The Challenges of Technical Vocational Education and Training Colleges in Benshangul Gummuz Regional State

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ACRONYMS

AU	African Union
BGRS	Benshangul Gummuz Regional State
CSA	Central Statistical Agency
ecbp	Engineering Capacity Building program
FDRE	Federal Democratic Republic of Ethiopia
GDP	Gross National Product
GTP	Growth and Transformation Plan
ILO	International Labor Organization
MoE	Ministry of Education
REB	Regional Education Bureau
TVET	Technical and Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization

ABSTRACT

The purpose of this study was to assess the challenges of TVET Colleges in Benshangul Gummuz Regional state. The study has been conducted in two governmental and two non-governmental TVET Colleges. The trainees, trainers, College management bodies, and Regional TVET experts were the main sources of data for the study. Stratified random sampling approach was employed in selecting the trainers and trainees. Questionnaires, interviews, observation check list, focus group discussion, and document analysis were the instruments used for the collection of data. The data obtained through questionnaires were analyzed using statistical instruments like percentage and weight mean values. The data are analyzed and interpreted quantitatively as well as qualitatively. The results obtained from the study suggest that the TVET Colleges in the region are not supplied with qualified and skilled trainers and lack machines, equipment, workshops, libraries, classrooms, books, and other facilities. Furthermore, findings reveal that lack of adequate facilities, shortage of skilled manpower, lack of awareness regarding TVET strategy, lack of adequate budget, and lack of commitment of concerned bodies are challenges of TVET colleges in the region. Besides, Colleges are not well organized and have not enough resources to implement current TVET curriculum. Lack of skilled trainers, lack of facilities and machinery and weak internal organization are major challenges of trainees in the college while, unsuccessful Center of Competency (COC) exam, competing with others and lack of employers are expected challenges for trainees. There is no professional guidance and counseling in the colleges and trainees cannot decide their opportunity and will have job. Lack of cooperative training and COC assessments is not employed and these have an effect on quality training. Finally, Based on the findings and conclusions, the following points were recommended to address the existing challenges in the Region under study: Staff development in the Colleges; internally organized TVET systems in the region and TVET institution; and raise social awareness about the importance of TVET in the region for all societies should seriously be considered. Necessary facilities should also be fulfilled. In addition, tracery studies should be carried out before providing training, and trainees have to be encouraged in self-employment. Besides strengthening the labor market information system; establishing and enhancing technology transfer department; enhancing supervisory and professional support; offering opportunities for further education for trainers; and establishing professional guidance and counseling services are issues to be addressed.

CHAPTER ONE

1. INTRODUCTION

This chapter deals with the problem under study and its approach. It comprises background of the study, objectives of the study, significance of the study, delimitation of the study, and definition of terms.

1.1 Background of the Study

Education has the power to transform lives. It broadens peoples' freedom of choice and action, empowering them to participate in social and political lives of their society, and equipping them with the skill they need to develop their livelihood (UNESCO, 2010:135). Thus, people need to have the chance for being exposed to education in general and practical skill of training in particular. This exposure would help them to insure their existence and contribute in building their country's economy. To assert this UNESCO in African Union (2007:17) states the following:-

> *Since education is considered the key to effective development strategies, technical and vocational education and training (TVET) must be the master key that can alleviate poverty, promote peace, conserve the environment, improve the quality of life for all and help achieve sustainable development.*

In the Ethiopian context, this practice of technical and vocational education and training has significant role. The overall objective of the National TVET Strategy is:

> *to create a competent, motivated, adaptable and innovative workforce in Ethiopia contributing to poverty reduction and social and economic development through facilitating demand-driven, high quality technical and vocational education and training, relevant to all sectors of the economy, at all levels and to all people*(MOE, 2008: 12).

TVET is an integral part of the Education for All (EFA) initiative and through its orientation towards the world of work and the acquisition of skills play an essential role in promoting a country's economic growth and contributing to poverty reduction; ensuring the social and economical inclusion of marginalized communities. Bunning & Zhao, (2006:19) state that training and education are increasingly integrated into production and work-

processes to achieve a balance between implicit experienced learning and systematically contextualized training processes. Regarding this, Yikunuamlak (2000:13) mentioned that the primary function of vocational education is to assist individuals in building desirable and effective work habits and gain the required knowledge and skills of occupation to either enter and/or make progress in it. Similarly, Masresha (2004:16) substantiates this idea by saying that society would equally benefit from the service of technical and vocational education in human resource development and it is responsible for the growth of Gross National Product (GDP).

Besides, quality technical and vocational education and training (TVET) help develop the individual's knowledge of science and technology in a broad occupational area requiring technical and professional competencies and specific occupational skills (UNESCO and ILO, 2002: 2). As economic, social and technological change gathers pace, people everywhere need to develop their knowledge and skills, on a continuous basis so that they can live and work meaningfully in the knowledge society. Education and training contribute to an individual's personal development; increase her/his productivity and incomes at work, and facilitate everybody's participation in economic and social life. It follows that education and training can also help individuals to escape poverty by providing them with the skills and knowledge to raise their output and generate income.

The other issue pertaining to TVET is quality. At the very centre of quality technical and vocational education and training lies an effective interaction between trainers and trainees. In fact, an overall improvement in vocational skills for employability and citizenship can only be realized if there is an improvement in the quality, effectiveness and relevance of training. Many, both in the developed and developing countries, are increasing the emphasis they place on improving the capacity of technical and vocational education and training (TVET) systems, in recognition of the important role TVET plays in equipping individuals with relevant skills and knowledge for the job market. TVET can also better enable individuals to participate in social, economic and technological innovation processes. Therefore, embedding TVET into regional and national innovation structures is of paramount importance to the economic performance and social development of countries. Having a pool of skilled and knowledgeable people within the TVET industry is

as important to the TVET industry as it is to the industries TVET serves (Bunning & Zhao, 2006:17).

The development of TVET differs from country to country. For instance, TVET in different countries in Africa has various stages. On the whole, TVET has three objectives. The primary objective of all technical and vocational education and training program is the acquisition of relevant knowledge, practical skills and attitudes for gainful employment in a particular trade or occupational area. The need to link training to employment is at the base of all the best practices and strategies observed world-wide. In recent years, in view of the rapid technological advances taking place in the labor market, flexibility, adaptability, and life-long learning have become the second major objective. The third objective, which is particularly important for Africa, is to use TVET as a vehicle for economic empowerment and social mobility and for the promotion of good governance and regional integration (African Union, 2007: 24). I think in addition to these objectives TVET can have also make trainees self-employing and productive sections of society.

Meanwhile governments in sub- Saharan Africa face some of the toughest challenges in reforming TVET. Finance is part of the problem institution across the region. They suffer from a familiar combination of under investment in equipment, low pay for instructor and problems recruiting qualified staff, and higher per capital cost four times that of secondary schools due to small class size than general education(UNESCO, 2010:87). Survey reports, for example, Meselu (2007:3) has studied the TVET situation in Ethiopia and concluded that TVET face various challenges. According to her some of the problems are the dynamics and changing demand of skilled labor, uncooperativeness of enterprises and the society to implement TVET programs and expensiveness of the program by its nature, lack of career guidance and counseling and the like. The challenge mentioned above gets worse in the study region-Benshangul Gummuz Regional state.

The delivery of quality TVET is dependent on the competence of the teacher. The competence is measured in terms of theoretical knowledge, technical and pedagogical skills as well as keeping abreast with new technologies in the workplace. UNESCO (1990:33) stated that Technical and Vocational teacher's need to maintain up-to-date knowledge of

their subject content and possess the necessary skills to teach successfully. Since replacing equipment which becomes obsolete in the context of rapid technological advances is difficult, technical and vocational teachers are ill-prepared to meet the needs of their students. Moreover, the new requirements of industrial and commercial enterprises are some of the problems of training TVET teachers. Theodore in Simon (2002:2) states that the relative success or failure of programs of vocational training depends largely upon the ability to attract and to hold eager, happy, and able teachers. It is highly desirable that teachers meet fully and if possible exceed the standards set forth in the state plan for vocational training.

The development of effective programs of TVET also requires a great deal of attention to the facilities needed for good instruction. Training for high-quality skills requires appropriate training equipment and tools, adequate supply of training materials, and practice by the learners. Other requirements include relevant textbooks and training manuals and qualified instructors with experience in enterprises (African Union, 2007:38). The over all condition of facilities and materials at TVET should have solved the problems of power, spare-parts, consumable materials, maintenance, proper manuals, storage and organization; proper allocation of machines and materials (Birhanu et al, 1992:53).

Successful TVET System typically provided a strong link between the world of work and the world of school, requiring active engagement by private sector. The curriculum and the approach to train/teach also matter (UNESCO, 2010:7). The current curriculum is not properly implemented in the region.

