THE IMPLEMENTATION OF NON-FORMAL TECHNICAL VOCATIONAL EDUCATION AND TRAINING: THE CASE OF SELECTED INSTITUTIONS IN THE CITY GOVERNMENT OF ADDIS ABABA

BY

SEMAHAGN MENGISTU

JULY, 2007
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SEMAHAGN MENGISTU

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES OF ADDIS ABABA UNIVERSITY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTERS OF ARTS IN CURRICULUM AND TEACHER PROFESSIONAL DEVELOPMENT STUDIES

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DEPARTMENT OF CURRICULUM AND TEACHER PROFESSIONAL DEVELOPMENT STUDIES

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ACRONYMS

• CSTCs = Community Skill Training Centers
• EPRDF = Ethiopian Peoples Revolutionary Democratic Front.
• FAEP = Functional Adult Education Program
• FDRE = Federal Democratic Republic of Ethiopia
• GDR = German Democratic Republic
• MOE = Ministry of Education
• NF = Non - Formal
• NFE = Non Formal Education
• TGE = Transitional Government of Ethiopia
• TVET = Technical Vocational Education and Training
• NLCCC = National Literacy Campaign Coordinating Committee
• UNESCO = United Nations Education Scientific and Cultural Organization
• USAID = United States Agency for International Development
• USSR = United Soviet Socialist Republic
Abstract

The purpose of this study was to investigate the status of the basic and junior level (Non - formal) technical and vocational training program implementation in the City Government of Addis Ababa. To this end an attempt was made to look into the factors that affect the implementation of the training program; such as availability and adequacy of human, material and financial resources, the appropriateness of the physical facilities and the emphasis given to practical training. In order to attain the objectives of the study descriptive survey method was employed. It is also tried to identify the similarities and differences between government and private non formal TVET institutions. Six government and six private training institutions were selected based on stratified and random sampling techniques. The subjects of the study were eight officials, twelve principals; twelve counselors, 122 trainers and 305 trainees, and they were selected based on stratified, random and available sampling techniques. Information was obtained using questionnaires, interviews, observation and document analysis. The data was analyzed using percentage, chi - square and weighted mean values. The findings of the study revealed that the government TVET institutions were better in physical facilities; while private TVET institutions were better in availability and adequacy of training materials, human and financial resources. Even though, the program implementation seems better in private TVET institutions, the overall N.FTVET program implementation is found to be inadequate in both institutions. Accordingly, mounting efforts of concerned bodies were recommended to improve the status of the current non - formal TVET program implementation.

VI1
CHAPTER ONE:
Introduction

1.1. Background of the Study

Education and training contribute to an individual's personal development, increase his/her productivity and incomes at work, and facilitate everybody's participation in economic and social life. According to UNESCO (2002), education and training can help individuals escape poverty by providing them with the skill and knowledge to raise their output and generate income. Knowledge and skills are the engine of economic growth and social development.

Therefore, unless the education and training needs of all young people and adults are met through equitable access to appropriate learning and life skill programmes, it is apparent that the difference among individuals as well as among groups of people and societies will continue. But, it is impossible to ensure the education and training needs of all individuals only within the formal system. People who have not been able to benefit from formal education and training must be given opportunities to acquire skills and knowledge within the non-formal framework.

Of course, as many educators agreed, non-formal education and training emerged from the inability of the formal education system to provide an access to a great majority of the people. It is originated as a result of the inefficiency of the formal education system in terms of its access and failures to provide the necessary skills and to enable the learners participate in socio-economic development of society.

The interest in non-formal approaches to learning seems to be the wedge that promises an opening to a wider view of education that extends beyond the traditional structures and functions of the school system (Ahmed, 1975). According to Ahmed (1975) and Coombs (1985) the
pressure on resources and the inadequacy of present educational structures have combined to spur a growing interest in new avenues of education that go beyond the conventional formal system.

Since then, non-formal education gained popular currency and began to be treated as separate and expanding area of educational development and critiques of the prevailing pedagogical and managerial paradigm (Sheffield, 1974, in Gibon, 1998).

Since the Ethiopian Peoples Revolutionary Democratic Front (EPRDF) government came to power (in 1991) Ethiopia has been undergoing extensive changes. Based on the underlying political philosophy of federalism, the Education and Training Policy which was launched in 1994 is being implemented. The policy states that non-formal education concentrates both on basic literacy and occupational skills, which is to be given parallel to the formal schooling (Transitional Government of Ethiopia, 1994). The policy's sub-article 3.2.6 states that non-formal education deals with literacy, numeracy, environment, agriculture, crafts, home science, health and civics education.

In addition, with regard to the organizations of the non-formal education it is emphasized that the programs should be given in a coordinated way. In the aforementioned policy, Article 3, sub-article 3.6.6 reads as, "Non-formal education and training programs will be organized by various development and social institutions in coordination with the Ministry of Education" (TGE, 1994).

The decentralization of the political system has made serious implications on the application of the educational system. Apparently, following the federal structure of the country, all regional states are empowered to administer their regions including education. Based on
this, the Federal Ministry of Education mainly renders technical and professional assistance. The condition thus resulted in the dismantling of the former adult and non-formal education department and reduced its status to a panel. However, the panel is not responsible for the non-formal TVET program.

An effort has been made by the Ministry of Education to design and implement new TVET strategy in the following years after the Education and Training Policy was put into effect. And, due emphasis was also given by the Federal Democratic Republic of Ethiopia for the TVET program and different measures have been taken for its implementation. Some of the measures taken are:

- the proclamation of TVET; No 391/2004
- the establishment of National TVET council; and
- the establishment of the office of TVET in the Ministry of Education which is responsible for the TVET sector and which has powers to provide superior leadership and to prescribe standards as regards TVET carried out in the country (FDRE, 2004).

But it seems that much emphasis is not given for the non-formal TVET program. However, a lot of issues have been raised about the program in the Education and Training Policy. The non-formal is forgotten in the structure of “the office” of the TVET sector at the Federal Ministry of Education. Although, it is not clear that whether it is deliberately omitted or not, currently there is no department or panel or even a desk in the Federal Ministry of Education, which is responsible for the non-formal TVET. Hence, it seems that there is a gap between the Federal Ministry of Education and the Regional Education Bureaux in the implementation of the non-formal education and training programs (i.e. lack of strategic frameworks, procedures and guidelines as well as lack of technical and professional assistances).
Therefore, there exists an urgent need to examine how the existing non-formal TVET program is implemented without the appropriate guidance and assistance of the Federal Ministry of Education.

1.2. Statement of the problem
Because of the Ethiopian Government’s inception of new economic policy since 1992, it has been believed that trained and trainable citizen is necessary to socio-economic development. Thus, attempts have been made to comprehend the actual situation under serving the economy as a whole through vocational training. With the introduction of the new Education and Training policy, the issue of TVET development came to be one of the priority areas in the Ethiopian education system. In compliance with this, in 1997 twenty-five skill development centers have been opened in four regional states with the ultimate aim of training the larger number of secondary school leavers with various technical skills, mainly for self-employment in private sector.

However, since the scope and access to TVET was limited, no more than 6 percent of school leavers had the opportunity to attend the training. The participation of girls in TVET was less than 15 percent and nearly all girls choose the traditionally female occupations such as secretarial and home economics. The quality of training was also poor because of inadequate funding, lack of appropriate and adequate equipment and facilities, insufficient number of qualified trainers and inflexible and outdated curricula and inefficient management (Ministry of Education, 2002).

Yet the demand of employers for appropriately trained skilled labor is high. Therefore, reform and reorganization and expansion of the TVET system are found to be necessary. Among the aims of such measures the
major ones are: to increase the relevance of the TVET system; improve the access in general, and that of girls in particular to TVET; improve the efficiency of the system and, in general promote Vocational skill training in collaboration with private and public employers in order to foster economic development. In line with this, the Education and Training Policy of Ethiopia (TGE, 1994) states that "parallel to general education, diversified technical and vocational training will be provided for those who leave school from any level of education". Among these diversified training areas the one which is offered for those who completed grade ten for the development of middle level manpower was formally launched in 2001 in all regions of the country.

The TVET proclamation No. 391/2004 part two, Section one; article 4 states that; "The purpose of basic vocational training program is to provide citizens basic training which prepares them for gainful employment". Article 8 also states that; "The purpose of Junior Technical and Vocational Training program is to train the youth who have completed primary education" and article 12, sub-article 3 further states that the two training programs may be carried out through formal or non-formal programs. But to the researcher's knowledge, there is no formally organized activity launched for the stated programs. However, in the regions these programs are addressed within the non-formal system. Therefore, the purpose of the study is to assess how the non-formal technical, vocational, education and training program is effectively implemented in the city government of Addis Ababa.

Hence, the study will try to answer the following research questions.

1. What are the strengths and weaknesses of the non-formal TVET Program?
2. What factors do influence the effective implementation of the program?
3. Are there adequate of human, material and financial resources to implement the program in the training institutions?

4. What are the significant similarities and differences between the government and private non-formal TVET institutions in implementing the training program?

1.3. Objectives of the Study

The objective of this study is to assess the current status of the implementation of non-formal TVET program in Addis Ababa City Administration and specifically to:

- explore the strengths and weaknesses of the program in relation to the objectives;
- highlight the problems and constraints experienced while running the program;
- identify the significant similarities and differences between the government and private training institutions in carrying out the program;
- give suggestions and recommendations necessary for the improvement of the program in the future.

1.4. Significance of the Study

Any technical and vocational education and training program should be implemented in order to respond to the social and economic demand of a country. To this end, assessing the status of N.F TVET program implementation and identifying the major problems encountered the program and generating necessary information for decision-making and corrective action is essential. Thus, the study is said to be significant for the following reasons.
1. The study may help to examine the state of N.F TVET program implementation in order to determine the efficiency and effectiveness of the program in both government and private training institutions.

2. The study could enable the policy makers, development planners and other educational officers and authorities to get valuable information on the actual status of N.F TVET program implementation so that they could improve the program and/or its implementation.

3. The study may serve as a stepping-stone for further and in-depth studies.

1.5. Delimitation of the Study

The scope of the study was delimited to basic and junior level TVET program implementation in government and private training institutions of Addis Ababa City Administration.

Among the government, private and non-government (NGO) N.F TVET institutions, the government and private N.F TVET institutions were selected. This was because both government and private N.F TVET institutions are numerous and implementing basic and junior level N.F TVET program at large.

The Scope of the study was also delimited to four major fields of the study (Business and information Technology, Industrial Technology, Construction Technology and Home Economics), which are implemented in both government and private N.F TVET institutions. The others such as health sciences, Agriculture and trainings provided in relation to water are excluded because they are not organized non-formally.
1.6. Limitations of the Study

Technical and vocational education and training is relatively new phenomenon in Ethiopia. Therefore, locally written literature particularly on non-formal technical and vocational education is scarcely available. Hence, the researcher feels that sufficient evidences were not presented to supplement the study in the Ethiopian context. Because of financial and time constraints only the city Government of Addis Ababa is included in the study. Therefore, a very good picture of N.F TVET program implementation would have been obtained if more regions were included in the study.

1.7. Definition of Terms

Basic level TVET program: - is a training program set to provide citizens basic training which prepares them for gainful employment (Negarit gazeta, No 391/2004 section 2, Article 4).

Implementation: Is putting policies into practice. It is often a complex process of Planning, organization, coordination and promotion that is necessary in order to achieve policy objective (Lewis, 1984).

Junior level TVET program: - Is a training program set to prepare the you Junior level skilled labor fore (Negarit gazeta, 2004)

Program: all the courses in one field of study such as business, industrial trades organized to fulfill the same general objectives and conducted along similar lines (Good, 1973).

Private Training Institution: a training institution established by a private investor(s) or a business organization with a view to undertake business activities (Negarit gazata, 2004)
Public (Government) Training Institution: a training institution established with the funds of and operated under the guidance and control of the government (Negarit gazeta, 2004)

Technical and Vocational Education and Training: a comprehensive term referring to the educational process when it involves, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills and knowledge related to occupations in various sectors economic and social life (UNESCO, 1984).

1.8. Organization of the study
This study consists of five chapters. The first chapter deals with the problem and its approaches. The second chapter treats the review of the related literature. The third chapter contains research design and methodology, the fourth analysis and presentation of the data. The summary of the findings, conclusions and recommendations of the study are presented in the fifth chapter.
CHAPTER TWO

2. LITERATURE REVIEW

Education is a continuous process by which peoples' abilities and talents are developed. In a broader sense everything that is learnt and acquired in a lifetime including habits, knowledge, skills, interest, attitudes; and personality can be brought under the field of education. People became educated not merely by attending schools and colleges but also by the total experience of life. In this regard, education is a process by which the abilities and talents of the people are developed so as to enable them to lead a peaceful, meaningful and happier life.

Authorities in this field, claim that the concept of education contains three elements in it. These are content, process and strategy. Education when seen in terms of content indicates health, agriculture, vocational skills, pure and applied sciences etc. Education in terms of process indicates that education of children, adult education, lifelong education etc. Education in terms of strategy indicates that informal education, formal education, non-formal education, etc. (IIZ/DVV: 2002)

Life long learning is activated today as the key organizing principles for education and training systems, and for the building of the “Knowledge society” of the 21st century (IIZ/DVV, 2003). Accordingly, every member of the society is expected to acquire ample knowledge and skills of the most recent and up-to-date technological innovations are to be used.

Education could be directed through different systems. Evans (1981) also suggested the spectrum of learning settings into a number of categories: these are informal, formal and non-formal education.

Informal Education: Coombs (1985) defined informal education as “unorganized, unsystematic and even unintentional at times it accounts for the great bulk of any person’s total life time learning- including that
of even a highly 'schooled' person'. It is a life long process by which every person acquires and accumulates knowledge, skills, attitudes and insight from his daily experiences in his/her environment—at home, at work, at play (Bishop, 1994).

Moreover, informal education refers to learning which results from conscious efforts either on the part of the learner to learn from the environment or the part of the individual or organization with the intent to create a learning situation, but without a specific set of individual learner in mind. It provides as important avenue for self-improvement on the part of the learners who do not have the opportunity to attend school (Evans; 1981).

**Formal Education:**- Refers to hierarchically structured, chronologically graded education system, running from primary school through the university and including in addition to general academic studies, a variety of specialized programs and institutions for full time technical and professional training (Coombs, 1973). On the part of Evans (1981), formal education by its location is called schools, which are characterized by the use of graded classes of youth being taught with a fixed curriculum by certified teachers using standard pedagogical method.

