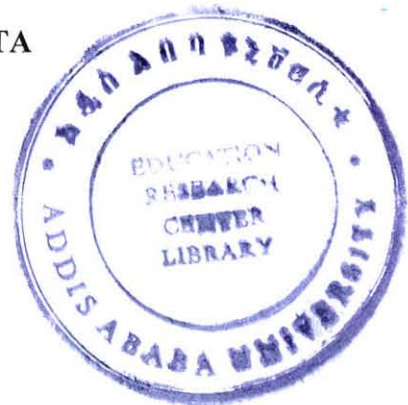


**THE PRACTICE AND PROBLEMS OF TVET
REFORM IMPLEMENTATION IN WEST
HARARGHE ZONE OF
OROMIA REGION**

**BY
BULTOSSA HIRKO LEBETA**



**A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE
STUDIES OF ADDIS ABABA UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS IN HUMAN RESOURCE AND ORGANIZATIONAL
DEVELOPMENT IN EDUCATION**

**June 2010
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Acronyms and Abbreviations

ANOVA	Analysis of Variance
AU	African Union
BPR	Business Process Reengineering
COC	Center of Competence
CSA	Central Statistics Agency
EFA	Education for All
EPA	Ethiopian Press Agency
ESDP	Education Sector Development Program
ICT	Information Communication Technology
MoE	Ministry of Education
NGO	Non- Government organization
OECD	Organization for Economic Cooperation and Development
ORSC	Oromia Regional State Council
OTVETA	Oromia Technical Vocational Education and Training Agency
TGE	Transitional Government of Ethiopia
TVET	Technical Vocational Education and Training
TVETA	Technical Vocational Education and Training Agency
TVETO	Technical Vocational Education and Training Office
UNESCO	United Nations Educational Scientific and Cultural Organization
WTVETO	Woreda Technical Vocational Education and Training Offices
ZTVETO	Zone Technical Vocational Education and Training Offices

Abstract

Ethiopian TVET system is reformed with the intention of providing the economy with middle level skilled workforce and alleviating poverty and its implementation is under way. The implementation phase of any change process is typically the most failure-prone. To this end, this study was designed to assess the practice and problems that hinder the successful implementation of TVET reform in West Haraghe zone. Descriptive survey was the research method employed to identify the scale and nature of problems of TVET reform implementation. The study was conducted in six Woredas and four TVET institutions, West Hararghe zone TVET offices and Oromia TVET Agency. Trainers, Trainees and Management bodies were selected from sample TVET institution by systematic sampling technique. Three separate questionnaire, interview and focus group discussion guide, were employed to collect data from a total of 251 respondents. In addition, check list was utilized to collect data from Zone and Woreda TVET Offices and TVET institutions. The data gathered through questionnaires were analyzed by employing statistical tools such as frequency, percentage, mean, standard deviation, grand mean Cruskal-Wallis test, Mann-Whitney U-test, independent sample t-test and one way ANOVA. The tests were made with 95% ($\alpha = 0.05$) level of confidence. The result of the study portrayed that the efforts that have been made to create the enabling environment for TVET reform implementation were constrained by poorly built consensus among the stakeholders, poorly committed and functioning of established TVET governance, poor linkage of market place requirement and delivery systems, theoretically dominated training approaches, and poor allocation of resources. This implies that the preparations made, and the results obtained might not be promising in the realization of TVET reform implementation. Hence, it is inferred that the implementation of TVET reform seems poor and the intended success in terms of formal TVET might not be attained. The alternative solutions recommended to be addressed by West Hararghe Zone and its respective Woreda TVET offices and TVET institutions are: revisiting the implementation plan, undertaking planned market need assessment, establishing strong cooperative training system with employers, mobilizing relatively adequate resource, and providing at least one TVET institution per three Woredas with meaningful involvement of stakeholders.

CHAPTER ONE

The Problems and its Setting

This chapter includes background of the study, statements of the problems, objectives of the study, significances of the study, delimitation of the study, limitation of the study, definitions of terms and organization of the study.

1.1 Background of the Study

Oromia is one of the largest regions in Ethiopia and contains 18 administrative zones. West Hararghe is one of the 18 Zones of Oromia regions with estimated total population of 1,787,086, within an estimated area of 17,552.23 square kilometers. This zone is divided in to 14 Woreda administrative bodies. Coffee and 'Chat' are the backbone of farmers in-come as cash crops with significant agricultural and pastoral areas supporting of lively hood of the majority of the population (CSA, 2008). West Hararghe Zone education office statistics shows that there are 18 secondary schools, six of which are with preparatory with total enrollment of 22,155. The zone has 615 primary schools with total enrollment of 326,565. Number of TVET institution found in the zone are 11 (three - government owned; and eight-private owned) (West Hararghe Zone Education office, 2002).

As far as TVET is concerned, Ethiopia has been put increasing pressure on the development of TVET since, 1942, when the first TVET institution was established (Tegbareid polytechnic), in Addis Ababa. Following the establishment of Tegbareid polytechnic school, attempts have been made to promote TVET in the country. For instance, Ethiopia introduced the comprehensive secondary education system in 1962 to meet the potential middle level manpower demand in the technical and commercial fields. The 1984 ten year national plan (1984-1994) envisaged, among other things, to promote polytechnic education as well as respect for work (Wanna, 1992).

Currently, the Transitional Government of Ethiopia (1994) reflects its commitment for TVET by issuing an education and training policy and strategy. One of the three major areas for change identified by the policy papers is the expansion of primary and vocational education. As a result, Technical and Vocational Training become one of the main components of ESDP policy which aimed to increase the trained labor force related to the development of the country as a whole.

Consequently, new offices were opened in all oromia Zones and their respective Woredas responsible to implement the new TVET system (ORSC, 1995; Oromia TVETA, 2009). With this newness realizing the reform attempt pose a question in one's mind and initiate for investigation.

1.2. Statement of the Problem

Trained manpower, as being one of the vehicles for national development, requires effective training to meet the requirements and need of employers and stake holders. The Technical Vocational Education and Training (TVET) system is, thus, assumed to be responsible to provide the required man power to the socio-economic development of one's country. To this end, TVET has been given due attention Worldwide and the government of Ethiopian commit itself in reforming the TVET system and the implementation is under way.

However, there is a growing concern for TVET improvement worldwide; it was excluded from both the international development target in 1996 and as a millennium development goal since 2000. This paradox implies, TVET has inborn challenges which lasted long (OECD, 2007). To mention some of the challenges; lack of access, especially, for women and rural areas, were identified as a great problem (UNESCO, 2000). Similarly, Foster in Middleton and Ziderman (1997) pointed out that vocational secondary schools in West Africa are characterized by low enrollment rate and poor employment outcomes because the best jobs did not require the kind of practical skills taught in TVET. Foster also realized that students and their parents clearly saw vocational programs as the second best option.

Lack of correspondence with qualification needs in the labor market and being excessively academic is another problem of TVET system. In addition, TVET system have not themselves been trained to adjust to changes in the production system, and their equipment and infrastructure are obsolete; and so they are very unlikely to produce up dated skills necessary for adjustment to the changes takes place in industry and there by fail to respond to the different skill needs of the formal and informal economy (Council of Europe, 1993; OECD, 2007; Santema, 2008).

The World Bank research result indicated that countries were finding it extremely difficult to hire and retain highly competent, qualified, motivated, flexible and creative TVET trainers and educators with the necessary skills and experience and thereby the training was very poor in

quality. In addition, there is no reliable and recognized Africa-wide teacher qualification standard (Middleton and Zideman, 1997). This implies, the implementation capability of TVET reform in Africa may be constrained by lack of trained manpower.

It is axiomatic that any change has to be geared to available resources in financial, human and material term, if implementing a change required being qualified as realistic. The problem for developing countries, in this regard, is lack of financial resource to build, maintain and operate the facilities, and to train and pay qualified staff (UNESCO, 1984). A closer look at the experience of Ghana shows us that the problem of funding of TVET may arise from social demand for general education rather than TVET. Similarly, since TVET is part of the whole education system, the stated priorities for TVET can sometimes be overshadowed (Duodu, 2006). Those challenges of TVET stated above also defines the situation in Ethiopian in that vocational training institutions are only found in the cities and major towns until recently.

In addition, in Ethiopia, as in many African countries, TVET suffers from a relatively poor public image in that it has been associated with low status job, low salary and lack of personal development opportunities. Likewise, TVET is generally perceived as a place of last resort for those students who failed to get into higher education. Lack of motivated and skilled trainers is also another recognized problem in Ethiopian TVET system (MoE, 2008). Therefore, finding ways of enhancing the value placed on TVET by individuals and society is one of the greatest challenges that can face countries attempt to implement the reform.

Ethiopian TVET delivery system, previously, did not consider the competence requirements of the labor market as it should be in occupational standards and thereby it failed to appropriately address the ever-changing demands of the labor market, or it was theory driven (MoE, 2002). Furthermore, underfunding is a structural problem in Ethiopian TVET sector, particularly in the public system. Thus, addressing these problems through reform of the TVET system turns out to be tough.

Lack of integrated coherent TVET system was identified as another problem for TVET development in Ethiopia. This can be evidenced by the observed fragmentation of formal, informal and non formal TVET systems and further training with open access to certification and permeability with the general and higher education system and lack of recognition for informal occupational learning (MoE, 2002). Similarly, there is weak communication and information exchange among employers, TVET providers, policy makers and stakeholders in Ethiopian

TVET system. The communication between these parties lack structural relationship and it is based on the free will of parties depending on their respective mutual need. As a result, lack of interest, in providing internship (industrial attachment training) and lower level of employment after completion of internship and graduation faced the TVET system in both regions. Thus, integrating and creating coherent functional TVET system and establishing workable structural relationship become tough during implementation of TVET reform (Zewde, 2000).

The data obtained from West Hararghe zone illustrate that out of 11161 total number of student eligible for grade 10 national examination by years 2000 and 2001, 4163(37.3%) of them got the chance to join preparatory schools and 6998 (62.7%) are expected to join TVET. Paradoxically, there were six preparatory schools and only two TVET institutions in the Zone. This entails TVET system in West Hararge zone may bear a problem.

To summarize, the problems of TVET system are related to weak national economy, huge number of poorly educated, unskilled and unemployed youth, uncoordinated, unregulated and fragmented delivery system, low quality, geographical and gender inequality, poor public perception, weak monitoring and evaluation mechanism, inadequate financing and ill adapted organizational structure, each of which have a greater impact on the implementation of the TVET reform. West Hararghe zone is one of the zones with low level of enrollment and economically poor. In addition, the experiences of the researcher were the inertia that urge to conduct the study in West Hararghe Zone TVET system.

✓ To this end, the researcher is interested to investigate the reality on the ground in making the TVET reform realistic in West Hararghe Zone within those immense problems, some of which are defined above and identify bottlenecks specific to the zone and provide possible policy suggestion as an input for the successful implementation of TVET reform .

To this end, the following basic questions are formulated.

1. What are the preparations made to support the implementation of TVET reform in West Hararghe Zone?
2. What are the current achievements of TVET reform implementation in West Hararghe Zone?
3. What are the major factors that constrain successful implementation TVET reform in West Hararghe Zone?

1.3 Objective of the Study

General Objective

The general objective of the study is to assess the practice and problems that hinder the successful implementation of TVET reform in West Haraghe zone.

Specific Objectives

The study is intended to:

1. Identify the preparations made to realize the implementation of TVET reform in West Hararghe Zone
2. Identify the major achievements in the course of implementing TVET reform in West Hararghe Zone.
3. Examine the major factors that constrain successful implementation of TVET reform in West Hararghe Zone.
4. Propose valuable mechanisms and holistic ways of addressing the problems observed by all concerned body in the West Hararghe Zone.

1.4 Significance of the Study

The application of this study results, the researcher believes, may be very immediate to the TVET system in Oromia in general and West Hararghe Zone TVET system in particular. The proposition is not without ground.

1. The government attempt to accelerate and sustain development to end Poverty and country's industrial development strategy and other sector development are, among other things, dependent on successful implementation of TVET. Thus, this study may help the TVET reform implementers in West Hararghe Zone and its respective Woredas and TVET institutions by creating awareness on how to strengthen the TVET reform implementation. So that the ongoing attempt to implement TVET reform will be supported.
2. It is believed that the result of the study will help the WHZTVET reform implementation in establishing workable in alleviating the shortcomings.
3. This study may provide insight and used as a spring board for further researchers and there by conduct research if interested.

1.5 Delimitations of the Study

This study was conducted at West Hararghe Zone level and covers Tulo, Chiro, Habro, Boke, Guba koricha, and Anchar Woreda TVET system. A total of 4 TVET institutions, and 4 organizations who are possibly the employer of the graduates selected from this zone were covered. The primary focus of the study is on the situation of the implementation of formal TVET aspect of the reform.

Thus, In order to make the study controllable, it is bounded to non-agricultural TVET system only. TVET reform components are formal, informal, and none formal and it is difficult to address all these components once at a time. Thus, the study is limited only to the implementation of formal TVET system. In addition, study was excluded the formulation aspect of TVET reform with the intention of making the study manageable. This is to mean, who, what and how the reform is designed, the approaches employed during formulation and the procedure followed to revitalize TVET systems were not the concern of this study. Moreover, the qualifications framework of the Ethiopian TVET reform system, which is the responsibility of CoC (center of competence), requires separate treatment. With this premises, it was excluded from the study. Thus, the research result is generalized only to non- agricultural and formal TVET systems in West Hararghe Zone.

1.6 Limitations of the Study

Originally, it was planned to make document analysis on tracer study conducted at TVET institutions and geographical distribution of trainees, but lack of data to trace them was encountered. Had it been possible to access these documents it would have been possible to come up with better finding.

1.7 Definitions of Terms

The followings are the definitions of some operational terms.

Board: is TVET governance responsible to run TVET institutions (MoE, 2006).

Council: is TVET governance responsible for TVET system at Woreda or Zone level (MoE, 2006).

TVET: is any education, training and learning activity leading to the acquisition of knowledge, understanding and skills which are relevant for wage employment or self-employment (MoE, 2006).

Formal TVET: Currently, it includes level I, II, III, IV, V programs provided by TVET schools under government or by other non public providers accredited by regional TVET authorities (MoE, 2006) .

Informal TVET: all kinds of training and learning that is not structured and without curriculum or syllabus (MoE, 2006).

Management bodies: TVET institutions' head, core process heads, and department heads

TVET institutions: Either college or institute which provide formal TVET

Non-formal TVET: includes all structured long and short- term TVET programs that are not registered as formal by MoE or regional authorities (MoE, 2006).

Occupational standards: definition of range of competencies that should be achieved through TVET (MoE, 2006).

1.8 Organization of the Study

This paper is divided in to five chapters: the first chapter includes background of the study, statements of the Problems, objectives, significances, delimitations, and limitations of the study and definitions of terms. The second chapter is about the review of various topics that are assumed pertinent to provide background information. Chapter three enclosed research methodology, samples and sampling techniques, data gathering tools, data analysis, and Procedures of data collection. Chapter four is about the presentation analysis and interpretation of data. Finally, summary of major finding, conclusion and recommendation of the study are included as chapter five. .

CHAPTER TWO

Review of Related Literature

This chapter enclosed the review of various topics that are assumed pertinent, by the researcher, to provide background information for the study to be used as reference point for interpretation and conclusion of the finding.

2.1 An Overview of Historical Development of TVET

2.1.1 Definitions

Before proceeding to discuss about TVET, it seems logical to clarify what is meant by TVET. Harrison (1992:2- 3) offers dictionary definitions of education and training which suggest that education is the general upbringing of people, whereas training is the teaching of some skill related to a specific occupation, profession or practice. Attachment of the word “vocational” to either training (VT) or education (VE) implies that the learning being undertaken will be of specific use to a chosen line of work or career, and may usually involve workplace experience.

Vocational training is broadly defined by Tsang (1999:79) as any type of job related learning that raises an individual’s productivity, and includes learning in formal vocational and technical school programs in training centers or institutes and in a work place, both on and off the job. Similarly, MoE (2006:50) defines TVET as any education and training activity leading to the acquisition of knowledge, understanding and skills which are relevant for wage employment or self employment.”TVET” serves as an overarching term to describe all kinds of formal, non – formal and informal training and learning provided by or in all different institutions, providers and learning location. From its definition it is clear that TVET include both knowledge building and relating the knowledge with the work place reality and emphasize practical learning.

2.1.2 Context of TVET

The development of TVET has a philosophical ground and dated back to 17 century. For instance : Locke (1592-1670) advocated the notion that education should prepare an individual for practical life through instruction in a manual and mechanical trade ; Rousseau (1712-1778) also realized that the value of learning through problem solving within an apprenticeship rather than rote learning in the class room bears great importance ; Fellenberg (1771-1844) operated a

number of manual labor schools. As a result, during 1800s industrial and manual labor type began to spring in Europe and America. Similarly, in 1868, Della vos adapted a manual labor school to the Russian by creating separate physical space for the instruction and construction of model projects. In 1872, Soloman popularized another evolution of the original industrial schools in Scandinavian countries which involve teaching students general education subjects through manual art of wood working. The best known educational philosopher, Dewey (1859-1952) was also the strong proponent of restructuring the education system in order to make it better preparation for useful employment and citizenship (Kapes, 1984). This entails, TVET is a matter of increasing the relevance of learning through the creation of linkage with the actual work.

In the last three decades there has been a growing interest in and scholarly attention given to the relationship between developments within working life, and the effects on function and organization of vocational education, but, TVET system faced not linear path elsewhere. For Sub-Sahara African Countries, for instance, Altinyelken in Kawachi (2009: 1) summarizes the trend of TVET in the context of international development from its beginning to its current form. He indicated that TVET used to enjoy a favorable position in the 1960s and 1970s in the post-colonial sub-Saharan Africa. International development agencies, particularly the World Bank, had also played a significant role in popularizing the TVET system in various African countries. Nevertheless, in the following decades TVET has come under strong criticism, and both national and international support has declined considerably. As a result, the 1990s was the lost decade for TVET in developing countries.

During this time developing countries did not attract much interest, because at national level, following the 1990 Jomtaen conference on education for all the priority for basic education was often interpreted as a priority for primary education, and at the international level , the 1991 World Bank policy paper on TVET focused primarily on private sector provision with ultimate goal of establishing market for training and market based training and there by TVET attracted little attention and less resource. Yet a number of unprecedented developments in the last decade such as globalization pressure, technological change and increased competition, have made the role of TVET even more crucial. Consequently, in recent years, TVET has come back to claim a place of importance on the agendas of many international organizations and donor agencies

(Kawachi, 2009; UNESCO, 2000). Thus, the initiatives for TVET reform in Ethiopia may be emanate from the importance that has been attached by world community.

2.2 Organization and Management of TVET system

2.2.1 Governance and Management

Management of TVET is typically shared by various government bodies. TVET is usually the responsibility of government ministry. Several countries have separate ministries for vocational training (Benin, Cote d'Ivoire, Madagascar, Senegal and Togo). Ministries of labor are responsible for training outside the school system. Such diverse management has been criticized in that it makes training delivery complex. The new trend in governance of TVET takes the form of: coordinating councils, national training boards, and national training authorities. Examples include: Industrial Vocational Training Board in Mauritius and TVET board in Eritrea, the national council for VET in Ghana and Mozambique. The board of governance, in Singapore's institute of technical education, is composed of members from government, private business, trade unions, and selected other stakeholders. Based on the experiences of these countries, strong representation of employers on managing boards is recommended, because it can forge strong industrial links, promote flexibility and responsiveness, and foster private training (Johanson and Adams, 2004).