In Benshangul Gummuz Regional State there are Governmental and non-governmental TVET Colleges. Among the governmental Colleges, the two Governmental TVET Colleges, namely Asossa and Manbuk, were established in 2002 (1994 E.C). The Colleges provide training in industrial, and business sectors. On the other hand, most of the non-governmental colleges in the region were established; according to the country's Education and Training policy to provide training in business, and health areas.

In Benshangul Gummuz region, until the year 2000/01 (1993 E.C), there was no Governmental and non-governmental technical school. Then the two TVET institutions were established in two zones and started working in 2002 (1994 E.C). Therefore, a considerable change in TVET development is observed in Benshangul Gummuz Region through the establishment of these TVET institutions. Thus, this study focuses on two Governmental TVET Colleges and two non-governmental TVET Colleges. This study, therefore, tries to examine the basic challenges of the existing TVET Colleges in aspects of the provision of qualified teachers and necessary equipment to successfully carry out the training programs way of achieving their goals. Moreover, this study will be assessed the Colleges furnished with the necessary materials and tools based on the current TVET curricula. This study also evaluates the current practice of the national TVET strategy.

1.2 Statement of the Problem

Technical and Vocational Education and Training programs in developing countries, like Ethiopia face lots of challenges. In Africa, the quality of training is low, with undue emphasis on theory and certification rather than on skills acquisition and proficiency testing. Inadequate instructor training, obsolete training equipment, and lack of instructional materials are some of the factors that combine to reduce the effectiveness of training in meeting the required knowledge and skills objectives. Appropriate workshop equipment, adequate supply of training materials, and practice by learners are the requirements for high quality skills training (African Union, 2007:23).

In Ethiopia, the major challenges facing the TVET program are well documented in the TVET strategy. Some of the major challenges include: Low quality and theory-driven teaching due to resource constraints, lack of skilled TVET teachers, under-funding, resource shortage, lack of adequate place of work and running costs (MOE, 2008: 11).

The other major problem in all developing countries is the relevance of content of TVET. Updating and revising of curricula mostly takes place after a major crisis in the labor market or problems of graduates' unemployment. There are no systematic evaluation, graduate tracer systems, and effective two-way linkages between industry and TVET

(Abdule, 2009:23). Because of this, the materials do not take into account the local situation. It is necessary to relate such issues with the situation in Ethiopia, particularly with the reality in Benshangul Gummuz State.

In addition, challenges in the TVET institutions are lack of updated training materials and tools; lack of skilled manpower; not fully practicing according to the current TVET strategy. Moreover, due to other challenges they faced in the training environment, use of too old items of equipment that have been used for decades, lack of adequate facilities, less awareness of TVET in the region. These are some of the factors that are combined to reduce the effectiveness of training in meeting the required knowledge and skills objectives.

In light of the above discussions, the major purpose of this study is to investigate the challenges of Technical and Vocational Education and Training (TVET) Colleges in Benshangul Gummuz Regional State. Therefore, the main focus of this study was to answer the following basic questions:

1. What are the challenges of Technical and Vocational Education and Training (TVET) Colleges by ways of achieving their goals?
2. How are the internal organizations and resource availability to implement the current TVET curricula?
3. What are the current practices of these TVET colleges with respect to national TVET strategy?

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of this study was to assess the challenges of TVET Colleges in BSGRS towards the training delivered and to recommend possible solutions.

1.3.2 Specific Objectives

The specific objectives of the research were the following:

1. To identify and examine, the basic Challenges of the existing TVET Colleges in the implementation of their TVET programs.
2. To examine and understand the internal organization and resource available in the Colleges to achieve their goals.
3. To examine, the current practice of the TVET colleges' vis-à-vis the national TVET strategy.

1.4 Significance of the Study

As TVET is essential for the fulfillment of individuals needs as well as for the national growth, assessing the challenges of the TVET Colleges in BGRS becomes unavoidable and necessary. In light of this observation, the researcher believes that the study would have the following significances:

- It may help planners, regional TVET experts, College managements and policy makers to be aware of the challenges and there by look for solutions based on the findings.
- It may encourage other interested bodies to be involved in strengthening the finding of challenging and the implementation of TVET to practical condition.
- It may help the concerned institutions involving and improving the implementation of TVET.
- It may give chance for experience sharing of institutions from each other.
- It may initiate other interested researchers to carry out more detail studies in the area.

1.5 Delimitation of the Study

According to MoE, (2009:55), all in all, there are 14 TVET institutions in BGRS, of which ten institutes are college level while the rest are providing in distance mode. Of these colleges, five of them are non-government sponsored and are private. Where as the remaining are sponsored by government. The former institutes provide training on business and health sectors and the latter give training on industrial, health, agriculture, and business sectors. The results would be more complete and comprehensive if it were possible to include all of the TVET institutions in the study.

Hence, taking constraints such as proximity, financial matters, and the researcher's engagement in a tight work duty into account, the study was delimited to two governmental and two- non-governmental TVET Colleges. Therefore, two governmental colleges namely Asossa and Manbuk and two non-governmental specifically MA and Cenaf, which are producing trainees in the industrial and business sectors were selected. Regarding the focus of the study it was limited to the challenges of TVET Colleges in TVET training.

1.6 Definition of Key Terms

The following technical terms are used in this paper as defined hereunder**:-**

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

Quality training is defined as a measure of the training received in meeting the knowledge and skills objectives, is at the heart of effective vocational training (African Union, 2007:36)

Training means any technical and vocational education and training provided through formal or non-formal program leading to a certificate or a college diploma and it also include competence earned trough work experience and attested by the test of professional competence (Federal Negaritgazeta, 2004:2552).

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

CHAPTER TWO

2. REVIEW OF THE RELATED LITERATURE

This chapter presents review related literature that helps to enrich the study. Under this the topics of historical development of vocational education, concept of TVET policy, the purpose and objectives of TVET, challenge of TVET, the system of TVET training, human resource of TVET, material resource in TVET, guidance in TVET, information source of TVET, and the current practice TVET in BGRS were discussed.

2.1 Historical Development of Technical and Vocational Education.

The history of vocational education is as old as the history of human being. It started where people learned essential skills through a trial and error method and advanced when they started to acquire education in its informal form. Generally, it started when man began to live together and stated to produce for his basic needs (food, clothing, and shelter). Historically, work was the true site of vocational training. In this regard, the primitive society used the digging sticks, stones, bones, and fire to cleat the vegetation and hunting and gathering their food. During this period the process of learning was simple imitation of skill, and knowledge passed from father to son and from mother to daughter continuously and verbally. Such awareness was based on what they had acquired from their parents and what they had learned by trial and error during the productive activities (Evans, 1971:10)

Traditional skills training existed until the 1400s in the developed world. But it is still continuing to exist in most part of the developing world, especially in Africa, where it is used as a major provider of vocational skill training. Technical training in the modern sense developed during the industrial revolution period in the 18th century, in order to produce the skilled human power required for the newly established factories at that period, in which TVET was seen as an opportunity for the people leaving the peasantry life (Delors in Aleka, 2008:10).

In the mid of the 19th century, mass production was developed and individual craftsmen became obsolete and the production of goods shifted from the small shops in to huge

factories. It was the huge production system that forced the big factories to establish vocational school, in or near their own plants, for the aim of training their own future workers before they actually assume their production duties (Ibid).

In the twentieth century, technical schools were expanded and post-school training were arranged to have a strong link with industries. This period was the period when there was a great pressure to expand TVET to satisfy the needs for the labor market and when industrialized countries understood that the qualified manpower had move decisive importance than any other production factors (Maris; 1994:86).

The 21st century, is the era of information and communication technology on one hand of knowledge and skill on the other hand where computer and other recent technologies do not only provide a myriad of new products for the markets but also the way the work is carried out.

Nowadays, the dynamism of technology and the world wide globalization put TVET on the top of the development agenda of the countries in order to produce well- trained and qualified manpower in the shortest possible period of time to cope with the changing situation and to complete in the world market (Aleka, 2008:12).

The introduction of TVET the Ethiopian education system dated back to more than 50 years. However, the development of the sub-sector in the past was slow and not up to desired level and quality owing to failure to give proper place and emphasis where there was no policy support.

After the expulsion of the Italians, the Ethiopian government paid some attention to the establishment of vocational and technical schools in Ethiopia as a part of its education system. Wanna in Aleka, (2008:22) identified three periods with regard to the TVET development in Ethiopia. During the first era (1940's-1960's) Ethiopia was rebuilding its educational institutions and very few schools served students from all over the country. However, graduates from high schools that could not join tertiary level of education lacked skilled to be employed among secondary school graduates. From 1962 the government converted the existing high school in to compressive high schools.