2.1. **Concept and Characteristics of Non-formal Education**

2.1.1. The Concept of Non-formal Education

According To Bishop (1989):

"Non-formal Education refers to all organized and semi organized education and training activities that operate outside the regular structure and routines of the formal educational system serving a great variety of learning needs of different sub-groups of the population both young and old."
Basically, NFE (non-formal education) constitutes a wide variety of educational activities. Literacy programs, trade training, management training, political reeducation. Alternative school programs, community development education; etc, to mention a few. Non formal education is defined as a form of planned and organized educational provision outside the formal system, whatever its purposes target groups and providers (Rogers, 1992; Cassara, 1995; Hildebrand, 1996).

2.1.2. Characteristics of Non-formal Education

As Fordham (1980) states, non-formal education is a part of the entire educational system and the most important thing is to integrate non-formal education with the development system to bring a meaningful change.

Furthermore, NFE is not designed to qualification but is seek to provide for a clear client specific and immediate need which formal approaches can not. Tekeste (1996) states “NFE falls outside designed institutional structure and is not bound by age restriction, time schedules and sequences, curriculum boundaries, exams, degrees and so forth”

According to Mamo (1996), the following salient features characterize NFE.

a) NFE is an organized and structured learning activity.
b) NFE is need centered; and is outside the formal education system
c) NFE deals with selected courses for immediate outcome.
d) NFE is targeted to sub groups (children, youth or adults) whether they be literate or illiterate.

Furthermore, Lewaravu and Kaye (1992), claim that the mission of NFE is aimed at liberating target population, especially the rural and urban poor and the disadvantaged. In addition, NFE is believed to have the
potential of here and now effect enabling people for a better living (Cassara, 1995).

2.1.3. Types of Non-Formal Education
Basically, NFE constitutes a wide variety of educational activities: Literacy programs, trade training management training, political education, alternative school programs, community development; etc to mention a few (Mamo, 1996).

As MOE (1994, in Hailesillessie, 1999) points out there are a number of non-formal educations, non-formal primary education for children, community skill training centers, vocational training programs and continuing education programs, are some of the non-formal education programs that are being run in Ethiopia.

Moreover, NFE will have three sub components; the program for out of school children with 7-14 years of age, literacy program for those youth and adults whose age are above 15 and offering basic skills training to youth and adults in the community skills training centers (MOE, 2002).

2.1.4. The Role of Non-Formal Education
Non-formal Education is found highly effective not only complementing the inadequacies of formal school in terms of preventing dropout and repetition rates, "adaptability and functionary", but also providing learning opportunities to different target groups such as children who cannot or don’t get enrolled in primary schools, those who dropout from school, youths and adults who relapse into illiteracy and those who have never benefited from any schooling.

In the context of development strategies, NFE is being viewed as a more relevant to the needs of the population. Because of this, it is likely to make more effective contribution than the formal education in alleviating the real problem of the poor (Fordham: 1980). According to
UNESCO (2001):

"as far as education remains in the heart of poverty alleviation strategies, NFE is particularly helpful in that it enables the rural, urban and other marginalized groups to acquire useful knowledge, attitudes and skills."

Moreover, NFE also helps to effectively implement family planning. As women became more literate, they tend to marry late and bear fewer children (UNESCO, 1997). This has a positive impact on development. In general, with regard to the role of NFE towards development, many educators (such as Heed, 1991) and Mamo (1996) argue NFE by itself is not a panacea to development. In view of these writers, either the spread of literacy programs, or training in occupational skills alone cannot be sufficient conditions for peoples better earning and living. Therefore, NFE to play its role of development must be integrated and reinforced with the other development interventions.

2.1.5. Challenges to Non-formal Education

The challenges of non-formal education emanate from its characteristics as it does not strictly follow the rigorous procedures and requirements of the formal education. Education for both the concerned government officials and the recipients (beneficiaries) is what one gets through the formal school system only. To be educated, one has to enroll in a formal school, attend full-time and go through the rigidly and hierarchically structured system which finally culminates with certification.

According to Mamo (1996) the following are the major challenges of NFE.

- Because NFE follows a different approach of delivery, government bodies are usually skeptical and reluctant to support it and allocate human, financial and material resources for it. As a result, NFE suffers from shortage of manpower, lack of official support and resources at all levels.
The coordination and integration of the essential elements of the various sectors working in NFE. NFE is mainly geared towards the needs and interests of the potential clientele emphasizing learning rather than teaching and making the learning as relevant as possible. It prepares the clientele for living a better life now rather than in the future. But these virtues are not immediately understandable to many people.

2.1.6. Historical Development of Non-formal Education in Ethiopia

Ethiopia, despite a long history of a developed written language, introduction of Christianity as far back as 330 A.D, the visit of Western Missionaries as early as the 16th century is described as the land of ‘Scribe and the thumb print’ (Rwantabagu, 1994; Ayalew, 1989). The religious institutions that have been established since long ago have not only concentrated on spiritual learning but also they have been inaccessible to the rural population. Furthermore, crafts like tannery, black smithing and pottery were among the highly neglected skills until the days of Emperor Menilik II (Teshome, 1979).

Ethiopia, having its own script since ages, introduced modern education only a century ago (Seyoum 1996). Similarly, it is only after this period that movements towards modern adult and non-formal education could be perceived (Solomon, 1997; MOE, 1972). It was the missionaries who first launched literacy classes. The aim was to enable the converts to read the Bible. Yet, no clear information is found about the date, the agents and target population. Furthermore, until 1948, there was no movement on the part of the government (Solomon 1997).

In the Ethiopian adult and non-formal education history, the year 1948 is marked by two important events: proclamation of universal basic education and establishment of Berhaneh Zarenew Institute for adult working groups (MOE, 1989). The proclamation of Universal basic
education was mainly concerned with literacy programs. The target population was illiterate adults with the ages between 18 and 50. The contents of the program included the 3RS (reading, writing and arithmetic), civics and health education. The goal was to create a literate citizen.

Although there was no formal department, provincial literacy officers were also appointed. They had to coordinate the program and train literacy teachers (Solomon, 1997). To facilitate learning, community schools and mobile literacy units were initiated. In urban areas attempts were also made to promote evening classes. Furthermore, an experimental station, including a clinic was established at Tebasse, near Debrebrehan (Fasil, 1990). However, human resource for the community schools was scarce.

To meet the manpower need, the Majete and Debrebrehan adult training centers were founded (MOE, 1989). The first one was organized by USAID and the second by UNESCO. Both centers were running short-term training of 'fundamental educators'. The Majete training center (1956-1960) was used to admit adults with formal education between grades four to eight. The Debrebrhan training center (1957-1963) was recruiting adults having grade 8 formal education and above.

Although the community schools were attractive, it seems they were not carried out as planned.

Due to this reason, in 1964, the Debrebrehan Training Center was changed into TTI to train elementary school teachers. In the continued years attention for adult and non-formal education was marginalized (Fasil 1990). Meanwhile, in 1961 the historic conference of African states on development of education was held in Addis Ababa. On the conference, in spite of all the attempts made, Ethiopia’s accomplishment
on education was found embarrassingly low (UNESCO, 1973). By then, among other things, Ethiopia, when compared to the rest of African countries, was second from the last with 3.8 percent of enrollment in first level education. According to Fasil (1990), lack of definite policies that relate education to development was the basic failure. Besides, Tilahun (1991) also comments that the programs were unorganized and piecemeal.

After the Addis Ababa conference, the need to revise the education system became imminent. Thus in 1967, Ethiopia joined the UNESCO sponsored functional adult education program (FAEP) (Solomon, 1997). In the same year, a standard examination was designed and a national certificate was prepared. Furthermore, a national advisory committee was set up. The committee later developed into a Formal Adult Education and Literacy Department (MOE; 1979). In 1969 with the help of UNESCO, work oriented adult literacy was scheduled to address the industrial areas near Addis Ababa and coffee growing areas of western Ethiopia. The schedule, however, did not extend beyond preliminary studies.

In 1972, there came the historic Education Sector Review (ESR). It was the most critical and comprehensive review which sought practical solutions for educational problems of the country. Accordingly, the review, in relation to adult non-formal education, in one of the alternative strategies for education, came with the proposal of community practicums. The statements of the review read as follows:

Alternative strategy II would place a strong emphasis on non-formal education, which would be institutionalized and programmed under the inclusive term, community practicums. (MOE, 1972)
Community practicum was regarded to be an important component of integrated strategy of educational development. Hence, it envisaged to fulfill two essential functions:

a. to cater for the educational needs of adults, youth and children;

b. to serve as the mechanism for coordinating education with other facets of integrated rural development (MOE, 1972).

The program of the content was intended to address functional literacy, occupational skills, scientific, social, cultural and spiritual development. Multiple instructional techniques, languages, media and supplementary reading materials were also given due attention. Utilizing all the available agents and institutional resources, formally or informally, were also emphasized. Furthermore, the need for a separate body to work on the organization, administration, control and evaluation of non-formal education was also noted to be critical. On the whole, it was claimed to be a novel approach marking successful non-formal education activity. However, due to unsuitable political, economic and social conditions, one may hardly say the plan was pragmatic. And hence it was immediately followed by the 1974 Ethiopian Revolution that resulted in its abolishement.

2.1.6.1. Non-formal Education from 1975 to 1991

After the revolution, in mid 1975, the Dergue launched National Work Campaign for Work and Development through Cooperation. Though the objectives were mainly ideological, there was also the education of the rural mass. Through the campaign some 60,000 secondary school and university students went to rural Ethiopia. Although the campaign was costly, the results in founding peasant association and literacy program was reported to have been notable (MOE, 1988).
Following this, in July 1979 the National Literacy Campaign was launched. A national literacy committee was also established under the auspices of the Ministry of Education. The campaign was initiated with a view of achieving universal literacy by 1989 (MOE, 1979).

The urban and peasant associations were regarded responsible for the implementation of the campaign. Basically, the literacy program had two main phases. That is, the basic literacy and post literacy program (MOE, 1979). The basic literacy included acquisition of numeric and literacy skills. It was given in 15 vernacular languages including Amharic. Besides, there were reading materials in areas of clean water, soil protection, health and political education.

Following certification in literacy, participants were legible to join grade three at formal schools. On the other hand, adults could continue to acquire functional and occupational knowledge and skills through post literacy programs in local level training institutions i.e Community Skill Training Centers (CSTCs) which began to get established since 1975. A CSTC, on an average, was intended to serve around 40 peasant associations, Wereda towns being the center. At each center, it was also planned to train, on an average 120 persons a year in different skills in 3 to 4 months, and a short term training lasting 2 to 3 weeks (MOE, 1989). Participants in the CSTCs were expected to complete basic literacy program. The courses given in the centers included four major areas: agriculture, hand crafts, health and cooperative education (MOE, 1980).

Although it was claimed that programs differ depending upon the learning needs of target groups, practically, however, need-centered non-formal training was non existent. The programs were uniform despite the difference in learning environment and target groups characteristics. Urban dwellers’ and peasant associations selected trainees. These trainees, upon completion of their term of training were expected to serve
as multipliers in satellite stations, which were to be established at local villages though it did not materialize.

The management of Literacy and post-literacy programs was vested upon the National Literacy Campaign Coordinating Committee (NLCCC). The committee was made up of 36 members representing government Ministries, public and religious organizations. Under the auspices of the NLCCC, came and executive committee headed by the Minister of Education. Then, there was the department of Adult Education, which was responsible for the organization, and administration of literacy and CSTCs programs. At the Wereda level, the Wereda development committee carried such a responsibility. The committee which usually had nine members was made up of the representatives of government offices and mass organizations. The Wereda administrator was a chairman and the CSTC coordinator served as secretary. The Committee had the mandate of mobilizing local resources and establishing sub-committees where necessary. Besides, it set criteria for recruitment of trainers and participants. However, there was no uniform criterion used for selecting the trainers. Furthermore, the trainers were made to train adults without adequate knowledge and skill.

At the skill training centers, the coordinator was the only permanent staff who is expected to accomplish all the tasks. To meet this manpower need of coordinators, since 1980, the Adult Education Department of Bahir Dar Teachers College has made significant contributions. According to Jember and others (1996) until 1991, the department graduated 320 adult educators. On the other hand, the Burayu Basic Technology Center was established in 1984 to foster basic technological innovations and train trainers at the CSTCs. Along with this, the Agarfa Comprehensive Farmers Training Center, a boarding institute, was also established in 1985 to train farmers from all over the country.
In general, until 1991, there were 408 CSTCs against a total number of 590 Weredas (MOE, 1990). This accounts for a national coverage of 69 percent. According to Tekeste (1991) until 1991, the centers trained, in different skills, 183,721 rural adults, of whom 33,000 were female. This figure accounts for only less than 1 percent of the total rural population. However, no evaluation was made about the impact of the training given by CSTCs.

During the military government, it was true that the literacy program had received a national and international attention. Initially, the literacy campaign had a true mass support and participation. It had been sustained to a large extent by material and financial support from the people themselves. Besides, the sacrifices made by the youth teachers and leaders was great (Fasil 1990). According to MOE (1990), National Literacy program was the most massive campaign that involved 30-40 thousand campaigners each year.

In spite of all the effort, however, its overall outcome was minimum. Though many millions of citizens were claimed to be able to read and write, little or no follow-up was made to make them functionally literate. The Skills Training Centers were hardly effective. The training courses were not need based. Forced recruitment, weak intersectional linkages in the provision of the program were prevalent. Promotional services were nonexistent. Hence, trained adults were hardly observed improve their lives. Furthermore, in the final years of the Dargue regime, massive forceful recruitment and converting the centers to military barracks made the rural people strongly dissatisfied. As a result, during the change of government, in 1991, a lot of CSTCs were vandalized, looted or destroyed by the surrounding community members (Tekeste, 1991).
2.1.6.2. Non-formal Education Since 1991

Since the new government came to power in 1991, Ethiopia has been undergoing extensive changes. Based on the underlying political philosophy of federalism, the new Education and Training Policy is in a change process. The policy indicates that Non-formal Education concentrates both on basic literacy and occupational skills, which is to be given parallel to the formal schooling (TGE, 1994). The policy's sub-article 3.2.6 states that non-formal education deals with literacy, numeracy, environment, agriculture, crafts, home science, health and civics education. In addition, with regard to the organization of the NFE, it is emphasized that the programs should be given in a coordinated way. Article 3, sub-article 3.6.6. reads as:

Non-formal education and training programs will be organized by various development and social institutions in coordination with the Ministry of Education. (TGE, 1994),

The decentralization of the political system has made serious implications on the application of the educational system. Apparently, following the federal structure of the country, all regional states are empowered to administer their regions including education. Hence, they have the power to implement non-formal education in their areas (MOE, 1996).

