

**A comparative analysis of Technical Vocational Education and Training  
System in Afghanistan and Germany**

By

**HAMDARD, Mohammad Jawad**

**THESIS**

Submitted to

KDI School of Public Policy and Management

In Partial Fulfillment of the Requirements

For the Degree of

**MASTER OF DEVELOPMENT POLICY**

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Committee in charge:

Professor Lee, Ju-Ho, Supervisor



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## Abstract

The potential contribution of Technical and Vocational Education and Training (TVET) to employment has attracted much interest from researchers, policy makers and academia over the years. Because TVET systems are very dynamic and vary across countries, there is considerable amount of comparative studies and arguably so, suggesting that the approach helps other countries to advance. This qualitative study compares TVET systems of two countries, Afghanistan, a developing country with a relatively recent history of TVET, and Germany, a developed country with an advanced experience in TVET. The method used comprises of examining the TVET features in both countries and bringing out their similarities and differences. The objective is to observe the features in Germany's TVET system and what Afghanistan can learn from them. The result of this observation will help make recommendations for Afghanistan.

**Keywords:** Technical and Vocational Education and Training (TVET) in Afghanistan & Germany

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## **List of commonly used Abbreviations**

CEDFOP	European Centre for the Development of Vocational Training
MoLSMAD	Ministry of Labor, Social Affairs, Martyrs and Disabled
MoE	Ministry of Education
DMTVET	Deputy Ministry of TVET
GDTVET	General Directorate for TVET
FIVT	Federal Institute of Vocational Training
IMF	International Monetary Fund
OECD	Organization for Economic Cooperation and Development
ODA	Official Development Assistance
ILO	International Labour Organization
WB	World Bank
TVET	Technical and Vocational Education and Training
NTVETS	National Technical and Vocational Educational and Training System
UNESCO	The United Nations Educational, Scientific and Cultural Organization

## **Dedication**

Dedicated to my family

## **Acknowledgement**

I thank God for the opportunity and the strength given me to complete this Master Program

My deepest gratitude goes to the people of Korea, the KDI School of Public Policy and Management, and all its lecturers and staffs for this academic experience. I particularly thank my main supervisor, Professors Ju-Ho, Lee for supervising this work, and Professors Lisa Lim for their constant support.

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## Chapter One: Introduction

### 1.1 Background

The Islamic Republic of Afghanistan is a mountainous and landlocked country located in South – Central Asia; bordered on the south and east with Pakistan, 2,430 kilometers; from the west with Iran, 936 km; from the north with Tajikistan, 1,206 km; Turkmenistan, Turkmenistan, 744 km; China, 76 km, and Tajikistan 1,206 kilometers (Library of Congress, 2008). Afghanistan occupies about 647,500 square kilometers, slightly smaller than the State of Texas in the USA. The country has 34 provinces and Kabul City is the country capital.

Culturally, Afghanistan is a country of minorities with four big ethnic groups consisting of Pashtun, Tajik, Hazara and Uzbek. There is less religious diversity with around 75 to 80 per cent of the total population being Sunni Muslims, 20 – 25 Shi'a Muslims and less than one percent comprising of other religions. The country has two official national languages, Dari and Pashtu.

Afghanistan gained its independence from Britain in 1919 and enjoyed some relative stability from 1930 to the late 1970s. After the 1970s, the country has been faced with rampant political chaos which has negatively impacted the socio-economic infrastructure particularly the education.

Since 2002, the Afghan government with support from its international partners designed and implemented various policies, strategies and programs to improve education. As a result, the TVET sector has been expanding. Both TVET schools and institutes have been opened throughout provinces with support and participation of both public and private sectors, noting that a lot of efforts have been made to make TVET more accessible to Afghans through the country.

In 2012, Afghanistan put in place a National Strategy for Technical Vocational Education and Training, to run from 2013 to 2018 in view of increasing the skilled labor force and reducing unemployment. Coming to the end of this period, questions are being asked as to the standards of TVET being delivered and concerns raised as to the limited innovation in the TVET system.

## **1.2 Technical Vocational Education and Training**

Since the inception of modern TVET in the 18<sup>th</sup> century, the concept has been defined differently across space and over time. The International Standard Classification of Education (ISCED) defines TVET as “education which is mainly designed to lead participants to acquire the practical skills, know-how and understanding necessary for employment in a particular occupation, trade or group of occupations or trades” (UNESCO, 1997, p.27).

The European Centre for the Development of Vocational Training (CEDEFOP) refers to TVET as all structured activities that aim to provide people with knowledge, skills and competencies necessary to perform a job or set of jobs, whether or not they lead to a formal qualification (European Commission, 2014). Therefore, it can be said that the overall objective of TVET is to train people to acquire the required knowledge, skills and attitudes to be competent in the labor market. The term TVET, vocational training and vocational education shall be used interchangeably in this paper.

The importance of the concept of TVET has attracted the attention of many. This is visible through the increase in government investments, abundance of literature from scholars and put in place of institutional frameworks. In Europe, the CEDEFOP was put in place, and in Latin America, the CINTERFOR saw the light of day. In Asia, the Southeast Asia Ministers of Education Organization Regional Centre for Vocational and Technical Education and Training (SEAMEO

VOCTECH) was established in 1990. Internationally, organizations such as UNESCO, OECD and ILO all have put in place TVET mechanisms.