The second era (1960's-1980's) was mainly characterized by the attempts made to vocational high school education. The mission was of reducing unemployment among young high school completer. However, because of lack of materials and human resource, shortage of qualified teachers and limited budget, the quality of graduate was not as expected and the problem of unemployment among high school completers did not improve much. It was during the third era (1980's-1994) that the government decided to strengthen a number of selected compressive as well as other vocational technical schools in order to give effective skill training.

The new education and training policy give special attention to TVET by providing broad and multi level foundations. The new organization of technical and vocational training based itself on analyses of the training needs of the country's economic and social development (MOE, 2003:3).

Hence, due attention is given to the organization and management of the sub sector, curriculum and educational materials development, teacher training, the expansion and building the capacity of institutions, provide quality assurance and accreditation provision and supply of education facilities, technology, vehicles and materials as well as involving the private sector.

Middle TVET program comprises three certificate levels: certificate I (10 +1), certificate level II (10 +2), and diploma level (10 +3) and these were timely based. However, the current National TVET Qualification Framework (NTQF, 2010:16) comprises five levels; level I, level II, level III, level IV, and level V and these are outcome based. Level I and Level II training program is non formal training programs, prepare a person to perform in a range of varied activities or knowledge application where there is a clearly defined range of contexts in which the choice of actions required is usually clear and there is limited complexity in the range of options to be applied under the supervision of level IV or level III.

Level III and level IV training programs are formal training programs, a performance of leadership and guidance are involved when organizing activities of self and others as well as contributing to technical solutions of a non-routine or contingency nature under

supervision of level V. Level V TVET program training, trainees' perform the self-directed application of knowledge and skills, with substantial depth in some areas where judgment is required in planning and selecting appropriate equipment, services and techniques for self and others (Ibid).

Generally, Ethiopian TVET system is more described in NTQF, (2010:2):

> *The TVET system is to be wage and self employment-oriented, demand-driven and outcome-based, and thus appropriate to address the development needs of the Ethiopian economy. It reflects an important paradigm change during recent years that puts quality and relevance of TVET as its first priority. An outcome-based TVET system creates ways for the fair recognition of the wide range of formal, non-formal and informal training and learning existing in Ethiopia, hence opening access to qualifications for previously neglected target groups. This will increase their chances of an occupational career and create options for further education and training.*

Therefore, since vocational education is the medium that safeguards both human and natural resources, planners and TVET experts should think how well people can be trained to perform useful work.

2.2 Policy in TVET

Policy refers to a set of relatively stable goals, and choice of a strategy to reach these goals over a considerable period of time. For national policies for TVET the key goal will be improved productivity of the workforce. In addition, certain groups are typically identified for special policy attention on equity ground, such as, the unemployed, the poorest, the disabled, as well as women and girls and underserved ethnic groups. In particular regional equity is generally a driving force in politics. However, equity driven aspects of TVET policies also need to be directed at labor market demand, for unless TVET leads to improved earnings for the learners, there is no equity gain either. The wide range of target

groups for TVET in any society means that national policies cannot be confined to TVET for youth still in school (Lauglo 2006:12).

TVET systems may differ from country to country and within countries. TVET may be delivered at different levels for different target groups and age cohorts in different types of institutions, including public and private technical and vocational education and training institutions, by NGOS, in enterprises, and apprenticeship training centers through formal, informal and non formal learning arrangements.

TVET policies would previously focus on the mechanisms in place to prepare individuals for the world of work. However, whereas this is still a priority, the quality of TVET is increasingly associated with having a broader scope including personal and general skills which can contribute to lifelong learning, participation and community building, through entrepreneurial skills as well as a broad set of skills regarding sustainable development. These broad skill sets tend to have a bearing on an individual's employability, active civic participation, and health, and to community building and economic development at the regional and local level (UNESCO, 2010:5).

High rate of population growth and declining economic growth that causes large number of unemployment and under employment in rural and urban areas of the developing countries including Ethiopia are the major challenges that need urgent responses. To attempt these problems the countries should formulate and implement growth oriented policies that focus on available abundant resource such as human resource and land. Hence, education and training policy should be designed in order to address the mentioned socio economic problems.

Finally, to implement policies and strategies, qualified manpower at all levels is a must. Policies with good intentions fail due to lack of qualified people to implement them. This is mainly true in countries like Ethiopia especially in Benshangul Gummuz Region State where more serious problems exist. This must be given serious considerations.

2.3 The Purpose and Objectives of TVET

The primary purpose of any technical and vocational education and training system is to develop sufficient people with the right skills to meet labor market demands and to produce competent, adaptable and responsible citizens who can contribute to changing and transforming the livelihood of the countries' population. King and Palmer, (2010:6) state that it helps to promote and support development a country, facilitate transition from school to work for millions of school leavers, and foster equality of opportunity and social cohesion. It also has a key role to play in addressing current problems such as the fight against poverty, the food crisis, and deterioration of the environment.

Smith in Aleka, (2008:14) writes that technical and vocational education serves different purposes. It is used to:

- Provide skill and experience considered valuable by students;
- Facilities the mastery of both non vocational and vocational skills needed by students;
- Provide hands on learning opportunities;
- Serve as an alternative for potential school dropout;

TVET is to deliberate interventions to bring about learning which would make people more productive in designated areas of economic activity. However, TVET will also have other purposes which are not unique to TVET, and which also apply to other forms of education: to prepare people for independent economic activity; to empower people to play a full part as citizens in a democratic society which means this purpose is to do with access, choice, and equity of opportunity; and to enable every person to develop their natural talents and capabilities to the fullest extent (Mansfield and Mitchel, 1996:3)

Developing countries including Ethiopia also need to improve productivity through their economies in order to be competitive in the era of rapid economic and technological change. Improved productivity requires not only capital investment but also a skilled labor force. Besides the level of the country's skilled workers and technicians competency is a

key determinant factor of labor force productivity. TVET undeniably is successful in terms of workers productivity (Middleton in Aleka, 2008:14).

The primary objective of all technical and vocational education and training (TVET) programs is the acquisition of relevant knowledge, practical skills and attitudes for gainful employment in a particular trade or occupational area. Skills acquisition is vital for an economy to compete and grow, particularly in an era of economic integration and technological change. TVET is a direct means of providing workers with skills more relevant to the evolving needs of employers and the economy. TVET can contribute not only to expansion of job opportunities but also to the reduction of poverty through income generation for vulnerable individuals and families.

Regarding the objectives of technical and vocational education and training, Louks in Aleka, (2008:20) states the following objectives:

- To train skilled workers and middle level manpower for industry, commerce or services.
- To encourage positive attitude to wards manual work.
- To reduce excess demand for higher education.
- To facilitate the schooling of low achievers.

The primary objectives of the TVET program in Ethiopia is to provide various skill training for the present and future labor force in order to adapt to the requirements of the labor market.

Apparently, the 1994 education and training policy outlined the following major objectives of the middle level TVET program:

- To create middle level technical work force in various occupation;
- To provide adequate skills and knowledge that builds problem solving capacity;
- Enable trainees to utilize resource wisely and economically for the benefit of individuals and thee society;
- Enable to take business risks by establishing their own business relevant to their skill trade (MOE, in Aleka, 2008:2)

Nowadays, the major objective of TVET is not simply to bring about economic development but also to enhance the overall social development. Then, TVET helps to fight against poverty and integrate young people in to the world of work.

2.4 Challenges in TVET Programming

Quality and relevance of training programs; quantity and quality of TVET teacher and instructors; management of the TVET system and TVET institutions; and need for rapid expansion of TVET system are the existing challenges of TVET. In addition, a major challenge is to continue to flourish in a global economy in which individuals are expected to have well-developed technical skills, that allow high levels of flexibility and adaptability and an ability to work across a range of jobs.

2.4.1 International Challenges of TVET

Survey reports in Canadian international development agency (CIDA) state six challenges identified through international experience in TVET and these are presented hereunder:

1. The crucial importance of the economic and social context : Economies that are growing, providing more and better employment opportunities are improving access to and adoption of new technologies and have available financial capital are, of course, the ideal environments for increased investment in TVET. The provision of education and training is fundamental but on its own is insufficient.

TVET is most effective as one component of solid economic, labor market and social policies such as trade, private sector development, rural and urban regeneration, and labor market reforms. Yet, realistically, it is often the poorer economies that have the most pressing need for training programs for young people.

2. Limited access for disadvantaged groups: - A particular challenge for developing country governments will be the development of long-term strategies to increase the participation of disadvantaged groups in TVET. The access of women to TVET is a major concern, but other groups are also excluded. Access for ethnic minority groups can be limited when programs are delivered in official or mainstream languages only. Actual and opportunity costs may be too high for students from low-income families. Access for

students from rural areas may be difficult because many vocational institutions and programs are located in major cities, and students have to deal with the financial and social implications of living away from their families. The TVET system may be designed to cater to young people, leaving older workers with little chance for training.