Based on this, the Federal Ministry of Education mainly renders technical and professional assistance. The condition thus resulted in the dismantling of the former huge Adult Education Department (146 staff members) at the center. In addition, the department in the Ministry, is reduced to a panel.
2.2. Technical Vocational Education and Training

2.2.1. Definition of Technical and Vocational Education

There are scholars who contend to define all education as vocational education. In this sense the definitions of vocational education become broader. Scholars such as Swans (1959) as cited in Ainley (1990) and Entwistle (1970) describe vocational education as a "term which is more comprehensive" and which "embrace technical education and the learning of technical competence."

Entwistle (1970) in addition, contends to suggest that "general", "vocational" and "technical" education are related to each other, rather than inclusive terms or concepts. According to him, "general education" is the most comprehensive "vocational education "is the next comprehensive term, which embrace technical education and/or technical training. Hence, Entwistle regards vocational education and/or technical education as part of general education.

Other scholars tend to put clear demarcation between vocational and technical education. According to Clark, et al (1965) as cited in Mesfin (1995) vocational education implies to be a "formal instruction at the high school level" and has a function of preparing students "to work in specific occupation."

Generally, the above scholars contend to indicate that vocational education differs from that offered at post high school level and curriculum that requires higher skill and longer periods of training.

On the contrary, the proponents of technical education saw technical education as that type of education, which designated post high school courses, and curriculum, which requires higher skills, and longer periods of training (Evans, 1971). According to him technical education refers to a level of education rather than a type of education and it is not a type of education for certain engineering technologies.
Wiles (1963) defined technical and vocational education as "course used by a student to prepare for an occupation." Twining (1987) definition of vocational and technical education is somehow different from the above definition. Twining define technical and vocational education in relation with the "location of learning." Vocational education according to Twining is "education that takes place in post high school institution other than Universities."

Technical vocational education is a form of education that carries many names. In England and Wales, it is known as further education and in Colombia and other South American countries SENA. In most of the world, the most common label is technical education (Benson, 1987 cited in Wanna, 1998).

According to Benson (1987), there are three special characteristics of vocational education.

1. The programs are intended to serve people who are seeking to enter the work force at some level, above that of unskilled labor.
2. The jobs for which people are being prepared do not normally require applicants to hold a university or baccalaureate degree; and
3. a portion of a training is offered in publicly administered forms of instruction.

Technical Vocational Education is by design intended to develop skills that can be used in a specific occupations or jobs; (Middleton et al.1993 cited in Wanna, 1998)

Technical Vocational Education deals with skills development needed for employment in the labor market. Thus, it has to be sensitive to
market forces and be adaptive to changing environment (Middleton et al., 1993 cited in Wanna, 1998).

2.2.2. Controversy on Technical vocational Education and Training

There are a number of arguments and beliefs about technical and vocational education. According to Evans (1971) there are scholars in favor of technical and vocational education who say that technical and vocational education develops not only the knowledge and skills that is essential for specific occupation but also the individual's intellectual capacity.

Frobel and Pestalozzi in Goodson (1994) argued that schooling was most effective when all students were able to use their hands to complement the mental activity of learning. By the first decade of the twentieth century, the philosophy of 'social efficiency' has largely eclipsed these forms of technical education. According to Goodson (1994) 'social efficiency' reformers believed that the traditional high school curriculum with its heavy emphasis on classical and academic subjects, was not suited to the interest, attitudes and occupational needs of most students. They claimed that while the academic or 'humanist' curriculum prepared future teachers, lawyers, doctors and clerics for their adult jobs, it fulfilled no vocational purpose for the majority of young people, who would later become industrial laborers, office workers or homemakers Goodson (1994).

On the other hand, there are scholars such as O'Hear (1981) who only favor general education that appear to be in doubt that technical and vocational education could be regarded as a means for the intellectual development of the individual. For such scholars, it is only history, mathematics, sciences, literature etc. that enable individual to develop their skills and intellectual capability and argued that less emphasis should be given to TVET.
Douglas (1992) regards technical and vocational education as equally important as general education. Douglas further suggested the idea of integrating "vocational courses" into the existing curriculum so that all students would benefit from vocational education. Tucker (1992) as cited in Mesfin (1995) share Douglas's ideas and have gone to the extent of believing that "it is time to abolish the general, vocational and academic tracks and establish what is known as "mastery standard" for all students. He further argued that technical and vocational education should be given to all students. In addition to this, he also believes that, having a diploma after having gone through, say, twelve years of schooling, does not tell what knowledge the person possess and what he/she can do. He had suggested that, this must be reversed by applying the concepts of "mastery standard" which has to be fixed and note by the students at the end of their learning.

In conclusion, the debate between those who favor technical and vocational education and those who favor academic education seem to remain unresolved. But no body is in doubt that technical and vocational educational and training program is vital for the economic development of any country.

2.2.3. Purposes/ Objectives of Technical and Vocational Education

The purpose of technical and vocational education is mainly focused to that type of education, which leads to particular occupation. The purpose of technical and vocational education is a reflection of the definition of the two terms, technical and vocational. Seen from such point of view, schools that are concerned with the provision of subjects that are technical and vocational nature have the responsibility of training people who would be able to work in the occupation available. In supporting the above idea, Evans (1971) indicates that the objective of meeting the manpower needed to society is the "earliest and widely accepted". Thus,
one of the primary purposes of technical and vocational education-training program is to meet the skilled manpower need of the specific area in which the schools have to operate.

Another objective of technical and vocational education is increasing options to students so that they could join any areas they want. The availability of vocational education, as indicated by Evans gives students an opportunity of having more options in relation to the options that may be possible by attending general education.

In addition to the above objective, Twinning (1987) indicated that technical and vocational education should be seen as the means of resolving the problem of unemployment of school leavers.

The main purpose of technical and vocational education in Ethiopia is more or less similar with the purposes discussed above. The Education and Training Policy and its implementation (2002) states the following as far as the purpose of technical and vocational education is concerned.

The aim in all these programs is not only to train manpower for the development program that the country is in the process of implementing but is also intended to encourage the trainees to create jobs themselves and contribute to the national development efforts.

2.2.4. Pre-conditions for Effective Implementation of TVET

2.2.4.1. Teachers’ Preparation

Technical and vocational teachers/trainers are the key elements in implementing training programs. The quality of any TVET program depends largely on the professional competence, personal quality and attitudes of teachers (UNESCO, 2001)
According to UNESCO (1973) technical and vocational teachers are "... responsible not only for imparting knowledge and skills, but also and most important is for preparing workers and technicians capable of contributing to a society which uses technology to serve the case of humanity". In this regard, it is possible to say that TVET teachers are the linking device between industry, the real world and the education system.

In order to play this role, the technical and vocational teachers must possess knowledge of their field and have had some experience in the real world of work for which they are preparing the students. They also must have knowledge and skills in pedagogical and practical teaching.

2.2.4.2. Facilities

Training facilities are the major and fundamental resources to run technical and vocational training programs effectively and efficiently. The major components of training facilities in TVET institutions are buildings, machines, equipment, playing ground, sanitary and safety facilities.

In order to make the training program more effective and the training environment more conducive, the location, orientation and size of the school building should be planned and standardized based on the types of the training program. Similarly, the libraries, laboratories, workshops, classrooms, computer centers, demonstration classes and offices of different purposes should be well established and equipped with appropriate materials (MOE, 2003).

Furthermore, health and safety facilities are among the most required facilities in the training institutions. Health facilitates encompass
facilities such as toilets and sewage disposal, washing and drinking water, and medical and treatment facilities (UNESCO, 1985).

The safety and sanitation facilities are related mainly with four physical risks that are fire, laboratory and workshop accidents, and falls in or from multi-storied buildings. The main concern with fire in the training institution is warning systems and means of escaping in case of fire. This means, TVET institutions' construction designs should consider the way of preventing the spread of fire. Likewise, fire hoses or fire extinguishers should be made available in multi-storied buildings and where laboratories are located. Construction of laboratories should also consider the way of escaping during accident. All stores and offices opening into the laboratories should have more than one exit door opening to a corridor (UNESCO, 1985).

In most cases, a danger in workshops arises from the improper and overuse of electrically powered machines and tools. So, it should be made possible for the trainers to cut-off all the powers at once to prevent or to minimize the risks that could be occurred otherwise. In order to maintain the sanitation, all the time the rooms should be clean and dry and it should get sufficient air and light easily. In addition, the training institutions should have clean and safe out-door space where the trainees could be engaged in a variety of games and sports.

Besides to the physical facilities TVET institutions should be furnished with the necessary and adequate machines, equipment, tools, furniture, books etc in order to attain the intended training objectives. Failure to supply these facilities in time will hinder the overall training activities. In addition, proper utilization of the existing facilities, proper storage of materials, maintenance of machines and equipment require due attention in training institutions (Birhanu and others, 1992).
2.2.4.3. Finance

One of the major factors that determine the quality of TVET program implementation is availability of sufficient financial resource. This means technical and vocational education and training programs are expensive to run as compared to the general education. According to UNESCO (1998) the cost of one TVET School is equivalent to two or three schools offering general secondary education. For instance, in Ethiopia, the average recurrent training cost per trainee for a year is estimated to Birr 2250 (MOE, 2003).

The high cost of TVET is mainly due to a smaller class size and expensive machines, equipment, facilities and training raw materials. Expenditure on machines, infrastructure, equipment and facilities make up a very high percentage while the non-teaching and operating expenditure represent the medium share in TVET institutions as compared to the general education.

In contrast, the share of expenditure devoted to the teachers’ salaries is lower in TVET institutions than in general education. With in the TVET system also those institutions providing industrial and construction skills have required more investment, than those institutions oriented towards the service rendering sectors (Atchoarena and Andrew, 2002; Ziderman, 2003).

In general, TVET institutions require huge financial resources in order to meet the skills need of the society. Failure to supply sufficient capital and operating finance for TVET institutions results in poor quality of training and inability of the graduates to find jobs relevant to their field of study Maura (In Atchoarena and Andre, 2002).
2.2.4.4. Apprenticeship

Apprenticeship is the work-based training in any commercial, industrial or service giving organization based on agreement between a training institute and an employer. It connects vocational schools/training institutions with the companies (MOE, 2002; 2001; 2000; Yekunoamlak, 2002).

Historically, in many parts of the world, small enterprises sold training as well as products. For instruction in a trade, apprentices paid masters a fee in a form of cash or labor. Specially, when the demand for their products decreased training was their major source or income. Through apprenticeship, apprentice can acquire a broad range of practical and business skills necessary for self-employment. However, even though the apprentice learned enough for commercial survival, it was not enough to improve productivity. Also, it was not supported by trade theory (World Bank, 1991).

In the modern apprenticeship, the owners of the enterprises pay some allowances for the apprentices and the training offered is supplemented by theory. In addition, at the end of the training programs, trade testing is administered and the certificate of accomplishment will be awarded. Moreover, the employers prefer to employ their apprentice rather than employing an individual who is not familiar with the nature of the work (Laugo in MOE, 2001).

Apprenticeship is a win-win situation for trainees, training institution and employer for mutual advantage. It equips trainees with appropriate skills and increases their employability. It also builds up the work discipline and self-confidence among the trainees. Regarding the training institutions and enterprises both will utilize their resources (trained manpower, materials, machines and time) efficiently by cooperating in
apprenticeship. Furthermore, the training institutions can facilitate job opportunity for the trainees, while the employers also get a better condition to employ staff with required competence (MOE, 2002).

According to the apprenticeship guideline of Ministry of Education (MOE, 2002) each TVET institution should assign a coordinator for apprenticeship training. This coordinator is responsible for the identification of companies for training, preparation of schedules, communication with enterprises and evaluation of the apprenticeship program.

**2.2.4.5. Vocational Guidance**

Many students usually face a great problem in choosing appropriate fields of study that fit them best. They are uncertain what courses they should study, and there is always the temptation to take courses that are believed to be easy and enjoyable. They do not understand the relationship between course selection now, and future options based upon these selections.

This problem is highly serious in high schools and technical and vocation training centers. Students who are attending high schools are not informed about their future education and training, and the existence of different fields of study before completing grade ten. Like wise the students in technical and vocational schools are not aware of job opportunity of courses given in their schools (Befekadu, 1993).

Vocational guidance helps the learners to plan their education, training and careers or prepare to become more employable. It helps to identify their own talents, strengths and weaknesses, family expectations and national requirements. Also, it helps to understand the available
education and training options to select relevant and appropriate field of study.

2.2.5. Technical and Vocational Education in Ethiopia

Traditional attitudes in Ethiopia regarded the skilled worker to the status of an outcast. Potters, metal workers, leather workers and wood carvers were despised and excluded from the possibility of owning land which was the foundation of the feudal society. These attitudes persisted until the revolution of 1974. The fascist invasion in 1935 had important cultural side effects. In the process of developing a colonial economy and social infrastructure, the Mussolini regime imported as estimated 200,000 Italian artisans and technical personnel who were required for elements of modernization under fascist rule (MOE, 1984).

In 1940's and early 1950's, a number of institutes for technical and vocational training were established to train technical personnel who can meet the need for middle level manpower (MOE, 1984). The basic objective for establishing these training institutes was to produce administrative and managerial elite who can fill the vacancy available.

Generally speaking, the development of the TVET sector of education in Ethiopia could be divided roughly into four periods (Wanna, 1998; MOE, 2002).

2.2.5.1. The Introduction of TVET Schools (1940s-1960s)-Phase I

During the first phase Ethiopia was rebuilding its educational institutions. The Vocational Technical schools built during this time were Addis Ababa Technical School, Addis Ababa Commercial School, Addis Ababa Building Trade School, Ambo Agricultural School, Jimma Agricultural School and Bahir Dar Polytechnic School (MOE, 1992). Even
though these Technical Vocational schools were few in number, they served students from all over the country.

2.2.5.2. Expansion and Introduction of Comprehensive High Schools (1960-1980s)-Phase II

In the middle of 1950s, secondary school leavers faced a great problem to get job. There was also high dropout rate, low access to the university and high growing demand for trained manpower. To overcome these problems, some secondary schools were changed to comprehensive secondary schools to provide Agriculture, Commerce, Home Economics and Industrial Arts parallel to academic education. This transformation was completed from 1958 to 1968 (Dessalegn, 1996).

Basically, the concept of comprehensive high school was taken from American Education System (Conant in Dessalegn, 1996). According to Wonna (1998) in Ethiopian context, comprehensive secondary schools had two major purposes; that were to provide academic education to prepare young individuals for tertiary education and to provide technical and vocational education and training for the young people for the world of work.

