### EDUCATION - JOB MATCH AMONG TECHNICAL, VOCATIONAL EDUCATION AND TRAINING (TVET) GRADUATES IN BUNO BEDELLE ZONE OF OROMIA REGIONAL STATE.



# JIMMA UNIVERSITY COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCES DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

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June, 2018

Jimma, Ethiopia

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#### **DEDICATION**

This thesis is dedicated to my unforgettable class mate Yasin Abba Jobir, who was with me when I started this program but lost him in unexpected Car accidental on May 30, 2010 E.C. Dear Yasin you have advised and gave me moral support within two years in many ways. Thank you for the thoughtfulness, the well wishes and encouragement. I never forget you throughout my life. I pray always to God to put your Soul in the heaven.

#### Declaration

I, the under signed, declared that this thesis is my original work and has not been presented for

the degree in any other university, that all source of materials used for the thesis have been duly
acknowledged.
Name
Sign
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This thesis has submitted for the examination with my approval as university advisor
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management
Date of Submission

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#### Table of Contents

#### Contents

Acknowledgements
Table of Contentsi
List of Tablesv
Acronyms and Abbreviationsv
Abstractvii
CHAPTER ONE
1. Introduction
Background of the study
Statement of the Problem
1.3 Objective of the study
1.3.2. Specific objectives.
1.4 Significance of the Study
1.5 Delimitation of the study
1.6 Operational definition of key terms
1.7 Organization of the study
CHAPTER TWO
2. Review of Related Literature
2.1. Brief review of the of education-job match literature
2.1.2 Skill Gap
2.1.3 The Concept of Competence and Its Definition

2	2.2	The	Human Capital Theory	. 13
2	2.3	Job	Satisfaction	. 15
2	2.4	Ove	erviews of Technical and Vocational education and Training	. 17
	2.4.1		TVET Development of in Africa	. 19
	2.4.	2	The Historical Framework of TEVT in Ethiopia	. 21
	2.4.	4	Objectives of TVET in Ethiopia	. 24
	2.4.	5	The Policy Framework	. 25
2	2.5	Pri	nciples of TVET	. 26
2	2.6	Mo	des of TVET Delivery and Their Challenges	. 27
2	2.7	Cui	rent Status of TVET in Ethiopia	. 30
2	2.8	The	e TVET Curriculum Development	. 31
2	2.9	His	torical Development of Entrepreneurship	. 31
	2.9.	1	Entrepreneurship in Ethiopia	. 32
	2.9.	2	Contributions of Entrepreneurship	. 33
	2.9.	3	Entrepreneurial Motivation	. 33
	2.9.	4	Challenges of Job Creation for Young Graduates	. 33
	2.9.	5	TVET for Self-Employment	. 34
СН	APT	ER 7	ΓHREE	. 37
3.	Res	earc	h Methodology	. 37
3	3.1	Res	earch Design	. 37
3	3.2	Res	earch Method	. 37
3	3.2	Sou	rce of data	. 38
3	3.3	Sample size and sampling technique		. 38
3	3.4	Inst	rument of data collection	. 40
	3.4.	1	Questionnaire	. 40

3.4.2 Interview
3.4.3 Document Analysis
3.5 Data collection procedure
3.5.1 Pilot Test
3.5.2 Validity and Reliability Checks
3.6 Data analysis
3.7 Ethical consideration
CHAPTER FOUR
4. PRESENTATION AND ANALYSIS OF THE DATA
4.1. Characteristics of the Respondents
4.2. Status of Employment of TVET Graduates in the Labour Market
4.3 Major factors which contribute education job mis- match among TVET Graduates 55
CHAPTER FIVE
5. Summary, Conclusions and Recommendations
5.1. Summary of major finding
5.2. Conclusions 60
5.3. Recommendations
Reference
Appendix

#### List of Tables

Table 1.Summary of the Population, Sample Size and Sampling Technique	39
Table2. Reliability Statistics	42
Table3. Demographic Characteristics of the Respondents	45
Table4.Dataanalyses on employment status in of TVET Graduate in labor market	47
Table5 Data analyses on employment status in of TVET Graduatein in area of study (Field)	49
Table6 Level of education and job match of TVET Graduate	51
Table 7 The skills acquired at TVET and required in the job market	52
Table 8: Mean of genders on field of study and marketoriented	54
Table 9: An independent t-test for TVET graduates field of study and market oriented program.	54
Table 10.factors which contribute education job mis- match among TVET Graduates	55

#### **Acronyms and Abbreviations**

ADB. – Asian Development Bank

CSTC: Community Skill Training Center

ECBP: Engineering Capacity Building Program

EDPM: Educational Planning and Management

ESDP: Education Sector Development Program

ETB: Ethiopian birr

FDRE: Federal Democratic Republic of Ethiopia.

GTP Growth& Transformation Plan

GTZ: Gesellschaft fur Internationale Zusammenarbeit

ILO: InternationalLabourOrganization

IZA: 'International Zeolite Association'

MoE: Ministry of Education

MOFED: Ministry of Finance and Economic Development

MSE: Micro and Small Enterprises

PASDEP: Plan for Accelerated End Poverty

SPSS: Statistical Package for Social Science

TVET: Technical and Vocational Education and Training

UNESCO: United Nations Educational, Scientific, and Cultural Organization

UNESCO-UNEVOC: United Nations Educational, Scientific, and Cultural Organization - United Nations Educational, Vocational Organization Center

UPE: Universal primary education

USA: United States of America

USSR: Union of Soviet Socialist Republics

#### **Abstract**

The main objective of this study was to explore Education-Job Match among TVET Graduates in Buno Bedelle Zone Oromia Regional State. This study employed concurrent mixed research design including both quantitative and qualitative approaches with more emphasis on quantitative as the leading method through close-ended questionnaires. In this study out of 1044 target TVET Graduate employed, a total of 289 Graduate employed were selected by using stratified random sampling technique proportionally. Out of 1044 Graduate employed who Graduated from 2006-2008E.C, 289 Graduate employed were selected from the sampled TVET Colleges by using stratified systematic random sampling technique and among field of studies, BEI, HNS, Animal production, GMFA and Masonry were purposely included in the study as these departments were given in all the four colleges. After took those graduates to get where they do used snow ball sampling and collect data through snow ball system. 12woreda public service employers and 4 deans of TVET colleges were purposely included in the study. For this study, the data gathering tools such as questionnaires, interview and document analysis were used to collect data from Graduate employed, dean of TVET College and Woreda public service employers. Frequency, percentages, means, standard deviation, and Independent t-test were used to analyze the data. A reliability test was also performed to check the consistency and accuracy of the measurement scales by using a Cronbach alpha test through SPSS Version 21. The findings of the study indicated that the employment status of TVET graduates in the labor market quality of the TVET Program employment received the relevance of curriculum to the actual world and the satisfaction employed with their job Were very poor. Regarding the extent of match between level of education and job among TVET graduates in the study area, the employed level of education and job match of TVET Graduate was not match with their current work situation and also Concerning match between skills acquired at TVET and required in the job market in the study area, and the Competency of TVET Graduate employed interms of the skills acquired at TVET and required in the job market of TVET Graduate employed were slightly match with their current working situation.

#### **CHAPTER ONE**

#### 1 Introduction

This chapter deals with background of the study, statement of the problem, objectives of the study, significance of the study, delimitation of the study, operational definitions of key terms and organization of the study.

#### 1.1 Background of the study

It is well acknowledged that graduates' entry into the labour market is a critical mechanism through which public investment in education bares its returns (Pavitt, 1991; Salter and Martin, 2001). Indeed, as they are equipped with up-to-date competencies, graduates bring into the labour market innovative attitudes and competencies to combine and use knowledge in new productive ways (Senker and Senker, 1995; Walters, 2004; von Tunzelmann and Wang, 2007). For graduates entering the labor market, a job that matches one's interests and educational back ground is not always easy to obtain. Thus, the widespread occurrence of education-job mismatching may seriously jeopardize the actual returns to public, as well as private, investment in human capital and calls for a better understanding of the transition from study to world of work (Groot and Maassen van den Brink, 2000; Hartog, 2000; McGuinness, 2006).

The issue of education mismatch has a long history and it had been first identified in the 1870's (Glad well, 2008). As they mentioned, much attention was not paid on the issue of education mismatch. However, since the 1970s, considerable attention has been paid on this concept as supply of educated workers seemed to outpace the demand in the labor market (Freeman, 1975). Vertical mismatch and horizontal mismatch are the two types of education mismatch that had been identified by the European Centre for the Development of Vocational Training (Cede fop, 2010). Vertical mismatch occurs when the level of education that an individual is having is not suitable for the job. Vertical mismatch can occur in two ways, overeducation or under education. Overeducation exists when an individual is recruited for a job which requires lower level of education than those possessed by the individual. On the other hand, under education exists where the individual is having lower level of education than those are expected for the job. The logical end result of vertical mismatch is either the presence of overeducated workers who bring the

skills to their jobs in excess of the skills required for that job, or undereducated workers' skills are inferior compared to those required for that particular job.

Horizontal mismatch occurs when the type of education or skills that an individual is having, is inappropriate for the job. In accordance with horizontal mismatch person does a job unrelated to his or her field of study (Robst, 2007). Vertical and horizontal mismatches can occur due to three reasons. First, large number of skilled workers exists for the limited number of skilled jobs in the economy (Green & McIntosh, 2007). The second possible explanation for the existence of education mismatch is the asymmetry of labour market information (Cede fop, 2010). Due to lack of information about jobs in the job market, the graduates would not be assigned to jobs that they can make full use of their skills (Green & McIntosh, 2002). The third possible reason is employee skills are heterogeneous with the existing education system and the pattern of education. Therefore, individuals may consider themselves as overeducated for the job in terms of formal or paper qualifications, but when their skills or abilities are concerned they may be suited for the current job (Green & McIntosh, 2002).

The acquisition of work place skills is seen universally as a key driver of economic and technological development. It is the type of education which provides individuals with skills, knowledge and attitudes for effective employment in specific occupation. UNESCO (2009) defined TVET as all forms and aspects of education that are technical and vocational in nature, provided either in educational institutions or under their authority, by public authorities, the private sector or through other forms of organized education, formal or non-formal, aiming to ensure that all members of the community have access to the path ways of lifelong learning. The perception of the origin of TVET by many is in diverse ways. However, general education and training began in pre-history with the transmission of knowledge and culture from one generation to the next. The use of tools, beginning with those made from stones, evolved as humans evolved. In the pre-historic hunting and gathering society, skills were passed from parent to child as members of small, usually related, migratory groups. The education and training that occurred is best embodied in the Chinese proverb: 'Give a man a fish and he will eat for a day. Teach him how to fish and he will eat for a lifetime.' TVET can take place either in formal schools (i.e. kindergarten through to grade 12 or 13), or increasingly in post-secondary community and/or technical colleges, or informally by means of training at the work place and increasingly by distance media.

TVET prepares learners for specific jobs or types of work, often including practical and/or procedural activities. The aim of TVET is to enable learners to meet needs of employers for qualified labour and/or own needs related to production of goods and services. Skills training in general denotes development of qualifications in the same line, but with a more limited scope and volume of training, often focusing on performance of one task (e.g. operation of a specific machine) or a limited set of tasks (e.g. different types of welding). Throughout the world, and in particular in Sub-Saharan Africa, governments are renewing efforts to promote TVET with the belief that skill formation enhances productivity and sustains competitiveness in the global economy. According to Bhuwanee (2006), in recent years, concerns have been raised by most African countries about the move towards making TVET complementary to post-basic education. Similarly, Ethiopia is expanding TVET with an objective of creating competent, motivated, adaptable and innovative work force that contributes to poverty reduction and social and economic development through facilitating demand driven, high quality TVET relevant to all sectors of the economy, at all levels and to all people in need of skill development (Teklehaimanot, 2002).

The beginning of TVET in the formal educational scheme dates back to the founding of the first TVET schoolin1942 in Addis Ababa which had the name Écoles National des Arts Technique(re-named later on as Addis Ababa Technical School). The School offered trainings in many occupational fields such as electricity, economics, wood work, secreterial science, accounting, autho mechanics, building construction, carpentry. Qualified candidates were enrolled into the three years training program known as 8+3 program, and up on completion they were awarded diplomas. Over the years Addis Ababa Technical School underwent a number of changes in terms of the training offered and their entry level and duration. The School offered the 8+4, 10+2, and 10+3 programs and applicants from many parts of the country with the best academic achievements competed for admission to the then prestigious school.

In Oromia region, in 1997/98 there were 4 governments owned and 1 NGO owned TVET centers that have accommodated 557 trainees. Out of these trainees 492 were government trainees while 65 were that of NGO. By 2010/11 the number of TVET Institutions reached 196.Among those 93 were owned by government and 103 owned by non-government (private).TVET centers that had accommodated 145,453 trainees (Ministry of Education, 2011). Though there were empirical evidences on the current status of TVET in different parts of the country, there were no any studies conducted in the area of education job match among TVET Graduate in Buno Bedelle Zone of Oromia regional states. Thus this study intended to examine the status of education job match among TVET graduates in Buno Bedelle Zone, Oromia Regional Stat

#### 1.2. Statement of the Problem

TVET institutions are designed to provide education and training in specific areas of fields in which the industry requires. As it is indicated in TVET strategy (2008), the vision of Technical, Vocational Education and Training (TVET) in Ethiopia is to create competent and self-reliant citizens to contribute to the economic and social development of the country, thus improving the livelihoods of all Ethiopians and sustainably reducing poverty. (TVET Strategy, 2008,) According to this document, the mere expansion of TVET does not solve the problems of unemployment and low productivity of the economy unless it is able to respond to the competence needs of the labor market and create a competent, motivated and adaptable workforce capable of driving economic growth and development.

Having the right skills and competences can reduce the chance of mismatch and hence exert a positive influence on Wages and job satisfaction. This study examines a mismatch in level (vertical mismatch), a mismatch in content (horizontal mismatch) and a mismatch in skills, focusing on TVET graduates in Buno Bedelle Zone. The study begins with identifying the employment status of TVET graduates in the study area. Then it examines the occurrence of these types of mismatches. From policy perspective, this study is relevant because of the substantial investment society puts into education and mismatches are found to be inefficient (Allen and deweert, 2007; Robst, 2007). Mismatch may represent a large cost, both economically since returns on investments in education are not fully obtained), as well as mentally as graduates don't end up where they wish to be. Witte and Kalleberg (1995) note that there is theoretical importance to the issue of education-job match, as it brings attention to the understanding of how and why individuals are matched to their employment, which is a concern of many labour market specialists.

Many studies were conducted on TVET institutions/Colleges in Ethiopia indifferent areas by different researchers Though there were bunches of studies on TVET in Ethiopia, there was no study on education job match among TVET graduates in Buno Bedelle zone. Thus this research examined education job match among TVET graduates in Buno Bedelle zone. To this end this study elucidated the following basic questions

- 1. What is the employment status of TVET graduates in the study area?
- 2. What is the extent of vertical mismatch among TVET graduates in the study area?

- 3. What is the extent of match between level of education and job among TVET graduates in the study area?
- 4. How is the match between the skills acquired at TVET and required in the job market in the study area?
- 5. What are the major factors which contribute to education-job mismatch among TVET graduates in Buno Bedelle zone?

#### 1.3 Objective of the study

#### 1.3.1. General objective

The main objective of this study is to examine the status of education - job match among TVET Graduate in Buno Bedelle Zone of Oromia Regional State.

#### 1.3.2. Specific objectives.

- ➤ To identify the employment status of TVET graduates in the labor market in Buno Bedelle Zone of Oromia Regional State.
- To examine the level of match between level of education and current job among TVET graduates in the study area
- > To identify the gap between skills acquired at TVET and required on the job market among TVET graduates in Buno Bedelle zone
- > To identify factors contributing for the prevailing education- job mismatch among TVET graduates in the study area.