3. The stigma of vocational education: - In some regions, public perception of TVET as second class education will continue to limit enrolment rates. Reform and strengthening of TVET will help to change public perception and increase demand. There are many steps that developing country governments can take, including institutional capacity building, the establishment of effective accreditation systems, improvement of teacher training, curriculum reform, and improved labor market analysis.

4. The issue of high costs and sustainability:-The costs of TVET programming can be high and financial sustainability of programs may be in question. Budget allocations for TVET, particularly for maintenance, up-grading of facilities and equipment and on-going professional development of staff are often much smaller than is required.

5. Poor quality of primary and lower secondary education:-Low enrolment and/or poor quality in primary and lower secondary education will have a direct impact on skills and knowledge acquisition within TVET programs. If achievement in literacy, mathematics and science are low at the primary and lower secondary level, students will not have the basic academic skills they need to succeed in TVET programs.

6. Weak TVET governance: - The governance and management of TVET may not be strong in many developing countries. There can be a wide range of TVET authorities and institutions in one country, including state, non-governmental and private providers, all with differing interests, administrative structures, and approaches to TVET and communication and coordination among them may be ineffective.

AU, (2007:52) states that the challenges of globalization for TVET in Africa is the tension it has created between developing skills for poverty eradication and skills for global economic competitiveness. Although the primary objective of technical and vocational training in Africa is to help alleviate poverty through the acquisition of employable skills, a strategic approach to skills development on the content cannot ignore the effects of globalization.

In a globalized world economy, driven by the case of information exchange, financial flows, and the movement of people, labor, goods, and services across national boundaries, each country will have to adopt.

2.4.2 Major Challenges of TVET in Ethiopia

In Ethiopia the major challenges facing the TVET program have been well documented in the TVET strategy. As stipulated in the TVET Strategy (2008), with some little modifications, the major ones are the following:

- Demand by far exceeds the current supply and that the majority of the population is not reached by TVET offers at the moment.
- Low quality and theory-driven due to resource constraints and lack of skilled TVET teachers.
- Lack of cooperation of the employers as they were not consulted during the planning process.
- Most urban public TVET programmes are under-funded while rural public TVET programmes suffered from poor facilities and shortages of training materials.
- The lack of adequate and appropriate quantitative and qualitative information on labour market needs and other areas has created a gap in the generation of information that could have been used for improving practice and policy.
- Lack of adequate place of work and running costs are the major challenges

2.5 The System of TVET Training

Vocational and technical skills can be acquired by individuals in many ways. Public pre employment training is only one way to enter skilled job. In modern sector, skills are obtained from initial and in service trainings offered by public and private organizations; and wage employment are used as a means of providing skills to many informal sector entrepreneurs. Training by private and voluntary organizations is a second alternative.

Generally, in most countries especially, in Ethiopia TVET can be located in one or more of the following three distinct institutional settings are:

1. School based training
2. cooperative training and In company training
3. On the job training

2.5.1 School Based Training

School based training is an educational approach for TVET trainees that provide opportunities to achieve employment- related competencies in the workplace, actually it provides students with knowledge and skills that help them connect school experiences to real-life work activities. It is often undertaken in conjunction with classroom or related learning, and may take the form of work placements, work experience, workplace mentoring, and instruction in general workplace competencies and broad instruction in all aspects of industry.

The strategies of school based training is that an individual might use will depend on the learning style of that individual, the nature of the skills or understandings that are being developed, and the context in which the training is taking place. Some of the strategies that might be used by members of a work based training team include action learning, mentoring, seminars, focus groups, problem-based training, reflection, critical and/or strategic questioning, and many others.

2.5.2 Cooperative Training and in Company Training

The TVET system anticipates that the public and private sectors will join in a partnership to deliver a co-operative and in-company training which takes place in the training institution and at the place of work because bringing enterprises into the training process promises to improve the relevance of the training offered to market needs. Cooperative and in company training model is found in many developed countries over the world.

Cooperative training system refers to mode of training delivery of technical and vocational education and training that combines training in enterprise and institution based on a training plan collaboratively designed and implemented by industries and respective TVET

institutions. Under this system, the industries/companies and the TVET institutions share the responsibility of providing the trainee with the best possible job qualifications, the former essentially through practical training and the latter by securing an adequate level of specific, general and occupation-related basic competency. The word “cooperative” refers to the two parties providing training: the concept “system” means that the two parties do not operate independently of one another, but rather coordinate their efforts. The guiding principle is that as all parties involved, namely: the industry, the trainees and TVET institutions will gain immediate and long-lasting benefit; they will choose it (MOE, 2010:3).

Any enterprise which can provide a working place to trainees, machines for training, tools, consumables materials and which can also assign a training coordinator/ supervisor can be a cooperative training partner. As far as occupational activities of the enterprises, in one way or another, if the activity of enterprise have similarity with occupational training, any enterprise, large or small can take part in Cooperative training.

Before starting Cooperative Training program, enterprises and TVET institutions should negotiate and agree on types of occupations in demand and jointly develop a training plan right from the occupational standard or from a curriculum derived there from. A training plan shows topics of the curriculum to be taught either in enterprises or in TVET institutions. Cooperative training cannot be successful without a training plan.

MOE-ecbp (2010:15) states that in-company training is a training approach through which active workers already in the enterprises could maintain, or upgrade their competencies while working. It is also a method by which companies/enterprises cope up with new and changing technologies. It is also the most cost-effective way to improve the skills of their employees. This is because:

- training can be scheduled at the companies convenience
- training is more focused, consistent and relevant to their needs
- traveling and accommodation costs are reduced or even eliminated

Therefore, in Ethiopia three years since cooperative training is conceived as a major training modality in our TVET system, and thousands of trainees and numbers of enterprises and TVET institutions have already been participated and benefited from it. This experience shows that, being aware of the benefits there from, more and more stakeholders are likely to participate in this partnership in the future.

2.5.3 On the Job Training

In service training is the mode of training that is intended to serve an organizations need for staff development. The degree of difference of training from on going production process will vary within and among organizations. As such, at one end, there is informal on the job learning in which new employee learns their job through guidance from supervisors and more experienced workers. At the other end highly institutionalizes company based training department conduct full time instructions and offer courses at training center (Laugol 1993:47).

Most employees obtain skill acquisitions at the work place during employment through informal on he job training or through formal training programs sponsored by employers and employee offered in the firm or at external training institution.

Firms engage in training due to several reasons. Some of them are as follows:

- To prepare experienced staff for promotion
- To build workers moral and identification with the organization.
- To promote a cooperate culture for better productivity (Laugol 1993:49).

In sum, there is no exclusively preferred mode of training, hence using the combination of modes of trainings as situation and resource permit can have a better result.

2.6 Resources in TVET

2.6.1 Human Resource of TVET

TVET system managers, professionals and policy deciders will also have to be trained and their skills upgraded to enable them confidently drive the new strategy with its various

implementation structures, such as qualifications framework, accreditation standards, assessment guidelines, quality assurance and accountability frameworks.

UNESCO, (1990:21), states that TVET requires a more adequate infrastructure and facilities and more specialized teachers than does general education. Thus, teacher/trainer is the most important single factor manner on the effectiveness of any part of TVET. Therefore, the selective recruitment, and retention of sufficient number of capable teachers in this area of training should be recognized as one important administrative function.

The delivery of quality TVET is dependent on the competence of the teacher; competence measured in terms of theoretical knowledge, technical and pedagogical skills, individual work experience as well as being abreast with new technologies in the workplace (African Union, 2007:9). Without qualified teachers, training programs could not be effective. The teachers are being trained in trainer's methodology to enhance their skills in preparing, managing and delivering training and to make learning achievable on the part of the trainees. The intention is to make the TVET teachers capable of developing curricula, assessment tools and Teaching, Training Learning Material (TTLM) and to make them able to manage the training activities in the workshop in accordance with the requirements of the standards. In this way, TVET teachers who are willing to teach in the sector shall be able to comply with requirements, the occupational and methodological (MOE, 2010:6).

Thus, the quality of vocational and technical education depends upon teachers. The teacher should see himself as a member of a professional body devoted to the search of excellence. The work experience in industries or comparable experience in particular discipline the vocational teacher brings is also very important in performance of teachers. UNESCO (1990:50) asserts that now, more than ever before, it is essential to insure vocational and technical education teachers possess appropriate, up-to-date knowledge, and skills to meet the training needs of all trainees. This would help to meet all current and future requirements in the world of work. UNESCO further points out that the teaching staff should possess appropriate academic and pedagogical qualifications and coupled with industrial experience.