The first general secondary school converted to comprehensive secondary school was Woizero Sehen Secondary School in Dessie in 1961. The school was expected to provide basic technical and vocational skill in the field of Industrial Arts, Agriculture, Commerce and Domestic Sciences besides the academic subjects. Students who had got basic training in one of the above subjects were able to join the world of work easily when they had completed twelve grade (Dessalegn, 1996).

However, the comprehensive high school programs were commenced without proper study. As a result, there was lack of material resources,
shortage of qualified teachers, and limited budget. Thus, soon, many of
the comprehensive secondary school graduates found to be unemployed.

2.2.5.3. Reorganization and Consolidation of TVET Schools (1980s-
1991)-Phase III
Since the reorganization of comprehensive secondary schools was not
successful, the alternative step taken was to establish new technical and
vocational training centers and to re-equip the already existing ones.
From the year 1984 to 1991, twenty technical and vocational schools
were consolidated. These schools were fourteen government and six non-
government schools, three were established after the fall of the Derg
regime.

2.2.5.4. The Condition of TVET from 1991 to 2007-Phase IV
Because of the Ethiopian government's inception of new economic policy
since 1992 it has been believed that trained and trainable citizen is
necessary to socio-economic development. Thus, attempts have been
made to comprehend the actual situation under serving the economy as
a whole through vocational training. With this condition precedence, the
economic policy laid foundation for private entrepreneurs to participate
and invest in the field of TVET and give ample opportunity through
encouraging them by creating conducive environment for investment.
With the introduction of the new Education and Training Policy, the
issue of TVET development came to be one of the priority areas in the
Ethiopian education system. In compliance with this, in 1997 twenty-five
skill development centers have been opened in four regional states with
the ultimate aim of training the larger number of secondary school
leavers with various technical skills, mainly for self-employment in
private sector.
However, since the scope and access to TVET was limited, no more than 6% of school leavers had the opportunity to attend the training. The participation of girls in TVET was less than 15% and nearly all girls choose the traditionally female occupations such as secretarial and home economics. The quality of training was also poor because of inadequate funding, lack of appropriate and adequate equipment and facilities, insufficient number of qualified trainers and inflexible and outdated curricula and inefficient management (MOE: 2002).

Yet the demand of employers for appropriately trained skilled labor is high. Therefore, reform and reorganization and expansion of the TVET system are found to be necessary. Among the aims of such measures the major ones are: to increase the relevance of the TVET system, improve the access in general, and that of girls in particular to TVET, improve the efficiency of the system and, in general, promote vocational skill training in collaboration with private and public employers in order to foster economic development. In line with this, the Education and Training Policy of the Transitional Government Ethiopia (1994) states that parallel to general education, diversified technical and vocational training will be provided for those who leave school from any level of education.

An effort has been made by the Ministry of Education to design and implement new TVET strategy in the following years after the policy was put into effect. And, due emphasis was also given by the Federal Democratic Republic of Ethiopia for the TVET program and different measures have been taken for its implementation. Some of the measures taken were:

- The proclamation of TVET;
- The Establishment of National TVET Council
- The establishment of the office of TVET in the Ministry of Education, which is responsible for the TVET sector and which has
powers to provide superior leadership and to prescribe standards as regards TVET carried out in the country (FDRE, 2004).

The TVET Proclamation No. 391/2004 states that there are three TVET programs to be offered. They are:

- Basic vocational training program;
- Junior level TVET program and
- Middle level TVET program

Among these diversified training areas the one which is offered for those who completed grade ten for the development of middle level manpower was formally launched in 2001 in all regions of the country.

But the rest two programs: the basic and the Junior level are left to the regional states including the selection of the trades.

Therefore, since the focus of this study is the basic and junior level TVET program, it is better to see how it is conducted in the City Government of Addis Ababa.

2.2.5.5. The Basic and Junior level TVET Program in the City Government of Addis Ababa

According to the TVET proclamation (2004) the purpose of Basic and Junior TVET program is to train the youth who have completed primary education.

- Areas of training provided under basic and junior TVET program shall be selected by the regional state taking into account the country's development strategy and the local needs for trained manpower. It is also stated that:
"The training may be carried out through formal and non-formal programs"; and the purpose of Basic Vocational Tanning Program is to provide citizens basic training which prepares them for gainful employment. Citizens who leave school before completing primary education and whose age is appropriate for the training may participate in the program. The program may be carried out through non-formal methods.

Based on these, the City Government of Addis Ababa has organized the Basic and Junior level TVET programs in non-formal approach.

2.3. Curriculum Implementation

The concept of curriculum implementation, though expressed in different words by different scholars, denotes the same meaning in the literature. Fullan and Pomfret (1977) defined implementation as "the actual use of an innovation or what an innovation consists of in practice." Similarly, Grotelueschen (1980) explained curriculum implementation as "a process of putting the goals and designing to work." According to Grotelueschen (1980) curriculum implementation is "a process by which a program is conducted using a variety of teaching-learning-administrative procedures, aimed at fulfilling the designer expectation of a target audience."

As per the above definitions, implementation in short is, the execution stage of a planned curriculum. There is a clear demarcation between the developmental stage and implementation stage of a curriculum according to Yoloye (1978).

Ornstein and Hunkins (1998) view implementation as a separate component in the curriculum action cycle. According to them "Curriculum implementation is the next extensive step once a curriculum has been developed and piloted." It involves diverse action by
many parties, including the interaction between those who designed the curriculum and those who are to deliver it.

Implementation is not as easy task according to some writers. Lewy (1979) argued that implementation of curriculum is a much complex process than its development. While the development of a curriculum is usually carried out at a single developed centre by a relatively small team, the implementation may require contracting with many scholars, teachers and students.

Curriculum implementation is one of the major components of curriculum development process which continues even after the plans are tried out. Different scholars such as Fullan (1991) and Dalton (1988) describe curriculum implementation and show this process. According to Fullan, implementation is the actual use of an innovation in practice. Similarly, Dalton (1988) defined implementation as “the actual use of curriculum syllabus and what it consists of in practice.” Marsh (1992), Evans (1971), Pratt (1980), and Berman and McLaughlin (1976) shared the above definitions. All the above writers imply that the process of implementation gives life to curriculum.

Many scholars underscored the criticality and complexity of implementation. Dervegt and Knip (1990) noted that, “implementation is a complex, concrete, and fragmented ‘nut bolts’ affair involving a series of discrete activities through out the school.

From the remarks given by the above writers, we can easily see that implementation, as compared to other curriculum aspects, is a complex process as it confronts real classroom situations. It is concrete, as noted by Dervegt and Knip (1990) because it involves teachers, students, administrators, and other concerned bodies in direct contact with the innovative concepts. It is related to ‘bolt’ and ‘nut’ because it demands
“not to get the innovation in place but also to get the innovation components in tune.”

2.3.1. Dimensions to be considered in implementing a curriculum
According to Derebssa (2004) the following are dimensions to be considered in implementing a curriculum.

i. Planning
A careful planning is a necessary prerequisite for implementation, which would address the needs, changes necessary and resources required for carrying out intended actions. It involves establishing and determining how to administer policy that will govern the planned actions. Planning focuses on three major factors: people, programs and organizations.

ii. Communication
Whenever a new program is being designed, communication channels must be kept open so that the program does not come as surprise to the people. Frequent discussion about a new program among teachers, principals and curriculum workers is a key to successful implementation.

iii. Cooperation
The teachers' full cooperation is required in practicing the new ideas and programs that will find expression in their classroom. It is said that the best educational practice is unlikely to fulfill its promise in the hands of an inadequately trained or unmotivated teacher. Educators need to consider teachers' needs, level of commitment and skills while determining when and how to involve teachers in implementation.
iv. Support

In-service training program for teachers, administrators and such other personnel, acquainting them with the new program and its practice aspects can be a necessary support activity.

On the other hand, curriculum implementation is a complex process, thus, successful implementation cannot be achieved easily. Successful implementation involves a great deal of materials and manpower cost (Hord, 1995). Leslie Bishop as cited in Ornstein and Hunkins (1998) stated that implementation requires restructuring and replacement. He further stated that it requires adjusting personnel habits, ways of behaving, program emphasis, learning spaces and existing curriculum and scholars. It means getting educators to shift from the current program to the new program, a modification be met with great resistance. As such, it sees that with a change in curriculum, the framework necessary to put into practice need also to be altered. Hence, it would be of great help to have a look at what these procedures, structures and adjustment included so that to clearly visualize the process of implementation.

In short, implementing a curriculum is not an easy task and it requires so many things to be adjusted in the school where the curriculum is going to be implemented. Thus, it is crucial to discus the factor that hindered the effective implementation of curriculum in order to eliminate them before causing serious problem on the whole system.

2.3.2. Factors Affecting Curriculum Implementation

There are various factors that affect the smooth and effective implementation of curriculum. Some of the factors the availability of curriculum materials, contents knowledge of teachers and the feasibility of the curriculum are easily visible and are also manageable, but others such as budget size, socio-political conditions, and cultural factors take
long period to manipulate them (Posner, 1992). Four broad categories of factors that affect curriculum implementation have been identified by Fullan and Pomfret (1977) after reviewing 16 studies on measuring implementation. These are (a) Human factors, (b) Implementation strategies, (c) Characteristics of the innovation, and (d) Characteristics of macro socio-political units.

Those factors that are pertinent with the scope of this study are presented in this review; namely, human factors and implementation strategies.

2.3.2.1. Human Factor

A curriculum might be useless unless people change it into operational curriculum in the classroom. Curriculum becomes reality when teachers implement it with real students in real classroom (Dalton, 1988). In a similar view, Posner (1992) pointed out that "not only do the characteristics of the people... remain relatively stable, but also, more than any other frame factor they directly affect curriculum change." The view of these scholars indicated the extent to which human factors affect curriculum implementation. The most related human factors are teachers, students, and administrators according to these scholars.

As far as teachers are concerned they are one of the human factors that affects curriculum implementation, "No one is in doubt that they are the chief agents in the process of curriculum reforms (The International Bureau of Education, 1993). Teacher's role in determining the success or failure of curriculum implementation is also given emphasis by Posner (1992). Pedagogical belief and willingness and knowledge about the curriculum are the two main issues that can be raised in relation to teachers.
In relation to pedagogical belief, Neil (1995) stated that, teachers marginalize or avoid parts of the syllabus, which are not in agreement with their theoretical position. This means that, teachers use the parts of the syllabus, which are in congruent with the ways they teach, and avoid parts, which are not in harmony with their principles. This virtually leads to “drastic mutation” rather than straightforward adoption of the syllabus (O, Neil, 1995).

Posner (1992) argued that in extreme situations teachers neglect a new curriculum, which is inconsistent and accept that is consistent with most of their beliefs. The implementation of a curriculum at classroom level relies on teachers existing ideas about their day-to-day teaching and the extent to which they regard the new policy as desirable and practical. Hence, it is advisable to give teachers the chance to participate in the designing phase of the curriculum for the curriculum implementation to be successful.

Students are the second human factors that curriculum implementation is influenced by. Posner (1992) stated that, “the extent to which student possesses academic skills and background knowledge is the major determinants of success or failure of a curriculum.” Sometimes, there might be a pressing need to participate student in the design stage of a curriculum so that the implementation shall be successful. Similarly, Fullan (1991) stated that student participation in the designing phase of a new curriculum determines the success or failure of implementation. Because implementation comprises change in the role relationship between teachers and students.

Another human factor that influences implementation of curriculum is school administrators. Of course, school administrators do not have direct influence on curriculum implementation as Fullan (1991) argued, but they need to have knowledge about the curriculum and the planning
and management procedures involved. By understanding the crucial role of school administrator in implementation, McLaughlin (1976) notes, "implementation is incredibly hard... and that successful implementation generally requires a combination of pressure (introduce new ideas) and support by school administrators."

In conclusion, as the main constituents of the school system are the interaction within and among the three personnel factors highly determines the success of implementation.

2.3.2.2. Implementation Strategies

To accomplish successful implementation of new curriculum material and structural adjustment and behavioral changes of teachers are highly needed. Rather it requires developing and applying appropriate methods such as in-service training, resource support, and participating teachers in decision-making.

Before the new curriculum is put into effect it is necessary to arrange in-service training, which is one of the common strategies of implementation. As mentioned earlier, the teacher is chief agent of educational reforms, and there is a need to introduce a refresher course prior to the implementation of the reform (International Bureau of Education, 1993).

As Pratt (1980) sated unlike business or industry, which seeks to eliminate the need for human service, education is a labor-intensive field, which requires teachers more than machines. Hence, a key to educational change must include staff development, rather intensive staff development.

The provision of materials resource support and time are another implementation strategy that need to be considered by curriculum
planners and policy makers. Structural alteration, like grouping, textbooks preparation, classroom spacing etc, need to be made in line with the planned curriculum. Dublin and Olshrain (1988) stated that "Policy making can be realistic and effective only if it takes into account the limitation of available resources for implementation".

Inadequate material supply due to economic problem is one of the bottlenecks in implementing educational reforms in developing countries.
CHAPTER THREE

3. RESEARCH DESIGN AND METHODOLOGY

3.1. Method

The method used to conduct this research was descriptive survey study. In addition to the descriptions comparisons are made to reveal the existing strengths and weaknesses in implementing N.F TVET program both in government and private training institutions, and thereby it tries to make the necessary recommendations for adjustment.

3.2. Sources of Data

The major data sources for the study were officials at the Bureau and Sub-City level, principals, teachers, vocational counselors and trainees in the N.F TVET institutions.

Officials at the Bureau and Sub-City level were included because of their position and for their contribution to the program effectiveness. Principals, teachers and vocational counselors were selected because they were the front line program implementers and were able to share their experiences on the existing programs. The trainees were selected because they are the ones who are directly involved in the program under the study.

Moreover, official documents, statistical evidences, reports and other relevant materials were used as the source of data. In general, the data were secured both from primary and secondary sources.

3.3. Sample Population

In Addis Ababa City Administration there are 27 government and 21 private accredited N.F TVET institutions/ training centers. According to the data obtained from Addis Ababa Education Bureau, (2006/07) the total enrollment of the trainees for the year 2006/07 is 10,258 for
government, and 8974 for private N.F TVET institutions and the number of teachers was 1,156 and 687 respectively.

Among these trainees, 185 from government and 120 from private training institutions were selected for the study. Accordingly, seventy-four teachers from government and forty-eight teachers from private TVET institutions were selected for the study. Similarly, the sample of the study includes two officials (N.F TVET department Head and one expert) from Addis Ababa Education Bureau, six sub-city N.F TVET coordinators, twelve principals (one from each training institution), and twelve vocational counselors were included in the study. Therefore, the total subjects included in the study were 459.

