

**MANAGEMENT PROBLEMS OF
APPRENTICESHIP TRAINING PROGRAM IN
TVET INSTITUTIONS OF NORTH GONDER ZONE**

**A THESIS PRESENTED TO THE SCHOOL OF GRADUATE
STUDIES, ADDIS ABABA UNIVERSITY IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTER OF ARTS IN EDUCATIONAL
PLANNING AND MANAGEMENT**

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**JULY 2007
ADDIS ABABA**

ACKNOWLEDGEMENTS

I would like to convey my gratitude to Dr. Yekunoamlak Alemu, my thesis advisor, for his professional support and valuable comments through out the study. He made all the things through his inclusive observation that the successful achievement of this thesis based.

My sincere thanks go to my family members, Ato Niguse Assefa and w/t Fitsum Assefa for their enormous support and encouraging me throughout my study.

Finally, I would like to extend my thanks to all principals, vocational counselors, trainers, trainees, supervisors in apprenticeship offering organizations and zonal TVET officials in North Gonder Zone for their genuine provision of relevant data for the study.

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ACRONYMS

ANRS	Amhara National Regional State
ETP	Education and Training Policy
FDRE	Federal and Democratic Republic of Ethiopia
IIEP	International Institute of Educational Planning
ILO	International Labor Organization
MoE	Ministry of Education
MOFED	Ministry of Finance and Economic Development
NGOs	Non Government Organizations
NTVETC	National Technical and Vocational Education and Training Council
OECD	Organization for Economic Cooperation and Development
REB	Regional Education Bureau
TGE	Transitional Government of Ethiopia
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization
ZEO	Zonal Education Office

ABSTRACT

This thesis was performed with aspire of conducting a research study on management problems of apprenticeship training program in TVET institutions of North Gonder Zone. A focus was made on the major problems countered while managing apprenticeship training. To this end, this research attempted to focus on the fundamental factors affecting the management process such as legal frame work, state of partnership and aspects of management. A descriptive survey was employed to identify the major managerial problems of apprenticeship training. The tools used during data collection were questionnaires, interview and document analysis. Data analysis was conducted by using percentage, chi-square, t-test, ANOVA and spearman's rank order coefficient of correlation. The subjects of the study were 5 principals, 3 vocational counselors and 2 zone TVET officials selected using availability sampling technique and 275 trainees and 45 trainers sampled using stratified and simple random sampling techniques and 60 company supervisors sampled using purposeful sampling. The finding depicts that as the majority of the respondents replied the legal framework for the management of apprenticeship training is absent and the program undertaken with lack of financial, material and human resources. In addition to this, the preparedness of apprenticeship offering organizations to cooperate, to prepare a plan and monitor the activities during the training were absent. Thus, it is possible to conclude that the management of apprenticeship training is entangled with a set of problems such as absence of legal framework, shortage of finance, lack of trained human resource and absence of partnership between organizations and TVET institution. Therefore, it is recommended to promote the existing legal framework for apprenticeship training. It is further recommended to create stronger partnership among all providers of apprenticeship training by making aware the mutual benefits to be derived from it through information campaigns, and to strengthen the human resource for managing and guiding the training.

CHAPTER ONE

1. THE PROBLEM AND ITS APPROACH

1.1. Background of the Study

Social and economic development of any country depends on the availability and quality of educated manpower that have competent knowledge and skill in globalized technology and high market competition.

Any developmental activity can only be supported and achieved, if the capacity for the provision of qualified manpower at all level is maintained. To this end, Technical and Vocational Education and Training (TVET) plays significant role in providing middle level trained manpower. Regarding this, (Lauglo, 1993: 1) indicates that TVET has a vital role in improving the productivity of labor in the labor market.

As educators believe, TVET in its informal form emerged when man began to live together and started to produce for his basic needs. After formal education came in progress, TVET started to get the attention of several countries than academic education due to the assumption that there was a direct relationship between education and technological advancement. Moreover, the development of TVET has been fuelled by lack of middle level manpower during the industrial period. Currently, there is a wide consensus among scholars that academic education alone is not enough for rapid and continuous social and economic changes (Teklehaimanot, 2002: 6-7; Yekunoamlak, 2002: 219,222).

With the introduction of the current Education and Training Policy of Ethiopia, the issue of TVET got high attention in our country. Thus, the number of TVET institutions in the country increased from 17 in 1996/97 to 158 in 2003/04 and the number of trainees also increased from 2,924 in 1996/97 to 102,649 in the year 2003/2004 (MOFED, 2006: 7).

According to MoE (2006a: 10) the overall objective of TVET is to create a competent, motivated, adaptable and innovative work force that contribute to poverty reduction, and social and economic development. To achieve the stated objective, the management of trainings provided in TVET program should be comprehensive.

Management of TVET at institutional level should be organized in a form of board or council and committee that includes various stakeholders from social sector. The council must be composed of able, clear thinking, business strategists. The board or council may have different forms depending on factors such as the sharing of responsibilities between various stakeholders, the funding arrangements, the degree of centralization and the functions operated by national agencies (Atchoarena and Hite, 2001; Gasskov, 2006: 51).

Delivery of TVET has different forms that are related to one another by the fact that the national systems have multiple characteristics and do not conform to a single pure type of training (Lauglo, 1993: 15). He further indicates that currently used modes of TVET delivery are;

- ❖ School based training
- ❖ Enterprise based training (training employees) and
- ❖ Apprenticeship training.

As noted in MoE /Ethio-German/ TVET Program (2002: 4) apprenticeship training is,

A work-based method for learning and gaining qualifications and it is in-company training, based on an agreement between TVET institution and an employer for the purpose of training of trainees in any commercial, industrial or service giving organization or establishment.

Apprenticeship training helps the trainee to be engaged in self-employment activities or get job opportunity in employer organizations without further

training after graduation. Since the trainee will apply the concept learned in class (theoretical) through practice or actual job that enhances his/her skill (Atchoarena, 1996: 5). It also builds up the work discipline and self-confidence of the trainees. This makes its contribution to easing of social problems in the field of unemployment significant.

As indicated in Deakin and Morris (1998) apprenticeship training in its informal form has its origin when man commenced to live together and started to produce for his basic needs. The traditional apprenticeship training; which is based on an informal learning situation, does not lead to formal certificates and it also does not have any structured training scheme. Nowadays apprenticeship training is included in formal curricula of TVET and is basically structured and recognized in-company training scheme, which leads to formal certificates.

As it is stipulated in education and training policy (ETP) of Ethiopia (MoE, 1994: 25), trainees who are enrolled in middle level TVET institutions will acquire the necessary field experience before their graduation. To this end, trainees are expected to pursue apprenticeship training at the end of in-school training for 312 hours in the selected organizations to familiarize them with the real world of work.

In managing apprenticeship training, the involvement of government, companies and training institutions is mandatory in the formulation of policy, rules and regulations for the training program as well as material support and advice to be given.

Managerial activities of apprenticeship should include planning for the delivery of training, coordinating the training, monitoring or supervising the training and evaluation of the trainees in light of the predetermined

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standards at the beginning of the training. Besides, financing the program (allocating adequate budget) is also part of managing apprenticeship training.

Moreover, the contribution of vocational counselors in managing apprenticeship training should not be undermined. They are instrumental in facilitating and preparing trainees for apprenticeship training. They will also be focal points in organizing apprenticeship training for trainees and self-employment support for TVET graduates (MoE, 2006a: 26). Thus, the management of apprenticeship training needs attention of those involved in its implementation process.

1.2. Statement of the Problem

Apprenticeship training is being implemented in all TVET institutions based on the current education and training policy (ETP) and the curriculum developed for middle level TVET. However, there are many difficulties in applying this scheme in developing countries, like Ethiopia. The grounds for the difficulty of implementing the scheme are broad.

As Corvalan (in Lauglo, 1993: 34) indicates, the universal constraint for apprenticeship training is lack of interest among employers. Moreover, according to UNESCO's (1983) report although apprenticeship programs are the stronger side of TVET, they still suffer in many countries from lack of appropriate workplace and qualified supervisors. Moreover, the existence of divided responsibility between enterprises and TVET institutions creates some problems of coordination in what is taught in the firm and in industry.

Similarly, studies in Ethiopia have revealed that apprenticeship fails to meet its objectives due to many problems. Apprenticeship has been carried out in haphazard fashion with lack of partnership between TVET institutions and enterprises, lack of finance to support the training, lack of proper management, coordination and follow up (FDRE, 2000: 6).

Apprenticeship, as part of TVET program, requires well established management system. However, as indicated in MoE /Ethio-German/ TVET Program (2000: 2-6) the current apprenticeship program is facing problems like;

Limited number of apprenticeship offering organizations and those existed ones are not fulfilling the required standard, apprenticeship companies are not willing to accept apprentice and they took it as an obligation, apprenticeship companies do not include apprenticeship trainings in their organizational plans, the controlling mechanism of the apprenticeship program was not tight as required, there was no organized and structured apprenticeship program, absence of organizations that have certified professional or vocational staff who can assist the apprentice in transferring technical skills and knowledge. Besides, the coordination and integration problem between TVET institutions and apprenticeship companies aggravate the problem. Hence, it requires the attention of those involved in the area.

Hence, it is essential to set up an organ that will organize training programs, accredit training institutes, determine the level of certification, devise methods for apprenticeship, seek finances for training program, and establish working relationships between employers and training institutions.

A study conducted by (Masresha, 2004; Zenebe, 2006) on the problems of apprenticeship training revealed that the major problems seen in the implementation of apprenticeship training programs are shortage of finance, absence of follow up of trainees during apprenticeship, and the irrelevance of activities performed during apprenticeship training.

The former studies conducted on apprenticeship training focus only on the implementation of apprenticeship training without stressing on the management problems. This study, however, will try to focus on the management problems faced during apprenticeship training. Therefore, the purpose of this study is to identify the management problems of

apprenticeship training program in North Gonder Zone. Thus, the study tries to seek answers to the following basic questions.

1. Which guidelines and policy frameworks do TVET institutions and companies use to govern apprenticeship training and to what extent are they utilized?
2. What is the state of partnership between TVET institutions and apprenticeship offering organizations?
3. What is the state of financial, human and material resource in apprenticeship training program?
4. How is the apprenticeship training program planning process conducted?
5. To what extent is apprenticeship training properly implemented, monitored and evaluated?
6. What are the major managerial, social, in-school and company-related problems encountered in managing apprenticeship training?

1.3. Objectives of the Study

General objective of this study is:

- To identify the major managerial problems occurred within TVET institutions and apprenticeship offering organizations in apprenticeship training.

The specific objectives of the study were:

- To assess the state of existing guidelines and policy frameworks that are used by apprenticeship offering organizations and TVET institutions.
- To assess the state of partnership between TVET institutions and apprenticeship offering organizations.
- To identify the availability of financial, human and material resources in apprenticeship training programs.
- To examine the planning process for apprenticeship training.

- To examine the implementation, monitoring and evaluation process in apprenticeship training.
- To identify major managerial, social, in-school and company related problems faced while managing apprenticeship training.
- To provide suggestions on the effectiveness of apprenticeship training management.

1.4. Significance of the Study

The existence of high-quality and competent management for apprenticeship training leads to successful implementation of TVET. This in turn requires clear and concise planning, ample financial, human and material resources, monitoring the progress of the training and its evaluation. Hence, fulfilling these requirements is the responsibility of TVET institutions and other stakeholders.

Thus, conducting this study may have the under mentioned contributions:

- By revealing the existing management problems of apprenticeship training programs, the study may aware policy makers and curriculum designers to take an action.
- The study may also provide an alternative approach or solution to the problem under study.
- It may enrich the existing literature in the field of TVET in the context of management problems of apprenticeship training.
- It might give information for those who intend to study the problem in depth.

1.5. Delimitations of the Study

Apprenticeship training is provided for all middle level TVET trainees after their annual in-school training. Since apprenticeship training is wide in its very nature, and studying all issues is difficult, this study is delimited to the management problems of apprenticeship training program in North Gonder

Zone. Besides, the study is delimited to governmental TVET institutions on the ground that relatively all major fields of training are provided in such institutions. Moreover, the study is delimited to 10+2 program since they took their apprenticeship training during their previous levels. Among the management aspects, the study will focus on aspects like planning, financing, monitoring and evaluation of apprenticeship training. This is to make the study manageable and to conduct it in proportion to the researcher's resource capacity.

1.6. Limitations of the Study

While the study was carried out, the student researcher was faced time constraint. Moreover, there was an acute shortage of local research (regional or national) for references and well documented evidences in the area at zone and woreda education offices. On top of this, it was difficult to get access to the MoE library.

1.7. Research Methodology

1.7.1. Method

In this study, descriptive survey method is employed to reveal the existing management problems of apprenticeship training in TVET institutions of North Gonder Zone which is the appropriate method to examine the current practice.

1.7.2. Sample Population and Sampling Technique

This study was conducted in North Gonder Zone. The zone is purposely selected since there were no studies conducted on the issue in the area. Thus, by using availability sampling technique, all the three institutions and all five major departments found in these institutions were included to enrich the study by adequate information.

Similarly all principals, deputy principals and vocational counselors are also included in the study by using availability sampling technique. This technique is selected because each institution has only one principal, deputy principal and vocational counselor. Thus including all of them helps to get adequate information.

Out of 160 organizations that offer apprenticeship training in North Gonder Zone, 60 (37.5%) apprenticeship offering organizations were selected by using stratified sampling technique. The technique was employed in order to include organizations from different areas of activity, size of operation and ownership so that the conditions and practice of different areas and various economic activities were incorporated in the study. The supportive supervisors of all the 60 organizations were selected as sample respondents of the study using purposeful sampling technique since they are the directly responsible persons to supervise their respective apprentices.

Finally, stratified sampling technique was employed in determining number of trainees and trainers by taking field of training and sex as strata. This is to get proportional number of trainees of both sexes from all fields of study in the institutions. After determining the number that should be taken from each department, simple random sampling technique is employed to select samples, since this technique is unbiased and gives equal chance to the whole population to be selected. Thus, out of the total population of 564 students and 81 trainers, 275 (48.75%) of the students and 45 (55.6%) of the trainers were selected as a sample population. Accordingly, 117 trainees and 18 trainers from Business education, 6 trainees and 2 trainers from Textile and Garment, 4 trainees and 4 trainers from Hotel service and Beautification, 51 trainees and 10 trainers from Construction Technology and 101 trainees and 11 trainers from Industrial Technology were included in the study.

1.7.3. Source of Data

Data were gathered from different (primary and secondary) sources. These sources are categorized into seven. The first data sources were 10+2 level trainees in different TVET institutions since they are the target groups of the study and take apprenticeship training at the end of their previous level during summer time.

The second data sources were principals and deputy principals in the TVET institutions, since they can give adequate and detailed information on the management of apprenticeship training. The third group was composed of vocational counselors in the sampled institutions who are responsible to plan and monitor the progress of the apprenticeship training program.

Trainers of TVET institutions who provide theoretical training and who were responsible to supervise the training provided by apprenticeship offering organizations are the fourth data sources. The fifth group is that of apprenticeship training company supervisors that are responsible to provide supervisory service as well as to follow up and evaluate trainees during apprenticeship training.

The sixth data sources were zonal TVET officials who are responsible to manage TVET system at zonal level. Finally, the last sources of data are documents of different types that are related with apprenticeship training.

1.7.4. Instruments for Data Collection

The data for the study were collected by using research questionnaire and unstructured interview. Questionnaire is an appropriate data gathering tool to get information from large population whereas interview helps to get additional information from few experts.

Thus, three sets of questionnaires consisting of closed ended and open ended question items were prepared (in English for principals, deputy principals, vocational counselors and trainers and in Amharic for trainees and apprenticeship offering organization supervisors). In addition to this, interview is conducted with zonal TVET officials. Besides, the study is supported by secondary data sources.

1.7.5. Data Administration, Distribution and Collection

Before the final forms of questionnaires were distributed to the actual survey, they were pre-tested on small groups at Gonder TVET institution in the field of wood work technology to see their validity and to make essential correction. Based on the inputs obtained from the pilot test, vague items were rephrased. Then, the questionnaires were distributed to the respondents, collected and finally analyzed.

1.7.6. Instruments for Data Analysis

After the data were gathered, the quantitative data were tabulated and the qualitative data were organized for analysis. Then, the following statistical tools were used to analyze the data:

- Percentage to demonstrate the share of responses;
- Mean to indicate the mean average of the responses;
- Chi-square to test the difference in perception among respondents;
- T-test to test the significance of differences between means of two groups of respondents;
- ANOVA to test the significance of differences between means of responses; and
- Spearman's rank order coefficient of correlations to measure the chance of relationship between respondent groups.

Alpha value (α) =0.05 level is selected to test all statistical significant differences employed in the study.

1.8. Definition of Terms

Apprenticeship training: - Special type of structured and recognized cooperative TVET based training made by a contract between company and trainee or TVET institution (MoE, 2006: 46).

Management: - Is planning, organizing, leading and controlling the work of organization members and of using all available resources to reach stated organizational goals (Stoner and others, 1998: 7).

Technical and Vocational Education and Training: - Refers to all forms and levels of educational process involving, in addition to general knowledge, the study of technologies and related sciences and the acquisition of practical skills, know-how, attitudes and understanding relating to occupations in the various sectors of economic and social life (UNESCO, 1989: 2).

Training institution: - A public or private training institutions and also includes college which offers training to which a pre-accreditation license or an accrediting authority to engage in the provision of TVET (Federal Negarit Gazeta, 2004: No.391/2004: 2553).

Vocational guidance: - Assessment of an individual's abilities and aptitudes followed by advice on matching these effectively with appropriate education, training, occupations and long-term career (Taneja, 2005: 269).

Zone: - For this study, it is an administrative locality, and hierarchy below region consisting of limited Woredas under it.

1.9. Organization of the Study

The study is organized under four chapters. The first chapter deals with the problem and its approach. Here, the basic questions that the study seeks to answer and the research procedures are treated. The second chapter is devoted to the review of related literatures. The third chapter incorporates presentation, analysis and interpretation of data. Summary of findings, conclusions and recommendations were treated under the last chapter of the study.