This entails that to come up with effective and efficient TVET system the governance of TVET needs to be built up on stakeholders' participation. This, in turn, enhances the quality of decision making and may create bondages between TVET providers and consumers. In addition it can forge a market conscious system.

Planning

Based on the felt need of the country and the labor market TVET organization can determine among the training types like short term initiation courses - which can be delivered by labor market training centers as well as by general education school; long term training - which can be organized as "sandwich" course with strong involvement of enterprises; short and long term upgrading programs for employees; short and long term retraining programs for unemployed which can be planned on the anticipated demand for skills; and school-based programs leading

to qualification. The school- based TVET program, which is the focus of this study, planning can be complicated by the uncertainty of future market developments. Furthermore, this program is very costly (Gasskov, 2000). Thus, school- based requires a detail market analysis and continuous assessment of trends in market demand during planning.

Three approaches are suggested in planning the TVET system these are: planning driven by individual demand (enterprise and /or trainees demand) is mostly aimed at responding to the true skill shortages and improving employment; planning based on market signals which aims to respond to the short term demand for skill. The identification of such types of demand, in practice, is undertaken by individual training providers rather than national system; and strategic national planning, as its name indicates, attempts to forecast the future and aims at setting long term targets, priorities and activities. This approach attempts to foresee the long term trends in national and pectoral economic and human resource development(Gasskov, 2000).The current TVET reform attempt in Ethiopia is a strategic national planning approach which include the other planning approaches as the extension of it. But, planning made on market signals, as responsibility of TVET institution, may vary within different localities. Thus, the qualities of management, the resource avail matters in applying strategic planning approach and it may result in disparity between different regions and Zones in implementing TVET reform.

The experiences of other countries indicate that once strategic decision is made at center, decentralizing the remaining decisions to the local level alleviate the problems. For example, Denmark has one of the most decentralized TVET systems within the OECD. On the bases of objective and frame conditions defined by ministry of education each state TVET center can compose its own course and define its training content. A tripartite training center board approves the business plan and budget for the center. The director of the center, who is accountable to the board, can decide on procurement, recruitment and firing, and all day to day management issues (Johanson, 2005). In Tanzania, the decentralization was done in parallel with broader central government devolution of authority to local authorities. The management board is responsible for curriculum decision for administering the affair of the institution including the finance (Johanson and Adams 2004). This implies that the TVET systems in decentralized system can take an advantage of maximum utilization of resource through the prioritization of

felt local need and sense of ownership which could enhance the acceptance of the graduate in the labor market.

3.2.1 The Function of TVET

The mandate of Vocational Education and training is many fold. To mention some of these: first, TVET should deliver both foundation and specialists skills to private individuals, enabling them find employment or launch their own business, to work productively and adapt different techniques with ultimate economic objective of improved personal and social productivity. second, it serve as an instrument for structural change in training workers to leave jobs that are no longer in demand and move to new jobs that will be created. Third, there is always a need to equalize the opportunities that people have to earn their leaving through the acquisition of skills. Fourth, TVET can be viewed as a tool for achieving national, economic and social objectives, such as, encouraging regional development and supporting priority industrial, sectors, expanding, and experts, attracting foreign investment and raising wages (Gasskow, 2000).

Fifth, in addition to economic befit TVTE can generate massive social benefit, such as crime reduction, health improvement, and better social cohesion. Sixth, training can also have benefits not directly connected with employment in that it can enable people to provide service which can reduce cost of living for families and neighbors. Based on these functions, government involvement in TVET system is recommended (Gasskow, 2000). These imply that TVET has broad socio economic and political benefit for once country and individuals in that it promote cost saving and employments. Thus, TVET seems appropriate for governments attempt to alleviate poverty.

2.2.3 Forms of TVET Systems and Modes of Training

The identification of different types of TEVT systems is necessary for effective management. TVET systems are networks of organizations providing different training and educational services to different types of clientele and reporting to different national authorities. National training activities are usually split between state, regional and local government levels, as well as between several ministries. For the purpose of management and organization of TVET system, three systems can be distinguished. These are vocational education which offers long-term technical and technological instructions. This type of TVET is similar to previous Ethiopian

vocational education which had been delivered in comprehensive secondary schools; the labor market training provide a broad range of job related programs including short entry level course for young people; short and long individual coerces for the un employed; and up grading course instruction provided or financed by employers for their employees, either voluntarily or in compliance with regulations (Gasskow, 2000).

The delivery system has three forms: Formal TVET delivery which is planned and provided on the basis of different levels like ; level I, II, III and above . It is school based or school and company training. The second form is none formal training that can be planned and delivered within a relatively short term either to upgrade or adjust with the technological change. This can be provided at the company or school outside the formal training program. The third form of TVET is the one which were not recognized but provide middle level work force for the country's economy. It is an accidental forms of training in which the trainee acquire the skill while holding other activities. This study, as it is defined in the scope of the study, is about the most expensive and school based formal TVET program.

Training modes used in TVET system reflect the organization of skills acquisition. Gasskow (2000) identified five major training modes: general secondary and comprehensive high school which add vocational programmers to the academic curriculum; vocational school-based learning which often referred to French system, in which separate vocational and technical schools running alongside secondary school; dual training which often referred to the German system which combines structured training in firms with par-time instruction in state vocational school. The dual system is essentially employees led; Center based instruction is a training mode which often carried out by national labor market training agencies. The training caters directly to current and expected skill shortage and do not offer academic subjects; the final mode is enterprise based training which often referred to as the Japanese system which provide initial and continuing in service training offered by enterprises to their employees throughout their working life. The training mode common in Ethiopia seems more of center based in that most training may be restricted to training institutes.

2.3 TVET Reform and Implementation

2.3.1 Education Reform

The force of globalization today affects every social, economical, cultural, and political affairs of each and every nation in the world. Education and training system, as a base for every human endeavor, is the most victimized sector. Modern economies are not simply boosting or gently encouraging an already existing notion that education system should enhance a nation's human capital resources. Rather, it inter-shapes the form of schooling across national boundaries. To this end, world economy has provoked three kinds of reforms in the education and training sectors.

First, Competitiveness-driven reform - reform that respond to shifting demand for skills in both the domestic and world labor market and new ideas about organizing the production of educational achievement and work skill. This reform strategy promotes demand for education and training, increases the quality of education, makes the content more relevant to different groups and diversifies the delivery system, and prepares youngsters for the world of work and implementing lifelong education. Second, finance driven reform which responds to cuts in public sector budgets and private company incomes, and reducing public and private resources available for financing education and training. Third, equity driven reform- reform that attempt to improve education's important political role as a source of social mobility and social equalization (Carnoy, 1999; Arnove and Torres, 2003). Currently, TVET agendas worldwide seem synchronized with reform and it seems a management fad. Thus, TVET reforms may be curried by world nations to respond to the pressure from globalization.

Reforming the education system alone does not guarantee success, unless the decisions are implemented. Lindensjo" and Lundgren in Lindell (2006) define the challenges of implementation, by indicating that discrepancy between the reality where the goals are formulated and the reality where decisions are supposed to be implemented may be so significant that it may be difficult to bridge between. Education system by its nature has double action and role in society that is shown in the stages of planning and implementation of education. On the one hand, education is supposed to be an efficient tool for progressiveness within the modern society. On the other hand, the education system is obliged to adjust itself to contemporary society's wishes and demands of equity and social inclusion. As a result, reforming education

including technical and vocational schools (both public and private), enterprises, apprenticeship training centers, non-profit NGO and Church-based institutions. In almost all countries, non-government provision of TVET is increasing both in terms of number of institutions and student numbers. This trend is linked to the fact that private providers train for the informal sector (which is an expanding job market all over Africa) while public institutions train mostly for the more or less stagnant industrial sector. Private providers target “soft” business and service sector skills that do not require huge capital outlays to deliver. In all of Sub-Saharan Africa, formal TVET programs are school-based (AU, 2007). The Public training providers’ interest reflected above may also characterize the private institutions found in West Hararghe Zone of Oromia region.

With a few exceptions, the socio-economic environment and the contextual framework in which TVET delivery systems currently operate on the continent is characterized, in general, by: weak national economies, high population growth, and a growing labor force; shrinking or stagnant wage employment opportunities especially in the industrial sector; huge numbers of poorly educated, unskilled and unemployed youth; uncoordinated, unregulated and fragmented delivery systems; low quality; geographical, gender and economic inequities; poor public perception; weak monitoring and evaluation mechanisms, and Inadequate financing, poor management and ill-adapted organizational structures(AU,2007).

This implies TVET in Africa seems lack relevance, flexibility and there by its employability and coping with the changing world technology may be poor. In addition, private TVET providers in Africa have been participated on “soft” courses like business, health than “hard” courses like construction, automotive, mechanics and others. This motive may be aroused from the expensive nature of the later courses and commitment of the providers.

2.3.2.1 TVET Reform Priorities

The African Union (AU) has a vision of “an integrated, peaceful, prosperous Africa, driven by its own people to take its rightful place in the global community and the knowledge economy.” This vision is predicated on the development of the continent’s human resources. In its Plan of Action for the Second Decade of Education (2006 – 2015), the AU recognizes the importance of TVET as a means of empowering individuals to take control of their lives. To this end most of the

countries in the Sub Sahara Africa regard TVET as vital to their economic development as this sector is associated with the acquisition of the qualification needed to be competitive in the international arena. Thus, TVET is going through a stage of transition and reorientation in the region, as efforts are being made to give student some basic skill and knowledge, as well as the tools they need to play an active role in the production system (Atchoarena and Delluc, 2002). This implies that there are many movements underway in the countries of Sub-Saharan Africa to change the content of TVET and the way it function.

The major reform agenda of TVET in Sub Sahara Africa is strengthening cooperation between enterprises and TVET institutions in order to forge closer links between training and labor market. This search for a better match between jobs and training is based on the two horned problems. These are: an acute shortage of skilled labor and paradoxically, the raising of unemployment, particularly among the young people leaving the education system. This problem imply the available man power in African countries lack the skill required by the market.; the other problem observed is that the pace of technological change requires workers to have new qualifications in order to perform a task required in modern jobs. This problem refers to those who already employed individuals in that the fast technological change obsoletes the skills in the market. Therefore, to cope up with these issues, TVET must establish a close links with enterprises to make it easier for graduates to make the transition from school to work (Atchoarena and Delluc, 2002).

This entails the Africa TVET reform priority is the provision of skilled labor force for the economy and reducing unemployment by enhancing the relevance of education; and help employee cope with the ever changing technology.

2.3.2.2 Key Strategies

The key issues that the proposed TVET strategy in Africa seeks to address are: Poor perception of TVET in which the public and even parents consider the vocational education track as fit for only the academically less endowed; Gender stereotyping in which women are disadvantaged from access to TVET; Instructor training which promote competence of the teacher that enable delivery of quality TVET; Linkage between vocational and general education in order to create articulation pathways between vocational education and general education; Linkage between formal and non-formal TVET that enable regular vocational school students should be able to

acquire relevant practical skills in the non-formal sector; Linkage of TVET to the labor market in order to enhance the socio-economic relevance of TVET can be enhanced; Traditional skills, business management and entrepreneurial training in order to facilitate the acquisition of business management and entrepreneurial skills for self-employment; Harmonization of TVET programs and qualifications which facilitate the Portability of TVET qualifications across national frontiers as a factor of integration in Africa (AU,2007).

Likewise, Ethiopia, suffering from deep-rooted and severe poverty, share these strategic issues and seems renewed its interest in TVET, because it is considered a key to enhance economic competitiveness and for contributing to social inclusion, decent employment and income and poverty reduction (MoE, 2006).

Thus, the strategies designed by Africa to address the identified priority area are enhancing the image TVET, enhancing teachers' competency, establishing permeability with higher education, linking Formal in formal and non formal training forms and making the curriculum market oriented. Thus, the implementation of TVET reform which is intended to address these strategies is tough.

2.4 Lesson learned from TVET Reform Implementation

2.4.1 Best Practices

The World Bank policy paper tracing the experience of countries in reforming their TVET policies, proposed a two step strategy. The first step involves addressing important none TVET problems; in particular, improving access to and the quality of general , specifically basic, education; creating a regulatory frame work that encourage involvement in physical and human capital; and instituting macroeconomic policies that foster sustained output and employment growth .The second step entails the reform of TVET by assessing TVET policies and evaluating the supply of TVET in relation to changing labor market demands tailoring actions to country specific situations and building commitment and maintain support for the implementation of the reform(Gill and Dar,1999). The success of TVET programs appear to depend more on their objective than on how they are designed and delivered. The experience of different countries shows that the main objective of the programs have been first, to help unemployed people find jobs; second, to prepare school livers to enter the labor market; third to upgrade the skill of

employed workers. This practice coincides with the TVET strategy of Ethiopia. What is important here is, but, bridging the goals and the real situation where the reform is implemented. This is to mean being smart in planning does not guarantee success.

To alleviate the finance related problems which is the most challenging for poor countries, one can learn from the Australia's experience that: combining relevant government agencies in policy setting; ensuring employer and worker participation in policy setting; shifting some of the financial burden of TVET onto the beneficiaries; ensuring competition so that the supply is cost effective; encouraging private providers are the answer (Gill and Dar, 1999). In Ethiopian TVET reform, these strategies seems considered in that TVET governance is designed to include different parties and sectors, and the reform promote stakeholders involvement, the introduction of cost sharing , and private provision is appreciated by the reform. But, the question is whether the TVET reform implementation and practice made a linear path or not.

2.4.2 Challenges

The result of the study conducted in Sweden in 2006 suggests that implementation of educational policy making is not a simple, linear development, but rather a complex, sometimes fierce process where different ideological beliefs, motives and commitments are clashed against each other (Lindell,2006). Likewise, the implementation of TVET reform has been faced a multifaceted constraint. Generally, the change in economic policies and economic crises worldwide; accelerated technological change which may lead to skill obsolescence and occupational change; and globalization are the threats (Middleton and Zideerman, 1997). More specifically, while different countries, as spelled in the World Bank research result, made an effort to implement TVET reform, they faced challenges like: inadequate financing of public TVET systems, incomplete information on private training supply, and fragmentation of TVET systems, weak information link between training providers and employers, and weak institutional capacity (Gill and Dar, 1999). These problems may be the challenge for TVET reform implementation in Ethiopia because the economy of the country, poor information communication systems, the material and human capacity of existing TVET institutions seems not in a position of providing conducive environment to implement TVET reform. So, what is going in West Hararghe zone in confronting these challenges? This is a logical question expected to be answered by the finding.

2.4.2.1 Quality and Relevance

Relevance, the external productivity of the system that is how well the objective and outputs of training system are oriented to economic and social requirements, of TVET in SSA is immersed in a crisis. For instance, Public training tends to be small, imbalanced, and oriented exclusively to wage employment. Lack of flexibility, seriously adherence to centralized curricula, central trade testing system does not correspond to the need of the market are some of the reasons that were identified by World Bank for lack of TVET relevance (Johanson, 2002).

According to World Bank project report, TVET systems generally lack statistics about the destinations of their graduates (Johanson, 2002). This implies that post training is not often tracked through tracer study and thereby fails to recognize the relevance of TVET programs.

On top of this, quality of TVET has been one of the challenges to be addressed by the reform. Improving TVET quality is the function of: preparing better teachers, strengthening school leadership, and altering instructional content, forging closer links with employers and experimenting with more effective training modes. In addition, instructional quality can be substantially improved in schools by making better use of the productivity factors associated with high student achievement. Of these factors, active teaching, the use of feedback, cues and advanced organizers, appropriate pacing, clear and adaptive instruction, availability of qualified teachers, good administrators, selection of instructional content have considerable effect on program quality (Herschbach, 1997).

In order to alleviate these problems, the writers suggested: the source of content for vocational instruction should be the workplace. Contact with employers should be established at the initial stage of course design and should be continued periodically, with course revision based on changing work requirements: vocational instruction usually involves a laboratory full of tools, equipment and machinery. To this end, vocational instructor should hold tasks associated with practical work in addition to other instructional duties. Instructional laboratories are complex. Yet, well-managed laboratories are the exception; for teachers with marginal technical skills, internships, work placement and short formal courses during off times may be a better alternative than extensive residential programs (Middleton and Zideman, 1997).

As one of SSA, Ethiopia share those problems related to quality. According to ESDP III, most TVET teachers/instructors have relatively low formal qualifications, and are (mostly) inappropriately practically skilled and lack motivation (MoE:2004). In addition, EPA (2009) reported that lack of qualified teachers with required capacity is the bottle neck to provide quality TVET in Arsi Zone of Oromia region.

2.4.2.2 Equitable Access

The Dakar frame work for action set six goals one of which is “to ensure that the learning need of all young people and adult are met through equitable access to appropriate learning and life program”. TVET is an essential component of such programs , since it is one of the provider of learning and life skill program for young people and adults and so it is important that access to TVET is provided in all countries, worldwide , as part of EFA. However, in many countries, individuals who would like to acquire competencies and skills are excluded from TVET. Some of the reasons for lack of access, identified by UNESCO (2000), are: learners’ low - income, restricted training opportunities, and stereotypes

ADEA (2008), based on UNESCO global monitoring report in 2005, indicated that African countries can be grouped in three categories based on percentage of student enrolled in secondary schools: below 2% like Eritrea, Ethiopia, Malawi, Namibia, Niger and South Africa; between 5% and 9% like Botswana, Burkina Faso, Côte d’Ivoire, Morocco, Mozambique, Togo, Tunisia and Uganda; and over 10 % like Cameroon, Congo, Egypt, Gabon and Mali.

The number of TVET institutions providing non agricultural training in Ethiopia increased from 17 in 1997 to 199 in 2005. Curently there are 126 medium level TVET institutions. Despite this massive increase in provision, there are indications that the demand for TVET education services far exceeds supply. Thus a high percentage of Ethiopians do not access to TVET (MoE, 2008). Likewise, as it is indicated by EPA(2009), small number of TVET institutions and their less in take capacity are problems that hold back the provision of TVET and thereby Arsi Zone of Oromia region fail to satisfy the societal demand for TVET. This entails that Ethiopian TVET system may bear access problem.

Similarly, Atchoarena and Delluc (2002) indicated that girls are underrepresented in TVET as all other sub sectors of education system, Gender inequality, where access to TVET is concerned, a

gender biased division of labor and the low female enrollment rate in TVET reflects the status that societies attribute to women. Likewise, equitable access to skill development, an aspect of social relevance, is a critical problem in match of SSA .Gender equity is a parallel issue. Young women are seriously underrepresented in TVET. One of the reasons is gender biased division of labor in which industrial sectors (mechanics, construction, automotives and electricity) are traditionally reserved for young men. In Mali, large inequalities exist in access to training according to socio economic category in that farmers' children are highly disadvantaged (Johanson, 2002).

Female underrepresentation in TVET is not a universal phenomenon and there is an experience in which males are underrepresented. For instance, in a smaller group of countries, women's vocational school shares exceed those of men, by as much as nine percentage points in the UK and five percentage points in Guatemala and Mexico. Closely related to these distributional patterns by gender, countries in which women's education distributions favor vocational education, compared to men also exhibit a disproportionately high female composition among vocational school enrollees. In Brazil, almost 70 percent of vocational track students are female, followed closely by Bolivia with 66 percent of vocational school students who are female (Rodgers and Boyer, 2006).