**Table I: Respondents Category by TVET Institutions**

<table>
<thead>
<tr>
<th>No</th>
<th>Respondents Category</th>
<th>Fritter N.F TVET Center</th>
<th>Lideta N.F TVET Center</th>
<th>Peresney N.F TVET Center</th>
<th>Akaki N.F TVET Center</th>
<th>Gofa N.F TVET Center</th>
<th>Shiramosa N.F TVET Center</th>
<th>Total</th>
<th>C.P.U.P TVET Center</th>
<th>Fedan N.F TVET Center</th>
<th>Negatu N.F TVET Center</th>
<th>Sarina N.F TVET Center</th>
<th>Kidus N.F TVET Center</th>
<th>Orion N.F TVET Center</th>
<th>Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teachers</td>
<td>16</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>16</td>
<td>16</td>
<td>74</td>
<td>8</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Students</td>
<td>40</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>40</td>
<td>40</td>
<td>185</td>
<td>20</td>
<td>15</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>56</td>
<td>28</td>
<td>28</td>
<td>28</td>
<td>56</td>
<td>56</td>
<td>259</td>
<td>28</td>
<td>21</td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>0</td>
<td>14</td>
<td>21</td>
</tr>
</tbody>
</table>

As it is indicated in table I a total of 427 (122 trainers and 305 trainees) were included in the study.

**3.4. Sampling Techniques**

The twelve training institutions (six from government and six from private) were selected by simple random and stratified sampling techniques. Respondents were selected based on available and stratified random sampling techniques. Availability sampling technique was used.
to secure information from the Bureau and Sub-Cities Education Departments officials, principals, and vocational counselors. This sampling technique was used because of its relative advantages to collect relevant and detailed information from respondents who can share their experiences and insight to the study due to their positions and involvement in issuing instructions and facilitation of the training program implementation.

Stratified random sampling technique was used to seek relevant and reliable information from teachers and students of different fields of study. This sampling technique was used because of its potential advantages to maintain the involvement of all occupations in the study.

3.5. Instruments for Data Collection
To secure reliable and adequate information, three basic instruments were used. These were questionnaires, interviews, and document analysis. The questionnaires were prepared in Amharic and English language to prevent possible misunderstanding and misinterpretation on the parts of the respondents. The questionnaires contain mainly close-ended and few open-ended items. Questionnaires were used because of their appropriateness to obtain relevant information, opinions, and attitudes from large population within short period of time. Depending on the types of question items, choices and rating scales were used in the questionnaires. Questionnaires were used to secure information from teachers and students. In addition, to supplement the study, structured interview was used to secure information from Principals and vocational counselors, and non-structured interview was used to secure information from regional and Sub-City TVET officials.

Moreover, relevant documents that are available in the Regional Education Bureau, Sub-City Education Departments, and the TVET
institutions were consulted to increase the reliability of the information. In addition to these, observation checklist was employed to see the extent of facilities available in the TVET institutions. Also, pilot test was carried out on kotebe N.F TVET center to see the validity and appropriateness of the instruments before the final form is delivered to the respondents.

3.6. Procedures of Data Collection
In order to assess the status of N.F TVET program implementation in government and private TVET institutions in Addis Ababa City Administration; first, data from different documents were secured and analyzed; second, relevant literature was reviewed to see what has been done in relation to the problem, third, data gathering tools were prepared. Then, pilot testing was conducted to check the appropriateness of instruments. After improving the questionnaire on the basis of the feedback from the pilot test, it was administered to the respondents with necessary explanations on how to complete it. Finally, the questionnaires were collected and the data analysis was made using appropriate statistical tools.

3.7. Methods of Data Analysis
The data analysis involved content analysis of documents, responses to both close ended and open ended questions and interviews. The raw data collected from the field were tallied, organized and systematically framed with tables according to the similarities of issues raised in the questionnaires. The data analysis and interpretation were carried out using percentage, chi-square and weighted mean values as appropriate.
CHAPTER FOUR

4. PRESENTATION AND ANALYSIS OF THE DATA

This chapter has two parts. The first part treats the characteristics of the study population. The second part presents the analysis and interpretation of the data.

4.1. Characteristics of the study population

The main sources of information were the teachers and students in government and private N.F TVET institutions. In this regard, a total of 372 respondents were involved in filling out the questionnaires. These were 232 (164 trainees and 68 teachers) from government TVET institutions and 140 (100 trainees and 40 teachers) from private training institutions.

Accordingly out of the 185 and 74 questionnaires distributed to students and teachers respectively, in government N.F TVET institutions, 164 (88.64) and 68 (91.89 %) were filled in and returned by students and teachers respectively. On the other hand from 120 and 48 questionnaires distributed to students and teachers respectively in private N.F TVET institutions, 100 (83.3 % ) and 40 (83.3. %) were filed in and returned by students and teachers respectively. A total of 27 ( 21 trainees and 6 trainers )and a total 28 ( 20 trainees and 8 trainers ) questionnaires were not returned.

On top of this, to raise the quality of the data and information interview was conducted with two Bureau and six Sub-City N.F TVET officials, twelve principals and twelve vocational counselors, which make up the interviewee to be 32.
As shown in Table II, majority of the teachers 53 (77.9%) from the government and 38(95%) from the private N.F TVET institutions were males. Similarly, 102 (62.2%) of the students from the government N.F TVET institutions, and 80 (80%) of the students in the private N.F TVET institutions were male.

Concerning the age compositions of the teachers, about 14(20.6 %) and 20 (29.4 %) of the teachers in government N.F TVET institutions were in the age range of 21-24 and 25-29 years old respectively. Where as 34(50%) of teachers in the government N.F TVET institutions were in the age range of 30-45 years. Regarding private N.F TVET institutions, most of the teachers 34(85%) were 21-29 years old. With regard to the age composition of students in government N.F TVET institutions, 114
(69.5%) were between 17-20 years, and 38(23.2 %) were in the age range of 21-24 years. The remaining 4( 2.4 % ) and 3( 1.8 % ) were 25-29 years, 30-34 years respectively. Similarly, in the private N.F TVET institutions, 41(41%) of the students were between 17-20 years and 35(35%) were between 21-24 years. The remaining 24 (24%) of the student respondents were in the age range of 30-34 years.

Table III: Teacher Respondents by Field of Study, Qualification and Service Year

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Government N.F TVET Institutions</th>
<th>Private N.F TVET institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>Field of study</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Business</td>
<td>35</td>
<td>51.5</td>
</tr>
<tr>
<td></td>
<td>- IT</td>
<td>5</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>- Construction Technology</td>
<td>11</td>
<td>16.2</td>
</tr>
<tr>
<td></td>
<td>- Industrial Technology</td>
<td>7</td>
<td>10.3</td>
</tr>
<tr>
<td></td>
<td>- Home Economics</td>
<td>10</td>
<td>14.7</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>68</td>
<td>100.0</td>
</tr>
<tr>
<td>2</td>
<td>Qualification</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Diploma 10 + 3</td>
<td>28</td>
<td>41.2</td>
</tr>
<tr>
<td></td>
<td>- Diploma 12 + 2</td>
<td>40</td>
<td>58.8</td>
</tr>
<tr>
<td></td>
<td>- B.A/B.SC/B.ED</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>68</td>
<td>100.0</td>
</tr>
<tr>
<td>3</td>
<td>Service year</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 1 – 5 Years</td>
<td>19</td>
<td>27.9</td>
</tr>
<tr>
<td></td>
<td>- 6 -10 Years</td>
<td>6</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>- 11 – 15 Years</td>
<td>12</td>
<td>17.6</td>
</tr>
<tr>
<td></td>
<td>- 10 – 60 Years</td>
<td>14</td>
<td>20.6</td>
</tr>
<tr>
<td></td>
<td>- 21 and above years</td>
<td>17</td>
<td>25.0</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>68</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As shown in table III item 1, half of the teacher respondents 35(51.5%) in the government N.F TVET institutions and 20 (50%) of the teacher respondents in the private N.F TVET institutions were from business field of study. Among the teacher respondents from government N.F TVET institutions, 11 (16.2%) were construction technology graduates, 7 (10.3%) were industrial technology graduates, and10(14.7) were graduates of home economics. Among the teachers in the private N.F
TVET institutions, 8(20%) were trained in home economics, and 2(5%) were construction technology graduates.

This indicates that both government and private N.F TVET institutions were providing trainings largely in business field of study. Training in construction and industrial technology were offered mostly in the government N.F TVET institutions than in private training institutions. This could be due to the fact that the construction and industrial technologies require huge investment for purchasing training machines and equipment that may not be affordable to the private N.F TVET institutions than in the government training institutions. This may be attributed to the fact that there is a great demand from trainees due to its higher job opportunity. The information obtained through interview strengthened the above idea.

Regarding qualification of teacher respondents from the government N.F TVET institutions, 68 (100%) were Diploma holders. On the other hand, 20(50%) and 20(50%) of the teacher respondents in the private N.F TVET institutions were B.A/B.SC and Diploma holders respectively. The data reveals that the private N.F TVET institutions have better qualified teaching staff than government training institutions.

Table III item 3, shows that 19 (27.9%) of the teacher respondents in the government N.F TVET institutions have served from 1-5 years and 17(25%) of the teacher respondents have served for 21 and above years. In private N.F TVET institutions, the majority 36(90%) of the teacher respondents have served for 1-5 years and only 2(5%) of the teacher respondents have served for 21 and above years. Therefore, it can be concluded that the teachers in the government N.F TVET institutions have relatively better teaching experience than the teachers in Private N.F TVET institutions.
Table IV: Trainees by level and field of Study

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Government N.F TVET Institutions</th>
<th>Private N.F TVET institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Respondents</td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>Level of training</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Basic level</td>
<td>96</td>
<td>58.6</td>
</tr>
<tr>
<td></td>
<td>c. Junior level</td>
<td>68</td>
<td>41.4</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>164</td>
<td>100.0</td>
</tr>
<tr>
<td>2</td>
<td>Field of Study</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Business and I.T</td>
<td>77</td>
<td>47.0</td>
</tr>
<tr>
<td></td>
<td>- Construction Technology</td>
<td>56</td>
<td>34.1</td>
</tr>
<tr>
<td></td>
<td>- Industrial Technology</td>
<td>21</td>
<td>12.8</td>
</tr>
<tr>
<td></td>
<td>- Home Economics</td>
<td>10</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>164</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As depicted in table IV item 1, 96(58.6%) and 68(41.4%) of the student respondents from the government TVET institutions were trained in basic and Junior levels respectively. Whereas, in private N.F TVET institutions 69(69%) and 31 (31%) of the student respondents were trained in basic and junior levels respectively. This indicates that most of the government N.F TVET institutions provide training at basic level than junior level. Similarly, private N.F TVET institutions provide training mainly at basic level.

As can be observed in Table IV item 2, 77(47 %) of the student respondents in the government N.F TVET institutions were from business and I.T field of study. The remaining 56(34.1%), 21(12.8%) and 10(6.1%) of the student respondents were from, Construction technology, Industrial technology and home economics field of studies respectively.
In private N.F TVET institutions, the majority of the student respondents, 49(49%) were in business and I.T field of studies, while 13(13%), 10(10%) and 28(28%) of the student respondents were in construction technology, Industrial technology and home economics filed of studies respectively. This indicates that most of the trainees in both government and Private N.F TVET. Institutions were studying business and I.T, whereas, the students in construction technology were larger in the government N.F TVET institutions than in the private N.F training institutions. To the contrary, students studying home economics were larger in private TVET institutions than in government training institutions.

4.2. Analyses and Interpretation of the Data
This part of the chapter treats the presentation, analysis and interpretation of the data, which are pertinent to the problem.

4.2.1. Teachers' and Students' Readiness for TVET Program
This part attempts to analyze the extent to which teachers have got refreshment courses to enable them perform better, and reorient trainees to TVET programs and help them make appropriate choices in training fields and cope with training programs in the TVET institutions.
Table V: The Extent of Refresher Courses Provision to the Teachers

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Government N.F TVET Institutions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>1</td>
<td>Have you attended any type of refresher courses recently?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Yes</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>b. No</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>If your answer to question No 1 is “yes”, for how long?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Less than one week</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>b. 8-15 days</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>c. 16-30 days</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>d. 31-60 days</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>e. 61-90 days</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>f. More than 90 days</td>
<td>31</td>
</tr>
</tbody>
</table>

As can be seen from Table V Item 1, 60(88.2%) of the teachers from government N.F TVET institutions and 24(60%) of the teachers from private N.F TVET institutions responded that they had taken refresher courses recently that would help them to implement the training program effectively and efficiently.

However, the degree of participation in refresher courses differs among the government and private N.F TVET institutions.

Table V Item 2 indicates that 26(26.7%) teacher respondents in government N.F TVET institutions had taken part in refresher courses 8-60 days, 7 (11.7%) for more than 60 days, and 31(51.7%) of the respondents have taken more than 90 days training either as refreshment or upgrading their qualification. To the contrary, only 2(8.3%) of the teacher respondents in the private N.F TVET institutions were participated in 8-15 days refresher courses, while the remaining 22(91.7%) had taken the upgrading course for less than a week.
Based on this fact it is possible to infer that most of the teachers in the government N.F TVET intuitions may join summer program courses to upgrade their level of qualification from diploma to first-degree. On top of this, the teachers in government N.F TVET institutions seem better in getting short-term refresher courses than the teachers in the private N.F TVET institutions. The information obtained through interview also revealed that teachers in the governments N.F TVET institutions take part in many upgrading courses during the weekends and in summer program than teachers in private N.F TVET institutions.

**Table VI: Status of Trainees Awareness about N.F TVET Program**

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Government N.F TVET Institutions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teachers</td>
</tr>
<tr>
<td>1</td>
<td>Do trainees get sufficient orientation about TVET?</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>a. Yes</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>b. No</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>68</td>
</tr>
<tr>
<td>2</td>
<td>If your response for question number 1 is yes, who gave them orientation</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>a. Vocational Counselor</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>b. The administrator of the training institution</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>c. Department heads</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>d. Vocational teachers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>68</td>
</tr>
<tr>
<td>3</td>
<td>Do you think that the orientation was enough for students to select appropriate field of study of their interest?</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>a. Yes</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>b. No</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>68</td>
</tr>
<tr>
<td>4</td>
<td>How most of the students choose their current field of study among others?</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>a. Based on their interest</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>b. Based on job opportunity</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>c. Based on their friends choice</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>d. Based on primary school grade point</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>e. Based on the available field of study</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>68</td>
</tr>
</tbody>
</table>

X2 = Chi-Square value

(* Significant at alpha level 0.05)
As it is indicated on item 1 of Table VI, respondents were asked to rate whether the trainees get sufficient orientation about technical and vocational training. In this regard, the majority 39(57.4%) of teacher respondents from government N.F TVET institutions and 32(80%) of teacher respondents from private N.F TVET institutions asserted that the trainees get sufficient orientation about technical and vocational training. Also, 89(54.3%) of the student respondents from government and 81(81%) of the student respondents from private N.F TVET institutions confirmed the above idea.