CHAPTER TWO

2. REVIEW OF RELATED LITERATURE

2.1. The Role of Technical and Vocational Education and Training to Development

Countries emphasize the importance of education for sustainable development since they need hard working citizens that have the capacity to solve problems, which have positive attitude towards science and technology and strive to renovate their country.

As indicated in World Bank Report (1991: 7), developing countries require improving their productivity to compete successfully in an area of rapid economic and technological change. This requires not only capital investment, but also a work force that acquire new skills for new jobs as the structures of economies and occupations change.

Folson (1995: 15) also argues that, education as providing skills, it prepares youth for economic function in an increasingly complex technological society and socializing them to fit into new kinds of economic setting. In addition to general education TVET has high contribution for economic and social development of a country. TVET is essential to provide, along side general education, knowledge and skills in TVET fields in order to meet the national manpower requirements in agriculture, business, industry and other technical services that enhance country's economic and social development (UNESCO, 1996: 16).

In sub-Saharan Africa, particularly in the French-speaking countries, governments have placed great hopes and increasing attention in TVET during the 1970s because of expectations concerning the development of the modern sector, which was supposed as a means of supporting and increasing

the need for skilled labor used for economic and social development of their countries (Atchoarena and Delluc, 2002; ILO, 1971: 5).

On the other hand, as indicated in UNESCO (1996: 2) the revision and restructuring of educational system was introduced in Nigeria, Ghana and other African countries. A common feature of educational system reform in the African countries was the introduction of technical education in the general school curriculum resulting from the realization of the importance of TVET in national development.

Developing and improving TVET is an important step to assist social and economic development, to intensify the relationship between technical and vocational education and the world of work, and to improve the living standards of the population (ANRS, 2002: 8). Education and training for work are of fundamental importance because it is at work that our roles as competent human beings and responsible citizens come together most intensely. To this end, a country's TVET system is an influential factor for the competitive strength and level of development of countries economy (UNESCO, 1996: 14).

Including TVET in country's education system is mandatory to have economic development. To this end, Velenchik (1993: 1) stresses that for many countries, TVET is not an option rather it is a necessity. He states that as primary school leavers are on the rise throughout the world, the need to expand further TVET learning opportunities is urgent. Besides, many secondary school systems are unable to absorb these large numbers of primary school leavers and jobs are even harder to come by. Thus, young people with new expectations but few opportunities are the ingredients of a social time-bomb.

As stated in the document released by UNESCO (1968: 7), both for the sake of spreading education and in view of its contribution to development, governments devoted a large and generally growing part of their budget to expenditures in the field of education. Available literatures also revealed that from the budget allowed to education, TVET got the lion's share (Ziderman, 2003).

TVET paves the way for the transition from compulsory education to the world of work. Ethiopia showed great interest in TVET since the country considered it as the master key to poverty alleviation and social cohesion, and a chance for the country to jump on the bandwagon of development and globalization. The government's national development endeavor demands the supply of skilled human power at different levels. The realization of this endeavor requires the entry of young people into job opportunities, including small-scale industries and strategies that encourage young people to become self-employed based on a firm education and training background, including training in a wide variety of work-related skills through TVET programs (MoE, 2006b: 52).

Technical and Vocational Education and Training program may have different objectives. UNESCO (2002: 9) suggests the major objectives of TVET include:

- To contribute to the achievement of the societal goals of grater democratization and social, cultural and economic development.
- To lead to an understanding of the scientific and technological aspects of contemporary civilization.
- To empower people to contribute to environmentally sound sustainable development through their occupations and other areas of their lives.

The objective of Technical and Vocational Education and Training in Ethiopia as indicated in (MoE/Ethio-German TVET program, 2000a: 1) is to supply

qualified manpower at various levels ranging from lower to higher skill levels. In this regard, a system that allows proper organization and coordinated deployment of qualified manpower need to be carefully designed and implemented.

The Ethiopian TVET system focuses on the current need of the country related to economic and social development that is supported by many scholars. TVET system should aim to meet the current, emerging or anticipated needs for education and skills training within an increasingly complex and volatile local, national and global environment to the satisfaction of stakeholders (Gasscov, 2006: 91).

In general, TVET has more contribution in the development of any country since it helps to produce middle level skilled manpower for the economy and to run government bureaucracy. Besides, it helps to create self employed individuals so that a number of unemployed youth or educated unemployment in the country will decline.

2.2. Policy Issues in Technical and Vocational Education and Training

Most African countries today are still characterized by: fast growing population, fragile political systems, high rates of inflation and frequent devaluation of national currencies, falling standards in education and training, and a steady decline in employment opportunities (UNESCO, 1996: 9-10). These problems need urgent response particularly on problems of unemployment. Lauglo and others (1988: 26) hassled that, the key policy issues focuses to find an educational response to the very great difficulty which the school leavers have in finding work.

Throughout the world a consensus is growing on the need to focus training on efficient responses to economic changes and to strengthen the role-played by employers and training organizations, that most existing training policies and institutions did not address. In many developing countries, past expectations that skill training could effectively combat high unemployment had largely been abandoned as unrealistic. Besides, rigid administration and severe budget constraints had reduced the quality of training and impede responsiveness to labor market opportunities. Furthermore, most countries lacked strategy for balanced development of public and private training systems. The need to break this vicious circle eventually led to the reconsidering of policy options and delivery patterns (Middelton and others, 1993: 254).

As recommended by UNESCO (2002: 16), national policy should foster TVET with particular emphasis on its potential within lifelong learning, and directed to its improvement and relevance to the prevailing socio-economic context. Most policy decisions are confirmed and strengthened through national educational and labor legislation, while others may change from time to time. The national priorities for training provision and system development and governments and social partners' responsibility for TVET are taken as major issues that can be considered in national TVET policy (Gasscov, 2000: 25).

Similarly, Middelton and others (1993) pointed out that the major policy issues which are important to TVET provisions include: flexible response to changing demands, customer oriented, and cost effectiveness. Thus, nowadays there is a great emphasis on gearing training more to effective labor market demand, active marketing of courses, cost consciousness, more power to managers, and the use of performance indicators.

Furthermore, in Sub-Saharan Africa countries currently policies on TVET provision make paradigm shift to market oriented structure. Here, the sub sectors policy focuses on new approach like involving social partners in governance, granting more autonomy to institutions, promoting private providers and company based training (Atchoarena and Delluc, 2002: 2; OECD, 1989).

Policy formulation involves many departments, institutions and organizations, hence, the sources of policy concepts are numerous. Regarding this issue Gasscov (2006: 15) states, the national training policy development process is becoming increasingly multipartite, involving a broad representation of stakeholders and agencies concerned. Similarly, UNESCO (2002: 13) recommends that although governments carry the primary responsibility for technical and vocational education, in a modern market economy TVET policy design and delivery should be achieved through a new partnership between government, employers, professional associations, industry, employees and their representatives, the local community and non-governmental organizations. This partnership, however, must create a coherent legislative framework to enable the launching of a national strategy for change.

To sum up the above discussion, policy issues in TVET provision should gear to countries development objectives and by doing so the country can benefit from the results of these policies and guidelines. Moreover, it is needed to adjust policies on TVET to the country's pressing problems and future economic and social development issues.

2.3. Modes of Delivery of Technical and Vocational Education and Training

Technical and Vocational Education and Training systems are networks of organizations that provide diversified training and educational services to dissimilar types of clientele by means of different forms of training delivery. The delivery modes that are used for the training were call for the country's aspiration. According to Middleton and Terry (1988: 4), the nature and effectiveness of various training systems depends on the degree to which they fit the need of economies at different level of development. Similarly Lauglo (1993: 15) indicates that organizing training in different ways is constrained by the fact that the multiple characteristics of the national systems have and do not conform to any single pure type.

As stated by Edita (2000: 2-3), TVET skills are numerous and they can be acquired in various sources. There are school-based education or training programs, on-the-job training and apprenticeship training. Similarly, Lauglo (1993: 15) identifies three types TVET training modes. These include training which occurs in comprehensive secondary schools (school based training), training which is fully encapsulated with in regular employment (training employees), and formal apprenticeship involving combinations of school based and work place experience. Another authority, Dougherty (1989: 18) divides the training modes of TVET as school-based vocational education, center-based occupational training, and apprenticeship schemes.

Thus, from the above classification made by different authorities, it is possible to categorize delivery modes of TVET into three distinct settings. These are:

1. School-based training
2. Enterprise-based training and
3. Apprenticeship training

2.3.1. School-Based Training

School based training is a type of training situated on the curriculum that balances general education and vocational subjects with combined theory and practice given within schools. School based trainings can only be expected at prevocational entry level skill that incorporates technical and vocational training (Lauglo, 1993: 17; Middleton and others, 1993: 33).

Vocational instruction is provided in different qualities and degree of depth in various types of training. School-based training is offered in schools that train through curricula and performed well on implementation criteria in which the larger share of student time is devoted to practical subjects and workshop training. It is comprised of class room and workshop instruction, with the sense of balance to general education subjects (Middleton and Terry, 1988: 4-6).

In developing countries, as Middleton (1988: 28) noted, school based training is employed in different secondary schools. These training have been designed to be integrated (with varying proportions of practical subject) in to secondary school curricula. Thus, using school-based training is the most cost effective way to meet skill training needs in developing countries. Moreover, as Gasscov (2000: 22) noted, it imparts knowledge and skill to many pupils simultaneously so that it can create the opportunity for rapid expansion of society's skill.

2.3.2. Enterprise-Based Training

Enterprise-based training differs from school-based training that it takes on work places and it aims to serve a firm's own needs for staff development (Lauglo, 1993: 47). It always occurs on-the-job, by being job specific, and often by being relatively informal even in the formal sector (Gill, and others, 2000: 21).

According to Grierson (2002: 22), enterprise based training subsumes employer-sponsored training during employment, including formal and informal on-the-job training and off-the-job training (but not training by employees at their own expense). It is important because it is directed at the current active labor force. It is market responsive, and a viable complement to existing public and private sector provision.

Enterprise-based training is used to address both firm-specific and general skill needs. In line with this Gasscov (2000: 24) states:

Enterprise based training entails the initial and continuing in-service training offered by enterprises to their employees throughout their working life. In most cases it consists of practical, on-the-job instruction. Irrespective of the educational level of employees, enterprise-based training normally adds little to their formal educational profile.

He further states that since this kind of training is often entirely financed by employers, it can only take hold in conditions of low labor mobility and smoothly developing markets. It is strongly influenced by the social and cultural traditions of employment and training. Moreover, the role of enterprises as providers of practical instruction to individual trainees, at the request of public authorities, is increasing.

A short coming of employment based training is that opportunity is restricted to those who are ready employed. Therefore, one cannot rely on such training in order to promote better quality of opportunity among groups in the wider society.

2.3.3. Apprenticeship Training

Apprenticeship scheme is the combination of school-based and company-based training that is managed through partnership. It is a way to transform a rigid, inward-looking, public TVET system. Apprenticeship training is a system that deals with actual work experience in any occupation, which

undertaken by a written agreement between the apprentice and the employer, that acknowledges their joint commitment in preparing a young person systematically for a trade for a specific period of time (Atchoarena and Delluc, 2002: 272).

As noted by MoE (2006a: 24), cooperative apprenticeship is a mode of training provided in partnership between enterprises and TVET institutions. In this scheme the bulk of practical training takes place in an enterprise while theory and initial practical exposure is provided by the institution. Hence apprenticeship programs fall half way between formal course work (formal in school training) and informal training schemes (Woodhall, 1987: 50).

Apprenticeship training program is an effective on-the-job training system and related instruction for skilled trade and journey workers. It is designed to prepare individuals for the practical and theoretical aspects of a highly skilled occupation and crafts and combines structured on-the-job training that are supervised by experienced journey workers with related classroom instruction. It is different from in-service training since in-service training is a training given to organizations' employee. On this issue Norton and Ryan (1999: 99) noted that, apprenticeship differs from 'in service' training in its orientation to youth entrants to the labor market and in involving specialized, training-related, fixed duration contracts. In-service training, on the other hand, based on work-related, indefinite-duration as well as employment focused training.

Apprenticeship training takes place without much difference from the real working situation. Therefore, apprenticeship offering organizations should be proper for the purpose of the training to be provided. To this end, Lauglo (1993: 36) stresses that, companies, which are physically dispersed and not subjected to government direction, need to be induced voluntarily to take on

apprentices and to provide training of some defined content. Special efforts and some degree of separate organization are usually required to provide systematic apprenticeship training within a firm.

In sum, strong apprenticeship system is helpful in gaining the experience of real world of work for trainees, in strengthening the relationship among the training institution, organizations and trainees, to understand the trade matters of the occupational community, the values of completing a job properly, self discipline, admiration for conscientious excellence so as the relevance and quality of training could be enhanced.

2.4. Apprenticeship Training: A Brief Historical Overview

Apprenticeship is unquestionably the oldest and universal tradition of passing skills to new generations. As such, in simpler societies as well as in our own, children learn to hunt, cook, weave, or repair cars primarily by watching, assisting, and imitating their elders (Francis in Zenebe, 2006: 43).

Apprenticeship establishes itself spontaneously with out formalized governing factors and particular demonstration for the training. To this end, Hanson and others (in Yekunoamlak, 2006) indicates that, learning by family heritage and learning spontaneously was not adequate for the transmission of knowledge for the needs of the society. To alleviate this problem, apprenticeship came into place during the middle age. During the middle age, the responsible body to impart apprenticeship training was the guilds association (association to protect the interest of members in the same craft). In this training system, the craftsmen were responsible to supervise youths based on the established specification while they are learning for any trade. The training and production are integrated towards the development of the apprentices into adult life in this training system.

Even though apprenticeship training does not get high attention to formalize the training, it has essential contribution in the production of labor force. As indicated in Atchoarena and Delluc (2002: 140), the endogenous mode of training of apprentices was for a long time ignored or scorned, even though these craft industries contribute in a large measure to national production, offering extensive employment opportunities as well as ensuring the major part of the maintenance of materials. They added that apprenticeship allows students to add hands-on experience to the primarily theoretical training they receive in their institution.

Nowadays, apprenticeship training in Africa is found more or less in the informal sector. According to Velenchik (1993: 1), African apprenticeship systems generally exist outside the formal educational system, with little interaction with vocational schools and neither control by nor intervention from government. Similarly, developed countries use this mode of training for a very long time as a major mode of training delivery. In German 'Dual system' of apprenticeship training supplemented by part-time vocational school, as it has developed in the post-war period, is internationally commended as an advanced version of apprenticeship training (Lauglo, 1993: 36).

Apprenticeship training leads to work in the past and even today in rural and urban part of any country. Grootaert (1988: 29) argues that in rural areas, apprenticeship lead people more to setting up their own business, relative to people with the same general education background but without apprenticeship training. Apprenticeship is highly heterogeneous. Two polar types may be distinguished, which we term for convenience the 'modern' and the 'traditional'.

2.4.1. Traditional Apprenticeship Training

In the early period of human history there were no formal institutions for teaching crafts or trades. Hence, family had significant role to teach their kids various types of trades in the process of productive activities.

In many European countries like Japan, traditional apprenticeship training was used to prepare youths for the labor market. To this end, Yekunoamlak (2002: 222) revealed that, in traditional apprenticeship; in ancient Japan apprentices get training by working with their masters and reside with the family of master. Moreover, Lauglo (1993: 31) hassles that, in the traditional European guild system apprentices were often provided with board and lodgings within their master's household.

In line with this view, Barlow (1965: 1) indicates that in early Jewish culture, the parents were ordered by law to teach trades to their children. Accordingly, the boys were taught religion in the morning and the father's trade in the afternoon.

In traditional apprenticeship, training was takes place by a parent or other family member, to the children of neighbors, and this was done in a formal agreements (not necessarily written) which offers an incentive to the master for taking on the apprentice and which clarify joint responsibilities. The agreement includes the length of the training period, conditions for terminating the arrangement, responsibility for maintenance, allowance and perhaps even fees (Dougherty, 1989: 14).

Inline with the above issue, Lauglo (1993: 31) indicates that traditionally apprenticeship is a type of on-the-job training. The apprentice, in return for the training received, contributes to the production. This cooperative relationship provides the basis for the apprenticeship contract and for the surrounding financial arrangements.

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other hand, the break down of traditional apprenticeship took place in countries remained and used as a base for the emergence of modern apprenticeship including the dual system of training. This approach is not discarded in the modern apprenticeship schemes. In line with this idea (Lauglo, 1993: 31) indicates that, traditional apprenticeship still exists side by side with modern apprenticeship in many developing countries.

As noted in Fluitman and Hans (2002: 25), traditional apprenticeship brings important skills to huge numbers of young people, particularly in West African countries. Thus it is possible to conclude that traditional apprenticeship training has great contribution in the development of modern apprenticeship training schemes.

To this end, Middleton and others (1996: 174) stated that, in many developing countries traditional apprenticeship is the major mode of training for traditional crafts such as blacksmithing, leather crafts and herbal medicine. Similarly, also it is used for training of modern trades such as automobile, appliance, radio repair. This apprenticeship exists wherever small firm owners are in need for fee to train a skill or trade that is in demand.

Therefore, like any other countries of the world; in many African countries including Ethiopia; traditional apprenticeship had a significant role in training of crafts or trades. Moreover, it still remained as one mode of training for traditional crafts and modern technical trades in small firms of informal sectors.

2.4.2. Modern Apprenticeship Training

Modern apprenticeship training is a training based on formal contract between an employer and a trainee, or apprentice; under the terms of this contract the trainee undertakes to work for the employer for a specified

period and the employer undertakes to provide practical experience and instruction which will allow the apprentice to attain the status of a skilled craftsman (Woodhall, 1987: 443).

Modern apprenticeship training is employer-based in-company training; a work-based method for learning and gaining qualifications. The training is mostly trade specific and is structured and recognized in-company training schemes, which lead to formal certificates (Munch in Norton and Ryan, 1999: 99).

As stated in (Laugo, 1993: 34) modern apprenticeship training saves the governments' cost of training because employers share most of the training cost. Therefore, it is considered as one of the most efficient cost effective mechanisms. In line with this, a study in countries showed that apprenticeship to be cheaper than and as effective as vocational schools.

