivel de diploma y continuar sus estudios una vez finalizado el programa FP, consiste en el eje central de los objetivos alcanzados. Para finalizar, también se concibe como un objetivo logrado la adquisición de nuevas herramientas (libros y equipamiento).

En relación con los resultados generados, ambos países han creado nuevas colaboraciones a nivel internacional, mejorando las relaciones bilaterales existentes entre diferentes países para cooperar en el futuro.

La percepción del impacto social relativo a la pertinencia o importancia del proyecto BEAR según las expectativas futuras profesionales ha mostrado que todos los participantes consideran que su participación en dicho programa ha sido relevante o extremadamente relevante. Sin embargo, existe una diferencia entre países, los participantes en Namibia son más escépticos en cuanto a las expectativas profesionales futuras que los de Botsuana; esto se puede explicar debido a las tasas actuales de desempleo totales son mayores en Namibia que en Botsuana. No existen diferencias significativas entre género. En ambos países, la relevancia percibida del programa es considerablemente mayor en aquellas personas que tienen mayores dificultades económicas.

Respecto a las percepciones relativas a la dimensión de capital humano (motivación, expectativas iniciales y percepciones [variables dependientes]), se puede

observar que los participantes de Botsuana tienen un mayor nivel de motivación que los participantes de Namibia, la diferencia es significativa estadísticamente, lo cual indica que hay un pequeño pero considerable efecto dentro de la práctica de las ciencias sociales. Esto se explica por un lado por el gran compromiso de todos los implicados y por la incorporación del sector privado en el proceso de diseño curricular sin olvidar la importancia de la formación en el lugar de trabajo como elemento clave en el proceso de aprendizaje de Botsuana, lo cual no existe en Namibia en el mismo grado. Las mujeres tienen un mayor nivel de motivación que los hombres, aunque, no existen suficientes indicios para decir que la diferencia es significativa.

En relación a las expectativas iniciales, las participantes de Botsuana tienen un mayor nivel de expectativa inicial que aquellos en Namibia, existiendo una diferencia significativa entre los. Lo anterior podría explicarse por el hecho de que Botsuana previamente al diseño del proyecto BEAR, ya existían programas FP en el sector del turismo, mientras que en Namibia, no había ningún programa previo relacionado con dicho sector, por lo cual el programa BEAR se desarrolló desde cero. Esto explica que en Botsuana existieran unas expectativas iniciales mayores que en Namibia puesto que los participantes tenían una idea de lo que podían esperar. Además, el género femenino demostró tener también mayores expectativas iniciales (la percepción del éxito que se puede llegar a alcanzar) en comparación a los hombres y dicha diferencia también fue estadísticamente significativa. Esta afirmación se puede explicar parcialmente por la distribución de las responsabilidades familiares entre los miembros del hogar, donde las mujeres en muchos países de África son responsables directas del bienestar de cada miembro de la familia. Ambas diferencias encontradas son relevantes en la práctica de las ciencias sociales.

Los resultados relativos a las expectativas futuras demuestran que los sujetos de Botsuana tenían mayores expectativas que los de Namibia, habiendo una diferencia significativa, este efecto secundario es considerado moderado. Asimismo, las mujeres ponían de manifiesto mayores expectativas en el futuro que los hombres, esta diferencia, también, era considerable. El efecto secundario satisface el mínimo requerido para que



se considere relevante. La diferencia entre países y género sigue la misma lógica que las expectativas iniciales, ya que ambas variables están correlacionadas.

Finalmente, respecto a la satisfacción con lo aprendido, los participantes de Botsuana muestran una mayor satisfacción con el proceso de aprendizaje que los sujetos de Namibia, dicha diferencia es significativa estadísticamente. El efecto secundario supera el mínimo requerido para que se considere relevante en la práctica de las ciencias sociales. Esto se evidencia a través de los comentarios realizados por los profesores y estudiantes namibios del proyecto BEAR los cuales mencionaron que el nuevo currículo diseñado eliminaba temas esenciales del currículo previo como son dibujo, ciencias o matemáticas y eran substituidos por otras materias que no consideraban tan útiles para su desarrollo profesional. Igualmente, las mujeres demostraron un mayor nivel de satisfacción con el aprendizaje que los hombres aunque no existen suficientes indicios para considerar que dicha diferencia es significativa.

Respecto a las percepciones relativas al capital cultural y satisfacción cuando se comparan ambos países, podemos observar que los sujetos de Botsuana demuestran una mayor apreciación de sus resultados de aprendizaje obtenidos que los participantes de Namibia, siendo la diferencia estadísticamente significativa. Este efecto secundario es suficiente para ser considerado relevante en la práctica. Esta variable está directamente relacionada con la percepción del aprendizaje y comparte una lógica común respecto a su causa. Igualmente, las mujeres muestran una apreciación mayor en los resultados esperados aprendidos que los hombres, siendo una diferencia estadística significativa.

Los resultados obtenidos respecto a la Movilidad Social, comparando el balance de vida esperado antes y después de unirse al programa BEAR de FP una vez que termine el programa, muestra la existencia de movimientos sociales tanto verticales como horizontales.

La percepción sobre el balance de vida de los participantes antes del comienzo del programa BEAR es positivo y significativamente mejor en Botsuana que en Namibia. Esto se puede explicar a través del análisis macro donde se puede observar que los indicadores económicos y de desarrollo eran considerablemente mejores en Botsuana que en Namibia (p. ej., el ingreso nacional per cápita es significativamente mayor, y los porcentajes de desempleo o de empleo vulnerable son menores en Botsuana etc.). Las mujeres tienen una mejor opinión en este sentido. Asimismo, cuanto más alto es el nivel de educación alcanzado, mejor es la percepción sobre el balance de vida.

La mayoría de los participantes de ambos países consideran que su futuro profesional (expectativas) está vinculado a poder ser autónomo teniendo empleados a su cargo o ser trabajadores en una compañía; estos resultados muestran que existe un elevado nivel de emprendimiento entre los participantes de ambos países. Las mujeres son más escépticas que los hombres en cuanto a las perspectivas de empleo en su futuro, ya que muchas más mujeres que hombres consideran el desempleo como la opción más posible en relación su futuro profesional; esto se alinea con las estadísticas nacionales relativas al desempleo y relativas al empleo vulnerable en función al género en ambos países.

Respecto a las perspectivas de desempleo, casi todos los participantes tanto de Botsuana como de Namibia estiman que su participación en el programa BEAR ha mejorado sus expectativas de encontrar un trabajo una vez finalizado, sin haber diferencias significativas entre ambos países. Ambos géneros tienen la misma proyección de futuro en este sentido, sin haber grandes divergencias. Estos resultados están relacionados con los resultados de aprendizaje, cuanto mayor percepción de aprendizaje por parte de los participantes mejor las perspectivas en cuanto a un mejor empleo.

Los resultados sobre seguridad económica recogen la percepción de los participantes respecto a sus expectativas económicas futuras, proyecciones

profesionales y motivación para alcanzar el éxito profesional. Todos los participantes en ambos países, consideran que sus expectativas de ingresos futuros se incrementarían sin diferencias de género.

La percepción de los participantes sobre su estatus económico y social después de unirse al programa FP ha incrementado considerablemente en comparación con la percepción que tenían anterior, ha pasado de una situación económica aceptable a una muy buena situación. Todos los sujetos consideran que sus expectativas económicas de futuro mejorarán significativamente (ligeramente superior para las personas en Botsuana sin realmente haber divergencias grandes).

La situación profesional de la mayoría de los participantes en el programa BEAR antes de iniciar el programa, era una situación de desempleo, sin embargo una vez comenzó el programa las expectativas profesionales futuras han mejorado de forma significativa siendo mucho más optimistas. Este cambio demuestra que el proyecto de la UNESCO tiene un impacto importante en la percepción sobre la mejora de las expectativas del futuro profesional y también con el aumento de sus estándares de vida. Este hecho también refleja el carácter emprendedor de los participantes del programa FP.