This shows that the majority of trainees get orientation about N.F TVET in both government and private N.F TVET institutions, while the private N.F TVET institution students seem better in getting orientation than the government N.F TVET institutions. The chi-square observed value also reveals that the trainees’ awareness about N.F TVET program is significant.

This indicates that the students who join private N.F TVET institutions made a choice regarding the course he/she will be attending and the training institution before hand, whereas the students in the government N.F TVET institutions were assigned to the available fields of study based on their academic results.

Different fields of study require different ability to see fine things, to identify different color, to hear different sound, to lift heavy weight, to stand or to sit for long time and the like. Due to these mental and/or physical differences students should be informed to adjust their choice that fit them best before joining the training program. Moreover, the students should be informed about availability of different fields, educational background required, the possibilities of later continuing education and training and employment opportunities. Thus, students
who had better orientation and assigned to the field of study based on their interests, abilities and preference can be highly motivated and perform well in their training (UNESCO, 2001).

Item 2 of the same table shows that, the teachers from both training institutions were questioned to rate the responsible body that provides orientation for the students in the N.F TVET institutions. In relation to this, 24 (35.3%) of the teachers and 67 (40.9%) of the students from government N.F TVET institutions rated the vocational teachers, while the remaining 51 (31%) of the students rated the department heads. Similarly, the chi-square observed values for alternatives c and d was significant.

To the contrary, 16 (40%) of the teachers and 39 (39%) of the students from the private N.F TVET institutions rated the administrators of the training institutions. In this regard, the chi-square observed values for vocational counselors and administrators exceeded the critical value.

The orientation given for the students in government and private N.F TVET institutions were by different bodies, i.e., teachers, vocational counselors, department heads and administrators of the training institutions respectively.

As regards to item 3 of table VI, the majority of respondents in government N.F TVET institutions, i.e., 38 (55.9%) of the teachers and 146 (89%) of the students asserted that the orientation given for the students was not enough to select appropriate field of study of their interest. To the contrary, 27 (67.5%) of the teachers and 89 (89%) of the student respondents in the private N.F TVET institutions confirmed that the students had enough orientation to select an appropriate field of their interest. The calculated value of 33.12 exceeds the critical value.
Thus, the orientation obtained by the private N.F TVET institutions students was significant. This finding supports the results obtained in item 2 of the same table.

In the last item of the same table most of the respondents 101(78.8%) from government and 56(71%) from private N.F TVET institutions agreed that most of the students choose their field of study based on their interest. Similarly, the chi-square observed value of item 4 alternatives "a" exceeds the critical value in government and private N.F TVET institutions. Therefore, choosing field of study based on students' interest was found significant. Some 8(11.8%) of the teachers and 26(15.9%) of the students from government N.F TVET institutions believed the students choose their field of training based on their parents choice. Similarly, 12(12%) of students from private N.F TVET institutions indicated that students choose their field of study based on their primary school grade points. Similarly, the computed chi-square is found to be significant for the responses obtained from the students in private N.F TVET institutions; showing that the choices are done differently.

4.2.2. Adequacy of Resources for N.F TVET Program Implementation

This part of the study analyzes the degree to which human, material and financial resources were available in the N.F TVET institutions in order to implement the N.F TVET program effectively and efficiently.
### Table VII: Adequacy of Human Resources

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Alternatives</th>
<th>Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Government TVET institutions (Teachers &amp; Students)</td>
<td>Private TVET institutions (Teachers &amp; Students)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Very low</td>
<td>Low</td>
</tr>
<tr>
<td>1</td>
<td>Number of teachers/trainers</td>
<td>30</td>
<td>54</td>
</tr>
<tr>
<td>2</td>
<td>Qualification of teachers</td>
<td>16</td>
<td>33</td>
</tr>
<tr>
<td>3</td>
<td>Adequacy of workshop assistants/laboratory technicians or tool men</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>4</td>
<td>Adequacy of vocational counselor</td>
<td>75</td>
<td>64</td>
</tr>
<tr>
<td>5</td>
<td>Adequacy of supportive staff with the required level of education</td>
<td>30</td>
<td>49</td>
</tr>
<tr>
<td>6</td>
<td>Adequacy of librarian</td>
<td>65</td>
<td>56</td>
</tr>
</tbody>
</table>

X = Mean  
Xave = Average Mean

As can be seen from Table XII, items 1, 2, and 5, the adequacy of teachers and supportive staffs in government N.F TVET institutions were rated moderate, while it was rated very good for private N.F TVET institutions. However, the information obtained through interview revealed that there was a shortage of teaching and supportive staff in both government and private N.F TVET institutions. The remaining items, 3 and 4 of the same table were rated poor in the government N.F TVET institutions while moderate in private training institutions. It happened to be because the private N.F TVET institutions are required to have adequate qualified teachers and supportive staff to get accreditation license and to be competent in the market.
Table VIII: The Extent of Physical Facilities in the N.F TVET Institutions

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Government TVET institutions (Teachers &amp; Students)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Very low</td>
</tr>
<tr>
<td>1</td>
<td>Size of school compound</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>No noise disturbance in the compound</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>Size of class rooms as compared to the number of trainees</td>
<td>28</td>
</tr>
<tr>
<td>4</td>
<td>Adequacy of workshop/laboratories</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>Availability of computer room with good natural light</td>
<td>46</td>
</tr>
<tr>
<td>6</td>
<td>Library with required chairs. Tables and shelves</td>
<td>37</td>
</tr>
<tr>
<td>7</td>
<td>Adequacy of store</td>
<td>57</td>
</tr>
<tr>
<td>8</td>
<td>Adequacy of health care service</td>
<td>121</td>
</tr>
<tr>
<td>9</td>
<td>Adequacy of separate latrine for boys and girls</td>
<td>30</td>
</tr>
<tr>
<td>10</td>
<td>Adequacy of first aid kit in the workshop</td>
<td>15</td>
</tr>
<tr>
<td>11</td>
<td>Fire extinguisher in the buildings</td>
<td>54</td>
</tr>
<tr>
<td>12</td>
<td>Adequacy of playing ground in the training compound</td>
<td>19</td>
</tr>
<tr>
<td>13</td>
<td>Adequacy of electric supply</td>
<td>19</td>
</tr>
<tr>
<td>14</td>
<td>Adequacy of water supply</td>
<td>27</td>
</tr>
<tr>
<td>15</td>
<td>Road accessibility</td>
<td>15</td>
</tr>
</tbody>
</table>

X = Mean  
Xave = Average Mean

Training facilities are the key components in any technical and vocational program implementation. The quality and effectiveness of the
training program is reflected by the availability, adequacy and relevance of the training facilities and environment in which it is conducted.

In this regard, items 1, 2, 3, 4, 9, 10, 11 and 12 of Table XIII were rated adequate with average mean values between 2.94-3.68 in government TVET institutions, while they were rated moderate with average mean values between 2.29-3.00 in private N.F TVET institutions. This shows that government N.F TVET institutions were better than private N.F TVET institutions in size of training compound, free from noise, size of classrooms, workshops, separate latrine for boys and girls, first aid kits, fire extinguishers and playing ground. Inadequacies of physical facilities encountered by private N.F TVET institutions were due to offering of training without constructing appropriate building for training purpose. The information obtained through observation and interview also shows that the physical facilities in government N.F TVET institutions were in adequate. The reason behind was the existence of most of the N.F TVET institutions and kebele administration office in the same compound.

As regards item 8 of the same table, respondents from both government and private N.F TVET institutions rated very poor with mean value of 1.91 for government N.F TVET institutions and 2.39 for private N.F TVET institutions respectively. This shows that health care service was hardly available in both government and private training institutions.

On the other hand, as indicated in items 13 and 14 of Table VIII, the respondents from both government and private N.F TVET institutions replied that there were adequate electric and water supply. Generally, it is possible to conclude that government N.F TVET institutions have better physical facilities than private TVET institutions.
Table IX: The Extent of Training Materials in the N.F TVET Institutions

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Government TVET institutions (Teachers &amp; Students)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Very low</td>
</tr>
<tr>
<td>1</td>
<td>Adequacy of machines for training</td>
<td>57</td>
</tr>
<tr>
<td>2</td>
<td>Adequacy of tools and equipment</td>
<td>55</td>
</tr>
<tr>
<td>3</td>
<td>Appropriateness of machines for training program</td>
<td>41</td>
</tr>
<tr>
<td>4</td>
<td>Appropriateness of tools and equipments for training program</td>
<td>40</td>
</tr>
<tr>
<td>5</td>
<td>Adequacy of computer as compared to the number of trainees</td>
<td>71</td>
</tr>
<tr>
<td>6</td>
<td>Adequacy of relevant books in the library</td>
<td>78</td>
</tr>
<tr>
<td>7</td>
<td>Adequacy of relevant training modules in the library</td>
<td>66</td>
</tr>
<tr>
<td>8</td>
<td>Relevant factory or service giving organization for apprenticeship training</td>
<td>41</td>
</tr>
<tr>
<td>9</td>
<td>Adequacy of raw materials for training</td>
<td>32</td>
</tr>
</tbody>
</table>

X = Mean  
Xave = Average Mean

As indicated in Table IX, an attempt was made to investigate the adequacy of training materials in government and private N.F TVET institutions. In this regard, the average mean values for all items except item 8 were rated good in private N.F TVET institutions and moderate in government N.F TVET institutions. In this regard, adequacy and appropriateness of machines, tools and equipment, computers, relevant
books, training modules and raw materials found to be better in private TVET institutions than in government training institutions.

Item 8, which is concerned with the availability of factories or service rendering organizations for apprenticeship training, was rated above average with mean value of 3.3 for government N.F TVET institutions, while it was below average with mean value of 2.9 for private TVET institutions.

In general, the data indicated that the private N.F TVET institutions are better than the government N.F TVET institutions in having adequate materials for training. The reason may be attributed to the fact that the private institutions are trying their best to maintain their accreditation license.

**Table X: The Extent of Financial Resource**

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Government TVET institutions (Teachers &amp; Students)</th>
<th>Private TVET institutions (Teachers &amp; Students)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Very low</td>
<td>Low</td>
</tr>
<tr>
<td>1</td>
<td>Adequacy of recurrent budget for raw-materials</td>
<td>58</td>
<td>73</td>
</tr>
<tr>
<td>2</td>
<td>Adequacy of capital budget for machines and equipment</td>
<td>65</td>
<td>95</td>
</tr>
<tr>
<td>3</td>
<td>Adequacy of budget for project work</td>
<td>64</td>
<td>69</td>
</tr>
<tr>
<td>4</td>
<td>Adequacy of budget for field visit</td>
<td>126</td>
<td>53</td>
</tr>
</tbody>
</table>

X = Mean  
Xave = Average Mean

As can be seen in Table X items 1-3, the extent of financial resources in government N.F TVET institutions were rated low, and almost none for item 4 of table X in government N.F TVET institutions. Thus, the average
means values for items 1-3 were 2.44, 2.22 and 2.38 respectively, and it was 1.78 for item 4 above.

In contrary, the average mean values for all items were rated moderate between 3.125-3.55 in private N.F TVET institutions. Generally, it is possible to say that private N.F TVET institutions seem better in allocating sufficient budget for training. This may be due to low budget allocation for training in the government N.F TVET institutions. Furthermore, the sub-city finance offices did not purchase and supply training materials timely. The information obtained through interview was also consistent with the above findings.

Table XI: Conditions of Training Provision

<table>
<thead>
<tr>
<th>No</th>
<th>Items</th>
<th>Alternatives</th>
<th>Government TVET institutions (Teachers &amp; Students)</th>
<th>Private TVET institutions (Teachers &amp; Students)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Very Low</td>
<td>Low</td>
<td>Moderate</td>
</tr>
<tr>
<td>1</td>
<td>Adequacy of recognized curricula for training</td>
<td>40</td>
<td>76</td>
<td>37</td>
</tr>
<tr>
<td>2</td>
<td>Emphasis of training to practice than theoretical teaching</td>
<td>26</td>
<td>55</td>
<td>65</td>
</tr>
<tr>
<td>3</td>
<td>Provision of training based on the time allotted in the curriculum</td>
<td>31</td>
<td>47</td>
<td>65</td>
</tr>
<tr>
<td>4</td>
<td>Relevance of curriculum to the world of work</td>
<td>32</td>
<td>45</td>
<td>69</td>
</tr>
<tr>
<td>5</td>
<td>Evaluation of trainees based on practical performance than theoretical exam</td>
<td>37</td>
<td>45</td>
<td>70</td>
</tr>
</tbody>
</table>

X = Mean  Xave = Average Mean

As depicted in item 1 of table XI, the respondents from government institutions asserted that availability of curriculum for training was rated below average with average mean value of 2.91 while the respondents
from private training institutions asserted above average with average mean value 3.89. This shows that the private N.F TVET institutions are better in having adequate curricula for training.

Similarly, in items 2 to 5 of the same table, respondents from government N.F TVET institutions were ranked moderate with average mean value between 2.97 to 3.06 for government N.F TVET institutions, while rated good with average mean values between 3.81 - 3.84 for private N.F TVET institutions. Based on this fact, it is possible to deduce that private N.F TVET institutions seem better in practice teaching, provision of training based on time allotted, using relevant curriculum and evaluation based in practice.
CHAPTER FIVE

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

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

5.1. Summary

The major purpose of this study was to investigate the status and extent to which the basic and junior level N.F TVET programs were implemented in both government and private technical and vocational training institutions in Addis Ababa City administration.

To this effect, attempts have been made to provide answers to the following basic questions.

1. What are the strengths and weakness of the N.F TVET program?
2. What are the factors that influence the effective implementation of the program?
3. Are there adequate human, material and financial resources to implement the basic and junior level N.F TVET program in the training institutions?
4. What are the significant similarities and differences between the government and private N.F TVET institutions in implementing the training programs?

The study employed survey method and it was conducted by comparing six government and six private N.F TVET institutions in Addis Ababa City Administration. The sampling technique employed to select N.F TVET institutions was simple random sampling technique. The subjects of the study were 128 teachers and 264 students. More specifically, two teachers and five students were selected from each occupation of the sample N.F TVET institutions using simple random sampling technique.
In addition, 32 (Two regional and six sub-city N.F TVET officials, twelve principals, twelve vocational counselors) were selected based on availability sampling techniques.