Modern apprenticeship is a combination of course supplemented by trade theory in apprenticeship offering organizations and general subjects in a school or school like settings which may be organized in diverse ways (Lauglo, 1993: 32). Similarly, Norton and Ryan (1999: 99) give stress that modern apprenticeship training is delivered in addition to formal vocational schooling and it has formal structure based on the curriculum. Moreover, the training takes place based on educational and occupational background than simply a job-related content; and to craft, technician and even higher skills, rather than to immediate job requirements at semi-skilled level.

Unlike in traditional apprenticeship, where the apprentices must pay in order to gain access to the master's craft, in modern apprenticeship the apprentice in some cases is paid a wage-a more modest subsistence allowance, in return for his or her untrained labor (Metcalf in Zenebe, 2006: 46).

To sum up, modern apprenticeship training is a type of training takes place in real world of work in addition to the formal in-school training. It has a formal curriculum and implemented by joint participation of TVET institutions and apprenticeship offering organizations. Moreover, the apprentice will get modest allowance for their contribution in the production process. In addition to the above discussion, the difference between traditional and modern apprenticeship training is summarized below:

Table 1: Main Differences between Traditional and Modern Forms of Apprenticeship Training

Traditional Apprenticeship	Modern Apprenticeship
<ul style="list-style-type: none"> - It is not based on formal contract things are more informal - It doesn't lead to formal certificate - There was no legal regulation - It does not have formal structured scheme - Provided for illiterate and semi-literates - It has no link with formal education. What is taught depends on what is actually produced - No single government ministry has responsible to support, control or supervise - No competency based assessment produced - Apprentice must pay in order to gain access for the training 	<ul style="list-style-type: none"> -It is based on formal contract between an employer and trainees - It leads to formal certificate - It is regulated by law -It has a formal structure based on curriculum - It is provided in addition to formal schooling - The training is geared to skills with an education and occupational rather than simply a job-related content - It is supervised and supported by governments ministry - There is a trade test for trainees - Apprentices paid wage or modest allowance

* organized from the literature

2.5. Apprenticeship and Partnership

International recommendations for the better implementation of TVET systematically refer to the need for closer links between training and the labor market. This search for a better match between jobs and training is based on two-horned problems:

- The current labor market is often considered to be characterized by an acute shortage of skilled labor, as reported by many employers, paradoxically, many economies suffer, at the same time, from rising

unemployment, particularly among the young people leaving the education system, as reflected in graduate employment rates and

- The entire technological change requires workers to have novel credentials in order to perform the task required in modern sector and thus to raise their competitiveness (Poupard and others, 1995).

To cope with these two issues, TVET system must establish close links with enterprises to make it easier for graduates to make the transition from school to work (Atchoarena and Delluc, 2002: 58).

Every TVET institution can not deliver all training programs in isolation but are likely to be operating in an environment influenced by other players. In particular, these include other (public and private) training providers that offer industry-based apprenticeship training. TVET institutions must also do an assessment of the industry's ability to offer occupational training. This identifies opportunities that may then arise for the institution to deliver, cooperatively, off the job component of industry-based apprenticeship training (Gasscov, 2006: 110).

MoE/Ethio-German/ TVET program (2002: 8) indicates that, partnership is typical mechanism by which existing and future problems that can occur in the working environment will be solved, mostly by focusing on some types of training like: refreshment and extension training courses for employees engaged in a job; training of young apprentices; training for job seekers, and vocational training for those with low level of formal education.

Co-operation between TVET institutions and enterprises can come in several forms, ranging from sandwich training to collaboration in research and development that enhances the system's efficiency and effectiveness. To this end, (Gasscov, 2006: 110) stresses that the value of apprenticeship training is largely dependent on the degree of competence displayed by the parties that are responsible for the training, such as the employers willingness and

the organizers ability to organize the training. Trainees will acquire sufficient skill on their field in the industry training that is given in collaboration between TVET institutions and apprenticeship offering organizations. Regarding this, UNESCO (1968: 48) states that, close collaboration must be developed between TVET institutions and industry to carry out practical trainings that must be carried out for the training of technicians in industry and sandwich programs.

The partnership between the organization and apprentice in addition to the TVET institutions will have some benefits for the apprenticeship offering organizations. According to Velenchik (1993: 6), the apprentice, in addition to learning his/her trade, she/he provides labor service to the firm. The apprentice firm relationship therefore, include two types of transactions, one being the provision of labor services by the apprentice to the firm, the other being the provision of training services by the firm to apprentice. Participation of business and industry, labor unions and non-governmental organizations is very important in the developmental process of training with cooperation in TVET (Kroner, 2002: 1).

Apprenticeship offering organizations and TVET institutions must be participated in all aspects of training. As indicated in Middleton and Terry (1988: 73), enterprise played active roles in curriculum and enrollment decisions and apprenticeships. What may be most important is the consistency of commitment in training agencies to the importance of these linkages. Moreover, getting together all the partners involved in the decision that affect them is increasingly an efficient approach towards improving the functioning of training systems. Participation of stakeholders means giving them the institutional capacity to influence policy making and management as well as to control activities and resources (Atchoarena, 1996: 23).

In sub-Saharan Africa apprenticeship, is one form of cooperation between enterprises and TVET institutions. Apprenticeship allows young trainees to absorb the social and occupational conditions of their chosen specialization via a first contact with the business world. They, thus, allow students to add-on experience to the primarily theoretical training they receive in their institutions (UNESCO, 1996: 30).

The employment of qualified staff is the essential point of cooperation for all partners. It is argued that professional instructors with good technical and pedagogical skills are central to quality. Hence, some institutions make use of instructors from private sectors chosen for their competence to teach specialized courses. In the context of developing co-operation between training institutions and enterprises, some countries consider that teachers training should be conducted in cooperation with business via the inclusion of the hands-on training courses in firms (Atchoarena and Delluc, 2002: 62).

Partnership can be fruitful when enterprises believe that this is the best way in which to provide for their own need for skilled staff, and because an experienced, carefully trained skilled staff is necessary in order to maintain and increase their own performance and competitiveness.

As stated in MoE/Ethio-German/ TVET program (2000a: 11), employer organizations contribute to the enhancement of the training program. These include:

- Providing opportunity for apprenticeship;
- Cooperating in the planning and directing of the training program;
- Assisting in the designing of curriculum;
- Supply of machinery and materials required for training purpose.

According to the document, the government is expected to devise various incentive mechanisms to initiate and encourage the cooperation of the private sector in apprenticeship. Some of the incentive mechanisms include:

- Letting buildings to be used for apprenticeship purposes at low price;
- Providing land free of charge for employer organizations to be involved in apprenticeship;
- Allowing tax free imports of material required for training program; and
- Establish tax policy on training and relieving employer organizations involved in apprenticeship from such tax payments, etc

In a nut shell, apprenticeship and partnership are very important concepts in TVET provision and specifically one supports the other. Hence partnership of different organizations with TVET institution in planning, monitoring implementing, evaluation and improvement for apprenticeship training provision is a necessity. Moreover, the government also should be able to encourage small entrepreneurs by forming suitable economic environment such as access to credit, provision of inputs, arrangements of markets for their product, developing infrastructure and providing technical support.

2.6. Managing Apprenticeship Training

As organizational structure and the extent of operations become more complex, the need for more sophisticated techniques of management is mandatory. This makes the total work divide into manageable components in order to facilitate the accomplishment of objectives as it is desired. There is a considerable variation among countries in their preferred ways of management for TVET at all levels. However, it is usually the state which is held responsible to coordinate the training policy with other government initiatives and decisions (Atchoarena and Delluc, 2002).

Management of TVET at institutional level appear to have different forms depending on factors such as sharing of responsibilities between various stakeholders, funding arrangements, degree of centralization, and functions operated by national agencies (Atchoarena and Hite, 2001).

As mentioned in Gasscov (2000: 25), routine management activity consists of decisions regarding programming and planning, budgeting and financing, staffing, and monitoring the performance of units and individuals. Thus, effective management requires policies on planning, human resources, resource allocation, wages and other matters.

To have effective management in TVET system, the managing board should comprise different stakeholders from different sector of the economy. As indicated on MoE (2006a: 38), those successful TVET systems are governed by stakeholders who approve important decisions on policy directions and quality management and supervise their implementation. These are often tripartite organization consist of, employers, employees and governmental representatives from various sector in equal numbers.

The experience from Jordan shows that, the board of the vocational training corporation in Jordan is linked to the prime minister's office. Chaired by the minister of labor, it includes representatives of other ministries, employers, and workers. Financing is provided by government budgetary allocations, with significant cost-sharing from enterprises. Individual training centers have considerable authority over curriculum and enrollments (MoE, 2006a: 54).

In sum at any hierarchical level of TVET management the participation of relevant stakeholders in general and that of employers in particular should not be over looked. Because, the relevant stakeholder's participation starts from planning to evaluation, it has great importance in adjusting the program

to the changing labor market. Therefore, periodic assessment of the management aspect of the scheme is crucial to keep pace on truck of the program improvement.

2.6.1. Planning for Apprenticeship Training

The purpose of planning is to establish objectives and translate them into a schedule of operational activities for a set of period of time and this will permit budgeting and the distribution of resources. All training providers should be encouraged to plan apprenticeship training accordingly or they can also establish special units to work with partnership.

As indicated in Daft (2003: 226), currently the process of planning is changed. Traditionally, planning has been the domain of managers. However, in today's workplace, managers are not the only responsible in the planning aspect since every stakeholder becomes involved in the planning process. The planning of apprenticeship training should be done through participation of various stakeholders. These stakeholders include TVET institution, trainees and industries and it may extend to the local communities and to the government as initiator and regulator (Gasscov, 2006: 112).

Atchoarena and Delluc (2002: 257) asserts that, in earlier days of state planning, government used to allocate resources to TVET according to public-sector objectives and priorities, with no or little involvement of other partners. The failure of this old style of planning has led many African governments to seek partnership with labor market stakeholders with a view to bringing the supply of training closer to enterprise and labor market needs.

According to Gasscov (2000), the major planning issues in apprenticeship training include:

- The number of training places;
- Total enrollment and enrollment per program;

- Enrollment of targeted populations; and
- Outputs (number and type of qualifications to be produced) and schedules for producing them.

Besides, coordination and exchange of training personnel with enterprises can improve the planning of its training programs (MoE/Ethio-German/TVET program, 2000a: 4).

Available literatures on apprenticeship training contends that apprenticeship training plans should comprise the working tasks to be trained, the objectives of apprenticeship training, the training venues, the allocated time and some advice regarding suitable training methods (MoE/Ethio-German/TVET program, 2002: 9-10). It is further stated that, the training plan should not repeat all tasks of the curriculum but focus on the most important and on those the company can realize or those the TVET centers was not able to train. The training plan should be prepared by the people who are responsible to conduct and/or supervise apprenticeship training within the company.

As stated in World Bank document (1991: 26), planning for skills supply is often driven by manpower requirements forecasts that do not take market forces in to account and thus yields inaccurate predictions of skill needed. Therefore, Gasscov (2006: 43-44), points the most external data for apprenticeship planning need to come from:

- Industry training organizations rooted in the industry;
- Government statistics from the MoE, labor ministry, or ministry of economic and from their regional agencies;
- Local employment services.

The training plan gives orientation for both the supervisor or instructor and trainees. It is highly recommended to prepare a training plan to integrate

training into the normal workflow and to check training feasibility based on its objectives and time consumption.

Effective planning takes place over two different time scales:

- Long-term strategic planning, which gives effect to the governing council's vision for the TVET institution, its agreed mission, and its long-term strategic development;
- Short-term (annual) business planning, which determines the provider's training delivery for the forthcoming academic and financial year (Gasscov, 2006: 112).

TVET institutions are arguably better placed to make sound decisions on training plan and delivery because they are more likely to be aware of the choices of students and the skills needs of local industries. Those capabilities should, however, be supported by national TVET governance and funding arrangements, which provide incentives for institutions to respond to local and national training needs and to help their graduates achieve high employability (Gasscov, 2006: 94).

As noted in Gasscov (2006: 113), Successful TVET institutions need to oversee and monitor trends in the external and internal environments. The role of their planners is to interpret and predict the future training market. Their research and expertise lie in detailing emerging trends and, as importantly, forecasting trend breaks. They examine regional and national research data and liaise with the major vocational education and training funding (purchasing) body. Institutional planners work with senior management to shape their training delivery profile in order to ensure its sustainability and financial return.

As stated in MoE/Ethio-German/ TVET program (2000a: 13) document, in addition to formulation of laws and regulations, the organization or

institution to be commissioned for the administration and management of technical and vocational training programs should set out the action plan required for implementation of the apprenticeship task. The preparation of the action plan shall include the following activities:

- Based on the type of vocation required in the economic activity, identify the type of vocation in which apprenticeship is required;
- Identify organizations that can give apprenticeship services and determine the standard of the organizations eligible for the service;
- Establishing criteria for apprenticeship;
- Determining the content and standard for apprenticeship and
- Setting conditions under which apprenticeship contracts can be registered.

All in all the need for apprenticeship training plan on the side of TVET institutions and apprenticeship offering organizations is unquestionable. The training plan may be done in isolation by the training providers or in collaboration. It must consider the existing situation for the supply and demand for the training.

2.6.2. Human and Material Resource in Apprenticeship Training

Managers use strategic, tactical, and operational targets to direct employees and resources towards achieving specific outcomes that enable the organization to perform efficiently and effectively (Daft, 2003: 218).

Managing resource for the training purpose should be based on planning that facilitates the training progress. As indicated in Saiyadain (2005: 52), resource plan helps to avoid sudden disruptions in an enterprise's production, since it indicates the gap between the existing and the needed of personnel, and material in an organization if any, in advance and enable the management to adopt suitable strategies to cope with the situation.

Guidance and counseling service is a vital to facilitate the planning and implementation of apprenticeship training. To this end, UNESCO (1996: 104) stresses that; guidance and counseling enables individual trainee to identify and appreciate their potential inclination towards growth, career development and self-actualization.

Guidance and counseling plays a significant role in production and dissimilation of information to aware all clients of TVET in general and apprenticeship in particular. Therefore, due attention should be given to the activities of guidance and counselor in the training institution, so that its contribution to the quality and relevance of the training is indispensable.

The material resources of apprenticeship training are factors relating to economy and the working environment, like facilities, equipment, machinery, and materials. From the viewpoint of management, it is essential to have a plan for all resources that is used for apprenticeship training.

The shortage of material resource in apprenticeship training and the high cost of TVET are due to a smaller class size and to the need for expensive equipment, facilities and teaching material (Atchoarena and Delluc, 2002: 46). Moreover, the effective delivery of TVET requires that providers not only have adequate teaching space but also adequate teaching aids and proper range of equipment (Gasscov, 2006: 266).

To sum up, to improve the quality, effectiveness and efficiency of trainings that can respond to the dynamic labor market situation; considering the availability of human and material resources for the trainings by the TVET institutions and apprenticeship offering organizations to be provided has a paramount importance.

2.6.3. Financing Apprenticeship Training

Government finance education systems for several reasons some of these are: education raises labor productivity, reduces infant mortality, helps to improve the health of individuals and is often associated with lower fertility rates. Generally, education contributes both to the welfare of individuals and to the economic and social growth of countries (Atchoarena and Esquirol, 2002: 39). Therefore as indicated in Atchoarena and Delluc (2002: 44), that today, governments in Africa are forced to make difficult choices to control spending on education, which absorbs a large share of overall government budget.

TVET programs are expensive to run when compared to general education. It has been estimated that the cost of one technical school is equivalent to two or three schools offering general education. Previously, governments undertook total responsibility to finance TVET with some assistance from donor agencies (UNESCO, 1996: 20-21).

The private sector must be participated in financing TVET. To this end Gasscov (2006) stresses that, investment of TVET should be delivered by both public and private providers in order to achieve economic and social policy goals. It could be argued that, without such investment, there would be under-investment in education and training for the economy as a whole or for particular sections of society.

A fair participation of all stakeholders in matters of vocational training will lead to a larger and stronger financial participation of employers and other stakeholders. If employers are participating in the development of their own future staff they will be interested in financial participation. Financial assistance could be given in the form of allowance for trainees, by covering other expenses and through support of training centers, for example, sharing

and donation of training machinery and equipment to TVET institution (MoE/Ethio-German/ TVET program, 2002: 6).

To achieve the objectives of TVET government financing is not enough. Therefore, diversifying the financing system is mandatory. To this end, Middleton and Terry (1988: 57) hassled that, movement away from direct government financing towards a variety of alternative financing policies has accompanied the development of most national systems. Nowadays cost sharing between beneficiaries become an integral part of the TVET financing system. Raising awareness of the need for cost sharing will be one of the initial tasks. Different methods of cost sharing have to be developed as a major task of the TVET bodies including all related parties. The introduction of a training levy can constitute a significant trend towards increasing employer's participation in training issues. Moreover, sharing the training investment, so that workers and firms bear some of the costs and capture some of the benefits, avoids inefficient separation decisions by both parties.

Supporting this ANRS (2002: 24) noted that, a comprehensive TVET system, which covers not only the formal center-based and public funded training needs an extensive financing and funding system to share the cost between all beneficiaries. At the present time, the government is the main funding agency but it is unlikely to be able to meet the recurrent costs.

Even if the government would be able to increase funding of TVET programs on a large scale it would be impossible in the long run to be flexible enough and to modernize the training facilities in turn with changing technical requirements. Therefore, it is essential to involve Public and private employers, Trainees, local and international NGO's, and Local communities. Ziderman (2003: 12-13) put four different ways of funding, these are:

1. Fund augmentation: Public sector training funds available for supporting training institutions via financial assistance may be

- increased from other sources. The classic method is to impose special taxes, earmarked for training.
2. Cost sharing: Training costs may be shared with the beneficiaries of training, mainly by introducing training course fees or by raising them to levels that are more realistic. These measures will allow a reduction in public subsidies for training.
 3. Income generation: Training institutions may seek income from other sources, such as by selling products or combining production with training or renting out facilities.
 4. Private training provision: Developing private training institutions may be encouraged, thus generating additional funding for training and, in parallel, reducing the call on public funds. This approach is especially relevant where expanding the training system is desirable.