En relación con el éxito profesional esperado, en ambos países la percepción es positiva, aunque las expectativas de Botsuana son mayores que en Namibia. Es interesante anotar que los participantes namibios son más cautos respecto a su futuro que los de Botsuana lo que se explica por sus antecedentes históricos.

Respecto al desarrollo intelectual, la mayoría de participantes en Botsuana están deseosos de continuar estudiando mientras que en Namibia la mayoría de participantes tienen muchas o pocas intenciones de continuar a estudiar en el futuro. Esto se explica ya que en Botsuana los porcentajes de desempleo por el nivel de educación alcanzado son significativamente evidentes y diferenciados por nivel de enseñanza, mientras que

en Namibia las diferencias no son tan evidentes. Existen más mujeres que quieren continuar estudiante que hombres.

Con respecto a la percepción del nivel de vida de los participantes (balance futuro de vida) una vez finalizado el programa BEAR, los resultados difieren en ambos países, los participantes en Botsuana consideran que su balance de vida en el futuro será bueno o muy bueno. Mientras que en Namibia los resultados están polarizados, por un lado, los participantes más vulnerables consideran que su balance futuro de vida será muy bueno (personas que encuentran muchas dificultades de salir adelante con sus ingresos actuales y aquellos que reciben fondos públicos para costear sus estudios) y, por otro lado, los participantes de grupos más acomodados (aquellos que salen adelante con sus ingresos actuales y los que se financian por sí mismos el coste de estudiar) no ven claramente el valor añadido de los estudios y tienen una proyección pobre de su balance de vida. Esto puede deberse a la existencia de grandes desigualdades entre la sociedad namibia.

### **10.1.2. La distribución de una educación mundial en masa a través de las organizaciones internacionales**

Existe una relación de doble sentido entre el desarrollo de las políticas nacionales de educación desde las organizaciones internacionales y la distribución de la Educación de Masas.

En primer lugar, en ocasiones, los países en vías de desarrollo para desarrollar los sistemas nacionales de educación, utilizan referencia y modelos existentes y normalmente utilizan las políticas existentes en países desarrollados. En segundo lugar, cuando se planifica la intervención con alguna organización internacional, que pueda apoyar el desarrollo a nivel nacional, lo que suele pasar es que, aunque la idea no es de imponer nada, los expertos de las organizaciones internacionales suelen tener ideas preconcebidas de lo que va a funcionar en un contexto específico, y estas ideas

preconcebidas perfilan la forma en que las cosas se harán. En lugar de imponer políticas educativas, las organizaciones internacionales deben involucrar a la población y otorgar la responsabilidad del proceso de desarrollo de políticas educativas con la propia población. Sin la participación de dicha población, el desarrollo de políticas nacionales siempre será un fracaso porque no habrá un cambio efectivo en el país.

Además de lo mencionado anteriormente, aquellos que consideran que existe una relación clara y directa entre el diseño de políticas nacionales de educación y la influencia por parte de las organizaciones internacionales en los modelos de difusión de Educación de Masas. Describen sus ideas explicando que en nuestros días, vivimos en un mundo globalizado, donde hay mucha interacción entre los actores y el aislamiento completo de un país no le aportará prosperidad. Justifican su visión diciendo que, por un lado, las organizaciones internacionales son aquellas que fijan una agenda común de educación a nivel global y de ahí se debe su influencia; esta cuestión fue discutida en el Foro Mundial de Educación en Incheon, República de Corea del Sur, en mayo de 2016. En esta discusión, se enfatizó que el mandato de la comunidad internacional sería la de fijar un marco global de la educacional puesto que todos los países están formando parte de una nueva sociedad global, dentro del proceso de globalización: por lo tanto, los sistemas nacionales educativos deben adaptarse a dicho marco, pero parece que no existe un gran compromiso por parte de los Estados miembros de poner en práctica dicha agenda (especialmente por parte de los países desarrollados). Resulta complicado que una organización internacional pueda imponer algo a un país.

El papel de las organizaciones internacionales normalmente es el de apoyar a los países en términos de buenas prácticas, ampliando las redes nacionales y aportando experiencia. Es la responsabilidad de los gobiernos nacionales de debatir con las organizaciones internacionales y socios sobre qué hacer y cómo contextualizar dichas políticas. Además, las organizaciones internacionales tienen la capacidad de articular y crear una plataforma común con un conjunto de estándares internacionales comunes con el fin de en algún modo homogeneizar los requisitos de acceso al estudio de un país a otro sin introducir barreras. Este alineamiento de sistemas educativos es realmente lo

que hace falta en un mundo globalizado y actualizar los sistemas nacionales educativos haciéndolos competitivos internacionalmente.

Por otro lado, los altos porcentajes actuales de desempleo juvenil y otros grandes problemas educativos en los países en vías de desarrollo están presionando a los gobiernos a solventar dicha situación. Para abordar este particular desafío, los gobiernos normalmente miran a soluciones rápidas importadas de organizaciones internacionales, intentando evitar tensiones y estabilizar socialmente el país; pero, en algunos casos, genera disturbios y movimientos sociales contra dichos gobernadores. Existe un consenso común de que las soluciones rápidas impuestas de fuera no benefician al desarrollo de un país, la única manera de que un país pueda prosperar y encarar los problemas es creando su propio desarrollo y soluciones, esto puede ser apoyado desde fuera, pero la elaboración de las soluciones deben ser generadas desde dentro por los locales. En muchos casos, la influencia de las organizaciones internacionales está relacionada con la provisión de fondos a dicho país para implementar y articular algunas ideas particulares, normalmente relacionadas con la implementación de formas de educación de masas y una vez que el país que pide apoyo acepta la ayuda internacional, debe aceptar ciertas condiciones, incluidas la implementación de algunas formas de educación en masa. Existe una suposición preconcebida sobre las organizaciones internacionales de que tienen sus propios intereses cuando realizan y elaboran políticas educativas en países específicos.

La UNESCO, como organización internacional y agencia especializada para la educación de Naciones Unidas, encontraría difícil imponer en un ámbito nacional la Agenda Global de Educación, de acuerdo a lo aprobado en relación a los Objetivos de Desarrollo Sostenible para 2030. Para influenciar a los países, el enfoque utilizado debería ser uno contextualizado, ya que la realidad difiere de un país a otro, debería generar colaboraciones y estar focalizado a países no desarrollados. En África, la mayoría de países sienten una gran aversión a implementar modelos educativos extranjeros debido a sus antecedentes históricos basados en la imposición de modelos ajenos. No obstante en el caso del programa FP de la UNESCO, el proyecto BEAR fue hecho a medida intentado abordar las necesidades existentes, lo cual cambió por

complemento la percepción social, la relevancia percibida del programa y, de ahí, la influencia de la UNESCO en el diseño del sistema nacional de FP.

Por otro lado, también hay un grupo de gente (los representantes de las Comisiones Nacionales para la UNESCO (NATCOM), expertos de la BQA y expertos FP de NTA) que considera que no existe relación entre el desarrollo de Políticas Nacionales de Educación por parte de las organizaciones internacionales y las presiones para diseñar formas de Educación en Masas a nivel nacional. La justificación se basa en el proceso de articulación en el desarrollo del Objetivo Global de Desarrollo Sostenible número 4, llevado a cabo por la UNESCO. El proceso empezó con la consultación a nivel nacional, seguido por la preparación de un informe a nivel regional que fue la base para el debate durante la consultación global llevada a cabo en mayo 2015, en Incheon, Corea del Sur en el Foro Mundial de Educación. La articulación de dichos procedimientos permitió que todos los países pudieran elevar su opinión a nivel global.

