

**ADDIS ABABA UNIVERSITY**  
**SCHOOL OF GRADUATE STUDIES**  
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**MANAGEMENT OF VOCATIONAL EDUCATION**

**AN ASSESSMENT ON THE EFFECTIVENESS OF LABOR MARKET  
INFORMATION SYSTEM IN TECHNICAL VOCATIONAL EDUCATION  
AND TRAINING COLLEGES IN ADDIS ABABA CITY GOVERNMENT**

**BY**  
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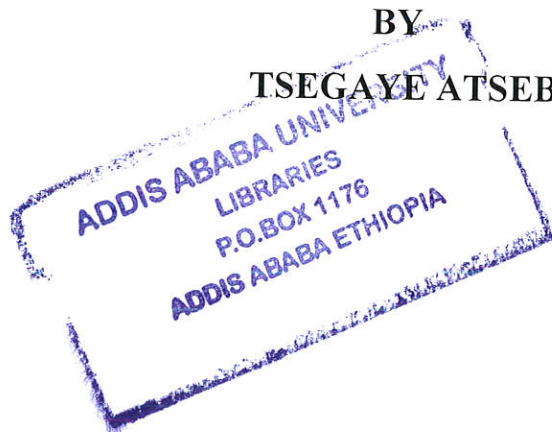
**APRIL 2011**  
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**A THESIS SUBMITTED TO THE SCHOOL OF GRADUATES STUDIES OF ADDIS  
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## **Acronyms and Abbreviation**

AACGEB	Addis Ababa City Government Education Bureau
CSA	Central Statistical Agency
ESDP	Education sector Development Program
GTZ	German Technical Cooperation
ILO	International Labor Organization
KILM	Key Indicators of Labor Market
LMIS	Labor Market Information System
MoE	Ministry of Education
MoFED	Ministry of Finance and Economic Development
MoLSA	Ministry of Labor and Social Affair
MSE	Micro and Small Enterprise
NGO	Non Governmental Organization
NLF	National Labor Force
OS	Occupational Standard
REMSEDA	Regional micro and small scale Enterprise Development Agency
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Education, Scientific and Cultural Organization

### **Abstract**

*The purpose of the study was to assess the current status of the effectiveness of labor market information system in Technical Vocational Education and Training Colleges in Addis Ababa City Government. The area of concern believed to be relevant to examine the meaning and concept of labor market information source of TVET, and countries experiences on the labor market information and TEVT. A descriptive survey research method was employed for the study. The sample TVET colleges were Nefasilk, Rift valley University, Misrak and Selam TVET College. The subject of the study includes 120 trainees, 60 TVET graduates, 40 TVET management bodies and 117 employer organizations. Purposive, availability lottery and random sampling technique were used to select the colleges and on the subject of the study. Questionnaires interview were used to obtain the necessary data. Using SPSS Software data results were organized and summarized into tables, percentages and cross-tabulations. Depending on questions and response different testing instruments such as ANOVA and T-test were used. The finding of the study depicted that there is a critical need of quality training, assigning students with their interest in the training and opportunity for further training for TVET graduates that result from lack of market demand, lack of professional human power who conducts research on the job opportunity, the society's lack of trust on the knowledge and skills competence of trainees, how capacity of TVET institutes, inadequate preparation/ background of the students in high schools, and mismatch of TEVT curricula with the market demand. The outcome of the study also showed that the growth of TVET trainees' enrollment rise year to year. The study results also revealed that TVET institutions have considering the market demand of the training area. Employer organizations also have plan for expansion without giving emphasis to utilize the excess human power in the area. Besides, the study reflects that trainees are not properly guided or given information to select appropriate training areas that suit their potentials. This reflects that training institutes show neglect of labor market information for trainees guidance and placement in the area of training demanded on the market. In light of these findings the following recommendation were forwarded: establishing TVET research units in the federal, regional and institutional level, LMIs should be conducted periodically and continuously, data bank on labor market should be made available, and TVET system should be steered and implemented with the involvement of a wide stakeholders group in order to provide quality, relevant and demand driven training.*

# CHAPTER ONE

## Introduction

### 1.1. Background of the Study

The economic policy and strategy of Ethiopia requires technical and professional skills in broad and specific occupational fields. It is with this intention that the government of Ethiopia has put in place a comprehensive capacity building development program aimed at strengthening its human resource potential through Technical Vocational Education and Training (TVET) (MOE 2006).

To meet this demand, easily accessible high-quality Labor Market Information (LMI) is a key ingredient to the success of modern economy. The importance of LMI to the efficient functioning of product and input markets has increased with the expanding globalization of economic activity. Labor market information can improve both the short-and long-term matches of labor supply and demand, ensuring that individuals acquire the skill sets required by employers for today's dynamic labor market. In outcome based TVET system easy access to national and local labor market information is of vital importance in meeting the demands of the employers by providing the required labor force in quality and quantity (MOE, 2010).

The education service has to consist of the development of human resources. The purpose of the vocational education and training system is to produce human resources with relevant skills so as to meet labor market demand. A permanent dilemma for vocational education and training planners is that the development of people for future labor markets should be based on the information from labor market records. Thus, the development of skilful human resource through education and training should be the first step if significant economic development is to be realized. In other words, the more the economy develops, the better will be investment in education and training in order to accelerate development with better innovations(MOE,2002).

In this regard, labor market information (LMI) is essential for the development of the human resource of society. The need for labor market information reflects the interest to understand human development in its economical and social context and to strive for creating adequate

living and working conditions aiming at welfare of the society. The fast changing world at international and national levels requires a profound understanding of its quantitative and qualitative realities and processes in order to direct development in better living and working conditions and welfare of every citizen (World Bank, 2005).

Yet, in most developing countries including Ethiopia, the link between technical vocational education and training and LMI is not strongly recognized. The labor market of developing countries are characterized by a number of serious imbalances, notably between aggregate demand for and supply of labor, and between the skills asked for and those on offer (ILO, 2002).

Moreover, the present situation reveals the fact that most TVET graduates do not meet the expectations of the service and production sectors. According to MOE, (2005) this is mainly due to three major reasons:

- TVET concentrates on institution based training which favors theoretical instruction. Initial training is still input-oriented and follows curricular requirements instead of work place and labor market requirements.
- Further training and continuous upgrading for the existing work force are only partially in place. A meaningful structure for steady adaptation to workforce demand and life-long learning is still missing.
- On going formal and informal non-public and private company-based training is closed to people and to the world of work. All these different training approaches are not yet part of the overall training system thus excluding large majority of trainees, job seekers (creators) and working people. Thus their skills, knowledge and experience are not sufficiently acknowledged, developed and utilized (MoE, 2005).

In relation to this, World Bank (2005) states that in order to achieve the Millennium Development Goal (MDG) of halving poverty by 2015, Ethiopia needs not only strong economic growth, but robust expansion in the quantity and quality of employment opportunities. Little systematic analysis has explored key labor market issues in Ethiopia, in terms of important policy questions about how to facilitate job creation, productivity growth, and labor market efficiency.

Furthermore, in Ethiopia Labor Market Information (LMI) is often unavailable, unreliable or otherwise inadequate. Nevertheless, available LMI remains frequently under utilized or misunderstood, due to sufficient knowledge about and mastering of basic LMI concepts and method and a lack of analytical skills. It is also likely to be due to inadequate institutional cooperation with regard to collection and dissemination of LMI. On the other hand, with regard to redesign of TVET policies and activities, expectation towards LMI is grossly exaggerated. Accordingly, the importance of qualitative occupational information and analysis remains underestimated. The same applies to inter-institutional dialogue and cooperation of all stakeholders.

The above research findings explain that the labor market of Ethiopia is characterized by a number of serious imbalances between aggregate demand and supply of labor. Due to the fact that most of these studies focused on the demand and supplies of labor without realizing education, and training, the researcher preferred to undertake an assessment of the effectiveness of labor market information systems in technical vocational education and training colleges in Addis Ababa City Government.

## **1.2. Statement of the Problem**

According to MoE (2008) around 35million people of the Ethiopian work force are characterized by low skill levels and very low average educational attainment. Only 10% of the urban population has post secondary education. As a consequence, 75% of the workforce is concentrated in low skill employment sectors such as commerce, services and elementary occupations. Less than half of urban work force works is engaged in wage employment. A significant portion of the urban workforce works for unpaid family business. More than 40% are self employed in the informal economy, most of which live on the edge of poverty. The decline of unemployment is insignificant when it is compared to the expansion of vocational education and training institutes in the country. Unemployment and underemployment are pervasive problem due to the absence of a dynamic private sector. In rural areas, underemployment is widespread. In urban areas, about 26% of the workforce is officially unemployed.

The MoE TVET strategy document (2008) describes the framework for the development of national TVET system which is committed to support the overall national development

objectives and guided by the principle of being demand driven, dynamic and relevant, competency based, modular and ensuring mobility and enable the productive force to contribute to the economic development of the country. Those countries with high unemployment and poor economic performance are in most cases with weak labor market information. In such an economy, the majority of the economically active populations are either underemployed or work for long hours but earn an income which does not even meet basic needs. Hence, labor is under utilized. Studies have shown that many TVET graduates remain unemployed even in those occupation fields that show a high demand for skilled manpower (MOE, 2008).

To this effect, the researcher believes that the TVET offerings need to be linked to the labor market through labor market information as a tool to avoid equipping young people with inappropriate skills and to make them demand driven; i.e., TVET offerings must be prepared by the identification of manpower demand and economic opportunities of young people.

Based on the statement of the problem, the researcher developed the following objectives of the stud:

- assess the effectiveness of labor market information systems with the respect to TVET colleges in Addis Ababa City Government.
- assess the prevalence of source of labor market information for vocational education and training
- examine the relationship between labor market information and vocational education and training
- identify information and structural adaptation of vocational education and training systems, and implementation of forecasting and monitoring of evaluation in skills, qualifications and occupation.

Therefore, the prime objective of this study is to assess the effectiveness of labor market information systems in TVET colleges in Addis Ababa City Government. Thus, the study intended to seek answers to the following research questions.

1. What types and sources of information do TVET institutions use to open and expand programs?
2. Do TVET colleges use supply and demand mechanisms to produce trainees and graduates?
3. What source of information do employing organizations use for expanding their business?
4. What does the relationship between the TVET colleges and stakeholders look like in relation to the training system?
5. How do vocational guidance and counseling staff discharge their roles in assisting trainees to make decisions concerning technical vocational education and training program and job placement?

### **1.3. Significance of the Study**

The researcher believes that the study has the following significance:

- help to formulate well developed labor market information system that is used for TVET programs leading to poverty reduction, to advocate in favor of employment promotion, and to support the matching between the demand and offer of work by timely access to reliable market information that meets user's needs.
- Help to indicate a clear vision about Labor Market Information System which is necessary to identify the right directions, steps and get the right priorities.
- Serves as a research document for further studies.

### **1.4. Delimitation of the Study**

There are ten sub-cities in Addis Ababa city government. Among these Yeka and Nefasilk Lafto sub cities were selected using purposive sampling technique because more TVET colleges are concentrated in these sub-cities. Since the government emphasis is on the development of middle level/college manpower and to make the research activity manageable, the study is delimited on

assessment of the effectiveness of labor market information system and middle level TVET colleges in two sub city of Addis Ababa City Government. Still more, the study included Misrak, , Selam, Nefassil and Rift Valley University College. And the choice of the colleges was made through purposive sampling method because the selected colleges' have long experience in offering TVET than the remaining ones.

### **1.5. Definition of Terms**

**Assessment:** A way to explore competence or capability (AACGEB, 2006).

**Labor market:** Interaction between demand for and supply of labor.

**Labor market signals:** this can be understood to refer to the most recent indicators of changes in the labor market.

**Labor Market Information System:** is a source of information in relation to the labor market.

**Occupational standards:** the competencies of worker requirements in the labor market.

**Training need assessment:** a systematic investigation of a work process to determine the components of the process and skills and knowledge required to perform the process effectively.

### **1.6. Organization of the Study**

The study report has been organized into five chapters. The first chapter includes background of the study, statement of the problem, significance of the study, delimitation of the study and definition of terms.

The second chapter deals with review of relevant literature. The meaning and context of labor market information, TVET and labor market, information source of TVET, the labor market situations in Ethiopia, experience of LMI in other countries, labor market information in Ethiopia, the experience of selected countries in TVET, TVET in Addis Ababa, and labor Market Information Systems in Addis Ababa. Chapter three consists of research design and methodology of the study.

Chapter four focuses on presentation and analysis of the gathered data. This chapter consists of characteristics of respondents, supply of TVET trainees, source of labor market information and

the labor market demand of TVET graduate, employer organizations' participation in educational activities, TVET institution activities, and role of vocational counselors and factors for graduate unemployment.

The fifth chapter presents summary of major findings, conclusions and recommendations of the study.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

This review deals with theories and principles that are related to an assessment of the effectiveness of labor market information the case Technical Vocational Education and Training (TVET), in Addis Ababa City Government. The major works done by different authorities in the area of the issue under study will be presented in this chapter. These are treated under the major topic of:

1. The meaning and concept of labor market information
2. Technical vocation education and training and labor markets
3. Information source of TVET
4. The experience of other countries on LMIs and TVET

#### **2.1. The Meaning and Concept of Labor Market Information (LMI)**

According to ILO (1999) states that, labor market information is

*Statistical and non-statistical information concerning labor market actors and their environment, as well as information concerning labor market institutions. Policies and regulations that serve the need of users have been collected through the application of accepted methodologies and practices to the largest possible extent.*

This definition recognizes that LMI can only defined by the users of information. It also points at the fact that concepts, definitions and methodologies exist to collect information on labor market actors or participants.

Furthermore, according to the World Bank (2005) availability and access of precise, comprehensive and reliable information on labor market is a prerequisite to the formulation of the required policies and programs addressing the long term development needs in employment and poverty reduction. Here, one should note that Labor Market Information is not any relevant for the policy making bodies but other organizations also require comprehensive and reliable labor market data to smoothly run their business. Moreover, LMI is an international demand which serves to the formulation of the strategies of the international organizations. It is therefore indispensable to make LMI quickly available to national as well as international users.

The labor market has changed from a process of slow to one turbulent and rapid change. This require an approach to the labor market analysis based prediction predicted and actual changes in the content of occupations, which is then expressed in TVET programs that are more in line with the needs of the labor market (MOE, 2002).

This implies LMIs is very important tool which provides a timely data for TVET colleges on the type of occupation and number of the skilled labor force required by the country.

### **2.1.1. The Need for Labor Market Information**

Labor market information is essential for any kind of development that every member of the human society strives for. The need of labor market information reflects the interest.

To understand human development in its economic and social context and to strive for creating adequate living and working conditions aiming at welfare of the society. The fast changing economy at international and national levels require a profound understanding of its quantitative and qualitative realities and processes in order to direct development to better living and working conditions and welfare for everybody (European Training Foundation, 1998).

Moreover, Nicholas (2002) elaborates the need for labor market information in the following manner:

*Sound and comprehensive labor market information allows policy makers and program administrators to identify gaps in vocational training, employment services and other human resources development programs and to design strategies to address those gaps. It also empowers individual employers and workers to make informed decisions regarding employment.*

It is clear that senior government officials responsible for planning, formulating policies and programs that have a significant impact on human resource development and employment within a country need LMI in order to identify policies and design programs that will encourage human resource development and support employment growth over the long term. This group includes officials responsible for developing and recommending fiscal and monetary policies, national, regional and local economic development policies, government services, labor market and higher education policies and programs (ILO, 2005).

Among these groups labor market policy and program planners rely very heavily on labor market information to develop policies and plan programs that support such an important issues as workforce mobility, work experience, industry-based training and social inclusion for specific target groups such as women, youth, migrant workers and disabled people, as well as in promoting gender mainstreaming (Nicholas, 2002).

This implies labor market information system (LMIs) is very important tool which provides a timely data for technical vocational education and training institutes on the type of occupation and number of the skilled labor force required by the economy.

### **2.1.2. The Importance of LMI for TVET**

There are significant areas of change which have an impact on the development of TVET standards. The most important are changes in technologies, legislation markets and organizational culture. Some of these changes are extremely rapid and difficult to predict (e.g., technology) whilst others are more easy to anticipate (e.g., legislation).

According to ILO (2005) an effective vocational education and training response depends on both the types of change and the level of response. Rapid changes require a quick reaction, usually through continuing longer term changes allow vocational and training planners to develop standards to support the change process.

This means, institutions need to get information on labor market trends, skill requirement of the economy, technological changes and how they affect skills development, programs offered by other (competing) institutions, and similar information to be able to develop and run programs efficiently. The curricula and types of programs these institutions offer have to be adjusted on a regular basis so that graduates from these institutions have the appropriate and relevant skills for an ever changing market place (Nicholas, 2002).

In relation to this, MOE (2006) stated that, the important of informing students, unemployed and workers about new professions and the skills required from them. The LMIs should also provide information about vocational training possibilities and qualification programs. Besides, it can provide counseling service to help people to find out their individual professional profile so that

they may choose professions according to their skills and preferences. This service has an important impact on work satisfaction and there by relation this on labor turnover, increment of productivity and the reduction of unemployment, that help them to develop career plans, make career choices, obtain information about training opportunities and find jobs. Students use LMI to gain a better understanding of the current and future skill requirements of the labor markets so that they can make appropriate education and training decisions.

Moreover, providing information on vocational training possibilities like courses offered by public or private training organizations is therefore an important function of the LMIs. This type of service is usually aimed at young adults and all individuals wishing to enter the labor market for the first time (in Went, 2004).