Thus, this funding approaches help government in diversifying the source of finance for TVET institutions and enable apprenticeship programs to be held properly.

In sum, to improve the quality, effectiveness and efficiency of the training that can respond to the dynamic economic situation of the country; considering the socio-economic status of the country diversifying the source of finance for the training on the side of government as well as employers has importance.

2.6.4. Monitoring Apprenticeship Training

Modern apprenticeship involves internal mechanisms for monitoring the progress of the training in the enterprise-informal and formal monitoring. According to the information guide for apprenticeship training compiled by MoE/ Ethio-German/ TVET program (2003), ideally there should be a balance between periodic formal performance reviews and informal daily observation and feed back. The rational behind these two forms of monitoring is that, on the one hand, informal daily observations and feedback builds

confidence, allows on time action wherever problems may occur, and informs apprentice to know where she/he stands; and on the other hand, regular formal performance reviews, which involve the apprentice, the supervisor help in identifying strengths and weaknesses of the apprentice and the training program; and in determining training requirements.

According to MoE/Ethio-German/ TVET program (2000a: 11), the TVET training center should assign a coordinator for apprenticeship training. The apprenticeship coordinator at center level is responsible for all matters of apprenticeship organization. This includes:

- Identification of areas and suitable companies or organizations for apprenticeship training;
- Preparation of apprenticeship programs and communication with companies and other stakeholders;
- Promotion of apprenticeship training programs;
- Evaluation of apprenticeship training programs and trainees.

As Daft (2005: 344) argues, the organizations need systems to process information and enable communication among people in different departments at different levels. He puts organizational monitoring as the systematic process of regulating organizational activities to make them consistent with the expectations established in plans, targets, and standards of performance. The basic method of operational control is to compare the actual course with what was planned. Atchoarena and Delluc (2002: 61) directs to control the training progress, the company training officer should also receive curricula instructions from the TVET institution about method of monitoring and evaluating the apprenticeship of the trainee concerned.

Monitoring should focus on events before, during, or after a process. Controlling is determining what is being accomplished- that is, evaluating the

performance and, if necessary, applying corrective measures so that the performance takes place according to plans (Terry and Franklin, 2005: 422).

The TVET institution therefore, should assign a supervisor to control the progress of the training. To this end Gasscov (2006: 55) stresses that, the development of day-to-day supervision of academic aspects is usually seen as the responsibility of the TVET institution.

2.6.5. Evaluation in Apprenticeship Training.

The more vocational training is tied to the real world of work by in-company training the more the evaluation and testing done by the employers becomes important.

Evaluation of trainees in apprenticeship training will draw a real picture of the trainees' performance and their achievements according to the objectives as well as whether the whole training program fits with the needs of the labor market. Evaluation of trainees during apprenticeship training will also give feedback about the performance of the TVET training center (MoE/Ethio-German/ TVET program 2000a: 5).

As noted in Gasscov (2006: 111), TVET institutions should monitor students learning progress expressed as achievements, completion rates, and the graduate post-training destination during the training period.

According to Gasscov (2006: 296), the process of measuring trainee's performance should be conducted:

1. through the duration of a course to monitor trainee's progress, to provide students with information on how they are performing, and perhaps to enable staff to intervene if trainees are not coping with the demands of the course and

2. At the conclusion of a course to determine whether trainees have met the course's requirements for successful graduation and, if so, are entitled to recognition of their achievement by appropriate certification.

Similarly, Norton and Ryan (1999: 100) stresses that, evaluating procedures in modern apprenticeship involve trades tastes unlike school based mode of TVET provisions, which prepares trainees only for internal or in school examinations. To this end, modern apprenticeship prepares the apprentices for trade tests, and those who pass this test are awarded a certificate of completed apprenticeship.

Apprentice's progress, both in job performances and related instruction is evaluated periodically and appropriate records are maintained. The apprentice is supervised during the term of the apprenticeship by a skilled craft worker(s). The supervisor reviews, evaluates and maintains records relating to the apprentice's job performance (Norton and Ryan, 1999: 100).

In sum, continuous and final evaluation of the training should be made by both trainers and company supervisors, with the participation of students as well, in order to determine the effectiveness of the methods and materials used, and to devise alternatives that should be undertaken with the participation of representatives from the occupational fields concerned.

2.7. Practices of Apprenticeship Training in Ethiopia

2.7.1. The Emergence of Technical and Vocational Education and Training in Ethiopia

Education in its traditional form has a long history in Ethiopia. However, the education system was predominantly religious and was intended to serve the manpower need of church and the state. Available sources indicate that there

was no significant sign of vocational training at that time (Girma and others, in Yekunoamlak, 2002: 226).

Education in Ethiopia is expanded as it happened in other African countries. As early as 1972 Emil Raddo expressed the concept that, contrary to the views held by many African countries including Ethiopia, the expansion of the general education system was not necessarily result in economic development (Tekeste, 1990: 9). In line with this idea, Teklehaimanot (2002: 6) asserted that, despite the intention of the government to develop technical skills in the country, the subjects that students were taught in the schools were basically academic. This is because the primary and immediate objective of preparing educated Ethiopians was mainly for various clerical and administrative purposes.

The development of TVET in Ethiopia has an age of half a century. Modern TVET programs that train young people for different skills were bring to Ethiopia in the near the beginning of the 1940s (Science and Technology in Africa in Wanna, 2000: 59).

As indicated in MoE/Ethio-German/ TVET program (2000b: 62-68), the development of TVET in Ethiopia has classified in to four eras. The first is from 1900 to 1927E.c. that modern education and technology was introduced to Ethiopia with the military and diplomatic relations made with the advanced European countries through Emperor Menilik.

The second era is starting from 1934 to 1966E.c. During this period, vocational and technical training schools were reestablished and Addis Ababa technical school was opened in 1934E.c. Thus, the MoE and fine arts used to admit students that have the interest for vocational training after successfully completing 8th grade in academic education.

The third era is from 1967 to 1983E.c. Until 1968E.c. TVET were under the supervision of a special organ within the MoE. However, a circular was passed on May 12, 1968E.c. announcing the establishment of the NTVETC under the MoE. The council was required to supervise and coordinate the activities of TVET schools and institutions at national level to improve fields of training and control cost and utilize trained manpower.

The last era is from 1984E.c. up to now. This is the time when Ethiopia's government gave high emphasis to TVET since government felt that the past country's education system does not able to solve the real problems of society. Therefore, in order to overcome the problem of unemployment, the government is establishing TVET institutions in various regions of the country.

Following the new middle level TVET programs, an industrial attachment period has been introduced to formal TVET. Apprenticeship is a cooperative training system based on reflective cooperation between TVET institutions and employers and joint training delivery still needs to be developed in order to increase the quality of TVET and enhance the employability of graduates.

2.7.2. Policy Framework and Guidelines in Apprenticeship Training

There is an increasing need to adjust policies related to TVET in general and apprenticeship in particular. That is in conformity with the existing need for skilled labor in any given country and the consequences of the level of economic and social development.

The World Bank's 1991 policy paper on TVET offers guidelines to support this sector to develop according to the needs of the economy. The World Bank's recommendations focus on encouraging private training programs and

increasing the effectiveness and efficiency of public training programs (World Bank in Atchoarena and Delluc, 2002: 50).

Countries which have mainly depended on industry-based training in employment (Japan, Korea) have sought to strengthen such training by legislation, incentives, or supplementary institutional training (Lauglo, 1993: 68).

As a developing country, Ethiopia, this has a small modern sector that encompasses less than 15 percent of the total labor force, which exhibits lower qualification. Moreover, thousands of young people leave schools without having any salable skills and swell the army of unemployed (Wanna, 1998: 63).

According to MoE/Ethio-German/ TVET program (2000b: 1), the development and progress in the field of TVET was not to the desired level and quality, owing to failure to give proper place and emphasis to the fields of training. Although efforts have been underway to provide vocational and technical training in some institutions, the issue of coordinated training program in terms of quality and coverage has not been tackled. As a result, the existing training system, which was not based on the economic development trend of the country, could not generate a workforce initiated for creativity and capable of supporting the economic development.

With view to the prevailing the problems mentioned above, the government promulgated a new training policy. The policy accords special attention to TVET. In order to implement the policy and develop qualified manpower base of the country, designing TVET system was essential; in settlement to this policy TVET programs started to function.

Following the Education and Training Policy (ETP) of 1994, a proclamation is launched for the provision of TVET with particular reference to apprenticeship training. The proclamation is entitled Technical and Vocational Education and Training Proclamation by the proclamation no. 391/2004. Moreover, a TVET strategy was also announced in the year 2006 with the view of restructuring the system to broaden its success.

2.7.3. Duties and Responsibilities of Stakeholders in Apprenticeship Training

Apprenticeship is a combination of on-the-job training and related instruction in which apprentices learn the practical aspects of a highly skilled profession. Moreover it is based on the agreement made between training institution, training companies and the apprentice. To apprehend the overall advantages, the apprenticeship training it requires careful preparation and a common effort from all concerned stakeholders. The success of the program is dependent upon all stakeholders working collaboratively based on law to achieve a successful outcome for the training. To this effect, every stakeholder has to be aware of his share and his certain task. Inline With this, the Ethiopian government has passed proclamation on TVET in general and on duties and responsibilities of various stakeholders in particular. Moreover, MoE/Ethio-German/ TVET program establishes the requirement of apprenticeship training to get to its culmination. The Federal Negarit Gazeta, (No 391/2004: 2560-2562) and MoE/Ethio-German/ TVET program (2002: 7) identified the duties and responsibilities of different stakeholders hereunder.

2.7.3.1. Duties and Responsibilities of Training Companies

Every training company that is selected for apprenticeship training shall have duties and responsibilities mentioned below:

1. Receive and provide apprenticeship training to trainees;

2. Assign the apprentice in the place appropriate to his training and to ensure that the apprentice acquires proper work experience;
3. Assign a capable supervisor who would enhance the knowledge and skills of the apprentice, and should follow up and evaluate the day-to-day performance of the apprentice;
4. Develop a training plan based on the curriculum and prepare the workplace;
5. Give orientation about the rules and regulations, methods of the organization and advice about safety rules;
6. Consider the trainee as a regular employee and to provide him the necessary inputs;
7. Respect and enforce human dignity of the apprentice;
8. Supply necessary working and training materials;
9. Evaluate and mark the performance of the apprentice and transmit the results to the training institution;
10. By inspecting the skill that he acquired, forward opinion to the concerned organ as to the competency of the institution;
11. Cooperate and work in coordination with training institution.

2.7.3.2. Duties and Responsibilities of Training Institutions

Regarding apprenticeship training, every training institution shall have duties and responsibilities as provided hereunder:

1. Identify employers and organizations suitable for apprenticeship training;
2. Prepare students for the workplace through relevant work readiness classes;
3. Support the employer and give advice on how to organize the apprenticeship training;
4. Assign a coordinator who shall follow up and control apprenticeship training undergone by trainees;

5. Prepare operational guidelines and detailed programs for their implementation, to cooperate and work in coordination with organizations;
6. Follow up and evaluate whether the trainee has been trained according to the designed plan;
7. Utilize result of performance evaluation relating to apprenticeship training as a criterion for certification;
8. By receiving opinion from the organization, improve the quality of training.

2.7.3.3. Duties and Responsibilities of Apprentice

Every apprentice shall have duties and responsibilities as provided hereunder:

1. Work according to the rules and regulations of the employer;
2. Diligently perform the apprenticeship training;
3. To utilize with care and economy tools, equipment and materials supplied to him for training purposes;
4. Be punctual and disciplined and perform the tasks in an appropriate manner;
5. Do not to reveal to any other person work secrets of the organization that he acquired in the course of his apprenticeship training;
6. Immediately inform the concerned body, when he becomes aware of any event or fact which may affect the interests of the organization;
7. Report the daily activities to the supervisor or instructor of the employer for evaluation.

The stated duties and responsibilities of stakeholders for apprenticeship training are essential to make the system effective. Therefore, to have effective management of apprenticeship training, all stakeholders must perform their duties and responsibilities in a participatory approach for the realization of the program.

2.8. Problems in Conducting Apprenticeship Training

Apprenticeship programs often cited as strength area, the training takes place with countless constraints in many countries. Apprentices should work under close supervision of both parties concerned for that they encouraged to observe and assist the trainee during training. However, there exist no systematic methods for supervision between the two parties (FDRE, 2000: 11). Moreover, governments have long been reluctant to establish a bridge between public TVET institutions and the informal sector (Atchoarena and Delluc, 2002: 272).

On the other hand, among the common constraints of apprenticeship are: problems in assessment, shortage of trainers, high costs and demanding management requirements for establishing such subjects and meeting logistics needs for materials, and maintenance and repair of equipment (lauglo and Lellis in Masresha, 2004: 44).

In addition to the above constraint, UNESCO (1996: 31; 1983: 14) put problems in developing countries. These include reluctance of the enterprise, lack of an effective industrial attachment management mechanism, inappropriate methods of assessment, lack of appropriate work-places and qualified supervision and inadequate incentives for trainees as well as for the enterprise. Furthermore, apprenticeship placement was found to be difficult because company owners and other employers were worried about space restraint (low capacity), wastage of materials, and risk of insurance during the training. The connection between TVET institutions and apprenticeship offering companies was also weak (Yekunoamlak, 2002: 231).

Training institutions do not have well-organized process for assigning apprenticeship to trainees, in most cases, trainees 'negotiate' their training individually and the institution merely approves their applications. As a

result, trainees are not closely monitored, and no evaluation is made of their performance and behavior during apprenticeship (Atchoarena and Delluc, 2002: 61). Besides, the cooperation between the TVET institutions and industry appears to be inadequate. One draw-back of this situation is that industry does not give full support to the training given and generally does not consider the quality of the training as the main objective (Mahlberg, 1975: 9).

CHAPTER THREE

3. PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This part of the study deals with the presentation and interpretation of data gathered from school officials (this includes principals, trainers and vocational counselors) and trainees in the TVET institutions, company supervisors in apprenticeship offering organizations, zonal TVET officials and documents. The data and information obtained through questionnaires, interview and documents were analyzed and interpreted in view of the basic questions raised in the first chapter.

Accordingly, out of 53 questionnaires distributed to school officials 51 (96.2%) and out of 275 questionnaire distributed to trainees 268 (97.5%) were filled and returned. And from 60 questionnaire distributed to company supervisors in apprenticeship offering organizations 53 (88.3%) were filled and returned. Based on the responses obtained from the respondents, the analysis and interpretation of the data is presented immediately following each table.

3.1. Characteristics of Respondents

Table 2: Description of Trainees by Sex, Age and Major Field of Study

No	Characteristics	No	%
1	Sex		
	Male	117	43.6
	Female	151	56.4
	Total	268	100
2	Age		
	15-20 years	227	84.7
	21-25 years	35	13.0
	26-30 years	6	2.3
	31 years and above	-	-
	Total	268	100
3	Major field of study		
	Business Education	113	42.2
	Textile and Garment	6	2.2
	Hotel service and Beautification	4	1.5
	Construction Technology	49	18.3
	Industrial Technology	96	35.8
	Total	268	100

Table 2 was constructed with the intention of presenting profile of trainees with particular emphasis on their sex, age and major fields of study. As indicated on item one of Table 2, majority 151 (56.4%) of trainees were females and 117 (43.6%) of them found to be males. This shows that the participation of females in TVET is better than their male counterparts. Thus, from these increase in participation, it sounds logical to infer that females have better participation in TVET than males. This indicates that the government's plan to raise the number of females in TVET is to some extent maintained in North Gonder Zone.

Regarding the major fields of study, item three of Table 2 depicts that majority 113 (42.2%) and 96 (35.8%) of trainees were enrolled in Business Education and Industrial Technology. Where as, a small portion of enrollment 6 (2.2%) and 4 (1.5%) is exhibited in Textile and Garment and Hotel service and Beautification, this is true not only in the sample trainees but also in all TVET systems. The miniature enrollment in Textile and

Garment and Hotel service and Beautification indicates that there is unequal proportion of enrollment in all fields of TVET. Furthermore, female's participation in traditionally male dominated fields were very low and most of females were participated in female dominated fields such as Business Education and Hotel service and Beautification. This implies that the participation of females in the industrial sector is very low. To have reasonable enrollments in the entire field of TVET, much needs to be done in increasing trainees and their parents' consciousness that all fields of study have equivalent worth in the world of work.

Table 3: Description of Implementers by Sex, Age, Qualification, Work Experience, and Major Field of Study

No	Item	Respondents					
		S.officials*		C.supervisors*		Total	
		No	%	No	%	No	%
1	Sex						
	Male	42	82.3	41	77.4	83	79.8
	Female	9	17.7	12	22.6	21	20.2
	Total	51	100	53	100	104	100
2	Age						
	21-25 years	10	19.6	9	16.9	19	18.3
	26-30 years	15	29.4	17	32.1	32	30.8
	31-35 years	13	25.5	14	26.4	27	25.9
	36-40 years	7	13.7	8	15.1	15	14.4
	41years and above	6	11.8	5	9.5	11	10.6
	Total	51	100	53	100	104	100
3	Qualification						
	Certificate	1	2.0	3	5.7	4	3.8
	Diploma	37	72.5	39	73.6	76	73.1
	BA/BSc	13	25.5	11	20.7	24	23.1
	MA/MSc	-	-	-	-	-	-
	Total	51	100	53	100	104	100
4	Year of service						
	1-5 years	11	21.6	13	24.5	24	23.1
	6-10 years	19	37.3	19	35.9	38	36.5
	11-15 years	12	23.5	10	18.9	22	21.2
	16-20 years	5	9.8	6	11.3	11	10.6
	21 years and above	4	7.8	5	9.4	9	8.6
	Total	51	100	53	100	104	100
5	Major field of study						
	Business education	16	31.3	-	-	16	31.3
	Textile and garment	3	5.9	-	-	3	5.9
	Hotel service and Beautification	4	7.8	-	-	4	7.8
	Construction Technology	11	21.6	-	-	11	21.6
	Industrial Technology	13	25.5	-	-	13	25.5
	Psychology	1	2.0	-	-	1	2.0
	EdPM (Management Training)	-	-	-	-	-	-
	Others	3	5.9	-	-	3	5.9
Total	51	100	-	-	51	100	

* S. officials = School officials

* C. supervisors = Company supervisors

Table 3 was prepared to present the characteristics of individuals participated in the management and implementation of apprenticeship training; school officials (S. officials) and company supervisors (C. supervisors).