En Botsuana y Namibia, se considera que no han existido presiones a la hora de diseñar o introducir tipos de Educación de Masas a través de las organizaciones internacionales, la razón que justifica esta afirmación, es el enfoque utilizado por los gobiernos. Los gobiernos establecen claramente cuáles son los objetivos que se deben lograr como Nación, a partir de esa serie de prioridades nacionales en educación, se articula y guía el desarrollo de políticas de educación, estrategias nacionales y planes de desarrollo, intentando alinear las necesidades nacionales con los procesos de desarrollo. De ahí que los gobiernos consideran que no existe imposición aunque el programa de desarrollo venga directamente planteado desde una organización internacional. Un buen ejemplo de ello radica en el proceso tradicional de consultación de Botsuana llamado la tradición “kgotla” que se refiere al encuentro público, consejo de la comunidad o tribunal de ley tradicional, utilizado Tribunal consuetudinario. Las decisiones de la comunidad siempre se toman por consenso, cada persona particular está permitida para hablar y nadie puede interrumpir a otra persona mientras habla.

Las presiones para introducir formas de Educación de Masas a nivel nacional dependen del nivel de desarrollo del país y el compromiso nacional de construir sus propias políticas en su proceso de desarrollo. La justificación se puede encontrar en la idea mencionada por el experto de NTA (VET manager): "si un país tiene un objetivo claro y una estrategia para conseguirlo a nivel nacional, la organizaciones internacional debe aportar la experiencia y el conocimiento para cumplir la estrategia; pero, si no existe tal estrategia, entonces la organización internacional tenderá a imponer un modelo ya utilizado y llevado a cabo en otra parte"

### **10.1.3. El rol de la UNESCO en el desarrollo de sistemas nacionales Formación Profesional**

Como se ha mencionado anteriormente, el objetivo principal de la UNESCO en el desarrollo de políticas FP en ambos países ha sido actuar como facilitador a los Estados miembros en sus propios procesos de desarrollo. La UNESCO ha facilitado más que impuesto políticas y prácticas basado en un dialogo con institucionales nacionales gubernamentales, según el contexto nacional. El rol de la UNESCO incluye tomar el riesgo de que los gobiernos nacionales no asumirán desarrollar e implementar nuevas políticas contextualizadas que sean capaces de probar que son prácticas para su desarrollo.

La UNESCO como agencia especializada en educación de NNUU tiene gran conocimiento y experiencia en el tema que puede facilitar el desarrollo de cualquier sector nacional educativo. La UNESCO lleva años asistiendo en el diseño y desarrollo de las políticas FP nacionales en ambos países.

Desde la fase de concepción del proyecto BEAR, la UNESCO se ha involucrado en el desarrollo de sistemas nacionales FP apoyando a todas las partes en las reuniones consultativas. Se hizo un estudio de los programas FP existentes en los países y dicho estudio fundamento la necesidad de centrar esfuerzos en mejorar las capacidades



existentes del sistema nacional de FP en ambos países. La UNESCO ha pilotado la conceptualización del proyecto en los sectores seleccionados y una vez la evaluación del desarrollo curricular ha sido aprobada y validada, el Ministerio de Educación en ambos países puede replicar el modelo en otros sectores asumiendo no solo el liderazgo, como lo había hecho, sino la financiación del mismo.

Las agencias nacionales FP en ambos países consideran el rol de la UNESCO como crucial para obtener la experiencia técnica y conocimiento necesarios y generar colaboraciones internacionales que permitan el intercambio de mejores prácticas con otros países de todo el mundo. También se considera crucial la creación de capacidades en los expertos nacionales FP que les permite replicar la experiencia en otros sectores y, de ahí, garantizar la sostenibilidad del proyecto a nivel nacional. No se puede olvidar el papel importante que juega la UNESCO a la hora de movilizar recursos económicos y financieros así como su papel en la provisión de material y equipo hasta cierto punto en ambos países.

En el proceso de desarrollo curricular, la UNESCO ha introducido cambios significativos en los sistemas nacionales FP. El cambio principal ha sido la introducción del enfoque DACUM. Aunque el proceso DACUM fue originalmente desarrollado hace 20 años, es un enfoque muy útil y beneficioso para ambos países, ya que transforma la realidad existente de acuerdo a las necesidades. Destacables en este proceso han sido tres elementos: La introducción y desarrollo del Blueprint; el segundo, la introducción de los exámenes como forma de evaluación; y el tercero, es la introducción de unas prácticas laborales.

Además, los elementos claves nuevos en la utilización de este enfoque han sido, por un lado, la introducción del análisis del mercado de trabajo como parte del proceso y, por otro lado, la implicación de la industria. Se han realizado algunas críticas a la utilización del enfoque DACUM ya que algunos profesores de FP consideraban que hubiera sido mejor incluir una mezcla entre el planteamiento anterior y el nuevo. Se han identificado algunos fallos en el nuevo sistema: en primer lugar, algunas asignaturas que

los estudiantes y profesores consideraban como fundamentales no se encuentran en el currículo y segundo, las nuevas dificultades que puede generar este nuevo enfoque si los estudiantes quieren continuar estudiando. Sin embargo, se considera por la mayoría como el enfoque DACUM mucho más práctico.

Asimismo, el rol de la UNESCO a la hora de desarrollar las capacidades nacionales relativas a FP es relevante. Primero, es fundamental la selección de gente comprometida y apasionada, capaces de tomar la iniciativa y el liderazgo del trabajo que hacen. Segundo, los profesores de FP deben actuar como un facilitadores, deben ser la persona que guía el aprendizaje; y ese aprendizaje debe estar basado en la creatividad y en el aprendizaje activo. Tercero, mejorando la calidad de las clases para los estudiantes incluyendo programas de intercambio formativos. Cuarto, UNESCO debería generar más colaboraciones que desarrollaran las capacidades nacionales en el largo plazo. Las diferentes áreas en las cuales la UNESCO ha contribuido a mejorar la capacidad nacional son: desarrollo curricular, planificación educativa y la gestión de proyectos educativos (ejecución).

**Figura 19. El papel de la UNESCO en el desarrollo de sistemas nacionales EFTP.**

1. Actuar como facilitador para los Estados miembros en su propio proceso de desarrollo.
2. Tomar los riesgos que los gobiernos nacionales no asumirán para desarrollar nuevas políticas contextualizadas.
3. Asistir al desarrollo de planes de sector nacionales educativos alineados con las estrategias de desarrollo nacionales.
4. Impulsar colaboraciones internacionales para intercambiar mejores prácticas.
5. Compartir experiencias y conocimientos de FP por todo el mundo.
6. Llevar a cabo programas contextualizados específicos FP en diferentes países (con el objetivo de capacitar)

Fuente: elaboración propia.

Algunas críticas relativas al papel de la UNESCO en el desarrollo de políticas nacionales de educación se han hecho patentes, ya que se considera que la UNESCO debería poder poner a un lado la dimensión política para el desarrollo de sistemas nacionales educativos y abogar por una reforma educativa a nivel nacional e, incluso, a

nivel regional, que podría erradicar la situación actual donde las universidades producen más graduados de los que el mercado de trabajo es capaz de absorber. Los Gobiernos deberían ser los únicos responsables para dirigir su desarrollo de forma autónoma, hay países que piden asistencia y apoyo extranjero financiero cuando tienen un porcentaje de crecimiento anual de 4-5 %. Tercero, para ayudar a combatir la corrupción dentro del sistema educativo, uno de los mayores problemas en África, especialmente relacionado con el sector de política estatal. Cuarto, para proveer asistencia técnica para implementar buenos proyectos desde oficinas en terreno. Por último, para incorporar procesos de transparencia y rendición de cuentas en las organizaciones internacionales.