This indicate that the planners and program developers in vocational education and training institutions use information on labor market trends and the anticipated impact of technological changes on future skill requirements to help them to determine the kinds of programs to be offered and the number of students to be accepted in each program.

### **2.1.3. Manpower Planning**

Manpower planning reflects a more comprehensive approach of labor market interventions than low wage policies or policies stimulating labor migration. Manpower planning consists of a set of policies that may include five forms of public intervention that were mentioned before (legislative, creation of institutions) (ILO, 1999).

Although an array of techniques is available to assist the manpower planner, manpower planning has become synonymous with manpower requirements forecasting (Middlton et al, 1993). This method starts with setting targets for the growth of GDP by sector, and subsequently uses a number of assumptions and calculations to derive levels of educational system. In this view, manpower planning can serve as an instrument for localization policies, and as means of quantifying or justifying technical training to produce skills for an expanding modern sector (Richard and Amjad, 1994).

According to Nicholas (2002) the shifts in employment patterns from the public sector to the private sector as a result of privatization of formerly state owned enterprises, on one hand, and from the formal economy to the informal economy on the other hand. In recent years globally, impose a serious threat and challenge to the whole process of manpower planning.

Thus, labor market analysis can be defined as the measurement and evaluation of economic and demographic forces as they relate to the education and training process on one hand, and the employment process on the other hand. Such economic forces include but are not limited to; labor force changes and characteristics, population changes and characteristics, industrial structure and development, technological development shifts in consumer demands, wage levels, recruitment practices, and conditions of employment and training opportunities (ILO, 2002). This implies that labor market information has great contribution in forecasting labor quantity and quality as well as level and type of training and skill demanded in direction of economic development.

Labor market provide inactive for and guide skills development through movements in wages and employment, labor market in sub-Saharan African have been influenced by “environmental” issues ranging from disease and wars to wears institutions and lack of information on the types of skills needed (Johnson and Adam, 2004). Thus economic and educational need to be aware that labor market is influenced by crisis besides technological and economic development and pay attention to change skills and labor demand at the time of adverse condition.

Education and labor market policy depend on some nation about the future, i.e., on possible future developments and structural changes in the employment system, in qualification requirements and the qualification structure of the future manpower supply (European Training Foundation, 1998). This calls for careful forecasting of future labor demand based on reliable labor market analysis and due consideration of past and present demographic, economic and technological development trends and global advancement speed.

The analysis of labor market information is a pre-requisite for re-orienting TVET to focus on labor market demand. Labor market information comprises information on the labor market i.e.,

demographic developments, number of school leavers at different levels, number of unemployed by region and qualification profile etc and information from which the present and future demand for skill and TVET qualifications in the labor market can be derived – i.e., skill gaps, employment trends by sectors and occupations, emerging markets, new investments, economic opportunities in rural areas, (MOE, 2006).

#### **2.1.4. Development of Occupational Standard**

In the past, vocational education and training was based on the design of the curriculum a specification of the knowledge and skills the student need by involving employers in curriculum design-usually through some form of curriculum committee. The new TVET system will overcome these problems through the introduction of TVET standards for all post graduate and an outcome – oriented training and testing system.

According to AATVET strategy (2006) occupational standards (OS) define as, description of minimum competencies for a full performance of an occupation and will follow a comprehensive concept of qualification addressing technical and vocational skills, trade-related knowledge as well as work attitudes, entrepreneurial, social and organizational competencies and environmental awareness.

Moreover, ILO (2002) states that, in standard based systems the outcomes are defined as closely as possible in line with the expectation of employment and thus education standards are set against occupational standards. This, in turn, will define the input (what has to be learned to achieve the outcome) and the process (the most appropriate method of achieving the outcome).

Thus, the structures of the economy, the employment composition and the performance of economic sectors have serious implications for the demand of different occupations (Human Science Research Council, 2005). On the other hand, MOE (2002) stated that, occupational standards must reflect ongoing economic and technical changes, in the economy that result in changing skill demands in the force. Before embarking on development of occupational standards (OS), stakeholders need labor market (LMI) to provide “early warning” and identify priorities for standards development.

Standards at regional level must be harmonized with standards set at federal level in order to ensure articulation between different training schemes and upward mobility in the training and education system.

This reflects that even though occupational standard is a means to link between work force employment requirements and human capital development (i.e., technical vocational education and training programs) developing quality occupational standard that required by the labor market is difficult without well organized LMI.

### **2.1.5. The Role of Vocational Guidance and Counselors in TVET Colleges**

Choosing a vocation is not an overnight work. It requires a great deal of time to make an intelligent decision. Then, trainees should have information about themselves, education and occupational opportunities that fit them best. However, trainees in the college usually face problems in the training area because of information they require to place in the appropriate fields of study according to their interest. Therefore, to minimize these problems, trainees should be well oriented and adjusted prior to the choice of studies in the TVET colleges.

Furthermore, increased attention will be given to vocational guidance to enable future trainees, in particular youth, to choose the right career and make full use of the initial and life-long learning opportunities provided by the TVET system. Vocational guidance has to start at school level. However, TVET institutions will also assign vocational guidance staff and they will also be focal persons in organizing self-employment support for TVET graduates and develop a system of aptitude testing to support personal career choices.

Guidance is a process of helping students to understand, accept and use their abilities, aptitudes and interests in order to achieve their ambition. It consists of three types: educational guidance, vocational guidance, and personal guidance.

One, which tries to solve vocational problem, is called vocational guidance. As Crow and Crow (1963) elaborates:

*Vocational guidance helps the pupils and parents understanding and attitudes about the world of work. It concerns it self with an early identification of vocational interest and aptitudes by giving pupils vocational awareness.*

Vocational guidance is therefore, a continuous process carried out at all levels than to be spotlight operation applied during the college training program.

The vocational guidance and counseling guideline for TVET institutes (MOE, 2005) states the following duties of career counselor:

1. Provide orientation for secondary schools and parents concerning vocational offering in the institutions,
2. provide placement program for trainees completing vocational programs, if possible;
3. prepares follow up studies of formed students in vocational programs for the purpose of improving services and evaluating the effectiveness of vocational training;
4. interpretation of vocational education to the community;
5. Provision of trainees information to potential employers and make recommendations ect.

Nicholas (2002) emphasizes that, guidance counselors in these institutions use the results from graduate follow up (tracer) studies along with information on anticipated skill requirements to help students make decisions concerning the particular vocational education and training programs they should pursue.

This calls for the necessity to give attention to labor market information as a vital tool for vocational counselor to give advice for trainees at the time of occupational choice and helping them for work placement.

## **2.2. TVET and Labor Market**

Successful TVET colleges have to be well informed about the local market demand that intended to solve the problem of the mismatch between training and labor market. Most of basic instruments like training need assessment and tracer studies should be known and carefully conducted at all levels. In this connection, Aderson in Abusetugne (2000), has noted that there should exist at every training institution a program of occupational information service just to provide every student with information concerning the occupation of the community in which he or she will serve as an employee following the completion of the training program.

Likewise Yekunoamlak (2000), disclosed that, Labor Market Information System (LMIS) is very important information tool which provides a timely data for vocational training centers on the

type of occupation and number of the skilled labor force required by the economy. It can serve as an “early warning system” on what is happening in the labor market including the current employment patterns and problems associated to it, as well as future trends and opportunities.

According to Degobbi (2006), training has a dual function in that it enhance security and at the same time increases flexibility because better employability allows easier shift from one job to another, and even from a sector requiring certain skills to another where different qualifications are needed. In order to improve labor market of flexibility training must provide not only several types of skills, but also technological knowledge such as theory of technology as well as foundation skills applicable to any job in different industries or sectors (computer skill's) and which allow an individual to quickly learn new skills.

### **2.2.1. Labor Market Information and Employment Opportunity**

The problem of employment opportunity of graduates of TVET trainees is the mismatch between labor supply and demand. Changes in the educational system will not change the number of job opportunities in the economy, however, education is definitely responsible for one of the problem of structural imbalance that of matching employment opportunities and expectations (Blaug, 1973).

If the labor market is poorly organized or if employers are unwilling to hire youngsters, so that the circumstances make the graduate vulnerable to several months to find suitable work, the rate educated unemployment is almost bound to be higher than that of uneducated.

Responsive training policy requires more often accurate, regular and update labor market information and socioeconomic trend analysis systems to develop information on labor markets and to monitor training are necessary to adjust instantly to changes in skills demand. Often, however, such systems are not well developed at national levels and are even weaker at regional and local levels (World Bank, 2004).

For well known reasons, though labor market again like all markets function in a much more complicated fashion. They are affected by host of cultural, institutional, legal and political mechanism. Together these mechanisms constitute what we by “labor market regulation”. There are many aspects involved, ranging from how employers contact for the service of labor to the

nature of the exchange including the rights and responsibilities of the parties, the terms and conditions of work, and the resolution of disputes. Given the direct impacts that labor markets have on the welfare of workers and their families, this area of regulation represents an important, visible and often controversial aspect of public policy.

According to Bose et al in Abosetugne (2000), prospective graduates depend on the following eight factors as the major sources of employment market information: (1) parents and relatives (2) teachers (3) mass-media (4) career masters (5) counseling office (6) previous employment of others (7) peers (other students and) (8) career guidance. Suain et al in Abosetugen (2000), have also stated that the development of human resources is dependent on the operation of the labor market and the preventing employment policy equally, output of the education system, by type of skills thought, has to be known for proper utilization of human resource.

Most notably it serves as an “early warning” on the current employment patterns and problems associated to it, future trends and opportunities in the labor market. Similarly, World Bank (2004) pointed out that an effective LMIs would provide latest information on the demographic and socio economic characteristics of the labor force, the composition and nature of employment and unemployment and, most importantly, initial changes in labor demand and training requirements. In practical terms such systems use to analyze demand for training the transition form school to the world of work and performance of the labor market. It also brings together the required information and acts so as to facilitate the decision making process such systems are moreover useful to avoid wastage of scarce resources and duplication of efforts.

However, TVET systems in many countries have yet established sustainable institutional set-up required by LMIs. Systems for this kind of data collection (labor market data collection), and analysis are weak and there is an extreme dependence on external agencies to carryout these functions. TVET institutions in these countries, hence, will not be flexible in adjusting to short term and long term changes in demands for training.

What is needed, by students, their parents, teachers trainers, job seeker, employers and employees is reliable and timely information about the state of the various labor market for

qualified people meeting these information needs will be one of the main function of planning in it (Good Frey, 2003).

According to Middlton (1993), recent studies have shown that when employment opportunities are available or growing and a match is made between training and available jobs, TVET programs were found to produce higher productivity, wage and investment, and vocational graduates have had advantage of getting initial employment opportunity over their counter parts – non vocational or general education graduates. More frequently, however, conditions are not encouraging to TVET graduates.

Typical examples are found in low income countries where training capacity surpasses employment demand. Studies in Kenya, Niger, Benin and Tanzania indicated low returns under conditions where a third to a half of vocational school graduates cannot secure employment for as such as three years, on average.

### **2.2.2. Looking for Job**

According to Zunker (1998), job hunting takes a lot of hard work. Job will not come to you. You have to go to the jobs when looking for job openings; it helps to have a plan of action of find employers who are looking for a worker with your qualifications.

There are a variety of sources you can use including personal contacts, school counselors, and direct contact with employer, newspaper, employment agencies, the more sources you use, the more job openings you are likely to find.

There are many reasons why appropriate choice is important and why factors about jobs are essential for making a wise choice of an occupation. This means that wise choice of an occupation may determine whether a job seeker will be employed or unemployed in some occupations, employment is notorious irregular, in other it is much more stable and secure, by choosing an occupation in which employment is known to be relatively stable, one may increase the probability it will have a job even when many others are out of work (Catter in Abosetugne, 2000).

Students will not need information about many occupations which they are not seriously considering. In this case, Pecku (1991), have stated that the wise of an occupation requires: relevant, comprehensive and accurate information about what options a variable, what they require and what they differ, also knowledge and acceptance of ones own an aptitudes, feelings fears and preferences are essential for making the appropriate and relevant occupational choice.

Likewise Hayes, (1971) asserts that, the development of occupational preference can be traced through stages: awareness, interest evaluation and trial. In the awareness stage the individual are not at all selective about information he exposes himself to and tends to be rather passive factor and the only selectivity is that which might be imposed by its environment and his awareness of occupations is based upon on the unsolicited inputs of information bomb and him from all sides passive through the individual is in this process, his awareness of occupations will normally increase overtime as repeated inputs about the same job even fully seep though into conscious awareness.

### **2.2.3. Brokerage**

The rational for brokerage is that since neither employer nor job seekers have full information about vacant jobs and candidates. This requires the provision of a service which can help make the link between the two sides. Without such a service jobs take longer to fill and people stay unemployed for longer periods than is necessary. The provision of employers service (PES) tries to fill this lack of information and put employers and job seekers in touch with each other and the PES is not the only channel for filling job vacancies but also other channels include personal contact, news paper advertisement, notice boards (Elien Hansen, 2001).

The traditional brokerage process consists of listing job vacancies from employers and obtaining information from individual job seekers, then matching the two. This involves the following major tasks: Interviewing job seekers and registering information about them, job canvassing, registering and advertising job vacancies on display boards: computer screens, newspapers, radios, TV and internet., appraising job vacancies and job seekers and matching them, liaising between employers and job seekers and providing job search assistance for those job seekers who need it in order to successfully in the labor market (Phan Thuy et al 2001).

#### **2.2.4. Labor Market and Globalization**

Globalization creates new opportunities for growth and employment but also brings challenges and problems such as job displacement and job loss, as increased stresses and strains at the work places exposed to increasing global competition. On a general level there is evidence that in order to grasp the new opportunities of globalize markets, it is important to be part of the trade and investment flows or are integrated in the world economy solely as primary commodity exporters they face bleak results in their economies and labor markets (Ghose, 2003).

The dismal growth, employment and poverty record of the excluded countries account for such of the unfairness in globalization found by the world commission on the social dimension of Globalization (WCSDG, 2004). Yet, even in the countries in which globalization has a generally positive impact; people are still affected, as globalization trends to increase labor market adjustment problems. The pros and cons of globalization are in fact unfairly distributed between winners and losers within countries even when a country as a whole is winner in globalization.

Labor market in particular create winners and losers: while new jobs are created, other jobs are lost. Loss and creation do not occur in the sectors, firms and regions of a country; and do not occur at the same time.

Sometimes jobs are lost in one country and created in another. Jobs destroyed and created usually differ in terms of pay, skills, age and sex and so on. This structural heterogeneity between jobs created and lost is one of the reasons why, even in the presence of a hypothetical quantity match of supply and demand of labor, painful qualitative adjustments are the outcome for many. The pain increases with level of inadequacies between demand and supply and the time need to adjust.

This is one of the main causes of structural unemployment, with observers usually attribute to the supply side (people not well adopted to demand from employers) when in reality it is caused by other shortage of or ill adapted demand. Long periods of high unemployment in many countries show this drastically.

Globalization is also said to bring about more flexible labor markets. As adjustment to Shocks (such as trade liberalization) becomes more frequent, the labor force has to adapt more quickly and the employment relationship is said to become more volatile and short term. For the future of work in the era of globalization, the future of the employment relationship is relevant; most observers see dramatic changes in the employment relationship and some even see the end of (salaried) work (Rifkin and Heilbroner, 1995).

Today's world is one of rapid change in virtually all dimensions of life. The globalization of trade means that decisions in one country may have an impact on employment opportunities in another country, where values and priorities are very different. Globalization of the labor market means that workers have greater mobility across borders, yet opportunities are not uniform from one country to another or in different segments of society within a given country. There is a greater need for specialized education and training, but in some countries a tendency to cling to traditional priorities results in a shortage of workers in certain specialized fields.

There is a widening gap between the rich and the poor who can seize opportunities and those who are marginalized and those who have received an education and those who have not. The days of job stability are over for many and are being replaced by a context where flexibility and transferability of skills are essential (Ghose, 2003).

### **2.2.5. The Role of TVET for Economic Development**

According to Eliasson in Yekunoamlak (2000) describes that, the relationship between vocational training and labor market is seen in light of the relation between the function of education as investment in human capital and as a filter that sorts individuals according to their talent. If much attention is given to the investment side disregarding the filtering function, more educated people beyond the capacity of the economy will be produced.

Different studies show that there are differences of economic activities and social needs from country to country and place to place which calls upon the flexibility of TVET institutions' programs to address the local need. This makes the issue of needs assessment critical so that courses are matched with local community needs (UNESCO, 1996).

Here the critical issue, especially in publicly provided or supported training, is the potential mismatch between training and jobs. Training by itself cannot create jobs. In a period of high unemployment, especially of youths, governments are tempted to spend large amounts of sums on training programs since students and parents think that they will have a better chance at getting jobs. But if the economic environment is not producing jobs, then this investment will be wasted and it would be better to provide general education rather than the often more costly vocational training. The rules of vocational training should therefore be simple no demand, no training (Laurence, 2000).

Seninger (1989) argues that, long-term investment in worker training as a policy strategy for economic development has a strong appeal for a number of social, economic and political reasons. A commitment of economic resources to training strategy improves the human resource endowment of a region through higher levels of educational attainment and labor skills. The kind of qualitative improvement of the population is a desirable goal over and above the economic goals.

Laurence Wolf (2000) similarly advocates that, it pays an individual to invest in human capital additional education. If investment in education increases, the earning power of the person being educated by more than the cost of the additional education. Just as investment in nonhuman capital is expected to increase and expand the capacity of capital resources to produce, so is a large part of the investment in human capital is expected to augment the capacity of capital resources to produce, to contribute to gross national product.