In Ethiopia most urban public TVET programs are under-funded while rural public TVET programs suffered from poor facilities and shortages of training materials (MoE, 2006). In West Hararghe Zone of Oromia region, similarly, there was only one TVET institute found in the Zone until recently. To sum up, the world is in a crisis of gender and geographical underrepresentation concerning TVET provision. Thus, the TVET system with greater unsatisfied need for training, lack market place reality, and poor economic status like West Hararghe of Ethiopia, may face difficulty to provide equitable access during implementation of TVET reform.

2.4.2.3 Cost and Efficiency

Efficiency means the relationship between inputs (time, money, and other resources) and outputs (graduates). The World Bank research result indicated that TVET does not absorb a major share of spending on education and training in most SSA countries. Out of total educational expenditure, TVET absorb the amount of expenditure ranging from 0.5% in Ethiopia to 12.7% in

Gabon. In Mali, where TVET makes up 33% of secondary enrollment, TVET absorb 10% of total educational expenditure (Johanson, 2002). This entails that SSA countries commit least value to TVET and it seems most horrible in Ethiopia.

According to TVET strategy, there are indications that TVET in Ethiopia lacks effectiveness and efficiency. It is indicated that substantial resource wastages occurred as a result of underutilization of equipment in public TVET institutions. Beside the availability of poor economy for Ethiopia, the amount of resource devoted for the program is very low (Middleton and Zideman 1997). Thus, introducing such ambitious change package with in these challenging environments may be tough.

2.5 TVET in Ethiopia

2.5.1 Historical development

Ethiopia's modern TVET delivery system had started in 1950s by the establishment of the first TVET center: Tegbareid in Addis Ababa (1941), to produce technically skilled man power for the country. Since then, Formal TVET delivery system had changed its level of studies in order to produce competent technicians that satisfy the national demand as first cycle secondary education (9th to 10th grade), which is equivalent to junior high school. Then from around 1970s until 2000s, most of it had been provided in parallel with the second cycle secondary education (11th to 12th grade), which is equivalent to high school, and the rest had been offered at higher education level.

More specifically, in order to provide options for the increasing number of school leavers, the Government embarked upon a massive expansion of formal TVET some years ago. Between 1996/7 and 2004/5, the number of TVET institutions providing formal non agriculture TVET increased from 17 to 199, and enrolment from 3,000 to 106,305. However, despite the enormous expansion, formal TVET only caters for less than 3% of the relevant age group.

The efforts for TVET development were not free of problem. According to Wanna (1992), Problems associated with TVET programs such as lack of clear objective , poor equipment, shortage of class rooms and laboratories were reported as early as 1969. In general, the TVET system of Ethiopia was characterized by numerous defects some of which are: low quality and theory-driven; lack of integration of TVET with the world of work; lack of the developments of

is strongly held that for education reform to be effective, it is not only necessary but also essential that the target population, which is to be affected directly or indirectly by the reform, be involved in the reform process. Participatory decision making advocate that such involvement helps to develop in people the sense that they are not mere pawns to be manipulated as object of reform, who have a voice and sake in the reform process (Seyoum, 1996).

Likewise, TVET operates at the interface of different sectors of society, notably the education sector, the labor market, industry, MSE sectors, agriculture and rural development, and public administration. In order to serve and relate to all these sectors through high quality and demand-responsive instruments, the TVET system must be steered and implemented with the involvement of a wide stakeholder group in order that their combined efforts improve the relevance and effectiveness of the TVET system. In order to encourage stakeholders to undertake such investments, the government is prepared to share responsibility proportionate to the capacity of the respective stakeholders and entertain different interests and opinions (MoE, 2006). If this has been realized on the ground, TVET reform can be favored different stakeholders' contribution of their own expertise, experience and capacities and thereby scale the implementation of the reform.

2.5.2.4 Monitoring and Evaluation

The TVET reform strategy was not only about the activities to be carried out to realize the implementation, but also it enclosed how to check the progress of the implementation. The main purposes are : to monitor the progress of the TVET reform envisaged in this strategy and to identify bottlenecks at an early stage, the TVET executive bodies, together with their stakeholders, will set up a monitoring system that will: translate the objectives of this strategy into indicators and identify means of verification for the indicators; ensure that indicators are aligned with other national development indicators, Make sure that relevant information to verify progress is generated through the TMIS; commission base-line studies if necessary and oversee subsequent data updating

CHAPTER THREE

Research Methodology

3.1 Method

The advantage of descriptive survey research method, defined by Cohen (1994) and Grey (2004), are: it generate large amount of data from relatively wide area; it allows high degree of interaction by respondents; it may be adapted to collect generalizeable information, it provides relatively simple and straight forward approach to the study of attitude, values and beliefs, it help to measure particular phenomena at fixed point in time and systematic.

Based on this ground, to collect data from sample groups of TVET institution management bodies, trainers, trainees TVET office heads at Zone and woreda level and employers and parents in West Hararghe zone, which are relatively large population, and to describe the existing practices and problems systematically and ascertain stakeholders view and opinions and thereby mirror out the current status of TVET reform implementation that enable to find out solution and elicit recommendation, descriptive survey research method was employed. To this end, questionnaires were prepared to gather quantitative data and interview and focus group discussion guide were utilized to collect qualitative data.

3.2 Sources of Data

Two sources of data (primary and secondary source) were employed in this study.

Primary Sources of Data

Professionals with in three core processes (Capacity Building of Trainers and professional support, Quality assurance and licensing, Market need assessment and training system development) and Planning and statistics support process of Oromia TVETA, West Hararghe Zone's and its respective sample Woredas' TVET office heads (Chiro, Tulo, Habro, Boke, Anchar, Guba Koricha Woredas), four sample TVET institutions (Charcher, Galamso, Lusi, and Rift Valley) management bodies, trainers, trainee, parents, and employers(Gobebe car body building firm; Ebsa Gudina, and Tired metal and wood work; Tesfa garage were the primary sources of the data. These parties were identified as a source because they could be affected by TVET reform either directly or indirectly and thereby they are assumed to provide dependable information for the study.

Secondary Sources of Data

Records and documents pertaining to expansion of TVET, Enrollment, budget allocation, reports, and TVET plan, were employed. Likewise, policy documents and relevant literatures were utilized as secondary sources of data to compliment the primary sources.

3.3 Samples and Sampling Techniques

3.3.1 Sampling Technique

Lottery method sampling procedure was adopted in selecting samples from among Management bodies, Woredas and TVET institutions in West Hararghe Zone because their Population is small. This was followed by the selection of TVET institutions' trainers, and trainees from among the selected TVET institutions by employing systematic method of sampling procedure. Using the list of target population the n^{th} value were identified and the starting point in a sampling frame was chosen. There were a random selection of number between one and 14 to start off the sequence based on the list being organized in TVET institutions in a way unrelated to the study. The starting point selected through lottery method was seven for all sample TVET institutions and every 14th person was chosen. In addition, to select trainers similar procedures were employed and the starting point selected through lottery method was two and every 3rd person was chosen. The proposition behind are the size of the populations are relatively large. The lottery and systematic sampling techniques also employed to provide equal chance for every member of each population.

Furthermore, Purposive sampling technique was employed in selecting sample core process owners in OTVETA, West Hararghe Zone, and selected Woredas TVET office heads because it is assumed by the researcher that they are relatively more resourceful than other members of their respective office workers about TVET reform implementation. Based on the suggestion given by sample TVET institutions four parents and employers were selected by employing purposive sampling technique. The rationale was to identify those employers and parents who were involved during TVET implementation and relatively better informed about TVET reform. Finally, in order to identify sample department heads for focus group discussion, purposive sampling technique was employed, to make the discussion inclusive in addressing each department's situation.

2.2.1 Population and Sample Size

Size of population from which the samples were selected, the sample size planned and number of samples participated are described in table one below as a summary.

Table 1: Size of Population and Sample

No	Types of respondent	Population Size	Planned		participated	
			No	%	No	%
1	OTVETA: Process owners	3	3	100	3	100
	Planning team	5	1	20	1	100
2	ZTVETO head	1	1	100	1	100
3	WTVETO heads	14	6	43	6	100
	TVET institution heads	11	4	36	4	100
	Department heads	12	8	67	8	100
4	Management bodies	36	22	61	20	91
5	Trainers	123	48	39	44	92
6	Trainees	1425	162	11	156	96
7	Employers		4		4	100
8	Parents		4		4	100
	Total		263		251	95

Table one above depicts that out of a total of 263 planned size of sample respondents, 251 (95%) of them were included. This implies adequate numbers of respondents were included in the study.

Oromia TVET Agency: out of a total of three core process owners and two support process heads except human resource support process the others (Capacity Building of Trainers and professional support, Quality assurance and licensing, Market need assessment and training system development core process owners) and Planning and statistics support process were considered to be adequate. These samples were selected by assuming that they are more concerned about the implementation of the reform, because of their position.

West Hararghe zone and Woreda TVET office: out of three employees working in West Hararghe Zone TVET office the head was considered adequate to participate in the study. In addition, considering the homogeneity of the total populations of 14 woredas found in West Hararghe zone six woredas were considered to be adequate and representative. From the selected sample woredas, six office heads were participated in the study.

TVET institutions: out of three Government and eight private TVET institutions four (two from each) were considered enough to furnish reliable data for the study. Considering the homogeneity of the target population of trainees, a total of 156 (162 planned), 92 male and 64 female, was considered to be adequate and representative to provide reliable data. The envisaged sample size was from four sample TVET institution proportionally based on the size of trainees' population in their respective institutions. Similarly, in order to capture trainers' perspective of the issue under investigation and to meet data need, a total of 44 trainers (48 planned), 36 male and 8 female, were included in the study. In addition, out of 22 management bodies (planned), 20 of them were included in the study.

Employers and Parents: two parents and employer with in the vicinity of sample TVET institution were involved in providing data on TVET reform implementation.

2.3 Instruments of Data Collection

The instruments employed for data collection are questionnaire, interview and focus group discussion guide and checklist. Three Separate questionnaires for management bodies with 32 items, trainers with 23 items, and trainees with 18 items, each of which enclosed close ended and few open ended questions, were developed and distributed accordingly. Close ended questions were enclosed "category questions" such as "Always", "Very frequently", "Occasionally", "Rarely", "Very rarely", or "Never"; "Scale questions", specifically, Likert type items on which respondents are asked to indicate how strongly they agree or disagree and to indicate the levels of variables as "Very high", "high", "medium", "low", or "very low"; and multiple choice types. To avoid language barrier, the questionnaire prepared for trainees was translated to Afan Oromo. The, theme of questions were based on four basic issues: Characteristics of respondents, preparations, Achievements, and Challenges. Moreover, open ended questions appeared in the questionnaires are less than three and designed in such a way that it give chance for respondents to add something untouched and relevant for the study.

One semi structured interview and focus group discussion guide was prepared with five major guiding questions with the intention of triangulating the data and to flexibly probing of views and opinions and give chance for informants to expand on their answers. Face to face interview were conducted among three core process owners in OTVTA and planning support process heads; Zone and sample Woreda office heads and TVET institution heads; parents and

employers. Focus group discussion was administered to department heads in sample TVET college/institute.

Moreover, check lists were prepared to gather data from OTVETA, Zone and Woreda TVET offices, TVET institutions, and West Hararghe Zone Finance office. The purpose was to collect some figures on amount of finance allocated, enrolment distribution among Woredas, and number of institutions, to collect data that enable to identify, what is planned and achieved in the course of TVET reform implementation.

3.5 Procedure of Data Collection

3.5.1 Pilot Test

Following the preparation of the questionnaires and before distribution, the tools were administered to Tulo TVET institute' management bodies, trainers, and trainees which are selected through simple random sampling technique. Tulo TVET institute which is found in West Haraghe Zone was selected for pilot testing purpose with a rationale: First, it was not selected as sample, second, found in the same zone with sample institutes and thereby share something in common. For the sake of Validity Oromia TVET agency experts were selected because they are familiar with the implementation of the reform and its components.

Two test procedures were employed: the first test was related to the validity of the tools. To test the validity the questionnaire was distributed to five experts in OTVTA to comment on the clarity of the language, the inclusiveness of the questions, and to identify irrelevant questions. Based on comments from these experts, language usages for some concepts are corrected. For instance, they suggested, researcher, to use 'trainers and trainees' instead of using 'teachers and students'. In addition, four items are excluded because of duplication and one important item was added (the cluster Woreda approach in resource mobilization) by the suggestion of this experts.

The second attempt made to test the tool was consistency (internal and external) test. Two techniques were employed: First, split- half test was used to test the internal consistency of the tool. To undertake this test the questions were divided in to two equivalent parts and distributed to two groups of management bodies, trainers and trainees. The two halves have 18 respondents with equal proportion from each types of groups (management bodies = 6/2; trainers =10/2 and trainee= 20/2). Thus the split-half method treats the two halves of measures as alternative form.

This halves reliability estimate was tested using the Spearman-Brown correlation prediction formula (rs). The assumption behind is that it measure the portion of the variability in one variable that can be predicted using the relationship with the second halve. The resulting values obtained are: Management bodies (rs=8.43), Trainers (rs=7.26), and Trainees (rs = 6.92). Based on the assumption behind the Spearman-Brown test, the more the result of reliability nearer to one the more it is reliable. Thus, it appears that the obtained results help to predict that the questions in the questionnaire are internally consistent.

Second, in order to test the external consistency of the question multiple administration method was employed. The procedure followed were first five department heads, five trainers and 10 trainees were randomly selected (NB. These sample respondents were excluding those who participated in split half test). The questionnaires were distributed within interval of eight days to the same sample. This test retest reliability was estimated as Pearson product moment correlation coefficient(r) between these two data (Gravitter, 2000).

The resulting values obtained are: Management bodies (r = 7.91), Trainers (r = 7.44), and Trainees (r = 7.20). Based on the assumption defined above for Spearman-Brown, the obtained results help to predict that the questions in the questionnaire are externally consistent.

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3.5.2 Data Collection

Following the pilot test, the questionnaires were distributed, after getting permission, to all the samples identified for the study by the researcher. During the distribution, orientations were given for all sample respondents (collectively for trainers, because of large size). For student respondents, the researcher assigned agents in order to help learners to fill the questionnaire at the spot. Finally, the questionnaires were collected after checking whether each question items are answered or not, in order to avoid un-responded items error.

Concerning interview, in order to help the interviewee to prepare him/her self, the interview guides was distributed to the interviewee before conducting the interview. In addition, time and place for interview was planned by the agreement of the interviewee and interviewer and administered accordingly. For the data collected through focus group discussion in TVET College, the researcher was arranged appropriate time and place with the participation of informants. During discussion the researcher provided points of discussion and take note.

Finally, important documents like annual report, Plan, enrollment, budget, and others were assessed through the check list and some of the copies of documents were collected and annexed.

3.6 Data Analysis

The data analysis procedure was started by tallying and tabulation of the data gathered through questionnaires. In addition data that were obtained through interview, focus group discussion, and documents were summarized.

Quantitative data: the data obtained through questionnaire were analyzed using different kinds of statistical tools which were processed through Statistical packages for Social Science (SPSS) software. The statistical results reporting formats included both descriptive and inferential statistics. The intent of descriptive statistics is to give the picture of data by summarizing the original scores and thereby to provide better understanding of the result from the test. In addition, inferential statistical tools were employed to test the difference in scores of response between different sample groups and provide supplementary evidence. More specifically the statistical tools employed were frequency, percentage, mean standard deviation, grand mean, Kruskal-Wallis test, Mann-Whitney U-test, independent sample t-test and one way ANOVA. The tests were made with the 95% ($\alpha = 0.05$) level of confidence. Parametric tests were (independent sample t-test and One way ANOVA) utilized to test data obtained by likert type questions using the numbers assigned as standard by Likert. The non parametric tests (Kruskal- Wallis and Mann-Whitney U-test) were employed to measure the difference between scores obtained from multiple choice and Category questions because such data could be categorized under nominal and ordinal scale type.

Mean and grand mean, were employed to measure the central tendency and standard deviation was used to show the variability of responses within each sample groups. Kruskal- Wallis test is the non parametric equivalent of One way ANOVA (parametric), both of which are appropriate to measure the difference between responses score of more than two independent sample groups (Giravitter and Wallnou, 2000). Based on this assumption these tools were employed to test the difference of scores of response between sample group of Management bodies, trainers, and trainees. Similarly, Mann-Whitney U-test is the non parametric equivalent of independent sample t-test (parametric), both of which are appropriate to measure the difference between response score of two independent sample groups. With this premises, these two tools were

utilized to measure difference of scores of response between sample group of Management bodies and trainers, or sample trainers and trainees.

Qualitative data: the data obtained through interview (individually and with group) were grouped in to three themes (preparations made; results obtained; challenges encountered in the course implementing TVET reform) and coded. Based on the grouped responses the data were described thematically as supplementary evidence following the discussion of quantitative data.

CHAPTER FOUR

Data Presentation, Analysis and Interpretation

This chapter deals with presentation and analysis of the data obtained from the sample population through questionnaires, interviews, focus group discussions and documentary analysis. The analysis is categorized in to two major parts.

The first part (4.1.) deals with the profiles of the sample respondents in terms of their sex, work experiences and qualification field of specialization. The second part (4.2) is about TVET reform implementation with three minor sub titles: preparations made, results obtained, and major challenges encountered in the course of implementing TVET reform in West Hararghe Zone.

4.1. Characteristics of Respondents

Different parties in West Haraghe Zone TVET system, namely, WHZTVETO, WTVETO, TVET institutions, employers, and parents and OTVETA were included in the study. Three sets of questionnaires were distributed to management bodies (institution heads, core process owners, department heads), trainers and trainees in sample TVET institutions in the Zone. Out of the total 232 respondents who were distributed with questionnaires, 220 (94.83%) of them (management bodies=20; trainers= 44; and trainees =156) returned with their responses. Interview guide was employed to gather data from a total of 23 personnel from OTVETA, WHZTVETO, WTVET offices, TVET institutions, employers and parents. In addition, focus group discussions were made with eight TVET institution department heads found in sample TVET institutions. In general, a total of 251 respondents were included in the study and offered the necessary information.

Distribution of Respondents by Sex, Work Experience, Qualification and Fields of Specialization

The main purpose of treating sex, work experience, qualification, and fields of specialization and provision of additional courses is, in general, to provide the picture of the characteristics of respondents in terms of these variables.

Table 2 Frequency and Percentage Distribution of Respondents' Sex, Experience, and Qualifications

No	Items	Respondents					
		Trainees		Managers		Trainers	
1	sex	F	%	F	%	F	%
	Male	92	58.97	20	100	36	81.82
	Female	64	41.03	0	0	8	18.18
	Total	156	100	20	100	44	100
2	Year of service						
	<5			5	25	38	86.36
	5-10			13	65	6	13.64
	11-15			2	10	0	0
	Total			20	100	44	100
3	Qualification						
	diploma			6	30.00	16	36.36
	BA/BSC/BED			14	70	28	63.64
	Total			20	100	44	100
4	Field of specialization						
	Academic			17	85	6	13.64
	Management			3	15	0	0.00
	Technical			0	0	38	86.36
	Total			20	100	44	100
5	Additional training for management						
	Short term			12	60		
	None			8	40		
	Total			20	100		

Table 2 above depicts that number of male respondents exceed females (all management bodies 100%, trainers 81.82%, and trainees (58.97%). What is surprising here is that there is no single female who act either as a department head, core process head in all (4) sample TVET institutions. This entail the TVET system in west Haraghe Zone might be male dominated. As far as the service of respondents is concerned, most trainers (86.36 %) have work experiences less than five years and most management bodies hold work experiences between 5 and 10 years. This implies the management bodies look as if more experienced.