Como observación última, el papel de la UNESCO en lo relativo al desarrollo de políticas nacionales educativas, algunos críticos comentaron que la UNESCO debe recuperar el liderazgo en educación dentro del sistema UN, durante las últimas décadas UNICEF está tomando el mando en educación en algunos países africanos, esto podría afectar o tener una relación directa o bidireccional con la falta de fondos y el apoyo financiero a la agencia.

Para terminar esta parte, es preciso hacer un resumen general del papel que cualquier organización internacional debería tener en el desarrollo de políticas nacionales de educación: a) proveer experiencia técnica para el desarrollo de políticas nacionales en los Estados miembros; b) actuar como catalizador y hacer que los expertos nacionales e internacionales trabajen juntos y facilitar el desarrollo de políticas nacionales de educación; c) construir capacidad y proveer formación para que los nacionales puedan desarrollar el país por ellos mismos en una perspectiva de medio y largo plazo; d) proporcionar colaboraciones y apoyo financiero a los estudiantes; e) análisis comparativo; f) asignar recursos financieros para apoyar el desarrollo de programas nacionales de educación; g) proporcionar asistencia en la reforma del sistema educativo que se necesita; h) compartir las mejores prácticas y experiencia y dejar que el gobierno decida si quieren o no implementarlo nacionalmente; i) apoyar a los Estados para clarificar las prioridades nacionales en relación con los Objetivos de Desarrollo Sostenible de 2030.

**- Fortalezas y debilidades de la UNESCO como Organización Internacional. Sugerencias para la mejora de la eficacia de su mandato y trabajo.**

Como organización internacional, la UNESCO cuenta con fortalezas y debilidades a fin de apoyar el desarrollo de los sistemas educativos nacionales. En primer lugar, uno de los puntos fuertes de la UNESCO, es el alto talento y cualificación del personal y consultores de la organización, por su conocimiento, capacidad y experiencia. En segundo lugar, tiene un mandato mundial, el objetivo final de la UNESCO es hacer posible que los países sean capaces de desarrollar sus propios sistemas educativos por su cuenta. En tercer lugar, como 198 estados miembros forman la UNESCO, la organización tiene acceso directo a una gran cantidad de información de calidad. La UNESCO ocupa un lugar privilegiado para tener acceso a las estrategias y políticas existentes de los estados miembros así como en para compartir buenas prácticas. En cuarto lugar, en general, la metodología de la UNESCO para desarrollar sistemas educativos nacionales es más rápida y eficaz en términos económicos que otras organizaciones internacionales, como han mencionado los Coordinadores Nacionales del proyecto. En quinto lugar, el mandato de la UNESCO como un laboratorio de ideas, facilita la articulación de la infraestructura necesaria para dar difusión a los productos de investigación; por ejemplo, la página web institucional es accesible a personas de todo el mundo, quienes beneficiarse libremente del conocimiento compartido en dicha página. Por último, la UNESCO cuenta con una posición privilegiada para crear y establecer colaboraciones entre diferentes países basándose en sus más de 70 años de experiencia.

**Figura 20: Fortalezas de la UNESCO como Organización Internacional**

<b>Fortalezas de la UNESCO</b>					
Alto talento y cualificación del personal y consultores de la organización	Mandato internacional	Acceso directo a una gran cantidad de información mundial	Laboratorio de ideas: facilita la articulación y la difusión de los productos de investigación	Posición privilegiada para crear y establecer colaboraciones internacionales	Aproximación para apoyar el desarrollo de sistemas educativos nacionales es rápida y eficaz

Fuente: Elaboración propia.

Las debilidades a las que UNESCO se enfrenta como organización internacional son en primer lugar y en términos generales, la tediosa burocracia interna existente que afecta directamente a la ejecución de los resultados, lo cual tiene un impacto negativo en la reputación y fiabilidad de la organización. En segundo lugar, la falta de respuesta rápida a las demandas de los estados miembros.. En tercer lugar, hay una debilidad notable en términos de falta de visibilidad, el trabajo de la UNESCO podría ser mucho más visible y accesible mundialmente. En cuarto lugar, la falta de apoyo económico para la implementación de proyectos específicos dada la situación financiera actual de la organización. En quinto lugar, la continua reestructuración interna del personal, ha aumentado significativamente el reemplazo de personal en los últimos años, causando un éxodo de profesionales de alta cualificación y calidad, siendo éstos el principal activo y valor de la organización. Por último, en la UNESCO existe siempre una orientación política muy clara que influye en el momento de tomar decisiones, por lo que sería importante dejar la dimensión política a un lado del mandato y del trabajo de la UNESCO.

**Figura 21: Debilidades de la UNESCO como Organización Internacional**

<b>Debilidades de la UNESCO</b>					
Pesada burocracia interna	Falta de respuesta rápida a las demandas de los miembros	Falta de una mayor visibilidad de la organización mundialmente	Falta de apoyo económico para implementar nuevos proyectos relevantes, dentro del presupuesto regular de la UNESCO	Continua reestructuración interna del personal, causando un éxodo de profesional de los principales recursos de la organización	Fuerte influencia política en la toma de decisiones de la organización

Fuente: Elaboración propia.

Por otra parte, la debilidad más significativa de la UNESCO es la falta de una estrategia clara de FP en el área de Educación. Esta afirmación se justifica ya que a pesar de existir numerosos informes escritos y documentos de políticas educativas de FP escritas por académicos de reconocido prestigio, es necesario que éstas sean elaboradas por expertos profesionales de FP, éstos deben formar parte de la formulación de nuevas estrategias de FP, para que puedan ser reales, fiables y factibles (deben estar enfocadas en una mejor planificación en lugar de lo que parece ser el elemento de mayor importancia para la UNESCO: los resultados).

Con el fin de mejorar la eficacia de la UNESCO apoyando el desarrollo del sistema de FP y especialmente en relación con la implementación del proyecto BEAR, han surgido diversas sugerencias. Primero y más importante, el proyecto BEAR debería coordinarse desde la oficina regional de la UNESCO en Zimbabwe y no desde la sede central, es fundamental que la coordinación se realice desde un lugar geográfico próximo al desarrollo del proyecto. Otro segundo aspecto, para poder garantizar la

sostenibilidad y progreso del sistema de FP, el proyecto BEAR, debería ser ir transformado progresivamente de proyecto a programa de nivel internacional, y ser replicado en diferentes sectores industriales y económicos. En tercer lugar, entre las diferentes fases de implementación del proyecto, el proceso de desarrollo curricular debería programarse para ser realizado paralelamente a la formación al profesorado, y anteriormente a la implementación del proyecto piloto; de esta forma se sigue la coherencia natural del desarrollo del proyecto que encaja en las expectativas reales que tienen los expertos FP y los instructores FP de las escuelas técnicas. Además, en relación con el alcance del proyecto; durante la construcción del marco lógico, es importante considerar todos los elementos que serán significativos a la hora de implementar el proyecto, como son el bienestar del alumnado, la necesidad de un programa de becas para hacer frente al coste del programa FP en los centros de FP, así como una estimación de los recursos que dichas escuelas deberían tener.

Añadir además de todo lo anteriormente mencionado, la necesidad en Namibia, de reconsiderar la incorporación de algunas de las asignaturas que se consideran esenciales (dibujo, matemáticas y ciencia) las cuales existían anteriormente y ahora han sido eliminadas, dentro del currículum.

### **- El papel de la UNESCO en el desarrollo e implementación del programa BEAR en Botsuana y Namibia**

#### **a) Estrategias esenciales llevadas a cabo por la UNESCO para el éxito del proyecto:**

Existen dos grandes estrategias que han sido esenciales para el éxito del proyecto en estos países; la primera está enfocada a los esfuerzos de la UNESCO por promover la FP a nivel nacional, proporcionando experiencia y dotando de recursos para el desarrollo de los sistemas nacionales de FP, la segunda estrategia se centra en aprender de las mejores prácticas de FP a nivel mundial y a través del proyecto BEAR, lo que permite al gobierno nacional replicar y expandir las mejoras alcanzadas en su FP a otros sectores.