Due to lack of access of the quantitative labor market analysis approach, the French authorities have adopted a more pragmatic and flexible approach aimed at identifying the main trends of the labor market, and helping the vocational education and training system to respond quickly to its signals to align training and labor market work force demand. Flexible system is built in at national, regional and local levels. At local level, vocational schools are encouraged to establish close links with local enterprises; the future employers of their graduates. As one tool of gathering information on employability, vocational schools have to follow up their graduates (tracer studies) in order to find out:

- How many are actually found job
- How long it took to get a job
- How many have remained unemployed and why?

Vocational schools also have the possibility to create local complementary: these courses last one year after obtaining diploma. The content of this training is defined in close cooperation with local companies in order to correspond to the needs of the local labor market (European Training Foundation, 1998). This indicates that for the existence of a link between education and economic development is mainly the result of manpower needs being translated into vocational educational targets and plans.

Therefore, institutions need to get information labor market, skill requirements of the economy, technological changes and how they affect skill development programs, to be able to develop and run programs efficiently. The curricula and the types of programs institutions offer have to be adjusted on a regular basis so that graduates from institutions have the appropriate and relevant skills for an over-changing market place.

### **2.3. Information Source of TVET**

To improve the quality, relevant and efficiency of trainings being provided as well as to identify new needs of training requires a proper and efficient system of collecting timely data that can help to make the training program more flexible and responsible to the dynamic labor market demand.

Hence the main ways and means of obtaining information and data is labor market information system. It includes labor market monitoring, need assessment and tracer studies. Regarding this AACG (2006) stated that,

*Labor market monitoring and training need assessment are instruments used to identify skills and knowledge for individual and socio-economic development. Based on occupational standards through labor market monitoring and training need assessment, suitable training program can be designed and provided. Moreover, tracer study is a method to obtain feedback that helps TVET institutions to evaluate the outcome of a given training tracer studies monitor the quality and demand-orientation of the trainings.*

To this end, Middleton (1996) states that, industrial as well as developing countries conducting periodical survey annually, quarterly or even monthly is important to obtain information and

identify structural change in the economy, movement of relative wage and employment by skill qualification. The data collected can be used to analyze labor market and their performance to evaluate macro economic policies. Earning information from household survey is periodically analyzed with respondent qualification to estimate various levels of schooling and field of study. Data collected from type of training can also be used to estimate rate of return to training program.

Furthermore, managers of training institutions can establish their own mechanism and source of data concerning skill demand and success of training in fulfilling those demands by forming proper relationship with enterprises.

For the improvement of training quality and efficiency, permanent change of market information on demand and supply has paramount important, likewise, regular tracer studies of graduates of training decisions frequent survey of employers can offer pertinent information on expected changes in skill needs, assessment of pre-employment training, and constraints to the productive use of skill labor.

To sum, creating an efficient mechanisms and means of collecting timely data from relevant sources and proper utilization of the data obtained is crucial to adjust the training program to skill market demand, decide on the types and scale of training should be provided, to evaluate the trainings being offered, to connect training program and economic plan etc.

Hence, investing labor market information system is a priority issue that need due attention by the government, employers and training institutions to improve the quality, access, relevance, effectiveness and efficiency of education system in general and TVET in particular.

### **2.3.1. Labor Market Monitoring (LMM) and Training Need Assessment (TNA)**

LMM and TNA are instruments used to identify skills and knowledge for individual and socio-economic development. Based on occupational standards through LMM, suitable training program scan be designed and provided.

A systematic and coordinated approach of continuous LMM will be developed in order to enable training providers to offer appropriate training programs in the needed skills and occupational

fields, and to avoid unnecessary duplication in the training offers. Stakeholders from all TVET sectors and at all levels have to be incorporated.

A decentralized system of data collection and analysis will be setup. Such a system must work in a very close cooperation with all concerned stakeholders and organizations. When the LMM has established the occupational areas for which training is needed, a training need assessment has to identify the detail of the required training. TNA involves job assessment and human resource assessment, community need assessment, survey of employers, households and other sectors in the economy, analysis of the market for products and services, and aim to identify the skills attitude and knowledge required to do a certain job and to determine the type of manpower required.

To make the regional system effective at all levels a close work relationship with respective stakeholders must be set up and established in terms of exchanging information and data with TVET schemes. The results of LMM and TNA should be used by counselors for career guides of TVET (AACGEB, 2006).

### **2.3.2. Training Need Assessment**

According to MOE (2004) manpower requirement planning and training needs assessment are important instruments for both individual and societal development. Above all they are important inputs to identify vital training areas and necessary knowledge and skills that enable to bring about economic progress of a nation.

Need assessment before the provision of TVET program is a common phenomenon in most developed countries. However, the training experience of less developed countries has been direct replica of other countries or mainly influenced by political overtone. Provision of the same types of training areas almost in every TVET is not uncommon in many developing countries including Ethiopia. As a result wastage of skilled human resource and educated unemployment are critical (MOE, 2004).

Taking the needs assessment as a pre-condition, the ministry of education (MOE, 2004) devises the stages: develop planning for required skilled labor force, occupational standards, training

need assessment bases and its implications; training need assessment methods comprises the following crucial tasks: situational analysis, market analysis, and manpower inventory.

In conclusion, training need assessment should be taken as precondition for the provision of external efficient TVET program.

### **2.3.3. Tracer Studies**

Tracer studies are an important signal for TVET to know the relevance of the training areas and to identify the weakness of the program and eventually to adjust the training program in way that it suit to the labor market.

The major focus of tracer study is to make sure that TVET institutes have achieved their desired objectives and discriminate the training areas that enable the graduate to be employed in government/private organizations it self employed. It is also an important instrument for TVET authorities and policy makers to close down irrelevant training areas to the labor market both at national level (MOE, 2004).

## **2.4. Countries Experiences on LMIs and TVET**

### **2.4.1. Developed Countries Experiences**

#### **2.4.1.1. LMIS in France**

In France, training needs assessment involves observing major labor market trends and drawing pragmatic guidelines from them. According to Gasskov (2000) states that, three national bodies are involved. The Center for Studies and Research on Qualification (CEREQ), which is jointly supervised by the Ministry of Education and Labor, is responsible for studying the relationship between training employments. The Evaluation and futures Department (DEP) of the education ministry supplies CEREQ with the results of its statistical research on student's flows. The Education Finance Committee (HCEE) establishes permanent high level contacts between the education ministry and its parents.

State and regional authorities and the social partners annually update information on trends in employment and qualifications for each economic sector. Data are dawn from employment

surveys, which give information on the number of salaried employers in firms, on the occupational structure and on employee turnover.

Labor market information is commonly collected by ministry VET departments, national training agencies and local employment office careers services. LMI is dissemination through print and electronic media. For example, with the enterprise network, a mailing list is maintained for government agencies, private institutions and all those concerned with human resource development. They receive all publications. A telephone directory is provided at the end of each publication, and also on the internet, which shows where to get each type of information.

## **Major Challenging**

Perhaps because of inefficiencies born of inexperience, regional observatories have been found to be costly and to have problems with translating labor market signals into training decisions.

### **2.4.2. Developing Countries Experiences**

#### **2.4.2.1 The LMIs in South Africa**

The demand for labor market information in Southern Africa has increased due to dramatic economic and political changes in the sub-region, as well as developments in labor market theories and policies. The supply of labor market information, however, shows a series of well-known deficiencies. Many countries in the sub-region therefore attempt to meet demand through the establishment or improvement of their labor market information systems.

It cannot be denied that many previous efforts to establish sustainable labor market information systems have failed. A review of the experience of SADC countries, and the role of technical cooperation in this area, would be beneficial for countries establishing new systems, even when efforts were not successful. Experiences in the institutional design of labor market information systems elsewhere in Africa could also be useful to countries that are in the process of establishing new systems (ILO/SAMAT, 1999).

The experience of other countries indicates that, different organization and agencies need to network to give on stop source of information through online services for individual and

organizations that need LMI. However, labor market information collection, compiling, interpreting, and dissemination is a serious problem even in more developed countries unless well projected, coordinated, and database LMI system is established at national level.

#### **2.4.2.2. LMI Practice in Ethiopia**

Ethiopian labor statistic bulletin has developed 27 years ago and since then there is no improvement made on it. On the comparison with other countries, Ethiopia has no well developed labor statistic, and has low capacity of resent labor market information indicators (MOE, 2004).

According to the MOE (2006) the analysis of labor market information is a pre-requisite for re-orienting TVET to focus on labor market demand. This is become labor market information comprises information on the labor market i.e., demographic developments, number of school leavers at different levels, number of unemployed by region and qualification profile and information from which the present and future demand for skill and TVET qualifications in the labor market can be derived – i.e., skill gaps, employment trends by sectors and occupations, emerging markets, new investments, economic opportunities in rural areas and so on.

Because of lack of sufficient LMI, organizations take their own labor market information. These kinds of gathering information create duplication of effort, moreover relevance and reliability of the information is questionable (MOE, 2004).

On the other hand, World Bank (2006) explain that substantial relevant labor market information and forecasting is already available in Ethiopia, in particular through the Ministry of Labor and Social Affairs, the National Statistics Office, REMSEDA Contrary to this MOLSA (2005) states that Ethiopian Labor Market information has reiterated the need to implement an overall and sustainable strategy to strength the availability, quality and use of labor market information.

According to MOLSA (2005) the main problems are:-

- Lack of (reliable) statistics and relevant indicators to analyze the labor market and monitor trends: the statistical coverage of the agricultural sector is of special concern.
- Insufficient coordination and participation of the providers of information have resulted in duplication of efforts, available information not being used, and inconsistencies in data series.

- Problems of transmission of information within and between the regional and federal levels due to difficulties of communication.
- Limited capacity of national and regional levels to produce, analyze and disseminate labor market information.

As stated on MOE (2004) as a solution for Ethiopian LMI establishing linkage between Labor Market Information provider and users organization, capacitating KILM organization with skilled human power and material, and giving awareness for society about the importance of LMI are issues that need attention if LMI system is to be established on sound ground and make utilizable for intended purposes.

### **2.4.2.3. Labor Market Information Practice in Addis Ababa**

According to AACGEB (TVET) strategy (2006) the analysis of labor market information is a pre-requisite for re-orienting TVET to focus on labor market demand. In order to serve monitoring, evaluation, communication on local TVET level data collected needed. This TVET collection system should be compatible with the regional management information system (MIS) and Personnel Information System (PIS) and with the future federal management information system.

A data collection under the responsibility of Addis Ababa TVET Commission should start from the TVET institutes/colleges and collect basic data for use at all levels. The function of data collection is:

- To inform school leavers about TVET training possibilities in Addis Ababa and need of labor market,
- To inform companies about TVET training programs and training possibilities including assessment procedures and certificates.
- The basis to create a web-site
- Management instrument for Addis Ababa TVET commission (AACGEB, 2006).

The data's can be collected from different fields of TVET labor market monitoring, training need assessment and tracer studies, accreditation, TVET training programs, evaluation, cooperation with enterprises, workshops, standard setting, Trade testing, certification, apprenticeship, participants of all types of training, modules, courses, status of teachers/instructors, further

training, TVET structure capacity building, conceptualize the TVET data system in close cooperation with all training providers (public, private, NGOs, etc). To set up a website is one of the possibilities to improve the awareness creation of the TVET system of Addis Ababa.

Related to this a network between public and private TVET training institutes, stakeholders, and companies should be improved in order to share experience, equipment and human resources. Two times per year the AACG (TVET) Commission should organize workshop to share experience and to build up new networks and set up the received data collection to the web-site of AA TVET Commission. However, there is no coordination between the different training providers, as a consequence, training offers are fragmented and often duplicated (AACG, 2006).

As stated on MOE (2004) as a solution for Ethiopia LMI:

- establishing linkage between labor market information provider and users organization,
- capacitating KILM organization with skilled human power and material, and
- giving awareness for society about the importance of LMI

are issues that need attention if LMI system is to be established on sound ground and make utilizable for intended purpose.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1. Description of Research Methodology**

Descriptive survey method is used as a method of the research, with the assumption that it could help to get description of current state of the problem by examining and describing practices, the major problems and prospects related to labor market in Addis Ababa. It is also assumed that the nature of the problem needs wider description and investigation. Furthermore, the data collection procedure is designed in such a way that it provides a description of the current practice and problems so as to identify typical bottlenecks that need to be tackled to improve the TVET system.

#### **3.2. Sources of Data**

The data for the study were obtained from both primary and secondary sources; primary information pertaining to the study was obtained from:

- TVET college/Middle level graduates who have completed their training in the academic years 2006/7 – 2009/10 and Middle level/college first years trainees of the four colleges and responsible officers from the four colleges which include: TVET institutions management bodies, employer organization's higher officials, TVET officials and KILM organizations.
- As far as the secondary sources are concerned relevant documents, books journals and websites on the internet were made use of.

#### **3.3. Sampling Procedures**

##### **3.3.1. Colleges**

In Yeka and Nifasilk Lafto sub cities there are two public and four private colleges which provide level four TVET programs. These were Nefas Silk, Misrak, Addis, Selam and Noh colleges and Rift Valley University College. Among these Nefassilk, Misrak, Rift Valley University Colleges and Selam were selected for study. And the choice of the colleges was made through purposive sampling method because the selected colleges' have long years experience in offering TVET than the remaining ones.

### **3.3.2. Trainees and Graduates**

The four sampling elements are the middle level TVET graduates who have completed their training in the academic years 2006/07-2009/10 and TVET college first year trainees (2011). The researcher selected the graduates and TVET college first year trainees because it was believed that they would give adequate information. Out of 1600 first year TVET trainees in the sample institute, 128 (8%) were taken by using simple random sampling as the source of data. In this process, five respondents from each training area were selected to make the sampling representative and obtain adequate information from each training area. Furthermore, additional information was collected from 68 vocational graduates that were selected through available sampling on the bases of getting information secured from the selected TVET institutions.

### **3.3.3. Deans, Deputy Deans, Vocational Counselors Department Heads and TVET Management Bodies**

Because they were small in number purposive sampling technique was employed to incorporate all vocational counselors, deans, deputy deans and TVET Management bodies in Yeka and Nefas Silk Lafto sub city in Addis Ababa City Government.

### **3.3.4. Employer Organizations**

There are 3200 manufacturing and service giving organizations in the two sub-cities. Therefore, in order to make the sample manageable and reliable 128 employer organizations were selected using lottery sampling techniques.

Accordingly, a total of 364 questionnaires were distributed and 337 (92.58%) were filled in and returned. Response of 40 TVET management bodies, 120 TVET trainees, 60 TVET graduates and 117 employers were used in the study.

## **3.4. Data Collection Instruments**

The study was intended to gather data from both primary and secondary sources. The primary data were gathered through questionnaires and interview. Four different sets of survey questionnaires were developed based on the basic questions to secure factual information, opinions and attitudes on the problem under study. The four types of questionnaires were

distributed to TVET trainees, TVET college/institutions management bodies, TVET graduates and employer organizations. The questionnaires were designed in such a way that they include both close-ended and open ended items.

Interviews were conducted for four LMI users and providers and for 36 TVET officials at Federal, Regional and Sub-city levels. Secondary data, which have relevance to the study, were collected from MoE, MOLSA, CSA, ILO, World Bank and different companies and other relevant research documents and sources.

Primary data were collected through field survey. In order to maintain the quality of the data, data collectors were properly selected and oriented on how to contact respondents and check the filled in questionnaires on spot.

### **3.5. Methods of Data Analysis**

The type of data obtained through the different instruments were analyzed in quantitatively and qualitatively. Using SPSS software data results were organized and summarized into tables, percentage and cross tabulation. Depending on the question and responses, different testing instruments such as ANOVA (for testing three and more than three variables (considered in responding the questionnaires) and T-test (for testing two variables considered in responding the questionnaires) were used to statistically test whether the mean differences among the groups are significant or not. For questions that are rated scale a ranging from 1-5 used to give more option for the respondents and obtain meaningful information, and responsible outcomes (Nichola, 2006).

## CHAPTER FOUR

### PRESENTATION, ANALYSIS AND INTERPRETATION OF THE DATA

This chapter deals with the presentation and interpretation of the data gathered through questionnaire from respondents of the TVET management bodies (deans, deputy deans, vocational counselors and department heads), trainees, 2006/7- 2009/10 TVET graduates and employers.

A total of 364 copies of questionnaires were prepared and distributed to 40 management bodies, 127 trainees, 68 TVET graduates and 128 employers. Out of this figure, a total of 337 copies of questionnaires were properly filled in and returned i.e., 40 management bodies, 120 trainees, 60 TVET graduates and 117 employers.

In order to supplement the data collected from questionnaire interview was conducted for 36 LMI users and providers and for TVET officials at federal, regional and sub city levels.

Depending on the question and responses the data was tabulated and analyzed using tables and statistical tools. For ranking order question items, mean and standard deviation were calculated based on T-test and ANOVA. Analysis and interpretation were made based on the basic questions raised in chapter one of the report.