As it is indicated in Table 2 above, most management bodies (70%) and trainers (63.64%) held first degree. On the other hand, while the majority of sample management bodies specialized in academic subjects, most trainees (86.36%) specialized in technical education

Table 3 Frequency and percentage distribution of respondents' (trainee) department

No	Department	Trainees		Rank
		F	%	
1	Health	11	7.05	5th
	Construction	49	31.41	1st
	Mechanics	39	25.00	2nd
	Automotive	19	12.18	4th
	Business	38	24.36	3rd
	Total	156	100	
years in school				
2	One	11	7.05	3 rd
	Two	46	29.49	2 nd
	Three	99	63.46	1 st
	Total	156	100	

Table 3 above shows that most trainee respondents are from construction (31.41%), mechanics (25%), and business (24.36) departments and they rank first, second and third respectively. This entails that these departments seem dominant in West Hararghe Zone TVET system. On the other hand, most sample trainees (63.46%) stayed for three years in their respective college or institutes. Thus, they bear relatively better understanding about TVET reform and as a result they may provide the necessary information for the study.

4.2 Analysis of Data on TVET Reform Implementation

This sub title enclosed the analysis of data on reform implementation by categorizing in to three. These are preparations made to implement TVET reform in West Hararghe zone; achievements or the results obtained as a result of the implementation of TVET reform; and constraints that challenge the successful implementation of TVET reform. The issues raised in each of these three minor sub titles are inter related in such a way that one contribute to the other and vice versa. Thus, this categorization is made only to ease the presentation and analysis of data.

4.2.1 Preparations

It is a hard fact that any change efforts require adequate preparations that facilitate the enabling environments for successful implementation of the reform. In light of this fact issues included in this minor sub title are: the preparations made in terms of communication of the reform, curriculum, governance, and resource. To this end, management bodies (TVET institution, core

process and department heads) trainer, trainees, TVET system heads at Woreda and zone, OTVETA core process heads employers and parents were included in the study.

Communication of TVET Reform

One of the steps to confront challenges that could arise from resistance during implementation is communicating the change. Hammer and Champy (1995) suggest continuous communication as “communication, communication, communication...” With this premises, TVET institutions’ management bodies, trainers and trainees’ opinion where included (see table 4 below).In addition, qualitative data gathered during field work were transcribed and included in the following discussion.

Table 4 Mean Distribution of Responses on TVET Communication Related Issues

N o	Items	Respondents			Grand mean	t _{obt}	f _{obt}	sig
			Managers	Trainers				
1	Communication of TVET reform	N	20	44	156	3.32	0.03	0.97
		Mean	3.25	3.18	3.24			
		SD	1.16	1.32	1.58			
2	Commitment of political leaders	N	20	44	156	2.65	0.65	0.52
		Mean	2.9	2.64	2.63			
		SD	1.07	1.20	0.95			
3	Importance of TVET reform	N	20	44		3.45	0.96	0.33
		Mean	3.65	3.36				
		SD	0.81	1.22				
4	Timeliness of TVET reform	N	20	44		3.47	1.17	0.25
		Mean	3.70	3.36				
		SD	0.66	1.20				
5	Preparation of TVET reform	N	20	44		3.08	3.14*	0.00
		Mean	3.80	2.75				
		SD	0.77	1.40				

NB : Mean < 3 “disagree”; Mean =3 “Undecided”; Mean > 3 “Agree” ; t_{obt} - calculated value of independent sample test; degree of freedom= 62; f_{obt} is calculated value of one way ANOVA; Degree of freedom (b/n group=2 and within group=217); Confidence level is 95%($\alpha=0.05$)

Table 4 above indicates that the three sample groups of respondents agreed that the reformed TVET is communicated, important, timely and participatory (Grand mean ranges from 3.08 to 3.47; see items no 1, and 3 to 5). Though the participation of stakeholders in TVET reform implementation was perceived participatory in its totality (grand mean= 3.08), trainers disagree (Mean =2.75). Most of the scores within each sample groups have the value scattered in both direction of each mean by degree which ranges from 0.657 to 1.32 (value of SD). For instance,

most scores of trainers' response scattered from 2.76 to 4.50 (SD=1.317). This entails that there are some trainers who believed that TVET reform is not well communicated and there is no common understanding among stakeholders about the preparation of TVET reform. As it is indicated in the same table, TVET reform did not win the political leaders commitment yet (grand mean = 2.65). This implies that the communication of TVET might be discontinuous and exclusive and thereby TVET system might be deprived of poor commitment of stakeholders in West Hararghe Zone.

In addition, the data that was obtained during field work through interview and focus group discussion seems convey similar message. To illustrate some by respondents own term:

Political leaders used to speak much about TVET on the stage, but commit least resource for the program; The political leaders at the remote woredas seems not acquire the importance of TVET reform; The knowledge about TVET decreases while one makes a move from major cities to remote areas in the zone (TVET institution and department heads)

Woreda and Zone TVET heads have no political power to make political decisions; (Zone and Woreda TVET office heads).

This entails that TVET reform communication seems discontinuous, exclusive and lack convincing power and there by fail to gain commitment from political leaders in strict sense or the commitment might be verbal.

Moreover, the independent sample t-test result (at $t_{obt}=3.14$; $p<0.05$, see Table 4 above item no 5) shows that there is significant difference between opinion of sample management bodies and trainers. This difference could be aroused from the position of respondents in that management bodies may hold better knowledge about the preparation of TVET reform or trainers might be poorly communicated about stakeholders' involvement in reforming TVET.

Theoretically, many writers are in a firm agreement with the principle of gaining commitment to change is the final ingredient in the recipe for success. Thus, to enable the reform attempt to be understood by everyone and acceptance to be secured from those who are mostly affected by or involved in any change requires , among other things , involvement, clear, effective and convincing communication on a continuous base (Rye,1996).

Thus, it is possible to infer that TVET system in West Hararghe Zone might not claim better position to accelerate the implementation pace as it ought to be and thereby its success might not be promising.

TVET Curriculum

One of the trusts of Ethiopian TVET reform strategy is developing outcome - based curricula with the introduction of occupational standard. Thus, to examine the preparation made the relevance and flexibility of curricula and communication of standard and market demand issues are treated based on the attitude of management bodies, trainers and trainees (see table 5 below). In addition, qualitative data that were obtained during field work were supplemented in the following discussion.

Table 5 Mean Distribution of Responses on Curriculum Related Issues

No	Items	Respondents				Grand mean	t _{obt}	f _{obt}	sig
			Managers	Trainers	Trainees				
1	Relevance of curriculum	N	20	44	156	3.40		1.88	0.12
		Mean	3.75	3.18	3.42				
		SD	0.64	1.17	1.14				
2	Employers expectation and TVET Graduates	N	20	44	156	2.65		2.68	0.71
		Mean	3.12	2.30	2.71				
		SD	1.56	1.13	1.26				
3	Communication of Standard requirement of the course	N	20	44	156	2.78		4.31*	0.02
		Mean	3.50	3.02	2.62				
		SD	1.36	1.02	1.49				
4	Preparation of curriculum	N	20	44		2.31	5.09*		0.00
		Mean	3.20	1.91					
		SD	1.15	0.83					
5	Flexibility of Curriculum	N	20	44		3.61	1.58		0.12
		Mean	3.90	3.48					
		SD	0.55	1.13					
6	Market demand and decision on course delivery	N	20	44		2.51	-2.00		0.05
		Mean	2.15	2.68					
		SD	1.14	0.91					

NB : Mean < 3 "disagree"; Mean =3 "Undecided"; Mean > 3 "Agree" ; t_{obt} - calculated value of independent sample test; degree of freedom= 62; f_{obt} is calculated value of one way ANOVA; Degree of freedom (b/n group=2 and within group=217); Confidence level is 95%(α=0.05)

Table 5 above depicts that while the sample group of management bodies, trainers and trainees hold a conviction that explain the reformed TVET curriculum is important and flexible (grand

mean= 3.40 and 3.61 for items 1 and 5 respectively), they believed that the preparation of curriculum was not participatory, the standard requirement is not communicated, the graduates fail to meet the expectation of employers, and market demand is not a benchmark for the kind of courses either to be delivered or closed (Grand mean ranges from 2.31 to 2.78). But, when one make a closer look at each group of respondents' view it seems clear that while sample group of management bodies (mean = 3.12, 3.5, and 3.2 respectively) believed that the preparation of curriculum is participatory and the graduates meet the expectation of employers, both trainers and trainee were not (mean <3.00; see the same table items no 2 - 4). This means that the stakeholders' involvement in the preparation of curriculum might not be participatory and trainees, as a result, could not meet the stakeholders' expectation. In addition, market place requirements were not utilized to make curriculum related decisions. This implies that the TVET delivery system in west Hararghe zone could not create strong link with the market place demand and thereby trainees might not be competent in the market.

The data obtained from interview and focus group discussion is also in agreement with what is discussed above. To demonstrate some by respondents' own term:

TVET institutions, zone and woreda TVET offices have been told to undertake the study on market demand, but not by initiatives from the local authorities; We undertake need assessment for the sake of report (TVET institution heads II and III and department heads)

Our organization prefer to hire those who are trained informally because they are skillful and productive; You find very few students, not more than two or three who feet to the real work during apprenticeship training (Employer I,II and IV).

This entails that the market need assessment activities have been performed in West hararghe zone for the sake of report. Graduates from school based TVET system in West Hararghe Zone might not be the primary preference of employers.

From its very outset the goal of Ethiopian TVET reform was to transform the TVET system from supply to demand driven. To this end, the identified competencies needed in the labor market should become the benchmark of training, so that the system support citizens to become competent (MoE,2006).

Moreover, as it is indicated in table 5 above, the result obtained from one way ANOVA shows that the view of respondents, on whether the standard requirement is communicated or not, is significantly different (at $f_{obt}= 4.31; P<0.05$). This implies that the knowledge about the standard

requirement might be restricted to trainers and management bodies. Thus, trainees may fail to expect the kind of competencies that they need to hold to be competent in the market. Likewise, the t-test result indicates that the opinion of respondents on the issue of participatory preparation of TVET curriculum is significantly different (at $t_{obt} = 5.09$; $P < 0.05$). This implies trainers might be poorly participated in TVET curriculum preparation than managers. On the other hand, the test result for items 1, 2, 5, and 6, indicates that there is no significant difference indicating consensus in responses and thereby it is possible to deduce the result for the whole population in the study.

In light of these facts (information obtained from qualitative and quantitative data) it seems safe to conclude that the TVET delivery system might not be in a position of preparing competent and adaptable manpower for the socio economic development of West Hararghe Zone.

TVET Governance

One of the problematic features of the previous situation was that TVET system limits its relation to education sector excluding other sectors and stakeholders. Thus, to come up with effective and efficient TVET system the governance of TVET need to be built up on stakeholders' participation. With this proposition, the inclusiveness of TVET office councils and TVET institutions' board inclusiveness and their commitment, was treated. To this end the attitude of managers, trainers were included (see Table 6 below). The qualitative data obtained during field work also included thematically in the followong.

Table 6 below depicts that the TVET governance at different level was established from different government sectors, employers and there is clear guideline that possibly dictate their activities (grand mean ranges from 3.69 to 4.11; see items 1, 2, and 4). On the other hand, it was perceived by groups of sample respondents that the established TVET governance lack commitment to assume their responsibility and there is no structural relationship set by TVET system in the zone (grand mean ranges from 1.55 to 2.55 for items 3, and 5 to 7). In addition, majority of respondents' response scores have scattered by less than one degree about their respective mean value (see "SD" value for all items). This is to mean the variation among response scores is minimal which may hold the implication that members of each sample groups have similar conviction on each issue. This implies that the TVET governance might not be effective and functional.

Table 6: Mean Distribution and t-test Result on Governance Related Issues

No	Items	Respondents			Grand mean	t _{obt}	sig(2-tailed)
			Managers	Trainers			
1	Members of TVET institution Board	N	20	44	4.11	4.79*	0.00
		Mean	4.35	4.00			
		SD	0.49	0.00			
2	Guideline for board members	N	20	44	3.69	9.25*	0.00
		Mean	4.90	3.14			
		SD	0.31	0.82			
3	Commitment of Board members	N	20	44	2.08	2.61*	0.01
		Mean	2.45	1.91			
		SD	0.76	0.77			
4	Members of Woreda and Zone TVET council	N	20	44	4.09	3.16*	0.00
		Mean	4.55	3.89			
		SD	0.51	0.87			
5	Council members responsibility	N	20	44	2.20	1.30	0.20
		Mean	2.40	2.11			
		SD	1.00	0.72			
6	Willingness of TVET council members	N	20	44	1.55	-2.18	0.03
		Mean	1.35	1.64			
		SD	0.49	0.49			
7	Structural relationship b/n employer and TVET institution	N	20	44	2.25	0.62	0.54
		Mean	2.30	2.23			
		SD	0.47	0.42			

NB : Mean < 3 “disagree”; Mean =3 “Undecided”; Mean > 3 “Agree” ; t_{obt} - calculated value of independent sample test; degree of freedom= 62; Confidence level is 95%($\alpha=0.05$)

According to the data obtained during field work through interview and focus group discussion the board and council members are from employers and different sectors of government offices. The informants also indicated that members of TVET governance hold responsibility other than TVET in their respective offices. Thus, as per the response of the informants, it is difficult to bring them together in order to involve them in different kinds of decisions.

Basically, TVET reform strategy document underlined that the mere establishment of tripartite bodies for TVET governance alone does not bring the desired result unless the stakeholder bodies function effectively and if their participation is strong and undisputed (MoE, 2006).

Additionally, independent sample t-test procedure was employed to test the difference between sample groups’ response scores. The obtained result indicates that, however, managements’ and trainers’ response score lies on the same category “disagreement”, there is statistically significant difference between the two scores (see items 3 and 6 in Table 6 above; at t_{obt} = 2.611 and -2.18, $p < 0.05$). This implies management bodies seem affected highly by poorly committed board

members and unwillingness of council members to assume their responsibility. On the other hand, though the response of management bodies and trainers, for item no, failed in the same category “high” the difference is statistically significant ($t_{\text{obt}} < 0.05$). This implies that school management bodies perceived the severity of the problem than trainers because of their responsibility.

Thus, it appears that the stakeholders were not in a position of playing their parts in the governance of TVET system and thereby TVET might not claim the diversified alternatives in the decisions required to run the system in West Hararghe zone.

Planning

It is a hard fact that any smart change project alone does not guarantee success unless implementation is planned and followed by continuous monitoring and periodic evaluation in order to take remedy for short comings observed in the course of implementation. With this premise, preparations made in terms of planning and controlling systems were examined in the following. To this end, TVET institutions’ management bodies, trainers, trainees were included (see Table 7 below).

Table 7: Mean Distribution and t-test Result for Planning Related Issues

No	Items	Respondents			Grand mean	t_{obt}	sig(2-tailed)
			Managers	Trainers			
1	Planning the activities	N	20	44	4.34	2.68	0.01
		Mean	4.60	4.07			
		SD	0.50	0.82			
2	Networking through IT	N	20	44	2.23	5.91	0.00
		Mean	2.45	2.00			
		SD	0.51	0.00			
3	Planned monitoring activity	N	20	44	2.83	4.30	0.00
		Mean	3.30	2.36			
		SD	1.26	0.49			
4	Evaluation process	N	20	44	3.72	3.32	0.00
		Mean	4.15	3.45			
		SD	0.75	0.79			
5	The utilization of evaluation results	N	20	44	3.91	2.86	0.01
		Mean	4.25	3.57			
		SD	0.55	1.00			

NB : Mean < 3 “disagree”; Mean =3 “Undecided”; Mean > 3 “Agree” ; t_{obt} - calculated value of independent sample test; degree of freedom= 62; Confidence level is 95%($\alpha=0.05$)

Table 7 above indicates that the TVET institution undertake planning for the activities to be performed and track the performances in the course of implementing TVET reform. In addition, they utilize the result of evaluation process to improve their performance while implementing the reform (grand mean ranges from 3.72 to 4.34; see items 1, 4, and 5). Most scores of respondents have scattered for both samples between 3.00 and 5.00 (see the SD value for the same items). This entails that most respondents are in agreement with existence of planning and controlling procedure in the course of implementing TVET reform. On the other hand, net working between TVET organizations at different echelons through IT seems not established yet (grand mean=2.23). This implies that there might not be established net working among TVET systems in order to learn from each other and communicate best practices and share resources.

Responses obtained during interview shows that there is a planned quarterly evaluation of the performances at OTVETA level. In addition, there is monthly report which is communicated to zone level government bodies and OTVETA. According to the informants view, best practices are communicated and short comings are identified to undertake remedy. What is problem here is, according to informants' view, there is no established supervisory system to support TVET institutions.

Though, there is a similarity of response category "Agree" for both respondents, there is statistically significant difference between the perception of management bodies and trainers (at $t_{obt} = 2.679, 3.318, 2.858$; $p < 0.05$). This entails that managers may hold better understanding about the planning process or the planning and tracking system lack transparency.

From these data it is possible to deduce that preparations was made by TVET system in West Hararghe zone in establishing planning and evaluation system that possibly enable to keep the reform implementation on progress. But, there might not be strong link among TVET systems in West Hararghe Zone. Thus, TVET system in West Hararghe zone may lack the culture of knowledge management and thereby the chance to learn from other may be poor.

Resource

Let alone TVET reform whose provision is expensive, any plan cannot be realized without the allocation of adequate resources. With this ground in order to examine the preparations made in terms of resource, TVET institution management bodies, trainers, and trainees are included in the

study. In addition, document analysis, interview and focus group discussion also employed and presented in the following discussion.

Table 8: Mean Distribution of Responses and one way ANOVA Results on Resource Related Issues

No	Items	Respondents				Grand mean	f _{obt}	sig
			Managers	Trainers	Trainees			
1	Trainers' skill	N	20	44	156	2.36	13.65*	0.00
		Mean	2.45	3.14	2.12			
		SD	0.95	1.42	1.08			
2	The machineries	N	20	44	156	3.05	0.02	0.98
		Mean	3.10	3.02	3.02			
		SD	1.17	1.46	1.46			
3	The workshops	N	20	44	156	2.86	1.11	0.33
		Mean	3.30	2.89	2.80			
		SD	1.08	1.43	1.44			
4	The classrooms	N	20	44	156	3.19	0.07	0.93
		Mean	3.30	3.16	3.19			
		SD	1.42	1.35	1.40			
5	Raw material	N	20	44	156	2.38	0.01	1.00
		Mean	2.35	2.39	2.38			
		SD	1.14	1.26	1.39			
6	Required books	N	20	44	156	1.75	0.84	0.43
		Mean	1.65	1.59	1.81			
		SD	1.18	0.76	1.10			
7	Internet access	N	20	44	156	1.21	8.44*	0.00
		Mean	1.30	1.45	1.13			
		SD	0.47	0.50	0.46			

NB : Mean < 3 "disagree"; Mean =3 "Undecided"; Mean > 3 "Agree"; f_{obt} is calculated value of one way ANOVA; Degree of freedom (b/n group=2 and within group=217 ;Confidence level is 95% ($\alpha=0.05$)).