Afghanistan has not been left behind in this global movement towards TVET. Despite several decades of war and instability, the country designed and implemented a National Strategy for TVET 2013 – 2018.

### **1.3 Objective and significance of the study**

The government of Afghanistan invested much in its TVET National Strategy 2013 – 2018 with a hope of achieving economic growth and the reconstruction of the war-ravaged country. Coming to the end of this national strategic framework, the question in everyone's mind is whether or not the strategy was successful. This study examines the features of TVET 2013-2018 in Afghanistan, in the light of international best practices. In the end, some policy recommendations are made for the way forward.

The study is significant in the sense that the literature on TVET in Afghanistan is limited. As such, using carrying out comparative studies with other countries may help spur reflections and innovations in the Afghan system.

### **1.4 Scope of the study**

This thesis will mainly focus on analyzing TVET features in Afghanistan and Germany. The period under study will be from 2013 to 2018, representing the implementation period of Afghanistan's national strategy.

## 1.5 Research Methodology

The study analyses TVET features in Afghanistan in relation to its design and implementation with those in Germany. Data of the study is essentially collected by document analysis including published statistics from national and international organizations as such UNESCO, World Bank, UNICEF, and local NGOs, government publications, research reports and other articles have been exploited. Similar TVET features in Afghanistan and Germany shall be regrouped and compared.

Despite the fact that the two countries do not meet the institutional and cultural similarities as required by Marsden and Ryan (1991), the comparison still appears meaningful for two reasons. Firstly, Germany is a global example when it comes to the formation of skills, especially by apprenticeship. According to Pritchard, R. M. (1992), the German model of TVET is a “source of pride at home and emulation abroad”. Secondly, Germany’s Official Development Assistance ODA for TVET is higher than that of the World Bank and the European Commission. It is also one of the major contributors to ODA in Afghanistan, especially in the education sector. According to the OECD, Afghanistan is the second recipient of Gross bilateral ODA in the world behind India, with a total of USD 3 024 millions in 2016-2017. Germany alone contributed approximately, 16.25% of this, about USD 491 million. About 11.8% of Gross Bilateral ODA received from Germany is in the education and health sectors. Further, this means comparing these two countries will help identify if feasible TVET policies that have proven to be successful in Germany, have been designed and implemented in Afghanistan through technical assistance.

Following this introductory chapter of the study, chapter two discusses literatures review on TVET. Chapter three highlights the main features of Afghanistan TVET while a comparative

analysis is done in chapter four between TVET features in Afghanistan and Germany. Chapter 5 presents key shortcomings of Afghanistan's TVET system and recommendations.

### **1.6 Limitations of the study**

As it is the case with research in many war torn countries, availability of reliable data is a major challenge in Afghanistan. Further, the comparative approach method is used for this study and focused is placed on features. As such, the methodology is not based on a well-defined model. Finally, the choice of country (Germany) to compare with Afghanistan may not be ideal given the difference that exist between them in terms of culture, level of development and political environment.

## Chapter Two: Literature Review

Considering the important role of TVET, several researchers have shown the contribution of TVET on improving labors skills, job creation, employability, social participation, poverty reduction, economic and social development (Akoojee, 2012). Other studies such as McGrath and Akoojee 2009, have demonstrated that vocational education plays a key role in nation's competitiveness internationally. Fawcett, Sawi and Allison (2014) categorized TVET into three distinct models i.e. the liberal market model, the state-regulated bureaucratic model and finally the dual system model. In Europe, England is recognized for its market model, while France is easily noticeable by its bureaucratique approach and Germany applauded for a dual model.

Comparative analysis seems to be the much privileged approach when it comes to TVET studies. Looking at the trends in comparative research and studies, the cedefop (the European Centre for the Development of Vocational Training) organized a conference in 1998 in Germany. Attended by several researchers and TVET professionals across Europe, the aim of the conference was to see how comparative studies in the domain of TVET relate to policy and practice. The objective was also to examine how these studies have promoted innovation in Europe. However, not much literature exists in the case of Afghanistan. This chapter will examine the different TVET features before making a review of past comparative studies.

### 2.1 TVET Features

TVET features simply refer to the traits or identifying elements of a TVET system. They vary from recognition, financing, governance, relationship to the education system, linkage to the labor market and integration.

### **2.1.1: Structure**

TVET can take different structures. It can be informal, non-formal and formal. The formal TVET, also known as the most recognized, generally refers to training carried out within a well-defined institutional, legal and academic framework. The non-formal which is second in the ladder may have an academic framework without necessarily a legal institutional framework. The informal TVET is the least recognized and generally done without any defined recognizable framework. In some countries, especially in developed countries, the first structure and to a lesser extent, the second is predominant. In less developed countries, the three structures seem to cohabit.

### **2.1.2 Recognition**

Before the implementation of a system, it is important that it should be subject to discussions, studies and debates. As such, the government, the general public, employers and academic community will give value to the policy if not only the concept, but the policy itself as well as its relevance to each actor is well understood. This facilitates the participation of different actors in the design and implementation process. However, the reality is not always the case. Keating, J., Medrich, E., Volkoff, V., & Perry, J. (2002), revealed that there is in some parts a lack of recognition of TVET in the labor market. This can be formal or informal and lead to a reduction in the rate of returns on private and industry sector investments. The informal lack of recognition is mainly through the poor standing of qualifications issued while the formal is through the structures that issue the certificates.