**Table 1. Description of TVET institutions management body's and employer organizations respondents**

No	Variable	TVET Management body's		Employer organizations		Total	
		F	%	F	%	F	%
<b>1</b>	<b>Sex</b>						
	Male	35	87.5	86	73.5	121	83
	Female	5	12.5	31	26.5	36	17
	Total	40	100	117	100	157	100
<b>2</b>	<b>Age</b>						
	21-25	5	12.5	24	20.5	29	18
	26-30	15	37.5	44	37.6	59	37
	31-35	8	20	24	20.5	32	20
	36-40	7	17.5	19	16.2	26	16
	41 and above	5	12.5	6	5.1	11	9
	Total	40	100	117	100	157	100
<b>3</b>	<b>Qualification</b>						
	Certificate	-	-	8	6	8	5
	Diploma	2	5	68	58	70	44
	BA/BSc	27	67.5	28	23	55	35
	MBA/MSc	11	27.5	13	1	24	16
	Total	40	100	117	100	157	100
<b>4</b>	<b>Service year</b>						
	0-5 years	3	7.5	26	22	29	18
	6-10 years	15	37.5	59	50	74	47
	11-15 years	6	15	22	18	28	17
	16 years and above	15	37.5	10	10	25	15
Total	39	97.5	117	100	157	100	

The first item in table 1 relates to the sex of TVET management bodies and employer organizations. The information obtained from respondents in this regard shows that 87.5% were males whereas 12.5% were females. Thus it is possible to deduce that females involvement in

TVET institutions and employer organizations management levels is low because most females work at low level occupations based on their educational background. The age of these sample respondents falls between 21 years and maximum age of employment. The qualification of respondents includes all levels of post secondary education from certificate up to M.A/MSc levels. Furthermore, the years of service of these respondents depict that those who were very recently employed and those who served for more than fifteen years have offered pertinent information to the issue under study. Thus, it is possible to deduce the existence of proportionate representation of respondents as to sex, age, education and service years and hence ideas and opinion of different groups were reflected.

**Table II: TVET trainees and graduates respondents by sex and field of studies**

No	Variable	TVET Management body's		Employer organizations		Total	
		F	%	F	%	F	%
<b>1</b>	<b>Sex</b>						
	Male	34	56.7	88	75.2	122	68.9
	Female	26	43.3	29	24.8	55	31.1
	Total	60	100	117	100	177	100
<b>2</b>	<b>Age</b>						
	15-17	4	6	82	70	86	48.5
	18-20	16	31	14	11.9	30	16.9
	21-23	16	26	15	12.8	31	17.5
	24 and above	31	37	6	5.3	37	17.1
	Total	60	100	117	100	177	100
<b>3</b>	<b>Training area</b>						
	Information technology	9	15	22	18.8	31	17.5
	Secretary	10	16.7	4	3.4	14	7.9
	Accounting	6	10	12	10.2	18	10.1
	Marketing	4	6.7	11	9.4	15	8.4
	Purchasing	4	6.7	9	7.7	13	7.3
	General mechanics	6	10	8	7.1	14	7.9
	Machine	2	3.3	5	4.2	7	5.9
	Auto	12	20	12	10.2	24	13.5
	Woodwork	-	-	5	4.2	5	4.2
	Building	5	8.3	7	5.9	12	6.7
	Electricity	1	1.7	7	5.9	8	4.5
	Electronics	-	-	7	5.9	7	5.9
	Dress making	1	1.7	8	7.1	9	5.1
	<b>Total</b>	<b>60</b>	<b>100</b>	<b>117</b>	<b>100</b>	<b>177</b>	<b>100</b>

As indicated in table II 24.8% and 43.3% of respondents in the sample of trainees are currently pursuing their training and graduates were female respectively. This indicates sample representation of TVET trainees the number of female is a bit higher than males. On the other side the contribution of female TVET graduates is less than 50% for the study. The ages of these respondents indicate that fifteen years is the minimum age of TVET graduates as well as TVET trainees in TVET institutions. It is also revealed that both trainees and graduates from middle level TVET programs were included in proportionate representation regarding sex and age training areas of TVET trainees and graduates so to reflect ideas and opinion of each variable. Regarding the number of field of studies of graduate and trainee respondents were 11 and 13 respectively.

**Table III: Description of respondents by sub city and ownership of the business**

No		TVET management		TVET graduate		TVET trainee		Employer organization		Total	
		F	%	F	%	F	%	F	%	F	%
1	Sub city										
	Nefasilk Lafto	16	40	31	51	56	46	60	51	163	48
	Yeka	24	60	29	49	64	54	57	49	174	52
	Total	40	100	60	10	120	100	117	100	337	100
2	Ownership of the institute										
	Government	28	70	44	73	63	52	68	57	203	60
	Non-government	7	17	16	27	36	30	7	5	66	19
	Private	5	13	-	-	21	18	35	29	61	18
	Cooperative	-	-	-	-	-	-	7	9	7	4
	Total	40	100	60	100			117	100	337	100
3	Size of the business										
	Small	-	-	-	-	-	-	37	31.2	37	31.2
	Medium	-	-	-	-	-	-	40	34.4	40	34.4
	Large	-	-	-	-	-	-	40	34.4	40	34.4
	Total	-	-	-	-	-	-	117	100	117	100
4	Sector of the business										
	Manufacturing	-	-	-	-	-	-	58	49	58	49
	Service giving	-	-	-	-	-	-	59	51	59	51
	Total	-	-	-	-	-	-	117	100	117	100

Item one of table III the distribution of four major groups of respondents between the two selected sub cities. Accordingly, it is revealed in the table that each sub city was evenly represented by the respondents from each category.

Concerning the type of ownership of the institutes of organizations from which each major group of respondents were selected, item two of table III shows that cooperatives, non-governmental, private and governmental organizations have their share. Besides, as shown on the same table that due attention was given to include reasonable number of respondents from service giving and manufacturing sectors covering small, medium and large size business organizations. Therefore, it is possible to infer that the data collected from each group of sample respondents is representative and at the same time reliable.

**Table IV: Means of labor market information for TVET institution and employer organization**

No	Variable	TVET Management		Employer organizations	
		F	%	F	%
1	What is the main source of labor market information?				
	Research result of different organization in the area	3	8	-	-
	Central statistics agency	2	5	-	-
	Ministry of Education	16	41	-	-
	Ministry of labor and social affairs	16	41	-	-
	No source	2	5	-	-
	Total	39	100	-	-
2	What is the source of information for the demand of your company's product?				
	Industrial strategy	-	-	5	4
	Selling or purchasing potential of its product	-	-	32	27
	Customer satisfaction	-	-	80	69
	Total	-	-	117	100

In table IV respondents were asked to show the source of labor market information to promote their business. Accordingly, (82%) respondents from TVET institutes depicted that they rely on information provided by Ministry of Education and Ministry of Labor and Social Affair. But these reasons contradict with the information gathered from TVET officials at federal, regional and sub city levels and MOLSA higher expert. An interview was held whether or not they set appropriate labor market information to perform their organization duty perfectly, all of the interviewees confirmed that they did not get such labor market information service. They also assured that they use their different mechanism to get labor market information even if it does not indicate perfect labor market information. This is also related with the explanation of in Went (2004) that procedures are organized in their own organization that can be addressed for information concerning changing skill requirements and needed qualification program. This duplication of efforts leads to wastage of time and resource. In addition (69%) of respondents from employer organizations assured that their organizations' source of information the satisfaction derived by their customers. From this, it is possible to infer that training and employing organizations did not have common source of labor market information.

**Table V: Labor Market Information for TVET Trainees and TVET Graduates**

No	Variable	TVET graduate		TVET Trainees		Total	
		F	%	F	%	F	%
1	Why do you prefer to join the TVET program?						
	Because you have interest	30	50	48	40	78	43
	Because you can not get other opportunity	22	36	44	36	66	36
	The program have employment opportunity	8	14	28	24	36	21
	Total	60	100	120	100	180	100
2	Are attending training in the TVET are you choice?						
	Yes	45	75	82	68	127	70
	No	15	25	38	32	53	30
	Total	60	100	120	100	180	100
3	How did you choose your training area?						
	By vocational counselor advice	8	13	10	8	18	10
	By parents advice	22	36	32	27	54	30
	By friends advice	23	38	22	19	45	25
	By teacher advice	00	00	5	4	5	2
	Based on media information	7	15	46	42	53	33
	Total	60	100	115	100	175	100
4	What was the information you got from these sources?						
	The training area has current employment opportunity	28	46	40	33	68	37
	The training gives you high prestige	4	8	14	11	18	10
	Will have employment in the future	28	46	66	56	94	53
	Total	60	100	120	100	180	100
5	When did you get orientation about TVET (Specifically your training area)?						
	At the time when you come to register for the program	34	56	38	31	72	40
	When you were in grade 9 and 10	8	13	40	33	48	26
	Since the training has began	18	31	42	36	60	34
	Total	60	100	120	100	180	100

On the item one of table V respondents were asked to disclose what initiated them to join TVET program. The majority of respondents replied that they joined the TVET program to meet their personal interest and very few (36) of them asserted that the employment opportunity after graduation stimulated them to join TVET program. Concerning the specific training area

attended in TVET institution. (36%) of the respondents confirmed that the training institution considered their choice of trade.

Regarding the source of information to choose specific area of training, majority of respondents depicted that they were advised by their parents and friends giving due emphasis to the employment opportunity of the area. Information, without effective employment service leads to labor market distortions.

In relation to the orientation program given to TVET trainees, majority of the respondents confirmed that they were given orientation about their specific area of training during registration at the institutes. From this, it is possible to infer that trainees were not properly guided or given information to select appropriate training area that suits their potentials in high schools (grade 9 and 10). This finding is also consistent with information that is obtained through interview. This reflects those training institutes overlook the most important idea which an individual belonging to this target group needs to start one step earlier by first identifying the area he/she would like to work in. to do so, they need more general information on the professions offering an income generating future for them before they join the institutes (in Went, 2005).

**Table VI: Types of Information Collected by TVET Institution**

Item	Respondent	N	Mean	Standard deviation	F- value	P- value
The success of your institute graduates in the world of work	Government	41	4.22	2.151		
	Non-government	11	6.18	2.857		
	Private	6	7.50	1.643		
	Total	58	4.93	2.505	7.613	.001*
The skill gap of the graduate in the labor market	Government	41	5.73	2.530		
	Non-government	11	4.91	2.166		
	Private	6	8.17	.753		
	Total	58	5.83	2.472	3.821	.028*
Training area needed in a market	Government	41	4.83	2.333		
	Non-government	11	8.09	1.578		
	Private	6	4.83	1.941		
	Total	58	5.45	2.500	9.967	.000*
Employability of TVET graduates	Government	38	4.24	1.792		
	Non-government	11	7.18	2.960		
	Private	6	4.17	2.639	8.279	.001*
	Total	55	4.82	2.427		

Significant at an alpha level (< 0.05)

1 = Strongly Disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly Agree

S. D= Standard Deviation

For training institution, information on the success or failure of the graduates in the world of work, getting information about new training area needed in the market employability of graduates is very important to deliver demand driven training. In order to know which kind of information is applied as a tool for training provider to give quality training, the training institution management body respondents were asked to rate type of information collected by their institution. All items in the table show that the average means of the respondents for the three factors, below average except the factor, skill gap of the graduate in the labor market.

This reflected that the information gathering system is poor in TVET institutions to improve their effectiveness. Moreover, the result of one way ANOVA indicates that there were significant differences between the mean scores of the study groups in terms of their perception about the influence of labor market information at an alpha level (< 0.05)

**Table VII: The Matching of TVET Graduate to Labor Market**

No	Variable	TVET graduate		TVET Trainees		Total	
		F	%	F	%	F	%
1	Is your current job similar or different from the area which you have been trained for?						
	Yes, it is similar	-	-	7	19	-	-
	Not very different	-	-	6	16	-	-
	Completely different	-	-	23	65	-	-
	Total	-	-	36	100	-	-
2	Have you employed TVET graduates in the past five years?						
	Yes	-	-	35	43	-	-
	No	-	-	45	57	-	-
	Total	-	-	80	100	-	-
3	How do you evaluate the match between the labor demand and supply?						
	Perfectly match	3	8	8	10	11	9
	Moderately match	12	34	10	12	22	19
	Total	20	58	62	78	82	72
4	Do you need further training to fulfill your current job?	35	100	80	100	115	100
	Yes	-	-	45	64	-	-
	No	-	-	25	36	-	-
	Total	-	-	70	100	-	-

Table VII was designed to investigate whether or not there is a match between skills acquired from TVET institution and level of competency required by the labor market. The majority of the respondents (72%) indicated the existence of mismatch between skill acquired through training and skills required by the work in the actual world. It seems due to this mismatch between the majority of employers (57%) become reluctant to employ TVET graduates and those who were employed (64%) confirmed that they need remedial training to fill the skill gap. This finding is consistent with the information obtained through interview. Thus, it is possible to infer that the absence of labor market information that governs the demand for and supply of skilled human power resulted in mismatch between skills acquired and competency required. This has further negative impact on effective utilization of both human and physical resources.

**Table VIII: Employer Organizations' Involvement in Educational Activities**

Item	Respondent	N	Mean	S.D	t-calculated	Sig.
On the determination of number of trainees in each training area	Employer	17	3.94	2.703	.045	.833
	TVET management	7	4.71	2.563		
	Total	24	4.32			
On consultation of training method	Employer	17	4.12	2.956	.907	.351
	TVET management	7	5.43	2.573		
	Total	24	4.77			
In the determination of occupational standard	Employer	17	3.14	2.488	.020	.889
	TVET management	7	6.24	2.340		
	Total	24	4.69			
In the development of curriculum	Employer	17	3.00	2.693	.030	.863
	TVET management	7	7.00	2.517		
	Total	24	5.00			
On the selection of training area	Employer	17	4.88	3.160	3.326	.008*
	TVET management	7	4.86	2.545		
	Total	24	4.87			
For apprenticeship program designing	Employer	17	6.47	3.184	.825	.373
	TVET management	7	7.86	3.078		
	Total	24	7.20			
On the development of occupational assessment	Employer	17	3.18	3.067	.173	.681
	TVET management	7	4.43	3.207		
	Total	24	3.80			

Significant at an alpha level (< 0.05)

1 = Strongly Disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly Agree

S. D= Standard Deviation

The t-test result on the companies involvement in educational activities shows that there is no significant difference among TVET institution management bodies and companies higher officials respondents at an alpha level  $>0.05$  for all items in table VIII.

Regarding the mean except one item which is apprenticeship program designing it is rated at the first level with the average mean 7.2. The other items, companies participation on determination of number of trainee in each training area, on the consultation of training method, on the

determination of occupational standard, in the development of curriculums, on the selection of training area and on the development of occupational assessment the participation of occupational assessment are rated below average 5.5. The determination of occupational standard and the development of curriculum are rated above average by TVET management respondents and average mean of 6.24 and 7.00 respectively. The higher rating items by the TVET management respondents assure that the reform towards an occupational standard is based on TVET officials, that occupational standard is one mechanism to meet the labor market need.

Moreover, the t-test result shows the statistically not significant difference between the mean values of the respondent except on item that deals with the selection of training area. This indicates that the involvement of companies in planning educational activities is poor. It is also considered as factor contributing for the poor quality product and service of companies.

**Table IX: Factors that Influence the Growth of Companies**

Item	Respondent	N	Mean	S.D	F- value	P- value
Lack of shortage of applicant	Private	15	7.13	2.615		
	Government	22	5.36	2.194	3.216	.053
	Cooperative	0				
	NGO	0				
	Total	37	6.08	2.499		
Those apply lack the required skill	Private	15	8.47	1.642		
	Government	22	8.91	.750		
	Cooperative	0				
	NGO	0				
	Total	37	8.73	1.194	4.06	.669
Disagreement of the applicant for the payment	Private	15	3.93	2.492		
	Government	22	7.09	2.114		
	Cooperative	0				
	NGO	0				
	Total	37	5.81	2.737	2.11	.811
The applicant lack experience by vocational area	Private	15	6.47	3.357		
	Government	22	7.64	2.083	1.62	.851
	Cooperative	0				
	NGO	0				
	Total	37	7.16	2.693		
Shortage of capital	Private	32	6.03	3.307		
	Government	54	6.96	2.628		
	Cooperative	3	5.33	4.163		
	NGO	3	7.00	.000		
	Total	92	6.59	2.894	.902	.444
Lack of land/premises	Private	32	5.91	2.855		
	Government	53	5.72	3.078		
	Cooperative	3	5.67	.577		
	NGO	3	8.00	.000		
	Total	91	5.86	2.908	.834	.479
Lack of demand on the organization's product	Private	32	5.19	3.031		
	Government	54	5.94	2.573		
	Cooperative	3	7.00	1.732		
	NGO	3	3.00	.000		
	Total	92	5.62	2.733	.583	.628
Lack of labor market information	Private	32	8.41	1.757		
	Government	54	8.06	2.269		
	Cooperative	3	9.00	1.000		
	NGO	3	8.00	.000	.358	.783
	Total	92	8.21	2.030		

Significant at an alpha level (< 0.05)

1 = Strongly Disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly Agree

S. D= Standard Deviation

As illustrated in table IX, among the factors that influence the development of companies, all the factors were rated above the average mean. Two items, lack of qualified/skilled human power and lack of labor market information are rated at the highest level on the average mean of 8.90 and 8.2 respectively. Lack of demand on the organization's product and lack of land/premises ranked at lower average (5.86 and 5.62).

Therefore, lack of qualified human power is the major factor that hinders company's growth because labor is one of the major production factors that contribute to the economic development of a country. Moreover, the result of analysis of variable for the item depicts no significant difference between the mean scores of respondent. This shows the consistency of the mean score values of the respondent.