As stated earlier, good technical and vocational education and training requires teachers who have technical skills, industrial experiences, and pedagogical skills. But in developing countries, there is a general shortage both of suitably qualified teaching staff and of teachers with relevant industrial or commercial experience. It is assumed that most teachers of vocational and technical education and training could almost any time find other employment (in a non-teaching position) at a salary greater than what they are receiving as teachers. So, in order for the TVET teachers to stay in the teaching profession, they must be satisfied. But developing countries, which suffer from a chronic shortage of adequately trained manpower, fail to attract sufficient number of talented and qualified people for their educational establishments because of low financial incentives in education compared with those in the manufacturing and services industry (Ibid).

A common strategy to overcome the problem of qualified teachers is to train teachers in both technical and pedagogical skill. But many countries have been unable to establish effective teacher training institutions and programs. Where it is difficult to attract and retain technical teachers, it is even more difficult to find and hold highly qualified teacher trainers. UNESCO, (1990:51) the solution of the problems states that, in addition to their special subject field, all technical and vocational education and training teachers need to keep up-to-date in and be aware of the applicability of new technologies to teaching. This puts technical and vocational teacher trainers increasing pressure to innovate the initial teacher training courses so as to provide adequately trained technical and vocational teaching personnel and to update and constantly upgrade their knowledge and skills. Developing countries have stressed the need for their own staff training programs, featuring flexibility in the teacher's application of the newly acquired skill to their specific teaching institutions. The need to assess their in-service training schemes and consider their impact on the work of individual teachers is clear. They recognized the importance of links between educational institutions and industry and commerce in order to provide present and future technical teachers with practical experience in industry and commerce, thereby ensuring that they acquire the appropriate knowledge and skill for their teaching.

In Ethiopian TVET system highly competent and motivated teachers/instructors is a prerequisite for developing a comprehensive, integrated, outcome-based and decentralized

TVET system. Without such a pool of TVET teachers/instructors, the implementation of the National TVET strategy may not be achievable. The establishment of such human resources can take various paths, such as the development of a new group of TVET teachers, the upgrading of current TVET teachers to the required standards, the use of expatriate staff until local staff is able to take over, or a combination of these and other measures.

Therefore, from the above statements we can understand that human resource is an important factor to determine how well and how rapidly TVET program may be implemented to attain the required goal.

2.6.2 Material Resources in TVET

Besides teachers, machines and facilities are also essential to good training. If workshops have non-functioning equipment and no supplies, then training could be reduced to lectures and the practical skills component of the curriculum to a large extend will disappear.

The MOE-ecbp (2010:3&4) describes the selection of equipment for training purpose should takes time and care. Equipping a training facility is a questionable approach if it means that when trainees enter the work place they find themselves unprepared for the standard equipment in use. Equipment for training should normally be similar to that being used in local industry unless orders have already been made for a major industry-wide switch to new equipment or approaches.

Vocational education costs too much and usually when shortage of budget occur. Such as maintenance, spare parts, and consumable materials and supplies are most heavily operating costs (Simon, 2002:20). As the result, the vocational manager must give attention to a good maintenance program for all equipment. Where staff is willing and able to maintain equipment and particularly if they can involve students, then this is an excellent approach. The manager in this case should ensure that a schedule for comprehensive maintenance is established and that staff are provided time, resources and recognition for the work involved and for benefits they have provided to the institution.

A further responsibility of a vocational manager in TVET is to regularly review the level of utilization of existing and often expensive equipment. An accurate annual inventory should be prepared. Besides, equipment which is not used may still have a market value and it may be possible to trade it for other equipment, or even sell it to raise needed funds. Here too, enthusiastic and well informed staff can be key partners of the vocational manager if the opportunity is provided.

Therefore, practice materials for workshops are essential to good training and there should be effective maintenance of facilities and equipment. These factors contribute substantially to high recurrent costs typical of good quality vocational programs.

2.7 Guidance and Counseling Service in TVET

Guidance and counseling service involves relevant aspects of all educational system in general and that of TVET in particular. So it is essential to facilitate its development in order to make it play significant role in the system. Guidance and counseling service enables individual trainees to identify, know and appreciate their potential and inclination towards growth, career development and self-actualization. Guidance and counseling helps trainees in planning their education and developing their skills so that they may be more employable in the future. Assuring the employability of trainees begins with effective guidance and counseling of potential trainees in the choice of training programs in relation to their aptitude and academic background (African Union 2007:10). Regarding this, MoE-ecbp (2010:8) stated that:

> *Guidance and Counseling is an integral part of the effective functioning TVET institutions in their attempts to educate and train their students to become efficient and effective technicians. It helps every student to understand himself, to make the most of his capabilities and interests, to make effective adjustments with the environment and the institution and to develop ability and inclination to solve his problems independently. A primary task of guidance and counseling is that of enhancing learning, not only learning of skills and knowledge related directly to the world in which*

the student lives but also learning related to his "inner world" – that is an increased understanding of self.

In order to provide adequate guidance and counseling functions, the special vocational guidance and counseling centers personnel must be appropriately trained. Furthermore, all TVET staff must be aware of the availability of guidance and counseling in the program area which they train/teach. Vocational guidance and counseling is completely independent of and not linked to teaching and administration, while vocational guidance is provided by staff that is qualified in psychology. Students counseling is carried out by all teachers (UNESCO, 1990:44).

Generally, the guidance and counseling service programs designed to support individuals of any age during their life time and aims to help trainees become more confident, more motivated, and more effective learners. Students learn how to identify and assess their own competencies, characteristics, and aspirations. They explore a broad range of options related to learning, work, and community involvement through a variety of school and experiential learning opportunities. Students develop learning and employability skills and strategies that they can apply in their secondary and post secondary studies and in the workplace. They identify and develop essential skills and work habits that are required for success in the workplace, as well as skills needed for effective communication, teamwork, and leadership.

To sum, Vocational guidance and counseling service program, as one major input to the TVET training, plays significant role in production dissemination of information to aware and facilitate the participation of all clients of TVET in general and helps trainees in particular to decide their choice at entry and guide in the process of training; supports in creating job or employment after graduation. Therefore, due attention should be given to the activity of guidance and counseling in the training institution as well as outside the institution, so that its contribution to the quality and relevance of training is essential.

2.8 TVET and Employment Opportunity

Man has to work if he is to be associated with the society. By means of his work he is able to provide for his needs and comfort. It is through vocational education that he can prepare himself for his job. An individual unable to perform service of one kind or another is likely to become a liability for the society. Therefore, one should think how well people can be trained to perform useful work.

TVET provide people with the skills that they will use in the future. Starting from this idea it is often argued that such provision should extend to the people who will be employed in the future, often some years ahead. It is further argued that the labour force should be provided with a pattern of occupational skills which corresponds to the pattern of jobs that will exist in the future.

In the modern sector, training as a solution to unemployment has not established viable for two main reasons. First, in the absence of job opportunities, the acquisition of labour market skills does not lead to enhanced employment: vocational education and training, alone, does not produce jobs. Second, even where an expanding modern sector does offer employment opportunities, most entry-level jobs do not require significant formal training before employment. It was also said that barrier to productive self-employment and development of small enterprises in some countries is low population density and the consequent lack of concentrated rural markets, a constraint that is intensified where rural transportation system are weak. In addition, lack of access to credit and raw materials often limits the development (Simon, 2002:23).

The ultimate aim of vocational training is employment. TVET programs therefore have to be linked to the job market. In this way, the socio-economic relevance of TVET can be enhanced. UNESCO and ILO, 2002:2) indicated that:

> *Education and training can help individual to escape poverty. Knowledge and skills are the engine of economic growth and social development of every country; there for providing knowledge and skills help the individual to raise*

their out put and generate income. It assures the sustainability of individuals as well as countrywide prosperity.

2.9 Information Sources of TVET

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

Hence, the main ways and means of obtaining information and data is labor market information system (LMI). It includes all quantitative and qualitative facts related to labor markets. Summary statistics are included, as are demographics; employment; unemployment, and vacancy rates; industry data; occupational statistics; summary reports on outcomes; and forecasts of future trends (MOE, 2010:4).

Labor market assessment may be conducted by distributing a survey instrument to potential employers, either the entire population or a representative sample; and/or convening a focus group to collect information. Local labor market assessments have to be carried out by the TVET institutions, while regional labor market are assessed by regional TVET agencies following the economic corridors of the region(Ibid).