### **2.1.3: Financing**

From the design and inception of TVET systems, through their implementation, monitoring and evaluation, the key question is financing. Here, the question is who pays the bills for the initial

and continuous training of individuals, the setting up of training institutions and the acquisition of necessary equipment. The three models of TVET presented by Fawcett, Sawi and Allison (2014) give an idea of the different modes of financing. That is, the liberal market TVET model is being essentially financed by the market or the private sector, the state-regulated bureaucratic TVET model being mostly financed by the government and the dual system TVET model being financed both by the government and the private sector. The dual system of financing, however, appears to be the most widespread.

#### **2.1.4: Governance**

The third feature of TVET is governance. Governance refers to the training and supervisory authority and the management approach used in TVET. The governance of TVET may follow the same direction like financing, that is, TVET being generally administered by the institutions that support the financial burden. However, it is important here to make the distinction between initial and continuous TVET. In some countries, TVET administration is divided according to initial and continuous TVET. In this case, the public authorities take charge of the administration of initial TVET while the industry takes responsibility over the continuous TVET. But the general trend as observed by Fawcett, Sawi and Allison (2014), is towards uniting efforts rather than division.

#### **2.1.5: Relationship with the education system**

Another important feature of TVET is the relationship with the education system. TVET systems are relatively recent compared to education systems. But they're also fast developing. Their relationship depends on the existing education system, the perceived or real perception that people make of TVET and the type of TVET being introduced. Recognition is therefore

determinants to the success of TVET policies. If the labor market in particular does not recognize the products of TVET, the unemployment problem that TVET policies seek to resolve will persist.

### **2.1.6: Labor market linkage**

Further, labor market linkages explain the relationship between TVET and the labor market. When this link is strong, TVET tends to be relevant to employers and thus helps resolve unemployment problems as youths will easily find work upon completion of their training. If the link is weak, investments in TVET may not be fruitful.

### **2.1.7: Integration**

Integration in TVET can be understood as the blending of academic trainings and TVET. It is the combination of theory and practical. Integration is at its best when TVET teachers are well trained and the relevant equipment is available to match the theoretical lessons and practices are available.

These features will be the key variables for our study. Other features may include the regulatory framework of TVET, the social, political, economic and cultural environment within which TVET originated and developed as well as the history.

## **2.2 Review of past comparative studies on TVET systems**

With regards to comparative analysis studies, Alexander, S., Sun Y. and Kai, G. (2008), made comparative analysis of China and Germany VET and labor market. After examining in detail the impact that the political systems of both countries have on the education system of both countries, the authors focused on how the TVET systems are structured, their legal frameworks

and the place of skill assessment in labor market compatibility. Finally, the strengths and weaknesses of both systems in terms of access are analyzed and implications drawn.

Keating, J., Medrich, E., Volkoff, V., & Perry, J. (2002), present a review of research on comparative study of VET Systems in nine countries (USA, Chile, Mexico, China, Japan, Singapore, Germany, France and the United Kingdom) across Europe, East Asia and the Americas. The authors refer to the target systems as being each under pressure for change. Each of these systems according to the authors, provide structural alternatives with regards to the different TVET features such as resource mobilization, regulation, integration and connection relationships with the overall system of education vis a vis labor market relation. However, the conclusions reveal that the link between the education systems and VET systems is generally a converging one. Financing being an important feature, sources of financing across all the systems have to be diversified and costs reduced. The target audience for this study being Australia, recommendations was made for improving the Australian system.

Burke, G. and Reuling, J. (2002), in their study on vocational and lifelong learning in Australia and Germany. The authors suggest that in Australia, TVET is more industry oriented and the trainees can complete their courses through different mediums of instruction including online, face to face or non-formal on the job training. The authors describe the German TVET as being “process based” in which all the actors collaborate with each other within the training process. In terms of structure, the study reveals that the German TVET is divided into initial and continuous, public & private, formal and non-formal. In Australia, public and private TVET compete for public and private financing. This means that a trainee can move to a private TVET provider, negotiate their training according to the terms set by regulation, and the government of Australia pays the

TVET provider. In conclusion, the paper raises the question as to what system should countries go for, the Australian and British loose system of TVET or the tight dual German system. According to the authors, when focus is made on a wider number of variables such as education indicators and not focus on youth unemployment, the Australian system does not envy the German system.

According to Cantor, L. (1989), TVET systems are a reflection of the society in which they were developed. Looking at TVET systems in three developed countries, Japan, Germany and the United Kingdom, with a focus on youths from 16 to 19 years, the study reveals that each of these countries have their own models. In Japan like in the USA, this age group is in majority following the schooling model. In Germany, the dominant dual model gives the young people the possibility to continue school-based general education while acquiring on the job skills through a well-developed apprenticeship system. In the United Kingdom, the mixed system combines aspects of the schooling model and those of the German dual model. In each of these countries, different factors explain the choice of TVET system. In Japan for example, the authors argue that the schooling model is based on the densely populated nature of the country and limited natural resources, homogeneity in society which makes consensus easy, the 'obsession for education' in Japan, life-long employments and the government's permanent role in education and TVET. In Germany, the study notes that the dual system comes from a series of measures put in place by the federal government in view of strengthening collaboration with regional governments, the industry and unions after the Second World War II. Under the German Ministry of Education and Science, the Federal Institute of Vocational Training in Berlin was set in place. This agency works with the public sector, industry and trade unions to determine what competences and skills are required or no longer required in each profession. The private sector through the Chamber of Industry and Commerce, test the vocational and educational aspects of the curricular in the job premises.