As indicated on item one of Table 3, the great majority 42 (82.3%) of school officials and 41 (77.4%) of company supervisors were males. only 9 (17.7%) of school officials and 12 (22.6%) of company supervisors were females. This indicates that the participation of females in modern sector is negligible. Therefore, it is possible to infer that traditional dominance of males is still exists in the modern sector of the economy.

Concerning the qualification of school officials, item three of Table 3 depicts that majority 37 (72.5%) of school officials had a college diploma and only 13 (25.5%) of them are first degree holders who fulfill the minimum requirements for the TVET as per the proclamation declares.

The quality of apprenticeship training depends to a considerable extent on the capability of workplace supervisors who train and guide trainees throughout the training. Item three on the same table depicts that, the great majority 39 (73.6%) of company supervisors had a college diploma, this puts in question the competency of supervisors to administer the training as the curriculum demands. To this end, it is possible to deduce that qualification might have an effect on the aspects of management as planning, organizing, evaluating and monitoring that have an impact on the management of the training.

Regarding the service years of respondents, item four of Table 3 indicates that, 40 (78.4%) of school officials and 40 (75.5%) of company supervisors had more than five year work experience. The longer the years of service explains that they acquire sufficient knowledge and skill through their longer

years of service. Thus, from this it can be deduced that school officials and company supervisors can pass adequate theoretical and practical training for trainees.

Activities performed by school officials depend on the relevance of their major field of study to their activity in TVET institution as well as in apprenticeship training. To this end, school officials were asked to specify their major field of study with their position in the institution.

As indicated on item five of Table 3, from school officials in TVET institutions, all trainers were trained with the appropriate field of training that makes them to play their roles and responsibilities effectively throughout the training. On the contrary, all school principals do not have the right training to the position they hold; that is from Educational Administration (Educational planning and management). In addition to this, only two of them had TVET background that may help to some extent to perform their tasks. This put the ability of principals in managing the TVET institutions as well as apprenticeship training in question. Similarly, only one vocational counselor has dependable training for the task he is engaged. Others do not have the proper training to give guidance and counseling services for trainees during apprenticeship training. This indicates that the assignment of principals and vocational counselors was not based on their major field of study. Therefore, it is possible to infer that the task of principals and vocational counselors that must be performed in managing apprenticeship training is not well recognized.

Table 4: Profile of the organizations participated in the provision of apprenticeship training

No	Item	No	%
1	What type of business your organization has?		
	Manufacturing	6	11.3
	Trade	17	32.1
	Service	30	56.6
	Total	53	100
2	What type of ownership your organization has?		
	Government	35	66.0
	Private	18	34.0
	NGO	-	-
	Total	53	100
3	How many trainees can you take on for apprenticeship training for one training period?		
	1-3 apprentices	39	73.6
	4-7 apprentices	8	15.1
	8-10 apprentices	6	11.3
	11 and above	-	-
	Total	53	100

Table 4 was constructed with the purpose of giving basic background information about the type and capacity of organizations participated in apprenticeship organizations. From these organizations, 30 (56.6%) of them were service rendering organizations and 17 (32.1%) of the organizations were from the trade sector and 6 (11.3%) of apprenticeship offering organizations were manufacturing organizations. This indicates that service rendering organizations were active participants in apprenticeship training. As indicated on item two of Table 4, majority 35 (66.0%) of apprenticeship offering organizations were governmental organizations. Where as, 18 (34.0%) of them were owned by private sector. This indicates that private sector does not have ample participation in the provision of apprenticeship training as of the government.

Regarding the capacity of apprenticeship offering organizations to accept and train apprentices for a training period, item three of Table 4 indicates that majority 39 (73.6%) of the respondents replied that they can take a maximum of three apprentices for a training period and only 6 (11.3%) of apprenticeship offering organizations ascertained that they can take ten apprentices at a

time. It is further indicated on the open ended items that incapable organizations were participated in apprenticeship training due to lack of organizations in their localities. The finding from interview also indicates that the organization's capacity to receive and train apprentices is minimal. Therefore, it is possible to infer that the number of trainees and the capacity of the organizations to offer apprenticeship training found far apart.

3.2. Legal Framework for Apprenticeship Training

Table 5- Condition of Legal Framework for Apprenticeship Training

No	Item	Respondents								D F	criti cal x ²	Calc ulat ed x ²
		S.officials		Trainees		C.supervi sor		Total				
		No	%	No	%	No	%	No	%			
1	Were there any laws regarding apprenticeship training?											
	Yes	6	11.8	-	-	3	5.7	9	8.7			
	No	45	88.2	-	-	50	94.3	81	91.3			
	Total	51	100	-	-	53	100	104	100	1	3.84	3.65
2	If yes, which of the following is used in your case?											
	Apprenticeship proclamation	2	33.3	-	-	1	33.3	3	33.3			
	Apprenticeship regulation	-	-	-	-	-	-	-	-			
	Apprenticeship guideline	4	66.7	-	-	2	66.7	6	66.7			
	Total	6	100	-	-	3	100	9	100			
3	Did all concerned bodies sign a memorandum agreement for apprenticeship training?											
	Yes	11	21.6	86	32.1	9	17.0	106	28.5			
	No	40	78.4	182	67.9	44	83.0	266	71.5			
	Total	51	100	268	100	53	100	372	100	2	5.99	5.85
4	If yes, how far it is applicable?											
	Excellent	-	-	-	-	-	-	-	-			
	Very good	6	54.5	7	8.1	8	88.9	21	19.8			
	Good	3	27.3	46	53.5	1	11.1	50	47.2			
	Fair	2	18.2	33	38.4	-	-	35	33.0			
	Poor	-	-	-	-	-	-	-	-			
	Total	11	100	86	100	9	100	106	100			

$\alpha = 0.05$

Apprenticeship training puts its foundation on the level of co-operation between TVET institutions and apprenticeship offering organizations. As indicated in the literature, to realize the objective of TVET as well as apprenticeship training, the training that is provided in co-operation must be based on clear policies, laws, guidelines and regulation. Based on this stakeholders in apprenticeship training were asked to indicate the convenience of laws regarding apprenticeship training and their applicability.

Accordingly, as indicated on item 1 of Table 5, 45 (88.2%) of school officials and 50 (94.3%) of company supervisors ascertained that there was no law concerning apprenticeship training. Conversely, 6 (11.8%) of school officials and 3 (5.7%) of company supervisors approve the existence of law used for managing the implementation of apprenticeship training.

A chi-square test was employed to verify whether perceptual difference exists between the response of school officials and company supervisors. Accordingly, the result revealed that for 1 degree of freedom at $\alpha = 0.05$ level of significance, the critical value of chi-square was found to be greater than the calculated value of chi-square. Implying that, there is no statically significant difference in perception among the groups of respondents. From the finding it seems that there exists some legal provisions for apprenticeship training but most of the TVET institutions and companies were not familiar with these legal provisions. It can therefore be concluded that although managing apprenticeship training by using law is undeniable, implementers manage apprenticeship training in haphazard manner without using any law.

Moreover, from the respondents who replied positively, (33.3%) of school officials and (33.3%) of company supervisors pointed the existence of apprenticeship proclamation and (66.7%) of school officials and (66.7%) of company supervisor replied that they use apprenticeship guideline to manage the training in their organization. This indicates that only few TVET

institutions and apprenticeship offering organizations were applying the apprenticeship proclamation and apprenticeship guideline. Therefore, it is possible to infer that much needs to be done in promoting the existing laws regarding apprenticeship training to all concerned bodies that were participated in the provision of apprenticeship training.

Apprenticeship training should be implemented by partnership between TVET institutions and apprenticeship offering organizations. Hence, all concerned bodies must have a memorandum agreement for the training they provide and receive. In light of this, item 3 of Table 5 was constructed to examine whether or not apprenticeship contract agreement was signed among participants. Accordingly, 11 (21.6%) of school officials, 86 (31.2%) of trainees and 9 (17.0%) of company supervisors ascertained the existence of such contractual agreements for apprenticeship training. On the opposing side, 40 (78.4%) of school officials, 182 (67.9%) of trainees and 44 (83.0%) of company supervisors confirmed that there was no contractual agreement made for apprenticeship training.

A chi-square test was employed to assess whether or not there is a difference in perception between the responses of respondents. Accordingly, the result revealed that for 2 degree of freedom at $\alpha = 0.05$ level of significance, the critical value of chi-square found to be greater than the calculated value of chi-square. Implying that, there is no statistically significant difference in perception between the responses of the respondent groups. From this, it is possible to infer that although proclamation and regulation on TVET made it clear the importance of such agreement, they does not give due attention for the procedure.

Respondents who replied positively for the existence of contractual agreement were asked to indicate the level of applicability during apprenticeship training. As indicated on item four of Table 5, majority (54.5%) and (88.9%) of

school officials and company supervisors replied that the applicability of the contractual agreement is very good. On the other hand, a small portion (8.1%) of trainees ascertained that there was very good applicability. Majority (53.5%) of trainees and (27.3%) of school officials ascertained that there was good applicability of contractual agreement. Similarly a small proportion of company supervisors (11.1%) replied that there was good applicability of the contractual agreement. (18.2%) and (38.4%) of the school officials and trainees replied that the agreement has fair applicability during the time of apprenticeship training. Implying that, even there is an agreement between stakeholders for apprenticeship training, the responses for the applicability of the agreement is different for school communities (trainees and school officials) and company supervisors. There fore, it is possible to infer that the key issues that must be performed on the basis of the contract agreement were not satisfied.

3.3. Partnership activities in Apprenticeship Training

Table 6: Companies' Partnership in Overall Activities of Apprenticeship Training

No	Items to be rated	Responses												Mean	SD	t value	P value		
		Very high		High		Medium		Low		Very low		Total							
		No	%	No	%	No	%	No	%	No	%	No	%						
1	Participation in organizing apprenticeship training																	-0.31	0.75
	School officials	-	-	1	1.9	3	5.9	6	11.8	41	80.4	51	100	1.78	6.80				
	Company supervisors	-	-	4	7.6	8	15.1	29	54.7	12	22.6	53	100	2.55	6.17				
2	Participation in preparation of curriculum																	0.14	0.89
	School officials	-	-	-	-	-	-	24	47.1	27	52.9	51	100	1.96	6.56				
	Company supervisors	-	-	-	-	-	-	7	13.2	46	86.8	53	100	1.62	7.57				
3	Participation in evaluating apprentices performance																	-0.32	0.75
	School officials	-	-	9	17.6	30	58.8	12	23.6	-	-	51	100	3.37	7.51				
	Company supervisors	11	20.8	22	41.5	19	35.8	1	1.9	-	-	53	100	4.16	6.84				
4	Participation in setting rules and regulation																	-0.28	0.78
	School officials	-	-	-	-	2	3.9	38	74.5	11	21.6	51	100	2.31	8.09				
	Company supervisors	-	-	-	-	34	64.1	15	28.3	4	7.6	53	100	2.99	8.47				
5	Cooperation in using machineries																	-0.06	0.95
	School officials	-	-	-	-	1	1.9	29	56.9	21	41.2	51	100	2.10	6.83				
	Company supervisors	-	-	-	-	2	3.8	36	67.9	15	28.3	53	100	2.24	7.68				
6	Cooperation in giving allowance for trainees																	-0.29	0.77
	School officials	-	-	-	-	6	11.8	3	5.8	42	82.4	51	100	1.77	7.01				
	Company supervisors	-	-	-	-	7	13.2	40	75.5	6	11.3	53	100	2.50	8.30				
7	Cooperation in using each others staff																	0.02	0.99
	School officials	-	-	-	-	-	-	5	9.8	46	90.2	51	100	1.59	7.67				
	Company supervisors	-	-	-	-	-	-	3	5.7	50	94.3	53	100	1.55	8.17				
8	Participation in financial support for training																	0.12	0.91
	School officials	-	-	-	-	-	-	51	100	-	-	51	100	2.49	10.80				
	Company supervisors	-	-	-	-	-	-	38	71.7	15	28.3	53	100	2.21	8.12				
9	Participation in monitoring apprentices																	-0.59	0.56
	School officials	-	-	4	7.8	29	56.9	11	21.6	7	13.7	51	100	3.02	7.12				
	Company supervisors	17	32.1	27	50.9	9	17.0	-	-	-	-	53	100	4.47	7.79				
10	Participation in development of qualified staff																	-0.14	0.89
	School officials	4	7.8	6	11.8	25	49.0	16	31.4	-	-	51	100	3.36	6.39				
	Company supervisors	12	22.6	8	15.1	21	39.6	12	22.7	-	-	53	100	3.72	5.60				

Very high = 4.5-5
df = 102

High = 3.5-4.49
α = 0.05

Medium = 2.5-3.49

Low = 1.5-2.49

very low = 0.5-1.49

As discussed in the literature part of this study, apprenticeship training can not be put into practice without partnership between organizations that offer apprenticeship training and TVET institutions. Organizations' participation is essential to manage the training effectively. In other words, the successful implementation of apprenticeship training relies on the active participation of companies participated in the provision of apprenticeship training. To this end, school officials and company supervisors were asked to indicate the level of company's participation in apprenticeship training.

As indicated on the items of Table 6, the major aspects that apprenticeship offering organizations should participate were listed and respondents rate company's participation during apprenticeship training. From these aspects, participation in organizing apprenticeship training and participation in setting rules and regulation regarding apprenticeship training was rated as low by school officials and medium by company supervisors. Conversely, participation in monitoring apprentices during apprenticeship training, participation in evaluating apprentice's performance and participation in development of qualified staff were rated as medium by school officials and high by company supervisors. The participation in preparation of curriculum, cooperation in using machineries and Participation in financial support for apprenticeship training rated as low by both respondent groups. On the other hand, both groups of respondents rate the cooperation in using each others staff as high. School officials rate cooperation in giving allowance for trainees as low and company supervisors rate as high.

There was no significance difference between the average weighted means of the responses of school officials and company supervisors for each item listed in the table at $\alpha = 0.05$ level of significance as the calculated P-value for all items is greater than the level of significance ($\alpha = 0.05$). Implying that, the level of partnership in providing apprenticeship training is not adequate as intended.

Moreover, the result of the interview indicates that most organizations were reluctant to participate. If they accept trainees, the trainees will not be assigned on the correct place. In addition to this, there were no supervisors to follow-up and monitor trainee's progress and organizations are reluctant in the overall activities in apprenticeship training. Therefore, it is possible to infer that the TVET institutions and apprenticeship offering organizations are not well communicated in managing apprenticeship training by partnership. Therefore, much needs to be done on essential aspects of apprenticeship training to have promising partnership between TVET institutions and apprenticeship offering organizations.

Table 7: Promotion Activities and Provision of Apprenticeship Training

No	Item	Response	
		No	%
1	Did your organization aware of apprenticeship training?		
	Yes	12	22.6
	No	41	77.4
	Total	53	100
2	If Yes, how your organization aware about apprenticeship training?		
	Through a forum which is prepared by zone education office	-	-
	By provision of apprenticeship co-operation guideline	-	-
	Through meeting which is prepared by the TVET institution	12	100
	Others	-	-
	Total	12	100
3	How was your organization made to provide apprenticeship training?		
	On the basis of discussion and agreement with zone education office	-	-
	On the basis of request from TVET institution	34	62.4
	On the basis of request by trainees	19	35.8
	That was the organizations choice	-	-
	Others	-	-
	Total	53	100

Table 7 was constructed with the purpose of examining the state of activities performed by the TVET institutions or zone education office in promoting apprenticeship training to apprenticeship offering organizations. To this end,

company supervisors were asked whether or not their organization get awareness on the use of apprenticeship training. As indicated on item one of Table 6, 41 (77.4%) of company supervisors replied that they do not have awareness on apprenticeship training. On the other hand, only 12 (22.6%) of the respondents replied that they do have the awareness on the worth of apprenticeship training.

Regarding the method that is used to create consciousness for apprenticeship offering organizations, item two of Table 7 indicates that from the respondents who replied positively in item one, all the respondents ascertained that they get the awareness on occasional meetings which was prepared by the TVET institutions. Moreover, as indicated on the open ended items, apprenticeship offering organizations are not aware about the trainees' field of study and the essence of apprenticeship training. In addition to this, zonal officials ascertained that the ZEO do not participate in apprenticeship promotion activities. Therefore, it is possible to infer that the accountability to create awareness on the usefulness of apprenticeship training for organizations was solely imposed on TVET institutions whose voice is too remote, the authorities in different hierarchy of the region and zone involvement in apprenticeship training is not present.

On item three of the same table, company supervisors were asked how their organization is made to provide apprenticeship training. 34 (62.4%) of the respondents ascertained that TVET institutions were asked them for apprenticeship training. Where as, 19 (35.5%) of company supervisors ascertained that trainees were asked them to offer apprenticeship training. This indicates that trainees were expected to look for apprenticeship offering organizations during their in-school training. Therefore, it is possible to deduce that the duty of the vocational counselor to look for apprenticeship offering organizations and assigning trainees to the selected organizations is missing.

Table 8: Provision of Incentives for Organizations Participating in Apprenticeship Training

No	Item	Response	
		No	%
1	Were there any incentives given to your organization for apprenticeship training you provide?		
	Yes	11	20.7
	No	42	79.3
	Total	53	100
2	If Yes, what were the incentives given to your organization?		
	Thank you letter	2	18.2
	Certificate of participation	4	36.4
	Invitation to attend ceremonies	5	45.4
	Subsidizing recurrent cost	-	-
	Tax exemption for imported machines	-	-
	Charge free training for employees	-	-
	Free of charge provision of land for expansion	-	-
	Others	-	-
	Total	11	100

Table 8 was designed to assess whether or not some kind of inducement given to encourage apprenticeship offering organizations for their participation in apprenticeship training. To this end, company supervisors were asked to indicate whether they get any type of incentives for their participation.