Table 8 above depicts that all groups of sample respondents in TVET institution (management bodies, trainers, and trainees) perceived that the machineries and classrooms available for training are appropriate (grand mean=3.05 and 3.19, for items no 2 and 4 respectively). On the other hand, the same table showed that all groups of sample respondents in TVET institution believed that the raw material provision, the availability of required books in the library and provision of internet service are either in a short supply or in existent (grand mean ranges from 1.21 to 2.38). The distribution of the scores for the provision of internet to support the training and education in the TVET institutions, is relatively less scattered (SD= 0.45-0.504). This means that all respondents agreed that there is no internet access to support the training in West

Hararghe Zone. From these data it seems clear that the TVET training system in West Hararghe Zone lack the required manpower with the skill required, raw material supply, books and internet provision. By implication, formal TVET delivery system might be poor.

The responses obtained from interview and focus group discussion transmit similar points. To illustrate the responses by respondents own term:

The trainer's training and learning module (TTLM) guide is very general and advice the trainer to prepare their own module based on the outlines identified. But, For trainers to prepare a training module there is no books that address the identified titles and no access for internet. I am in a state of confusion; Raw materials are a tie which holdout our hands from practical learning; Training in the workshop are hypothetical, meaning taking paper as a wood (TVET institution department heads)

The existing machineries, especially for automotive are fantastic but left idle because of skill gap from trainers side (Employers I and II)

We simply hire trainers those applicants who were not certified by COC (TVET institution heads, I and III)

These data reveals that trainers' skill gap and raw material input and poor provision of reference sources are the bottlenecks that constrain the successful implementation of TVET reform.

On top of that, the one way ANOVA test procedure was employed to test whether the obtained scores for different sample groups in the study are different or not. The obtained result, as indicated in Table 8 above item no 7, shows that the difference between scores of sample groups on trainers' skill is statistically significant (at $f_{obt} = 8.44$, $p < 0.05$). This entails that the trainers either denied or do not know their skill gap. This condition may be very dangerous in that it protect trainers from striving to improve their skill. On the other hand, the test results, for items 2 to 6, indicate that the difference in perception of sample groups is not significant (at all f_{obts} ; $P > 0.05$). So that, it is possible to deduce the results obtained to the whole population under the study.

In general, therefore, TVET training system in West Hararghe Zone seems not in a position of preparing trainers for the World of work. As a result, the skill gap might be made a vicious circle and the problem may continue for a long time, unless broken out somewhere.

Table 9: Mean Distribution and t-test Results of Resource Related Issues

No	Items	Respondents			Grand mean	t _{obt}	sig(2-tailed)
			Managers	Trainers			
1	Leaders' capacity building	N	20	44	3.16	4.09*	0.00
		Mean	3.95	2.80			
		SD	0.76	1.15			
2	Qualified trainers availability	N	20	44	1.89	-2.45*	0.02
		Mean	1.55	2.05			
		SD	0.83	0.71			
3	Recurrent budget assignment	N	20	44	1.84	0.04	0.97
		Mean	1.85	1.84			
		SD	0.75	0.81			
4	Capital budget assignment	N	20	44	1.75	-3.48	0.01
		Mean	1.30	1.95			
		SD	0.47	0.78			

NB : Mean < 3 "disagree"; Mean =3 "Undecided"; Mean > 3 "Agree" ; t_{obt} - calculated value of independent sample test; degree of freedom= 62; Confidence level is 95%($\alpha=0.05$)

Table 9 above reveals that TVET leaders were capacitated to lead the TVET system (grand mean =3.16). Majority of the scores of trainers have scattered between 2.01 and 4.31 (SD=1.15). This entails that some trainers believed that the leaders hold the required capacity to lead TVET institution. On the other hand, qualified trainers are not found in the labor market (grand mean= 1.89) and budget (capital and recurrent) are in a short supply at least to meet the minimum requirements by the institution (grand means=1.84 and 1.75). This implies that the amount of resource committed for the implementation of TVET reform seems inadequate and thereby the training system might be in a poor quality.

The qualitative data obtained during field work through interview and focus group discussion define similar reality as the one discussed above. To demonstrate some of them by the respondents own term:

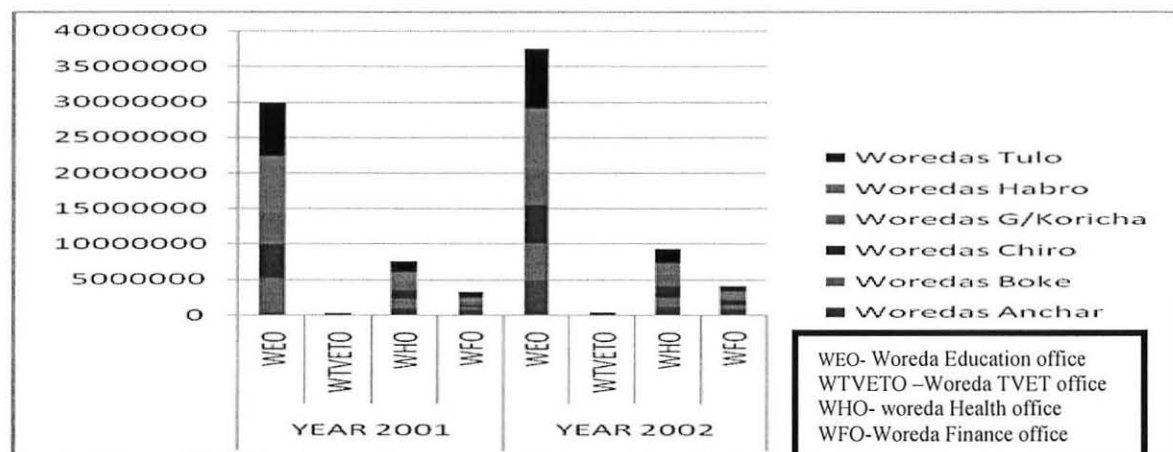
All trainers hired this year are those who fail to get the COC certificate; Our institution announce so many times by posting the vacancies in major cities in the country but we collected no application (TVET institution heads I and II).

Those graduates who pass the COC examination and earn the certificate automatically collected from the market by huge companies like MEDROC (OTVETA core process owners II and III).

... 'Cabane' members at woreda level assign more budgets for their own respective offices (Woreda TVET office heads III, IV, V, VI, and VII).

From this it seems clear that lack of qualified trainers who hold the required competencies are either in a short supply or in existent. In addition, it also confirms that TVET system might not won the political leaders commitment.

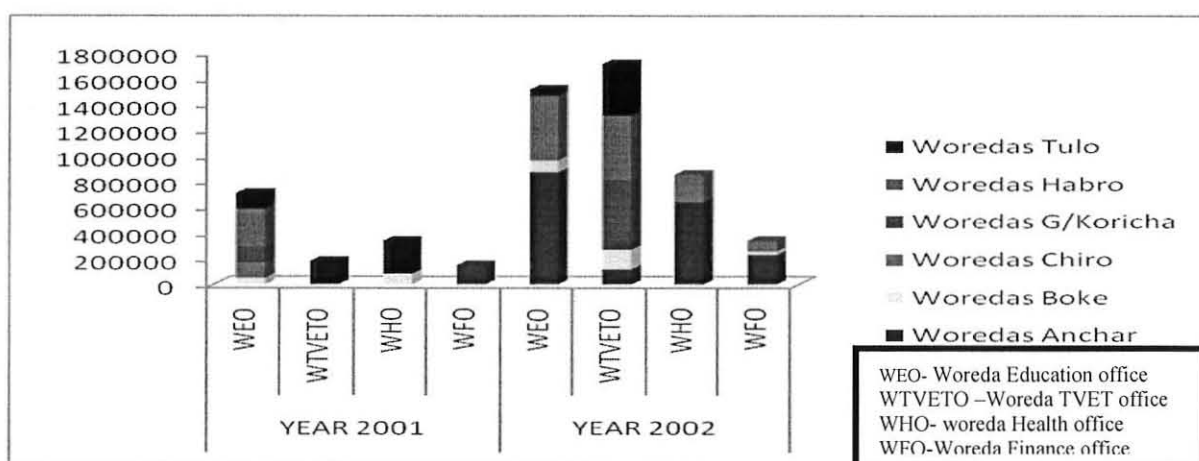
In addition, the following graphs present the budget allocation of sample woredas and there by judge the extent of political leaders' commitment.



Source: West Haraghe zone Finance office

Figure 1: Recurrent Budget Distribution for Four Sectors in the Sample Woredas

Figure 1 above depicts that the recurrent budget allocated for TVET by sample woredas, compared to other sectors within the consecutive two years (2001 and 2002), is least. The table from which the graph is sketched indicates that, there are woredas without allocation of budget for TVET (see annex 2). On the other hand, TVET seems favored in the allocation of capital budget in 2002 in West Hararghe zone (see figure 2 below). But, table of the graph (see annex 2) shows, though there is an improvement in Capital budget allocation, there is a Woreda with the allocation of no coin.



Source: West Haraghe zone Finance office

Figure 2: Capital Budget Distribution for Four Sectors in the Sample Woredas

This shows that the commitment of political leaders at woreda level is least in the allocation of recurrent budget and there is an improvement in the allocation of capital budget.

Furthermore, though the grand mean for trainers and trainees showed that the leaders were capacitated the t-test result indicated the responses are statistically significant (at $t_{\text{obt}} 4.09$; $p < 0.05$). This implies that trainers might lack confidence on competence of TVET institution leaders.

From these data discussed above and previous discussions, it seems clear that the resource available to run TVET system seems inadequate. As a result, the training system appears poor because the materials and skilled human inputs are in a short supply. Thus trainees' preparation could not enable them to be successful in the competition for employments in West Hararghe Zone. In addition, one can learn from this data that there might be lack of uniformity in implementation of TVET reform which could be due to poor communication of the reform.

4.2.2 Achievements

Any planned changes have a target that could be attained by spelling the plan in to effect and its successes are possibly measured in terms of the set of goals. With the intention of examining the results obtained as a result of the introduction of TVET reform in West Hararghe Zone, the level of stakeholders involvement, trainers and trainees support system, trainees' selection criteria, improvements made, and resource mobilization issues are included in this minor sub-title. To this end, management bodies (TVET institution, core process and department heads) trainer, trainees, TVET system heads at Woreda and zone, TVETA core process heads employers and parents were included in the study.

Stakeholders Involvement

TVET operates at the interface of different sectors of society. In order to serve and relate to its stakeholders through high quality and demand responsive instrument, the TVET system must be steered and implemented with the involvement of a wide stakeholder groups. With this understanding, the extent to which the TVET systems involve stakeholders in the course of implementing TVET reform was treated. To this end, management bodies, and trainers, employers, and parents are included in the study.

Table 10 Mean and Distribution of Respondents and t-test Result on Stakeholder's Involvement

No	Stakeholders' involvement in:	Respondents		Grand mean	t _{obt}	sig(2-tailed)
			Managers	Trainers		
1	Planning	N	20	44	2.63	2.44*
		Mean	3.10	2.41		
		SD	0.97	1.09		
2	Resource allocation	N	20	44	2.55	4.99*
		Mean	3.40	2.16		
		SD	0.94	0.91		
3	Evaluating the Curriculum	N	20	44	2.48	3.02*
		Mean	3.10	2.20		
		SD	1.17	1.07		
4	Monitoring the progress	N	20	44	2.38	3.25*
		Mean	3.05	2.07		
		SD	1.40	0.97		
5	Communicating the reform	N	20	44	2.70	3.78*
		Mean	3.55	2.32		
		SD	1.19	1.22		
6	Selecting trainees	N	20	44	1.92	3.41*
		Mean	2.55	1.64		
		SD	1.36	0.78		
7	Market need assessment	N	20	44	2.11	4.29*
		Mean	2.75	1.82		
		SD	1.16	0.58		

NB : Mean < 3 "disagree"; Mean =3 "Undecided"; Mean > 3 "Agree" ; t_{obt} - calculated value of independent sample test; degree of freedom= 62; Confidence level is 95%($\alpha=0.05$)

Table 10 above depicts that the level of stakeholders' involvement in different activities in TVET system was low (Grand mean ranges from 1.92 to 2.70). Specifically, while sample management bodies perceived the participation of stakeholders in planning, resource allocation, evaluation of the TVET curriculum, monitoring the progress of TVET reform and communicating activity as relatively high (mean ranges from 3.1 to 3.55), the trainers perceived as low (mean ranges from 2.07 to 2.41). Most scores, as indicated in the same table, of the sample respondents have a value spread in both directions of each mean. For instance, the managers' scores have spread out from 1.655 to 4.495 (SD= 1.395). This entails that, however, the groups' mean indicated that the managers believed the participation of stakeholder is "high"; there are some managers who believed the participation of stakeholders in monitoring the TVET reform implementation is

“low”. This implies that the stakeholders’ involvement seems poor and thereby the relevance and effectiveness of TVET system might not be improved.

On the other hand, the interview, focus group discussion and the document review for selection criteria indicated that the guideline for TVET governance clearly state who participate in each steps of selection. The problem is, as indicated by informants, the unwillingness of concerned stakeholders to participate in each steps of decision. Thus, the stakeholders’ participation in selecting trainees looks as if poor in West Hararghe Zone TVET system.

The Ethiopian TVET reform strategy indicated that the TVET system must be steered and implemented with the involvement of wide stakeholders group. As a result, TVET system favored from the contribution of different stakeholders expertise, experience and capacities, in order that their combined efforts improve the relevance and effectiveness of the system (MoE, 2006).

In addition, the independent sample t-test results, in the same table, shows that the score of responses of the two sample groups (Management and Trainers) is significantly different (at all tobt; $P < 0.05$). Thus, the trainers seem unsatisfied on the degree of their involvement as compared to managers. This might be due to poor participation of trainers on decision machining activities in TVET institution.

Therefore, the above data realized that the participation of stakeholders in its strict sense seems in existent. Therefore, the TVET activities undertaken in West Hararghe Zone may be the decision of few or single individuals and thereby restricted alternatives may be employed. Thus, the trainees may be underprivileged of acquiring the required skills in West Hararghe zone formal TVET system.

Reasons for Joining TVET

The motivations of individuals to join a given occupation have a direct implication on their productivity. Thus, the possible reasons that may force trainers and trainees to join TVET as either a trainer or trainee was addressed in the following discussion based on the view of trainers and trainees.

respectively for trainers and trainees) when they engaged in TVET. This implies that currently the image of TVET might be somewhat improved.

In general, therefore, both trainers and trainee may lack intrinsic motivation and thereby they might not exert their maximum effort. As a result, the formal TVET delivery system in West Hararghe Zone might not be productive.

Trainers’ Support System

To promote effective training system, trainers need to hold the required skill. The required skill is not only the function of trainer’s preparation because of technological obsolescence and change. The question is then relies on the extent to which trainers have been provided to keep pace with rapidly changing work environment. To this end, sample management bodies and trainers were included (see Table 12 below). In addition, the data obtained from focus group discussion also supplemented.

Table 12: Mean and t-test Distribution of Responses on Trainers’ Support System

No	Trainers provided with:	Respondents		Grand mean	t _{obt}	sig(2-tailed)
			Managers	Trainers		
1	Refresher course on manipulating machineries	N	20	44	2.42	0.42
		Mean	2.5	2.39		
		SD	0.99	0.83		
2	Refresher course on the subject matter	N	20	44	2.77	3.34*
		Mean	3.45	2.45		
		SD	1.21	0.93		
3	Experience sharing programs	N	20	44	2.39	1.08
		Mean	2.6	2.3		
		SD	1.05	1.05		
4	Provision of short term training	N	20	44	2.53	0.74
		Mean	2.7	2.45		
		SD	1.26	1.21		
5	Provision of long term training	N	20	44	2.39	-0.64
		Mean	2.25	2.45		
		SD	2.45	1.21		

NB : Mean < 3 “low”; Mean =3 “medium”; Mean > 3 “high”; t_{obt} - calculated value of independent sample test; degree of freedom= 198; confidence level 95%(α=0.05).

As it is depicted in Table 12 above, the provision of refresher course on how to manipulate machineries, arrangement of experience sharing sessions and provision of long-term and short-term training were perceived by respondents as below average or the degree of provision is

“low” (grand mean ranges from 2.39 to 2.77). In view of the fact, that most scores of the sample groups deviate from the average within the range of 0.993 and 1.261 (values of SD), there are some respondents who perceived as the provision is high.

Likewise, the focus group discussion held between TVET institutions’ management bodies conveys similar message. To illustrate some of the suggestion by respondents’ own term:

Most trainers lack the required skill and knowledge to provide courses up to the standard requirements of the courses (TVET institutions heads I, II, and III).

Efforts made to supplement trainers skill and knowledge is minimal and/or not given credit (TVET institutions department heads).

This entails that trainers’ skill gap and poor trainer support system might be the challenging factors in West Hararghe Zone TVET system.

On the other hand, as portrayed in the same table above, while managers perceived the provision of refresher course on the subject matter is high (mean = 3.45), the trainer is not (mean = 2.45). The observed difference on response of those respondents is tested for its significance by employing independent sample t-test. The result shows that there is statistically significant difference (at $t_{obt} = 3.34$; $p < 0.05$). This difference may be resulted from their position in that trainers may expect better provision of refresher course on the subject matter in order for them to hold their responsibilities successfully.

The above data shows that there was poor provision of trainers’ support system. This in turn may have an implication on the quality TVET delivery system. Therefore, the trainees might not be in the position of acquiring competence which enables them productive in real world of work and thereby it could slip back the success of the implementation of TVET reform in West Hararghe Zone.

Student Selection Criteria

One of the mechanisms to overcome the disparity is favoring the previously disadvantaged group or taking affirmative action. To this end, one of the steps is setting criteria in such a way that it favors disadvantaged groups. Within this philosophy, sample management bodies, trainers and trainees were included (see table 13 below). In addition, Zone and Woreda office heads were included through interview.

Table 13: Mean Distribution of Responses on Student Selection Criteria

No	Items	Respondents				Grand mean	t _{obt}	f _{obt}	sig
			Managers	Trainers	Trainees				
1	Extent of criteria to favor female applicants	N	20	44	156	3.55		1.67	0.19
		Mean	3.65	3.30	3.62				
		SD	0.81	1.13	1.06				
2	Extent of criteria to favor applicants with disability	N	20	44	156	3.37		0.65	0.52
		Mean	3.65	3.30	3.36				
		SD	0.81	1.13	1.23				
3	Extent of communicating criteria to potential applicants	N	20	44	156	1.95		2.15	0.12
		Mean	1.95	2.16	1.88				
		SD	1.10	0.75	0.74				
4	Extent of committee members' inclusiveness	N	20	44		3.38	-1.78		0.08
		Mean	3.05	3.52					
		SD	1.05	0.95					

NB: Mean < 3 “low”; Mean =3 “medium”; Mean > 3 “high”; f_{obt} is calculated value of one way ANOVA; Degree of freedom (b/n group=2 and within group=217). t_{obt} - calculated value of independent sample test; degree of freedom= 62.confidence level is 95%($\alpha=0.05$).

As it is depicted in Table 13 above, the criteria employed to select trainees favor disadvantaged groups and the establishment of committee members was inclusive (Grand mean ranges from 3.37 to 3.55). What is observed as a problem is, then, the extent to which the criteria were communicated to the potential applicants is “low” (Grand mean=1.95). This implies that the TVET system in West Hararghe zone created environments that facilitate equitable distribution of TVET among, specially, gender and disabilities.