Adding to the part time vocational training, Germany has a one-year full time vocational training scheme which enables school leavers to have an introduction to an area of work.

In France, Speake, L. (2007) observes that education is compulsory up to the age of 16. This comprises of primary, lower secondary and upper secondary education. The last year of lower secondary education is also called the “vocational guidance cycle”. In upper secondary education, the curriculum is made up of general and technological education and a professional education program. At the end of the three years’ general technological program, pupils obtain a vocational training certificate or general or technological baccalaureates. For the two years professional program which includes a placement in a company, the pupil obtains the first level vocational training qualification. After these qualifications, students can follow a two years training to obtain a vocational baccalaureate which paves the way for employment. Vocational information and guidance centers under the Ministry of National Education hold a database of trainings, qualifications and professions for the public. They also serve as link between students, recruiters and the public sector. Like in France, the author affirms that children up to the age of 16 receive compulsory education in Scotland. However, the specificity is that there is no unique curriculum. The Scottish Executive outs guidelines via the “National Priorities for Education”. The curriculum in the lower secondary has three stages and the last stage (3<sup>rd</sup> and 4<sup>th</sup> year) have some vocational trainings in upper secondary education, there is much freedom for pupils to choose and in the upper stage, there focus is on TVET. The Scottish Qualifications Authority (SQA) works in collaboration with public and private sector stakeholders to implement all non-degree policies and TVET as well.

Cockrill, A., & Scott, P. (1997), focused on the trends and issues facing vocational training in Germany. In this paper, the different features of TVET in Germany and notably the dual system.

In this system, irrespective of the type of school attained, be it full time or part time vocational training, graduates are legally required to continue general education until the age of 18 years. The study concludes that despite the admiration that the German dual system can still boast of having, there are major issues to deal with including funding cost of trainings and flexibility.

This literature review has focused on the definition of TVET and its features and past comparative studies on TVET. A study which presents the case of Germany was included so as to enable the comparative analysis in the up-coming chapter.

## **Chapter Three: Features of TVET in Afghanistan**

### **3.1 The structure of TVET in Afghanistan**

In Afghanistan, there are three types of Technical Vocation Education and Training (TVET) formal, non-formal and informal education. Vocational education is offered in schools/institutes, community, work-based settings to train beneficiaries with required education, skills and attitudes needed in the working area.

- Formal TVET

DMTVET is responsible for offering formal TVET programs in school and institutes. The formal TVET refers to training which have a unified curriculum approved by the Ministry of Education. These programs cover different grades starting from class one to fourteen. The students can get either 12 grade baccalaureate at school or 14 grade diplomas at institutes.

- Informal TVET:

The Deputy Ministry for TVET also provides informal TVET or in Dari language it is Ustad Shagardi. In this approach, the DMTVET targets students who have practical knowledge but they do not have theoretical knowledge. The program is conducted for a period of three years with a 12 grade baccalaureate degree offered at the end.

- Non Formal TVET:

MoLSAMD and NGOs are proving non-formal TVET programs. The training programs are usually short term courses, ranging from three to nine months. There is no formal education requirement for learners to be enrolled in this type of TVET programs.

### 3.1 TVET Institutions

Currently in Afghanistan, several entities provide countrywide Technical Vocational Training. This diverse source has made TVET more accessible to Afghans. However, there huge concerns exist especially with regards to the quality of institutions offering these trainings, harmonization of training curricular, lack of experience and the absence of regulation. The direct consequence is the weak linkage between TVET and the labor market. Table one below shows the different types of TVET institutions, the structure of the training received and the governing body

**Table 1: TVET Providers in Afghanistan**

Overview of TVET Providers			
Provider Type	Level	Delivery	Managed by
Public TVET Institutes	Grades 13-14	Formal	MoE
Public TVET High Schools	Grades 10 – 12	Formal	MoE
Public TVET Training Centers	6 – 9 months	Non-formal	MoLSAMD, NSDP
Private TVET Providers	Mixed of the above	Mixed formal and non-formal	Not all have contacts with MOE, MoLSAMD or NSDP
NGO TVET Providers			

Source: USAID Workforce Development in Afghanistan, an informal summary of key data, 2012

Source: <http://anafae.af/wp-content/uploads/2016/09/Technical-and-Vocational-Education-and-Training-Sub-Sector-Report-2012.pdf>

As seen in table one above, TVET services are offered by a wide-range of institutions in Afghanistan. Many of these TVET institutions only provide theoretical teachings rather than practical skills development due to the lack of equipment and qualified teachers in workshops. The role of the different actors is presented below.

- **Ministry of Education**

In 2008 the TVET directorate was promoted to Deputy Ministry of Technical and Vocational Education and Training (DMTVET), with the aim to expand and improve the quality of TVET in Afghanistan. DMTVET under the Ministry of Education (MoE) provides formal technical education in the country. These are usually longer courses which range from two to five years, with a unified formal curriculum approved and recognized by the Ministry of Education.