#### 1.4 Significance of the Study

The study is to assess Education-Job match Among TVET Graduates in Buno Bedelle Zone of Oromia Regional State.TVET institutions are designed to provide education and training in specific areas of fields in which the industry requires. As it is indicated in TVET strategy (2008), the vision of Technical, Vocational Education and Training (TVET) in Ethiopia is to create competent and self-reliant citizens to contribute to the economic and social development of the country, thus improving the livelihoods of all Ethiopians and sustainably reducing poverty.(TVET Strategy, 2008)

Accordingly, the study has the following contributions:

• It will indicate what will be expected from government, policy makers and curriculum developers to identify the field of study, level of education, skills and competence which full fills the required competence of the Graduates.

- The study may also provide a solution to the TVET college problem under this study.
- The study provides useful information which can serve as a spring board for further in depth study.
- It will serve as a benchmark for other researchers to conduct further studies.

#### 1.5 Delimitation of the study

This study is delimited to public/ government TVET colleges of Buno Bedelle Zone of Oromia Regional State. In BunoBedelle there are four government TVET Colleges currently offering training in different fields of studies at College levels. This study was delimited to all public TVET colleges' in Buno Bedelle Zone. The study was Job match Among Technical, Vocational Education and Training (TVET) Graduates of 2006-2008E.C in Buno Bedelle Zone of Oromia Regional State. The study is delimited to the following variables; the independent variable is graduate field of study, level of training, skill gap and the dependent variable is employments status of TVET graduates.

#### **1.6** Operational **definition of key terms**

The following operational terms are used in this paper as defined here under:-

**Technical and vocational education and training** is education and training to acquire the practical skills, know-how and understanding necessary for employment in a particular occupation, trade or group of occupations or trades (UNESCO in African Union, 2007:19).

**Training**: - is a Process that affects behavioral change by providing the skills, knowledge and attitudes required for employment in particular occupation, group of occupations or field of economic activity.

**Trainee** means a person who participates in technical and vocational education and training program provided by a training institution with a view to acquiring or upgrading his technical and vocational skills (Negaritgazeta, 2004:2552).

**Skill mismatch** explains the gap between the skills supplied and demanded.

**Education mismatch**, generally, refers to the lack of coherence between the required and offered educational level for a given job (Betti, Agostino, & Neri, 2007).

**Skill:** Ability to perform a given work in the specialization of filed .it allows a person to complete a designated task in a real. (African Union, 2007) run escape.

**Labor market**: interaction between demand for and supply of labor. Employers and work places in need of apparently skilled and qualified workers represent the demand side and workers with their specific competences the supply side of the labor Market.

**Stakeholders**: All role players at different levels in the TVET system including training providers, Training institutions, Trainers, Employers (trade union), Trainees, parents, policy makers (Government), NGOS and other institutions involved.

**TVET institution**: Location and Organizational set up in which Technical and vocational

Education and training is supplied.

**Matching skills-** From the individual point of view, matching skills means employability, better prospects of carrier development and better protection against unemployment risks.

**Education-job match**" refers to a situation of consistence between workers acquired and required skills, that is in fact in line with job-matching theories.

#### 1.7 Organization of the study

This thesis had five chapters. Chapter one presents the nature of the problem and its approach through comprising background of the study, statement of the problem, objectives of the study, significance of the study, delimitation of the study, operational definition of key terms and organization of the study. Chapter two discusses the key concepts that would use in the paper to place the problem in a broader perspective of literature or review of related literature. Chapter three concentrates on the research design and methodology specifically which includes research design, research method, Source of data, sample size and sampling techniques, data collecting procedure, data analysis procedure and also ethical considerations. Chapter four indicates the presentation and analysis of the data and Chapter five deals with the summary of the major findings, conclusions and the recommendations forwarded based on the findings.

#### **CHAPTER TWO**

#### 2. Review of Related Literature

#### 2.1. Brief review of the of education-job match literature

Theory Witte and Kalleberg (1995) note that there is theoretical importance to the issue of education-job match, as it brings attention to the understanding of how and why individuals are matched to their employment, which is a concern of many labour market specialists. Even though in our study we do not aim to test theoretical aspects of education-job match, we think it is relevant to examine how some labour market theories would interpret job-education match/mismatch.

In Human capital theory, there are numerous aspects to human capital besides education, such as experience, training, etc. This theory paints a positive picture of higher education, portraying it as providing the skills needed to perform complex jobs, making people more productive, thus sustaining economic growth. People with the most human capital are said to be the most productive, and thus secure the best jobs and the highest salaries (Allen and De Wert 2007). Educational mismatch can be viewed as part of an efficient labour market, i.e. a temporary phenomenon to replace one form of human capital to gain another.

On the other hand, Credentialism theory questions whether postsecondary education provides necessary skills used in employment. In the credentialist viewpoint, skills are by and large acquired on the job, and employers see education as a predictor of the future productivity and trainability of employees. Collins (1979) argues that education is more to socialize people in appropriate cultures, business, sociology, or otherwise. He feels that employers use credentials (qualifications) obtained by graduates as a form of currency, hiring only those who have the highest degree papers, but these papers have very little actual worth. Education mismatch by level or field of employment is problematic but might be expected. If a graduate spends an extra few years earning a particular degree, it might demonstrate igence and their abilities to be disciplined and to learn have presumably already been demonstrated in school.

The employer might therefore hire this graduate ahead of someone without this degree, or with a lower degree, even if it is not necessary to perform the job itself. However, as the credentialist critique goes, the three years and many tens of thousands of dollars this investment takes is not worth its subsequent screening advantage to employers. The Job-matching theory is based on the idea that the labour market is

composed of jobs of many different skill and experience levels, as well as workers of many different skill and experience levels. The most skilled workers (i.e. the most educated) should occupy the most skilled positions, and there is a mismatch if either the supply of educated workers or skilled positions surpasses the other (Sorenson and Kalleberg 1981; Jovanovic 1979). Van de Werfhorst (2002) describes how in Job-matching theories, education-job match is beneficial for all parties involved. Workers prefer such a match because they have the opportunity to utilize all of their skills, increasing their feelings them to command higher salaries. Employers prefer such a match because individuals who are optimally utilizing their skill sets will maximize productivity for their firm, and will stay longer at the firm (Jovanovic 1979).

Finally, the Technological change theory is based on the idea that in the modern and advanced economy, the rate of technology progresses quite rapidly. Applied studies most studies on education-job mismatch focus on how level of education affects match. However, a careful examination of the literature reveals there have been a growing number of articles pertaining to job mismatch by education degree field, as well as job mismatch by degree generally. Wolbers 2003 and Ibanez 2006; Robst 2007a; Krahn and Bowlby 1999; Storen and Arnesen 2006; and Ris 2003, find that graduates from occupation-specific programs have a much higher degree of match than those in the more general programs. This is attributable to the fact that these programs provide specific skills meant for the job market (Robst 2007a).

General skills can either increase or decrease the likelihood of a match, depending on the field. For example, Storen and Arnesen (2006) find that in general, low levels of leadership slightly decreases match, which would be consistent, as it lowered job outcomes in general. Those that see themselves as having strong innovative, professional ability decreases match, eased the match, which was and Ris (2003) find that having a high level of adaptability decreases match, which is likely attributable to the fact that those who can adapt might be less inclined to obtain employment in a field that they studied in school. Also as far as academic achievements go, the higher the postsecondary educational level, the more likely the match (Wolbers 2003; Robst 2007a; Krahn and Bowlby 1999). Robst (2007a) also finds that the more recent the degree, the more likely the match, which might be attributable to the fact that people most likely took their most recent degree to specifically to find work in the labour market. The education-job match is also found to be associated with some characteristics of the job. For instance, having a full-time job is associated with an increased match (Wolbers 2003). Having a permanent job generally is as well (Wolbers 2003; Witte and Kalleberg 1995; Krahn and Bowlby 1999), though this is not always the case, as in some situations having a temporary contract increases the match (Ibanez 2006).

There appears to be some discrepancy with firm size, as Witte and Kalleberg (1995) show that for males, working in a larger firm is negatively associated with education-job match (with no significant connection for females) whereas Wolbers (2003) finds that in larger firms the match is generally better.

Witte and Kalleberg (1995) as well as Wolbers (2003) hypothesize that a larger firm might increase the match, because there are more positions available for one to find a position that matches their skills. Witte and Kalleberg (1995) also alternatively-hypothesize however, that a large firm might have more room for advancement within the company, so an initial match might be taken away after promotion opportunities. Those who found work in Blue-collar positions or lower tier services had less of a match than white collar or professional professions (Witte and Kalleberg 1995; Krahn and Bowlby 1999). This is likely attributable to the fact that the higher the position, the more likely it would be to require specific credentials, and thus a postsecondary education.

Education job mismatch generally, refers to the lack of coherence between the required and offered educational level for a given job (Betti, Agostino, & Neri, 2007). The issue of education mismatch has a long history and it had been first identified in the 1870's (Glad well, 2008). In a report written under the title of "Relation of Education to Insanity" by United States commissioner of education, Jarvis first revealed this concept. In this report he claimed that out of the 1,741 cases of insanity he studied, "overstudy" was responsible for 205 (cited by Edwin & Hessel, 2011). As they mentioned, much attention was not paid on the issue of education mismatch. However, since the 1970s, considerable attention has been paid on this concept as supply of educated workers seemed to outpace the demand in the labor market (Freeman, 1975). Freeman (1975) predicted in his book of "The Overeducated Americans", about a situation with substantial oversupply of college graduates is likely to remain for many years to come (Edwin & Hessel, 2011).

Vertical mismatch and horizontal mismatch are the two types of education mismatch that had been identified by the European Centre for the Development of Vocational Training (Cede fop, 2010). Vertical mismatch occurs when the level of education that an individual is having is not suitable for the job. Vertical mismatch can occur in two ways, overeducation or under education. Overeducation exists when an individual is recruited for a job which requires lower level of education than those possessed by the individual. On the other hand, under education exists where the individual is having lower level of education than those are expected for the job. The logical end result of vertical mismatch is either the

presence of overeducated workers who bring the skills to their jobs in excess of the skills required for that job, or undereducated workers' skills are inferior compared to those required for that particular job.

Horizontal mismatch occurs when the type of education or skills that an individual is having, is inappropriate for the job. In accordance with horizontal mismatch person does a job unrelated to his or her field of study (Robst, 2007). It is also worthy to study about to what extent horizontal mismatch prevails in the case of graduate employment. Very often it has been found that particular fields of study provide occupationally specific skills for the job market in contrast to the general degree programmes in Arts, Humanities, Social Sciences, etc. (Robst 2007). As such, graduates in narrower fields of study (such as law or medicine) are likely to have a better defined set of job skills than those in more broadly defined ones (such as arts and humanities). Kucel and Byrne (2008) suggest that those from broader educational backgrounds are likely to be less well informed about labour-market opportunities.

Vertical and horizontal mismatches can occur due to three reasons. First, large number of skilled workers exists for the limited number of skilled jobs in the economy (Green & McIntosh, 2007). In such a situation, policy recommendation was suggested by Green and McIntosh (2007) to reduce the number of people receiving higher levels of education since the economy is essentially producing too many skilled individuals with a concurrent waste of resources. However, such a recommendation is not properly absorb in making policy decisions by the governments in many countries especially in Sri Lanka, where the policy decisions are focused mostly on the quantity than improving the quality. Therefore the most appropriate policies should be to encourage employers to raise their demands for skills to match the skills possessed by the job seekers (Senarath, 2006).

The second possible explanation for the existence of education mismatch is the asymmetry of labour market information (Cede fop, 2010). Due to lack of information about jobs in the job market, the graduates would not be assigned to jobs that they can make full use of their skills (Green & McIntosh, 2002).

The third possible reason is employee skills are heterogeneous with the existing education system and the pattern of education. Therefore, individuals may consider themselves as overeducated for the job in terms of formal or paper qualifications, but when their skills or abilities are concerned they may be suited for the current job (Green & McIntosh, 2002).

#### 2.1.2 Skill Gap

The acquisition of workplace skills is seen universally as a key driver of economic and technological development. The essential role of Technical Vocational Education and Training (TVET) in facilitating skills development for the socioeconomic and technological development of countries globally account for the increasing importance that is being attached to TVET. TVET is the type of education which provides individuals with skills, knowledge and attitudes for effective employment in specific occupation. According to UNESCO (2001), TVET is a comprehensive term referring to those aspects of the educational process in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupation in various sectors of the economic and social life. UNESCO (2009) defined TVET as all forms and aspects of education that are technical and vocational in nature, provided either in educational institutions or under their authority, by public authorities, the private sector or through other forms of organized education, formal or non-formal, aiming to ensure that all members of the community have access to the pathways of lifelong learning.

#### 2.1.3 The Concept of Competence and Its Definition

Various ways of defining the term competence are found in the literature often focusing on its different aspects. Some of these definitions are presented below. "Competency is knowledge, skill, ability, or characteristic associated with high performance on a job, such as problem solving, analytical thinking, or leadership. Some definitions of competency include motives, beliefs and values." (Mirabile, 1997, p. 75) "A competency is a cluster of related knowledge, skills and attitudes that affects a major part of one's job (a role or responsibility), that correlates with performance on the job, that can be measured against well-accepted standards, and that can be improved via training and development" (Parry, 1996, p. 50).

A competency is an underlying characteristic of an individual that is causally related to criterion referenced effective and/or superior performance in a job or situation. Underlying characteristic means that competency is a fairly deep and enduring part of a person's personality and can predict behavior in a wide variety of situations and job task. Moe (2008:21). Competences will be described in National Occupational Standards to be developed by people knowledgeable on and experienced in the world of work. As such, the National Occupational Standards define the outcome of all training and learning expected by the labour market, and will form the benchmark of all quality management within the TVET system.

Competency is sometimes thought of as being shown in action in a situation and context that might be different the next time a person has to act. In emergencies, competent people may react to a situation following behaviors they have previously found to succeed. To be competent a person would need to be able to interpret the situation in the context and to have a repertoire of possible actions to take and have trained in the possible actions in the repertoire, if this is relevant. Regardless of training, competency would grow through experience and the extent of an individual to learn.

In other words Competency can be defined as the capacity to choose and utilize an integrated combination of knowledge, skills and attitudes with the goal to do a task. Knowledge, skills and attitudes serve to realize the standard to perform job-related tasks that typify profession. Several authors offer competence definitions. For example, Garavan and McGuire (2000) define competence as an action, behavior and outcome a person should be able to demonstrate. This definition constitutes what a person can do. Competency might also be viewed from the possession of certain attributes such as knowledge, skills, and attitudes.

Kricher et al (1997) view competency as the ability to choose and use the attributes suggesting that competence is the capability to choose a set of available behavior and to execute suitable skills to meet certain goals. The comprehensive definition covering all aforementioned is offered by Mulder (2001): "Competence is the ability of a person or an organization to reach specific achievements. Personal competence comprise: integrated performance oriented capabilities, which consist of clusters of knowledge structures and also cognitive, interactive, affective an where necessary psychomotor capabilities, and attitudes and values, which are conditional for carrying out tasks, solving problems and more generally, effectively functioning a certain profession, organization, position or role". The former relates to the set of appropriate competencies required to realize a key professional job at a satisfactory level. The latter is associated with 'life skills' including self-concept, values and personality traits.

#### 2.2 The Human Capital Theory

Economists like Becker (1993) defined the relation between the individuals" abilities, education, training, and the outcomes obtained in the labour market, in terms of wages and employment (Becker, 1993). Individuals or governments invest resources in education or training up to the point where the profit or gain of the last Birr invested in human capital is greater than the profit or gain that would have been invested in any other markets (Becker 1964). Furthermore, human capital theorists argue extensively that any resources voluntarily committed for enhancement of human capital have a definite productivity aspect

(such as McMahon 1999). The view of these theorists has been that schooling or training elevates labour productivity through its function in increasing the abilities of workers. The outlook that elevated labour productivity is a positive function of the amount of schooling or training obtained is the main premise of human capital theory (Colcough 1982).