**Table X: TVET Trainee Enrollment and Institution and Organizational Plan for Expansion**

No	Variable	TVET trainees		TVET Graduates		Total	
		F	%	F	%	F	%
1	When did your institution start giving training at middle level training program?						
	2006/2007	29	72.5	-	-	-	-
	2007/2008	4	10	-	-	-	-
	2008/2009	7	17.5	-	-	-	-
	2009/2010	0	0				
	Total	40	100	-	-	-	-
2	Number of trainee enrolled in the current year?						
	Less than 500	24	60	-	-	-	-
	501-1000	0	0	-	-	-	-
	1001-1500	0	0	-	-	-	-
	1501-2000	6	15	-	-	-	-
	More than 2000	10	25	-	-	-	-
	Total	40	100				
3	How do you evaluate the match between the labor demand and supply?						
	Yes	27	67.5	-	-	-	-
	No	13	32.5	-	-	-	-
	Total	40	100	-	-	-	-
4	How many field of specialization are available in the institute?						
	5 and less than 5	27	67.5	-	-	-	-
	6-10	0	0	-	-	-	-
	11-15	16	25	-	-	-	-
	More than 16	3	7.5	-	-	-	-
	Total	40	100	-	-	-	-
5	Organization have plan to expand?						
	Yes	29	72.5	77	65.8	106	67.5
	No	11	27.5	40	34.2	51	32.5
	Total	40	100	117	100	157	100

In table X respondents were asked questions that help to depict the state of enrollment in TVET institutes and plan for expansion. Therefore, the majority of the respondents (67.5%) asserted that total number of enrollment in their institute increases year by year and that is currently accommodating 500 or less than 500 trainees according to the majority (60%) of the respondents.

Concerning the number of specializations in their institutions the majority (67.5%) of respondents ascertained that it is five and less than five different areas of specialization. Thus, one can safely deduce that the average number of trainees in each specialization is around one hundred. As already discussed in literature review, excess trainee in a specific training area may lead to over supply of labor in few occupations. Therefore, employment services are very important to promoting flexibility through a quick adjustment of labor supply to the needs of labor demand.

Regarding the plan of organizations to expand their business, majority of them responded positively. This again explains the need for labor market information and its relation with expansion of business operations.

**Table XI: TVET Institutions' Reasons to Expand Training**

Item	Respondent	N	Mean	Standard deviation	F- value	P- value
The institution got accreditation on the area	Government	20	4	0.50		
	Non-government	4	4	0.00		
	Private	4	4.25	0.500		
	Total	28	4.03	0.538	1.260	0.270
The course has been demanded in the market	Government	20	4.17	0.761		
	Non-government	4	4	0.00		
	Private	4	4.75	0.500		
	Total	28	4.22	0.076	2.083	0.159
The institute got many applicants in the area	Government	20	3.58	1.176		
	Non-government	4	3.75	0.50		
	Private	4	4.75	0.50		
	Total	28	3.75	1.107	0.00	1.000
The institute has sufficient teaching and learning materials	Government	20	3.75	1.225		
	Non-government	4	5	0.00		
	Private	4	4	0.00		
	Total	28	3.94	1.134	4.541	0.001
The institute got new technical machinery	Government	20	3.54	1.179		
	Non-government	4	4.75	0.50		
	Private	4	3.25	0.50		
	Total	28	3.66	1.125	8.987	0.005

Significant at an alpha level ( $< 0.05$ )

1 = Strongly Disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly Agree

S. D= Standard Deviation

The ANOVA result on reasons of TVET institution to expand training program shows that there is no significant difference among government, non-government and private TVET institution of an alpha level  $< 0.05$  for all items in table XI. This implies that the three group of respondents have similar perception on reasons to expand TVET institutes in terms of accreditation, market demand, number of applicants, adequacy of training materials, and new technological machinery.

Regarding the mean value on factors the institute got many applicants in the area is highly rated by private TVET institution. This implies that private institution's major factor for expansion of number of applicant.

In addition to this, as observed, on the total mean of each factors indicates the institution got accreditation and the courses have been demanded in the market are rated first (4.03) and second (4.22) at higher level. Reasons stated as the institution has new technological machinery and the institution got many applicants are rated low.

**Table XII: Factors of Employer Organizations' Expansion**

Item	Respondent	N	Mean	Standard deviation	F- value	P- value
The demand in the market	Private	22	9.09	.971		
	Government	45	8.89	1.112		
	Non-government	2	10.00	.000		
	Total	69	8.99	1.064	1.210	.305
The company investment plan	Private	22	8.32	1.460		
	Government	45	8.29	1.359		
	Non-government	2	10.00	.000		
	Total	69	8.35	1.391	1.476	.236
Because the company bought new technological machinery	Private	22	7.64	2.172		
	Government	45	8.13	1.408		
	Non-government	2	6.50	2.121		
	Total	69	7.93	1.709	1.357	.264
Because excess human power in the area	Private	22	7.05	2.011		
	Government	45	7.02	2.210		
	Non-government	2	9.50	.707		
	Total	69	7.10	2.143	1.302	.279

Significant at an alpha level ( $< 0.05$ )

1 = Strongly Disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly Agree

S. D= Standard Deviation

In order to test the matching or mismatching of labor demand and supply, it is very important to examine both the demand side and the supply side of the labor market. Accordingly, employer respondents that have plan for expansion within the coming five years were asked a major factors that stimulated them to expand their organization. As shown in the above table, among the major factors of company's expansion the company's investment plan and the demand in the market are highly rated (10.0) mean by cooperative organizations. The demand in the market and the companies' investment plan take the first and the second stage with the average mean of 8.99 and 8.35 respectively.

On the other hand, factors related to the existence of excess human power in the area and the company's acquisition of new technological machinery were low compared with other factors with 7.10 and 7.93 on the average mean respectively. This indicates that the expansion of companies is not based on the demand of the market and the company investment plan in all cases except cooperative organizations. The others give less emphasis to utilize the excess human power in the area.

This implies that the explanation overlooks (Johanson, 2004) the rapid expansion of population and the labor force continues in sub Sahara Africa placing considerable pressure on labor markets to absorb new entrant and provide productive employment for all.

As we can observed from the table, all of the factors relating to the companies' expansion, the one way ANOVA test result shows that all of the factors among the mean scores of the study groups are not statistically significant at an alpha level ( $< 0.05$ ). The data also indicate that the mean computed result of private, government and cooperative organization rated highly above average. This implies that the three groups of respondents have close perception on the factors to expand the organization.

**Table XIII: Factors Determining Number of Trainees in TVET Institution**

No	Variable	TVET management	
		F	%
1	Does the number of trainees enrolled in your institution base on some factors?		
	Yes	37	92.5
	No	3	7.5
	Total	40	100
2	If yes, what is the reason to why you limit the number of trainee?		
	The demand on the market	5	13.5
	Availability of teacher/trainer	2	5.4
	Availability of teaching and learning materials	10	2.7
	Capacity of classroom	20	78.4
	Total	37	100
3	What is the requirement for registration in the institution?		
	Acceptable grades	28	70
	Ability to pay tuition fees	2	5
	Citizenship	2	5
	Acceptable grades and acceptable age	5	12
	Poor family background	3	8
	Total	40	100

The items in table XIII were designed to investigate factors that oblige TVET institutes to limit the number of trainees to be registered or admitted. Accordingly, the majority (92.5%) respondents confirmed that the number of TVET trainees are accepted by their institutes is subject to different factors. Among these factors, as indicated by respondents, capacity of classrooms, the availability of training materials and the demand for graduates on the labor market came at the top of the list. In addition to these factors majority of the respondents (70%) indicated that the minimum grade requirement set by Ministry of Education to join TVET institutes is the major determinant of number of trainees to be admitted. In relation to these interviewees confirmed that a study had been conducted by MoE in collaboration with GTZ on future demand of middle level skilled human resource before five years. However, the study did not adequately show the current and detail occupational information because of various changes

that occurred in the labor market. This indicates that the timely and detailed information that used to determine the number of trainees in TVET institutions is needed to produce TVET trainees have to fit for the labor market.

**Table XIV: Factors influencing the choice of fields of training offered in TVET institute**

Item	Respondent	N	Mean	Standard deviation	F- value	P- value
Availability of teacher/trainer	Government	24	7.33	2.408		
	Non-government	12	7.64	1.859		
	Private	4	7.50	1.049		
	Total	40	7.40	2.196	.092	.912
Availability of student/trainee	Government	24	8.58	1.159		
	Non-government	12	8.36	1.502		
	Private	4	8.00	.632		
	Total	40	8.48	1.186	.694	.504
Availability of teaching and learning materials	Government	24	6.84	1.902		
	Non-government	12	8.36	1.206		
	Private	4	7.50	1.049		
	Total	40	7.18	1.809	3.494	.370
Capacity of classroom	Government	24	5.79	2.465		
	Non-government	12	8.18	1.537		
	Private	4	8.50	1.049		
	Total	40	6.50	2.474	7.695	.901
The request of potential employer	Government	24	5.28	2.594		
	Non-government	12	5.55	2.115		
	Private	4	5.50	1.871		
	Total	40	5.35	2.420	.064	.938

Significant at an alpha level ( $< 0.05$ )

1 = Strongly Disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly Agree

S. D= Standard Deviation

Field of training given in TVET institution should be a reflection of the world of work/apply on the world of work by creating relation with companies. So in order to know the major factors that influence the choice of field of training offered in TVET institution, TVET institution management body respondents were asked to rate these factors. All illustrated in table XIV, the

total mean computed reveals the result of all factors above average except for the least factor that is the request of potential employer which have the average mean of 5.35 for the three types of respondents. This figure indicates that employer request has low emphasis on the determination of field of training offered in TVET institution. On the other hand availability of teacher/trainer and availability student/trainee rated first and second two (8.48 and 7.40) respectively.

The ANOVA result on factors that influence the choice of field of training offered in TVET institution shows that there is no significance difference among the respondent at an alpha level  $>0.05$  for all items in table XIV. This implies that the three groups of TVET institution respondents have nearly similar perception on the factor of influence of the choice of field of training in terms of availability of teacher/trainee, availability of student/trainee, availability of teaching and learning materials, capacity of classroom and the request of potential employers.

**Table XV: Employability of TVET Graduate**

No	Variable	TVET graduate	
		F	%
1	When did you graduate?		
	2006/2007	9	15.5
	2007/2008	16	27.6
	2008/2009	22	37.9
	2009/2010	11	19
	Total	60	100
2	Are currently employed?		
	Yes	25	41.7
	No	35	58.3
	Total	60	100
3	If yes, what is your present employment status?		
	Wage employed	20	80
	Self employed	4	16
	Working in cooperative	1	4
	Total	25	100

Table XV shows the employment condition of TVET graduates. As can be seen from the table out of the total graduates from years 2006/7 to 2009/10 it is only 41.7% who found jobs. Out of this employed group only few (16%) were self-employed. From this, it is safe to deduce that

TVET programs are preferred by trainees for wage employment and the very purpose for self employment is very far from attainment.

**Table XVI: Employment opportunity of TVET Graduate**

No	Variable	TVET management		TVET Trainee		TVET Graduates		Total	
		F	%	F	%	F	%	F	%
1	Do you have any strategy to conduct tracer study on your graduates to assess success in the labor market?								
	Yes	23	57	-	-	-	-	-	-
	No	17	43	-	-	-	-	-	-
	Total	40	100	-	-	-	-	-	-
2	If yes, how many time your institute conducted tracer study in the last four years?								
	Four times	1	4.3	-	-	-	-	-	-
	Two times	7	30.4	-	-	-	-	-	-
	One time	15	65.3	-	-	-	-	-	-
	Total	23	100	-	-	-	-	-	-
3	Do you have any information whether the former graduates were employed or not?								
	Yes	18	45	58	48	-	-	76	42
	No	22	55	62	52	-	-	84	58
	Total	40	100	100	100	-	-	100	100
4	What is the source of information about graduates employment?								
	Former trainees feedback	30	75	-	-	-	-	-	-
	Education sector	2	5	-	-	-	-	-	-
	Tracer study	1	3	-	-	-	-	-	-
	Information source	7	17	-	-	-	-	-	-
	Total	40	100	-	-	-	-	-	-
5	Employment opportunities of every year's graduates								
	10% and below	16	57	-	-	33	55	47	53
	11% - 25%	6	21	-	-	17	28	25	28
	26% -50%	3	11	-	-	8	13	11	12
	51% - 75%	3	11	-	-	2	4	5	7
	Total	28	100	-	-	60	100	88	100

Items in table XVI were constructed to show whether or not TVET institutes follow up on employment condition of their graduates. In relation to this, majority of respondents assured that their institution undertake tracer study to assess their graduates in the labor market. Regarding the frequency of the tracer study majority of respondents (65.3%) ascertained that it takes place

once. From this, it is possible to infer that TVET institutions rarely collected feedback about their graduates and use it as a basis for their future plan.

Respondents were also asked whether or not they have access to the information on the state of employment of former graduates. A little bit less than half of the respondents (45%) positively replied and disclosed that feedback from these graduates was their major source of information for TVET institution. From this one can safely infer that TVET institutes have no well organized information system.

As can be seen from item five more than half of the respondents (16 (57%) estimated that the opportunity of TVET graduates to get job in their area of training is 10% and below. From this, it is possible to infer that the resources allocated to the training of these trainees were not utilized by productive activities. Training without employment prospect is wastage of physical and human resources. This finding Laurence (2000), stated ‘‘the rules of vocational training no demand, no training.’’

**Table XVII: Employment Expectation of TVET Trainees and TVET Graduates**

No	Variable	TVET Trainees		TVET graduate		Total	
		F	%	F	%	F	%
1	Do you expect to get job after graduation?						
	Yes	91	75	57	95	148	82
	No	29	25	3	5	32	18
	Total	120	100	60	100	180	100
2	If yes, why did you expect?						
	Because the former graduates in this area are employed	20	21.9	34	56	54	35.7
	Because you have an information that there is a demand	64	70.3	22	36	88	58.2
	Because you were promised by employer	7	7.8	4	8	11	6
	Total	91	100.0	60	100	151	100

Table XVII is designed to investigate TVET trainees expectation of employment after graduation. Accordingly, the great majority of respondents (82%) replied that they expect to get employed after graduation. They also indicated that their high expectation emanated from the employment condition of former graduates and that they have information about the existence of demand by 35.7% and 58.2% of respondents respectively. From this one can safely infer that the former graduates' employability is considered as a guaranty for the coming trainees. But the demand of the last year may not be exactly the same demand for the current year. Because economic forces such as labor change, industrial structure and development, technological development and employment and training opportunities are the cause of labor market changes(ILO, 2002).

**Table XVIII: Labor Demand in the Market**

No	Variable	Employer	
		F	%
1	Is there currently a shortage of human power with the necessary skills and educational qualification?		
	Yes	54	46
	No	63	54
	Total	117	100
2	If your response is 'yes' would you please identify the shortage area?		
	Upper level technician/management	15	27.7
	Middle level technician/management	30	53.3
	Lower level technician/management	10	18.6
	Total	55	100

Employers were asked about the shortage of skilled human power in their organization and 63 of them responded negatively indicating that there is no shortage of skilled human power. Those who replied positively asserted that there are relatively shortage in the area of middle level technicians. This result coincides with MoE (2006) that states TVET graduates remain unemployed in those occupation fields that show a high demand for skilled manpower. From this it is possible to deduce that if link is created between TVET institutions and employing

organizations for appropriate training that help to mitigate the shortage in demand of middle level technicians would be planned and put in effect.

**Table XIX: Companies Problems Faced in Filling Vacancy**

Item	Respondent	N	Mean	Standard deviation	F- value	P- value
Lack of shortage of applicant	Private	15	7.13	2.615		
	Government	22	5.36	2.194		
	Total	37	6.08	2.499	4.967	.320
Those apply lack required skill	Private	15	8.47	1.642		
	Government	22	8.91	.750		
	Total	37	8.73	1.194	1.233	.274
Disagreement of the applicant for its payment	Private	15	3.93	2.492		
	Government	22	7.09	2.114		
	Total	37	5.81	2.737	17.219	000*
The applicant lack experience	Private	15	6.47	3.357		
	Government	22	7.64	2.083		
	Total	37	7.16	2.693	1.716	.199

Significant at an alpha level ( $< 0.05$ )

1 = Strongly Disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly Agree

S. D= Standard Deviation

As shown on the above table XIX respondents from employing organization were asked to rate the cause of the problem to fill the vacancy. The average mean of all stated factors rated above average even through disagreement of the applicant for the payment is near to the average mean point 5.5 (5.81). This average decreases because private organization respondent rating the factor at comparatively low level. This indicates that payment in private organization is better than government organization. Among the cause, applicant lack required skill and applicants' lack experience are rated highly as 8.73 and 7.16 respectively. Lack of experience and lack of shortage of applicant are rated highly and above average because most vacancy announcement do not invite the zero year experience applicants.

The table shows all the causes of the problem to filling vacancy in companies. Except disagreement on payment the rest differences among the mean scores of the study group are not statistically significant at an alpha level ( $< 0.05$ ). This indicates that disagreement of the applicant for the payment (salary) is not a major factor for filling vacancy in private employer organization.