According to Ministry of Education (2015), DMTVET has 294 public formal TVET institutions in 34 provinces, of which 173 are high school level (grades 10 to 12), and institute level (Grades 13 to-14 & Grades 10 to 14). The TVET Institutions offer vocational training courses in more than sixty fields, such as agriculture, accounting and administration, veterinary, electricity, machinery, auto repair, music and art. According to the Ministry of Education, the number of learners enrolled in both public and private TVET centers expanded from 31,424 in 2011 to 81,261 in 2015.

- **Ministry of Labour, Social Affairs, Martyrs and Disabled**

The Ministry of Labour, Social Affairs, Martyrs and Disabled (MoLSAMD) with its General Directorate for TVET (GDTVET) manage and operate a network of public TVET training centers that offer Non-Formal TVET programs. The non-formal TVET as earlier mentioned are generally short term programs with three to nine months' duration. The centers under the ministry mainly offer trainings to jobless youths, adults with no formal learning, martyrs' relative and the disabled. Most of trainees are from vulnerable groups and have not completed formal primary education. The Ministry of Labour with the assistance of the World Bank established the National

Skills Development Program (NSDP) in 2009 with the objective to train less educated unemployed population in key sectors such as carpentry, auto repair, welding and petty trades.

In 2013, MoLSAMD had over 30 urban vocational training centers. The capacity of these centers was to enroll about 8,000 trainees annually. MoLSAMD is in charge of designing and implementing course curricula; training, evaluation and assessment; and issue of certificates. The ministry also facilitates capacity building, registry and coordination of the local non-formal sector NGOs and acts as liaison for the key line ministries working within the fields (UNESCO-IBE, 2011).

- **Private Sector**

The private sector plays an important role in the provision of technical vocational education and training in Afghanistan. According to National Statistical Report on Formal TVET in Afghanistan (2015) presently 40 institutions have been registered at the Deputy Ministry for TVET. The private colleges enroll general education graduates of grade 12 who are willing to continue their education and receive vocational training for a period of two years.

- **Non-Government Organization TVET Providers**

As at 2009, about 100 national and international NGOs in Afghanistan provided technical and vocational education according to the Baseline Data for Quality of TVET Provision (MoLSAMD, 2009). The duration of training courses provided by NGOs varies from three to nine months. It is worth noting that trainings offered by these NGOs are not officially recognized due to the absence of a certification and accreditation system. The technical and vocational training by international providers is mainly focused on Information and Communication Technology sector and English language.

### **3.2 Financing of TVET in Afghanistan**

The financing of TVET in Afghanistan is done by development partners, the government and the apprentice. Development partners through external funding are the highest contributors. The reason for this is due to the fact that the state of Afghanistan as a result of political instability faces serious budgetary challenges. The funding received for TVET from development partners can be direct or indirect.

Direct funding is usually done through NGOs and the industry. Local and international NGOs play an active role especially in non-formal TVET in Afghanistan. They fund and provide vocational trainings to young people and facilitate their integration in the job market. English language and ICT skills fall among the most important trainings that beneficiaries receive.

Indirect external funding of TVET is done through the government structures especially the MoE and the MoLSAMD. This can be through technical assistance or financial budgetary contributions. In the domain of technical assistance, the German Federal Ministry for Economic Cooperation and Development (BMZ) has designed innovative strategies on international TVET cooperation to support and develop TVET policies in developing countries (BMZ, 2012). These strategies particularly focus on forced displacements and fragile states. Afghanistan has greatly benefitted from this support. Budgetary support on the other hand is the contributions given by bilateral and multilateral development agencies to support the Afghanistan government in its search for stability and durable peace. These resources enable the government to build schools, TVET centers, recruit and pay teachers and equip the training centers.

### **3.3 Governance of TVET in Afghanistan**

The administration of formal TVET in Afghanistan is almost entirely done by the government through the MoE and the MoLSAMD. The creation of schools, design of curricular, accreditation, recognition, and issue of certificates is the responsibility of the MoE. The training programs are longer, cover a wider spectrum of subjects, and the curricular has a direct relationship with the education system.

In the informal and non-formal TVET, there is a noticeable absence of regulation, norms and standards. There is no unified curricular. The subject areas are mostly related to ICT and the English language. They're shorter in duration and are generally not accredited and less connected to the education system in the country.