Information was obtained from respondents through questionnaire, observation, interview and document analysis. The data obtained were analyzed using percentage, chi-square, and weighted mean values. In addition, the information obtained through interview and observations were presented in complementing the data obtained by means of questionnaire.

Based on the data analysis, the following major findings were obtained.

5.1.1. Regarding characteristics of the respondents

1. Concerning the teachers' field of study, 35(51.5%) from government and 20(50%) from private N.F TVET institutions were from business field of study.

2. Most of the students, 77(47%) in government and 49 (49%) in private N.F TVET institutions were from business field of studies.

3. The majority of students, 114(96.5%) in government and 41 (41%) in private N.F TVET institutions were 17-20 years old. Others 3(1.8%) and 24(24%) from the government and private N.F TVET institutions were between 30-34 years of age respectively. This shows that, the students in government N.F TVET institutions were younger than the students in private training institutions.

4. With respect to the level of training of students, 96(58.6%) from government and 69(69%) from the private N.F TVET institutions were trained in basic level where as 68 (41.4%) from government and 31(31%) from private institutions were trained in junior level program.
5.1.2. The Extent of Teachers and Students Readiness for TVET Programs

1. Concerning refresher courses attended by teachers, 60 (88.2%) of government and 24 (60%) of private N.F TVET institutions had taken refresher courses. Among these teachers, all 60 (100%) of government N.F TVET institutions have participated in refresher courses for more than one week, while 22(91.7%) of private institutions attended the courses for less than a week.

2. Regarding students' awareness about N.F TVET program, 39 (95.74%) of the teachers and 89(54.3%) of the students from government and 32(80%) of the teachers and 81(81%) of the students from private N.F TVET institutions asserted that they got orientation about N.F TVET program. Based on the findings, in government N.F TVET institutions, students get orientation from vocational teachers and department heads, while it was provided by the administration of the institutions in private N.F TVET institutions.

3. The findings of the study revealed that the majority of the students from government and private N.F TVET institutions chose their field of study based on their interest and job opportunity. However, few of them chose their field of study based on their parents' choice.

4. Respondents from government N.F TVET institutions asserted that orientation given for students was not sufficient to select appropriate field of their interest, while the respondents from private N.F TVET institutions agreed that the orientation provided for them was sufficient to select appropriate field of their interest.

5.1.3. Extent of Resources for N.F TVET

1. Adequacy of teachers in number, qualification and practical training ability was rated medium for both government and private N.F TVET institutions. Also adequacy of staff with required level of
education was rated medium for both government and private N.F TVET institutions. However, the information obtained through interview shows that there is a shortage of qualified teachers and administrative staff in both government and private N.F TVET institutions.

2. The findings also revealed that the adequacy of health care service was rated low for both government and private N.F TVET institutions.

3. The majority of respondents indicated that there is adequate electric and water supply in both government and private N.F TVET institutions.

4. The finding also showed that the number of workshop assistants, vocational counselors and librarian was inadequate in government N.F TVET institutions, while it was above average in private N.F TVET institutions. The information obtained through the interview indicated that there is a shortage of workshop assistants and vocational counselors in private N.F TVET institutions as that of government N.F TVET institutions.

5. Regarding the extent of training facilities such as size of school compound, absence of noise disturbance, size of classrooms, workshops, libraries, stores and separate latrine for boys and girls were moderate for government N.F TVET institutions while it was rated low for private N.F TVET institutions. The findings obtained through observation and interview also showed that the private N.F TVET institutions had no sufficient compound, standardized classrooms, workshops, libraries and playing grounds for training.

6. As the findings revealed, first aid kits and fire extinguishers were moderate in government N.F TVET institutions, while it was low in private N.F TVET institutions.

7. Regarding the extent of training materials: machines, tools and equipment, computers, books, modules and raw materials for
training were found to be better in private N.F TVET institutions than in government training institutions.

8. The finding revealed that the budget allocated for raw materials, machines and equipment, and project work was low for government N.F TVET institutions, while it was moderate for private TVET institutions.

9. Concerning training provision, respondents from private N.F TVET institutions rated adequate for having relevant curriculum, practical training, maintain time allotted for training and evaluating trainees based on practical activities than theoretical examination, while respondents from the government N.F TVET institutions rated medium for all items above.

5.2. Conclusions

Based on the literature revised the data collected, the analyses made, the findings obtained and discussions held the following relevant conclusions are drawn.

The quality of any education and training program largely depends on the adequacy of human, financial and materials resources; and availability of appropriate curriculum. Hence, the strengths and weaknesses of the private and government non-formal TVET institutions are identified as follows.

Government N.F Institutions

Strengths

- Teachers’ participation in continuous professional development.
- The placement of students in the occupations based on their interests
- The presence of adequate electric and water supply

Weakness

- Lack of qualified teachers all of them are diploma holders
- Lack of adequate budget
• The training program is not demand and market driven
• Lack of qualified vocational counselors, workshop assistants and librarians
• Lack of training modules and books.
• The training is being more of theoretical than practice, that is, inadequate to give the training based on the curriculum (80% practice, 20% theory)
• Lack of health care services
• Lack of appropriate apprenticeship training

Private N.F TVET Institution

Strengths

▲ The qualification of trainees is relatively better than government institutions; however, their experiences are under question.
▲ The provision of appropriate orientation for trainees before the training program is started.
▲ Having adequate raw materials for the training program
▲ More emphasis is given for practical training rather than theoretical training
▲ The presence of adequate electric & water supply.

Weakness

• Lack of continuous teachers' professional development.
• Lack of appropriate training compound, size of classrooms, workshops and health care services.
• The training program in not market driven.
• Lack of appropriate apprenticeship training.
5.3. **Recommendations**

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

5.3.1. **Strengthening students awareness on TVET**

To be successful in TVET program implementation, students should be given sufficient orientation, which enables them to select appropriate field of training that fit their interest and capability. To do this, N.F TVET institutions should arrange orientation program before the training starts. Furthermore, Vocational guidance service should be strengthened in the N.F TVET institutions.

5.3.2. **Building the capacity of N.F TVET institutions with required human, material and financial resources**

The quality of the N.F TVET program mainly depends on the quality and adequacy of the required resources in the N.F TVET institutions. However, it has been observed that both government and private N.F TVET institutions were poorly furnished with necessary resources. Therefore:

- To enhance the professional competence and the attitude of the existing teachers, the Addis Ababa Education Bureau should improve qualification of the teachers by organizing in service courses. Furthermore, in order to improve the practical skill of teachers, the N.F TVET institutions should establish strong relationship with relevant companies to enable teachers and workshop assistants obtain practical skill and experiences from the real world of work. In order to realize this, the N.F TVET officials at Bureau and Sub-City level should facilitate the relationship between the training institutions and the industries by providing guidelines and monitoring the implementation.
The government N.F TVET institutions should be organized in separate compound with the required physical facilities. Likewise, to maintain the quality of training, the private N.F TVET institution should build or rent standardized separate training buildings with the required classrooms, offices and workshops, health and safety services before launching N.F TVET training. For those private N.F TVET institutions that are required to build the training institutions, the N.F TVET officials at different level should facilitate access for land with local governments.

In order to equip the Government N.F TVET institutions with required machines, tools, and equipment, the Sub-City Education Departments should purchase and supply machines and equipment required for the training purpose. The sub-city education officials and the N.F TVET institutions should also coordinate financial and material supports from the government organizations, NGOs, private organizations and other internal and external donors. Moreover, before claiming for additional machines, tools and equipment, the existing machines and equipment should be repaired on time.

Since the N.F TVET program is expensive to run as compared to general education, the Sub-City Administration should allocate sufficient budget for the training based on the expenditure required for each field of study. On top of this, in order to strengthen the financial capacity of the training institutions, there should be income generation scheme from sales of products. In this regard, the Addis Ababa Education Bureau and Sub-City Education Departments should issue guidelines and create awareness for the N.F TVET institutions, and the Sub-City N.F TVET officials should follow the implementation of the program.

Training modules and relevant books for basic and junior level training program should be prepared in enough copies by Addis
5.3.3 Market Assessment
The training programs conducted in both private and government institutions should be demand and market driven. Therefore, before launching the training program, the appropriate need assessment should be made in different occupations.

5.3.4. Undertaking further studies
The non-formal TVET program implementation is a new phenomenon in the education system of the country with the aim of producing semi-skilled labor force and reducing unemployment. On this ground, the student researcher recommends that further study should be carried out to investigate the issue in more detailed and comprehensive manner.


Tekeste. (1990). The Crisis of Ethiopian Education. Some Implications for Nation Building. Uppsala University


Terminology of Technical and Vocational Education. Paris UNESCO.

The Transition of Youth from School to work. Paris. ITES Publication.

National Policy Definition in Technical and Vocational Beyond the Formula Sector Berhn: UNESCO.

Norms and Standards of Educational Facilities Paris: UNESCO.


UNICEF. (1993). Non formal Approach and Universal primary Education. New York UNICEF.


Appendix-A

Addis Ababa University
College of education

Department of Curriculum and Teacher Professional Development Studies

Questionnaire to be Filled by Non-Formal Technical and Vocational Teachers

The purpose of this questionnaire is to investigate the status of Non-formal TVET program implementation in government and private TVET institutions in Addis Ababa Administration.

In addition, it also intends to appreciate the strength accomplished and thereby to forward possible solutions for the problems encountered in the course of Non-formal TVET program implementation; if any. Accordingly, your genuine, frank and timely responses are quite vital to determine the success of the study. So; I kindly request your contribution in filling in the questionnaire honestly.

Instruction:-

1. No need of writing your name
2. For alternative answers, fill in the box by using "x" mark.
3. For any additional opinion or explanation use the space provided.

Thank you in advance for your cooperation.
Section one: Personal profile

1. Name of your training institution/school

2. Sex: A. Male □ B. Female □

3. Age: A. 21-24 years □
   B. 25-29 years □
   C. 30-34 years □
   D. 35-39 years □
   E. 40-44 years □
   F. 45 years and above □

4. Major field of study ___________________________

5. What are your educational status and your respective years of service?

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Years of service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-5</td>
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<tr>
<td>A Diploma (10+3)</td>
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<tr>
<td>B Diploma (12+2)</td>
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<tr>
<td>C B.A/B.Ed/B.Sc</td>
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<tr>
<td>D M.A/M.Sc</td>
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<tr>
<td>E If others, specify</td>
<td></td>
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</tbody>
</table>

6. Have you attended any refresher courses recently?
   A. Yes □
   B. No □

7. If your answer for question No. "7" is yes, for how long have you attended?
   A. __________ days
   B. __________ weeks
   C. __________ months
Section Two

1. Given below are a number of points indicating about extent of human, material and financial resources to deliver quality training.

Rate these items in 5-point scale according to your view of their appropriateness as:

1 = Very inadequate  
2 = Inadequate  
3 = Moderate  
4 = Adequate  
5 = Very adequate

<table>
<thead>
<tr>
<th>1.1</th>
<th>Extent of Human resources</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<td>A</td>
<td>Number of teachers/ trainers</td>
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<tr>
<td>B</td>
<td>Qualification of teachers</td>
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<tr>
<td>C</td>
<td>Teachers ability in practical teaching/training</td>
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<tr>
<td>D</td>
<td>Adequacy of workshop assistance/ laboratory technicians or tool men</td>
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<tr>
<td>E</td>
<td>Provision of counseling service</td>
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<td>F</td>
<td>Adequacy of supportive staff with the required level of education</td>
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<tr>
<td>G</td>
<td>Adequacy of librarian</td>
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<table>
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<th>1.2</th>
<th>Extent of training facilities and material resources</th>
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<th>4</th>
<th>5</th>
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<td>A</td>
<td>Size of school compound</td>
<td></td>
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<tr>
<td>B</td>
<td>The staining building is free from noise disturbance</td>
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<tr>
<td>C</td>
<td>Size of classrooms as compared to the number of trainees</td>
<td></td>
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<tr>
<td>D</td>
<td>Adequacy of workshops/ laboratories</td>
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<tr>
<td>E</td>
<td>Adequacy of machines for training</td>
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<tr>
<td>F</td>
<td>Adequacy of tools and equipment</td>
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<td>G</td>
<td>Appropriateness of machines for training program</td>
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<td>H</td>
<td>Appropriateness of tools and equipments for training program</td>
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<td>I</td>
<td>Availability of computer room with good natural light</td>
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<td>J</td>
<td>Adequacy of computers as compared to the number of trainees</td>
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<td>K</td>
<td>Library with required chairs; tables and shelves</td>
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<td>Adequacy of relevant books in the library</td>
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<td>M</td>
<td>Adequacy of relevant training modules in the library</td>
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<td>N</td>
<td>Adequacy of store</td>
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<td>O</td>
<td>Adequacy of health care service</td>
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<td>P</td>
<td>Adequacy of separate latrine for boys and girls</td>
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<td>Adequacy of first aid kit in the workshops</td>
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<td>Fire extinguisher in the buildings</td>
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<td>Adequacy of playing ground in the training compound</td>
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<td>T</td>
<td>Adequacy of electric supply</td>
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<td>U</td>
<td>Adequacy of water supply</td>
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<td>V</td>
<td>Road accessibility</td>
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<td>W</td>
<td>Relevant factories or service rendering organizations for apprenticeship training</td>
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<td></td>
<td>Adequacy of raw- material for training</td>
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<td>1.3.</td>
<td><strong>Extent of financial resources</strong></td>
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<tr>
<td>A</td>
<td>Adequacy of recurrent budget for raw- materials</td>
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<td>B</td>
<td>Adequacy of capital budget for machines and equipments</td>
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<td>C</td>
<td>Adequacy of budget for project work</td>
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<td>D</td>
<td>Adequacy of budget for field visit</td>
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<td>1.4.</td>
<td><strong>Training provision</strong></td>
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<tr>
<td>A</td>
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<tr>
<td>B</td>
<td>Emphasis of training to practice than theoretical teaching</td>
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<td>C</td>
<td>Provision of training based on the time allotted in the curriculum</td>
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<td>D</td>
<td>Relevance of curriculum to the world of work</td>
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<td>E</td>
<td>Evaluation of trainees based on practical performance than theoretical exam</td>
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</tbody>
</table>
6. In your institution, what are the major problems that hindered the proper implementation of the training program?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

7. What do you suggest to improve the implementation of the training program?

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________
Appendix B

አስአራ ከአ ይስርት

ለሥርት ከፈለገ

የሥርት አይታልEAR ያለት ላይ ያርበት ይህን

በሸ빛 ውስጥ ውስጥ ያለው ይህን የህ caveat በየካ ለከ ላይ ያለው ለማባለ ይህን

አስሱ ውስጥ ውስጥ ለላሱ ከለ-በራር ያለት ያንበታቸው የሥርት ውስጥ ውስጥ ያለው ይህን

የሥርት ከፈለገ ያለት ላይ ያርበት ያለሁን የቴን-700 ከተነሳ ለለለር ያለት ይህን

ውላል ከተከማተው ለማጭ ያለት የመልከቱ ላይ በሚ-መጋወ ለህ ከፈለገ

አስለስ-

1. ከምግብነት መጣት እስከላጥም
2. ከተካለ መልስ ለምግብነት/ታወሚ ብሆኑ

u. ከተካለ ከው ለውልኝነት ለአማ ይወ ሲ-ኔን ት ለአለት እተርንሱ እርርን/1.