Nevertheless, economists like Spence (1973), have argued that those who are more able and productive also have a tendency to invest in more education. In other words, education does not inevitably make you more productive it basically is an expensive sorting scheme, to support employers to recognize more able individuals. Wolf (2002) points out that the policy emphasis on education and skills as the main driver of economic growth exaggerates the significance of human capital investments and that a major function of education is as a sorting tool (Wolf 2002). It is clearly vital to understand these potential economic returns to education and training to the individual, firms, and the wider economy. Even so, we must also distinguish that separating out the genuine impact of education on productivity and earnings from its task as a sorting tool is very challenging (Carneiro 2010). According to Worthington and Juntunen (1997), Human capital theory also emphasizes that human capital is developed differently between different individuals due to distinctiveness of an individual's characteristics such as:-

- 1. Inherent cognitive skills; 2. Practical skills and norms and values; 3. Differences in the surroundings;
- 4. Differences in the capacity to benefit from in the investment in human capital; 5. Parental background and many other reasons.

Impact analysis of the returns to human capital requires common and sometimes complex econometric analysis of education/training—labour market linkages (Fasih 2008). For an all-inclusive representation of human capital—labour outcome linkages, the supply-side analysis needs to be harmonized with demand side analysis (Kingombe 2012).

The provision of adequate jobs for the labour force is a vital issue for any policy maker, not simply an adequate number of jobs for the workforce, but also whether these jobs are of good quality and/or whether selfemployment is an option in the economy. As to the de-and side, it should include policy issues related to the curriculums and programme structure, other than policy issues that affect the operation of labour outcomes for example the mismatch of skills and trainings in labour markets.

Literature on the rate of returns to human capital in developing countries evaluates the returns to vocational in comparison to academic education (Psacharopoulos 1994, Bennell, 1996) or tries to classify the impact

of completing heterogeneity in schooling and impact on earnings (Appleton 2001). The Bonn resolution of October 2004 noted that TVET is the "Master Key" for alleviation of poverty, promotion of peace, and conservation of the environment, in order to improve the quality of human life and promote sustainable development. Ethiopia can reorient itself towards sustainable development, using TVET as a vehicle for socio-economic and technological transformation. It is critical that Ethiopia, through TVET meets the challenges of increased unemployment, poverty, food insecurity and environmental degradation.

#### 2.3 Job Satisfaction

Job satisfaction comprises of job and satisfaction. In order to understand the concept of job satisfaction, it is necessary to comprehend the sense of job and satisfaction separately. The most general definition on term 'job' is given in the Coline English Dictionary (1980) is a piece of work. Burger (1986) defines a job as a complex of inner relationship of tasks, rules, responsibilities, interaction, incentives and rewards. Satisfaction is a state of mind in which a person feels pleasure or happiness as described in Lexicon Webster dictionary of the English. In the Collin's English Dictionary, it is defined as the state of being satisfied, completion of aspirations, the delight obtained from fulfillment.

Job satisfaction refers to the way one feels about events, people and things. Job satisfaction is the result of various attitudes the person holds towards his job related factors and towards life in general (Mohanty, 1983). Saiyadain (2007) defines job satisfaction as the end state of feeling, the feeling that is experienced after a task is accomplished. This feeling could be negative or positive depending outcome of the task undertaken. Similar, job satisfaction is the collection of feeling and beliefs that people have about their current job. People's levels of degrees of job satisfaction can range from extreme satisfaction to extreme dissatisfaction. It is an established fact that job satisfaction usually leads to qualitative and quantitative improvement in performance.

Satisfaction in job induces motivations and interest in work, when work becomes interesting; the worker gets pleasure for work. More especially, the personal pleasure that the worker gets from a job of his choice gives him tremendous psychological satisfaction. It is probably the major aim of every worker to get maximum satisfaction from his job. Employers feel equally that pleasure in job enhances production and mental satisfaction. According to Tiffin and McCormick (1971), the satisfaction which people experience in the jobs is in large part the consequence of the extent to which the various aspects of their work situations tend to be relevant to their job related value system. Those jobs that provide the worker a chance

to fulfill his interests and aptitudes, give him satisfaction and pleasure. Natural interest in jobs of his choice motivates him for efficient and qualitative performance.

Definitions of Job Satisfaction Singhal (1973) defines job satisfaction as the "test", an employee displays in his harmonious relationship on the jobs as a result of his adjustment on three dimensions; personal, social and work. Hoppock (1935) defines job satisfaction constitutes a combination of many psychological and environmental circumstances.

Job satisfaction is pleasurable or positive emotional state resulting from the appraisal of one's job or job experience. Bullock (1962) remarked that job satisfaction is an attitude which results from balancing and summation of many specific likes dislikes and experience in connection with job. This implies when an employee has high job satisfaction, he really likes his job and has positive feelings and attitudes toward the job. Whereas Garton (1976) expressed employees' satisfaction and morale are attitudinal variables about particular persons or situations, satisfaction when applied to work context of teaching seems to refer to the extent to which a teacher can meet individual, personal and professional needs as an employee.

Rownstree (1981) recognized job satisfaction as the extent to which each person in each organization gets satisfaction from the functioning of the organization and nature of his work. This implies that job satisfaction can lead to those behaviors and attitudes that can have either a positive or negative impact on any organizational functioning. It is very important not only for employees but also for effective functioning of an institution. Organ (1990) defines job satisfaction relates to positive attitudes and beliefs towards several aspects of the job or the profession. Solly and Hohenshil (1986) stated "job satisfaction is defined as an attitude individuals hold about their work consisting of a general or global factor of satisfaction as well as a collection of specific factors related to sources of work reinforcement" (cited in Baghaei, 2007). Thus, from all these definitions, it can be concluded that job satisfaction is the result of various attitudes possessed by an employee. It will not be exaggeration to comment that job remains to be the main source of satisfaction and dissatisfaction in one's life. In a narrow sense, job satisfaction is related to specific factors, such as wages, supervision, steadiness of employment, recognition of ability, fair evaluation of work, social relation on the job, prompt settlement of grievances, fair treatment by employer and other similar items.

#### 2.4 Overviews of Technical and Vocational education and Training

There are various contemporary definitions given to the term "Technical, Vocational Education and Training" (TVET), UNESCO (2009), viewed (TVET) as learning, aims at developing skills in the practice of certain trades, as well as learning, aims at preparing students for entry into the labor market in general. The organization maintained that in both cases, learning may be geared towards direct access to the labor market or lay the foundation for access to higher education and training with joining specific trades in view. The organization added that TVET encompasses programs that provide participants with skills, knowledge and aptitudes that enable them to engage in productive work, adapt to rapidly changing labor markets and economies, and participate as responsible citizens in their respective societies.

Most recently, the Federal Republic of Nigeria (FRN, 2013) defined (TVET) as a comprehensive term refers to those aspects of educational process involving, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding, and knowledge relating to occupations in various sectors of economic and social life in addition to general education. FRN (2013) listed the goals of (TVET) to include among others: provision of trained manpower in the areas of applied sciences, technology, business, advanced craft as well as providing training and related skills for self-reliant and employment. Indeed, (TVET) is a potent means for fast-tracking technological progress, citizens' capacities, economic growth and national development (Akhuemonkhan&Raimi, 2013). It is designed to train skilled and entrepreneurial workforces that are needed to create wealth that would help reduce the menace of poverty and unemployment (Maigida, 2014).

According to UNESCO (2006), (TVET) is classified into three categories: formal, non-formal and informal TVET. Formal TVET refers to organized vocational education programs provided within an approved public or private educational or training institution and it is structured (in terms of curriculum, learning objectives and learning time) in such a way that it constitutes a continuous "ladder" where one level leads to the next and finally leads to certification. In a nutshell, formal TVET covers vocational education programs provided within approved public institutions. It is intentional from the learner's perspective, it is school based, it has a rigid curriculum, and the entry qualifications of trainees are fixed. Moreover, teachers in the formal TVET delivery system are required to be trained technical teachers with relevant vocational teachers 'qualifications.

Non-formal TVET is the type of vocational education and training which takes place outside the formal school system either on a regular or intermittent basis. It has the advantage of a short-term training period; it is occupation-specific; the main emphasis is on the acquisition of practical skills for self-reliance or direct employment in a related field. For this reason, skilled craftsmen with some pedagogical training may be engaged as instructors.

Informal TVET is the type of vocational education that is provided by craftsmen of different trades in the informal sector of the economy. It is more appropriately often referred to as vocational training or experience based learning and is usually carried out in form of apprenticeship system. Thus, the informal TVET is characterized by the non-existence of any curriculum or structure as there is no well-designed scheme and the method of training is not always sequential.

The master craftsman decides out of his experience what the apprentice should learn. TVET is the institution provides training on market oriented programs based on the demand of industry for various target groups such as graduates of Grade 10 as well as school leavers, people who are in employment, school drop outs, and marginalized groups in the labor market. As was been stipulated in ESDP IV, the main objective of TVET sub-sector is to train middle level human power and transfer demanded technologies and by doing so to contribute to GTP as well as towards the realization the country's vision of becoming a middle income country (EFA,2015). Technical and vocational education and training is defined as the source of practical skill acquisition and knowledge forth world of work and the place where practical competencies, know-how, and attitudes necessary to perform a trade or occupation in the labor market (ADB, 2009).

Lauglo and Lillis (1988) posited that TVET leads to 'specific human capital and has the advantage of imparting specific job-relevant skills which make the worker more readily suitable for a given job and more productive. One of the important components of HD is the technical vocational education and training (TVET) that is gaining tremendous popularity in recent literature. Finch and Crunkilton (1999) refer this subject to education and training that prepares people for an employment and makes them more productive in various economic fields.

Mclean and David (2009) refer to TVET as the attainment of knowledge and skills to enhance opportunities for socioeconomic development in consonance with rapidly changing work environment. Uwaifo (2010) spells out TVET as the training of technical personnel who are in lead to initiate, facilitate

and implement the technological development. The goal of TVET is quite plausible in the sense that it equips people not only with technical and vocational skills, but with a wide range of awareness that are obligatory for meaningful participation in working place and daily life.

The role of TVET in furnishing skills required to improve productivity, raise income levels and improve access to employment opportunities has been widely recognized (Bennell, 1999). Developments in the last three decades have made the role of TVET more decisive; the globalization process, technological change, and increased competition due to trade liberalization necessitates requirements of higher skills and productivity among workers in both modern sector firms and Micro and Small Enterprises (MSE). Skills development encompasses a broad range of core skills (entrepreneurial, communication, financial and leadership) so that individuals are equipped for productive activities and employment opportunities (wage employment, self-employment and income generation activities).

#### 2.4.1 TVET Development of in Africa

The first conference of African States on education was held in Ethiopia in 1961. The conference obviously put the pitch in placing precedence on expanding general secondary and tertiary education (UNESCO, 1961), with a view to rapidly replacing the colonial human resource and additional expatriates in the civil service which in turn made vocational education and training in Africa a "Second-rate Priority" in the education agenda (Wilson, 2005). After about a dozen years from the 1961 education conference, an enormous in-crease in the numbers of youth completing primary education and disentangled demand for secondary education was observed (Oketch 2007). These lead many independent governments in Africa to relapse to supporting TEVT on the basis of the production structure of their respective countries and the dwindling number government jobs (ibid).

Pioneer of TVET researcher in Africa, Philip Foster in 1965 argued that, it might be lucrative to support small-scale vocational training systems strictly linked with the continuing development efforts while very detached from the official educational system to alleviate the problem of youth unemployment (Foster, 1965). Mark Blaug who followed Phillip Foster later in 1973 argued that the expansion of TVET cannot be a cure for educated unemployment. It cannot prepare students for specific occupations and reduce the mismatch between education and the labour market (Blaug 1973). Foster sargument against government involvement in massive expansion of TVET despite its new found appeal after decades from independence

supported by evidence from field re-search did not go with the assumptions about the benefits anticipated of TVET.

On the contrary, authors like Psacharopoulos (1997) believed that TVET would alleviate the mass problems of Africa by bringing about economic progress and youth employment by heavily inculcating technological knowledge. He based his argument by pointing out that as everyone cannot be academically successful, TVET would offer those students to achieve something who otherwise are cast as academically unsuccessful in the general education system (ibid).

Even though authors like Wilson (2005) argued that, TEVT was seen as detrimental in post-independence Africa as it was linked with the colonial educational rule. He argued that Africans viewed TVET as a "substandard education". Oketch (2007) argued that, even where the context might have changed, African countries where the argument over whether to focus investment in general education or in TEVT has continued for over 40 years. Moreover, Blaug (1973) had argued that in general, both students and their parents instinctively knew that academic lines guaranteed a better livelihood than vocational education.

All in all, the current schooling structure in most countries leads to two courses: general education and vocational education (Oketch 2007). The general education enables students who gain access to it, to continue in their schooling to higher levels, while vocational education are for those students going directly to the world of work or to those who, due to limited general educational chances, are crowded out of the general education hierarchy (ibid). In some countries, it's the choice of the student to choose his/her pathway either to join general education or vocational education. However, for vocational students in most countries crossing the path to higher education is impossible (Atchoarena et al, 2001).

Radwan, Akindeinde et al. (2010) argue that in order for Africa to attain development, the youth need to have access to a learning that will facilitate the enhancement of their standard of living by gaining competitive skills that will be in high demand in the labour market. TVET is only one of numerous tools for employment creation (de Largentaye 2009). It is a well-known fact that vocational training can expand the attainment of suitable skills and thus raise labour supply and the "employability" of the work force.

The demand for labour depends on variety of factors such as incentives for investment, the exchange rate, prices factors, personality traits, government and related entities support system, socio-cultural environment and the production and commerce environment in the country. Dar and Tzannatos (1999)

suggest that given that many countries around the world do put into practice these large scale programmes, a hard-headed approach should be whether the intended goal is met and at what cost, but not whether to just have them. Kingombe (2012) argues that, when setting up for large scale TVET programmes, policy-makers and decision-makers should be able to make knowledgeable and informed decisions that are held up by evidence-based information However, the same author notes that there is a scar-city of proof-based information about TVET mostly in SSA (ibid).

On different note, TVET globally has a low social acknowledgment (Grollmann and Rauner 2007). The differentiation in perception between TEVT and that of the academic education has more reduced the recognition that TVET deserves (Abebe 2010). Incidentally, Grollmann and Rauner (2007) stated that: - The empirical importance of vocational learning is overshadowed by the big emphasis society puts on academic education and credits. Despite the fact that there are gradual differences regarding this structural problem, nevertheless this is one of the universal core problems. The "Parity of esteem" between vocational and general education is still wishful thinking but could never be established. Still in the international discourse the prevailing orientation is that vocational education is something old and traditional fitting to the needs of the preindustrial and industrial societies but not to the so called knowledge societies and economies or that it is at best a solution for low-achieving students.

#### 2.4.2 The Historical Framework of TEVT in Ethiopia

TVET in Ethiopia followed the school- based model of training beginning from the establishment of the system. The beginning of TVET in the formal educational scheme dates back to the founding of the 1st TVET School in 1942 in Addis Ababa which had the name Ecole National des Artes Technique (re-named later on as Addis Ababa Technical School). The school offered trainings in many occupational fields such as electricity, economics, wood work, secretarial science, accounting, auto mechanics, building construction, , carpentry. Qualified candidates were enrolled into the three-year training programme known as 8+3 program, and upon completion they were awarded diplomas.

Over the years, Addis Ababa technical school underwent a number of changes in terms of the trainings offered and their entry level and duration. The school offered the 8+4, 10+2, and 10+3 programs and applicants from many parts of the country with the best academic achievements competed for admission to the then prestigious school. In 1943, the Addis Ababa School of Business and Administration (later

renamed Addis Ababa Commercial College and now currently named Addis Ababa University Commercial College was inaugurated with the aim of supplying trained personnel in the vocational fields of accounting and secretarial sciences for business and commerce, as well as for civil service. Later, banking and finance training fields were added. It offered trainings at the 8+4, 10+3, 11+3 and 12+2 levels. Currently, it offers Bachelor of Arts and Graduate degree level programs under Addis Ababa University.