### **3.4 Linkage with the labor market**

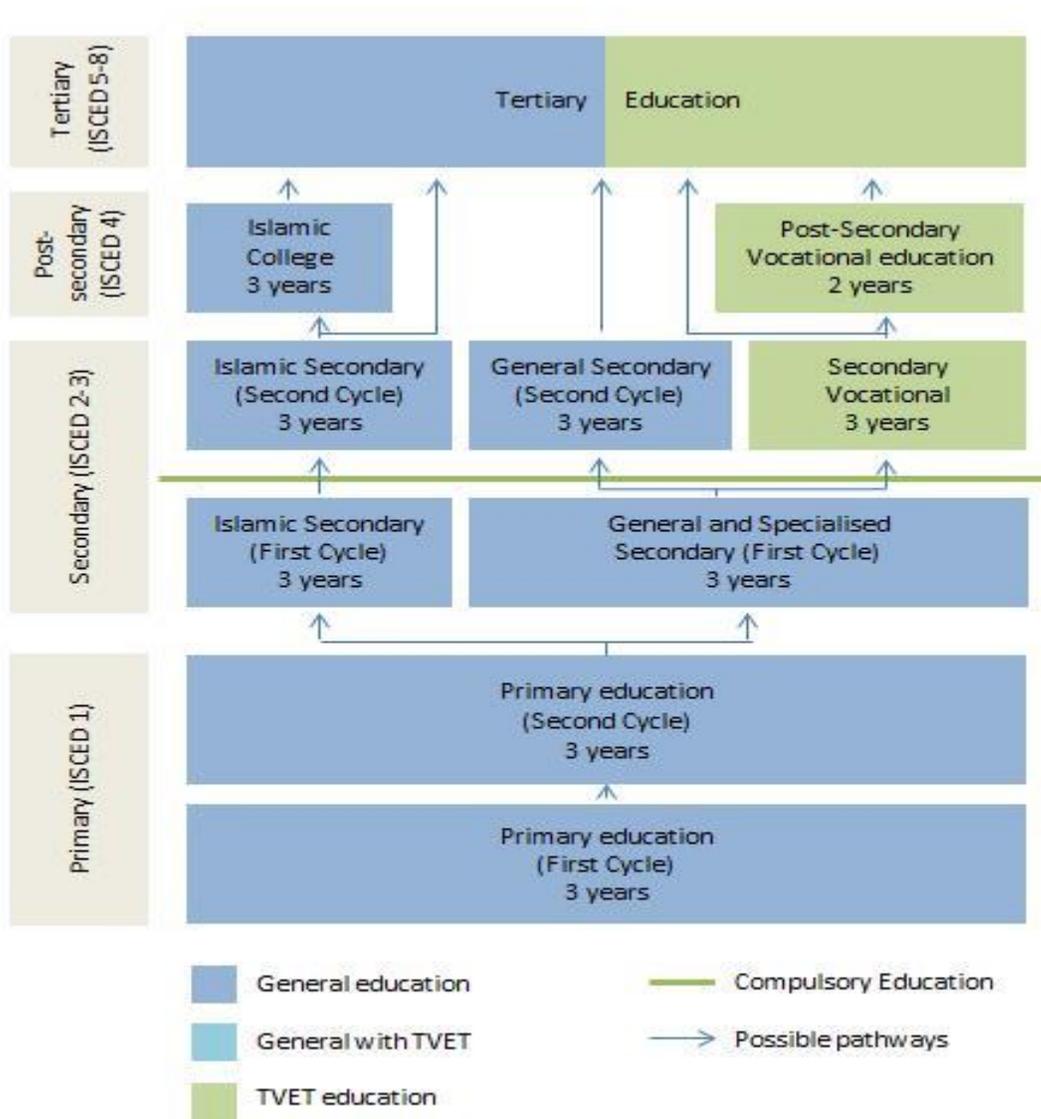
The linkage between TVET with the labor market in Afghanistan is far from good for several reasons. First, in the policy design and implementation of initial TVET, the industry plays a reduced role. The institutions as earlier seen which are in charge of training are poorly equipped and lack qualified teaching staff. As such, it is difficult to match training and job market requirements.

### **3.5 Relation to the education system**

There exists a strong linkage between TVET and Afghan system of education. As seen on the Afghanistan education cycle below, after primary education, students can choose to do three years Islamic education or three years of general and specialized education. Those who choose the general and specialized education continue with either general education or secondary

vocational studies. After secondary vocation, the student moves to post-secondary and subsequently tertiary vocational studies.

Figure 1. Afghanistan education cycle



Source: UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training [https://unevoc.unesco.org/wtdb/worldtvtdatabase\\_afg\\_en.pdf](https://unevoc.unesco.org/wtdb/worldtvtdatabase_afg_en.pdf)

## **Chapter Four: Comparative Analysis between TVET in Afghanistan and in Germany**

### **4.1 Structure**

This section, shall examine the policies and regulations and the institutional framework of TVET in both countries.

#### **4.1.1 Policies and regulations**

One aspect in which Afghanistan does not fall short is in the domain policy. Even though, questions may be posed as to their quality and relevance. Under the supervision of different administrations, different strategic plans have been designed to create employment taking into account TVET. They include but not limited to:

Afghanistan National Development Strategy (ANDS), TVET Strategy (2013 – 2018), National Education Strategic Plan (NESP) I, II, and III, National Education Interim Plan (NEIP), National Skills Development Program (NSDP), National Action Plan for the Women of Afghanistan (NAPWA), The MoLSAMD 5-year skills Development Plan (Ministry of Education, 2015).

However, when it comes to regulation, all the documentary research carried out within this study has not made mention of any TVET regulation in Afghanistan.

In Germany, there is also a multiplicity of policies that were designed, implemented and reviewed over the years. The main difference is that Germany has a vocational training Act known as the *Berufsbildungsgesetz* (BBiG). It came to force in March 2005 and governs vocational

trainings, organizations of vocational training and vocational training research, planning and statistics. It also has dispositions on fines for those who do not respect the regulation.

#### **4.1.2 Institutional framework**

The Ministry of Education always played a central task in TVET in Afghanistan. In 1947, the Department for Technical and Vocational Education (DTVET) of the Ministry of Education was established. It is in charge of vocational education and curriculum development in Afghanistan. Vocational education curriculum has been developed for different fields as such agriculture, technical education, business and administration and arts and crafts, and the vocational schools were designed to be flexible in terms of evaluation of education and implementing their curriculums. In order to improve TVET management, supervision and advancement, separate structures under DTVET saw the light of day. The new structures included a section to consult with employers and industry concerning vocational education programs and also provide services for students. Other institutions that participate in the TVET system are the MoLSMAD and the private sector.