Middleton, et al. (1996:152) state that, in industrial as well as developing countries conducting periodical survey annually or quarterly is important to obtain information and identify structural change in the economy, movement of relative wage and employment by skill qualification. The data collected can be used to analyze labor market and their performance to evaluate macro- economic policies. Earning information from household survey is periodically analyzed with respondent qualification to estimate various level of schooling and field of study. Data collected on the type of training can also be used to estimate rate of return to training program. Furthermore, managers of training institutions can establish their own mechanisms and source of data concerning skill demand and success of training n fulfilling those demands by forming proper relationship with enterprise. For the improvement of training quality and efficiency, permanent exchange of

market information on the demand and supply has paramount importance; likewise, regular tracery studies of graduates of training programs can be used to know the balance of skills and demand on the market, to evaluate training programs and to make training decisions. Frequent survey of employers can offer pertinent information on expected changes in skill needs, assessment of pre employment training, and constraints to the productive use of skill labor.

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

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

2.10 The Current Practice of TVET in Benshangul Gummuz Regional State

Benshangul Gummuz is one of the regional states in Ethiopia with an area of 50,380 square kilometers. It is located in the western part of the country. Its borders are Amhara region on the north and north east, Oromia region on the east and south east, Gambela on the south and the Sudan on the west. The region is divided into three administrative zones namely, Asossa, kemashi, and Metekel Zones, nineteen woredas, and one city administrative (Benshangul Gummuz GTP, 2003:5).

According to CSA of 2007, the population of Benshangul Gummuz is 670,847 out of which 340,378 are men and 330,469 women; urban inhabitants number 97,965 or 14.6% of the population. The region has an estimated density of 13.6 people per square kilometer. The ethnic groups include the Berta (25.9%), Gummuz (21.11%), Amhara (21.25%), Oromo (13.32%), Shinasha (7.59%) and Mao (1.9%).

Like the other regions of Ethiopia Benshangul Gummuz's economy is based on agriculture. 92.5% of the population in the region depends on agricultural economy and some of living

in bordering area of the region working cultural gold mining. The main agricultural products in the region are maize, sorghum, oil seed, and cereals. Over 60% of this Region is covered with forest, including bamboo, eucalyptus and rubber trees, incense and gum forests as well as indigenous species. It has also large amount of unexploited mineral resources such as lime stone and gold. These may encourage public and private investments to take part (Benshangul Gummuz GTP, 2003: 5-8).

Education opportunities were extremely limited before the establishment of the regional government. Especially the indigenous population was not in a position to get schooling.

Coming back to the TVET issues, before 1994 E.C there was no technical and vocational education and training school/center in the region. The establishment of the two governmental TVET training centers and following number of other nongovernmental training centers produce middle level man power in the region. Against the background of high unemployment, poor performance of the economy and rapid population growth the training centers are seen as a possibility to train skilled manpower and equip people with marketable skills to enable them to either find wage employment or to get self- employed.

In the region there are two TVET colleges, one agricultural training College and one nursing College which are sponsored by the regional government. Number of private sponsored, health and business colleges is also available in the region. Manbuk TVET College, and Pawi Nursing College are found in different Woredas, but the other governmental and private training institutions (12 training institutions including distance mode) are found in Asossa.

CHAPTER THREE

3. RESEARCH METHOD

3.1 The Research Design

The main objectives of this study were to find out the challenges of TVET Colleges in Benshangul Gummuz Region towards the training delivered in the colleges. To realize this descriptive survey method type of research was employed. This method was selected because it is helpful to show situations as they currently exist. That means the study determines and describes the way things are (Gay, 2000:275). Moreover, it is economical and easy to describe the current situations quantitatively as well as qualitatively. Therefore, the first step of the study was to collect data that examines the challenges towards the training area. Then, the data was discussed and interpreted. Based on the results of the study, conclusion and recommendations were provided.

3.2 Research Population

The researcher collected data from primary sources as well as from secondary sources. The primary data were collected from participants of TVET Colleges. The participants were trainees, trainers, college management, and Bureau of TVET experts. The sample included College Deans/principals, vice Deans/principals, and department heads who in this study are referred to as College management. The trainees and trainers were selected using stratified random sampling technique as highlighted by Gay (2000:126,138). All college management members and TVET experts were taken as participants. The numbers of population and the samples taken from the trainers, management bodies and trainees in the colleges are shown in the table below.

Table 1: Sampling of Management Bodies, Trainers and Trainees

College		Population			Sample				Total
		Trainees	Trainers	Management Bodies	Trainees		Trainers	Management bodies	
					Industries	Business			
Governmental	Manbuk	285	16	11	62	38	10	11	257
	Asossa	313	43	12	53	47	24	12	
Private	M. A	160	13	4	--	50	8	4	112
	Cenaf	120	8	4	--	40	6	4	
Total		878	80	31	100	190	48	31	369

Furthermore, secondary sources such as different documents, colleges' statistical records, magazines and WebPages were used.

3.4 Instruments of Data Collection

To get first hand information from the subjects of the study, different instruments were prepared and implemented based on the review literature to collect the required data. These were questionnaires, observation (cheek list), focus group discussion, document analysis, and interviews. The purpose of the questionnaires was to investigate the challenges of TVET Colleges. Questionnaires are useful for the collection of appropriate data and to secure data from many respondents at a time (Gay, 2000:283). To obtain quality and proper data, four sets of questionnaires were administered to the trainees, trainers, management bodies, and TVET experts. The questionnaires were constructed with close ended and open ended items which were prepared originally in English and later translated into Amharic. This was done for communication purposes for trainees. Most of the close ended questions were constructed in Likert scale. To get their suggestions, comments, and expressions freely, open ended questions were also be used.

The second instrument used to collect data was interview and this was administered to selected college management and TVET experts. The researcher used the technique of structured interview because it is more economical and safe for generalization (Gay, 2000).

Observation is the other instrument used to chek the availability of equipment, machines and training facilities in the college. A check list was prepared and the availability of resources and machines were ticked. Focus group discussions and document analysis are important instruments to get sufficient and reliable data. In this context, capturing past and present information about the colleges is very critical. Participants in the focus group discussion were some selected management members and trainers of the colleges.

3.4 Procedures of Data Collection

The Questionnaires were piloted to maintain reliability and to evaluate the appropriateness before they were administered. Pilot test was administered one TVET College, among 20 respondents other than the subject for the study. The purpose of the try out was to check whether the investigator and the respondents were properly communicating through the instrument and add some value to the reliability and validity of the questionnaires on the base of the feedback obtained. After getting all the corrected items, the questionnaires were distributed and followed up for collection according to the time line. To increase the quality of the responses, the return time was made short through continuous follow up. The researcher made the purpose of the study simple and clears to all respondents of the questionnaires in order to avoid confusion. Besides these, explanations were provided as required by the respondents.

Observations and focus group discussion were carried out according to the time schedule. In all the colleges' machines, training equipment, facilities such as water services, electric services, workshops, class rooms etc and organizational structures were observed by the researcher himself. Documents which are indicated as secondary sources were analyzed.

3.5 Data Analysis

To make the collected data ready for analysis, the questionnaires were checked for completeness. The data were also classified and tallied carefully. The assembled data were arranged and organized in tables. Computing frequency, percentages and weighted means were employed to summarize and present the data. Finally, by using descriptive survey method the organized data were interpreted and analyzed quantitatively as well as qualitatively.

CHAPTER FOUR

4. DATA PRESENTATION AND ANALYSIS

This chapter deals with the description of the sample population, analysis and interpretation of the data gathered from sample management bodies (deans and department heads), trainers and trainees in Benshangul Gummuz Region TVET Colleges. The data obtained through questionnaires, interviews, and observation check list were analyzed and interpreted. Out of 369 questionnaires distributed to their categories of respondents, 335 (90.7%) were properly filled in and returned.

4.1 Characteristics of Respondents

The following description of the characteristics of target population gives some basic information about the sample population involved in the study.

Table 2: Respondent Personal Profile

Items	Government respondents				Private respondents				Total	
	Management Bodies		Trainers		Management bodies		trainers			
	No	%	No	%	No	%	No	%	No	%
Sex										
• Male	17	94.4	30	90.9	6	100	6	85.7	59	92.18
• Female	1	5.5	3	9.1	--	--	1	14.2	5	7.81
• Total	18	100	33	100	6	100	7	100	64	100
Age										
• 20-24	2	11.1	6	18.2	3	50	5	71.4	16	25
• 25-29	11	61.1	27	81.8	2	33.3	2	28.5	42	65.6
• Above 30	5	27.7	-	-	1	16.6	--	--	6	9.3
Total	18	100	33	100	6	100	7	100	64	100
Qualification										
• Diploma	4	22.2	13	39.3	2	33.3	--	--	19	29.6
• BA/BSC/BED	14	77.7	20	60.6	4	66.6	7	100	45	70.3
• MA/MSC	-	-	-	-	-	--	--	--	-	-
Total	18	100	33	100	6	100	7	100	64	100
Field of study										
• Business area	7	38.8	11	33.3	3	50	5	71.4	26	40.6
• Industrial area	8	44.4	12	36.3	--	--	--	--	20	31.25
• Information Technology	3	16.6	2	6.1	1	16.6	2	28.5	8	12.5
• Other fields	--	--	8	24.2	2	33.3	--	--	10	15.6
Total	18	100	33	100	6	100	7	100	64	100
Service Years										
• 0-4	8	44.4	14	42.2	3	50	7	100	32	50
• 5-9	3	16.6	15	45.5	2	33.3	--	--	20	31.25
• 10-14	2	11.1	4	12.2	--	--	--	--	6	9.33
• Above 14	5	27.7	-	-	1	16.6	--	--	6	9.33
Total	18	100	33	100	6	100	7	100	64	100

As shown in the table 2, out of 64 respondents 92.18% were males and 7.81% females. Particularly there is only one female as a member of management bodies (department head). The possible reason behind this may be the society's perception that vocational occupations are regarded as males' professions and there was no special motivation on the process of hiring females in the College.