In 1962, an educational reform in the country was made which saw secondary schools curriculum transform to a more inclusive education and training. This made TVET more available to students. Even though this reform was not well supported by the resources essential for its success, it was made with the intention that TVET will offer the chance for the secondary school students to join the world of work right after completion of secondary school. In reality, it was an alteration that offered the needed attention and credit for the significance of TVET in the education scheme (Abebe 2010). In 1963 the Bahir Dar Polytechnic Institute was established which further sustained the development of TVET in Ethiopia. This school was later upgraded to a higher education institution level and currently it offers Bachelor and Graduate degree level pro-grams under the name Bahir Dar University. Abebe (2010) argues that no major institutional expansions or development agenda intended at developing TVET took place in the educational scheme between the mid-1960s and the mid-1980s (Abebe 2010).

During the Derg regime (1974-1991), the MoE was cautioning the government of the educational crisis as early as 1980s, not only in terms of achieving Universal Primary Education (UPE), but also about the increasing unemployment of the secondary school graduates (Abebe 2010). The MoE had planned to reduce the pool of unemployment through the introduction of an 8-year universal polytechnic education that could help the student's transition to the world of work but the plan was not fully realized (Abebe 2010). After the down fall of the socialist Derg regime in 1991, the command economy was changed by the free market economy and the country was politically constituted as a Federal Democratic Republic country (Negash 2006).

In 1991, the then transitional government of Ethiopia (currently the EFDRE) introduced a new education policy that dramatically changed the education system was introduced in July, 1994. The policy included a major supply-side push on TVET to support the school-to-work transition. It aimed at tackling the educational problems of access, equity, relevance, and quality with the regional governments of the FDRE guaranteeing the rights of their people to be taught in their language and work in the direction of achieving

access to education for all age cohorts in their regions (Abebe 2010). Before 1994, primary school included grades 1–6, junior secondary included grades 7–8, and secondary school included grades 9–12. In grade 12, students took a school-leaving exam that determined their eligibility to pursue higher education. Only a small percentage of students could enroll in higher education. The majority of students left school without any readily marketable professional or technical skills. The new education policy aimed to change this picture by focusing on producing a skilled labour force rather than a large cohort of relatively unskilled secondary school graduates.

The current educational structure consists of eight years of primary education followed by four years of secondary education. The primary education has two cycles, first cycle (grades1- 4) and second cycle (grade 5- 8). The secondary education has also two cycles. The first cycle is the general secondary education (grade 9- 10) which leads to the end of the general education for all students. A national exam is given upon completion of grade 10, with those who score well promoted to the second cycle of secondary school (grades 11 and 12), which is considered college or university preparatory. Those who do not score well enough to continue in secondary school have the opportunity to pursue formal TVET, which takes one to three years. One- and two-year training programs.

Acording to Yekunoamlak, Available sources show that vocational education in Ethiopia is a recent phenomenon. The first development of vocational and technical education had started when some vocational schools were opened giving training in some vocational and technical training. The development of vocational education is related to the development of general education in Ethiopia. Prior to 20th century, the education system was predominantly religious oriented that used to serve the man power needs of the church and the state (Yekunoamlak, 2000; Wanna, 1998; Mekonnen, 2004). During that time, there was no significant sign of vocational training (Yekunoamlak, 2000). Nevertheless, Emperor Theodros and Emperor Menelik had contacted foreign countries and got some craftsmen and artisans (Yekunoamlak, 2000).

Modern type of education was introduced with establishment of Menlik II School in 1908. Though there was an intention to develop vocational education beginning that year, only academic subjects were provided. This happened, because the primary objective to open a school was to prepare Ethiopians for various clerical administrative purposes (Teklehaimanot, 2002). After a decade the first technical school, Technical school of Addis Ababa was established in 1942 for the purpose of training junior and middle

level technicians (NIGAT, 1996). Since then the technical and vocational education has exhibited various changes and continuities. Recently, (2005) the country has been engaged in reform of its TVET system. The reform is being carried out at federal and regional levels with the goal of creating a TVET system that is responsible to the development needs of the Ethiopian economy and that can effectively provide the skills needed by those working for wages and self-employed (Ministry of Education, 2007).

The 1994 education and training policy have brought fundamental change in education sector in general and TVET in particular. Number of schools and enrollments has been considerably increased. Moreover, from 2002 onward, many TVET institutions have been opened in the country to cater to those who completed grade 10. In Ethiopia, as in many African countries, TVET suffers from a relatively poor public image. TVET is usually associated with low status job, low salary and lack of personal development opportunities, partly due to the low quality of previous TVET programmers" that did not allow TVET graduates to successfully compete in the labor market. TVET is generally perceived as a place of last resort for those students who failed to get into higher education. This misconception needs to be rectified (MOE, 2006). Nevertheless, efforts made to investigate students" attitude towards TVET program is negligible (Teklehaimanot, 2002).

## 2.4.4 Objectives of TVET in Ethiopia

The main objective of the TVET sub-sector is to train middle level human power and transfer demanded technologies, and by doing so, to contribute to poverty reduction and sustainable development. One of the most important features of TVET is its orientation towards the world of work and the emphasis of the curriculum on the acquisition of employable skills. TVET delivery systems are well placed to train the skilled and entrepreneurial workforce that needs to create wealth and emerge out of poverty. According to Africa Union (2007), another important aspect of TVET is that it can be delivered at different levels of sophistication. This means TVET institutions can respond to the different training needs of learners from different socioeconomic and academic backgrounds, and prepare them for gainful employment and sustainable livelihoods.

In Ethiopia, TVET was the most neglected area in the history of the education system. However, following 2000/01 a massive expansion of this sub-sector has been operational. The strategic thinking behind the expansion of the TVET sub-sector is to meet the middle level human power needs of the economies which have become very essential to the overall development of the country (MOE, 2002). The goal of the

TVET system is to create a competent, capable and adaptable workforce to economic and social developments in Ethiopia, and to enable an increasing number of Ethiopians to find gainful employment and self-employment in the different economic sectors of the country (Engineering Capacity Building Program, 2006). To this end, TVET will be re-organized into an outcome-based system. This means that identified competencies needed in the labor market become the final benchmarks of training and learning, and that all institutions, rules and regulations of the TVET system will be re-defined so that they support Ethiopians to become competent.

According to MOFED report of (2000) edition, the economic policy and strategy of Ethiopia requires technical and professional skills in broad and specific occupational fields. It is with this intention that the Government of Ethiopia has put in place a comprehensive capacity building development program aimed at strengthening its human resource potential through TVET programs. To meet this demand, public and private TVET institutions have increased in number. Moreover, the training areas have been diversified, and enrolment has also increased. Graduates of TVET institutes/colleges will not only be government or private sector employees, but they are also expected to be self-employed citizens. To this end, courses in entrepreneurship development would be offered to trainees so that they don't only have the professional skills, but also the ability to create their own self-employment opportunities MOE (2002). According to this document, this action was considered as one of the major actions intended to achieve the skilled man power requirements of the economy.

## 2.4.5 The Policy Framework

With the Plan for Accelerated and Sustained Development to End Poverty (PASDEP), the Industrial Development Strategy and other sector development strategies, the Ethiopian Government has initiated a new push towards creating frameworks conducive to economic and social development. Comprehensive capacity building and human capital formation are key pillars in all these efforts. As such, this National TVET Strategy is an important element of the overall policy framework towards development and poverty reduction.

The PASDEP's main thrust is to fight poverty through accelerated economic growth, to be achieved mainly through commercialization of agriculture as well as economic growth and employment creation through private sector development. TVET is expected to play a key role in this strategy by building the required motivated and competent workforce. PASDEP envisages TVET to provide the necessary "relevant and demand-driven education and training that corresponds to the needs of economic and social sectors for

employment and self-employment". The Strategy further stresses the need for an increasing role and involvement of the private sector and non-governmental organisations, as well as community involvement, in the delivery of educational services. In order to avoid the mismatch of the available resources with increasing demands, measures for improving efficiency and cost effectiveness are called for.

The Industrial Development Strategy of 2003 highlights the tremendous human resource deficits in Ethiopia being a major reason for the low state of industrial development. According to the Strategy "we do not as yet have an educational and a training system that is capable of producing the manpower that is both professionally and ethically capable of carrying and sustaining the responsibility of seeing to it that our industrial development program will have achieved its goals". It therefore, calls for efforts to raise the quality of the Ethiopian workforce to international standards, to reverse the previous marginalization of industrial professions in the TVET system, and to put a substantial focus on building a culture of entrepreneurship and preparing people for self-employment.

The Education Sector Strategy Programme (ESDP) III outlines a comprehensive development vision for the TVET sector. Based on the analysis that TVET graduates are currently not meeting the expectations and demands of economic sectors, the strategy paper advocates a coherent system including formal and non-formal, initial and further training, with open access to certification and pathways with the general and higher education system. ESDP III has therefore allocated a total of 3,000 million ETB to TVET over a five-year period in order to further increase enrolment rates, strengthen quality assurance, improve teaching methods, invest in physical infrastructure, equipment, training materials, libraries and ICT facilities, build centres of excellence and assessment centres, curricula and training material improvements, and other investments. People in rural areas, both in agricultural and non-agricultural sectors, are to receive special attention. Measures to ensure financial sustainability, to improve management in training institutions and to involve industry in planning, management and delivery of TVET are envisaged. As such, the ESDP III touches upon important pillars for the further development of TVET in Ethiopia.

# 2.5 Principles of TVET

TVET in Ethiopia has various conceptual & non Conceptual principles. One of the conceptual principles is "stakeholders involvement" (Ibid), specifically stakeholders are needed to play a major role in various function as the TVET system, one of these function is stakeholders are needed since they contribute much to the success of the system by participating in "TVET delivery through the provision of training to their

own staff, offering internship to trainees & providing apprenticeship training." Concerning TVET delivery, the non-public sector needs to play a decisive role. It already contributes significantly through incompany TVET schemes & in particular, through wide spread traditional apprenticeship training provided in the micro & small business sector. In addition to these employers based TVET schemes, non-government TVET institutions will become an increasing important pillar of the overall TVET supply. Hence, in short among various role of improving & widening training delivery made in the central role that stakeholder could play; this led us to the discussion cooperative training which warrants a genuine Cooperation between TVET institution and stakeholders.

## 2.6 Modes of TVET Delivery and Their Challenges

There are two types of TVET delivery modalities in Ethiopia: formal & non formal. Non formal TVET (NF-TVET) is any organized form of training for which the content, learning aims & targets have been defined. By definition, NF-TVET means training based on well-defined curricula, either within or without an institution, with or without guidance from a teachers or trainer. From the general economic development & the demand for better livelihood point of view, NF-TVET is considered a broad area of learning that accommodates learning/training needs of various target groups both in content, scope, depth and goal orientations. It also includes informal training, e.g. learning on the job or self-learning (Education Expertise center, Ethiopia: 2008). In the Ethiopian TVET strategy (MoE, 2008) traditionally, Technical and Vocation Education and Training (TVET) has been fragmented and delivered by different providers at various qualification levels. Hence, this gives the modalities of training multiple pictures.

Historically, such training as institutionalized in 1976 when Community Skill Training Centers (CSTC), established in 1976 in various Woredas with the intention of initiating integrated rural development through a joint effort off all development sectors particularly those working at Woreda level (Education Expertise Center Ethiopia :2008). Non -formal TVET programs, such as the above one designed by public institutions, NGOS, and private schools offer employment- oriented TVET programs to various target groups including school leavers, people in employment, school drop outs and marginalized groups in the labor market. In addition such Community Skill Training Center (CSTC), prisons, farmer training centers rural appropriate technologies, etc are known non -formal TVET training centers (MOE ,2008: Education Expertise center Ethiopia , 2008 ) while public TVET institution under the education sector were concentrating on producing middle level technical graduates at post grade 10 level

In parallel with this, public and private companies have had their own TVET programs, as have NGOs and private TVET providers. Some of the known skill and training provided in the informal center include woodwork ,metal work, tailoring, embroidery ,waving ,typing ,computer training, driving ,etc . However, experiences very across regions in the country and in other countries regarding the types of training given and the modality under which it is given. It appears important to high light the effort made to establish CSTCs for giving training on indigenous crafts and modern trades.

The many studies made on CSTCs indicate that they were not effective as expected. Some of the reasons documented are: The issue of integrating planning and human resource from various sectors and providing budget to CSTCs was not addressed sufficiently right from the very beginning. The skill training centers were neither need based nor market oriented. The skill training centers are under equipped. Many were looted and destroyed during the last years of the Derg government. CSTCs are underutilized due to low budget and lack of trained coordinators. CSTCs are used only a few months of a year leaving the trainers idle most of the year. As a result the staff of CSTC is unmotivated and not sufficiently trained. In addition unlike formal TVET, these programs are not yet systematic assessment and certification system there are currently no mechanisms to recognize informal occupational learning.

The formal TVET is much better researched than that of none formal .There are data that helps have to have a general picture on the area for example between 1996/7 and 2004/5, the number of TVET institutions providing formal TVET increased from 17 to 199, and enrolment from 3,000 to 106,305. Of these, 31% were trained in nongovernment TVET institutions. Around 60% of formal TVET is provided in the form of regular programs and 40% in evening classes. However, despite the enormous expansion, formal TVET only caters for less than 3% of the relevant age group. Enrolment figures in formal TVET programs show a fair gender balance with 51% female students. However, girls are over proportionality represented in commerce and typical female occupations such as textiles and hospitality, and underrepresented in traditional technical occupations. In 2004/5, another 42,000 trainees were enrolled in agriculture TVET programs and some 10,000 in teacher training institutes and colleges (MoE, 2008).

However the following have been major problems in the sector by the national TVET strategy (MOE, 2008:10-11) Lack of cooperation of the employers as they were not consulted during the planning process. An internship and cooperative training system based on profound cooperation between TVET institutions

and employers and a joint training delivery still needs to be developed in order to increase the quality of TVET and hence the employability of graduates.

There are also indications that TVET lacks effectiveness and efficiency. Studies have shown that many TVET graduates remain unemployed even in those occupational fields that show a high demand for skilled manpower .Furthermore, substantial resource wastages occurred as a result of underutilization of equipment in public TVET institutions. The shortage of a sufficient corps of TVET teachers/instructors represents one of the obstacles to TVET development in Ethiopia. The quality of TVET teachers/instructors has suffered as a result of the low reputation of their profession.

Most TVET teachers/instructors have relatively low formal qualifications, severely affecting TVET delivery at higher qualification levels. Furthermore, technical teachers, more often than not, have been unmotivated. They did not choose to become technical teachers, but were placed in technical teacher colleges because there were no other options available to them. Existing TVET teachers/instructors are (mostly) inappropriately practically skilled, i.e. not competent to provide TVET in accordance with the occupational standards. This is a result of a training system that long emphasized theoretical knowledge (though often not aligned with modern technology requirements), disregarding the importance of practical skills and appreciation of the world of work. Finally, under-funding is a structural problem in the TVET sector, particularly in the public system. Costs of TVET will remain high, if it is to be provided as centre based training, which is still the predominant mode of TVET delivery in Ethiopia. As with most other countries, public TVET programs in Ethiopia are usually more expansive than general education, requiring lower than average teacher/student ratio and substantial capital and recurrent expenses incurred through practical training.

AS consequences of budgetary constraints, most urban public TVET programs are under-funded while rural public TVET program suffered from poor facilities and shortages of training materials. Coming back to the non-formal sector, traditional apprenticeships in the small and micro enterprise sector constitute another presumably important, yet entirely unsearched, training environment. Public and private training schemes planned to produce administrative and health personal to the market in sufficient quantity. Agriculture TVET programs, which have been massively expanded during recent years, are disconnected structurally with non-agriculture TVET programs. (Education Experts center, Ethiopia: 2008) with the advent of the education and training policy, the formal TVET system of the country requires completion of

a tenth-grade education and leads to certificates on the level of 10+1,10+2,or 10+3.By contrast NFTVET designates every other form of technical and vocational education and training. This includes: Training over different periods of time.