Similarly, the German Ministry in charge of Education and Science facilitated TVET development to this day. The Federal Institute of Vocational Training (FIVT) in Berlin placed under the Ministry of Education can be assimilated to the DTVET in Afghanistan. However, their capacities (human, material and financial) and missions seem to differ widely, thus posing quality and relevance challenges in Afghanistan. In Germany, the collaboration between the public and private stakeholders is more direct and runs relatively smoothly throughout the policy implementation process. This is not always the case as seen in the Afghanistan case.

## **4.2 Labor market linkage**

In Afghanistan, the TVET the link to the labor market was not enviable. The consequence of this was the training of young people who did not match the job profiles in the market. This situation led to the creation within the DTVET of a Division in charge of consulting with employers and the industry and providing services to students. Its mission is to be the link between the government and employers, so that policies should be geared towards satisfying existing demand for labor.

In Germany the linkage appears to be so smooth that the choice of secondary education greatly determines a person's later career options Cockrill, A., and Scott, P., (1997). These authors precise that every company in Germany have to be registered in their respective local chambers (industry or craft, commerce law, medicine, ...) where they pay their levies. These chambers act as the link between the private and the public sector. They are comprised of vocational training committees and training councilors which help to design and implement TVET content, advice employers, employees and the government. Once the application of a potential apprentice is accepted by the employer, a training contract is signed and registered with the chambers which will be responsible for the follow-up. This fluid cooperation framework between the employer and the TVET system enables recognition and a strong linkage to the labor market.

## **4.3 Relationship to the education system**

In Afghanistan, TVET is linked to the education system as seen in figure 1. After primary education, students can choose to do three years' Islamic education or three years of general and specialized education. Those who choose the general and specialized education continue with either general education or secondary vocational education (UNESCO-UNEVOC, 2012). After

secondary vocational education, the student moves to post-secondary vocational training and subsequently tertiary education.

In Germany the situation is similar. As Cockrill, A., and Scott, P., (1997) put it; the German TVET and the education system are “inextricably linked”. According to these authors, there are four types of secondary schools which a pupil can choose from after leaving primary school. They are: *the Gymnasium*, *the Realschule*, *the Hauptschule* and *the Gesamtschule* (in some states). The *Gymnasium* is mostly academic and ends with an entry qualification to high school. In the past, it was the entrance to high school, but today, many students leave from here to do vocational training. The *Realschule* is mostly specialized in TVET training. Here, students are prepared for professional life and not for general education. During the six years long training, students are taught practical skills and they go through job placements and by the time they graduate, they have some amount of work experience. Upon graduation, they may decide to stay in apprenticeship, change to the general education system or enter a full time vocational school. Although the option of change to general education (*Gymnasium*) is possible, the difference in curricular may be a major challenge for the student. The *Hauptschule* was initially the most attended in Germany and it was a place where recruiters came to search for apprentices. It offers basic education up to 15 years. However, overtime, it is mostly used for pupils with some form of disability. In the *Gesamtschule* a comprehensive training is administered to the pupils. They go through all the three different systems described above or are all thought together until the age of 15. This form doesn't seem to gain much steam. Irrespective of the type of school attained be it full time or part time vocational training, graduates are legally required to continue general education until the age of 18. This legal requirement is what gives the German TVET model its dualistic sense.

From the analysis, both the German and Afghan TVET are related to the education system. The key difference will be at the level of flexibility, quality and the amount of experience at work that the German system offers.

#### **4.4 Financing TVET**

In Afghanistan, the funding of TVET as earlier seen is done by development partners, the government and the apprentice.

In Germany, the government and the private employer both bear the cost of the training. Once a potential apprentice signs a training contract with an employer, the employer begins to bear the cost of training. They pay the apprentice an allowance each month which is far less than that of the full time recruits in the company. A levy is imposed on small and medium-sized enterprises, which rely on joint training centers which the chamber manages. The government only supports the cost of the school-based component of Germany's TVET system

#### **4.5 Governance of TVET**

In Afghanistan, the Ministry of Education through the DMTVET, the MoLSAMD and development partners are at the forefront of TVET governance.

In Germany, the Ministry of Education and Science through the FIVT and the chambers are the major TVET governing bodies. Despite the regulatory framework in place, Cockrill, A., and Scott, P., (1997) note that not all companies in Germany participate in the training of apprentices and the training conditions for the same specialty are not the same. Apprentices tend to apply to companies offering better conditions while these companies recruit the high quality apprentices in return.

## **Chapter Five: Conclusion and Recommendations**

This study attempted to examine TVET features in Afghanistan in relation to Germany. Information was collected from academic publications, conference papers and working papers. The result suggests that both systems have similarities in their institutional framework and relation to the education system. However, they are fundamentally different. The Afghanistan TVET system is much tilted towards the bureaucratique system as seen in France. This is in contrast to the dual system that is in place in Germany. The environment in which TVET develops, the strategies put in place, the international cooperation and regulation frameworks are areas where Afghanistan can learn from Germany.