From the total of the respondents 65.6% fall in age ranges between 25 to 29. This indicates that less experienced trainers and management bodies are involved at the college in the region.

Regarding the qualification, from the total of the respondents 70.3% are first degree holders. According to the new education and training policy, the minimum qualification requirement for deans and department heads of TVET at this level ought to be second degree (M.A/MSE).

From document analysis (according to Educational Bureau Statistics) held at the two governmental Colleges, seven trainers who have first degree have started summer and distance program of MA/MSE to upgrade their qualification and three diploma holder trainers have joined regular program to upgrade their qualification in first degree. This implies that better in fulfilling the standard set for the level concerning trains qualification. However, the number of trainers given opportunities for further training is very small.

With regard to work experience of the trainers and management bodies, 50% of the sample populations have below five years service. This may show that most TVET trainers lack practical skills and experience. It should be noted here that the work experience of the TVET trainers is very important in the performance of trainers.

Relating to the field of studies 40.6% is qualified in business areas. As indicated in the TVET strategy, hard skill training programs (industry) are encouraged and should produce self employing and trained people. But 31.5% of the total respondents are qualified in industrial area and the observation made in the Colleges especially in industrial area of Governmental TVET Colleges confirms that trainers were newly hired in the College i.e. within two years. This shows that there had been labor turnover in the Colleges and the less

number of experienced trainers in the industry area is a challenge for giving proper training.

4.2 Presentation, Analysis and Interpretation of the Data

4.2.1 Facilities, Equipment, and machines Availability in the Colleges

Besides trainers, machines, equipments, and facilities such as electric service, water service, cafeteria, standard workshop, library service and classrooms are also essential to good training. The table below reveals the Colleges' standard and identifies the challenges that hinder the process of training.

Table 3: facilities, equipment, and machines availability in the colleges

No	Items	Respondents	Choice							
			Agree		Undecided		Disagree		total	
			No,	%	No,	%	No,	%	No,	%
1	Facilities, equipments, and machines in the college are satisfactory	Management bodies	7	29.2	4	16.6	13	54.2	24	100
		Trainers	13	32.5	--	--	27	67.5	40	100
		Trainees	--	--	76	28.1	194	71.8	270	100
		Total	20	5.9	80	23.9	234	70.0	334	100
2	The training center equipped with modern facilities, equipment, computers in relation to the current TVET policy	Management bodies	4	16.6	4	16.6	16	66.6	24	100
		Trainers	8	20	3	7.5	29	72.5	40	100
		Trainees	60	22.2	54	20	156	57.7	270	100
		Total	72	21.5	61	18.3	201	60.2	334	100
3	There are no idle machines and there is regular maintenance program in the college.	Management bodies	--	--	8	33.3	16	66.6	24	100
		Trainers	7	17.5			33	82.5	40	100
		Total	7	10.9	8	12.5	49	76.5	64	100
4	Raw materials for training are provided at the right time.	Management bodies	7	29.2	---	----	17	70.8	24	100
		Trainers	15	37.5	----	--	25	62.5	40	100
		Total	22	34.4	--	--	42	65.6	64	100
5	The availability of electricity, water, cafeteria, workshop, and library are enough in the college.	Management bodies	4	16.6	---	---	20	83.3	24	100
		Trainers	8	20	---	---	32	80	40	100
		Total	12	18.7	---	---	52	81.2	64	100

As it is revealed in the table above, 70.0% of the respondents indicated that the availability of equipments, machines, facilities in the colleges were not satisfactory. In terms of equipping the workshop with modern and adequate facilities and equipment (such as machine, computer etc) still 66.6% of management bodies, 72.5% of trainers, and 57.7% of trainees answered disagreed that they are fulfilled according to the current education and training policy. Besides these, majority of the respondents (76.5%) pointed out that the broken machines and tools were not maintained because of there was no regular maintenance program in the colleges and 65.6% of respondents revealed that raw materials for training were not provided at the right time.

Accordingly, from the observation check list from both Governmental and private Colleges and item five of the above table respondents, 83.3% of management bodies and 47.5% of trainers responded disagree that the availability of electric service, water service, cafeteria, standard workshop, library service and classrooms are not enough in the colleges.

Consequently, when interview was carried out with the regional TVET experts and college deans, all of them agreed with what is said above. To mention some challenges faced both Government and Private TVET Colleges they forwarded their views. For example, one respondent from deans has stated that “different machineries, accessories, computers, cars etc are not fulfilled even at a minimal figure”. Another respondent from the TVET experts has pointed out the following:

> *To begin with there is material constraint in the TVET to satisfy the strategy set at a national level and different resource requirements are not fulfilled at the rate it is to be.*

Finally, TVET experts and deans pointed out that the main reason for the challenge was budget constraint, poor management, and lack of highly committed, experienced, and dedicated TVET leaders and experts. .

One can infer from the above discussion that the availability of facilities (electric service, water service, cafeteria, standard workshop, library service and classrooms), equipment, heavy and simple machines for industrial training area were not sufficient for training in

the Colleges. On the contrary to bring about quality organized training workshops, modern machines, equipment, material supply and other training facilities should be considered.

4.2.2 Basic Challenges of the Colleges in Achieving their Goal

MoE (2008:21) highlights that the goal of the TVET system is to create a competent and adaptable workforce to be the backbone of economic and social development and to enable an increasing number of citizens to find gainful employment and self-employment in the different economic sectors of the country. Therefore, the ultimate goal of TVET Colleges is to equip individuals with relevant skills and knowledge that enable trainees to be competitive in the labor market or to create their jobs. Technical and vocational education offers a specific training in particular vocations for ensuring the trainees transition from school to the world of work.

This section discusses the challenges of TVET Colleges in achieving their goals and the data obtained is summarized in the tables below.

Table 4a: Basic challenges of the college in achieving its goal

No	Items	Respondents			
		Management bodies		Trainers	
		Mean	Rank	Mean	Rank
1	Shortage of skilled manpower	3.243	2	3.100	2
2	Lack of adequate budget	2.540	5	2.725	3
3	Lack of adequate facilities	3.378	1	3.475	1
4	Lack of awareness regarding TVET strategy	3.162	3	2.60	4
5	Poor management	3	4	3.100	2

As indicated in table 4a, lack of adequate facilities, shortage of skilled manpower, and lack of awareness regarding TVET strategy respectively were the first three challenges in the colleges to achieve their goals. Among the three lacks of adequate facilities was the most serious challenge.

In line with this view, from the observation check list lack of adequate facilities such as electricity, water service, organized workshop, library service, well ventilated classrooms were the prominent problems that affect the training being provided. This situation indicates that lack of adequate facilities is the basic challenge that hinders the colleges to achieve their goals.

Table 4b: Basic challenges of the colleges in achieving their goals

No	Items	Choice	Respondents			
			Management bodies		Trainers	
			No	**%**	**No**	**%**
1	Shortage of competent man power, lack of adequate budget, and lack of commitment of concerned bodies are major challenges of the college.	Agree	21	87.5	27	67.5
		Undecided	---	---	---	---
		Disagree	3	12.5	13	32.5
2	Shortage of competent manpower, lack of awareness regarding the objective, and shortage of materials are not challenges to achieve the objectives of the colleges.	Agree	3	12.5	---	---
		Undecided	3	12.5	5	12.5
		Disagree	18	75	35	87.5

The issue of basic challenges was also presented to management bodies and trainers as shown in the above table. The results indicate 87.5% of management bodies and 67.5% of trainers revealed that shortage of competent manpower, lack of adequate budget, and lack of commitment of concerned bodies (TVET experts, trainers, deans, etc) are major challenges of the colleges.

Respondents were asked to agree or disagree whether shortage of competent manpower, lack of awareness, and shortage of materials were basic challenges or not. Consequently, 75% of management bodies and 87.5% of trainers reported that these are the basic challenges to achieve their goals.