Además, en Botsuana, el enfoque utilizado, que se ha basado en la tradición social y cultural existente de reunir a todos los actores clave para discutir y llegar a consensos sobre las mejores políticas a poner en marcha ha sido fundamental para lograr alcanzar los objetivos del proyecto que se habían planteado.

**b) Las grandes barreras afrontadas por la UNESCO durante la implementación del proyecto**

Durante la ejecución del proyecto BEAR se fueron encontrando diferentes barreras. Inicialmente, existía una resistencia inicial por parte de la sociedad y de los expertos nacionales de FP en ambos países acerca del rol y de las actividades llevadas a cabo por agentes externos, esto estaba justificado por los antecedentes históricos en relación al apoyo extranjero recibido, el pueblo mostraba preocupación acerca de las implicaciones que el apoyo facilitado por la UNESCO iba a tener en la sociedad y en el sistema (existía un gran miedo a la imposición de políticas de FP extranjeras).

Cambiar la mentalidad de la gente fue una de las barreras que fue superada a través de la implicación de los participantes en todos los niveles del proceso de implementación; así como gracias al proceso de asimilación del proyecto como propio por parte de los actores nacionales en ambos países. En segundo lugar, la barrera lingüística entre los expertos internacionales y los especialistas de FP en el país, fue una de las más importantes, pudiendo de forma potencial haber debilitado la finalización del proyecto. En tercer lugar, los tediosos procesos burocráticos internos existentes en la UNESCO. En cuarto lugar, en el inicio, durante la fase de planificación hubo una falta importante de consideración sobre los procesos de calidad que las instituciones nacionales requerían para poder introducir un nuevo currículum en el sistema educativo, superar esta barrera ha sido crucial para conseguir el respaldo de la entidad nacional que certifica la calidad de los programas educativos. Asimismo, la falta de recursos materiales para la ejecución del proyecto (por ejemplo: la equipación material de los centros FP) y el retraso en la entrega de acuerdo con lo establecido en el plan del proyecto son dificultades recurrentes que han aparecido, las prioridades en la ejecución



del proyecto cambiaban constantemente, creando expectativas basadas en promesas que no fueron llevadas a cabo o en el tiempo prometido.

Entre otros obstáculos identificados, encontramos la falta de un programa de financiación específico para los estudiantes (becas), la mejora de la calidad de los profesores FP en el nuevo currículum, y dificultades asociadas a los esfuerzos por vincular representantes de la industria en las fases del desarrollo curricular.

**c) ¿Cómo afecta el proyecto de la UNESCO al futuro desarrollo de otros sectores?**

En ambos países el desarrollo del proyecto BEAR ha demostrado que hay una necesidad real de replicar el enfoque aplicado a otros sectores a nivel nacional, para poder consolidar los cambios en el sistema de FP llevados a cabo. Por lo tanto, como hemos comentado anteriormente, es crucial trabajar con todos los agentes educativos implicados, funcionarios del gobierno e instituciones en conjunto. Incorporando a todas las partes interesadas en el proceso facilitarían el proceso de réplica en nuevos sectores de FP.

Así mismo, el apoyo facilitado por los colaboradores internacionales en todas las fases y actividades ha proporcionado un referente necesario para el avance de otras áreas. La experiencia del proyecto BEAR ha establecido una base replicable a otros sectores.

Los gobiernos nacionales tienen suficiente capacidad para replicar el proyecto una vez finalice la financiación del programa BEAR, las dos razones más importantes para ello son; por un lado, el empoderamiento y las capacidades de los expertos locales harán posible el crecimiento y la reproducción exitosa de las mismas actividades en el futuro, y por otro lado, económicamente el impuesto denominado LEVI, que financia las actividades nacionales de FP garantiza la financiación económica que será necesaria. Sin embargo, si a esto se añadiera algún tipo de apoyo o financiación exterior, esto serían una ventaja.

Además de lo mencionado anteriormente, la sostenibilidad del proyecto se garantiza basándose en otros elementos. Primero, el simple hecho de que los objetivos de dicho proyecto pueden ser generalizados, es decir los gobiernos son conscientes que es la antesala de un desarrollo mayor del sistema FP. El proyecto ha ofrecido la posibilidad de construir un sistema de FP de calidad para los alumnos y profesores. Por lo tanto, la transformación del proyecto BEAR en un programa es algo que debería hacerse y garantizaría los resultados adquiridos.

## **10.2. LIMITACIONES Y FUTURAS LÍNEAS DE INVESTIGACIÓN**

En este último apartado, se discuten las limitaciones y las futuras líneas de investigación.

### **10.2.1. Limitaciones del estudio**

Es necesario identificar cualquier dificultad inherente a la investigación. Las limitaciones que han surgido durante el proceso de estudio incluyen obstáculos que afectan a la naturaleza del objeto de estudio, así como otros están relacionados con el diseño de la metodología.

Respecto a las restricciones relacionadas con la naturaleza del objeto de estudio, es importante mencionar que el objeto de investigación es en sí mismo muy amplio y complejo. Por lo que, este estudio comparado ha reducido el campo de estudio seleccionando dos países de la Southern African Development Community (SADC). La selección de estos dos países ha sido completamente justificada basándose en criterios

claros y evidentes. No obstante el estudio podría haberse extendido a un gran número de países de esta región en particular.

Respecto a las limitaciones asociadas al diseño de la metodología, uno de los principales obstáculos ha sido la falta de literatura de FP existente relacionada con estos países en los que se centrada la investigación. Se ha publicado muy poca cantidad de información de la FP a nivel internacional sobre Namibia o Botsuana. Es por ello que se ha sido complejo llevar a cabo una revisión literaria exhaustiva. Primero, la literatura identificada y examinada se basa esencialmente en documentos normativos, legislativos con muy poco énfasis en la investigación de FP; Segundo, como se menciona anteriormente, en muchos casos las pocas investigaciones existentes no están completamente disponibles.

No existen centros de investigación de Formación Profesional a nivel nacional en los que consultar publicaciones existentes, ni en Botsuana ni en Namibia, y las instituciones de FP nacionales – DTVET y NTA – tampoco llevan a cabo investigaciones nacionales. Esta situación implicó problemas logísticos al recabar la literatura, teniendo que recoger información y documentos en diferentes instituciones distribuidas en un gran número de lugares durante la primera visita al terreno. Siendo mis recursos de viaje limitados, no tuve opción de recoger documentos que se encontraban geográficamente en lugares lejanos a los que me encontraba. Muchos documentos clave están solamente disponibles en papel, y no son accesibles para el dominio público. También han existido limitaciones en el escaneo de documentos para el almacenamiento y trabajo electrónico, ya que los escáner existentes no son adecuados para una conversión eficaz de grandes documentos. Lo que nos queda es una bibliografía de la investigación que es parcialmente geográfica y temática. Este hecho en sí mismo tiene implicaciones muy significativas para cualquier estrategia futura regional de renovación de la FP.

Existe otra posible limitación en el estudio, que es la potencial influencia que mi persona, como personal de la UNESCO, pueda haber tenido en el proceso de investigación. Como miembro de la sección de FP de la UNESCO durante la investigación, el proceso fue observado desde la perspectiva de la implementación del proyecto BEAR en el terreno, siendo inevitable que se formasen relaciones con los participantes. Los pasos necesarios para mitigar esta potencial influencia subjetiva fueron: tener referencias cruzadas de observación de comportamientos en las entrevistas y validación de participantes, o un control de los miembros en la transcripción de entrevistas. Traté de permanecer reflexiva y atenta ante posibles sesgos en la observación o interpretación, reflejándolo en el trabajo de campo y en el proceso de redacción.