In addition, one way ANOVA result shows that there is no significant difference among response scores of respondents (see Table 12 at all calculated values of “f”; $p>0.05$).This implies that all group of sample respondents have similar conviction on trainees selection criteria

Trainee support System

Creating competent work force is the function of different inputs one of which is complimenting the training system through tutorial and counseling service. To this end, the extent to which trainees have been provided support was treated by including trainers, trainees, and management bodies in the following discussion.

Table 14: Mean Distribution of Responses on trainees' support system

No	Items	Respondents				Grand mean	f _{obt}	sig
			Managers	Trainers	Trainees			
1	Vocational counseling	N	20	44	156	2.34	5.41*	0.01
		Mean	3.00	2.20	2.29			
		SD	1.34	1.05	0.87			
2	Provision of regular tutorial session	N	20	44	156	1.94	3.96*	0.02
		Mean	2.00	2.30	1.83			
		SD	1.12	1.19	0.87			
3	Arrangements of actual work visiting	N	20	44	156	2.00	1.03	0.36
		Mean	1.75	2.09	2.00			
		SD	0.64	1.05	0.86			

NB: Mean < 3 “low”; Mean =3 “medium”; Mean > 3 “high” ; *f_{obt}* is calculated value of one way ANOVA; Degree of freedom (b/n group=2 and within group=217); confidence level 95%($\alpha=0.05$).

Table 14 above indicates that the extent to which trainees are provided support system is identified as “low” (grand mean ranges from 1.94 to 2.34). This implies that trainees are deprived of poor support system to supplement their learning and thereby might not hold the required competencies.

In addition, trainees spell out that, on open-ended question, lack of tutorial provision is one of the reasons why learners in their location lack the ability to cope with work place requirement.

As it is revealed in Table 14 above, the difference observed is tested through one way ANOVA. The result obtained shows that the opinion of sample groups of respondents is statistically significant (at *f_{obt}*.5.41 and 3.96; $p<0.05$). This implies that trainers and trainees may be affected more by the absence or poor provision of vocational counseling service. On the other hand, TVET institution management bodies and trainees more dissatisfied by the extent to which trainees provided tutorial.

Therefore, the trainee in West Hararghe Zone might lack career plan and poorly initiated to develop entrepreneurial attitude and thereby they may fail to earn employment of which kind.

Improvements

This minor sub title enclosed the level of improvements made in terms of society's perception, the employability, entrepreneurial attitude and resource allocation. To this end, management bodies, trainers, trainees, (see Table 15 below) and Zone and Woreda office heads were included through interview.

Table 15: Frequency and Percentage Distribution of Responses on Issues of TVET improvement

No	Items	Groups of respondents						Hobt	uobt	sig
		Managers		Trainers		Trainees				
		F	%	F	%	F	%			
1	society's perception about TVET							4.434		0.109
	stayed the same	6	30	16	36.36	38	24.36			
	getting somewhat better	12	60	21	47.727	83	53.205			
	getting much better	2	10	7	15.909	35	22.436			
	sum of second and third option	14	70	28	63.636	118	75.641			
	Total	20	100	44	100	156	100			
3	The employability of TVET graduate							18.896*		0.000
	stayed the same	6	30	27	61.364	120	76.923			
	getting somewhat better	10	50	17	38.636	24	15.385			
	getting much better	4	20	0	0	12	7.6923			
	sum of second and third option	14	70	17	38.636	36	23.077			
	Total	20	100	44	100	156	100			
4	Employers perception about TVET							1.639		0.441
	stayed the same	12	60	29	65.91	94	60.26			
	getting somewhat better	6	30	15	34.091	38	24.359			
	getting much better	2	10	0	0	24	15.385			
	sum of second and third option	8	40	15	34.091	62	39.744			
	Total	20	100	44	100	156	100			
5	Student entrepreneurship							2.428		0.297
	stayed the same	12	60	30	68.182	92	58.974			
	getting somewhat better	6	30	14	31.818	44	28.205			
	getting much better	2	10	0	0	20	12.821			
	sum of second and third option	8	40	14	31.818	64	41.026			
	Total	20	100	44	100	156	100			
6	Resource allocation for TVET							5.457		0.065
	getting somewhat worse/ much worse	0	0	0	0					
	stayed the same	8	40	28	63.64					
	getting somewhat better	9	45	16	36.364					
	getting much better	3	15	0	0					
	Total	20	100	44	100					

Uobt- calculated value of Mann-withney U- test ; Hobt- calculated value of kruskal walis test; degree of freedom =1

Table 15 above reveals that there is no negative attitude on the improvement of TVET reform (no rating was observed for both “getting somewhat worse” or “much worse” by respondents). This implies that the TVET reform, at least, retained its statuesque. Furthermore, as it is

indicated in the same table, the majority of sample management bodies (70%), trainers (63.64%) and trainees (75.64%) believed that the society's perception about TVET is improved. On the other hand, while majority of sample management bodies (70%) promote the improvement of employability of TVET graduate, majority of trainers (61.36%) and trainees (76.92%) perceived that it is not yet improved. In addition, the majority of management bodies (45%) perceived that TVET reform is getting somewhat better in locating resource for TVET. On the other hand, the majority of sample management bodies (60%), trainers (65.91% and 68.18%), and trainees (76.92% and 58.97%) respectively consider employers' perception and trainees entrepreneur attitude did not show improvement. This implies that, though the perception of the society towards TVET is improved the employability and perception of employers stayed unchanged. Thus, TVET reform implementation might not bring holistic improvement. As it was previously discussed in the preceding portion, the allocation of resource, especially capital budget, is on the state of improvement (see graph 2 above)..

Qualitative data obtained during field work also conveys a message which is concomitant to what is already discussed above. To illustrate some by respondents own term:

...informally trained applicants are productive than those from TVET institution (Employers I, III and IV).

... TVET seems good now! Parent I and III

...there are a number of graduates from TVET without employment (TVET institution department heads).

This entails that employers' primary preference is informally trained and formally trained graduates from TVET might not get employments.

In addition, the Kruskal-Wallis result portrays that the attitude of sample management bodies, trainers and trainees towards employability of TVET graduate is significantly deferent (at $H_{01} = 18.896$; $p < 0.05$; see Table 15 above). This difference may be aroused from the fact that trainees are more conscious and follow the market for their own sake, and they may know where their friends were placed than everybody else.

Generally, from these data it seems clear that, though the TVET reform is perceived important by the society, the employers' attitude, and employability of the graduate stayed unchanged. Thus, there might be poor employment opportunity for TVET graduates in West Hararghe Zone which may has far reaching implication on the success of the reform.

4.2.3 Factors Affecting TVET Reform Implementation

It is axiomatic that the implementation of any change efforts is not a simple linear development, but rather a complex, sometimes fierce process where different beliefs, motives and commitments are clashed against each other. In light of this fact issues included in this minor sub title are: trainers, apprenticeship, training style, market need assessment, accessibility and resource mobilization related factors. To this end, management bodies (TVET institution, core process and department heads) trainer, trainees, TVET system heads at Woreda and zone, employers and parents were included in the study.

Trainers Related Factors

Trainers are one of the grounds up on which the success of the implementation of TVET reform is founded. Thus, trainers regard for practical training, commitment and incentives are included. To this end, the opinion of managers, trainers, and trainees are included. In addition, qualitative data obtained through interview and focus group discussion are thematically incorporated

Table 16: Mean Distribution of Responses on Trainers’ Related Factors

No	Items	Respondents			Grand mean	t _{obt}	f _{obt}	sig
			Managers	Trainers				
1	Trainers regard practical training	N	20	44	3.65		3.14*	0.05
		Mean	3.20	3.36				
		SD	1.06	1.24				
2	Trainers commitment	N	20	44	3.74		4.47	0.01
		Mean	3.10	3.52				
		SD	1.38	1.02				
3	Teacher’s reputation	N	20	44	2.59	-0.21		0.84
		Mean	2.55	2.61				
		SD	1.28	1.08				
4	Incentives for trainers	N	20	44	3.50	0.21		0.83
		Mean	3.55	3.48				
		SD	1.32	1.25				

NB: Mean < 3 “low”; Mean =3 “medium”; Mean > 3 “high”; f_{obt} is calculated value of one way ANOVA; Degree of freedom (b/n group=2 and within group=217). t_{obt} - calculated value of independent sample test; degree of freedom= 62.

As it is described in Table 16 above, the response of sample group of management bodies, trainers and trainees shows that trainers’ commitment and the value attached by the trainers to practical training, and the kind of incentive system for trainers are identified as the major factors that affect the TVET delivery (Grand mean ranges from 3.50 to3.74; items no 1,2, and 4). The

majority of the scores, for the same items defined above; distributed in both direction of their respective mean by more than one degree (SD ranges from 1.023 to 1.373). This entails that the degree of influence for these items, for some respondents, is very high. This, in general, implies that the TVET delivery system could be affected by poor commitment of trainers to devote more time for practical training.

The data obtained through interview and focus group discussion and open ended questions on questionnaire that was distributed to trainers conveys a similar message to the one discussed above. To illustrate some by respondents own term:

Most trainers are not willing to wear the cloth that helps them work in workshop; Trainers earn less salary than high school teachers; The trainers do not know what and how the machinery works (TVET institution heads I, II, IV)

I did not touch the machinery at all while I am training (Trainees)

This entails that the commitment and ability of trainers to train practically seems poor and trainers are deprived of poor practical training

On top of that, the statistical test procedure was employed to check the significance of the difference observed among scores of sample groups of respondents. The one way ANOVA test result indicates that the difference between the response scores of sample groups is statistically significant (at $f_{obt} = 3.144$; $p < 0.05$) on the extent to which trainers' commitment affect the training system. This implies that trainees may be very highly affected by trainers' commitment.

Thus, the TVET training seems inclined to theory. In addition, maximum efforts of trainer may not be employed by TVET system and in so doing the delivery system in West Hararghe Zone might be poor and the trainees lack the required competence to get employments.

Apprenticeship Training

If training is practically oriented and it combines learning with working, obviously, it increases the motivation and confidence of trainers for their future career. For TVET system to provide such dual training, thus, the existing formal TVET delivery system in West Harardge Zone do not have production unit to combine learning with working. Thus, the TVET institutions are expected to train cooperatively with employers. Thus, in the following discussion managers, trainers, trainees (see table 17 below) and employers Woreda and Zone TVET offices are included.

Table 17: Mean distribution of Responses on Apprenticeship Training

No	Factors affecting apprenticeship training:	Respondents				Grand mean	f _{obt}	sig
			Managers	Trainers	Trainees			
1	Willingness of organizations	N	20	44	156	3.73	0.03	0.96
		Mean	3.70	3.70	3.74			
		SD	1.13	1.21	0.89			
2	Trainers' interest	N	20	44	156	3.40	1.09	0.34
		Mean	3.80	3.30	3.38			
		SD	1.40	1.21	1.33			
3	Trust in providing resource	N	20	44	156	3.30	2.69	0.08
		Mean	3.95	3.25	3.24			
		SD	0.89	1.37	1.33			
4	Monitoring process by providers	N	20	44	156	3.52	0.08	0.93
		Mean	3.50	3.59	3.51			
		SD	1.15	1.34	1.29			
5	Assessment procedures	N	20	44	156	3.80	0.27	0.76
		Mean	3.95	3.86	3.77			
		SD	1.19	1.27	1.17			
6	Monitoring by the host school	N	20	44	156	4.05	1.79	0.17
		Mean	3.95	3.84	4.13			
		SD	0.76	1.18	0.86			

NB: Mean < 3 "low"; Mean =3 "medium"; Mean > 3 "high"; f_{obt} is calculated value of one way ANOVA; Degree of freedom (b/n group=2 and within group=217); confidence level 95% ($\alpha=0.05$).

Table 17 above reveals that the unwillingness of employers, the interest of trainers at apprenticeship centers, lack of trust by apprenticeship providers, poor assessment procedures, poor follow-up and lack of monitoring by host TVET institutions affect the apprenticeship training process highly (Grand mean ranges from 3.30 to 4.05). Most scores of samples have a value scattered between 3.00 and 5.00 (SD ranges from 0.759 to 1.399). This entails that most respondents recognized that these problem affect the apprenticeship greatly. This implies that the TVET system in west Hararghe Zone might not be supported effectively by work place learning.

Similarly, the data obtained through the interview and focus group discussion indicated that the apprenticeship programs have problems. Some responses by respondents own term:

TVET institutions send a trainee with letter, but they fail to monitor the training; ... Some trainees have no moral to learn by doing; We are in the market and we do not have such a time to train unwilling learners; Few trainees are good; The number of trainees are not proportional with our organization's capacity; The trainees put our computer in trouble (Employers I,II, III, IV).

Although our headache is convincing employers to accept the trainees for apprenticeship, some others requested to send them trainees a head; The assessment result of almost all trainees is between 95 to 100% (Zone and Woreda TVET office heads, I,III,IV TVET institution department heads)

This entails that apprenticeship programs in West Hararghe Zone seems not in a position of supporting the school based training.

The dual system, benchmarked from Germany, suggest that training delivered at TVET center should be supplemented through work place learning. The main advantage of the dual system is that training is very practice oriented and trainees develop confidence (MoE, 2006).

Moreover, The difference observed between scores of responses to each item in Table 17 above are insignificant (at all value of fobt ; $p>0.05$). This means that almost all respondents perceived that the apprenticeship training might not be successfully contributing for the viability of the implementation of TVET reform.

Generally, from all these data presented above it is clear that the apprenticeship programs seem not going as it ought to. Thus, the training system in TVET might not be supplemented by workplace learning and thereby the trainees may lack practical competence and knowledge about work place reality.

Training Need Assessment

One of the goals of Ethiopian TVET reform is to link TVET to the demand in the market or the skill required by the economy. This, in turn, could be achieved through an assessment of market need and addressing the felt need of the market through TVET. So, what is on the real ground is the question. To this end, sample TVET institutions' management bodies and trainers are included (see table 18 below). Likewise, Zone and Woreda TVET office heads and employers opinion were included through interview.

Table 18: Mean Distribution of Responses on Training Need Assessment

No	Barriers of TVET need assessment:	Respondents			Grand mean	t _{obt}	sig(2-tailed)
			Managers	Trainers			
1	planning	N	20	44	3.73	0.08	0.19
		Mean	3.75	3.73			
		SD	0.97	1.15			
2	Experience	N	20	44	3.34	1.32	0.94
		Mean	3.65	3.20			
		SD	1.14	1.30			
3	Budget	N	20	44	3.64	1.24	0.22
		Mean	3.90	3.52			
		SD	1.12	1.13			
4	Utilization of the data	N	20	44	3.78	0.09	0.93
		Mean	3.80	3.77			
		SD	1.28	1.05			

NB: Mean < 3 “low”; Mean =3 “medium”; Mean > 3 “high”; t_{obt} - calculated value of independent sample test; degree of freedom= 62; P(sig)< 0.05 show significant deference .

Table 18 above depicts that the training need assessment for TVET training delivery is highly maltreated by lack of regular plan, experience, budget and failure of TVET institutions to utilize the data for the decision making on either to open or close courses. (Grand mean ranges from 3.34to 3.78).This implies that training need assessment for TVET delivery might be undertaken haphazardly, without experience and adequate budget. Thus, the decisions made on the kind of training to be delivered could be made without knowledge about the market and thereby the Training system in West Hararghe Zone might lack relevance to the local market.

The qualitative data obtained through interview seems concomitant to what is already discussed. To illustrate some of the responses by respondents’ own term:

We undertake the market need assessment because we told to do so by Oromia TVET Agency and we undertake for the sake of reporting (TVET institution heads I, II, III).

I do not know whether market need assessment is carried out or not (TVET institution department heads III and VI).

This implies that TVET need assessment might not exist in West Hararghe Zone in its strict sense.

Independent sample t-test result, as indicated in Table 18 above, shows that there is no significant deference between sample groups’ response scores(at all t_{obt} values; p>0.05).This entails that the all respondents bear a similar conviction on the factors that affect TVET need assessment.

The Ethiopian TVET reform strategy suggested that to make TVET demand oriented, competencies needed in the labor market should become the final benchmark of training (MoE, 2006). In contrary, the data defined under table 16 above and qualitative data collected from field work reveals that TVET training decisions seems made without the knowledge of market demand. Thus, it is safe to conclude that TVET system in West Hararghe zone might not be demand driven and thereby fail to create competent, capable and adaptable workforce who possibly finds out gainful employment and self employment in different economic sector of the society.

Common Training Approaches and Assessment

The kind of training approach employed during trainers and trainees preparation have a direct implication upon the competence of the graduate in the market. In addition, the way the trainees assessed may determine the concentration of trainees. With this premises trainers and trainees preparations were assessed in terms of TVET institution management bodies, trainers and trainees are included as in the following

Table 19: Frequency and Percentage Distribution of Responses on Training Approach and Assessment

No	Items	Groups of respondents						Hobt	Uobt	Sig
		managers		trainers		trainees				
		F	%	F	%	F	%			
1	Common training mood							2939	0.12	
	More practical			0	0	0	0			
	More theoretical			19	43.18	64	41.03			
	Equal for practices and theory			17	38.64	29	18.59			
	No practical			8	18.18	63	40.38			
	Total			44	100	156	100			
2	How often trainees' do assessed practically?							5.46	0.07	
	Never	4	20	6	13.64	21	13.46			
	Very rarely	6	30	4	9.09	19	12.18			
	Rarely	5	25	20	45.45	102	65.38			
	Occasionally	3	15	9	20.45	11	7.051			
	Very frequently	2	10	5	11.36	3	1.923			
	Total	20	100	44	100	156	100			

Uobt- calculated value of Mann-withney U- test ; Hobt- calculated value of kruskal- walis test; degree of freedom =1; P(sig)< 0.05 show significant deference .

Table 19 above shows that most trainers (43.18%) was trained with theoretically dominated training approach during their preparation in their respective colleges or universities and most trainees (41.03%), in similar fashion, provided training theoretically in West Hararghe Zone. The preparations of some other trainers were dominated by both theoretical and practical approach (38.63%). But, the majority of trainees (40.38%) did not provided training which is more of practically oriented. Surprisingly, from both trainers and trainees point of view, there is no training in which practical training is more emphasized.

In addition, as indicated in Table 19 above, trainees' assessment seems more of theory driven. The majority of responses are distributed within three alternatives: "rarely", "very rarely" and "never" which indicate that practical assessment is not emphasized (management bodies = 75% (20+30+25), trainers = 68.18% (45.45 + 13.64 + 9.09), and trainee 91.02% (65.38 + 18.65 + 13.46)). This implies that the dominant approach in preparing trainees in West Hararghe zone TVET system might be lecture. Likewise, trainees might prefer to devote more of their effort on the theoretical aspect of their training.

Theoretically, in the training system that heavily relies on theory, graduates fail to bridge between theory and its application (Herschbach, 1997).

Moreover, statistical test procedure was employed to test the significance level of difference between response scores of sample groups of respondents. Mann-Whitney U-test result, in table 18 above, indicated that the difference on how trainers prepared and in turn preparing trainees is not significantly different (at $U_{obt} = 2938.5$; $p > 0.05$). This implies that the way the trainers were prepared affect on how to train trainees. Similarly, the Kruskal-Walis result also realized that the difference between the scores of sample groups is insignificant (at $H_{obt} = 5.457$; $p > 0.05$). This entails that the perception of respondent on the issue of trainees' assessment technique is similar "theoretically dominated".

Thus, the graduates may lack practical skill which enables them get employed either in the form of wage or self-employment in West Hararghe Zone.