From short-term courses of a few days to long-term programs of up to 6 months, training through different modalities (Institutional, community based, mobile, link and apprenticeship) Life skills or add-on components for primary Educations. Training for a wide range of target groups: Unemployed, youth and adults, School dropouts and those with grade 8 – education or lower including illiterate people, People potential/active in the informal economic sector, People from urban and rural areas, Landless poor, and Disadvantaged groups People with disabilities. Hence, none-formal TVET differs from formal TVET in the following respects: The educational background of the target groups is different and very divers. Teachers/ Trainers /Instructors are so far usually certified or examined. There are no standardizing curricula to be used in non-formal TVET Provision. The duration of training is usually shorter and varies widely. Onformal TVET is more cost effective than formal TVET.

## 2.7 Current Status of TVET in Ethiopia

At a global Symposium on implementation matter of diversified financing strategies for TVET organized by the Ethio-German Engineering Capacity Building Program (ECBP) on November 20-21, 2006 in Addis Ababa, Ethiopia, it was decided amongst the nearly one hundred experts and practitioners from eleven countries and four continents who took part, that the Ethiopian approach to TVET reform and TVET financing are very much in line with international best practice in terms of performance (Kingombe 2012). All stakeholders at the above stated symposium seemed to agree that partnerships among the public sector, the private sector and civil society will be key in making any TVET reform process succeed (GTZ, 2006 as cited in Kingombe 2012). Ethiopia has achieved the highest increase of 5,565 % in TVET enrolment from 1999 to 2007 from SSA countries and ranks the second among the countries in Africa in terms of number of training institutions. Further, the same author notes that, the recent growth in TVET enrolment and provision has been achieved by a substantial development of public spending and increased TVET provision by private institutions (ibid).

# 2.8 The TVET Curriculum Development

Every formal government training establishment is responsible for developing their own training materials based on the centralized occupational standards (OS) facilitated, monitored and evaluated by regional TVET agencies. Model training materials is developed and disseminated by the Federal TVET Bureau to the regional TVET agencies in order for them to develop their training material based on their local market needs and surroundings. At the beginning of the TVET programme in 2002, all training materials were prepared centrally and used by all institutions. Those materials were prepared for 10+1, 10+2 and 10+3 but the programme was changed shortly by Occupational Standards (OS) in 2004.

This curriculum reform aimed to ensure quality and relevance of TVET by facilitating the setting of National Occupational Standards which is fairly equivalent to international standards and organizing an occupational assessment and certification system which offers National Occupational Qualification Certificates to those who have proven, in an assessment, that they are competent in accordance with the defined occupational standards7.

The development of the occupational standards has been re-categorized into five levels now i.e. Level 1, Level 2, Level 3, Level 4 and Level 5 packages. The Level 1 and Level 2 pack-ages are short term training packages and are developed for those not entitled to enroll in the 10+1, 10+2 and 10+3 program i.e. students who drop out before completing grade 10. An outcome-based TVET system which is the centerpiece of the TVET reform strives for enhanced quality and relevance of TVET. It plans to make it easier to recognize the wide range of non-formal training and informal learning schemes available, opening access to previously neglected target groups. Responsibility for establishing and facilitating a national occupational assessment and certification system rests with the Federal TVET Agency. It stipulates rules and procedures for assessment item development, for conducting assessments and will facilitate, supervise and regulate the system. Responsibility for implementing the occupational assessment, i.e. ensuring that assessment is properly conducted and certificates issued, rests with the state TVET authorities.

## 2.9 Historical Development of Entrepreneurship

The concept of entrepreneurship varies from period to period and the level of economic development thoughts. It is a continues process growing from time to time. According to Ayalew (1995), earlier views to entrepreneurship go back to the sixteenth century when the concept was applied to explain people engaged

in establishing trade routes. According to Desai (2001), in the sixteenth century French men who organized and led military expeditions were referred to as entrepreneurs. In the middle of seventeenth century, the term entrepreneurship was applied to describe a person managing large production projects Pavlov (2005). At that period, the entrepreneur was only responsible for running large production project by using available resources regardless of the associated risks to production projects. Dawit Arega and Dawit Ayalew (2005) strengthening this view in their paper described that in middle of seventeenth century an entrepreneur was considered as an actor engaged in running large production projects. The next progressive views on the issue of entrepreneurship could be broadly put into two: the first view equates entrepreneurship with management and/or administrative function of a given business undertaking, while the second looks entrepreneurship as something more than just managing an enterprise Ayalew (1995). The connection of risk with entrepreneurship had developed in the seventeenth century which lies in the second progressive view.

## 2.9.1 Entrepreneurship in Ethiopia

Brief Historical Account: Although Ethiopia has long been an independent country for long years; enterprise culture has not been developed. For this, there are many factors as explained by different scholars. According to Ayalew (1995), the feudal culture has affected the development of entrepreneurial derive. It despises enterprising people and activities.

The economic policy was discouraging private enterprises and people were allowed to participate only in one line of activity. This has also contributed for low entrepreneurial spirit (Ayalew, 1995). In addition to these, the formal education system that the country has pursued did not prepare students for enterprise. It in fact inspired them to become administrators, military personnel or other civil service servants and it instills in them fear and robs them of entrepreneurial vision and the zeal to business opportunities (Andualem, 1997). These factors along with others have contributed for the unsatisfactory level of private and small scale enterprise development. Small scale industries have not been able to contribute substantially as needed to the economic development of the country particularly because of poor financial capacity of these enterprises (Hailay, 2003). Moreover, according to Johannes (1995), traditional Ethiopian education was initially more of literacy and spiritual knowledge. As such, education for business entrepreneurship would not have been part of traditional education system. With the start of modern education it became more evident that education was for employment.

In this regard, education for self-employment was not part of the objective. After post Derg period, the transitional government of Ethiopia declared its economic policy to be market economy. Such policy when supported by appropriate institutional and legal arrangement is expected to encourage development of private sector which breeds entrepreneurs and business owners. According to Ayele (2003), Ethiopia is now on the line of market driven economic system. This implies that entrepreneurial derive in Ethiopia is in its infancy.

Today entrepreneurship and development of private sector in Ethiopia are given high prominence.

The private sector has become a prime focus of attention, particularly since the change of the Derg government in 1991. It is considered to have a pivotal role for the growth of the economy. This new economic orientation geared towards free market economy has rekindled the chance for the birth and growth of private sector (Taye, 1995).

## 2.9.2 Contributions of Entrepreneurship

Entrepreneurship has been regarded by many as one, perhaps the most significant factors in the process of economic growth and development. Hence, differences in entrepreneurship among societies are believed to account for the differential rates of economic growth and development. As Nelson and Nguiru (1998) explained, business enterprises have a big role in employment creation, resource utilization, and income generation which has economic, social and political significances to the economy.

## 2.9.3 Entrepreneurial Motivation

Motivation may be defined as a process of stimulating someone to adopt the desired course of action Kumar and et al 2004). According to these authors positive motivation for entrepreneurship occurs when a person is inspired to act for earning some rewards and benefits. According to Gubta and Srinivasani (2003), a person's behavior is shaped by several socio- psychological factors such as his/her goals, education level, cultural back ground, work experience, etc. As the above authors explained several factors motivate people to start business enterprises. To mention some: education, occupational experience, desire to innovate, and assistance from financial institutions, desire to be free and independent and family background.

## 2.9.4 Challenges of Job Creation for Young Graduates

The issue of graduate unemployment has become a center of discussion and concern for different countries around the world, a subsequent focus of attention by governments, planning bodies and institutions and

academics. Unemployment of youth graduates has far reaching implications on the labor market and the society at large. Self-employment may be a career option for graduates when employment situations are not easy to find. On the contrary, graduates might have a lot of problems in this regard. Ames and Miller (2003), in their paper explained challenges of graduates for self-employment as; lack of startup capital; technical skills and experience; lack of entrepreneurial motivations; lack of youth involvement and lack of institutional capacity for promoting graduate employment. Zimmer (2005) in his part stressed that lack of effective and accessible knowledge; inadequate social infrastructure; and poor stakeholder knowledge, commitment, and participation have made it difficult to mitigate the high unemployment rate and extreme poverty among graduate youths in developing countries.

On the other hand as explained in Gubta and Srinivasani (2003), cultural factors, social factors and economic factors are main hindrances of job creation. According to these authors, entrepreneurship does not emerge and grow spontaneously. The actions as well as entrepreneurs decisions are thus likely to be influenced by their cultural background. It is obvious that cultural background influences an individual's approach to life. In addition to this, Dawit and Dawit (2005) strengthening the above view explained that cultural beliefs and societal practices which have an adverse effect and are challenges of entrepreneurial job creation. Andualem (1997) also on his part indicated that for entrepreneurship to flourish, the environmental conditions should be favorable. Hence, no doubt those cultural factors enhance or inhibit the desire and ability to express enterprise in a society. The existence of unsupportive culture is therefore, could retard promotion of entrepreneurship.

## 2.9.5 TVET for Self-Employment

Self-employment represents an important route into the labor market, especially in per-urban and rural areas. However, self-employment requires more than being technically competent in a certain occupational field. In order to become successful, entrepreneurs need self-confidence, creativity, a realistic assessment of the market, basic business management skills and openness to risks. Starting a business, furthermore, requires access to finance, access to necessary permits and licensing, and access to land or structures to operate from. Against this background, basic entrepreneurial and business management training will be incorporated into all relevant TVET programs. The TVET authorities will provide assistance to TVET providers to develop appropriate training packages, drawing on the magnitude of international experience in this field.TVET providers are also encouraged to consider the work environment in the local micro and small business sector when designing their training program. This includes, for example, the introduction

and use of appropriate technologies and the organization of internships or cooperative training programs with micro and small enterprises. The TVET executive bodies will also undertake initiatives to strengthen and raise quality in traditional apprenticeship training, as this mode of TVET delivery is particularly effective in preparing youth for self-employment. TVET institutions shall serve as centres of technology capability, accumulation and transfer. They shall closely cooperate with the private sector in undertaking problem-solving research programmers.

## 2.9.5.1 TVET and Employment Conditions

According to UNESCO (2005), TVET is increasingly recognized as an effective means of empowering young people to engage in productive and sustainable livelihoods. In some countries, governments are faced with the challenge of providing further learning opportunities for young people or preparing them for the world of work. Hence, TVET programs that respond to the demands of the labor market are viewed as central to equip graduates with work skills that will enable them to escape from the cycle of poverty and contribute to their community economic wellbeing. The quantity and quality of human resources produced depend on both the delivery capacity of the formal and informal education and skills system, and on the demand for these resources in a given country. Williamson (2007:123) illustrated this fact as 'simply increasing the supply of educated and skilled workers through investing heavily in expanding the provision of education and training is nothing unless matched with labor market'. This could make rapid rise in the number of degree and certificate holders, coupled with a lack of jobs in the areas for which these people were/have been trained.

Guarcello (2006:45) explained the above issue further as 'graduate unemployment is one of the most labor market difficulties of young graduates coming from middle level training centers'. This is because, early unemployment in a person's working life is severe as it may permanently impairing his or her productive potential and therefore, unemployment problems can lead to serious social adjustment difficulties. In line with the above ideas, a high level of unemployment is one of the critical socioeconomic problems facing in Ethiopia. While the labor force grows, with an increasing proportion of youth, employment growth is inadequate to absorb labor market entrants. As a result, youth are especially affected by unemployment (UNESCO, 2005). Thus, enterprises of the formal sector are by no means in a position to absorb the increasing demand for employment. According to Freire, (2001), the majority of people will have to make a living in the informal sector. The TVET system must react to this situation and although a number of

projects offer a larger range of different training programs, more initiatives are required for the existing training institutions to address a greater variety of target groups, particularly the more disadvantaged.

#### CHAPTER THREE

## 3. Research Methodology

This part of the research presents the methodological aspects of the research, which include the research design, research method, Source of data, sample size and sampling techniques, data collection procedure, data analysis, data analysis procedure and ethical considerations.

## 3.1 Research Design

In order to investigate the Education Job match among Technical, Vocational Education and Training (TVET) Graduates concurrent mixed research design was employed. A mixed methods research design is a procedure for collecting, analyzing, and "mixing" both quantitative and qualitative methods in a single study or a series of studies to understand a research problem (Creswell & Plano Clark, 2011).

The purpose of a concurrent mixed design is to simultaneously collect both quantitative and qualitative data, merge the data, and use the results to understand a research problem. A basic rationale for this design is to get a more complete understanding of a research problem by collecting both quantitative and qualitative data. The researcher gathers both quantitative and qualitative data, analyzes both datasets separately, compares the results from the analysis of both datasets, and makes an interpretation as to whether the results support or contradict each other. The direct comparison of the two datasets by the researcher provides a "convergence" of data sources.

## 3.2 Research Method

The study employed both quantitative and qualitative approaches with more emphasis on quantitative as the leading method through close-ended questionnaires. Quantitative approach was emphasized because investigating; more data is needed to extend, elaborate on, or explain the first database as the Education Job match Among TVET Graduates could better understand by collecting large quantitative data. In addition qualitative approach was employed.

A survey, according to Kothari (2004), is a method of securing information concerning an existing phenomenon from all or selected number of respondents of the concerned universe, while interview facilitates to have or to get in-depth data on Education Job Match Among TVET Graduates from the respecting individuals. To this line, the qualitative approach is incorporated in the study to validate and triangulate the quantitative data.

## 3.2 Source of data

In order to strengthen the findings of the research the relevant data for the study generated from both primary and secondary sources. In this study primary data source were TVET graduates, dean of TVET colleges, and employers. These respondents provided data on vertical and match, skill gap and factors affecting education job match among TVET graduates in Buno Bedelle zone. Secondary data sources were authentic documents on employment status of TVET graduates in the study area. In addition, graduates recruitment documents and quarterly reports were used to supplement the data obtain through questionnaire and semi-structured interview.

## 3.3 Sample size and sampling technique

This study followed a multi stage sampling technique. Accordingly, first the TVET colleges were selected. As mentioned earlier, there were four (4) TVET Colleges in Buno Bedelle Zone. All the four TVET colleges were included in the study using census. The TVET Graduate employed from each the four Colleges in Buno Bedelle Zone were taken by using Stratified random sampling and among field of studies, BEI, HNS, Animal production, GMFA and Masonry were purposely included in the study as these departments were given in all the four colleges. After took those graduates by using Stratified random sampling to get where they do used snow ball sampling and collect data through snow ball system. 12 employers and 4 deans of TVET colleges were purposely included in the study.

Among a total population of 1044, with a 5% margin of error, a design effect of 2, and return rates of 90%, the sample size required for the survey was 289 (27.7%) using Yamane Taro's sample size calculation formula:

$$n = \frac{N}{1 + N(e^2)}$$

Where: n = required the sample size

N=the study population

e =the level of precision (0.05)

1 = designates the probability of the event occurring

Therefore: 
$$n = \frac{1044}{1+1044(0.05)^2} = 3.6$$
  $_{\rm n} = \frac{1044}{3.61} = 289$ 

After determined the sample size and the proportional sample size from each stratum was calculated by using the following formula:  $ni = (n \times Ni)/N$ 

Where: ni= sample size for respondents

n= the total number of selected from each TVET college

Ni=the total sample size from each TVET college

N=the total number of TVET Colleges

Therefore, the distribution of the Sampling technique and sample size in relation to their respective population for each of the (4) government TVET Colleges in Buno Bedelle Zone were precisely summarized in table1.