አ. ለንክ ግራ ለጆ የጆለ የመልስ ወይስ ወይስ
3. መልስን ተፋ-ፋን እ社会资本 የሚጭር የሚጭር እለው ውስጥ ወይስ ውስጥ

ከተሉ ከርሃ- ይህ ውስጥ ላይ ይህ

1. የህገድው ለ መሁሬ ይህ
2. ይ- ው. ወቅት : ው. ሲ-
3. የነፋ ው. 16 ዋመ-የት ከ9.3 ወቅት : ው. 17-20

ሂ. 21-24 ው. 25-29

w. 30 ዋመ-የት ከ9.3 ወቅት

4. ከሱ የህገድው ለይ. የአማራ-ው ዋመ-የት

ሂ. ውስጥ ውስጥ

መለክት ውስጥ
| 1. | የጭስ ውጭ ሀበት ይህ እንደው ይህ ይህ / ድርጊ ይህepad | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 2.1 | የጭስ ውጭ ሀበት ይህ እንደው ይህ ይህ / ድርጊ ይህepad | 1 | 2 | 3 | 4 | 5 |
| 2.2 | የጭስ ውጭ ሀበት ይህ እንደው ይህ ይህ / ድርጊ ይህepad | 1 | 2 | 3 | 4 | 5 |
| 2.3 | የጭስ ውጭ ሀበት ይህ እንደው ይህ ይህ / ድርጊ ይህepad | 1 | 2 | 3 | 4 | 5 |
| 2.4 | የጭስ ውጭ ሀበት ይህ እንደው ይህ ይህ / ድርጊ ይህepad | 1 | 2 | 3 | 4 | 5 |
| 2.5 | የጭስ ውጭ ሀበት ይህ እንደው ይህ ይህ / ድርጊ ይህepad | 1 | 2 | 3 | 4 | 5 |
4. Անձանց այսօր մի քանի հարցեր էին դիմել: ինչ կգիտակցի սով. երկիր թագավոր նա
նա սուր ելքան համարել է: ինչ են խաղաղ համերեր տարած վրա? ինչ
v. կոր
Δ. սովորել թագավոր. համարել
δ. սուր ելքան համերեր
5. ԱԳԲ «4» սուրերի «8» հարց մեկու «4» հարց յուրահատկություն/թագավոր հուշարձանում?
v. երեխայից են հանալուց նամակ
Δ. հայդացի փաստ հանդիպում
δ. հայկացումs. հայկացումo. ադում
6. ԱԳԲ «4» սուրերի յուրահատկություն/թագավոր բարձրակերպում/թագավոր սով. այնպիսի
Ավարտ համարել է նախատեսվել?
v. կոր
Δ. սովորել
δ. սուր ելքան
7. ԱՈ-ի խմբագրական/մասնակից: ինչ էր սով. կոր համարել/թագավոր: հուշարձանում? (հաճախ օգտվում
ΔԱՊԱ)
v. անդամ
Δ. ամբողջ օգտվում
δ. համարել
ro. նախատեսվել
w. արդեն համարել
2. այն էին
8. հայդացի փաստեր դեպքում կարգավոր թագավորություն/բարձրակերպում/թագավոր
թագավոր
1.
2.
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9. ԱԳԲ «8» փաստեր/թագավոր անհետացել է սով. այս հուշարձանում
Appendix-C

Addis Ababa University
College of education

Department of Curriculum and Teacher Professional Development Studies

Questionnaire to be Filled by Non-Formal Technical and Vocational Students.

The purpose of this questionnaire is to investigate the status of Non-formal TVET program implementation in government and private TVET institutions in Addis Ababa Administration.

In addition, it also intends to appreciate the strength accomplished and thereby to forward possible solutions for the problems encountered in the course of Non-formal TVET program implementation; if any.

Accordingly, your genuine, frank and timely responses are quite vital to determine the success of the study. So; I kindly request your contribution in filling in the questionnaire honestly.

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1. No need of writing your name
2. For alternative answers, fill in the box by using 'x' mark.
3. For any additional opinion or explanation use the space provided.

Thank you in advance for your cooperation.
Section one: personal profile

1. Name of your training institution

Ownership: Private ☐
Government ☐

2. Sex: A Male ☐ B. Female ☐

3. Age: A. 16 years and below ☐
   B. 17-20 years ☐
   C. 21-24 years ☐
   D. 25-29 years ☐
   E. 30- and above years ☐

4. Major Field of study

   Level: Basic ☐ Junior ☐
Section Two

1. Given below are a number of points indicating about extent of human, material and financial resources to deliver quality training, Rate these items in 5-points scale according to your view of their appropriateness as:

1= Very inadequate  2= Inadequate  3= Moderate  
4= Adequate  5= Very adequate

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<thead>
<tr>
<th></th>
<th>Extent of Human resources</th>
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<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>A</td>
<td>Number of teachers/ trainers</td>
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<tr>
<td>B</td>
<td>Qualification of teachers</td>
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<td>C</td>
<td>Teachers ability in practical teaching/ training</td>
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<tr>
<td>D</td>
<td>Adequacy of workshop assistance/ laboratory technicians or tool men</td>
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<td>E</td>
<td>Provision of counseling service</td>
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<td>F</td>
<td>Adequacy of supportive staff with the required level of education</td>
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<td>G</td>
<td>Adequacy of librarian</td>
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</table>

1.2. Extent of training facilities and material resources

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<td>B</td>
<td>The staining building is free from noise disturbance</td>
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<td>C</td>
<td>Size of classrooms as compared to the number of trainees</td>
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<tr>
<td>D</td>
<td>Adequacy of workshops/ laboratories</td>
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<tr>
<td>E</td>
<td>Adequacy of machines for training</td>
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<tr>
<td>F</td>
<td>Adequacy of tools and equipment</td>
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<td>G</td>
<td>Appropriateness of machines for training program</td>
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<td>Appropriateness of tools and equipments for training program</td>
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<td>I</td>
<td>Availability of computer room with good natural light</td>
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<td>J</td>
<td>Adequacy of computers as compared to the number of trainees</td>
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<td>K</td>
<td>Library with required chairs, tables and shelves</td>
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<td>L</td>
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<td>O</td>
<td>Adequacy of health care service</td>
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<td>P</td>
<td>Adequacy of separate latrine for boys and girls</td>
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<td>Q</td>
<td>Adequacy of first aid kit in the workshops</td>
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<td>R</td>
<td>Fire extinguisher in the buildings</td>
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<td>S</td>
<td>Adequacy of playing ground in the training compound</td>
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<td>T</td>
<td>Adequacy of electric supply</td>
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<td>U</td>
<td>Adequacy of water supply</td>
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<td>V</td>
<td>Road accessibility</td>
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<td>W</td>
<td>Relevant factories or service rendering organizations for apprenticeship training</td>
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</tbody>
</table>

C - 3
<table>
<thead>
<tr>
<th></th>
<th>Adequacy of raw-material for training</th>
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<tr>
<td>1.3.</td>
<td><strong>Extent of financial resources</strong></td>
</tr>
<tr>
<td>A</td>
<td>Adequacy of recurrent budget for raw-materials</td>
</tr>
<tr>
<td>B</td>
<td>Adequacy of capital budget for machines and equipments</td>
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<td>C</td>
<td>Adequacy of budget for project work</td>
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<tr>
<td>D</td>
<td>Adequacy of budget for field visit</td>
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<td>1.4.</td>
<td><strong>Training provision</strong></td>
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<tr>
<td>A</td>
<td>Adequacy of recognized curricula for training</td>
</tr>
<tr>
<td>B</td>
<td>Emphasis of training to practice than theoretical teaching</td>
</tr>
<tr>
<td>C</td>
<td>Provision of training based on the time allotted in the curriculum</td>
</tr>
<tr>
<td>D</td>
<td>Relevance of curriculum to the world of work</td>
</tr>
<tr>
<td>E</td>
<td>Evaluation of trainees based on practical performance than theoretical exam</td>
</tr>
</tbody>
</table>
4. Did you get sufficient orientation about non-formal technical and vocational training before you joined the institution?
   A. Yes I got
   B. Yes to some extent I got
   C. No I didn't get

5. If your answer for question No "4" is "A" or "B" Who gave you orientation?
   A. Vocational guidance officer
   B. Administrator of the training institution
   C. Department head
   D. Vocational Teachers
   E. Others; if any ____________

6. How did you choose your current field of study?
   A. Based on my interest
   B. Based on available job opportunity
   C. Based on my friend choice
   D. Based on my parents choice
   E. Others, if any ____________

7. In your institution, what are the major problems that hindered the proper implementation of the N.F training program?
   ________________
   ________________
   ________________
   ________________

8. What do you suggest to improve the implementation of the N.F training program?
   ________________
   ________________
   ________________
   ________________

C-5
Appendix D

Addis Ababa University
College of Education

Department of curriculum and Teacher Professional Development Studies

Interview Guides made with Heads of the Training Institutions

1. What are the major objectives of your TVET institution?

2. Are the students informed about Non-Formal TVET programs before they placed to different fields of study? If yes how?

3. What are the major problems regarding availability and effective utilization of human resource?

4. What are the major difficulties concerning availability and effective utilization of training facilities and materials?

5. What are the major sources of finance for Non-Formal TVET implementation?

6. Is there any problem encountered regarding financial resource raising and utilization?

7. Does your institution undertake any training need assessment and labour market survey? If yes how?

8. How much percent of time is given for theory? And practice?

9. What are the major problems that hindered the implementation of the training program?

10. What would you suggest to improve the Non-Formal TVET program implementation?
Appendix-E

Addis Ababa University
College of education

Department of Curriculum and Teacher Professional Development Studies

Interview guides to be made with non-formal TVET experts in the Sub-City Education Departments

1. What are the objectives of the program?
2. Who are the target groups of the program?
3. How is the curriculum prepared?
4. Who is responsible for the curriculum preparation?
5. Who is responsible for budget allocation for the non-formal training program?
6. Is the training program demand driven?
7. What is the role of the Sub-City Education Department (N.F TVET Department) in conducting the N.F program?
8. How is the relationship between the Sub-City Education Departments and the training institutions? In conducting the program?
9. What are the major problems that hindered the implementation of the training program?
10. What would you suggest to improve the N.F TVET program implementation?
Appendix-F

Addis Ababa University
College of education
Department of Curriculum and Teacher Professional Development Studies
Interview guides to be made with non-formal TVET experts of Addis Ababa City Government Bureau of Education.

1. Are there strategic frame works within which N.F. TVET is conducted?
2. What are the objectives of the program?
3. Who are the target groups of the program?
4. How is the curriculum prepared?
5. Who is responsible for the curriculum preparation?
6. How many training programs are there?
7. Is the training program demand driven?
8. What is the role of the city government education bureau (N.F TVET Department) in conducting the N.F program?
9. How is the relationship between the City Government of Education Bureau, Sub-City Education Departments and the training institutions? In conducting the program?
10. What are the major problems that hindered the implementation of the training program?
11. What would you suggest to improve the N.F TVET program implementation?
Appendix- G

Addis Ababa University
College of education

Department of Curriculum and Teacher Professional Development Studies

Interview guides made with vocational counselors of N.F TVET Institutions

1. Are you a professional counselor?
2. In your opinion, do the trainees get sufficient orientation about N.F TVET?
3. In your opinion, do you think that the orientation provided for the trainees was enough to select appropriate field of study of their interest?
4. How most of the students placed in their current field of study?
5. Do your institution undertake training need assessment prior to conducting the training?
6. Do you make any tracer study?
7. What do you think are the major problems that hindered the implementation of the N.F TVET program?
8. What would you suggest to improve the N.F TVET program?
Appendix H

Addis Ababa University
College of Education

Department of Curriculum and Teacher Professional Development Studies

Observation Check-List

The purpose of this check-list is to collect relevant data about Non-Formal TVET implementation in government Non-Formal TVET institutions in Addis Ababa Administration.

1. Name of the Institution ___________________________

2. Ownership of the institution
   A. Government □  B. Private □

3. Establishment year __________

<table>
<thead>
<tr>
<th></th>
<th>1= Very poor</th>
<th>2= poor</th>
<th>3= moderate</th>
<th>4= Good</th>
<th>5=Very good</th>
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</thead>
<tbody>
<tr>
<td>4</td>
<td>Adequacy of training facilities and other materials</td>
<td></td>
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<tr>
<td>4.1</td>
<td>Separate compound used only for training purpose</td>
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<tr>
<td>4.2</td>
<td>Freeness of building from noise</td>
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<tr>
<td>4.3</td>
<td>Class room size and its facilities</td>
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<td>4.4</td>
<td>Adequacy of workshop/laboratories</td>
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<td>4.5</td>
<td>Availability of machines and tools and equipments</td>
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<td>4.6</td>
<td>Appropriateness of mechanics equipments for training</td>
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<tr>
<td>4.7</td>
<td>Computer room</td>
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<td>4.8</td>
<td>Adequacy of computer</td>
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<td>4.9</td>
<td>Library</td>
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<td>4.10</td>
<td>Relevant books</td>
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<td>4.11</td>
<td>Training modules</td>
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<td>4.12</td>
<td>Manuals/guidelines</td>
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<td>Store for raw materials</td>
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<td>Hall</td>
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<td>Clinic</td>
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<td>Separate latrine for boys and girls</td>
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<td>Teachers' file</td>
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<td>Students' file</td>
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<td>Supporting staff file</td>
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<td>Students attendance sheet</td>
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<td>4.29</td>
<td>Training schedule</td>
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Declaration

I, the undersigned declare that this thesis is my original work and has not been presented for a degree in any other University and that all sources of material used for this have been duly acknowledged.

Name: Semahagn Mengistu
Signature: 
Place: Addis Ababa University
Date of submission: July 2007

This thesis has been submitted for examination with my approval as University Advisor

Advisor
Signature