Image

Generally, stereotypes are predominant that render things undesirable for individual to acquire. This implies that the way the society perceives TVET could possibly constrain the successful implementation of the reform. To this end, TVET institution management bodies trainers and

trainees are included (see Table 20 below). Likewise, qualitative data obtained through interview and focus group discussion are enclosed in the following discussion.

Table 20 Mean Distribution of Responses on Image of TVET

No		Respondents				Grand mean	fobt	sig
			Managers	Trainers	Trainees			
1	Permeability	N	20	44	156	3.40	19.14*	0.00
		Mean	3.00	2.55	3.69			
		SD	0.73	1.28	1.11			
2	Opportunity for employment	N	20	44	156	3.83	3.79*	0.02
		Mean	3.20	3.75	3.93			
		SD	1.44	1.01	1.13			
3	Status of employment	N	20	44	156	3.88	7.63*	0.00
		Mean	3.60	3.43	4.04			
		SD	1.23	1.17	0.88			
4	Quality of training	N	20	44	156	3.41	2.45	0.09
		Mean	3.95	3.43	3.33			
		SD	1.05	1.17	1.19			
5	Academic status of trainees	N	20	44	156	3.85	0.94	0.39
		Mean	4.15	3.80	3.82			
		SD	0.88	0.95	1.09			

NB : Mean < 3 “disagree”; Mean =3 “Undecided”; Mean > 3 “Agree”; **fobt** is calculated value of one way ANOVA; Degree of freedom (b/n group=2 and within group=217) ; P(sig)< 0.05 show significant deference .

Table 20 above reveals that the constraints like: permeability of TVET with higher education, employment opportunity and status employment, quality of training and academic status of trainees who join TVET are perceived by sample groups of respondents (managers, trainers and trainees) as a dominant factor that affect the image of TVET (grand mean ranges from 3.40 to 3.85). Most scores for samples have a variation by almost one degree and above from their respective mean value (see the Value of “SD”). This entails that there are respondents who perceived these factors as, the great impediments at one hand and moderate by others

The qualitative data obtained from field work through interview and focus group discussion bears message that emphasized the improvement of value attached to TVET.

Theoretically, the reasons for poor image of TVET are low status of TVET, poor quality, and beliefs that stigmatized TVET as the choice of the less successful (UNESCO, 2000).

Moreover, One way ANOVA result also shows that the difference between scores of sample groups of respondents on permeability issue is statistically significant (at $f_{obt} = 19.141$; $p < 0.05$). This difference could be because of lack of the communication of the designed permeability of TVET with higher education for trainees. In addition, one way ANOVA test result portrayed that the difference between respondents' scores on opportunity and status of employment issue is significant (at $f_{obt} = 3.787$ and 7.629 ; $p < 0.05$). This entails that though the response of all the sample group of respondents lies in the same category "high", their degree within this high level vary significantly and trainees seems relatively more disgusted by poor opportunity and low status employments of TVET.

Generally, these data, which is discussed above, entails that TVET system seems not in a position of claiming better image in West Hararghe zone. The poor image of TVET in turn affects trainees' moral and hold them back from devoting their maximum effort for the success of their training.

Accessibility

TVET system in SSA countries, including Ethiopia, was characterized by poor access (UNESCO, 2000). Thus, the extent to which accessibility factors are affecting the implementation of TVET reform is examined in the following by employing management bodies, trainers, trainees opinion (see Table 21 below). In addition, data obtained through focus group discussion and interview were included.

Table 21 below reveals that shortage of space in the existing TVET institution; poor distribution and distance of TVET institution from trainees' residence and poor income of trainees' family are the major factors that highly affect the accessibility of TVET (grand mean ranges from 3.81 to 4.13). Majority of scores for each samples have value ranging from 3.00 to 5.00 (see value of "SD"). This implies that the majority of respondents might be in agreement with poor TVET accessibility in West Hararghe Zone.

Table 21: Mean Distribution of Responses on TVET Accessibility

No	Factors affecting accessibility:	Respondents				Grand mean	fobt	sig
			Managers	Trainers	Trainees			
1	Shortage of space in TVET institute	N	20	44	156	3.81	1.06	0.35
		Mean	3.80	4.00	3.76			
		SD	1.40	0.92	0.90			
2	location of TVET (distance)	N	20	44	156	4.21	0.26	0.77
		Mean	4.20	4.27	4.19			
		SD	0.70	0.82	0.60			
3	student family income	N	20	44	156	4.13	0.35	0.71
		Mean	4.30	4.14	4.11			
		SD	0.80	0.91	0.99			
4	Existence of college	N	20	44	156	4.06	1.23	0.30
		Mean	3.80	4.09	4.08			
		SD	1.11	0.60	0.77			

NB : Mean < 3 “disagree”; Mean =3 “Undecided”; Mean > 3 “Agree”; fobt is calculated value of one way ANOVA; **Degree of freedom (b/n group=2 and within group=217); P(sig)< 0.05 show significant deference .**

The responses obtained through interview and focus group discussion bears similar message with the one already discussed above. To illustrate some by respondents’ own term:

We could not provide at least 50% of applicants who want to join TVET and Constructing schools, supplying with machineries are beyond the capacity of the zone to provide to all woredas at a time (Zone and Woreda TVET office heads I and III).

Families who are far from TVET center couldn't afford the training cost for their children (Families I, II, IV).

No trainee is registered in TVET centers from Hawigudina and Burka Dintu woredas (the most remote woredas in West Hararghe Zone) (TVET institution department heads).

This entails that distance and family income are the bottle neck for the accessibility of TVET in West Hararghe Zone and there is geographical disparity in provision of TVET.

Moreover, statistical test procedure was employed to test the significance level of difference between response scores of sample groups of respondents. One way ANOVA result shows that the difference between scores of the three sample groups, defined in Table 21, is insignificant (at all fobt; $p>0.05$). This entails the accessibility factors are a common problem for TVET reform implementation.

Thus, from the above data one can easily see that TVET system in West Hararghe zone might possibly deprived of geographical disparity and the provision of access seems poor and thereby there might be large number of potential trainees who left outside.

The data obtained during field work through interview seems hold similar message with the quantitative data discussed above. To illustrate some of respondents' view by their own word:

The member woredas that are found aside from the cluster woreda attach the ownership title to the cluster woreda and fail to devote resources; The chairman of the cluster woreda has no discretion to take any disciplinary measure up on anybody else from the members; Transferring money from one woreda to another is not possible (Zone and Woreda TVET office heads I,II, III,IV).

This entails that the problem might arose from Woreda leaders commitment and poor perception to successfully mobilizing resource through CWC approach.

Generally, these data (qualitative and quantitative) shows the CWC approach might not be communicated or consensus is not built and there by TVET system may fail to mobilize the intended resource. Thus, TVET system in west Hararghe zone might lack accessibility and quality.

CHAPTER FIVE

Summary, Conclusion and Recommendation

This chapter deals with the summary of the findings, conclusions, and alternative solutions recommended that assumed to possibly alleviate the problems encountered in the course of TVET reform implementation in West Hararghe zone TVET system.

To this end, the specific objectives set for the study were to:

1. Identify the preparations made to realize the implementation of TVET reform in West Hararghe Zone.
2. Identify the major achievements in the course of implementing TVET reform in West Hararghe Zone.
3. Examine the major factors that constrain successful implementation of TVET reform in West Hararghe Zone.
4. Propose valuable mechanisms and holistic ways of addressing the problems observed by all concerned body in the West Hararghe Zone.

In the course of addressing these objectives the following basic research questions were employed.

1. What are the preparations made to support the implementation of TVET reform in West Hararghe Zone?
2. What are the current achievements of TVET reform implementation in West Hararghe Zone?
3. What are the major factors that constrain successful implementation TVET reform in West Hararghe Zone?

In the course of answering these questions descriptive survey method was employed. To this effect questionnaires, interview and focus group discussion guides, and checklists were utilized as instrument during data collection. To infer the result from, a total of 251 respondents were (four core process heads from OTVETA, seven heads from West Hararghe Zone and Woreda TVET offices, eight from employers and parents found in the zone, and four TVET institution heads, 20 management bodies, 44 trainers, and 156 trainees) considered enough to furnish relevant data for the study. Accordingly, these informants were participated and provide

dependable data .Further, the obtained data were analyzed by employing statistical tools such as Frequency, percentage, mean, standard deviation, independent sample t-test, one way ANOVA, Cruskal-Walis, and Mann-Whitney U-test which were computed using SPSS software.

5.1 Summary of Major Findings

The major findings of the study are summarized as follow.

5.1.1 Characteristics of Respondents

TVET system in west Hararghe Zone seems male dominated in that majority (67.27%) of respondents are male. Most management bodies (70%) and trainers (63.64%) held first degree and most trainers (86.36%) specialized in technical education. Furthermore, most respondents (trainees) are from construction (31.41%), mechanics (25%), and business (24.36%) departments

5.1.2 TVET reform implementation

5.1.2.1 Preparations

- A. Though respondents (managers, trainers, and trainees) agreed that the reformed TVET is communicated; important, timely and participatory (Grand mean ranges from 3.08 to 3.47) political leaders commitment did not won yet in its real sense (Grand mean = 2.65). The reformed TVET curriculum is perceived important and flexible (Grand mean= 3.40 and 3.61) by stakeholders. But, the respondents indicated that the preparation of curriculum was not participatory, the standard requirement is not communicated , the graduates fail to meet the expectation of employers, and market demand is not a benchmark for the kind of courses either to be delivered or closed(Grand mean ranges from 2. 31 to 2.78).
- B. Despite the fact that TVET governance at different level was established from different government sectors, employers and there is clear guide line that possibly dictate their activities (grand mean ranges from3.69 to4.11), it was perceived by groups of sample respondents that the established TVET governance lack commitment to assume their responsibility and there is no structural relationship set by TVET system in the zone (grand mean ranges from 1.55 to 2.55). TVET institutions undertake planning for the activities to be performed and track the performances in the course of implementing TVET reform. In addition, they utilize the result of evaluation process to improve their performance while implementing the reform (grand mean ranges from 3.72 to 4.34). On the other hand, net

Census. Addis Ababa: UNFPA.

Duodu A. (2006). **Technical Vocational Education and training in Ghana.** Accra: Government printer.

EPA (2009). **የቴክኒክና ሙያ ስልጠና በኦሮሚያ፡፡ አዲስ ዘመን፣ ህዳር 7 ገጽ 11**

Farlex (2002, November, 5). The Free Dictionary on line. <http://www.the free dictionary .com/>

Fullan and Michael (1993). **Change Force.** New York: Falmer press.

Gasskow, V. (2000). **Managing Vocational Training System.** Geneva: Kogan page.

Gill, I. S. and F. Fluitman (1999). Constraints and Innovation in Reforming National Training Systems: Cross-country Comparisons. *International Journal of Manpower*, Vol. 20 No. 7, 1999, pp. 405-431.

Godfrey, Martin (1997). Planning for Vocational Education, Training and Employment: a Minimalist Approach. *International Journal of Manpower*, Vol. 18 No. 1/2, pp. 206-227.

Giravitter, R.J and L.B. Wallnou (2000). **Statistics for Behavioral Science** (5thed.) New York: Wadsworth.

Gray, D.E (2004). **Doing Research in the Real World.** New Delhi: SAGE Publication.

Hammer, M and S.A. Stanton (1995). **The Reengineering Revolution: Hand Book.** New York: Harper Collins Publishers

Harrison, R. (1992). **Employee Development.** London: IPM printers.

Herschbach, Dennis R. (1997). Improving Training Quality in Developing Countries: Towards Greater Instructional Efficiency. *International Journal of Manpower*, Vol. 18 No. 1/2, pp. 90-118.

- Hussen,T. and T.N. Postolathwate (1994). Technical Vocational Education and Training. In *The International Encyclopedia of Education (2nd Ed)*. (Vol.11. pp 6245-6256) New York: PERGAMON.
- ILO (1999). **The role of Evaluation for Vocational Education and Training**. Geneva: Kogan
page
- Johanson ,R.(2002). **Vocational Skill Development in Sub Saharan Africa**. Washington DC:
World Bank
- _____(2005). **Vocational Skill Development in Sub Saharan Africa**. Washington DC:
World Bank
- Johanson, R and A.V. Adams (2004). **Skill Development in Sub Saharan Africa**. Washington
DC: World Bank
- Kapes,J.T. (1984). **Study Guide to Historical Antecedents of Vocational Education:
Educational Philosophy**. Texas: A and M University press.
- Kawachi,Shigeru (2009). Reforming Ethiopia's Technical Vocational Education and
Training (unpublished thesis). Bernard University
- Lasonen, M. (2005, October, 14). Education and training in Ethiopia: An Evaluation of
approaching EFA Goals. www.gg.rhul.ac.uk/ict4d/ethiopia.pdf.
- Lindell, Mats (2006). From Formulation to Realization: the process of Swedish Reform in
Advanced Vocational Education. *International Journal of Education and Training*
Vol. 48 No. 4, pp. 222-240.
- Middleton J. and A. Zideman (1997). World Bank Policy Research on Vocational Education
and Training. *International journal of manpower* Vol.18 No. 1 / 2.
- MOE (2002).**Education Sector Development II**. Addis Ababa: color steps and print PLC.

- _____ (2005). **Education Sector Development III**. Addis Ababa: color steps and print PLC.
- _____ (2006). **National Technical Vocational Education and Training Strategy**.
Addis Ababa: EMPDA.
- _____ (2008). **National Technical Vocational Education and Training Strategy**.
Addis Ababa: EMPDA.
- OECD (2007, November, 5). Technical Skill Development in Africa. <http://www.dfid.gov.uk/pubs/files/technical-vocational.pdf>.
- OTVETA (2009). Enrollment Data: Regular and Evening .Un published document of Oromia TVET. Addis Ababa
- Rodgers ,Y. M and T. Boyer (2006). Gender and racial differences in vocational education: an international perspective. *International Journal of Manpower* Vol. 27 No. 4, pp. 308-320
- Rye, C. (1996). **Change Management Action Kit**. London: Kogan page
- Santema , Martinus (1997). Regional development and the tasks of vocational education and training professionals. *Journal of European industrial training* Vol.21, No 6/7.
- Seyoum Tefera (1996). Attempts at Educational Reform in Ethiopia: a Top-down or Bottom-up Reform? *Ethiopian Journal of Education*, Vol, 16 , No.1, pp 1-37
- T.G.E, (1994). **Education and Training Policy**. Addis Ababa: St. George printing press
- Tsang ,M .C.(1999). The Cost of Vocational Training. *International Journal of Education and Training*. Vol,41,No. 2,pp.79-97
- UNESCO (2000, September 29). Improving access to TVET <http://www.unevoc.unesco.org/2.0>
- _____ (1984). **Policy, planning and Management in Technical and Vocational**

Education: a comparative Study.France:7 place De Fantecy,75700 press.

Wanna Leka(1992). Assessing Vocational Education Outcomes: With Special Reference to Ethiopia. *Ethiopian Journal of Education*, Vol,13;No.1,pp 41- 68.

Zewde and Associate PLC.(2000).Comprehensive Analysis of Employers in the Provision of TVET in Ethiopia (Un published research Paper). Addis Ababa.

Appendixes

1. Tools
2. Data

Appendixes 1: Tools

- Questionnaires
- Interview guide
- Focus Group Discussion Guide
- Check List

Addis Ababa University
College of Education
Department of Educational Planning and Management
(Human resource and Organizational Development stream)

Questionnaire to be filled out by TVET Institute heads, Core process heads, department heads

General direction

Ethiopian TVET is under the process of reform with a vision to produce competent citizen that contribute to the economic and social development of the nation. Currently, regions are undergoing the implementation of the reform. West Hararghe zone in Oromia region also has a part to play in the realization of TVET reform implementation. Thus, this questionnaire is designed to collect data on the preparation, achievements, and constraints in the implementation of the reform, and thereby to recommend on how to alleviate problems and scale up the height of the implementation.

Therefore, your responses have a great value for the success of this study and you are kindly requested to respond according to the instructions given for all questions raised in this questionnaire.

NB. Your response is consumed only for academic purpose and for the sake of confidentiality you need not to write your name.

Mark 'x' or '√' or short response where ever needed

My heartfelt thanks in advance to you for co-operation

Part I. Background information

1. Name of the TVET institute/college _____
2. Owner of the institute/ college ☐ Private ☐ Government
3. Sex ☐ Male ☐ Female
1. Qualification ☐ TVET diploma graduate ☐ College diploma
☐ BA/BSC ☐ MA/MSc
If other, specify _____
5. Field of specialization _____
6. Years of service _____

No	Service:	Service in Year				
		<5	5-10	11-15	16-20	>20
1	As TVET teacher					
2	In current position					
3	Other					

7. Did you receive any training specific to your current position?

☐ Yes ☐ No

8. If 'yes' for question No 7 above, what type?

☐ Long term ☐ Short term

Part II. Preparation for Implementation

2.1. The following are a set of statements about communicating TVET reform implementation. For each of them indicate your response saying strongly agree(5) ,Agree (4) , Undecided (3), Disagree(2), Strongly disagree(1) and tick the appropriate box(√)

No	statements	5	4	3	2	1
1	The TVET reform is participatory					
2	The reform is communicated to all relevant stakeholders					
3	Trainers are convinced that the TVET reform is important					
4	Trainers are convinced that the TVET reform is timely					
5	The trainers are willing to teach practically					
6	There is partnership between employer and TVET institutions					
7	The program won the political leaders commitment at your locality					
8	The reform was pilot tested before implementation					

2.1.1 What other activities have been done in communicating TVET reform ?

2.2. The following are a set of statements about resource for TVET reform implementation. For each of them indicate your response saying strongly agree(5) ,Agree (4) , Undecided (3), Disagree(2), Strongly disagree(1) and tick the appropriate box(√)

No	statements	5	4	3	2	1
1	Trainers hold the required skill to manipulate the machineries					
2	The trainers are competent to provide courses in accordance with the occupational standard.					
3	The machineries are appropriate to teach the course					
4	The capacity of the workshop enable training					
5	There is Library for trainees to support their learning					
6	There is internet access for trainees to support their learning					
7	There is internet access to support for trainers					
9	The size of the classrooms are favorable for teaching and learning					
10	The raw material provision for teaching and learning is timely					
11	The required supportive staff are supplied					
12	There are qualified trainers in market to hire when the demand arise					
13	The recurrent budget assigned to run TVET program is relatively adequate					

2.2.1 What other activities have been done in providing resources for TVET reform implementation?

2.3. The following are a set of statements about planning and governance of TVET reform implementation. For each of them indicate your response saying strongly agree(5) ,Agree (4) , Undecided (3), Disagree(2), Strongly disagree(1) and tick the appropriate box(✓)

	Planning	5	4	3	2	1
1	Your institute plan the implementation with the participation of stakeholders					
2	Your institute set the target that can be attained by the institution					
3	There is networking with all TVET organizations at all level through IT					
4	There is a planned monitoring activities for tracking the achievements					
5	There is regular evaluation process in your institution					
	Governance	5	4	3	2	1
1	The board members are inclusive(members are from all stakeholders)					
2	The institution leaders have discretion to decide on the fate of the institution					
3	There is clear guide line for board members to hold their responsibilities					
4	The board members are committed for institution's development					
5	TVET council members are inclusive(members are from all stakeholders)					
6	The TVET council members recognized their responsibilities					
7	The TVET council members are willing to assume the responsibilities					
8	There is structural relationship between employer and your organization					