Table 1.Summary of the Population, Sample Size and Sampling Technique

N <u>o</u>	NameofTVET	Total number	of Sample size	Sampling
	Colleges	graduates	$ni=(n\times Ni)/N$	technique
1	Dega	348	96	
2	Chora	236	65	
3	Dabana	397	110	
4	Didessa	63	17	Stratified random
5	Total	1044	289	sampling and snow
				ball sampling
6	Dean of Colleges	4	4	
7	Employers	12	12	Purposive sampling
8		16	16	

## 3.4 Instrument of data collection

In order to acquire the necessary information from participants, three types of data collection instruments were used. These were:

## 3.4.1 Questionnaire

Questionnaire was employed to collect quantitative data from selected TVET graduates. Questionnaire is convenient to conduct survey and to acquire necessary information from large number of study subject within short period of time. Furthermore, it makes possible an economy of time and expense and also provides a high proportion of usable response (Best & Kahn, 2003). The questionnaire was prepared in English language, because all of the sample graduates could read and understood the concepts that were incorporated.

#### 3.4.2 Interview

In the field of social science research, the usefulness of interview has long been recognized. That is, as qualitative researchers tend to provide detailed descriptions of individuals and events in their natural settings, interviewing has 'usually' been thought of as a key factor in research design (Weiss, 1994). Semi structured interview questions were used to collect data, so as to get pertinent information from college deans, and employers and to assure the compatibility of the data obtained from the questionnaires. The reason for using interview is that they could permit the exploration of issues, which might be too complex to investigate through questionnaires and also justified as it allows better chance to explain more explicitly what he or she knows on the issue (Best and Kahn, 2003).

## 3.4.3 Document Analysis

In addition to questionnaire and interview, document analysis is used to verify the information gathered by the questionnaire and interview. To secure facts and figures about the graduate employed, a number of documents among others, statistical information, reports, employees" lists, etc, were thoroughly and sufficiently investigated. In addition, secondary sources such as employment document, cooperative training document, employing document review, and quarter report evidence, etc. were referred. The tool is also used to validate and check the consistency of the data, which is obtained through an interview and questionnaire (Best and Kahn, 2003).

## 3.5 Data collection procedure

Four (4) assistant data collectors were selected to gather data from the sample colleges. The assistants were selected because of their knowledgeable (conversant) of the location and their English languages. Their languages and familiarity of the research areas thought to facilitate the data collection process. To make the data collection procedure smart and clear from confusions, the data collectors were properly oriented about the data collection procedures by researcher. Furthermore, the researcher was provided orientation for all respondents concerning the objective of the study and how the items will be answer. Then, questionnaires were dispatched to sample graduates. In addition, semi structured interview was also conducted with TVET college deans and selected employers by the researcher himself. The researchers had initial contact with the interviewee to explain the objective of the study. While conducting the interview, the researcher was took notes.

## 3.5.1 Pilot Test

Pilot testes are usually conducted to test the instrument and to improve it for further use. Furthermore, to increase the validity of the research, data collection tools were piloted at the B.H.T.Vision TVET College which is owned by NGO. Accordingly, necessary changes and modifications were made in line with the findings of the pilot test. Some of the questions were modified depending on comments were took from the College. In short, the finding of the pilot test was expected to assist the researcher to incorporate a lot of items in the observation checklist. A pilot test was conducted before the distribution of the questionnaire to the sampled population questionnaires were appropriated or not to generate adequate information and to make the necessary modification. Thus, the draft instruments were tried out in small scale study to test and improve the instrument at B.H.T.Vision TVET College. B.H.T.Vision TVET College is located in Bedelle town (not included in the sampled colleges).

## 3.5.2 Validity and Reliability Checks

In order to check the validity and reliability of the research instruments, the pre-test was done with fifteen (15) graduates in B.H.T.Vision TVET College which is owned by NGO. The necessary modification was made on the items and unclear questions was modified or removed from index. Additionally the reliability of the instrument was measured by using Cronbach alpha test. A reliability test is performing to check the

consistency and accuracy of the measurement scales. To interpret the output the rule of George and Mallery (2003) was followed: >0.9 (Excellent), >0.8 (Good), >0.7(Applicable), >0.6(Poor), <0.5(unacceptable).

Table 2. Reliability Statistics

	Cronbach's Alpha Based on	
Cronbach's Alpha	Standardized Items	N of Items
.848	.831	47

Therefore, the Cronbach's Alpha value of response by instructors become .848, which is more than 80% and thus reliable.

## 3.6 Data analysis

This is a mixed method research which is looking for mixed method analysis. The quantitative data collected through questionnaire were coded, entered, cleaned and analyzed using the Statistical Package for Social Sciences (SPSS 21). The qualitative data collected through interviews were transcribed, coded and interpreted thematically as per the conceptual framework and basic questions.

First, the data collected through questionnaire were coded (code book prepared). Then all survey responses entered into SPSS 21 statistical analysis software and cleaned for missing values, outliers and duplicate cases. First, descriptive statistical analysis was conducted to display the nature of the data using percentage, means and standard deviations. Also, inferential statistics, involving Pearson Product Moment Correlation for interval level(continuous) variables, Friedman's Chi-square test for the Categorical Variable such as chi-square for Employment Status, Job satisfaction, Internship, was used to determine the relationships among the independent variables and the dependent variable. Summative content analysis was used to code interview transcripts. This approach counts words or content first, and then extends the analysis to include meanings and themes. Interview content that did not directly fit the coding scheme and research questions retained for further analysis to search for implicit meanings of the content

# 3.7 Ethical consideration

In order to conduct the study first, the researcher was went to the study area with the letter of entry which was prepared by Jimma University, College of Education and Behavioral sciences, Department of Educational Planning and Management to BunoBedelle Zone of TVET Education office. After the researcher had obtained letter of entry from the zone and explained the objectives of the study. Then, the study was conducted after getting permission from the selected sample of TVET Colleges in the zone.

#### **CHAPTER FOUR**

#### 4. PRESENTATION AND ANALYSIS OF THE DATA

This chapter consists of two parts. The first part deals with the respondents' backgrounds, while the second part deals with presentation, analysis and interpretation of the data collected through questionnaires, interview and Document Analysis. Both primary and secondary sources were utilized to analyze the basic research questions raised in chapter one. As stated in chapter three of the study, questioners were distributed to 289 TVET graduates employed in different sectors. From total questionnaires which distributed to employed TVET graduates employed, 263 (92.7%) returned and analyzed. The data obtained through interview with dean of TVET colleges, and employers were analyzed qualitatively along with the quantitative ones. Moreover, relevant information obtained from document analysis was also incorporated in this chapter. Based on the data gathered through all instruments the following results were found.

## 4.1. Characteristics of the Respondents.

The target population mainly consists of TVET graduates employed, dean of TVET colleges, and employers. In order to get relevant and authentic information about the Education Job match Among Technical, Vocational Education and Training (

TVET) Graduates respondents all the four TVET colleges Buno Bedelle Zone were included in the study using census. The TVET Graduate employed from each the four Colleges in Buno Bedelle Zone were taken by using Stratified random sampling and among field of studies, BEI, HNS, Animal production, GMFA and Masonry were purposely included in the study as these departments were given in all the four colleges. After took those graduates by using Stratified random sampling to get where they do snow ball sampling were used and collect data through snow ball sampling system. 12 employers (sivil service) and 4 deans of TVET colleges were purposely included in the study.

Or the study population was taken by using snow ball sampling technique for TVET graduates employed and purposive sampling for dean of TVET colleges, and employers

Table 3. Demographic Characteristics of the Respondents

S.no characteristics	Valid	Frequency	Percent
1. Sex	Male	108	41.1
	Female	155	58.9
	Total	263	100.0
	<=20	45	17.1
	21-30	198	75.3
2. Age	31-40	14	5.3
	>=41	5	1.9
	5	1	.4
	Total	263	100.0
3.Present work of Respondents	Teachers	70	26.6
	Office worker	114	43.3
	Technicians	28	10.6
	Others	51	19.4
	Total	263	100.0
4.Totalyears of Service of Respondents	6 months	47	17.9
	1 year	83	31.6
	2years	67	25.5
	>2years	66	25.1
	Total	263	100
	Level II	99	37.6
	Level III-IV	164	62.4
5.AcademicStatusofRespondents	10+3	-	-
	BA/BSc Degree	-	-
	Total	263	100.0

According to the above Table Item 1-5, the sampled TVET graduate employed responses were as follows. Concerning gender item, out of the TVET graduate employed, 108(41.1%) were male and 155(58.9%) were female. This shows that the females were more than males. Interms of age item, the majority of respondents whose numbers 198 (75.3%) were 21-30 years, 45(17.1%) were below 20 years, 14(5.3%) were 31-40 years and 5(1.9%) were more than 40 years. Regarding the Present work of respondents, Office workers, Teachers, Others and Technicians were 114(43.3%), 70 (26.6%), 51(19.4%), 28 (10.6%) respectively. This shows the majority of Employed were Office workers. Interms of services length, 1 year, 2 years, >2 years and 6 month were 83(31.6%), 67(25.5%), 66(25.1%), and 47(17.9%) respectively. This shows that the majority of TVET Graduate Employed workers were less than two years. Concerning the academic status of the respondents, levels III-IV were 164(62.4%). Levels II were 99(37.6%). This shows the higher academic status of the employed were level II-IV. As found out during the interview concerning the gender status all the deans of TVET Colleges were male. Regarding the proportion of female participants of deans of TVET Colleges of the Buno Bedelle Zone there were no female. This means no proportion of female participants who took part in the study. From the proportion of male and female participants of public service employers of the Buno Bedelle Zone among the participants the total Percentages of male participants were found to be greater than the female Participants. This means male participants who took part in the study, were greater than female. This also indicates there was very few female participation in leader ship.

As found out during the interview age structure status of the TVET graduate employed, most of them were in the middle structure. This means the proportion of age structure 21 - 30 years participants, who took part in the study, were greater than that of the rest age structure participants.

# 4.2. Status of Employment of TVET Graduates in the Labour Market

Table4.Dataanalyses on employment status in of TVET Graduate in **labor market** 

Employment status	N	Minimu m	Maximum	Mean	Std. Deviation
What was the quality of the TVET Program you received	263	1.00	5.00	2.25	1.07
Did you find the curriculum relevant to the actual world of work	263	1.00	4.00	1.93	0.74
Are you satisfied with this job	263	1.00	2.00	1.42	0.49
Total means	263			1.86	0.77

Table 4 showed that the overall mean of employs status of TVET Graduatein labor market Were very poor (M=1.86, SD=0.77). Analysis by item—quality of the TVET Program employment received were (M=2.25, SD=1.07), curriculum relevant to the actual world of work (M=1.93, SD=0.74) and the satisfaction of with TVET Graduatein this job (M=1.42, SD=0.49). The result revealed that the statues of employment that they received program, the relevance of curriculum to the actual world and the satisfaction employed with their job were very poor.

According to MoE (2006), as Bantalem Demelash (2014), cited Co-operative education is a process of learning that is used to integrate the content of a course with productive work experiences in a field related to the learners' academic, personal and career goals. It has been effective in providing closer relationships between tertiary institutions and industry by integrating the curriculum into a meaningful process of learning through productive work experience:-students gain the opportunity to combine their academic knowledge with the practical skills necessary to secure future work prospects. Several examples of work based learning programmes have been identified in the literature, and numerous institutions predominately in the higher education sector have utilized co-operative education programmes extensively as the preferred choice of an integrated learning and practical experience.

Co-operative education programmes are also being delivered in the TVET sector as an alternative option to courses that do not include a work based component. Co-operative education programmes consist of some form of work related experience where students are required to arrange a work placement with an employer where an agreed period of time is spent at the work place. A student will normally be required to arrange a learning contract with the academic supervisor together with the work based supervisor prior to spending their time in industry. The work experience component can be completed alongside the academic requirements prior to graduation whether by studying full time or part time. The learning contract will normally be used as part of the assessment requirements.

As found out during the interview concerning the curriculum relevant to the actual world of work of the study Participants, all the deans of TVET Colleges of government which found in Buno Bedelle Zone as they told me during the interview were argued that the relevancy of the curriculum is good for actual world of work ,but to provide closer relationships between tertiary institutions and industry by integrating the curriculum into a meaningful process of learning through productive work experience: - students gain the opportunity to combine their academic knowledge with the practical skills necessary to secure future work prospects, however there is no modern and big industry in the Zone to adapt with it during their training in the zone. They said that interms of the relevancy of curriculum to the actual world of work there is no match tight relationship with industry. The graduates cannot gain full work experience when we compare with other. Generally as majority of them said that the system of training (curriculum) sometimes differs from the actual working environment.

The relevance of curriculum is evaluated by People involved in curriculum implementation can include students, teachers, administrators, consultants, state employee, university professors, parents, political officials interested in education depending on their skills; such people may play different roles at different times in the change process (Fullan 1994).

The above result contradict with the assumption of Bullock (1962) remarked that job satisfaction is an attitude which results from balancing and summation of many specific likes dislikes and experience in connection with job. This implies when an employee has high job satisfaction, he really likes his job and has positive feelings and attitudes toward the job. In line with this Job satisfaction is the result of various attitudes the person holds towards his job related factors and towards life in general (Mohanty, 1983).

Table5 Data analyses on employment status in of TVET Graduatein in area of study

I. Area /Field of study	N	Mean	Std. Deviation
Practical skill of Respondents	263	2.67	1.28
Theoretical knowledge of respondents	263	2.81	1.25
Entrepreneurial skills of respondents	263	2.54	1.12
Other soft skills/Work ethics of Respondents	263	3.08	1.25
Total mean		2.77	1.23
II. The adequacy of the market oriented TVET programmes			
My Training has adequately Prepared me for work	263	2.96	1.32
My Employer is satisfied with my level of knowledge and skill	263	2.84	1.17
It was easy for to get a job because of the level of knowledge and skill learned in the Institute	263	2.81	1.20
I find myself to be very effective in my current job	263	2.79	1.19
I can easily change employment within my area of specialization	263	2.78	1.33
Iam being able toperformthe skills required by the job	263	2.67	1.26
Iam satisfied with my current job	263	2.66	1.29
Iam fully satisfied with the TVET Programme I had	263	2.95	1.43
Total mean	263	2.81	1.27

Table 5 indicated that employment status of TVET Graduate in area of study (Field)With mean score were (M= 2.77, SD=1.23) Other soft skills/Work ethics(M=3.08,SD=1.25)Was to some extent the employed are not work by their field of study, Theoretical knowledge of employed training in TVET were barely with mean (M=2.81,SD=1.25), Regarding Entrepreneurial skills of respondents the employed were responded (M=2.54,SD=1.12)respectively From this one can conclude that the employed were not trained by their field of study. The results were concurred with UNESCO (2001), TVET is a comprehensive term

referring to those aspects of the educational process in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupation in various sectors of the economic and social life.

Regarding the adequacy of the market oriented TVET programmes the respondents were responded the overall mean (M=2.81, SD=1.27). Analysis by item Training has adequately Prepared the employed for work was (M=2.96,SD=1.32), fully satisfied with the TVET Programme he/she had (M=2.95 SD=1,43) Employer is satisfied with their level of knowledge and skill(M=2.84,SD=1.17), easy for to get a job because of the level of knowledge and skill learned in the Institute(M=2,81,SD=1.20), very effective in my job(M=2.79SD=1.19),within current easily change employment specialization(M=2.78,SD=1.33), satisfied with their current job(M=2.66,SD=1.29) and able to perform the skills required by the job(M=1,67,SD=1,26).the result indicated the adequacy of the market TVEET program were slight relevant to the actual work. Economists like Becker (1993) defined the relation between the individuals" abilities, education, training, and the outcomes obtained in the labour market, in terms of wages and employment (Becker, 1993).