**Table XX: Company's Participation in Giving Apprenticeships**

No	Variable	Employer	
		F	%
1	Does your organization participate in giving apprenticeship for TVET trainee?		
	Yes	75	64
	No	60	36
	Total	117	100
2	If your response is 'yes' please indicate the number of apprentices you have taken		
	Below 50	40	54
	51-100	24	32
	101-150	9	12
	Above 150	1	2
	Total	74	100
3	How many of the apprentices you trained were retained as employee		
	No participant retained	48	64
	1-5	22	29
	11-15	3	4
	More than 15	1	3
	Total	74	100

Apprenticeship program in TVET institution has the major objective of introducing the trainee to the world of work and moreover facilitates the trainee employability. Regarding company's participation in giving apprenticeship 64% of the sample companies provide apprenticeship

training to TVET trainees for the fulfillment of the training program. About 54% of the respondents indicated that they train and below 50 trainees, 32% trainee 51-100 trainees and the rest give apprenticeship training for 101-150 and above 150 apprentices.

This phenomenon also indicates promising acceptances and raised level of awareness about TVET program even if the number of trainee taken is less in number in most organizations.

As far as retentions of apprenticeship trainees is concerned, it is concluded that 64% of respondents responded that they retained an apprentice and responded that 29% that they retained 1-5 apprentice. The reason for not recruiting apprentices has been indicated mainly as due to the companies' capacity not to recruit additional employees. This indicates that the majority of TVET graduates should look for other companies which do not provide apprenticeship for employment or mainly for self-employment as means of earning to support their lives.

**Table XXI: Reasons of Companies for not to Retain Apprentices they train**

Item	Respondent	N	Mean	Standard deviation	F- value	P- value
Because the company has sufficient employees	Private	23	8.70	1.845	.516	.673
	Government	20	9.05	1.849		
	Cooperative	2	9.00	1.414		
	NGO	3	10.00	.000		
	Total	48	8.94	1.767		
Because the company has no capacity to pay	Private	22	6.41	3.984	1.528	.221
	Government	19	5.05	3.535		
	Cooperative	2	7.00	4.243		
	NGO	3	2.00	.000		
	Total	46	5.59	3.769		
Because the apprentices lack required skill needed by the company	Private	22	8.18	2.218	.379	.769
	Government	19	7.47	2.318		
	Cooperative	2	7.50	.707		
	NGO	3	8.00	.000		
	Total	46	7.85	2.139		

Significant at an alpha level (< 0.05)

1 = Strongly Disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly Agree

S. D= Standard Deviation

The employer organizations were asked about their reason for not to retain apprentices they train. As seen on the above table XXI NGO respondent highly rated at an average mean of 10.0 for the reason saying because the company has sufficient employee. This reason is also the highest (8.99) on the four types of organization respondents. The reason because the apprentices lack required skill needed by the company rated the second highest average mean of (7.85).

The reason “the company has no capacity to pay” was rated at lower level with mean average of (5.59) even though this reason is rated (7.0) mean average by cooperative organization respondents. This reflects that most companies have no vacancies and those who have vacancies; they cannot get manpower among their apprentice because the apprentices lack the required skill. The result of one way ANOVA test indicates that there was no significant difference between all items regarding the reason of retention of apprentices in the organization.

This implies that the three groups of employer respondents have similar perception on the reasons that the companies’ not retain apprentices they train because the company has sufficient employee. It has no capacity to pay and the apprentices lack required skill needed by the company.

In addition, as clearly shown on the table labor, demand of the market (XXI) even though employer organizations have shortage of manpower at middle level, the organization are not willing to hire or retain their apprentice trainees at middle level training program because they lack the required skill for the organization. This indicates that there is a mismatch between the labor demand and supply.

**Table XXII: Factors for Graduate Unemployment**

Item	Respondent	N	Mean	Standard deviation	F- value	P- value
Graduates lack necessary skill and knowledge	Employer	117	8.22	1.196	53.237	.090
	TVET management	40	7.90	1.334		
	TVET graduate	60	6.21	1.608		
	TVET trainee	120	6.02	1.615		
	Total	337	6.98	1.770		
Graduates lack interests to be self employed	Employer	117	7.74	1.224	22.217	.800
	TVET management	40	8.07	1.632		
	TVET graduate	60	6.98	1.420		
	TVET trainee	120	6.46	1.553		
	Total	337	7.19	1.591		
Employers' lack of confidence in graduates competence	Employer	117	7.04	1.346	20.060	.600
	TVET management	40	8.09	1.315		
	TVET graduate	60	7.46	1.401		
	TVET trainee	120	6.58	1.617		
	Total	337	7.35	1.575		
Weak economic performance of companies	Employer	117	7.54	1.717	11.530	.060
	TVET management	40	8.59	.795		
	TVET graduate	60	7.38	1.529		
	TVET trainee	120	7.22	1.544		
	Total	337	7.57	1.562		
Absence of adequate capable employers	Employer	117	7.77	1.643	5.200	.072
	TVET management	40	8.47	.959		
	TVET graduate	60	7.79	1.638		
	TVET trainee	120	7.60	1.225		
	Total	337	7.83	1.422		
Employers prefer to recruit unskilled workers	Employer	117	8.24	1.258	3.571	.014*
	TVET management	40	8.81	.926		
	TVET graduate	60	8.08	1.697		
	TVET trainee	120	8.16	1.450		
	Total	337	8.28	1.410		

Significant at an alpha level (< 0.05)

1 = Strongly Disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly Agree

S. D= Standard Deviation

As shown on table XXII, factors for graduate unemployment were asked for the four groups of respondents' namely employer, TVET graduates. The average mean results of the group respondent in all factors are above the average mean 5.5. Factors employers prefer to recruit unskilled workers and absence of adequate capable employer's rates at high mean average value of 8.28 and 7.83 respectively. Factors graduates lack necessary skill and knowledge and graduate lack interest to be self employed rated at low average mean value compared to other factors of 6.98 and 7.19 respectively. From the above data one can deduce that graduates lack interest to be self employed because they lack the necessary skill and knowledge on entrepreneurship and also lack of job opportunity information.

In addition to this, weak economic performance of company and absence of adequate capable employer items rated at the average mean of 7.75 and 7.83 respectively and highly rated by the TVET management 8.59 and 8.47 respectively should not give less emphasis. Because the main cause of graduate unemployment is weak economic performance of the companies. This is also related with in Went (2005) explanation that says, "The level and growth rate of employment depend on the overall economic growth rate of a country".

The above finding was also consistent with the information obtained from the interviewee. Thus, the study result indicates giving training without considering the job placement leads to producing trained unemployment.

The result of one way ANOVA test indicates that there were no significant differences between all items except on item "employer preference to recruit unskilled workers." This implies that there is different perception among respondents on the employers' preference to recruit unskilled worker.

**Table XXIII: TVET Institution Activities**

Item	Respondent	N	Mean	Standard deviation	F- value	P- value
Information given about job placement	Employer	117	1.77	.800	1.688	.169
	TVET management	40	1.80	.988		
	TVET graduate	60	1.51	.780		
	TVET trainee	120	1.74	.798		
	Total	337	1.72	.835		
Follow up activity in training process	Employer	117	3.58	.496	29.008	.060
	TVET management	40	3.63	.520		
	TVET graduate	60	4.13	.813		
	TVET trainee	120	4.33	.754		
	Total	337	3.96	.745		
Conduct tracer study	Employer	117	1.48	.687	8.117	.900
	TVET management	40	1.73	.906		
	TVET graduate	60	1.38	.580		
	TVET trainee	120	1.93	1.018		
	Total	337	1.67	.871		
Flexibility to change training area according to the economic demand	Employer	117	1.65	.871	3.674	.013*
	TVET management	40	1.95	.899		
	TVET graduate	60	1.52	.618		
	TVET trainee	120	1.92	1.125		
	Total	337	1.78	.947		
Conduct training need assessment	Employer	117	1.71	.932	3.674	.021*
	TVET management	40	1.63	.807		
	TVET graduate	60	1.27	.545		
	TVET trainee	120	1.63	1.050		
	Total	337	1.58	.908		
Gather labor market information	Employer	117	1.70	.874	3.275	.821
	TVET management	40	1.46	.916		
	TVET graduate	60	1.27	.574		
	TVET trainee	120	1.69	.930		
	Total	337	1.57	.869		
Give quality training demanded by the market	Employer	117	2.70	1.428	2.465	.062
	TVET management	40	2.37	1.435		
	TVET graduate	60	2.24	1.088		
	TVET trainee	120	2.73	1.384		
	Total	337	2.56	1.364		

Significant at an alpha level (< 0.05)

1 = Strongly Disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly Agree

S. D= Standard Deviation

The four groups of respondents were asked to evaluate by the five Likert scale, the major activities of TVET institution to deliver market oriented training. As shown on the table among eight major activities only two activities are ranked above the average. The rest six activities

were evaluated below average. The first highly rated activities, follow up activities in the training process and giving quality training demanded by the market were rated on the mean average of 2.79 and 2.56 respectively. The finding reflects that TVET institutions are concerned only on the training process and look over more activities that enable trainees to apply their skill and knowledge for self and country development.

Information given about job placement, giving advice student to choose their field of study, conducting tracer study, flexibility to change training study, flexibility to change training area according to the economic demand, conducting training need assessment and gathering labor market information were rated equal or more than equal important than follow up activities in training process and giving quality training for TVET institutions.

The one way ANOVA result shows that there is significant mean difference in items on flexibility to change training area according to the economic demand and conducting training need assessment at an alpha level ( $< 0.05$ ) between the four groups of respondent. This indicates that there is no a perception difference among the respondent in these two items.

**Table XXIV: Availability of Vocational Orientation for Trainee in TVET Institutions**

No	Variable	TVET trainee		TVET graduate		Total	
		F	%	F	%	F	%
1	Has the institute have a vocational counselor?						
	Yes	74	61.7	35	58.3	109	62.0
	No	46	38.3	25	41.7	71	38.0
	Total	120	100	60	100.0	180	100.0
2	Does your institute provide vocational orientation for trainees on occupational fields and further employment opportunities?						
	Yes	58	73.3	23	38.3	71	45
	No	62	51.7	37	61.7	109	55
	Total	120	100	60	100	180	100
3	When does the institute provide vocational orientation?						
	At grade 9 and 10	1	1	1	4.8	2	2
	During application for admission	7	12	12	57.1	19	24
	After acceptance	20	35	5	23.8	25	32
	After assignment to respective fields	28	52	3	14.7	31	42
	Total	56	100	21	100	77	100
4	Who is responsible to provide vocational orientation in your institute?						
	Vocational counselor	32	26.7	14	23.3	46	25
	Principal	34	28.3	8	13.3	42	23
	Department head	54	45	38	63.3	92	52
	Total	120	100	60	100	180	100

Attempt was made to investigate the availability and roles of vocational counselors in TVET institutions based on questions as indicated in table XXIV above. Accordingly, 61.7% of trainees and 58.3% of graduates confirmed that TVET institutions have vocational counselors. In an open ended questions to TVET management it was also assured by 41(68.3%),TVET institutions have assigned vocational counselors. On the other hand, it is indicated by 43% of sample TVET trainees and 38.3% of graduates that TVET institutions provided vocational orientation for trainees on occupational fields and further employment opportunities. The data in the table

indicate that the role of the institution and vocational counselors are not well implemented to the intended level or as emphasized in TVET strategy.

The time and inconsistency for provision of orientation for trainees on occupational fields and further employment opportunities are also observed, as one can see from the responses of trainees and graduates. This is because in earlier days, as indicated by graduates, the orientation was given during application for admission and after acceptance. While in later days, as indicated by current trainees the major orientation was given after acceptance and assignment to respective fields. In both cases the application is contrary to the principle and direction that vocational counseling and guidance need to be given starting from prevocational training periods at general education and throughout period to career selection.

It also indicates that there is no role clarity in the provision of vocational orientation for trainees on occupational fields and further employment opportunities as it is given by vocational counselor, institute principals and department heads. This overlap of responsibilities could be due to manpower and budget shortages as well as organizational structure problems that force TVET institution to assign the available staff to undertake the tasks of vocational counselors. Such assignment has negative effect to carryout all responsibilities and roles played by full time vocational counselors. The assignment of such type does not enable the role player to undertake local labor market demand and training needs analysis and manage labor market information system due to time shortage and constraints as a result of overlapping of responsibilities.

**Table XXV: Major Activities of Vocational Counselors**

Item	Respondent	N	Mean	Standard deviation	F- value	P- value
Give advice for the trainee in the selection of training area	TVET management	39	2.93	2.297	.395	.675
	TVET graduate	60	2.70	1.181		
	TVET trainee	120	2.98	1.510		
	Total	219	2.90	1.673		
Give orientation for new entrant student	TVET management	39	4.55	2.619	2.707	.070
	TVET graduate	60	3.65	1.733		
	TVET trainee	120	3.74	1.889		
	Total	219	3.92	2.082		
Give TVET orientation for grade 9 and 10 students	TVET management	39	1.30	.668	2.384	.095
	TVET graduate	60	1.75	1.446		
	TVET trainee	120	1.82	1.510		
	Total	219	1.67	1.347		
Facilitate graduate placement	TVET management	39	2.75	2.660	1.096	.337
	TVET graduate	60	2.28	1.724		
	TVET trainee	120	2.92	2.374		
	Total	219	1.77	2.73		
Give training course	TVET management	39	3.77	2.675	18.107	.000*
	TVET graduate	60	6.18	1.738		
	TVET trainee	120	5.66	1.726		
	Total	219	5.31	2.189		
Work on the institution management activities	TVET management	39	8.57	2.055	13.364	.00i*
	TVET graduate	60	6.93	2.055		
	TVET trainee	120	6.63	2.115		
	Total	219	7.18	2.216		
Facilitate apprenticeship program	TVET management	39	9.23	1.669	2.535	.082
	TVET graduate	60	8.75	1.515		
	TVET trainee	120	8.55	1.676		
	Total	219	8.76	1.654		

Significant at an alpha level (< 0.05)

1 = Strongly Disagree

2 = Disagree

3 = Undecided

4 = Agree

5 = Strongly Agree

S. D= Standard Deviation

As it can be observed from the above table out of seven major vocational counselors' activities the one way ANOVA result shows that the overall differences among the mean scores of the study groups are not statistically significant at an alpha level (< 0.05) for five of the factors. The remaining two are statistically significant. The significant difference with two items may be due to the difference in perception between TVET trainees and TVET graduates with TVET management. The items given high rate by graduates indicated that vocational counselors'

participation in giving training might be more practiced in early years. In all items vocational counselors activities average mean are below average except the two activities, work on the institute management activities and facilitate apprenticeship program, with the average mean of 7.18 and 8.76 respectively.

This finding reflects that the vocational counselors' activities in TVET institution is limited to the facilitation of apprenticeship program and ignore the other major activities, such as giving advice for the trainee in selection of training area, giving orientation for new entrant trainees and giving TVET orientation for grade 9 and 10 student that are helpful for the trainee productivity career choice.

## CHAPTER FIVE

### 5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter includes summary of major findings, conclusions and recommendations of the study.

#### 5.1. Summary

The objective of this study was to assess the effectiveness of labor market information system the technical vocational education and training colleges in Addis Ababa City Government. To this effect, the following basic research questions were set.

1. What types and sources of information do TVET institutions use to open and expand programs?
2. Do TVET colleges use supply and demand mechanisms to produce trainees and graduates?
3. What source of information do employing organizations use for expanding their business?
4. What does the relationship between the TVET colleges and stakeholders look like in relation to the training system?
5. How do vocational guideline and counseling staff discharge their roles in assisting trainees to make decisions concerning technical vocational education and training program and job placement?

The study employed descriptive survey method to analyze the issues based on the basic research questions. The researcher reviewed relevant literature and prepared sets of questionnaires and interview guides to collect data from the respondents. The questionnaires were designed for trainees, graduates, TVET management bodies, and employer organizations. After discussing with the thesis advisor on the prepared questionnaires. The research study were intended to collect data from primary and secondary sources and interview were collected for key labor market users, providers, and TVET officials at federal, regional, and sub-city levels.

The questionnaires include both close and open ended questions. The data obtained were analyzed using SPSS soft ware and results were organized and summarized in to tables,.

Percentages and cross-tabulations. The total number of respondents included in this study was specifically 120 trainees, 60 TVET graduates, 40 management bodies, and 117 employer organizations.

**The following were the major findings.**

#### **5.1.1. Source of Labor Market Information**

Regarding means of labor market information for TVET institutions and employer organizations, the majority of TVET institutions' respondents depicted that they rely on information provided by Ministry of Education. In addition the majority of respondents from employer organizations assured that their organizations' source of information is the satisfaction derived by their customers. From this, it is possible to infer that training and employing organizations do not base on common sources of labor market information.

Regarding the source of information for TVET trainees and TVET graduates for choosing specific area of training, majority of respondents depicted that they were advised by their parents and friends giving due emphasis to the employment opportunity of the area.

Majority of respondents assured that their institution undertakes tracer study to assess the level of employment of the graduates in the labor market. Regarding the frequency of the tracer study, the majority of respondents ascertained that it took place once in a while.

The information gathering system in TVET institutions is poor to improve their effectiveness. Moreover, the result of one way ANOVA indicates that there were significant differences between the mean scores of the study groups in terms of their perception about the influence of labor market information.

#### **5.1.2. Supply of TVET Trainees**

Regarding the growth of TVET trainees' enrollment, the majority of respondents asserted that the total number of enrollment in their institutes increases year by year and that is currently 500 and less than 500 trainees according to the majority of sample TVET institutions. Concerning the

number of specializations in their institutions, the majority of the respondents ascertained that there are five or less than five different areas of specialization offered at their institutions.

Regarding the plan of expansion of TVET institutions and employer organizations majority of them responded positively. The ANOVA result on TVET institution factor to expand the training program showed that there was no significant difference among government, non-government and private institution.