Adicionalmente, la recogida de información sobre el proyecto BEAR por parte de los estudiantes piloto sugirió el uso de un cuestionario. Esto supone una limitación, ya que el cuestionario solo recoge percepciones, las cuales son ciertamente importantes, pero es imperativo tener en cuenta las diferencias entre las percepciones y la realidad. Respecto a los cuestionarios contestados por los estudiantes, pueden considerarse varios elementos difíciles de interpretar, por lo que se deberían haber considerado explicaciones más concretas o detalladas. Otra limitación relacionada sobre los procesos de recolección de información fue que las entrevistas programadas para los representantes de la industria en Namibia no pudieron llevarse a cabo.

Además de lo comentado anteriormente, durante el proceso de recogida de información de los cuestionarios en Botsuana, hubo varias huelgas de todos los estudiantes matriculados en programas EFTP, que pedían una respuesta a la falta de apoyo económico y becas proporcionadas para cubrir el coste de sus estudios EFTP, por lo que este malestar es visible y se refleja en las respuestas, como se ha mencionado previamente.

El acceso a los encuestados no ha sido fácil; pero el apoyo ofrecido por los asistentes y los Coordinadores de Proyecto Nacionales facilitaron los arreglos logísticos y la autorización para realizar las entrevistas adecuadas.

Las limitaciones enumeradas han sido detectadas a lo largo de la experiencia y del proceso de investigación llevado a cabo. Sin embargo, las restricciones no han sido un obstáculo para conseguir exitosamente el objetivo de investigación y crear una discusión constructiva alineada con el tema de estudio: la influencia de la UNESCO en el desarrollo de políticas nacionales FP, transformando alguna de las limitaciones en sujetos potenciales en futuras investigaciones.

### **10.2.2. Próximas líneas de investigación**

El siguiente apartado representa las áreas clave para futuras investigaciones en este tema. No obstante debe considerarse que este trabajo recoge los datos existentes más actualizados hasta la fecha. Futuras investigaciones de este tema podrían completar los resultados obtenidos en este trabajo.

Un estudio longitudinal puede ser requerido para medir no sólo la influencia de la UNESCO en el desarrollo de los sistemas EFTP nacionales, sino también para analizar cuál es el impacto real en la sociedad, la economía y el sistema educativo. Sería necesario analizar cuál es la tasa de absorción de los nuevos estudiantes del proyecto BEAR en el mercado laboral, las evaluaciones que la industria hace sobre las habilidades de los graduados y sobre el desarrollo profesional para realizar sus trabajos, así como el nivel de reconocimiento que gana el nuevo sistema EFTP en la sociedad.

También sería interesante introducir otras organizaciones internacionales, como la OCDE, Banco Mundial, UNICEF, OIT, en el estudio comparativo, para medir las

diferencias y similitudes entre todas ellas en términos de influencia en el desarrollo de sistemas y políticas de FP nacionales.

En este trabajo no se recoge una visión de las experiencias de los participantes. Un estudio cualitativo de las experiencias de los alumnos, en diferentes contextos de aprendizaje, podría ser especialmente útil. Las experiencias post-aprendizaje de los estudiantes podría ser una forma valiosa de identificar áreas de fortaleza y debilidad en el sistema de FP en sectores específicos.

Además, el desarrollo de un Sistema Nacional del Manejo de Información de FP dentro de los Ministerios de Educación, podría aportar una constante base de datos sobre el sector FP lo que podría sentar las bases y utilizarse eficazmente como punto inicial para el desarrollo de futuras investigaciones en éste área. Esa base de datos actualizada, podría mejorar cualquier futuro estudio de adquisición de habilidades en el país.

Deberían hacerse más investigaciones sobre la formación en ámbito laboral, con el objetivo de describir y analizar el valor del aprendizaje práctico dentro del currículum FP, especialmente en estos países.

Se ha observado que en este estudio de investigación, como menciona Fourcade (2006) que el desarrollo de políticas educativas en el área de la educación técnica y vocacional como un agente de globalización no ha sido muy estudiado, ni tampoco existe una gran comprensión de la misma por parte de los sociólogos, en parte porque hasta ahora no se ha considerado que la economía y el mercado laboral juegan un rol importante en FP.

El ámbito internacional, supranacional o global debe incorporarse como un complejo grupo de fuerzas sociales y patrones que cambian a lo largo del tiempo.

Finalmente, este estudio quiere destacar la importancia y relevancia de las auto-evaluaciones que las organizaciones internacionales deberían hacerse, no sólo en términos de medir los resultados, de los proyectos o de las políticas que desarrollan e implementan, sino también de la influencia que tienen en los países en los que desarrollan su trabajo, desde un punto de vista económico, social, cultural e ideológico en niveles macro, meso y micro.

Con optimismo esta tesis liderará las futuras líneas de investigación que han sido enumeradas aquí.

### **10. 3. RECOMENDACIONES**

Con los resultados del trabajo de investigación como base, se sugieren ciertas recomendaciones para la mejora de los sistemas nacionales de FP en ambos países: Botsuana y Namibia. Estas recomendaciones, enumeradas a continuación, podrían formar parte de la reforma educativa sugerida en este estudio:

- 10.3.1 Mejorar el papel de la FP en los objetivos de desarrollo a nivel nacional (y regional).
- 10.3.2. Expandir el acceso a una educación y formación profesional técnica.
- 10.3.3. Modernizar la educación de la formación profesional.
- 10.3.4. Incrementar la productividad de los estudiantes de FP.
- 10.3.5. Introducir exámenes como una parte del proceso evaluativo del aprendizaje de FP.
- 10.3.6. Enfatizar la importancia de la formación en el lugar de trabajo.

10.3.7. Explorar e incluir nuevos modelos de aprendizaje de FP, incluyendo aprendizaje de FP a distancia.

10.3.8. Maximizar la utilización de recursos de FP en los centros educativos

10.3.9. Aumentar el compromiso del sistema de FP formal con micro empresas y empresas informales.

10.3.10. Considerar el impacto del HIV/SIDA en el desarrollo de la FP a nivel nacional.

10.3.11. Comprometer a los centros de FP en la realización de actividades educativas que generen ingresos asociados al desarrollo de sus actividades.

10.3.12. Desarrollar nuevas estrategias de patrocinio.

10.3.13. Establecer fórmulas para que los profesionales técnicos altamente cualificados puedan obtener titulaciones como educadores de FP

10.3.14. Desarrollar sistemas de gestión de la información.

10.3.15. Incluir al sector privado en los procesos de desarrollo del sistema nacional de FP.

10.3.16. Reforzar la coordinación de políticas entre los departamentos gubernamentales y agencias.

10.3.17. Fomentar la creación y elaboración de sistemas de certificación.

### **10.3.1 Mejorar el papel de la FP en los objetivos de desarrollo a nivel nacional (y regional).**

La Formación Profesional debería ser un elemento esencial en las políticas de desarrollo económico y social a nivel nacional y regional.

Las políticas educativas de formación profesional deben conducir al crecimiento e inversión, incluyendo un aumento en empleos de calidad y el respeto de los derechos de los trabajadores. Éstas políticas así como las centradas en el empleo deberían ser consideradas conjuntamente.



### **10.3.2. Expandir el acceso a una educación y formación profesional técnica.**

Dentro de las políticas de FP deberían incluirse las garantías al acceso de la formación profesional para hombres y mujeres, incluyendo disposiciones especiales para los grupos que se enfrentan a mayores dificultades en su inserción al mercado laboral, como son la juventud, los trabajadores menos especializados, las comunidades rurales.