Accordingly, 42 (79.3%) of company supervisors ascertained that there was no incentives given to their organization. while, a small proportion 11 (20.7%) of respondents indicate that they get incentives for the training they offer.

On item two of the same table, respondents who replied positively for item one were asked to indicate the incentives given to their organization. Thus, thank you letter, certification of participation and invitations to attend ceremonies were given to their organization as an inducement to their co-operation. From this it can be deduce that these are positive measures but not sufficient to obtain the required partnership. Other areas of incentives such as tax

exemption, provision of training for apprenticeship offering organizations should be considered to strengthen the partnership.

3.4. Capacity of Apprenticeship Offering Organizations

Table 9: Availability and Adequacy of Supportive Work Place Supervisors

No	Item	Respondents								D F	Critic al X ²	Calcu lated x ²
		S.officials		Trainees		C.supervis or		Total				
		No	%	No	%	No	%	No	%			
1	Were there supervisors assigned for trainees during apprenticeship training									2	5.99	9.61
	Yes	43	84.3	226	84.3	53	100	322	86.6			
	No	8	15.7	42	15.7	-	-	50	13.4			
	Total	51	100	268	100	53	100	372	100			
2	If yes, how frequently did they visit apprentices during apprenticeship training?									10	18.31	124.1
	Daily	-	-	18	8.0	23	43.4	41	12.7			
	Once a week	7	16.3	62	27.4	26	49.0	95	29.5			
	Once in two weeks	9	20.9	28	12.4	4	7.6	41	12.7			
	Once in every month	16	37.2	19	8.4	-	-	35	10.9			
	Once in awhile	11	25.6	76	33.6	-	-	87	27.0			
	Not at all	-	-	23	10.2	-	-	23	7.2			
Total	43	100	226	100	53	100	322	100				
3	Have you got a chance to go to the organization as a supervisor?											
	Yes	44	86.3									
	No	7	13.7									
	Total	51	100									

$\alpha = 0.05$

Apprenticeship offering organizations are expected to assign workplace supervisors who follow-up and support trainees during apprenticeship training; this makes the teaching- learning process to be effective. Based on this, Table 8 was constructed with the intention of investigating the availability of workplace supervisors and the adequacy of their follow-up and support.

As indicated on item one of Table 9, 322 (86.6%) of respondents replied positively for the assignment of workplace supervisors. Where as, 50 (13.4%) of the respondents replied that there were no workplace supervisors during

apprenticeship training. There was significant perception difference exhibited between the responses of the respondent groups as the calculated chi-square value is greater than the critical value of chi-square when tested for 2 degree of freedom at $\alpha = 0.05$ level of significance. Therefore, it is possible to deduce that a number of companies do not assign workplace supervisors for trainees during apprenticeship training.

Respondents who replied positively for the presence of workplace supervisors were asked to indicate the incidence on which supervision takes place for the training period. Accordingly, 41 (12.7%) of the respondents replied that supervisors made a visit daily and 95 (29.5%) of respondents replied that the occurrence of visiting trainees was once in a week. On the other hand, 41 (12.7%) of the respondents replied that supervision was made once in two weeks and 35 (10.9%) of respondents ascertained that the rate for visiting apprentices was once in every month. Differently, 87 (27.0%) of the respondents ascertained that supervisors made a visit once in awhile and 23 (7.2%) of the respondents replied that there was no attempts made to visit apprentices during their apprenticeship training.

There was significant difference exhibited among the responses of respondent groups as the calculated chi-square value was greater than the critical value of chi-square when tested at $\alpha = 0.05$ level of significance and 10 degree of freedom. This indicates that the incidence of supervising activity on the side of company supervisors was daily and once a week. On the other hand, school officials and trainees rate the visit as once in every month and once in a while. This implies that even if supervisors were assigned; trainees were not furnished with the necessary follow-up from company supervisors.

To examine the condition of apprenticeship training, school officials should have a visit and report to the concerned bodies on the condition of

apprenticeship offering organizations. To this end, school officials were asked whether they got a chance to go to the organizations as a supervisor or not. As indicated on item four of Table 9, 44 (86.3%) of school officials ascertained that they got a chance to go to the organizations. On the contrary, as ascertained during the interview with ZEO they do not supervise the progress of the training. Moreover, even if supervisors were assigned to trainees the interview result indicates that supervisors were not eager to guide and follow-up trainees. In addition to this, they do not know how to evaluate trainees and the time when evaluation must be take place. Moreover, supervisors do not have enough knowledge on the trainee's field of training and their ability to impart their knowledge to trainees is not adequate.

Table 10: Capability of Organizations to Offer Apprenticeship Training

(Rate the following Facilities in Apprenticeship offering organizations)

No	Item	Responses												Mean
		Very high		High		Medium		Low		Very low		Total		
		No	%	No	%	No	%	No	%	No	%	No	%	
1	Appropriateness of materials used for apprenticeship training in organization	-	-	17	38.6	19	43.2	8	18.2	-	-	44	100	3.69
2	Appropriateness of materials used in TVET institution	3	6.8	24	54.6	17	38.6	-	-	-	-	44	100	4.14
3	Similarity of materials in the TVET institution and companies	-	-	4	9.1	17	38.6	22	50.0	1	2.3	44	100	3.04
4	Assignment of supervisors to apprenticeship training	19	43.1	16	36.3	7	16.0	2	4.6	-	-	44	100	4.46
5	Capability of supervisors to give instruction	-	-	6	13.6	20	45.5	17	38.6	1	2.3	44	100	3.19
6	Capability of supervisors to control trainees	-	-	-	-	32	72.7	12	27.8	-	-	44	100	3.22
7	Capability of supervisors to evaluate trainees performance	-	-	10	22.7	14	31.8	18	40.9	2	4.6	44	100	3.22
8	Supply of raw materials	-	-	8	18.2	12	27.3	24	54.5	-	-	44	100	3.13

Very high = 4.5-5

Low = 1.5-2.49

High = 3.5-4.49

very low = 0.5-1.49

Medium = 2.5-3.49

On item four of Table 10 school officials were asked The justification behind conducting apprenticeship training in collaboration with apprenticeship offering organizations is that, most of the time in our country once TVET institutions established, they are not furnished with new technology, consequently this becomes outdated as new technological inventions come into view, organizations are much more responsive to such new technological progress. That is the facilities accessible in TVET institutions may, at times be those which are not in utilize in the world of work. Such discrepancy between facilities through which students were trained in TVET institutions and facilities in apprenticeship offering organizations could impede the realization of the objective of apprenticeship training.

School officials who have got a chance to go to the organizations as a supervisor were asked to rate the facilities in apprenticeship offering organizations and in TVET institutions. Accordingly, as clearly indicated on the items of Table 10, the appropriateness of materials used for apprenticeship training in companies, appropriateness of materials used in TVET institution and assignment of supervisors for apprenticeship training in the organization is rated as high. On the other hand, the similarity of materials in the TVET institutions and companies, capability of supervisors in apprenticeship offering organizations to give instruction for apprentices, capability of supervisors to control trainees during apprenticeship training, capability of supervisors to evaluate trainee's performance and the supply of raw materials in the organization to apprenticeship training rated as medium. This indicates that apprenticeship offering organizations were not furnished as required.

Table 11: Summary of ANOVA

SV	df	SS	MS	F value	P value
Between	7	4235.13	605.02	0.43	0.87
Within	32	44827.31	1400.85		
Total	39	49062.44			

$\alpha = 0.05$

ANOVA was used to examine whether or not there is a significant difference between the means of school officials. As indicated on table 11, the calculated value of P value is greater than the level of significance ($\alpha = 0.05$). Hence; there is no statically significant difference in perception between the means for every item with respect to the facilities in apprenticeship offering organizations and TVET institution. Therefore, it is possible to deduce that apprenticeship offering organizations have average and above average facilities for apprenticeship training.

3.5. Management Aspects in Apprenticeship Training

Table 12: Financing Apprenticeship Training

No	Item	Response					
		Trainees		C. supervisors		Total	
		No	%	No	%	No	%
1	Were trainees charged fees for apprenticeship training?						
	Yes	-	-	-	-	-	-
	No	268	100	53	100	321	100
	Total	268	100	53	100	321	100
2	Were trainees being paid for their effort during apprenticeship training?						
	Yes	-	-	3	5.7	3	0.94
	No	268	100	50	94.3	318	99.06
	Total	268	100	53	100	321	100
3	Who covers trainees personal expenses during apprenticeship training						
	TVET institution	-	-	-	-	-	-
	Trainees/families	268	100	53	100	321	100
	Apprenticeship organization	-	-	-	-	-	-
	Sponsorship organization	-	-	-	-	-	-
	Others	-	-	-	-	-	-
	Total	268	100	53	100	321	100

Cost sharing between beneficiaries becomes a fundamental part of the financing system since it needs an extensive financing and funding system to share the cost between all beneficiaries. Moreover, sharing the training cost and capture some benefits, avoids insufficient consistency in decisions by all parties. Those who benefit from the training should also contribute in covering the costs. In light of this, Table 12 was designed to examine the mechanisms being put in place to finance apprenticeship training.

Item one of Table 12 was prepared to investigate whether trainees pay fees for the training or not. Accordingly, all the respondents confirmed the nonexistence of special charge for apprenticeship training. On item two of the same table, the great majority of respondents 318 (99.06%) ascertained that trainees were not compensated by organizations for their labor during apprenticeship training. Moreover, as indicated on item three of the same table, all respondents affirmed that personal expenses required to attend apprenticeship training were fully covered by trainees or their families. Thus, from the findings it is possible to deduce that no funds were borne by the government or TVET institutions and apprenticeship offering organizations to support apprenticeship training.

Table 13: Availability of Plan for Apprenticeship Training

No	Item	Respondents								DF	Critic cal X ²	Calcu lated X ²	d	d ²	r _s
		S. officials			C. supervisors			Total							
		No	%	Ra nk	No	%	Ran k	No	%						
1	Did you incorporate apprenticeship training in your plan?														
	Yes	8	15.7		-	-		8	7.7						
	No	43	84.3		53	100		96	92.3						
	Total	51	100		53	100		104	100		1	3.84	9.15		
2	If yes, who made a plan?														
	Vocational counselor	8	100					8	100						
	Company supervisor	-	-		-	-		-	-						
	Jointly	-	-		-	-		-	-						
	TVET principals	-	-		-	-		-	-						
	Others	-	-		-	-		-	-						
	Total	8	100					8	100						
3	If No, what is the reason for the reluctance?														
	The training is given out side the TVET institution	21	48.8	1	-	-	4.5	21	21.9				-3.5	12.25	-0.52
	Companies do not have commitment	3	7.0	4	-	-	4.5	3	3.1				-0.5	0.25	
	Lack of financial resource	4	9.3	3	16	30.2	2	20	20.8				1	1	
	Lack of awareness	-	-	5	28	52.8	1	28	29.2				44	16	
	Others	15	34.9	2	9	17.0	3	24	25.0				-1	1	
	Total	43	100		53	100		96	100						

$\alpha = 0.05$

As discussed in the literature part of this thesis, planning is a major activity to have organized management for apprenticeship training. To accomplish the tasks with high-quality management it needs goodwill of stakeholders who were involved in the implementation of apprenticeship training. To this end, Table 12 was prepared to assess the existence of plan for apprenticeship training.

As clearly indicated on item one of Table 13, majority 43 (84.3%) of school officials and all company supervisors ascertained the absence of plan for apprenticeship training. On the other hand, 8 (15.7%) of school officials replied that there was an attempt to have a plan for apprenticeship training. A chi-square test revealed that for 1 degree of freedom at $\alpha = 0.05$ level of significance, the calculated value of chi-square was found to be greater than the critical value of chi-square. Implying that, there is a significant difference in perception among school officials and company supervisors, where most of them agreed on the absence of plan and small proportion of the respondents confirmed the existence of plan for apprenticeship training. Thus, from these it is logical to infer that apprenticeship training plan is prepared in TVET institutions and apprenticeship offering organizations do not consider the training as their duties and responsibility.

On item two of the same table, respondents who replied positively for item one were asked to indicate the responsible body who is in charge of preparing a plan for apprenticeship training, all school officials ascertained that vocational counselor is the only responsible body to set up apprenticeship training plan.

On item three of Table 13, respondents who replied negatively for the existence of planning for apprenticeship training were asked to indicate the cause for their reluctance. Accordingly, school officials rate "the training is given outside the TVET institution" as the first and they point that other

reasons; they are not to the responsible body to prepare apprenticeship training plan as a second major reason and the third reason as school officials rate is lack of financial resource. Where as, company supervisors rating indicates that lack of awareness is the prominent reason for the observed reluctance. And lack of financial resource as a second reason for their unwillingness. As the calculated value of spearman's rank order coefficient of correlation ($r_s = -0.52$) indicates that the relationship that exists between school officials and company supervisors was moderate and negative. The reluctance for the school officials results from lack of partnership between TVET institution and apprenticeship offering organizations. And lack of awareness and lack of financial resource was the reason for company officials. Therefore, a bundle of work needs to be done in searching for finance for apprenticeship training and involving school officials and company supervisors in preparing apprenticeship training plan.

Table 14: Criteria Employed in Selecting Apprenticeship offering organizations

No	Item	Response	
		No	%
1	Is there a criterion to select apprenticeship offering organization?		
	Yes	48	94.1
	No	3	5.9
	Total	51	100
2	If yes, what was the criterion used to select organizations?		
	Activities performed by the organization	35	72.9
	Types of business	9	18.8
	Types of ownership	-	-
	Amount of capital	-	-
	Distance	4	8.3
	Number of employees	-	-
Total	48	100	

Table 14 was constructed to look into the criteria employed in the process of selecting apprenticeship offering organizations. As indicated on item one of Table 14, 48 (94.1%) of school officials replied that there was a criterion to select apprenticeship offering organizations and 3 (5.9%) of the respondents ascertained that the selection of organizations that offer apprenticeship training was not based on a predetermined criterion.

On item two of Table 14, school officials who replied positively for the existence of a preset criteria, 35 (72.9%) of them replied that “activities performed by the organization” and 9 (18.8%) of the respondents replied that “type of business” is used as a criteria to select apprenticeship offering organizations. Where as, 4 (4.3%) of them replied that “distance” was used as a criterion for the selection of apprenticeship offering organization. Thus, even criteria such as activities performed in the organization and type of business was used, important factors such as the availability of human and material resources in the organizations were not given due consideration.

Table 15: Procedure Employed in Assigning Trainees for Apprenticeship Training

No	Item	Respondents								D F	Critic al χ^2	Calcu lated of χ^2
		S.officials		Trainees		C. supervisor		Total				
		No	%	No	%	No	%	No	%			
1	Who assign trainees to the selected organizations?											
	Vocational counselor	38	74.5	206	76.9	-	-	244	76.5			
	Trainer	2	3.9	-	-	-	-	2	0.6			
	Principal	-	-	-	-	-	-	-	-			
	Through trainees personal contact	11	21.6	62	23.1	-	-	73	22.9			
	Company supervisor	-	-	-	-	-	-	-	-			
	Total	51	100	268	100	-	-	319	100	2	5.99	15.56
2	Does the assignment of trainees follow any criterion?											
	Yes	48	94.1	-	-	-	-	48	94.1			
	No	3	5.9	-	-	-	-	3	5.9			
	Total	51	100	-	-	-	-	51	100			
3	What criterion is used in the assignment of trainees?											
	Field of training	35	72.9					35	72.9			
	Distance	13	27.1					13	27.1			
	Chance	-	-					-	-			
	Interest	-	-					-	-			
	Others	-	-					-	-			
	Total	48	100					48	100			
4	How the number of trainees is decided to each organization?											
	By each organization	29	56.9	-	-	32	60.1	61	58.7			
	By the TVET institution	17	33.3	-	-	18	34.2	35	33.6			
	By bilateral agreement	5	9.8	-	-	3	5.7	8	7.7			
	No formal procedure is used	-	-	-	-	-	-	-	-			
	Others	-	-	-	-	-	-	-	-			
	Total	51	100	-	-	53	100	104	100	1	3.84	0.64

$\alpha = 0.05$

Table 15 was prepared to identify the procedure employed in assigning trainees to apprenticeship offering organizations. As indicated on item one of Table 15, school officials and trainees were asked to indicate the person who is responsible for assigning trainees to apprenticeship offering organizations. Accordingly, 244 (76.5%) of the respondents ascertained that the assignment of trainees was done by vocational counselors. Where as, 73 (22.9%) and 2 (0.6%) of the respondents ascertained that the assignment of trainees is done through trainees personal contact and by trainers accordingly. There was a significant difference in the responses of the respondents as the calculated chi-square value is greater than the critical value of chi-square at $\alpha=0.05$ level of significance. Where as most of the respondents confirmed that apprentices were assigned by vocational counselors; the remaining few respondents appreciated the trainees own effort in searching apprenticeship placements. Therefore, it is possible to infer that the procedure in assigning students to the selected organization made by the vocational counselors and through trainees personal contact.

Item two was constructed to identify whether there is a criterion to disperse trainees to the selected organizations or not. Majority 48 (94.1%) of school officials replied positively that there is a criterion to assign trainees to the selected organization. Regarding the criterion used during assignment of trainees, item three of Table 15 depicts that 35 (72.9%) of school officials ascertained that "field of training" is used as a criterion and 13 (27.1%) of the school officials indicate "distance" is used as a criterion employed in assigning students to the selected organization. Therefore, it is possible to infer that field of training and distance from the TVET institutions were among the major criteria during trainees' assignment.