As found out during the interview concerning the Status of Employment of TVET Graduates in the Labour Market all deans of TVET Colleges and selected Woredas 'public service employers were suggest that how to recruit graduates of TVET. As they suggested that when they want to recruit them any office which wants to recruit TVET Graduates Employees and other Employees first applied to employers' office their plan/needs, then employers' office make vacancy announcement for ten days. Within the given days all TVET Graduates those full fill the criteria registered as candidate and sit on exam and the exam is out of 70%, who score 50% and above sit for interview. Among all candidates whose took interview that got highest score send documents send to zone office and checked at zonal level and assigned to the work. As Bantalem Demelash, (2014) cited, TVET and practice based learning: Integration of course work and work place learning, Practice based learning in vocational education and training is one of the important issues to deliver the integration of course work and work place learning. According to Browen, B (2003) practice based learning is the engagement of student learning activates through the collaboration with tertiary institution, industry partner and work place learning includes industry based placement, work based learning programs integrated with the formal curriculum at a certificate level.

Table6 Level of education and job match of TVET Graduate

Vertical Match/Mismatch regarding education	N	Mean	Std.
			Deviation
My education is approximately at the level required by my work	263	2.4	1.32
My education is higher than the level required at my work	263	2.37	1.23
My education is lower than the level required by my work	263	2.28	1.17
My education isfor another kind of work than for my current work	263	2.61	1.24
My education have become out dated because the work has changed	263	2.45	1.19
My education have no relation at all to my current work	263	2.29	1.19
My education is insufficiently geared to the work practice	263	2.18	1.25
Total mean	263	2.37	1.23

As indicated on table 6 the level of education and job match of TVET Graduate employed the respondents were low at (M=2.37,SD=1.23). Analysis by item indicted their education is for another kind of work than for their current work (M=2.26,SD=1.24), their education have become out dated because the work has changed (M=2.45,SD=1.19), their education is approximately at the level required by their work(M=2.4,SD=1.32), their education is higher than the level required at their work (M=2.37,SD=1.32), their education have no relation at all to their current work (M=2.29,SD=1.19) and their education is insufficiently geared to the work practice(M=2.18,SD=1.25). The result point out that the employed level of education and job match of TVET Graduate were not match with their current work situation. In line with the result agreed Education job mismatch generally, refers to the lack of coherence between the required and offered educational level for a given job (Betti, Agostino, & Neri, 2007).

Table 7 The skills acquired at TVET and required in the job market

I. The knowledge and skills: Match/mismatch	N	Mean	Std. Deviation
My knowledge and skills are approximately at the level required by my work	262	2.39	1.25
My knowledge and skills are higher than the level required at my work	263	2.24	1.16
My knowledge and skills are lower than the level required by my work	263	2.36	1.18
My knowledge and skills are for another kind of workthanfor my current work	262	2.60	1.15
My knowledge and skills have become out dated because the work has changed	263	2.44	1.22
My knowledge and skills have no relation at all to my current work	263	2.47	1.27
Total mean		2.42	1.21
III. Competency of your skill on TVET Program have adequate theoretical technical knowledge	263	2.74	1.2
My knowledge and skills have highly developed practical trade skills	263	2.59	1.2
My knowledge and skills are eager to learn	263	2.32	1.2
My knowledge and skills are hardworking and committed	263	2.46	1.19
My knowledge and skills are able to work independently	263	2.68	1.24
Your overall performance is satisfactory	263	2.52	1.22
My knowledge and skills have adequate job specific skills	263	2.57	1.25
My knowledge and skills have adequate problem solving skills	263	2.61	1.27
My knowledge and skills have required individual and team work skills	263	2.67	1.21
My knowledge and skills have good leader ship skills	263	2.52	1.23
Total mean	263	2.56	1.22

As indicated on table above, the overall mean of skills acquired at TVET and required in the job market of TVET Graduate employed were low at (M=2.42, SD=1.21). Analysis by item indicted their knowledge and skills are for another kind of work than for their current work (M=2.60, SD=1.15), their knowledge and

skills have no relation at all to their current work (M=2.47,SD=1.27), their knowledge and skills have become out dated because the work has changed(M=2.44,SD=1.22), their knowledge and skills are approximately at the level required by their work (M=2.39,SD=1.25), their knowledge and skills are lower than the level required by their work(M=2.36,SD=1.18),their knowledge and skills are higher than the level required at their work(M=2.24,SD=1.16) respectively. The result point out that the skills acquired at TVET and required in the job market of TVET Graduate employed were slightly match with their current working situation.

As indicated on the same table above, the overall mean of Competency of TVET Graduate employed interms of skill on TVET Program have adequate theoretical technical knowledge at (M=2.56, SD=1.22). Analysis by item indicted Competency of their skill on TVET Program have adequate theoretical technical knowledge and skills were able to work independently, have required individual and team work skills, have adequate problem solving skills ,have highly developed practical trade skills ,have adequate job specific skills, their overall performance is satisfactory, have good leader ship skills, were hardworking and committed and were eagertolearn (M=2.74,SD=1.2), (M=2.68,SD=1.24), (M=2.67,SD=1.21), (M=2.61,SD=1.27), (M=2.59,SD=1.2), (M=2.52,SD=1.25), (M=2.52,SD=1.23), (M=2.46,SD=1.19), (M=2.32,SD=1.2), respectively. This shows that Competency of their skill on TVET Program has moderately adequate theoretical technical knowledge and skills.

This result concedes with the argument of Mirabile various ways of defining the term competence are found in the literature often focusing on its different aspects. "Competency is knowledge, skill, ability, or characteristic associated with high performance on a job, such as problem solving, analytical thinking, or leadership. Some definitions of competency include motives, beliefs and values." (Mirabile, 1997, p. 75) "A competency is a cluster of related knowledge, skills and attitudes that affects a major part of one's job (a role or responsibility), that correlates with performance on the job, that can be measured against well-accepted standards, and that can be improved via training and development" (Parry, 1996, p. 50).

Table 8: Mean of genders on field of study and marketoriented

Variable	Sex of	N	Mean	Std.
	Respondent			Deviation
	S			
Mean field of study	Male	108	10.9815	3.20625
	Female	155	11.1806	3.17962
Meanmarketoriented	Male	108	2.7245	.83526
	Female	155	2.8677	.78957

The above table shows mean and standard deviation of TVET graduates those were compered on their field of study and market oriented between genders and mean of males were 10.98 with SD 3.20 for field of study whereas females have mean of 11.18 with SD of 3.17.As indicated in the table mean of male graduates were lower than that of female graduates on their field of study. In the same way on market oriented mean of male were 2.72 with SD .83 while females have mean of 2.26 with SD .78. It was clearly shown that mean of female were higher than males.

Table 9: An independent t-test for TVET graduates field of study and market oriented program

Variables	t-test for Equality of Means			
	T	df	Sig. (2-	
			tailed)	
field of study	498	261	.619	
market oriented	-1.413	261	.159	

At .05  $\alpha$ , the 2-tailed independent t-test score were compared for TVET graduates between genders on field of study and revealed t (261) = -498, p=.619, p= > .05, r= .03. The t-test showed that there was no

significant mean difference between genders on field of study for the graduates. The effect size of the difference was medium which indicates that 3% of the difference on field study was explained by the graduates` gender.

At .05  $\alpha$ , the 2-tailed independent t-test score were compared for TVET graduates between genders on market oriented program and the test revealed t(261) = -1.413, p=.159, p=>.05, r=.087. The t-test showed that there was no significant mean difference between genders on market oriented program for the graduates. The effect size of the difference was large which indicates that 8.7% of the difference on market oriented program was explained by the graduates` gender.

# 4.3 Major factors which contribute education job mis- match among TVET Graduates Table 10.factors which contribute education job mis- match among TVET Graduates

1.What are the major factors which	Valid 1.00	Frequency	Percent
contribute education job mismatch among	2.00	81	30.8
TVET Graduates	3.00	89	33.8
	4.00	42	16.0
	5.00	42	16.0
	Total	9	3.4
		263	100.0
2. What is the main challenges while you	Valid 1.00	67	25.5
execute the activities	2.00	81	30.8
	3.00	48	18.3
	4.00	50	19.0
	5.00	17	6.5
	Total	263	100.0

As table 10. Above shows regarding to the major factors which contribute education job mis match among TVET Graduates, out of the total respondents 81 (30.8%) employed were lack of material resources,

89(33.8%) employed were doing without field of study, 42 (16.0%) Were lack of on job training, 42(16.0) were lack of experience and 9(3.4%) were others.

This means the proportion the major factors which contribute education job mis match among TVET Graduates, employed were doing without field of study participants who took part in the study. This implies the Graduates, employed were not doing wither their field of study.

On the same table.item2 above shows regarding to the main challenges while you execute the activities education job mis match among TVET Graduates employed responded that lack of motivation, lack of material manual, lack of good leader ship, and lack of agreement and transparency were 81(30.8%), 67 (25.5%), 50(19.0%),and 48 (18.3%)respectively. The result contradicted with authors Endris Yimer (2008) cited Motivation may be defined as a process of stimulating someone to adopt the desired cours of action Kumar and et al 2004). According to these authors positive motivation for entrepreneurship occurs when a person is inspired to act for earning some rewards and benefits. According to Gubta and Srinivasani (2003), a person's behavior is shaped by several socio- psychological factors such as his/her goals, education level, cultural background, work experience, etc. Diana (2005) in her paper identified that human motivation could greatly influence the entrepreneurial process. In her arguments, she explicitly assumed that all human action is the result of motivational factors. She also assumes that entrepreneurship is not solely the result of human action; external factors also play a role (e.g., the status of the economy).

#### **CHAPTER FIVE**

## 5. Summary, Conclusions and Recommendations

This chapter deals with the summary of the major findings, conclusions and the recommendations forwarded based on the findings.

## 5.1. Summary of major finding

The aim of this study was to investigate the Education Job match Among Technical, Vocational Education and Training (TVET) Graduates employed. This study was conducted in all four (4) public TVET colleges' in Buno Bedelle Zone. In order to achieve the purpose of this study, the following basic questions were raised:

- 1. What is the employment status of TVET graduates in the labor market?
- 2. How is the graduates currently employed in areas of their training?
- 3. What is the extent of match between level of education and job among TVET graduates in the study area?
- 4. How is the match between the skills acquired at TVET and required in the job market in the study area?
- 5. What are the major factors which contribute to education-job mismatch among TVET graduates in Buno Bedelle zone?

The research employed. concurrent research design, Quantitative approach was emphasized because, it enables the researcher to collect and describe large variety of data related to the Education Job match Among Technical, Vocational Education and Training (TVET) Graduates in a short period of time.

The data was collected using questionnaires, interviews and document analysis. Questionnaires were piloted and necessary changes were made before gathering the final data. Three categories of respondents were involved in the study. These were, TVET Graduates employed, Dean of TVET Colleges and selected woreda's public service Employer. The researcher used also stratified random sampling to determine the sample size and specifically used snow ball sampling techniques to identify where graduates doing. Furthermore 12 woreda's public service employers and 4 deans of TVET colleges were purposely included in the study.

The study was carried out in four government TVET colleges in Buno BedelleZone. Accordingly, 289 copies of questionnaire were distributed to TVET Graduates employed, who employed in the Zone last three years (2006-2008E.C).

The number of the questionnaires returned was 263 (91.00%). With regarding to interview, the respondents were deans of TVET Colleges of Buno Bedelle Zone and selected employers from some Woredas of the Zone.

Analysis of quantitative data was analyzed both by descriptive and inferential statistics. Descriptive statistics, involving frequency tables, percentages, Cross tab, Independent sample T-test, and also the qualitative research was analyzed by narration.

Based on the analysis and interpretation of the data, the following major findings were found out.

- Regarding the employment status of TVET graduates in the labor market quality of the TVET Program employment received, the relevance of curriculum to the actual world and the satisfaction employed with their job Were very poor (M=1.86, SD=0.77). The result revealed that the statues of employment that they received program, the relevance of curriculum to the actual world and the satisfaction employed with their job were very poor
- Concerning employment status of TVET Graduate in area of study (Field), the mean score were (M= 2.77, SD=1.23). In the adequacy of the market oriented TVET programmes the respondents were responded the overall mean (M=2.81, SD=1.27). From this one can conclude that the employed were not trained by their field of study, and the adequacy of the market TVEET program were slight relevant to the actual work.
- Regarding the extent of match between level of education and job among TVET graduates in the study area, the overall mean were low at (M=2.37, SD=1.23). The result point out that the employed level of education and job match of TVET Graduate was not match with their current work situation.
- Concerning match between skills acquired at TVET and required in the job market in the study area, the overall mean were low at (M=2.42, SD=1.21) and the overall mean of Competency of TVET Graduate employed in terms of skill on TVET Program have adequate theoretical technical knowledge at (M=2.56, SD=1.22). The result point out that the skills acquired at TVET and required in the job market of TVET Graduate employed were slightly match with their current working situation.
- The overall mean of Competency of TVET Graduate employed in terms of skill on TVET Program have adequate theoretical technical knowledge at mean score (M=2.56, SD=1.22). This shows that

- Competency of their skill on TVET Program has moderately adequate theoretical technical knowledge and skills.
- Concerning the major factors which contribute education job mis match among TVET Graduates, respondents were revealed that 81 (30.8%) employed were lack of material resources, 89(33.8%) employed were doing without field of study, 42 (16.0%) Were lack of on job training, 42(16.0) were lack of experience and 9(3.4%) were others. The result shows employed were doing without field of study participants and employed were lack of material resources was major factors which contribute education job mis match among TVET Graduates, in the study.
- Regarding to the main challenges while you execute the activities education job mis match among TVET Graduates employed responded that lack of motivation, lack of material manual, lack of good leader ship, and lack of agreement and transparency were 81(30.8%), 67 (25.5%), 50(19.0%), and 48 (18.3%) respectively. The result shows that luck of motivation and material manual are the serious challenge.
- As found out during the interview concerning the major factors which contribute education job mis match among TVET Graduates and the main challenges while execute the activities, as most of dean of TVET Colleges and employers said that motivation is one of the major factors which contribute education job mis match among TVET Graduates employed and others employees. As they told me there is scarcity of motivation, there were no match motivation except their monthly payment and chance of education up grade. For example as a College is no service for their transportation and there is nothing for safety service and etc as all of dean of TVET Colleges remarked and as I had ask some workers there is no any safety services.

#### 5.2. Conclusions

The study was undertaken to investigate the status of education - job match among TVET Graduate in Buno Bedelle Zone of Oromia Regional State.

Based on the above major findings of the study, the following conclusions were drawn.

- Regarding the employment status of TVET graduates employed in the labor market quality of the TVET Program employment received the relevance of curriculum to the actual world and the satisfaction employed with their job Were very poor.
- ❖ Concerning employment status of TVET Graduate employed in area of study the study conclude that their field of study were slightly match with the adequacy of the market oriented TVET program to the actual work.
- Regarding the extent of match between level of education and job among TVET graduates in the study area, the employed level of education and job match of TVET Graduate was not match with their current work situation.
- Regarding the extent of match between level of education and job among TVET graduates in the study area, the result point out that the employed level of education and job match of TVET Graduate was not match with their current work situation.
- ❖ Concerning match between skills acquired at TVET and required in the job market in the study area, and the Competency of TVET Graduate employed interms of the skills acquired at TVET and required in the job market of TVET Graduate employed were slightly match with their current working situation.
- Concerning the major factors which contribute education job mis match among TVET Graduates employed were doing without field of study and lack of material resources were major factors in the Buno Bedelle Zone of TVET Colleges.
- Regarding to the main challenges while they execute the activities education job mis match among TVET Graduates employed were lack of motivation and material manual are the serious challenge.
- ❖ As found out during the interview concerning the major factors which contribute education job mis match among TVET Graduates and the main challenges while execute the activities, as most of dean of TVET Colleges and employers said that motivation is one of the major factors which contribute education job mis match among TVET Graduates employed and others employees. As they told me there is scarcity of motivation, there were no match motivation except their monthly

payment and chance of education up grade. For example as a College is no service for their transportation and there is nothing for safety service and etc as all of dean of TVET Colleges remarked and as I had ask some workers there is no any safety services.

#### **5.3.** Recommendations

Based on the major findings and conclusions of the study the following recommendations were forwarded to improve the education job mis match among TVET Graduates at sampled TVET colleges in Buno Bedelle Zone.