One of the major factors for employer organizations 'expansion to utilize excess human power' in the area was rated at low level by most of respondents. The one way ANOVA test result shows that all of the factors among the mean scores of the study groups were not statistically significant.

Factors that oblige TVET institutes to limit the number of trainees to be registered or admitted as indicated by the majority of respondents is that the minimum grade requirements set by Ministry of Education to join TVET institutes is the major determinant of the number of trainees to be admitted. Furthermore, it was indicated that the study conducted by MoE in the collaboration with GTZ on 'Future Demand of TVET College skilled human resource' before five years, did not give adequate information about the detail and current occupational standard information to determine the number of trainees in a specific training area.

Regarding factors that influence the choice of field of training offered in TVET institutions, all factors were rated above the average except the request of potential employer. This reflects that employers request has low emphasis on the determination of field of training offered in TVET institutions. Even though the factors of availability of teaching and learning material and capacity of classroom average mean and above average there is a significant mean difference shown.

### **5.1.3. Employer Organization Participation in Educational Activities**

- Regarding the employer organizations' participation in occupational activities most of them have limited participation in apprenticeship program designing. The higher rated

items by the TVET management respondents assure that the reform towards occupational standard based TVET system.

- Employer organizations respond that lack of qualified human power is the major factor of hindrance of companies' growth. Moreover, the result of the analysis of variance for the item depicts that there is no significant difference between the mean scores of the respondents. This shows that the consistency of the mean score values of the respondents.
- The majority of the respondents indicated the existence of mismatch between skill acquired through training and skills required by the work in actual world. Due to this mismatch it seems that the majority of employers become reluctant to employ TVET graduates.

#### **5.1.4. The Labor Market Demand of TVET Graduates**

- It is found that out of the total graduates from years 2006/7 to 2009/10 only less than 50% of the graduates found jobs. Out of this employed group only few were self-employed. Moreover, the great majority of respondents revealed that the opportunity of TVET graduates to get job in their area of training is 10% and below.
- The great majority of respondent TVET trainees expect to get employed after graduation. Their expectation emanated from the employment condition of former graduates.
- Majority of employer organizations' respondents responded negatively as to the shortage of skilled human power.
- Those who replied positively asserted that there are relatively shortage in middle level technicians. This result assures that graduates remain unemployed even in those occupational fields that show a high demand for skilled manpower.
- Majority of sampled employer organizations provide apprenticeship training to TVET trainees for the fulfillment of the training program.
- As far as retentions of apprenticeship trainees are concerned, that most companies have no vacancies and those who have vacancies do not get manpower among their apprentice even though they have shortage of manpower at middle level because the apprentices lack the required skill. The result of one way ANOVA test indicated that there were no significant differences between all items stated as a reason of training apprentices in their organizations.

- The employers' preference to recruit unskilled workers and absence of adequate and capable employers are indicated as major factors of unemployment. The graduates' lack necessary skill and knowledge and lack of interest to be self employed are rated at low average mean compared to other factors.

#### **5.1.5. TVET Institutions' Activities**

- The finding reflected that TVET institutions are concerned only on the training process and overlook more activities that enable trainees to apply their skills and knowledge for self and country development. The one way ANOVA result shows that there is no significant mean difference on the major activities of TVET institutes,
- Lack of job opportunity, lack of quality training, assigning students without their interest in the training and lack of opportunity for further training in TVET are stated as major problems by the respondents.
- The cause of problems include lack of market demand, lack of professional human power who conducts research on job opportunity, the society's lack of trust on the knowledge and skills competence of the trainees, how capacity of the TVET institutes, inadequate preparation/ background of the students in high schools and mismatch of TVET curricula with the market demand.
- The possible suggestions also indicate that matching the training program with the labor market demand, upgrading the capacity of training institutions, raising awareness of the society about TVET graduates, establish labor market information unit in TVET institution, assigning trainees according to their interest and follow up of quality education, establishing strong relationship between training providers and TVET colleges and establishing relationships with CSA to incorporate all the data needed for market analysis.

#### **5.1.6. Role of Vocational Counselors**

- Majority of trainees, graduates and TVET management confirmed that TVET institutions have vocational counselors. However, the finding indicates that the role of the institution and vocational counselors is not well implemented to the intended level.

- The one way ANOVA result for seven major vocational counselors activities shows that the overall differences among the mean scores of the study groups are not statistically significant for five of the factors. The remaining two are statistically significant.
- In relation to the orientation program given to TVET trainees, majority of the respondents confirmed that they were given orientation about their specific area of training during registration.

## 5.2. Conclusions

Based on the findings the following conclusions were drawn.

- Before provision of TVET program, the main way and means of obtaining information and data is labor market information system. This includes training need assessment tracer study and labor market monitoring. As it has been found out by the study need assessment, was not adequately practiced in actual implementation at the TVET institutions. Moreover, there is no trend of frequently conducting tracer studies that can adversely affect the match of training supply, the quality, relevance and effectiveness of the training that could be affected by poor labor market information system.
- The growth of TVET trainee's enrollment successively increases at an average of five different areas of training fields. Excess trainees in a specific training area may lead to over supply of labor in few occupations or else under supply of labor on other fields that may have better demand. In addition, TVET institutions have plans for expansion if they get applicants without considering the labor market demand on the training areas. Employer organizations also have plans for expansion without considering the need for utilizing the excess human power.
- From the above fact, it is possible to infer that trainees were not properly guided or given information to select appropriate training areas that suit their potentials. This reflects that TVET institutions over look the importance of labor market information for trainees before students join the TVET program.
- Employer organizations have shortage of manpower at middle level. These organizations are not willing to retain their apprentices because they lack the required skill and knowledge. This indicates that there is a mismatch between the labor demand and supply as a result of less involvement of employer organizations in planning and training

provision. Thus, it is wastage of physical and human resources, so long as the graduates remain unemployed in those occupational fields that show high demand for skilled human power at middle level. Giving training without considering the job placement leads to producing trained unemployment which may lead the youth for crime, drug use and HIV/AIDS. The reform towards occupational standard-based TVET system is one way of the mechanisms to meet the labor market need.

- TVET institutions and especially vocational counselors are concerned only with the training processes and over-look to many activities that are helpful for the trainees productivity and career choice that enable the trainees to apply their skills and knowledge for self and country development.
- In general, it can be said that the effectiveness of labor market information system in TVET colleges was less emphasized in Addis Ababa City Government.

### **5.3. Recommendations**

Based on the major findings and conclusions, the following recommendations are forwarded.

- ⚡ Ministry of Education should conduct studies and research to find out effective ways and means of combating labor market information and unemployment by narrowing the gap between the supply and demand of manpower and expediting economic and social development;
- ⚡ Ministry of Education should give support in conducting studies on labor market information on continuous basis and findings should be disseminated to all concerned on time;
- ⚡ Data bank on labor market information should be made available and should be established by Ministry of Education in collaboration with the Ministry of Labor and Social Affairs REMSEDA and Central Statistics Agencies.
- ⚡ Data collected and information gathered at federal, regional and TVET colleges with regard to labor market information should be updated and promoted periodically.
- ⚡ The Addis Ababa TVET Agency should give the necessary capacity building support to TVET colleges so that they will acquire more knowledge about labor market information and to conduct tracer study being able to collect and analyze data adequately and correctly.

- ✚ To ensure that the compilation of data on labor market information employment statistics maintain their international standard, concerned professionals should be given the necessary support in all their endeavors.
- ✚ The Addis Ababa TVET Agency should improve the vocational counselor department both in pre- TVET colleges and in the colleges by assigning competent and qualified guidance officers. Besides to this, the concerned body should organize the office in such a way that it could be accessible storage for current records and resource material and room space for testing, interviewing and group conference.
- ✚ Employers and all concerned stakeholders should be involved in designing or modifying TVET program. Without their involvement producing graduates in the same field and the same number year after year could result in rising unemployment.
- ✚ The training program of TVET colleges must be demand driven and outcome based. That is, jobs that are available in present labor market must be identified and analyzed to develop relevant curricula.
- ✚ TVET colleges have to widen employment opportunities by providing a better information system on concerned labor market needs and data. They have to consult both public and private organizations that can offer occupational information. Moreover, they should have special mechanisms to display booklets, charts, pamphlets and newspapers that contain important occupational information.
- ✚ In order to facilitate a job search process for TVET graduate job seekers, there ought to be a cooperative team approach to job-placement operation between TVET colleges and employing organizations. Moreover, the TVET colleges in collaboration with employing organizations have to hold such discussion forum as symposium, job fairs, information events etc so that prospective graduates will have good access to employment and labor market information.
- ✚ TVET colleges should create awareness to participate stakeholders in general and employers in particular in designing or modifying TVET activities for vocational training programs in order to meet the needs of the labor market.

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**Appendix I**  
**Addis Ababa University**  
**School of Graduate Study**  
**College of Education and Behavioral**  
**Management Studies of Vocational Education**

**Questionnaire to be filled by Employer**

**Dear employer;**

The purpose of this questionnaire is to collect basic idea for the study on the assessment on effectiveness of labor market information in TVET: The case of Addis Ababa City Government. Your cooperation in offering relevant and honest information is highly important for the success of the study. Please, be sincere, frank and accurate as much as possible in responding to each item.

Please note that

- No need of writing your name
- Where alternative answers given, please put a ✓ mark in the box in front of your choice.
- In answering the open ended questions please give your answer brief and to the point as much as possible.

Thank you in advance for taking time to complete the questionnaire.

**Part I**

1. Name of the TVET College \_\_\_\_\_
2. Ownership of the institute/college  
A. Government       B. Non-government       C. Private
3. Sex      A. Male       B. Female
4. Age      A. 21-30       B. 31-40       C. Above 40

**Part II**

1. Name of company \_\_\_\_\_
2. Sub city \_\_\_\_\_
3. Size of the business \_\_\_\_\_  
A. Small       B. Medium       C. Large
4. Type of business  
A. Service       B. Manufacturing       C. Other \_\_\_\_\_
5. How long has your business been in operation?  
A. less than one year       B. 1-3 years       C. 4-6 years   
D. 7-10 years       E. More than 10 years

6. Does your organization have plan to expand your current business or invest in new initiatives in the next 5 years?

- A. Yes  B. No

7. If your response to Q 7 is 'yes' give the basis of initiative for expansion? For each statement below please indicate how strongly you agree, disagree with it by putting ✓ as follow

1. Strongly disagree 2. Disagree 3. Undecided 4. Agree 5. Strongly agree

	Activities	1	2	3	4	5
A	The demand in the market					
B	The company investment plan					
C	Because the company bought new technological machinery					
D	Because excesses human power in the area					
E	If other specify any rate					

8. Is there currently a shortage of human power with the necessary skills and educational qualification in your company?

- A. Yes  B. No

9. If your response to Q9 is 'yes' would you please identify the shortage area (level)

- A. Upper level technician /management   
 B. Middle level technician/management   
 C. Lower level technician /worker   
 D. Other specify \_\_\_\_\_

10. What is the source of information for the demand of your company's product?

- A. Industrial strategy  B. Sales of the company's product   
 C. Customer satisfaction  D. Other specify \_\_\_\_\_

11. Rate the problems faced in filling the vacancy, For each statement below please indicate how strongly you agree, disagree with it by putting ✓ as follows

1. Strongly disagree 2. Disagree 3. Undecided 4. Agree 5. Strongly agree

	Activities	1	2	3	4	5
A	Lack or shortage of applicant					
B	Those apply lack the required skill					
C	Disagreement of the applicant for its payment					
D	The applicant lack experience by vocational area					
E	If other specify any rate					

12. Have you employed TVET graduates in the past five years?

A. Yes

B. No

13. If your response for Q 13 is 'yes' are you satisfied with the quality of the graduate from the TVET training centers?

A. Yes

B. No

14. The quality TVET graduates skills in relation to the job they were expected to perform.

A. Perfectly match

B. Moderately match

C. Mismatch

15. Rate the possible reasons for TVET graduate unemployment, For each statement below please indicate how strongly you agree, disagree with it by putting ✓ as follows

1. Strongly disagree 2. Disagree 3. Undecided 4. Agree 5. Strongly agree

S.No	Activities	1	2	3	4	5
A	Graduates lack of necessary skill and knowledge					
B	Graduates lack interests to be self employed					
C	Employers lack of confidence in graduates competence					
D	Weak economic performance of companies					
E	Absence of adequate employers					
F	Employers prefer to recruit unskilled workers					
E	If other specify any rate					

16. Does your organization participate in giving apprenticeship for TVET trainees?

A. Yes

B. No

17. If your response for Q 17 is 'yes' please indicate the number of apprentices you have taken

18. How many of the apprentices you trained were retained as employee'

19. If there are the apprentices you did not retain, please rate the reason why you did so? For each statement below please indicate how strongly you agree, disagree with it by putting ✓ as follows

1. Strongly disagree 2. Disagree 3. Undecided 4. Agree 5. Strongly agree

S.No	Activities	1	2	3	4	5
A	Because the company have sufficient employee					
B	Because the company has no capacity to pay					
C	Because the apprentices lack required skill needed by the company					
D	If other specify any rate					

20. Has your organization ever been participating in planning TVET training programs?

A. Yes

B. No

21. If your response to Q 21 is 'yes', which of the following areas of involvement?

For each statement below please indicate how strongly you agree, disagree with it by putting ✓ as follows

1. Strongly disagree 2. Disagree 3. Undecided 4. Agree 5. Strongly agree

S.No	Activities	1	2	3	4	5
A	On the determination of number of training in a specific training area					
B	On consultation of training method					
C	In the determination of occupational standard					
D	In the development of curriculum					
E	On the selection of training area					
F	For apprenticeship program designing					
G	On the development of occupational assessment					
H	If other specify any rate					

22. If your response for Q 21 is 'No' please indicate why?

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23. Please, rate the factors that may influence the growth of your organization

For each statement below please indicate how strongly you agree, disagree with it by putting ✓ as follows

1. Strongly disagree 2. Disagree 3. Undecided 4. Agree 5. Strongly agree

S.No	Activities	1	2	3	4	5
A	Information given about job placement					
B	Advice students to choose their field of study					
C	Follow up activity in training process					
D	Conduct tracer study					
E	Flexibility to change training area according to the economic demand					
F	Conduct training need assessment					
G	Gather labor market information					
H	Give quality training					

24. What are the critical problems and there possible solution for TVET to contribute to economic development?

A. Problem \_\_\_\_\_

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B. Cause of the problem \_\_\_\_\_

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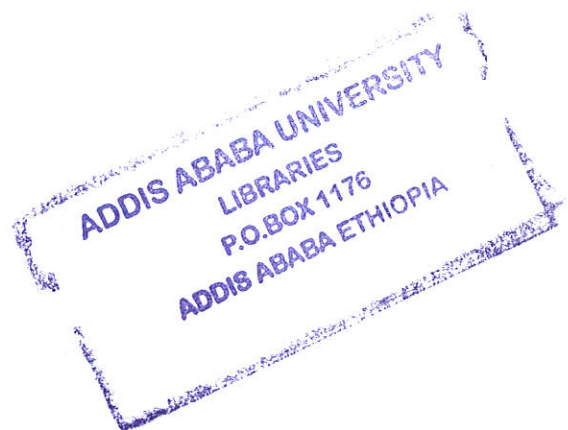
C. Possible solution \_\_\_\_\_

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**Thank you very much for your cooperation!!**



**Appendix II**  
**Addis Ababa University**  
**School of Graduate Study**  
**College of Education and Behavioral**  
**Management Studies of Vocational Education**

**Questionnaire to be filled by Deans, deputy deans, counselors and department heads**

**Dear respondents of management bodies**

The purpose of this questionnaire is to collect basic idea for the study on the assessment on effectiveness of labor market information in TVET: The case of Addis Ababa City Government. Your cooperation in offering relevant and honest information is highly important for the success of the study. Please, be sincere, frank and accurate as much as possible in responding to each item.

Please note that

- No need of writing your name
- Where alternative answers given, please put a ✓ mark in the box in front of your choice.
- In answering the open ended questions please give your answer brief and to the point as much as possible.

Thank you in advance for taking time to complete the questionnaire.