Item four was constructed to indicate the method that is used to make a decision on the total number of trainees to be assigned to each organization. To this end, 61 (58.7%) of respondents replied that each organization has a

discretionary power to decide on the number of trainees. Moreover, 35 (33.6%) of the respondents ascertained that the TVET institution is an influential body on the number of trainees. On the other hand, 8 (7.7%) of the respondents replied that the number of trainees is determined by mutual agreement made between TVET institution and apprenticeship offering organizations. A chi-square test result revealed that for 1 degree of freedom at $\alpha = 0.05$ level of significance, the critical value of chi-square was found to be greater than the calculated value of chi-square. Implying that, there was no significant difference between the response of school officials and company supervisors. This implies that decision about the number of apprentices is made by both the TVET institution and apprenticeship offering organizations. Therefore, it is possible to infer that the number of trainees is decided by TVET institutions, apprenticeship offering organizations and by bilateral agreement between them.

Table 16: Adequacy of Apprenticeship Training Duration

No	Item	Respondents						D F	Critic al X ²	Calcul ated X ²
		Trainees		C. superviso rs		Total				
		No	%	No	%	No	%			
1	For how long did trainees take apprenticeship training?									
	One month	-	-	-	-	-	-			
	One and half month	48	17.9	-	-	48	15.0			
	Two months	204	76.1	46	86.8	250	77.9			
	Two and half month	12	4.5	7	13.2	19	5.9			
	Three months	4	1.5	-	-	4	1.2			
	Total	268	100	53	100	321	100	3	7.81	16.63
2	How do you rate the adequacy of time allotted to apprenticeship training?									
	Excessive	22	8.2							
	Adequate	219	81.7							
	inadequate	20	7.5							
	Extremely inadequate	3	1.1							
	No suggestion	4	1.5							
	Total	268	100							

$\alpha = 0.05$

The TVET curriculum developed by MoE for middle level TVET program allocated 312 hours (eight weeks or two months) within a year for

apprenticeship training. Based on this, item one of Table 16 was constructed to examine whether or not the allocated time was put in practice. To this end, majority 204 (76.1%) of trainees and 46 (86.8%) of company supervisors indicate that the training is given for two months. On the other hand, 48 (17.9%) of trainees replied that they took apprenticeship training for one and half month. Similarly, 12 (4.5%) of trainees and 7 (13.2%) of company supervisors depict that trainees attend apprenticeship training for two and half months. A chi-square test revealed that there was a significant difference in the training duration as the calculated value of chi-square is greater than the critical value of chi-square when tested at $\alpha=0.05$ level of significance for 3 degree of freedom. Where as, most of the respondents indicated the proper utilization of apprenticeship training duration stipulated by MoE; few respondents regrettably pointed out that the training period is not fully practiced.

On item two of Table 16, trainees were asked to indicate the adequacy of the time allotted to apprenticeship training. Accordingly, 22 (8.2%) of trainees replied excessive and 219 (81.7%) and 20 (7.5%) of trainees ascertained that the training period was adequate and inadequate respectively. This indicates that, so far the adequacy of training period was rate as adequate by most of the respondents, a small number of respondents pointed that adequacy of the time was not as equivalent for the training.

Table 17: Significance of Activities Performed During Apprenticeship Training

No	Item	Response	
		No	%
1	How do you evaluate the relevance of activities of apprenticeship training to your occupational field?		
	Very high		
	High	16	6.0
	Medium	22	8.2
	Low	94	35.0
	Very low	128	47.8
	Total	8	3.0
2	If low, or very low, which of the following could be the reason?	268	100
	The tasks were not the same with our field		
	Reluctance of the organization during training	136	100
	Improper training in TVET institution	-	-
	Your failure to regularly attend	-	-
	Others	-	-
	Total	136	100

The quality of apprenticeship training relies on the relevance of activities performed during the time of training. To this end, trainees were asked to indicate the extent of relevance of the training to their occupational field. As indicated on item three of Table 17, 16 (6.0%) of trainees replied as very high, 22 (8.2%) of them replied as high and 94 (35.0%) and 128 (47.8%) of trainees ascertained that the relevance of training to their occupational field of study was medium and low respectively. From this it is possible to infer that the relevance of activities performed during apprenticeship training was not as desired. This implies that the key jobs and tasks that must be performed during apprenticeship training were not fully maintained.

As indicated on item four of the same table, all trainees who replied low or very low for the relevance of training was asked to indicate the major reasons for the observed problem. Consequently, all the respondents ascertained that they were trained in other tasks that were dissimilar with their fields of study during apprenticeship training. To this end, it is possible to deduce that trainees were not in a condition to acquire relevant training to their occupational field.

Table 18: Appropriateness and timing of evaluation

No	Item	Respondents								D F	Critic al X ²	Calcul ated X ²
		S.officials		C.supervi sors		Trainees		Total				
		No	%	No	%	No	%	No	%			
1	Did Evaluation takes place for trainees during apprenticeship training?											
	Yes	51	100	53	100	268	100	372	100			
	No	-	-	-	-	-	-	-	-			
	Total	51	100	53	100	268	100	372	100			
2	When does trainees evaluation takes place?											
	Continuously	-	-	-	-	-	-	-	-			
	At the end of the training period	51	100	53	100	268	100	372	100			
	Total	51	100	53	100	268	100	372	100			
3	Who evaluate trainees during apprenticeship training?											
	Company supervisor	44	86.3	53	100	198	73.9	295	79.3			
	Vocational counselor	-	-	-	-	-	-	-	-			
	Trainers	-	-	-	-	-	-	-	-			
	Others	7	13.7	-	-	70	26.1	77	20.7			
	Total	51	100	53	100	268	100	372	100	2	5.99	20.09

$\alpha = 0.05$

Table 18 was constructed with the aim of examining the state of evaluation for apprenticeship training. As indicated on item one of Table 18, all respondents replied positively, the existence of evaluation for apprenticeship training. Moreover, all respondents indicate that evaluation is takes place at the end of apprenticeship training. This shows, even if there is evaluation of trainees, continuous assessment during apprenticeship training period was absent.

On item three of the same table, respondents were asked to indicate the authority in charge of evaluating trainee's performance during apprenticeship training. Therefore, all company supervisors, 44 (86.3%) of school officials and 198 (73.9%) of trainees ascertained that the task of evaluating trainees during apprenticeship training was done by company supervisors. On the other hand, 7 (13.7%) of school officials and 70 (26.1%) of trainees indicate that evaluation was done by other personnel who were in the organization during the time of evaluation. Accordingly, chi-square test revealed that for 2 degree of freedom at $\alpha=0.05$ level of significance, the calculated value of chi-

square was found to be greater than the critical value of chi-square. Implying that, there is a significant difference in perception among the respondent groups. Therefore, it can be inferred that evaluation for apprenticeship training is done by company supervisors and other personals found in the apprenticeship offering organizations.

Table 19: Conditions Forced Trainees Not to Attend Apprenticeship Training

No	Item	Respondents							DF	Critical X ²	Calculated X ²	d	d ²	r _s	
		S. officials			Trainees			Total							
		No	%	Rank	No	%	Rank	No							%
1	Were there trainees forced not to attend Apprenticeship training														
	Yes														
	No	33	64.7	-	189	70.5	-	222	69.6						
	Total	18	35.3	-	79	29.5	-	97	30.4						
2	If Yes, what was the cause not to attend apprenticeship training?	51	100	-	268	100		319	100	1	3.84	0.66			
	Absence of adequate organizations in the area	15	45.5		68	36.0		83	37.4						
	Shortage of manpower to organize the training	6	18.2		13	6.9		19	8.5						
	Reluctance of the trainees	-	-	-	-	-	-	-	-						
	Inconvenience of the time to take the training	-	-	-	-	-	-	-	-						
	Absence of the organization willing to take	12	36.2		108	57.1		120	54.1						
	Total	33	100		189	100		222	100	2	5.99	7.16			
3	Did some trainees quit apprenticeship training?														
	Yes	27	52.9		176	65.7		203	63.6						
	No	24	47.1		92	34.3		116	36.4						
	Total	51	100		268	100		319	100	1	3.84	2.98			
4	If Yes, what were the reasons to terminate the training?														
	Doing things other than field of study	5	18.5	3	56	31.8	1						2	4	
	Inconvenience of the time	-	-	7.5	2	1.1	8						-0.5	0.25	
	Lack of proper follow up in the organization	8	29.6	1	11	6.3	6						-5	25	
	Financial problem	7	25.9	2	43	24.4	2						0	0	
	Long distance to the organization	2	7.4	5	26	14.8	3						2	4	
	Personal problem	4	14.8	4	17	9.7	4						0	0	
	Improper evaluation in the organization	1	3.8	6	6	3.4	7						-1	1	
	Lack of raw materials	-	-	7.5	15	8.5	5							2.5	6.25
	Total	27	100	-	176	100	-								

$\alpha = 0.05$

Table 19 was prepared to identify factors affecting retention and completion of trainees during apprenticeship training. Based on this, school officials and trainees were asked whether trainees were not attending apprenticeship training or not. As indicated on item one of Table 19, 33 (64.7%) of school officials and 189 (70.5%) of trainees ascertained that there were trainees who could not attend apprenticeship training. Accordingly, chi-square test revealed that for 1 degree of freedom at $\alpha=0.05$ level of significance, the calculated value of chi-square was found to be less than the critical value of chi-square. Implying that, there is no significant difference between trainees and school official's responses. This indicates that both group of respondents agreed with the existence of some trainees who did not attend apprenticeship training.

Regarding the cause for not attending apprenticeship training, item two of Table 19 depicts that 83 (37.4%) of respondents ascertained that "absence of adequate organization in the area" and 19 (8.5%) and 120 (54.1%) of respondents pinpoint that "shortage of manpower to organize apprenticeship training" and "absence of organizations who have willing to take apprentice" were indicated as an impressing problem. There was significant difference exhibited in the responses of the respondent groups as the calculated chi-square is greater than the critical value of chi-square when tested for 2 degree of freedom at $\alpha=0.05$ level of significance. This implies that various factors affect the participation of trainees in apprenticeship training. Hence, trainees do not participate in the apprenticeship partly due to absence of companies in the locality, lack of willingness from the part of companies and shortage of manpower to organize the apprenticeship training.

Item three of Table 19 was constructed to assess whether trainees give up apprenticeship training after they join. To this end, 203 (63.6%) of respondents replied that there were students who can not continue their training and 116 (36.4%) of respondents replied negatively. A chi-square test

reveals that there is no significant difference in perception among respondent groups as the calculated value of chi-square is less than the critical value for 1 degree of freedom at $\alpha=0.05$ level of significance. Implying that, there were trainees who can not attend their apprenticeship training.

Respondents who replied positively on item three were asked to indicate the possible reason for the existed problem. Accordingly, trainees ranked that “doing things other than field of study” as the first problem and “financial problem” as a second. While school officials rank “lack of proper follow up in the organizations” as first cause for not attending and financial problem as a second. The computed value of spearman’s rank coefficient of correlation ($r_s = 0.52$) indicates a moderate positive association exists between the ranks of trainees and school officials. To this end, due to many reasons, trainees give up their apprenticeship training due to improper placement in the organization and financial problem.

Table 20: Factors Affecting the Management of Apprenticeship Training

No	Item	Respondents						d	d ²	r _s
		S. officials			C. supervisors					
		No	%	Rank	No	%	Rank			
1	Trainees poor theoretical back ground	2	0.8	11	35	11.6	4	7	49	0.01
2	Lack of partnership between company and TVET institution	48	18.5	1	30	10.0	6	-5	25	
3	Incapability of the organization to receive trainees	32	12.3	5	15	5.0	9	-4	16	
4	Shortage of manpower to coordinate apprenticeship training	27	10.4	6	44	14.6	2	4	16	
5	Lack of suitable work place in the company	36	13.8	4	18	6.0	8	-4	16	
6	Absence of proper plan	7	2.7	8	33	10.9	5	3	9	
7	Lack of rules and regulation	4	1.5	9	41	13.6	3	6	36	
8	Shortage of finance	41	15.7	2	52	17.3	1	1	1	
9	Lack of proper monitoring and supervision	21	8.1	7	21	7.0	7	0	0	
10	Poor record system in the organization	3	1.1	10	3	1.0	11	-1	1	
11	Do not considering trainees as a regular employees	39	15.0	3	9	3.0	10	-7	49	

Managing apprenticeship training demands coordinated and willful participation of apprenticeship offering organizations and TVET institutions, conditions which appear to invalidate such willful participation will impede the successful implementation of the program. As stated in the literature, the management of apprenticeship training is based on the state of partnership between TVET institutions and organizations. To become successful, all aspects of management need to be carried out by combination with stakeholders.

In light of the above discussion, Table 20 was constructed to examine the major problems that impede the management of apprenticeship training. To this end, school officials and company supervisors were asked to indicate problems encountered during apprenticeship training that affects the management of apprenticeship training. As a matter of fact, the challenges are not only those listed above. Accordingly, school officials rank "lack of partnership between companies and TVET institutions" and "shortage of finance" as the first and second prominent problems. The third problem as school officials rated was "apprenticeship offering organizations do not consider trainees as a regular employee". Where as, supervisors rating indicates that "financial problem" was leading problem and "shortage of manpower to coordinate apprenticeship training" as a second prominent problem.

The computed spearman's coefficient of rank correlation ($r_s = 0.01$) indicate that there is negligible association between school officials and company supervisors. This implies that factors that affect the management of apprenticeship training in TVET institution and apprenticeship offering organization differs to a great extent.

CHAPTER FOUR

4. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

4.1. Summary

The purpose of this study was to explore the major problems encountered in managing apprenticeship training in TVET institutions of North Gonder Zone. To this end, basic questions addressing the major factors that might hinder successful management of apprenticeship training were raised. These were:

1. Which guidelines and policy frameworks do TVET institutions and companies use to govern apprenticeship training and to what extent are they utilized?
2. What is the state of partnership between TVET institutions and apprenticeship offering organizations?
3. What is the state of financial, human and material resource in apprenticeship training program?
4. How is the apprenticeship training program planning process conducted?
5. To what extent is apprenticeship training properly implemented, monitored and evaluated?
6. What are the major managerial, social, in-school and company-related problems encountered in managing apprenticeship training?

Descriptive survey method was used in the study. All the three TVET institutions that are found in North Gonder Zone were the subjects of the study by using availability sampling technique. The subjects of the study were 268 trainees, 51 school officials (principals, vocational counselors and trainers) and 53 company supervisors in apprenticeship offering organizations. All the principals and vocational counselors were included in the study by using availability sampling technique. Sample trainees and trainers were selected using stratified and simple random sampling technique. Differently, supervisors in apprenticeship offering organization

were selected by using purposeful sampling technique. Moreover, 2 zonal TVET officials were included by using availability sampling technique. The data obtained from these sample respondents using questionnaires, interview and document analysis were analyzed using percentage, chi-square, t-test, ANOVA and spearman's rank order coefficient of correlation tests as the circumstances demand. Accordingly, the following major findings were reached up on.

- Out of the total enrollment, participation of females takes the largest share making up (56.4%) of the total enrollments in TVET in 1999 E.C. in North Gonder Zone.
- The findings of the study reveal that although apprenticeship training is well addressed in the legal framework, majority (91.3%) of the respondents ascertained that the legal documents are not utilized while managing apprenticeship training. This was manifested by the absence of memorandum agreements signed among stakeholders involved in the provision of apprenticeship training.
- Apprenticeship training must take place through a close partnership between TVET institutions and employer organizations. The finding indicates that sensitization activities to promote partnership for apprenticeship training were insignificant. Where these activities exist, the finding depicted that the mechanism employed to create awareness and to increase stakeholders' participation in apprenticeship training is a forum involving officials from the TVET institution and only some of the apprenticeship offering organizations.
- The majority of respondents (79.3%) ascertain that no incentives, in any form, were given to the organizations that offer apprenticeship training which would induce the organizations' further cooperation. On the other

hand, the remaining (20.7%) of the respondents indicated that some incentives such as thank you letters, certificate of participation and invitation on ceremonies were given for apprenticeship offering organizations.

- Regarding the financial aspects of apprenticeship training, the finding revealed that all trainees were not charged directly by both the organizations and TVET institutions. On the other hand, trainees' personal expenses were fully covered by the apprentices or their respective families.
- Concerning the academic qualification of the school officials, a first degree was stipulated as a minimum requirement for middle level TVET program. The finding revealed that the qualification level of the school officials is far below the requirement since the majority of school officials (74.5%) have a college diploma. On top of this, according to the finding, none of the principals and (66.7%) of vocational counselors were not trained in the area which allows them to provide valuable managerial activity as a profession.
- With regard to the planning aspect of the management of apprenticeship training, the great majority (92.3%) of the respondents ascertained that apprenticeship training takes place without planning for human, financial and material resources.
- According to the finding, the selection of apprenticeship offering organizations is undertaken by using the type of business and activities of the organizations as criteria. The assignment of trainees to these organizations was based on trainee's field of training and distance as measuring criteria. The number of trainees to be assigned in an

organization is determined in either of the three ways; by the TVET institutions or by the apprenticeship offering organizations or by the agreement of the two. Regarding the placement decision of apprentices in the respective organizations, such decisions are made by vocational counselors, informal trainees' contact with the organization and other trainers in the TVET institutions.

- As regards the monitoring and evaluation activities, the findings confirmed that the assignment of supervisors who are in charge of follow up of the training activities and schedules for the supervision were not sufficient since the majority of the respondents ascertained that the tutors visit trainees once in two weeks. On the other hand, the finding depicts that supervisors' know how of evaluation techniques were found to be inadequate and consequently, assessments are not held as often as the curriculum demands.
- Regarding the adequacy of the allotted time for apprenticeship training, whereas the allotted time was found to be less than the time set in the curriculum, the trainees confirmed that it is adequate. And the relevance of activities performed during apprenticeship training found to be very low for the majority of the respondents. Among the most common causes mentioned are reluctance of the organization to assign trainees at the right place and absence of similar tasks with their field in the organization.
- The major reasons for failure of TVET institutions and the apprenticeship organizations to undertake the tasks that could foster the success management of apprenticeship training were financial difficulties, lack of partnership between TVET institutions and organizations and shortage of manpower to organize and monitor the training.