Políticas especializadas son necesarias para facilitar el acceso a una formación profesional de calidad por parte de individuos y grupos vulnerables como son las personas de bajos ingresos, origen étnico determinado, diversidad funcional o estatuto migrante (OIT, 2010).

Existe una gran necesidad de fomentar políticas de equidad e igualdad de género en la formación profesional, centrándonos en acabar con los estereotipos y perfiles concretos de mano de obra, en todos los niveles de la industria. Algunas de las recomendaciones en este tema son: a) una mayor proporción de mujeres deberían obtener becas de formación de FP, b) debería hacerse un esfuerzo para promover que las mujeres escojan estudios en cualquier sector de la industria, incluyendo aquellos histórica y socialmente orientados a los hombres, c) se necesita apoyo de las compañías y el sector privado para promover la participación femenina.

### **10.3.3. Modernizar la educación de la formación profesional.**

Cualquier intento de promoción y mejora de los sistemas nacionales de Formación Profesional debe ser incluido en los planes de reformas de la educación, reforzar la educación de los maestros de formación profesional es un requisito necesario dadas las pobres condiciones en las que trabajan dichos profesores.

La formación de los maestros debe incluir un servicio de formación continua en cada escuela de FP, que cubra temas pedagógicos, técnicos y administrativos. Formar y alentar al aprendizaje de forma constante para el personal en las escuelas de Formación Profesional.

La formación debe incluir la incorporación siempre de prácticas profesionales en las empresas. La educación de los maestros o profesores de FP deben estar certificadas por las unidades y/o agencias especializadas del Ministerio de Educación y evaluadas de forma regular.

#### **10.3.4. Incrementar la productividad de los estudiantes FP**

La prosperidad de cada país depende en la cantidad de población que trabaja y su productividad, está influida por las habilidades que cada uno tiene y la eficacia con la que son utilizadas (OIT, 2010). Para incrementar la productividad de estudiantes de FP, es importante no solo garantizar el éxito de la inversión de capital humano de los empleadores de FP sino también para el desarrollo económico de la nación.

El logro de conseguir una titulación no conlleva automáticamente ser productivo, los empleadores de FP consideran que la actitud de los graduados es el factor más importante para un empleador a la hora de contratar a un potencial candidato, a veces más relevante que las calificaciones (HRDAC, 2013).

Por lo tanto, durante el proceso de aprendizaje de los estudiantes, se deberían enseñar buenas actitudes. Algunas de las actitudes mejor valoradas son (HRDAC, 2013):

- a) Personal habilidoso que es dedicado y trabajador.

- b) Comportamiento profesional y auto-conducta correcta en un entorno empresarial.
- c) Atención al cliente y actitudes telefónicas.
- d) Personas orgullosas del trabajo que realizan.
- e) Compromiso en el trabajo y ética profesional.
- f) Fiabilidad, puntualidad y responsabilidad.

La experiencia de los graduados es el segundo factor más importante. Los empleadores creen que los estudiantes con experiencias laborales requieren de menos supervisión y menos trabajo de entrenamiento en el puesto, ya que ya están familiarizados con el entorno de trabajo. Las prácticas profesionales permiten que los graduados puedan proporcionar referencias, que son valoradas positivamente por los empleadores.

Las 4 habilidades que diferencian a los estudiantes son (BB, 2009):

- a) Habilidades y atributos personales.
- b) Habilidades de liderazgo y gestión.
- c) Actitud frente al público.
- d) Comprensión general de los servicios ofrecidos por la empresa.

### **10.3.5. Introducir exámenes como una parte del proceso evaluativo del aprendizaje de FP**

Los exámenes representan una oportunidad para los estudiantes de FP para demostrar la comprensión del contenido de la unidad que han estudiado, siendo éstos una parte de su proceso de evaluación. Los exámenes pueden realizarse al final del semestre o al terminar el curso, y se realizan en forma de preguntas largas de desarrollo,

que enlazan los resultados del aprendizaje con unos criterios dentro de una unidad de especialización.

Los exámenes son cronometradas para asegurarse que los candidatos proveen suficiente información relevante sobre la cuestión planteada, y no solo contestan reflejando lo que han aprendido.

### **Figura 24: Roles en el proceso de evaluación EFTP**

**Evaluaciones programadas por  
Departamento de Educación y  
Formación Técnica y Profesional**

- ↳ **Las evaluaciones son desarrolladas por el Departamento de Educación y Formación Técnica y Profesional.**
  - ↳ **Las evaluaciones son revisadas por la Unidad de Control de Calidad y Evaluación.**
    - ↳ **Las evaluaciones son distribuidas por el Departamento de Educación y Formación Técnica y Profesional.**
      - ↳ **Las evaluaciones son distribuidas por las escuelas en la misma fecha y hora programadas sin excepción.**
        - ↳ **Las evaluaciones son corregidas por el Departamento de Educación y Formación Técnica y Profesional.**
          - ↳ **Los resultados se verifican por la Unidad de Control de Calidad y Evaluación.**

Fuente: Elaboración Propia

### **10.3.6. Enfatizar la importancia de la formación en el lugar de trabajo.**

Las experiencias prácticas son un área de trabajo en sí mismas, porque desarrollarlas dentro de su campo de estudio es muy valioso para los alumnos. En el lugar de trabajo es donde el estudiante pasa un periodo de tiempo realizando prácticas y adquiere un gran número de competencias.

Existen diversas ventajas en llevar a cabo prácticas profesionales: a) el alumnado adquiere conocimientos sobre el tipo de trabajo asociado a un área vocacional específica; b) construye disciplina en asistencia, puntualidad, recibir instrucciones, responder a la supervisión, etc.; c) se forma en el aprendizaje de relacionar actividades de estudio y trabajo; d) adquiere oportunidades para conseguir un futuro empleo.

La adquisición de una actividad de prácticas profesionales debería incluir un trabajo previo con los alumnos siguiendo una serie de puntos: a) que esperar en el lugar de trabajo; b) puntualidad, asistencia y gestión del tiempo; c) como recibir y llevar a cabo instrucciones; d) requisitos de seguridad y salud; e) que hacer en casos de emergencia; f) como comportarse en el lugar de trabajo.

### **10.3.7. Explorar e incluir nuevos modelos de aprendizaje de FP, incluyendo aprendizaje de FP a distancia.**

La globalización de los mercados ha acelerado la difusión de la tecnología y el ritmo de la innovación. Los nuevos modos de enseñanza de formación profesional deberían ser revisados, introduciendo nuevas formas de enseñar e introduciendo la enseñanza a distancia (OIT, 2010).

Las políticas de educación son un potente motor de cambio y apuntan en una dirección más flexible de la educación y de las metodologías de aprendizaje, haciendo énfasis en un modelo de educación a distancia y un mayor uso de las tecnologías para acercarse a la problemática del acceso y la equidad mejorando la calidad en relación efectividad-precio.

#### **10.3.8. Maximizar la utilización de recursos de FP en los centros educativos**

Los recursos de la FP cuando se comparan con los recursos necesarios en otros niveles educativos, son extremadamente caros. La formación de habilidades requiere talleres, máquinas especializadas, herramientas, etc., todo ello supone un desembolso muy importante económico. Dado el alto coste de la FP es imperativo maximizar el uso de estos recursos en toda sus capacidades. Esto implica asegurarse que el tiempo de los maestros es completamente aprovechado, el tamaño de los grupos de clase es el máximo operativo, las facilidades son utilizadas el mayor número de horas posibles al día, y las máquinas y el equipamiento están en sus niveles óptimos de funcionamiento.

Para maximizar el uso de los recursos desde las instituciones de FP se debería:

- a) Establecer un mínimo de requisitos de material.
- b) Asegurar que la maquinaria y material están bien mantenidos, minimizando el riesgo de accidentes.
- c) Aplicar una utilización efectiva de los espacios.
- d) Desarrollar parámetros operativos para el personal educativo y no educativo.
- e) Desarrollar e implementar un sistema de mantenimiento de los recursos.
- f) Establecer inspectores para los centros EFTP que podrían controlar la seguridad de talleres y laboratorios.