### **5.1 Improve the education environment**

Considering that TVET systems do not operate in an island, the environment in which these systems are implemented play a determining role in their success. This environment includes the political, economic, social and cultural environment. As with Germany, TVET developed following the fall of the Berlin wall and the reconciliation of the German people. Political stability in Afghanistan will help develop a strong regulatory framework for TVET, engage the already trained skills in to work and promote economic growth. Implementing policies is a major challenge for states and in fragile states, the challenge is exacerbated. TVET in Afghanistan will remain a quest if the peace building process does not yield positive results.

### **5.2 Design adequate TVET strategies for fragile states**

As Afghanistan is war torn nation, the prime focus should be education for peace but not to undermine the importance of general education and TVET. Government should work on

incorporating peace education in all level and type of education nationwide (be it General education of TVET). To achieve the end goal, the government should engage all actors and stakeholders to foster peace building, thereby enhancing education in general and TVET in particular.

The vocational high schools and institutions should provide training in lecture and as well as practical forms. Considering the importance of laboratories and hand-on activities in vocational training, vocational high schools and institutes should be equipped with laboratories to assure the efficiency of education. Vocational training should also incorporate on the job training by arranging internships. To provide the necessary skills and knowledge, vocational technical schools should have complete learning environments including machines, equipment and facilities in order to foster cognitive learning.

- **Development in curriculum**

To avoid finance and material loss, Afghanistan vocational education should consider labor market information, mainly labor demand and supply. To avoid underemployment or unemployment after graduation, vocational training institutes should use labor market information from concerned bodies. This can help foster employment whereby economic development is assured. This can be done by utilizing secondary data from labor offices and stakeholders, community skills-training centers or using mobile workshops where possible. Training programs should include peace education, basic literacy and numeracy, and family life skills. Post-training support services, including micro-financing and mentoring, should be provided to graduates to facilitate job placement.

#### - **Developing efficient transmission channels for ODA in TVETs**

The efficiency of present day transmission channels of TVET ODA should be re-examined. The sources, the means of transmission, the destination and the focus of this ODA have to be brought to light. If it is clear that there is no such thing as ‘free aid’ it means, the TVET assistance received by Afghanistan could have mixed results. These resources however are needed and channeling them correctly will help improve efficiency.

Benchmarking the other education systems or policies especially in fragile states can help Afghanistan. For instance, the development path and the attitude of the Korean people toward education especially, may be useful for Afghanistan’s TVET system. One of the missing features in Afghanistan’s higher education, particularly TVET policy, has been the prioritization of education and understanding the impact of quality education for the future economic development and nation building process.

### **5.3 Improve existing TVET cooperation framework with other countries**

It is no doubt that the instability in Afghanistan slows down efforts for diplomatic cooperation. TVET cooperation is not an exception. But in the world of TVET, cooperation appears to be an indispensable word. As earlier mentioned, comparative analysis is one of the most used methods when it comes to TVET studies. The TVET Experts’ conference organized by the cedefop in 1998 explained various means through which comparative studies relate to policy and practice. These channels have been implemented by different countries and Afghanistan can learn from them. According Speake, L. (2007), in 2004, France and Scotland put in place a Franco-Scottish TVET Expert Group within the framework of their international cooperation. The objective of this Group was to reflect on TVET issues that were relevant to both countries and to

make policy recommendations. Afghanistan can do same. Setting up an Expert Group or an international cooperation framework with a country or countries with an advanced experience in TVET will help improve Afghanistan's system. For the work of this Expert Group to have any impact, it is important that reflections be done on the potential long term impact of such a platform, the choice of the country and the resources required identified. This will help improve the policies in place, and bring in better follow-up and coordination in TVET. Countries such as Germany, Britain, Australia and South Korea are examples of TVET success stories.

Germany's dual model has been applauded worldwide and many countries try to follow this example. This probably explains why the German Federal Ministry for Economic Cooperation and Development (BMZ) has designed innovative strategies on international TVET cooperation to support and develop TVET policies in developing countries. These strategies which particularly focus on forced displacements and fragile states will be most useful to Afghanistan. With an already existing international cooperation platform for sharing knowledge on TVET within the framework of bilateral ODA, the choice of Germany may just be easy.

#### **5.4 Elaborate a TVET Act**

Regulation generally tends to improve stability and reduce volatility. The absence of it creates an opposite effect. In Afghanistan, the absence of a regulation is partly responsible for the disorder observed in private sector TVET. A TVET Act will put in place a level playing ground for all the stakeholders involved, and pave the way for the improvement that is much needed in this sector. The type of regulation depends on the choice of TVET system and many other country specific factors. Each of the leading countries mentioned earlier (Germany, Korea and Britain) have TVET regulations.

In Germany, the TVET Act covers all vocational schools which do not fall within the scope of the education acts (Section 3.1). It however does not concern training offered within the framework of an employer relation governed by public law. An indication that the regulation of TVET in Germany mostly concerns private sector and not the public sector. It's been observed during the course of this study that Afghanistan needs to do more in this sector plagued by a lack of organization and poor quality trainings.

Afghanistan can also learn from the weaknesses of Germany's TVET Act which appears to be less flexible. This flexibility stems from the fact that the regulation is not adapted to each profession identified within the labor market. Some dispositions therefore appear easily applicable in some profession and much difficult in others.

Finally, far from focusing on Germany's regulatory framework, the proposed Afghan TVET Act should consider country specific factors and a wide range of other regulatory frameworks. The country specific factors will include social, cultural, political, religious and economic considerations. Regulations from other countries especially those in Muslim dominated countries or other fragile states like Afghanistan will be worth exploring.

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