4.2. Conclusions

In light of the findings of the study, the following conclusions are drawn:

The legal foundation for apprenticeship training gives mutual duties and responsibilities for all concerned parties with joint venture management that must exist between all stakeholders. However the findings show that no legal foundation was laid and no agreements are signed between stakeholders that govern the management of apprenticeship training. In addition to this, it was reflected in the findings that the partnership between the two parties are not well established. Thus, it can be concluded that the absence of law and memorandum agreement and lack of partnership among stakeholders due to lack of communication, awareness creation and lack of incentives to win the goodwill of organizations brought about major problems to manage apprenticeship training. Moreover, the training is takes place with the absence of efforts made to create an informed economic environment; legitimate incentives to encourage organizations to co-operate in apprenticeship training and lack of selecting capable organizations in terms of human and material resource for apprenticeship training are the causes for the reluctance to cooperate in the training.

Lack of employers' interest in assigning qualified supervisors for apprenticeship training affects the implementation of the program in planning, monitoring and evaluating trainees which in turn minimizes the skills acquired by trainees that allow them to be competent in the world of work. Moreover, the contents selected for practical activities during apprenticeship training and the desired objectives remained very far from being continuously exercised and mastered to bring about the desired change in trainees due to the absence emanates from lacking clearly defined plan and criteria elements for the selection and lack of responsible governmental entity in charge of creating partnership between TVET institutions and

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enterprises. Moreover, the enterprises were reluctant to assign qualified supervisors who are capable of planning, organizing, following up, evaluating and submitting performances of apprentices to TVET institutions. The absence of these activities eventually leads to undesirable mismanagement of these important aspects of the training.

4.3. Recommendations

On the basis of the findings obtained and conclusions drawn, the following suggestions are forwarded so that they could be taken into consideration by policy makers, educational planners and implementers to improve the apprenticeship training program in general and to enhance its effective management in particular.

- The issuance and declaration of TVET proclamation and the formulation of apprenticeship guideline is not an end by itself to improve the management of apprenticeship training at operational level. It needs the development of more specific and detailed legal document such as apprenticeship regulation. Therefore, priority should be given by REB and ZEO to provide and clarify the national proclamation of TVET and the regional apprenticeship guideline for all stakeholders. This may increase stakeholders' awareness on their respective duties and responsibilities. Thus, it is recommended that the REB and ZEO to prepare apprenticeship regulation that may create or raise the awareness of stakeholders on apprenticeship.
- It is the responsibility of REB, ZEO and TVET institutions to notify and motivate apprenticeship offering organizations more strongly about the essence and goals of the training. This awareness raising activity should be accomplished through the establishment of advocacy system among stakeholders focusing on the mutual benefits derived from

apprenticeship training. Therefore, the facilitation of seminars or workshops at the national and regional levels and uses of different broadcasts and printed media should be the task of MoE, REB and ZEO.

- There is no single universal model of investing for apprenticeship training. But it needs, as a prerequisite, a general economic environment and incentive mechanisms to encourage individuals and organizations to invest individually or jointly. Therefore, REB and ZEO should strengthen social dialogue with social partners to share responsibility in formulating policies, planning and implementing training network of cooperation, engage in partnership with government which initiates them to invest in apprenticeship training. Besides concrete incentives in the form of tax exemption, for example, should be used.
- The potential of TVET institution to generate income is not sufficient. Therefore it demands enhancing their revenue generating capacities and enable them to cover part of training costs and to mitigate their financial bottlenecks through commercial activities. The present practice of generating income for other purposes within the TVET institution such as sale of items produced during the training process or commercial use of equipment and renting halls must be expanded to a scale which could generate adequate income or TVET institutions need to look other options in their areas. Such options include creating conditions for partnership agreements with NGOs or other organizations.
- The quality of apprenticeship training depends on well-trained implementers who are able to administer the training effectively. Priority should be given by the MoE and REB to recruit dutiful and qualified trainers, vocational counselors and principals and to build the capacity of present implementers.

- It is apparent that when supervisors are found to be incompetent to monitor and evaluate trainees, the trainees do not get sufficient experience in the industrial settings. Therefore, training should be provided to company supervisors in pedagogical short term courses including teaching methodology, measurement and evaluation, etc. that fill this gap should be organized and continuously undertaken by ZEO and TVET institutions.
- Availability should not be the only criterion in selecting apprenticeship offering organizations. The MoE and REB must set criteria relating to the selection of legible organizations to provide apprenticeship training by giving emphasis to adequacy and up-to-datedness of facilities, availability of qualified and competent supervisors and the size and manpower in the organization, to state as few.
- The way of managing apprenticeship training must be based exclusively on the concept of partnership between education and industry with predetermined plan of action for the program. In order to make the provision effective it is the responsibility of TVET institution, in collaboration with ZEO and organizations, to prepare a detailed plan to strengthening the participation of stakeholders for managing the training effectively with a sense of partnership.
- Apprenticeship training organizing bodies such as apprenticeship board at regional and zonal level and apprenticeship committee at institutional level, which can take over responsibility of facilitating for apprenticeship training, should be established. As a result; the scheme could be carried out in a harmonized manner.
- Since this study is not an end in the area of apprenticeship training, further study should be conducted on issues enlightened by this study.

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APPENDIX – ONE

**ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT**

A Questionnaire to be Filled By Principals and Trainers and Vocational Counselors

The purpose of this questionnaire is to gather information and opinion on the management problems of apprenticeship training in TVET institutions of North Gonder Zone. Thus, your frank and honest responses to the items in the questionnaire help to meet the objectives of the study. Be sure that the information you provide will be kept confidential and used only for the academic purpose.

NOTE- no need to write your name

- put "x" mark on the boxes for close ended items
- give ingenuous and precise answer for opinion questions

Thank you!

PART ONE: PERSONAL DATA

1. Name of the TVET institution _____
2. sex Male Female
3. Academic qualification
 Certificate Diploma BA/ BSc
 MA/MSc Others, please specify _____
4. Field of specialization _____
5. your position in the institution _____
6. Age 21-25 31-35
 26-30 36-40 41 and above
7. Years of service
 1-5 years 6-10 years 11-15 years
 16-20 years 21 and above

PART TWO: GENERAL QUESTIONS

1. Is there any law supporting the management of apprenticeship training?
 Yes No
2. If 'yes', which one of the following were used by your institution to facilitate apprenticeship training?
 Apprenticeship proclamation Apprenticeship guideline
 Apprenticeship regulation Others, please specify _____
3. Did trainees and apprenticeship organization sign contract agreement?
 Yes No
4. If 'yes', how far it is applicable?
 Excellent very good good
 fair poor
5. Is there a criterion set to select apprenticeship offering organizations?
 Yes No
6. If 'yes', what is the criteria?
 Number of employees Type of business
 Amount of capital Type of ownership
 Distance others, please specify _____
7. Who assigns trainees to the selected organizations?
 Vocational counselor Through trainees personal contact
 No formal procedure used Others, please specify _____
8. Does the assignment of trainees follow any criteria?
 Yes No
9. If yes, what criterion is used in the process of assignment of trainees?
 Field of training Chance/draw Distance
 Interest Others, please specify _____

10. How the number of trainees assigned to each organization decided?
- By each organization unilaterally
 - By the TVET institution based on present criteria
 - By bilateral agreement between training organization and TVET institution
 - No formal procedures used
 - Others, please specify _____
11. Did you incorporate apprenticeship training in your annual plan?
- Yes No
12. If 'yes', who make a plan for apprenticeship training?
- Vocational counselor TVET principal
 - Training company officials
 - Jointly by TVET institution and training company
 - Others, please specify _____
13. If 'No', what is the reason for the reluctance?
- the training is given outside the institution
 - the training organization does not have commitment
 - the institution does not have enough financial resource
 - Others, please specify _____
14. Have you ever encountered a case or cases where trainees were forced not to attend apprenticeship training?
- Yes No
15. If 'yes', which one of the following could be the reason?
- Absence of adequate organizations in the area
 - Inconvenience of the time for the training
 - Reluctance of the trainees
 - Shortage of manpower to organize apprenticeship training
 - Others, please specify _____
16. Did some trainees quit apprenticeship training program?
- Yes No

17. If 'yes', what were the reason for the observed attrition? (you may choose more than one answer)

- Assignment on the duties other than field of training
- The period overlaps with trainees engagement in other activities
- Lack of proper monitoring
- Financial problem
- Personal problem
- High distance to the organization
- Irrelevant of the training to the occupational training
- Lack of qualified personal to organize the training
- Lack of proper evaluation
- Others, please specify _____

18. Rate the participation of organizations in each of the following activities?

1=Very high 2=High 3=Medium
4= Low 5=Very low

1	2	3	4	5	Items to be rated
					Participation in the overall organization of apprenticeship training
					Participation in preparation of curriculum
					Participation in evaluating apprentice's performance
					Participation in setting rules and regulations in regarding apprenticeship
					Cooperation in using machineries
					Giving allowance to trainees and covering other expenses
					Cooperation in using each other's staff when needed
					Financial support for training purpose
					Participation in monitoring and evaluation
					Participation in development of qualified staff

19. Have you got a chance to go to the organization as a professional?

- Yes No

20.If 'yes', how do you evaluate the following facilities in apprenticeship offering organization?

1=Very high 2=High 3=Medium
4= Low 5=Very low

1	2	3	4	5	Items to be rated
					Appropriateness of materials used for apprenticeship training in the organization
					Appropriateness of materials used in TVET institution
					Similarity of materials in the organization and TVET institution
					Assignment of supervisors to apprenticeship training
					Capability of supervisors to give instruction
					Capability of supervisors to control trainees
					Capability of supervisors to evaluate trainees performance
					Supply of raw materials

21.Did evaluation take place for trainees during apprenticeship training?

Yes No

22.When does trainee evaluation take place?

Continuously
 At the end of apprenticeship training

23.Who evaluates trainees during apprenticeship training?

Company supervisor Vocational counselor

Professionals from TVET institution

Others, please specify _____

24.Were there professional assistances given during apprenticeship training?

Yes No

25.If 'yes', how frequently did they visit apprentices?

Daily Weekly Once in two weeks

Every month Not at all

26.In your opinion which of the following highly hinder the smooth management of apprenticeship training program? (you may choose more than one item)

Poor theoretical background of students in their field of study
 Lack of partnership between organization and TVET institutions

- Disparity between number of trainees and capacities of the organizations to absorb them
- Lack of suitable work place and qualified supervisor in the organization
- Problems of effective apprenticeship training organization and management mechanisms
- Lack of proper plan for apprenticeship training
- Lack of regulation and guideline for teamwork in apprenticeship training
- Financial problems and incentives

Others, please specify _____

27. Would you please state major social in-school and company related problems you faced in managing apprenticeship training?

a. _____

b. _____

28. What possible solutions would you suggest to mitigate these problems?

a. _____

b. _____

Thank you!

APPENDIX – TWO

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

**Questionnaire to be Filled by Supervisors in Apprenticeship
Offering Organization**

The purpose of this questionnaire is to gather information and opinion about the management problems of Apprenticeship training in TVET institutions of North Gonder Zone. Thus, your frank and sincere responses to the items in the questionnaire help to meet the objectives of the study. Be sure that the information you provide will be kept confidential and used only for the academic purpose.

Note - No need to write your name

- Mark "x" on the boxes for close ended items.

Thank you!

PART ONE: PERSONAL DATA

1. Name of the company _____
2. Address Zone _____ Woreda _____ City _____
3. Your position in the organization _____
4. Your academic qualification
 Certificate Diploma BA/ BSc
 MA/MSc Others, please specify _____
5. Sex Male Female
6. Age 21-25 31-35
 26-30 36-40 41 and above
7. Years of service _____
8. What type of business the organization has?
 Manufacturing Trade Service

9. What type of ownership the organization has?

Government

Private

NGO

PART TWO: GENERAL QUESTIONS

1. How many trainees attend apprenticeship training in your organization?

In 1995 _____ in 1996 _____ in 1997 _____ in 1998 _____

2. For how long did trainees get apprenticeship training in your organization?

one month

one and half month

two months

two and half months

three months

others please specify _____

3. How many trainees can you take on for apprenticeship training at one time?

1-3

4-7

8-10

11 and above

4. Did your organization made aware about apprenticeship training?

Yes

No

5. If yes, how your organization is aware issues relating to apprenticeship training?

Through a forum which participate higher officials of the organization and TVET institution

By providing apprenticeship training co-operation guideline to the organization

By providing training of trainers

Nothing is done to create awareness

Others please specify _____

6. How was your organization made to provide apprenticeship training?

On the basis of discussion and agreement made between TVET institution and the organization

On the basis of request by local TVET institution

On the basis of guideline ordered from local administrative office

On the basis of stable triangulate negotiation

Others, please specify _____

16. When trainee's evaluation did takes place?
 Continuously At the end of the training
17. Who evaluates trainees during apprenticeship training?
 Company supervisors TVET teachers
 Vocational counselor Trainees
 Others, please specify _____
18. Did trainees sign apprenticeship contract with apprenticeship offering organization?
 Yes No
19. If 'yes', how far it is applicable?
 Excellent very good good fair poor
20. Were trainees charged fee for apprenticeship training?
 Yes No
21. Were trainees being paid for their effort during apprenticeship training?
 Yes No
22. Who covers your personal expenses during apprenticeship training?
 TVET institutions trainees/Families
 Sponsorship agencies the organization
 Others, please specify _____
23. Rate the participation of your organizations in each of the following activities?

1=Very high 2=High 3=Medium
 4= Low 5=Very low

1	2	3	4	5	Items t be rated
					Participation in the overall organization of apprenticeship training
					Participation in preparation of curriculum
					Participation in evaluating apprentice's performance
					Participation in setting rules and regulations in regarding apprenticeship
					Cooperation in using machineries
					Giving allowance to trainees and covering other expenses
					Cooperation in using each other's staff when needed
					Financial support for training purpose
					Participation in monitoring and evaluation
					Participation in development of qualified staff

APPENDIX - THREE

ADDIS ABABA UNIVERSITY SCHOOL OF GRADUATE STUDIES DEPARTMENT OF EDUCATIONAL PLANNING AND MANAGEMENT

A Questionnaire to be Filled by Trainees

The purpose of this questionnaire is to gather information and opinion about the management problems of Apprenticeship training in TVET institutions of North Gondar Zone. Thus, your frank and sincere responses to the items in the questionnaire help to meet the objectives of the study. Be sure that the information you provide will be kept confidential and used only for the academic purpose.

- Note - No need to write your name
- Mark "x" on the boxes for close ended items.

Thank you!

PART ONE: PERSONAL DATA

1. Name of the TVET institution _____
2. Major field of study _____
3. Sex Male Female
4. Age 15-20 21-25 26-30
 31 and above

PART TWO: GENERAL QUESTIONS

1. Did you sign a memorandum agreement with organizations that offer apprenticeship training?
 Yes No
2. If 'yes', how far it is applicable?
 Excellent very good good
 fair poor
3. For how long did you attend apprenticeship training?
 one month one and half month two months
 two and half months three months others

4. How do you rate the adequacy of the time allotted to apprenticeship training?
- Excessive Adequate in adequate
 Extremely inadequate No suggestion
5. Who assign trainees to apprenticeship offering organizations?
- Vocational counselor trainer/teacher
 Through trainees' personal contact
Others, please specify _____
6. Who covers your personal expenses during apprenticeship training?
- TVET institutions trainees/Families
 Sponsorship agencies the organization
Others, please specify _____
7. Were there some trainees forced not to attend apprenticeship training?
- Yes No
8. If 'yes', which one of the following were the reason?
- Absence of ample organizations in the area
 Inconvenience of the time
 Reluctance of the trainees
 Shortage of manpower to organize apprenticeship training
Others, please specify _____
9. Did some trainees quite apprenticeship training?
- Yes No
10. If 'yes', which of the following could be possible reasons?
(You may choose more than one answer)
- Assignment on duties other than field of training
 The period overlaps with trainee's engagement with other activities
 Lack of proper monitoring
 Financial problem
 Personal problem
 Long distance to apprenticeship offering organization
 The content of training is different from your field of training
 Lack of realistic evaluation
Others, please specify _____
11. Were there professional assistances given during apprenticeship training?
- Yes No
12. If 'yes', how frequently did they visit during apprenticeship training?
- Daily every month Once a week
 Not at all Once in two weeks

13. How do you evaluate the relevance of activities you have undergone during apprenticeship training to your occupational field of training?
- Very high High Medium
 Low Very low
14. If your answer is 'low' or 'very low', which of the following could be the reason?
- The occupation in which you trained was not among the activities in the organization
 Reluctance of the organization to assign you according to your occupation
 Improper training in TVET institution
 Your failure to regularly attend the apprenticeship training
Others, please specify _____
15. Were trainees charged fee for apprenticeship training?
- Yes No
16. were trainees being paid for their effort during apprenticeship training?
- Yes No
17. Did evaluation take place for trainees during apprenticeship training?
- Yes No
18. When does evaluation takes place?
- Continuously
 At the end of the training
19. Who evaluate trainees during apprenticeship training?
- Company supervisor TVET teachers
 Vocational counselor Trainees
Others, please specify _____
20. Would you please state major managerial in-school and company related problems you faced in the implementation of apprenticeship training?
- a. _____
b. _____
16. What possible solutions would you suggest to mitigate these problems?
- a. _____
b. _____

Thank you!

APPENDIX - FOUR

Interview Questions Prepared for Zonal TVET Officials

1. What law or legal foundation do you base for managing apprenticeship training?
2. How is the applicability for the existing law in your organization to facilitate apprenticeship training?
3. What is done at zonal level to make apprenticeship offering organizations aware about apprenticeship training?
4. Did you incorporate apprenticeship training in your annual plan?
5. Were there enough companies that can give apprenticeship training in the zone?
6. As to how companies participate in aspects of managing apprenticeship training?
7. Were there any incentives given to the apprenticeship offering organizations?
8. If 'yes', what were the incentives?
9. Did the ZEO made supervision for apprenticeship training?
10. How do you see the organizations have capacity to offer apprenticeship training?
11. Would you please state major problems you faced in relation to the management of apprenticeship training?
12. What possible solutions would you suggest to mitigate these problems?

DECLARATION

I here by declare that this thesis is my original work and that all sources of information used for the thesis have been fully acknowledged.

Name: Fozya Tesfa

Signature:  _____

Date: 15, August, 2007

Addis Ababa University