2.3.1 What other activities have been done in planning the TVET reform implementation?

2.3.2 What other activities have been done in providing resources for TVET reform implementation?

2.4. The following are a set of statements about curriculum for TVET reform implementation. For each of them indicate your response saying strongly agree(5) ,Agree (4) , Undecided (3), Disagree(2), Strongly disagree(1) and tick the appropriate box(✓)

	statements	5	4	3	2	1
1	The curriculum preparation was participatory					
2	There is a room to change or modify the curriculum					
3	The graduate meet the expectation of employer					
4	Your school decision either to open or close courses depends on market demand					
5	There are standard requirement for each courses					
6	The standard requirements have been communicated to trainers					
7	The standard requirements have been communicated to trainees					

2.4.1 What other activities have been done in planning the TVET reform implementation?

2.5. To what extent do stakeholders participated in the following activities of West Haraghe TVET system? Indicate your response saying Very high (5), high (4), medium (3), low (2) very low (1) and tick the appropriate box (✓)

No	activities	5	4	3	2	1
A	Planning TVET					
B	Resource allocation for TVET					
C	Evaluating the TVET Curriculum					
D	Evaluation of the reform					
E	Communicating the reform					
F	Selecting trainees					
G	Market need assessment					
H	decision on Opening or closing of course					
I	If other, specify _____					

Part III Trainers and trainee support system and trainee selection criteria

3.1. Which of the following trainers' support system is employed in your school and to what extent, if any? Indicate your response saying Very high (5), high (4), medium (3), low (2), or Very low (1) and tick the appropriate box (✓)

No	Support system	5	4	3	2	1
A	Provision of refresher course on manipulating machineries					
B	Provision of refresher course on the subject matter					
C	Provision of intradepartmental experience sharing programs					
D	Provision of interdepartmental experience sharing programs					
E	Provision of inter-college experience sharing programs					
F	Provision of short term courses off the job					
G	Provision of on the job training by skillful trainers in school					
H	Provision of on the job training by inviting trainers externally					
j	If other, specify _____					

3.2. The following are issues related to **student selection criteria** for TVET. Indicate your response saying Very high (5), high (4), medium (3), low (2) very low (1) and tick the appropriate box (✓)

No	issues	5	4	3	2	1
A	To what extent do the criteria are valuable to the course requirement					
B	To what extent do the criteria favor female applicants					
C	To what extent do the criteria favor applicants with disability					
D	To what extent do the criteria are clear to understand					
E	To what extent the committee members are familiar with courses					
F	To what extent do the criteria are communicated to the potential applicants					

3.3. To what extent do the following trainees' support systems are employed in your school? Indicate your response saying Very high (5), high (4), medium (3), low (2), or Very low (1) and tick the appropriate box (✓)

No	Statements	5	4	3	2	1
A	Provision of vocational counseling service					
B	Provision of regular tutorial session					
C	Arrangements of actual work visiting programs on their respective course					
D	Arrangement of par time work					
E	If other, specify _____					

Part IV Implementation and achievements

4.1. The following are statements related to trainee assessment. Indicate your response saying Always (6), Very frequently (5), Occasionally (4), Rarely (3), Very rarely (2), or Never (1) and tick the appropriate box (✓)

No	statements	6	5	4	3	2	1
A	How often do trainees' assessment carried out practically						
B	How often do trainees' assessment carried out theoretically						
C	How often do low achievers provided tutorial						
D	How often do female learners provided tutorial						

4.2. The following are statements about improvement of TVET system. For each of them indicate your response saying getting much better (5), getting somewhat better (4), stayed the same (3), getting somewhat worse (2), or getting much worse (1) and tick the appropriate box (✓)

No	Items	5	4	3	2	1
1	Society's perception about TVET					
2	Trainees' perception about TVET					
3	The employability of TVET graduate					
4	Employers perception about TVET					
5	Student entrepreneurship					
6	Female participation in TVET					
7	Teacher's commitment to teach in TVET					
8	Resource allocated for TVET					
9	The market orientation of TVET curriculums					
10	What other, specify _____					

Part V Constraints of TVET reform implementation

5.1. To what extent do the following factors affect TVET market need assessment system in your school? Indicate your response saying very high (5), high (4), medium (3), low (2), very low (1) and tick the appropriate box (✓)

No	Factors	5	4	3	2	1
A	Lack of experience in carrying out market study					
B	Lack of plan to undertake market study					
C	Lack of budget to carry out the study					
D	Lack of expertise to develop a tool to collect market data					
E	Failure to use the data					
E	If other, specify _____					

5.2. To what extent do the following major factors affects the TVET delivery through apprenticeships providers for your trainees? Indicate your response saying very high (5), high (4), medium (tly3), low (2), very low (1) and tick the appropriate box (✓)

No	Factors	5	4	3	2	1
A	The willingness of employers to accept learners					
B	The assignment of trainer who lack the capacity to teach					
C	Lack of trust by employers to provide training materials for trainees					
D	Poor monitoring of trainees					
E	Inappropriate assessment of learners					
F	Distance of apprenticeship providers from learner's residence					
G	Loose monitoring by the school					
H	If other, specify _____					

5.3. To what extent do the following factors affect TVET delivery system in your school? Indicate your response saying very high (1), high (2), medium (3), low (4), very low (5) and tick the appropriate box (✓)

No	Factors	5	4	3	2	1
A	Trainer's low reputation of their profession					
B	Trainers low commitment					
C	Trainers low skill to operate the machineries					
D	Lack of incentives for trainers					
E	Lack of counseling service					
F	Lack of required man power (trainers) in the market					
G	Shortage of recurrent budget					
H	Lack of spare-parts for machineries					

I	Lack of skilled personnel to maintain machineries					
J	If other, specify _____					

5.4 To what extent do the following factors affect the accessibility of TVET in your locality? Indicate the level of measure/ measures saying Very high (5) , high(4), medium (3), low(2), very low(1) and tick the appropriate box(✓)

No	Factors	5	4	3	2	1
A	Shortage of space in TVET institution					
B	In ability to pay cost sharing					
C	Shortage of trainers					
D	capacity of workshops					
E	Low status of TVET					
F	Location of TVET institutes					
G	Poor public image					
H	If other , specify _____					

5.5. To what extent do the following factors are the causes of poor TVET image in your locality and? Indicate your response saying very high (1), high (2), medium (3), low (4), very low (5) and tick the appropriate box (✓).

No	Factors	5	4	3	2	1
A	Lack of permeability					
B	Poor opportunity for employment					
C	Low status employment					
D	Poor quality of training					
E	The academic status of students who join TVET					
F	If other, specify _____					

5.6. To what extent do the following factors affect the cluster woreda approach in mobilizing resource for TVET program? Indicate your response saying very high (1), high (2), medium (3), low (4), very low (5) and tick the appropriate box (✓)

No	Factors	5	4	3	2	1
A	Poor sense of ownership by Woredas					
B	Lack woreda leaders commitment					
C	Regulatory problems in transferring resources' from one woreda to other					
D	Distance of cluster woredas from the others					
E	Lack of structural relationship between Woredas					
	If other, please specify _____ -					

Only one more page to go

5.7. To what extent do the following factors affect the quality of TVET in your institution? Indicate your response saying very high (1), high (2), medium (3), low (4), very low (5) and tick the appropriate box (√)

No	Factors	5	4	3	2	1
A	Lack of active teaching,					
B	Poor feedback system,					
D	Poor school leadership					
E	Lack of availability of qualified teachers,					
F	Lack of closer link with employers					
G	Lack of appropriate training materials					
H	If other, specify _____					

Part III. Open ended questions

14. what are the major problems that constraints the success TVET reform implementation? _____

15. What are the causes of these problems? _____

16. What are the possible solution, you suggest , that help to alleviate the observed problems ?



Addis Ababa University

College of Education

Department of Educational Planning and Management

(Human resource and Organizational Development stream)

Questionnaire to be filled out by TVET Trainers

General direction

Ethiopian TVET is under the process of reform with a vision to produce competent citizen that contribute to the economic and social development of the nation. Currently, regions are undergoing the implementation of the reform. West Hararghe zone in Oromia region also has a part to play in the realization of TVET reform implementation. Thus, this questionnaire is designed to collect data on the preparation, achievements, and constraints in the implementation of the reform, and thereby to recommend on how to alleviate problems and scale up the height of the implementation.

Therefore, your responses have a great value for the success of this study and you are kindly requested to respond according to the instructions given for all questions raised in this questionnaire.

NB. Your response is consumed only for academic purpose and for the sake of confidentiality you need not to write your name.

Mark 'x' or '√' or short response where ever needed

My heartfelt thanks in advance to you for co-operation

Part I. Background information

1. Name of the TVET institute/college _____
2. Owner of the institute/ college: ☐vate ☐vernment
3. Sex : ☐ Male ☐ Female
4. Qualification ☐ TVET diploma graduate ☐ College diploma
☐ BA/BSC ☐ MA/MSC
If other, specify _____
5. Field of specialization _____
6. Years of service ☐ <5 ☐ -10 ☐ -15 ☐ -20 ☐ >20

Part II. Preparation for Implementation

2.1. The following are a set of statements about communicating TVET reform implementation. For each of them indicate your response saying strongly agree(5) ,Agree (4) , Undecided (3), Disagree(2), Strongly disagree(1) and tick the appropriate box(✓)

No	Statements	5	4	3	2	1
1	The TVET reform is participatory					
2	You have been communicated the need for TVET reform					
3	Trainees have been communicated about TVET reform					
4	You are convinced that the TVET reform is important					
5	You are convinced the TVET reform is timely					
6	The trainers are willing to teach practically					
7	There is partnership between employer and your institute					
8	The program won the political leaders commitment at your locality					

2.2. The following are a set of statements about resource for TVET reform implementation. For each of them indicate your response saying strongly agree(5) ,Agree (4) , Undecided (3), Disagree(2), Strongly disagree(1) and tick the appropriate box(✓)

No	statements	5	4	3	2	1
1	Trainers hold the required skill to manipulate the machineries					
2	The trainers are competent to provide courses in accordance with the occupational standard.					
3	The machineries are appropriate to teach the course					
4	The capacity of the workshop enable training					
5	There is Library for trainees to support their learning					
6	There is internet access for trainees to support their learning					
7	There is internet access to support for trainers					
8	The size of the classrooms are favorable for teaching and learning					
9	The raw material provision for teaching and learning is timely					
10	Trainers hold the required skill to manipulate the machineries					

2.3. The following are a set of statements about curriculum for TVET reform implementation. For each of them indicate your response saying strongly agree(5) ,Agree (4) , Undecided (3), Disagree(2), Strongly disagree(1) and tick the appropriate box(✓)

No	statements	5	4	3	2	1
1	The curriculum preparation was participatory					
2	There is a room to change or modify the curriculum					
3	The graduate meet the expectation of employer					
4	Your school decision either to open or close courses depends on market demand					
5	There are standard requirement for each courses					
6	The standard requirements have been communicated to trainers					
	The standard requirements have been communicated to trainees					

2.4. To what extent have you been participated in the following activities? Indicate your response saying Very high (5), high (4), medium (3), low (2) very low (1) and tick the appropriate box (✓)

No	activities	5	4	3	2	1
A	Planning TVET					
B	Resource allocation for TVET					
C	Evaluating the TVET Curriculum					
D	Evaluation of the reform					
E	Communicating the reform					
F	Selecting trainees					
G	Market need assessment					
H	decision on Opening or closing of course					
I	If other, specify _____					

Part III Trainers preparation and support system and trainee selection criteria

3.1. To what extent do the following reasons force you to be a teacher in TVET? indicate your response saying Very high (5) , high(4), medium (3), low(2) ,or Very low(1) and tick the appropriate box(√)

No	reasons	5	4	3	2	1
a	your own interest					
b	Assignment of higher commission					
c	College/university assignment					
d	Family pressure					
e	Friends pressure					
f	Lack of other opportunity					
g	If other, specify _____					

3.2 While you were in a college to be prepared as a TVET teacher, which of the following training approach match with your preparation? Tick the appropriate box (√)

- ☐ More of practical
- ☐ More of practical
- ☐ Equal time for both practical and theoretical
- ☐ No practical teaching / training
- ☐ If other, please specify _____

3.3. To what extent do the following trainers' support system is employed in your school? Indicate your response saying Very high (5), high (4), medium (3), low (2), or Very low (1) and tick the appropriate box (√)

No	Support systems	5	4	3	2	1
A	Provision of refresher course on manipulating machineries					
B	Provision of refresher course on the subject matter					
C	Provision of intradepartmental experience sharing programs					
D	Provision of interdepartmental experience sharing programs					
E	Provision of inter-college experience sharing programs					
F	Provision of short term courses off the job					

G	Provision of on the job training by skillful trainers in school					
H	Provision of on the job training by inviting trainers externally					

3.4. The following are issues related to ***student selection criteria*** for TVET. Indicate your response saying Very high (5), high (4), medium (3), low (2) very low (1) and tick the appropriate box (✓)

No	issues	5	4	3	2	1
A	To what extent do the criteria are valuable to the course requirement					
B	To what extent do the criteria favor female applicants					
C	To what extent do the criteria favor applicants with disability					
	To what extent do the criteria are clear to understand					
D	To what extent the committee members are inclusive					
E	To what extent the committee members are familiar with training and education to be delivered					
F	To what extent do the criteria are communicated to the potential applicants					

3.5. To what extent do the following trainees' support systems are employed in your school? Indicate your response saying Very high (5), high (4), medium (3), low (2), or Very low (1) and tick the appropriate box (✓)

No	Statements	5	4	3	2	1
A	Provision of vocational counseling service					
B	Provision of regular tutorial session					
C	Arrangements of actual work visiting programs on their respective course					
D	Arrangement of par time work					
E	If other, specify_____					

Part IV Implementation and achievements

4.1. The following are statements related to student assessment. Indicate your response saying Always (6), Very frequently (5), Occasionally (4), Rarely (3), Very rarely(2) ,or Never(1) and tick the appropriate box(✓)

No	statements	6	5	4	3	2	1
a	How often do trainees' assessment carried out practically						

b	How often do trainees' assessment carried out theoretically						
c	How often do low achievers provided tutorial						
d	How often do female learners provided tutorial						

4.2. The following are statements about improvement of TVET system .For each of them indicate your response saying getting much better (5), getting somewhat better (4), stayed the same (3), getting somewhat worse (2), or getting much worse (1)) and tick the appropriate box(√).

No	Items	5	4	3	2	1
1	Society's perception about TVET					
2	Trainees' perception about TVET					
3	The employability of TVET graduate					
4	Employers perception about TVET					
5	Student entrepreneurship					
6	Female participation in TVET					
7	Teacher's commitment to teach in TVET					
8	Resource allocated for TVET					
9	The market orientation of TVET curriculums					
10	What other, specify _____					

Part V Constraints of TVET reform implementation

5.1.To what extent do the following factors affects TVET delivery system in your school? Indicate your response saying very high (1), high (2), medium (3), low (4), very low (5) and tick the appropriate box (√)

No	Factors	5	4	3	2	1
A	Teacher's low reputation of their profession					
B	Trainers disregarding the importance of practical teaching					
C	Trainers' poor preparation (the way trainers are prepared in their respective college)					
D	Trainers low commitment					
E	Lack of incentives for trainers					

F	Lack of counseling service					
G	Lack of required man power (trainers) in the market					
H	If other, specify _____					

5.2. To what extent do the following major factors affects the TVET delivery through apprenticeships providers for your trainees? Indicate your response saying very high (1), high (2), medium (3), low (4), very low (5) and tick the appropriate box (✓)

No	Factors	5	4	3	2	1
A	Unwillingness of organizations to accept learners					
B	The assignment of trainer who lack the capacity to teach					
C	Lack of trust to provide training materials for trainees					
D	Poor monitoring of trainees					
E	Inappropriate assessment of learners					
F	Distance of apprenticeship providers from learner's residence					
G	Loose monitoring by the school					
H	If other, specify _____					

5.3. To what extent do the following factors affect TVET market need assessment system in your school? Indicate your response saying very high (1), high (2), medium (3), low (4), very low (5) and tick the appropriate box (✓)

No	Factors	5	4	3	2	1
A	Lack of experience in carrying out market study					
B	Lack of plan to undertake market study					
C	Lack of budget to carry out the study					
D	Lack of expertise to develop a tool to collect market data					
E	Failure to use the data					
E	If other, specify _____					

Only one more page to go

5.4. To what extent do the following factors affect the quality of TVET in your institution? Indicate your response saying very high (1), high (2), medium (3), low (4), very low (5) and tick the appropriate box (✓)

No	Factors	5	4	3	2	1
A	Lack of active teaching,					
B	Poor feedback system,					
C	Poor school leadership					
D	Lack of availability of qualified teachers,					
E	Lack of closer link with employers					
F	If other, specify _____					

5.5 To what extent do the following factors are the causes of poor TVET image in your locality and? Indicate your response saying very high (1), high (2), medium (3), low (4), very low (5) and tick the appropriate box (✓).

No	Factors	5	4	3	2	1
A	Lack of permeability					
B	Poor opportunity for employment					
C	Low status employment					
D	Poor quality of training					
E	The academic status of students who join TVET					
F	If other, specify _____					

Part VI. Open ended questions

13. what are the major problems that constraints the success TVET reform implementation? _____

14. What are the causes of these problems? _____

15. What are the possible solution, you suggest , that help to alleviate the observed problems ? _____

Appendixes 2: Data

- Allocated Resource for different sectors in Sample Woredas

Capital budget allocated for four sectors in six sample Woredas

Capital budget allocated									
No	Woredas	YEAR 2001				YEAR 2002			
		WEO	WTVETO	WHO	WFO	WEO	WTVETO	WHO	WFO
1	Anchar	310780		947063	701479	4886257	52925	1164424	805590
2	Boke	5034689	45878	1478068	606929	5285238	101447	1344329	663580
3	Chiro	4691234	90133	1113846	135515	5400524	102924	1594514	725585
4	G/Koricha	4533674	29168	1310064	468035	4714265	71338	1651934	452780
5	Habro	7817745	69116	1237638	671546	8781876	63238	1573543	775148
6	Tulo	7501099	119172	1492120	737050	8406394	122779	1992884	750885

Source: West Hararghe Zone Finance Office

Recurrent budget allocated for four sectors in six sample Woredas

Recurrent budget allocated									
No	Woredas	YEAR 2001				YEAR 2002			
		WEO	WTVETO	WHO	WFO	WEO	WTVETO	WHO	WFO
1	Anchar				150000	873362	120000	640000	231514
2	Boke	50000		81823		90000	150000		25000
3	Chiro	120000				200000		130000	70000
4	G/Koricha	120000					541728		
5	Habro	293800				302540	500367	85000	15000
6	Tulo	125000	182017	257219		50000	403195		

Source: West Hararghe Zone Finance Office

Keys:

WEO ; Woreda Education Office

WTVETO: Woreda TVET office

WHO: Woreda health Office

WFO: Woreda finance office

No of students Who took national Examination

No	year	No student								
		who took exam			Promoted to preparatory			Fail to join preparatory		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
1	1998	2477	782	3259	1057	337	1394	1420	445	1865
2	1999	3646	1539	5185	1446	505	1951	2200	1034	3234
3	2000	4424	1579	6003	2169	674	2843	2255	905	3160
4	2001	3769	1383	5152	1060	260	1320	2709	1129	3838

Source: West Hararghe Zone Education Office