### **10.3.9. Aumentar el compromiso del sistema de FP formal con micro empresas y empresas informales.**

El compromiso de las empresas se refiere a las relaciones entre las instituciones de Formación Profesional y las compañías claves o grupos de contratistas, de las cuales las empresas informales y microempresas deberían formar parte. Las instituciones de FP deberían asociarse con estas organizaciones para asegurar que las prácticas profesionales alcanzan las necesidades y los requisitos educativos que los empresarios y la economía en general demanda.

Los directores de las instituciones de Formación Profesional deben considerar y aplica alguna o todas las estrategias siguientes con el objetivo de establecer buenas relaciones con empresas y empleadores:

- Desarrollar políticas y procedimientos para comprometer a las empresas en niveles institucionales.
- Emplear personal con cierta experiencia en empresa.
- Incluir compromiso de empresa en las labores educativas.
- Desarrollar un marco de acción para ofrecer en el lugar de trabajo.
- Comprometer en la realización de actividades educativas con ingresos alineados.
- Desarrollar estrategias de patrocinio.

Las ventajas de comprometer a las empresas son: a) la industria provee consejos claves que aumentan la relevancia de los programas FP; b) la industria ofrece puestos de trabajo para personal de FP de forma que aumente la aceptación de sus habilidades técnicas; c) las empresas ofrecen prácticas profesionales a los estudiantes FP que les

ayuda a experimentar el “mundo de la empresa” y añade una finalidad a sus estudios; d) Patrocinadores, actividades promocionales, etc., son otras formas de empresa (incluyendo empresas informales y microempresas) que pueden relacionarse con FP.

#### **10.3.10. Considerar el impacto del HIV/SIDA en el desarrollo de la FP a nivel nacional impacto del HIV/SIDA en el desarrollo de habilidades a nivel nacional.**

La incidencia del HIV/SIDA de forma histórica en ambos países, se considera como un agravante en el déficit de habilidades y un debilitamiento en el desarrollo de aptitudes. Se debería realizar una observación de las acciones que los proveedores públicos de FP llevan a cabo para enfrentarse a los problemas de acceso a los que la población con SIDA se enfrenta, así que como debería abordarse la educación del HIV/SIDA. El desarrollo de políticas relacionadas con este tema debería darse, no sólo en estos dos países, sino en toda la región.

#### **10.3.11. Comprometer a los centros de FP en la realización de actividades educativas que generen ingresos asociados al desarrollo de sus actividades.**

Las escuelas de FP generan unos ingresos discretos relacionados con los resultados de las prácticas formativas realizadas en los centros y de las actividades comerciales que se generan a través de las prácticas educativas de los centros. El mantener estos ingresos puede ayudar a las escuelas a conseguir más maquinaria, y animar a los profesionales a desarrollar actividades, asumir una mejora de las instalaciones, etc.



### **10.3.12. Desarrollar nuevas estrategias de patrocinio.**

Promover el patrocinio, como un acuerdo comercial en el cual un patrocinador aporta una contribución monetaria o cualquier tipo de apoyo en una actividad a cambio de unos beneficios específicos.

Las ventajas de desarrollar nuevos patrocinios son varias; aporta beneficio mutuo tanto a las instituciones de FP como a los patrocinadores, aumenta la relevancia y el estatus de la FP al asociarlo con organizaciones externas de reconocido prestigio; aporta un beneficio económico a los centros, al no tener que proveer de ciertos productos ellos mismos, aumenta el compromiso externo con la Formación Profesional.

### **10.3.13. Establecer fórmulas para que los profesionales técnicos altamente cualificados puedan obtener titulaciones como educadores de FP**

Una forma de construir la competencia técnica del profesorado de Formación profesional, es fomentar que los técnicos altamente habilidosos se trasladen de las empresas a los centros de formación de FP.

Existen no obstante, otras barreras significativas que impiden estos cambios de carrera profesional, entre las que se incluyen la falta de incentivos económicos para cambiar de trabajo, la cantidad de tiempo necesario para conseguir la titulación de maestros de FP y la ausencia de apoyo ofrecido a los nuevos profesores.

Teniendo en cuenta estos problemas, es importante desarrollar un itinerario formativo para la docencia más rápido, dedicado a estos profesionales que estén interesados en la formación. Estos programas muchas veces consisten en un programa educativo muy intenso, un y un programa de mentores que apoye al nuevo profesor a

través de la experiencia de otro maestro o educador.

Los beneficios clave de un sistema formativo de docentes más rápido dedicado a profesionales son varios: a) aumenta el número de maestros de FP con niveles altos de habilidades técnica; b) mejora la relevancia de programas de intercambio formativo asegurando que los profesores de FP tienen conocimientos industriales y las habilidades necesarias para formar y evaluar a otros; c) promociona el intercambio de habilidades entre las empresas y el sector educativo de FP, así como cambia la cultura de trabajo de las instituciones educativas de FP al reclutar personal con experiencia en las empresas, con conocimientos sobre las habilidades necesitadas en el sector y acostumbrados a trabajar en un entorno de empresa.

#### **10.3.14. Desarrollar sistemas de gestión de la información (EMIS)**

Los sistemas nacionales de gestión de la información sobre FP no están correctamente desarrollados. La falta de una recolección sistémica y de una recogida de datos en este campo educativo, acarrea grandes dificultades para monitorear el nivel del desarrollo y la puesta en marcha de los sistemas nacionales de FP. Mientras que no haya un sistema nacional de gestión de la información de FP, muy poca información sobre el sector de la Formación Profesional estará disponible, aportando datos estadísticos.

El desarrollo de un sistema de gestión de la información es necesario para recopilar datos clave a nivel nacional (por ejemplo: número de inscripciones totales en los centros de FP, número de proveedores, cantidad de personal) de todo el sector en general.

Deberían implementarse medidas para vincular un sistema de gestión de información de FP y del desarrollo de habilidades con datos del mercado laboral.

#### **10.3.15. Incluir al sector privado en los procesos de desarrollo del sistema nacional de FP.**

La introducción del sector privado en los procesos de desarrollo del sistema nacional de FP, tiene un gran potencial para contribuir en el logro de los objetivos y estrategias nacionales de desarrollo, así como para ser incorporado en un modelo

nacional de desarrollo del sistema de FP.

#### **10.3.16. Reforzar la coordinación de políticas entre los departamentos gubernamentales y agencias.**

Este trabajo de investigación aporta evidencias sobre la importancia de mejorar la coordinación interministerial que favorezcan el desarrollo de las políticas nacionales de FP.

Uno de los retos existentes es el refuerzo y mejora de los mecanismos de coordinación entre departamentos del gobierno, siendo un factor estratégico para la anticipación de necesidades futuras.

#### **10.3.17. Fomentar la creación y elaboración de sistemas de certificación.**

Esta recomendación en particular es apoyada por el Estudio de Habilidades Nacionales de Sudáfrica Paterson, A., McGrath, S., Badroodien, A. (2003) que muestra la necesidad de crear y elaborar sistemas de calificación y reconocimiento de las mismas a nivel nacional y regional.

Asimismo se resalta la importancia de la evaluación continua de la calidad de las instituciones educativas y de los programas de formación. Utilizando herramientas y metodologías de evaluación y certificación que incluyan estándares internacionales.

En relación con los sistemas de calificaciones de la región, es importante en la medida de lo posible, tender a la creación de un sistema de cualificación regional estandarizado para la formación profesional. Lo que debe comenzar con la

homogeneización del significado otorgado por cada país de lo que es el sistema de cualificación nacional.