**Part I**

1. Name of the TVET College \_\_\_\_\_
2. Ownership of the institute/college  
A. Government     B. Non-government     C. Private
3. Sex            A. Male             B. Female
4. Age            A. 21-30             B. 31-40             C. Above 40
5. Your position \_\_\_\_\_
6. Department \_\_\_\_\_
7. Qualification    A. Diploma             B. BA/BSC     C. Master's degree
8. Field of Specialization \_\_\_\_\_
9. Service year:    A. 5 year and below             B. 6-10 years   
                          C. 11-15 years             D. 16 years and above

**Part II. Questions related to the role of dean, deputy deans, counselors and department heads.**

1. Number of trainee enrolled in the current year \_\_\_\_\_
2. How many areas of specialization are available in the college? \_\_\_\_\_
3. When did the institution start giving training at middle/college level training program?  
\_\_\_\_\_
4. Does the number of enrollment increase from year to year?  
A. Yes  B. No
5. Does the TVET college collect information about the training (area) needed in the market to register trainees?  
A. Yes  B. No
6. If your response to Q. 5 is 'yes' what is the source of information?  
A. Training need assessment result  B. Tracer study result   
C. Feedback from former trainees  D. employer organization   
E. Any other specify \_\_\_\_\_
7. Does your college have plan to start new training program in the coming years?  
A. Yes  B. No
8. If your response for Q. 7 is 'yes' rate the factors of base to deliver new courses. For each statement below please indicate how strongly agree, disagree with it by putting ✓ as follows.  
1= Strongly disagree                      2. Disagree                      3. Undecided  
4 = Agree                                      5. Strongly agree

S. No	Factors	1	2	3	4	5
A	The institute/college get accreditation on the area					
B	The course has been demanded in the market					
C	The institute get many application on the area					
D	The institute has sufficient teaching and learning materials					
E	The institute has new technological machinery					
F	If other, specify and rate					

9. How do you rate the participation of stakeholders and that of employers in particular in planning the training system in your college?  
A. High  B. Moderate  C. Low  No participation

10. What are the constraints that affect relationship of training colleges and employers? For each statement below please indicate how strongly you agree, disagree with it by putting ✓ as follows

1. Strongly disagree 2 = Disagree 3= Undecided 4 = Agree 5 = Strongly agree

S.N	Constraints	1	2	3	4	5
A	Lack of awareness of employers					
B	Employers are not represented adequately in the government bodies of TVET colleges					
C	Lack of commitment of employers interest					
D	The training being provided is not suit to employers interest					
E	Adequate number of employers' are not available locally					

11. Does your college have any strategy to conduct tracer study?

A. Yes  B. No

12. If your response is 'yes' how often it conducted?

A. Three times  B. two times  C. One time

13. Do you have any information whether your TVET graduates are compatible to the labor market or not?

A. Yes  B. No

14. If your response for Q 13 is 'yes' how do you evaluate the match between the labor demand and supply?

A. Perfectly match  B. Moderately match  C. Mismatch

15. If TVET graduates are unemployed, what do you think the major reasons? For each statement below please indicate how strongly you agree, disagree with it by putting ✓ as follows

1. Strongly disagree 2 = Disagree 3= Undecided 4 = Agree 5 = Strongly agree

S.No	Reasons	1	2	3	4	5
A	Lack of skill and knowledge of graduates					
B	Lack of graduates interests to be self-employed other than government organization					
C	Lack of possible information where there are vacancies related to their career					
D	Lack of confidence of employers about skills and knowledge of graduates					
E	Weak economic performance of companies					
F	Employers prefer to recruit unskilled workers					
G	If other, please specify					

16. Does your TVET College have a vocational counselor?

A. Yes  B. No

17. If your response for Q 16. is 'yes' rate the major activities of the vocational counselor? For each statement below please indicate how strongly you agree, disagree with it by putting ✓ as follows.

1. Strongly disagree      2 = Disagree    3= Undecided  
4 = Agree                      5 = Strongly agree

S.N	Activities	1	2	3	4	5
A	Give advice for the trainee in the occupational choice					
B	Give orientation for new entrant trainees					
C	Give TVET orientation for grade 9 and 10 students					
D	Facilitate graduates placement					
E	Give training on subject courses					
F	Work on the institutes management activities					
G	Follow up apprenticeship programs and apprentice					
H	If any other, specify and rate					

18. Does your college involve potential employers of TVET graduates in the planning of TVET programs?

A. Yes       B. No

19. If your response for Q 18 is 'yes' rate the area of involvement? For each statement below please indicate how strongly you agree, disagree with it by putting ✓ as follows

1. Strongly disagree      2 = Disagree    3= Undecided  
4 = Agree                      5 = Strongly agree

S.No	Areas of involvement	1	2	3	4	5
A	On the determination of number of trainees in each training					
B	On consultation of training method					
C	In the development of occupational standard					
D	On the selection of training area					
F	Apprenticeship program designing					
G	On the development of occupational assessment					
H	If any other, please specify					

20. To improve labor market information system in the college what measures ought to be taken?

For each statement below please indicate how strongly you agree, disagree with it by putting ✓ as follows

1. Strongly disagree                      2 = Disagree    3= Undecided  
4 = Agree                                      5 = Strongly agree

S.No	Reasons	1	2	3	4	5
A	Assigning competent expert					
B	Allocating adequate budget					
C	Providing adequate facilities					
D	Awarding the concerned body					
E	Strengthen the relationship between employers and training institution/colleges					

21. Which of the following factors influence the choice of courses offered in your institute? For each statement below please indicate how strongly you agree or disagree with statement by putting ✓ under your choice.

1. Strongly disagree                      2 = Disagree    3= Undecided  
4 = Agree                                      5 = Strongly agree

No	Factors	1	2	3	4	5
A	Availability of teacher/trainer					
B	Availability of student/trainee					
C	Availability of teaching and learning materials					
D	Capacity of classroom					
E	The request of potential employers					
F	If other, please specify and rate					

22. Are there limitations on the number of students for enrolled?

- A. Yes                       B. No

23. What do you think the reason for the limitation of the number of trainees?

- A. The labor demand on the market   
B. Availability of teacher/trainer   
C. Availability of teaching/learning material   
D. Capacity of classroom                       E. Other, please specify \_\_\_\_\_

24. What are the requirements for registration in your TVET colleges?

- A. Acceptable grades
- B. Ability to pay tuition fees
- C. Acceptable age
- D. Citizenship
- E. Other, please specify \_\_\_\_\_

25. What are the main sources of information in your college?

- A. Ministry of Education
- B. Ministry of labor and social affair
- C. Central statistic Agency
- D. Regional minor and small scale enterprise development agency (REMSEDA)
- E. If any other, please specify \_\_\_\_\_

26. Do you believe that the skills and knowledge that students have acquired in your college enable them to be employed in the job market?

- A. Yes
- B. No

27. If your response for Q 26 is 'yes' how do you know? (you can give more than one answer)

- A. By asking graduates who are working in different firms
- B. through the feedback from employers
- C. based on research findings
- D. If any other, please specify \_\_\_\_\_

28. What are the source of information about graduate employment of your college?

- A. Former trainees feedback
- B. Employer organization
- C. Education sector
- D. Tracer study
- E. Other, please specify \_\_\_\_\_

29. Please, rate the kind of information collected by your institute of college? For each statement below please indicate how strongly you agree, disagree with it by putting ✓ as follows

- 1. Strongly disagree
- 2 = Disagree
- 3= Undecided
- 4 = Agree
- 5 = Strongly agree

S.No	Information	1	2	3	4	5
A	The success of the graduates in the world of work					
B	The skill gap of the graduates in the labor market					
C	Training area needed in the market					
D	Employability of TVET graduates					
E	If other, specify and rate					

30. In your college what are the major problems that hindered the implementation of labor market information service?

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31. What are the major strategies used in your college to overcome these problems?

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32. What do you suggest to improve labor market information services in your college?

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33. Do the trainees are getting adequate and timely guidance and labor market information service?

A. Yes

B. No

34. If your answer for Q. 33 is 'No' what was the problem?

A. Lack of qualified manpower

B. Lack of budget

C. If any other, please specify \_\_\_\_\_

Thank you very much for your cooperation!!

**Appendix III**  
**Addis Ababa University**  
**School of Graduate Study**  
**College of Education and Behavioral Management Studies of Vocational**  
**Education**

**Questionnaire to be filled by middle/college level TVET trainees in Yeka and Nefasilk Lafto sub cities in Addis Ababa City Government**

**Dear trainees,**

The purpose of this questionnaire is to collect basic data for the study on assessment of the effectiveness of labor market information in TVET: The case of Addis Ababa City Government. Your cooperation in offering relevant and honest information is highly important for the success of the study, be sincere, frank and accurate as much as possible in responding to each item.

Please note that

- No need of writing your name
- Where alternative answers given, please put a ✓ mark in the box in front of your choice.
- In answering the open ended questions please give your answer brief and to the point as much as possible.

Thank you in advance for taking time to complete the questionnaire.

**Part I**

1. Name of TVET institute/college \_\_\_\_\_
2. Ownership of the institute  
A. Government    B. Non-government     C. Private
3. Sex            A. Male             B. Female
4. Age A. 15-17             B. 18-20   
          C. 21-23             D. 24 and above
5. Training area \_\_\_\_\_
6. Department \_\_\_\_\_
7. Training level \_\_\_\_\_
8. Why did you prefer to join the TVET program?  
A. Because you have interest   
B. Because you couldn't get any alternative   
C. Because the program has employment opportunity   
D. If any other reason, please specify \_\_\_\_\_

9. Are you attending training in the TVET area you choose?  
A. Yes  B. No
10. If your response for question No 9 is 'yes' how did you choose this area?  
A. By vocational counselor advice   
B. By family advice   
C. By friend's advice   
D. Based on teachers advice   
E. Based on media information
11. What was the information you got from these sources?  
A. The training area has current employment opportunity   
B. The training gives you high prestige   
C. Will have employment opportunity in the future   
D. If any other, please specify \_\_\_\_\_
12. Do you expect to get job after graduation?  
A. Yes  B. No
13. If your answer for Q. 12 is 'yes' what is/are reason (s) for your expectation?  
A. Because the former graduate in this area has got employed   
B. Because you have information there is a demand   
C. Because you promised to be employee   
D. Any other, please specify \_\_\_\_\_
14. When do you know about training area (specifically your training area)?  
A. When you come to register for the program   
B. When you were learning in grade 9 and 10   
C. Since the training has got began   
D. Any other, please specify \_\_\_\_\_
15. Has the TVET College have a vocational counselor?  
A. Yes  B. No

16. If your response for Q 15 is 'yes' what are the major activities of vocational counselor? For each statement below please indicate how strongly agree, disagree with it by putting as follows

1. Strongly disagree                      2 = Disagree    3= Undecided  
 4 = Agree                                      5 = Strongly agree

S.No	Activities	1	2	3	4	5
A	Give advice for trainees in the selection of training area					
B	Give orientation for new trainees					
C	Give TVET orientation for 9 and 10 grade students					
D	Facilitate graduate placement					
E	Give training in any training area					
F	Participate in managerial activities of the college					
G	If any other, specify					

17. Does you institute provide vocational orientation for trainees on occupational fields and employment opportunities?

- A. Yes                       B. No

18. If your response for Q 17 is 'yes' when does the institute provide vocational orientation?

- A. At grade 9 and 10   
 B. During application for admission of TVET   
 C. After you have been assigned to respective fields   
 D. If any other, please specify \_\_\_\_\_

19. Who is responsible to provide vocational orientation in your college?

- A. Vocational counselor   
 B. Dean   
 C. Department head   
 D. If any other, please specify \_\_\_\_\_

20. Do you have any information whether the former graduates get employed or not?

- A. Yes                       B. No

21. If you have information about unemployed TVET graduates rate the major reasons of unemployment. For each statement below please indicate how strongly agree, disagree with it by putting ✓ as follows

1. Strongly disagree      2 = Disagree    3= Undecided  
 4 = Agree                      5 = Strongly agree

S.No	Reasons	1	2	3	4	5
A	Graduate lack necessary skill and knowledge					
B	Graduates lack interests to be self employed other than government organizations					
C	Employers lack confidence in graduates competence					
D	Weak economic performance of companies					
E	Employers prefer to recruit unskilled worker					
F	Absence of adequate employers					
G	If any other, please specify					

22. Rate the following activities of TVET institution by putting ✓ mark in the column of your choice.

S.No	Activities	Inadequately	Rarely adequate	Adequate	Very adequately	Higher adequate
A	Information given about job placement					
B	Advice students to choose their field of study					
C	Follow up activity in training process					
D	Conduct tracer study					
E	Conduct training need assessment					
F	Gather labor market information					
G	Give quality training demanded by the market					
H	Flexibility to change training are according to the economic demand					
I	If any other, please specify					

23. Do you get adequate and timely guidance and labor market information service?

A. Yes

B. No

24. If your response for Q 24 is 'No' what was the problem?

A. Lack of qualified manpower

B. Lack of budget

C. If any other, please specify \_\_\_\_\_

\_\_\_\_\_

25. What are the critical problems and their possible solution for TVET to contribute to economic development?

A. Problem \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

B. Cause of the problem \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

C. Possible solution \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Thank you very much for your cooperation!!



10. If 'yes' what is your present employment status?

- A. Wage employed                       B. Self employed   
 C. Work in cooperative                       D. Work in your family organizations   
 e. If any other specify \_\_\_\_\_

11. If employed the current occupation/job

\_\_\_\_\_

\_\_\_\_\_

12. Is your current job similar or different from the area which you have been trained for?

- A. Yes, it is similar                       B. Not very different                       C. Completely different

13. Have you been trained with appropriate skill to carryout your present job?

- A. Yes     B. No

14. Do you need further training to fulfill your current job?

- A. Yes     B. No

15. How long did you take to start work after graduation?

- A. Just after graduation                       B. With one years   
 C. Two years                                       D. Four years

16. If you are unemployed how long \_\_\_\_\_

17. How do you rate the level of employment opportunities of every year's graduates?

- A. 10% and below                       B. 11% - 25%                       C. 26% - 50%   
 D. 51% - 75%                                       e. Above 75%

18. If TVET graduates are unemployed, what do you think the major reasons? For each statement below please indicate how strongly you agree, disagree with it by putting ✓ as follows.

S.No	Reasons	1	2	3	4	5
A	Lack of skill and knowledge of graduates					
B	Lack of graduates interest to be self employed other than government organizations					
C	Lack of possible information where there are vacancies related to their career					
D	Lack of confidence of employers about knowledge and skill of graduates					
E	Weak economic performance of companies					
F	Employers Prefer to recruit unskilled worker					
G	If any other, please specify					

19. Is there any corner/place to display occupational information in the college?

A. Yes

B. No

20. Which of the following activities of TVET arranged by your college for trainees? For each statement below please indicate how strongly you agree, disagree with it by putting ✓ as follows.

1= Strongly disagree

2 = Disagree 3= Undecided

4 = Strongly agree

5 = Agree

S.N	Activities	1	2	3	4	5
A	Information given about job placement					
B	Advice students to choose their field of study					
C	Follow up activity in training process					
D	Conduct tracer study					
E	Flexibility to change training are according to the economic need					
F	Conduct training need assessment					
G	Give quality training					
H	Gather labor market information					
I	If any other, please specify					

20. Why you were not employed in the organization you attended your apprenticeship training?

A. because the organization have no vacancies

B. because the organization lacked confidence about my skills and knowledge

C. because of the mismatch of training with employer's interest

D. other \_\_\_\_\_

21. Why did you prefer to join the TVET program?

A. because you have interest

B. Because you can't get other opportunity

C. because the program have employment opportunity

D. If any other, please specify \_\_\_\_\_

22. Were you trained in the TVET area of your choice?

A. Yes

B. No

23. How did you choose your training area?

A. by vocational counselor advice

B. by family advice

C. friend's advice

D. by teacher advice

E. based on media information

24. Do you believe that the skills and knowledge that you have acquired in your college enable you to be employed in the job market?
- A. Yes                       B. No
25. If your response for Q. 24 is 'yes' how do you know (you can give more than one answer)
- A. by asking graduates who are working in different firm
- B. through the feedback from employers
- C. based on research findings
- D. If any other, please specify \_\_\_\_\_
26. What was the information you get from these sources?
- A. The training area has current employment opportunity
- B. The training gives high prestige
- C. will have employment opportunity in the future
- D. If any other, please specify \_\_\_\_\_
- \_\_\_\_\_
27. Do you expect to get job after your graduation?
- A. Yes                       B. No
28. If your response for Q 27 is 'yes' why did you expect?
- A. Because the former graduates in this area were employed
- B. because you have an information that there is a demand
- C. because you were promised by employed
- D. Any other \_\_\_\_\_
29. When did you know about TVET training area (specifically your training area)?
- A. At the time when you came to register for the program
- B. When you were in grade 9 or 10
- C. When you register
30. Do you get adequate and timely guidance and labor market information service?
- A. Yes                       B. No
31. If your answer for Q 26 is 'No' what was the problem?
- A. Lack of qualified manpower
- B. Lack of budget
- C. If any other, please specify \_\_\_\_\_

Thank you very much for your cooperation!!

**Appendix V**  
**Addis Ababa University**  
**School of Graduate Studies**  
**College of Education and Behavioral**  
**Management Studies of Vocational Education**

Interview guided questions for selected key labor market indicators organization of the country and for TVET official at the federal, regional and sub city level in Nifas silk, Lafto and Yeka sub city in Addis Ababa city Administrative.

The purpose of the questionnaire is to get necessary data that enable to identify the prevailing problems of LMI for market oriented TVET delivery.

**I General information about the interviewees**

1. Interviewer \_\_\_\_\_
2. Interviewee \_\_\_\_\_
3. Place of interview \_\_\_\_\_
4. Date of interview \_\_\_\_\_
5. Name of the interviewee \_\_\_\_\_
6. Sex    Male             Female


**II. Interview guide**

1. In what bases the type of training and supply determined in the institutions?
2. Do your office use or provide appropriate LMI which able to design or determine the quantity of trainee and the types of training given in the country?
3. Is the response of TVET system in the labor market evaluated?
4. What majors are taken to alleviate the problems of mismatching of TVET graduates skill and knowledge needed in the industry?
5. How can be the TVET system respond most effectively for the country labor market demand?
6. Suggest mechanism to improve collection and dissemination of LMI at national and regional level in utilizing TVET graduates force for economic development of the country?

## DECLARATION

This is my original work, has not been presented for a degree in any university and that all sources of material used for the thesis has been acknowledged.

Student's name: Tsegaye Atsebaha

Signature: \_\_\_\_\_ 

## SUBMISSION APPROVAL SHEET

The thesis has been submitted for examination with my approval advisor.

Name: Girma Zewdie

Title: (Associate Professor)

Signature: \_\_\_\_\_ 

Date of Submission \_\_\_\_\_