- 1. Concerning Quality of TVET Program and relevancy of the curriculum which graduates employed were received at TVET Colleges/institutions was somewhat good collaboration with micro and small enterprises and local industries for cooperative training at expected level to materialize the already designed strategy of cooperative training. However trainees training about big and modern machines, technologies and modern industries more in lecture method. But to enrich practical skill training tangibly to develop their skills there is no modern industries except micro and small enterprises and local industries for cooperative training at the zone. For fast and fair growth of Quality of TVET Program growth movement from one stage to the next, the concerned stakeholders need to strive for hierarchical growth of TVET Program as it is expected. Zone TVET Offices, TVET Colleges and other concerned body of the Zone offices discussing with higher concerned bodies need to offer donors (NGO's) and other concerned bodies make conducive environment to offer who can establish modern industries for cooperative training at the zone and the training must be linked to modern industries for cooperative training at the TVTE Colleges as the zone.
  - Moreover, the training given at TVET institutions is not adequate for trainees to be competent in the world of work. Thus, TVET Office and TVET Institutions need to develop and have a system that would enable them to control the quality of the training provided at TVET College/institutions.
- 2. Concerning Job satisfaction of TVET Graduates employed in the Labour Market majority of respondent were not satisfied with their job, the results indicated that, their education and job was not match more. Job satisfaction is the result of various attitudes the person holds towards his job related factors and towards life in general (Mohanty, 1983). The concerned stake holders, Zone TVET Offices, TVET Colleges and other concerned body of the Zone offices discussing with higher concerned bodies and should create a good working atmosphere and good working relationships among TVET Graduates employed in the Labour Market to be satisfied to their job. While, Educational leaders should coordinate the interrelationships of educational environments and increasing interest and excitement for the program.

In addition, government motivates TVET Graduates employed to assume new roles, be responsible and encourage them to consider themselves as play their role.

## 3. Regarding Field of study (Areas training):

Regarding to Field of study (level of education and job match) of TVET Graduates employed were doing related with their field of study small number of them were doing closely related with their Certificate, diploma or degree. The development of TVET Education Program plays great roles in Country development and to bring changes, to innovative ideas and in general and economic empowerments of Country in particular. But, as concluded in the research finding stated on the findings in Buno Bedelle Zone of TVET Colleges, most of TVET Graduates employed were doing without Field of study. Therefore, to improve these problems and to achieve national objectives, the concerning bodies should arrange hiring system to bring change.

4.Concerning Skills acquired at TVET and required in the job market about knowledge and skills of TVET Graduates as finding above shows regarding to knowledge and skills acquired at TVET and required in the job market TVET Graduates employed were not acquired the required skills in the job market to be competent workers in the world of work.

As indicated in the summary finding, it is believed that the TVET trainers were facing inadequate machines and training equipment's in the training workshops while conducting practical training. In a single shop and machine a number of trainers were practicing. Then, in this situation it is difficult to capacitate the trainees. So, the concerned stake holders, Zone TVET Offices, TVET Colleges and other concerned body of the Zone offices discussing with higher concerned bodies and other concerned government organs with cooperation of nongovernmental organization who are working with TVET program should must fulfill the necessary equipment's and training materials.

- 5. Regarding to the major factors which contribute education job mis match among TVET Graduates a number of factors listed, such as lack of material resources, doing without field of study, lack of on job training, lack of experience and others. A considerable number of challenges were identified in this research finding. It is the assignment of Woreda TVET office, Woreda head office, TVET College Deans, Zone head office and other concerned government organs offices to solve those challenges for further success of TVET Program.
- 6 Regarding to the main challenges while execute the activities education job mis match among TVET Graduates, as research finding above shows the main challenges were lack of material manual, motivation, good leader ship, agreement and transparency. As the finding indicated among those challenges lack of motivation is the big issue. As found out during the interview concerning the major factors which contribute education job mis match among TVET Graduates and the main challenges while execute the

activities, as most of dean of TVET Colleges and employers argued that motivation is one of the major factors which contribute education job mis match among TVET Graduates employed and others employees. As they told me there is scarcity of motivation, there were no match motivation except their monthly payment and chance of education upgrading. For example as a College is no service for their transportation and there is nothing for safety service and etc as all of dean of TVET Colleges remarked and as I had asked some workers there is no any safety services. So to enrich the above recommendation idea as Endris Yimer, (2008) cited Motivation may be defined as a process of stimulating someone to adopt the desired course of action Kumar and etal 2004).

Accordingtotheseauthorspositivemotivationforentrepreneurshipoccurswhenapersonisinspiredtoactforearnin gsomereards and benefits. According to Gubta and Srinivasani (2003), a person's behavior is shaped by several socio- psychological factors such as his/her goals, education level, cultural background, work experience, etc. As the above authors explained several factors motivate People to start business enterprises.

Diana (2005) in her paper identified that human motivation could greatly influence the entrepreneurial process. In her arguments, she explicitly assumed that all human action is the result of motivational factors. She also assumes that entrepreneurship is not solely the result of human action; external factors also play a role (e.g., the status of the economy, the availability of venture capital, the actions of competitors, and government actions on the economy).

MOE, Oromia TVET Bureau, the concerned stake holders, Zone TVET Offices, TVET Colleges and other concerned body of the Zone offices discussing with each other and with concerned bodies and other concerned government organs with cooperation of nongovernmental organization who are working with TVET program should must fulfill the necessary equipment's, training materials and safety issues.

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## **Appendix**

#### Appendix I

#### JIMMA UNIVERSITY

#### COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCE

#### DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

A questionnaire to be filled by TVETgraduates who are employed in the World of work.

The purpose of this questionnaire is to collect information regarding the Education Job match Among Technical, Vocational Education and Training (TVET) Graduates. Accordingly, the success of this study depends on the sincerity and frankness of your response. Be sure that the information you provide will be kept confidential and used only for academic purpose.

Thank you in advance for your cooperation.

Please note that:-

- No need of writing your name
- For Multiple Choice Questions, you can choose more than one if you believe that two or more alternatives are equally important.
- put a tick mark in the box in front of your choice

## A. Quaternaries to be filled by TVETgraduates.

#### Part One: Personal Data (Characteristics) of respondents:

1. Name o	f TVET College	
2. Sex:	A. Male □	B. Female □
3. Age: A.	below 20 and 20 $\square$	B. 21 30 □ C. 3140 □ D. Above 41 □
5. Present	work: A.Teacher □	B. Office worker $\square$ C. technicians $\square$ D.Others specify $\square$

6. Total years of service: A.6 month's □ B.1 year □ C.2 year	rs 🗆	D.A	bove 2	years	
7. Academic Status: A. Level II □ B. Level III_V □	C	C. Col	lege D	iplom	ıa 🗆
D. BA/BSC Degree $\ \square$ E. MA/MSC and above $\ \square$					
8. Major Field of Study					
Part Two: issues related to employment status of TVET gradua	tes in	the la	bour	marke	et
1. What was the quality of the TVET Program you received? A	Very	Poor	□ B.	Poor	· 🗆
C. Good $\square$ D. Very good $\square$ E. Excellent $\square$					
2. Did you find the curriculum relevant to the actual world of work	:?				
A. Not relevant $\square$ B. Relevant $\square$ C. Very relevant					
3. Are you satisfied with this job? 1. No $\square$ 2. Yes					
4. To what extent do you have required knowledge and skills in the	e foll	owing	fields	? (Sca	les of
answer ranges between: 1 = Not at all; 2= barely; 3= to some ext	ent; 4	= to h	igh ex	tent; 5	5 = to
very high extent)					
Area/fields	1	2	3	4	5
4.1. Practical skills					
4. 2. Theoretical knowledge					
4.3.Entrepreneurial skills (how to run a business and to treat					
customers, marketing)					
4.4. Other soft skills (Communication, punctuality, team work etc.)					

5. In the following box, some statements related to the adequacy of the market oriented TVET programmes are given. Please put your opinion for every statements using tick ( $\sqrt{}$ ) inside the related small box using rating scale:

1 = strongly disagree; 2 = disagree; 3 = Neutral; 4 = agree; 5 = strongly agree.

S.N	Statements	1	2	3	4	5
5.1	My training has adequately prepared me for work					
5.2	My employer is satisfied with my level of knowledge and skill					
5.3	It was easy for me to get a job because of the level of knowledge and					
	skill learned in the institute					
5.4	I find myself to be very effective in my current job					
5.5	I can easily change employment within my area of specialization					
5.6	I am being able to perform the skills required by the job					
5.7	I am satisfied with my current job					
5.8	I am fully satisfied with the TVET program I had					

# Part Three: issues related to Field of study(areas of training)

- A) Not related
- B) somewhat related
- C) closely related

# Part Four: issues related to level of education and job match of TVET graduates

1. How do you rate the following statements on your Horizontal/Vertical Match/ mismatch on TEVT program? (Scales of answer ranges from: 1 = strongly disagree; 2= disagree; 3= undecided; 4= agree; to 5 = strongly agree)

S.N.	Statements	1	2	3	4	5
1	Vertical Match/ mismatch					
	My education:					
1.1	is approximately at the level required by my work					
1.2	is higher than the level required at my work					
1.3	is lower than the level required by my work					
1.4	is for another kind of work than for my current work					
1.5	have become outdated because the work has changed					
1.6	have no relation at all to my current work					
1.7	is insufficiently geared to the work practice					

# Part Five: issues related with the skills acquired at TVET and required in the job market

**1.** How do you rate the following statements on your Skills Match/mismatch, and Competency of your skill on TEVT program? (Scales of answer ranges from: 1 = strongly disagree; 2= disagree; 3= undecided; 4= agree; to 5 = strongly agree)

S.N.	Statements	1	2	3	4	5
1	My knowledge and skills: Match/mismatch					
1.1	Are approximately at the level required by my work					
1.2	Are higher than the level required at my work					
1.3	Are is lower than the level required by my work					
1.4	Are is for another kind of work than for my current work					
1.5	Are have become outdated because the work has changed					
1.6	have no relation at all to my current work					
1.7	Are insufficiently geared to the work practice					
2	Competency of your skill on TEVT program					
2.1	have adequate theoretical technical knowledge					
2.2	have highly developed practical trade skills					
2.3	are willing and eager to learn					
2.4	are hard-working and committed					
2.5	able to work independently					
2.6	Your overall performance is satisfactory					
2.7	have adequate job specific skills					
2.8	have adequate problem solving skills					
2.9	have required individual and teamwork skills					
2.10	have good leadership skills					

**Part Six**: issues related to major factors which contribute education job mis match among TVET graduates

- 1. What are the major factors which contribute education job mis match among TVET graduates? Specify------
- 2. What is the main Challenges /problems/ while you execute the activities? Specify------

#### **Appendix II**

#### JIMMA UNIVERSITY

#### COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCE

#### DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

Interview guide for Deans of TVET College.

The purpose of this interview is to gather data about Education Job match Among Technical, Vocational Education and Training (TVET) Graduates with particular reference to Dega, Chora, Dabana, Didessa TVET Poly technic Colleges which are dwelled in Buno Bedelle Zone respectively.

Accordingly, the success of this study depends on the sincerity and frankness of your response. Be sure that the information you provide will be kept confidential and used only for academic purpose.

Thank you in advance for your cooperation.

**Interview questions** for Deans of TVET College.

**Personal Data (Characteristics) of respondents:** 

#### Part One

•
1. Name of the College
2. Sex: A. Male $\square$ B. Female $\square$
3. Age: A. 20- 30□ B.30- 40 □ C. 40-50 □ D. 50- 60 □ E. Above 60□
4. Qualification: BA/BSC $\square$ MA/M SC $\square$ Other $\square$
6. Total years of service: A. 1 year □ B. 2 years □ C. 3 years □ D. 4 years □

E. 5 years and above □
7. Major Field of Study
8. Work Experience
A. 5 years $\square$ B. 5-10 years $\square$ C. 10-15 years $\square$ D. Above15 years $\square$
Part Two: issues related to employment status of TVET graduates in the labour market
1. How relevant was the training TVET graduates in the labour market received at the technical institutes to the world of work?
Part Three: issues related to Field of study (areas of training)
1. Do. TVET Teachers develop apathy to workshop practice due to lack of motivation?
2. How do appropriate or inappropriate teaching methods affect practical skill training?
Part Four: issues related to level of education and job match of TVET graduates
1. What are the levels of contribution of TVET institutions in preparing competent workforce for the construction industry?
Part Five: issues related with the skills acquired at TVET and required in the job market
1. To what extent do the teachers' qualifications and quality of teaching affected the teaching of practical skills?
In terms of the:
1.1. Adequate or inadequate practical training given to teachers affects the practical training of students
1.2. Industrial attachment for TVET teachers affect practical skills training
1.3. Ability or inability to control large class size during practical skills training

Part Six: issues related to major factors which contribute education job mis match among TVET graduates

1. What are the challenges facing the effective preparation of technical students for the world of work?

In terms of the:

- 1.1. Training materials
- 1.2. Class size effect on effective practical teaching
- 1.3. Adequate or inadequate provision of basic workshop tools and equipment
- 1.4. Attention given to industrial attachment
- 2. How far have these challenges affected performances of students in their various programs?
- 2.1. Are there sufficient practical skills training for students?
- 2.2. Is there lack of training material has effect on students' competency level?
- 2.3. Do you have Students have adequate time to practice requisite skills at school during training?
- 2.4. Is the practical component in technical curriculum is effectively used?
- 2.5. Are there the Quality of training at school helps students get employment on the job market?

#### **Appendix III**

#### JIMMA UNIVERSITY

#### COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCE

#### DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

## **Interview questions (employers)**

The purpose of this interview is to gather data about Education Job match Among Technical, Vocational Education and Training (TVET) Graduates with particular reference to Dega, Chora, Dabana, and Didessa Poly technic Colleges which are dwelled in Buno Bedelle Zone respectively.

Accordingly, the success of this study depends on the sincerity and frankness of your response. Be sure that the information you provide will be kept confidential and used only for academic purpose.

Thank you in advance for your cooperation.

## **Interview questions for employers**

#### Part One: Personal Data (Characteristics) of respondents:

1. Name of the College
2. Sex: Male □ Female □
3. Qualification: BA/BSC $\square$ MA/M SC $\square$ Other $\square$
4. Age: A. 20- 30□ B.30- 40 □ C. 40-50 □ D. 50- 60 □ E. Above 60 □
6. Total years of service: A. 1 year □ B. 2 years □ C. 3 years' □ D. 4 years' □
E. 5 years and above □

7. Major Field of Study
8. Work Experience
A. 5 years $\square$ B. 5-10 years $\square$ C. 10-15 years $\square$ D. Above15 years $\square$
Part Two: issues related to employment status of TVET graduates in the labour market
1. How many employees are presently working in your office/enterprise? No. of employees
2. How many TVET graduates are presently employed in your organization?
3. How do you recruit these people?
4. Would you be interested in hiring more graduates from CTEVT program in the future?
5. What recruitment channels do you use?
6. What are the advantages of hiring TVET graduates?
Part Three: issues related to Field of study (areas of training)
1. Do you think that the TVET graduates need additional training in their respective technical area in order to meet your company's/business's needs?
Part Four: issues related to level of education and job match of TVET graduates
1. Have you also recruited technical employees other than from TVET graduates?
1.1. How have you found their performance level?
2. Is there a need for intercultural competencies in your company (organization)? Please give some examples of the use of such competencies

3. What do you think should be improved on behalf of TVET Colleges and Higher Education

Institutions (and policymakers) in order to facilitate the integration of international and foreign

talent into labour market?

## Part Five: issues related with the skills acquired at TVET and required in the job market

1. What are your perceptions about graduates from TVET Colleges in terms of their skills/ fitness for work? (Are there any skills that require further development in recently hired TVET graduates?)

# Part Six: issues related to major factors which contribute education job mis match among TVET graduates

1. Have you experienced any challenges/difficulties in working with TVET graduate employees, as compared to other employees?