The data in the above tables show that the basic challenges faced by the TVET colleges in BGRS to provide quality training were shortage of competent manpower, lack of awareness regarding the objective of TVET and shortage of materials.

On the other hand, the same questions were asked to regional TVET expert in interviews. The interviewees have mentioned the following statements, which can strengthen the above points. One of the interviewees has put the challenges as follows:

> *It is clear that in order for TVET to develop in the region all actors should be aware. For example, it is possible to create awareness on the current national TVET policies and strategies to higher officials and to the society at grass root level. Opening departments without doing feasible study that fit with the resource available in the region creates a huge problem to alleviate the real life problems. Not making students at the elementary and secondary schools aware so that they can join TVET according to their own interest."*

Another interviewee expressed the following:

> *"…..There was no definite and clear structure as there was no TVET agency or commission organized in the region. Besides, competent and skillful manpower/trainers were not available and there is also shortage of machineries even the available ones were outdated.*

4.2.3 The Internal Organization and resources Available in the Colleges

TVET institutions should be well organized internally with human and non-human resources to provide outcome based training. These includes facilities, instructional materials, curriculum, certified and qualified trainers and compliant with workplace requirements. It is the occupational area that guarantees quality training and is therefore well known by the community and industry. In addition, TVET institutions shall serve as centers of technology capability, accumulation and transfer. They shall closely cooperate with the private sector in undertaking problem-solving research program (MOE, 2008:21).

This section deals with the resources available in the Colleges, the colleges' internal organization and activities of technology transfer department in the Colleges.

Table 5: Internal organization and resource available

Items	Respondents					
	Management bodies		Trainers		Trainees	
	No	%	No	%	No	%
Have technology transformation department:						
• Yes	7	29.16	5	12.5		
• No	17	70.8	35	87.5		
Total	24	100	40	100		
Is the college well organized internally:						
• Yes	3	12.5	5	12.5		
• No	15	62.5	27	67.5		
• I can't determined	6	25	8	20		
Total	24	100	40	100		
The college is well organized and has enough resource to implement current TVET curriculum.						
• Agree	4	16.66	17	42.5	108	40
• Undecided	7	29.16	--	--	72	26.66
• Disagree	13	54.16	23	57.5	90	33.33
Total	24	100	40	100	270	100

The intent in item 1 in the above table was to identify whether or not the TVET Colleges in BGRS have technology transfer department. The result obtained from different categories of respondent indicates the following: 70.8% of management bodies and 87.5% of trainers asserted that there was no technology transfer department in the colleges. In my observation I have realizes that only one governmental TVET college assigned three trainers as a committee for leading technology transfer and started on working by borrowing documents from other colleges outside the Region.

TVET strategy (2008:15) states that, TVET institutions are mainly expected to replicate new and selected technologies and transfer the same to the relevant industry in order to increase the competitiveness of the sector according to international standards. It's also needed that these technologies focus on creative capacity building and greatly contribute to

the economic development of the country in propose to alleviate regional problems. Their benefit will be significant since the trainees who pass through this process are endowed with outstanding and international workforce ethics. In contrast to the above statement there is no technology transfer department in the College and this makes the aim of meeting the objectives of TVET doubtful.

The second item in the same table was intended to examine the internal organization of the college. Consequently, the result implied that 67.5% of the trainers agreed that the Colleges were not internally organized to be convenient for providing quality training. On the contrary, 75% of management bodies answered the College are internally organized. The reason may be that TVET Colleges in the region were established recently and may organizing gradually. But all agreed that internal organization of colleges is still a challenge as facilities, machines, human resources, and equipment the training system requires are not available.

Regarding the third item 54.2% of management bodies, 57.5% of trainers, and 33.3% of trainees asserted that the Colleges are not well organized and do not have enough resources to implement the current TVET curriculum.

Finally, from the above discussion and observations, one can infer that there is little or no technology transfer. Colleges are not well organized internally according to the new TVET policy. They do not have enough resources to implement the curriculum and this could have constrained TVET training in the region. Consequently, this could affect 80% practice and 20% theory in provision of training according to the curriculum contents. This is the challenge to bring about quality and effective training system.

4.2.4 The Current Practice of TVET Strategy in the Colleges

MOE (2008:1) states that TVET has to respond to the competence needs of the labor market and create a competent, motivated and adaptable workforce capable of driving economic growth and development. The main thrust of the strategy is that TVET development relies on an outcome-based system and dedicated and trusting cooperation among stakeholders.

TVET Colleges are responsible to produce a number of trainees as per the ratio of 1:3:24 to meet the manpower demand of the country. If there one person is trained in level V program, there must be three professionals in level III and IV programs. Through short term (in formal training system) training twenty-four trainees should be trained in level I and level II programs.

Table 6: Current practice TVET strategy in the colleges

No	Items	Respondents	Choice						total	
			Agree		Undecided		Disagree			
			No,	%	No,	%	No,	%	No,	%
1	Cooperative training to be given for trainees on each occupational title.	Management bodies	7	29.2	4	16.6	13	54.2	24	100
		Trainers	6	15	5	12.5	29	72.5	40	100
		Total	13	20.3	9	14.1	42	65.6	64	100
2	Trainees are measured by the center of competence (COC) after completion college training.	Management bodies	---	---	6	25	18	75	24	100
		Trainers	8	20	---	---	32	80	40	100
		Total	8	12.5	6	9.3	50	78.1	64	100
3	Training is given in the college from level 1 to 5 with the ratio of 1:3:24.	Management bodies	---	---	6	25	18	75	24	100
		Trainers	4	10	5	12.5	31	77.5	40	100
		Total	4	6.2	11	17.2	49	76.3	64	100
4	To implement new curriculum cooperative training with stake holders are the current activities of the college.	Management bodies	19	79.2	---	---	5	20.8	24	100
		Trainers	24	60	---	---	16	40	40	100
		Total	43	67.2	---	---	21	32.8	64	100
5	Trainees' interest to participate at level 1 and level 2 training program is very low.	Management bodies	18	75	---	---	6	25	24	100
		Trainers	31	77.5	---	---	9	22.5	40	100
		Total	49	76.5	---	---	15	23.4	64	100

The purpose of item 1 in the above table was to know whether cooperative training at industries/stakeholders should be given for trainees on each occupational title or not. Accordingly, as the result obtained from respondents indicates the total of the respondent 57.8% disagreed and particularly 72.5% of trainers disagreed saying that there was

cooperative training between institution and industries/stakeholders. On the other side the total sample 67.2% agreed that there were activities to implement new curriculum of which cooperative training with stakeholders are the current activities of the college. The possible reasons may be lack of access of industries in the region and less awareness of stakeholders to cooperate with training institutions.

However, the implementation apprenticeship training system has faced a number of problems, mainly due to the lack of cooperation of the employers as they were not consulted during the planning process. An internship and cooperative training system based on profound cooperation between TVET institutions and employers and a joint training delivery still needs to be developed in order to increase the quality of TVET and hence the employability of graduates (MOE, 2008:11).

Therefore, industries/stakeholders who can provide a working place to trainees, machines for training, tools, consumables materials and which can also assign a training coordinator/ supervisor can be a cooperative training partner. Then awareness creation and getting access to well organized enterprises in the region are some of the challenges of TVET Colleges.

In the second item, 80% of the trainers and 75% of the management bodies asserted that no trainees are measured by the center of competence (COC) after completion of college training. Since there were no official center of competency and assessor experts in the region, TVET graduates are awarded only institutional completion certificate.

A qualification is a formal certification issued by the center of competence in recognition that a person has achieved competencies relevant to identified individual, professional, industry or community needs. Then to get national certificate graduates as well as trainers can obtain a formal qualification through the assessment application outside of the region. This leads TVET Colleges to expend extra cost, which is another challenge for the Colleges.

Respondents were asked to testify whether or not the policy is implemented in the colleges. 65.6% of the respondents stated that training is not implemented in the college from level 5 to 1 with the ratio of 1:3:24. Besides, 5o% of the management bodies and 62.5% of the trainers d agreed that trainees' interest to participate at level 1 and level 2 training program is very low. Based on the open ended questions for trainees, respondents showed that trainees are attending only level 3 and level 4 programs. However, there was no sample trainees program attending level 1 and level 2.

Generally, through focused group discussions, deans forwarded some challenges in the region which go with the above statement. These challenges are summarized below:

- Lack of COC and accreditation center in the region.
- Lack of an awareness community mobilization activities by influential political authorities.
- lack of training provisions in level 1 and level 2 because trainees give priority to the soft skills than hard skills
- Lack of an awareness and know how about outcome based TVET training program.
- Lack of awareness about cooperative training and in-company training

4.2.5 Trainees Interest, Orientation and their Challenges in the Colleges

Table 7 below indicates the interests of trainees in selecting their training program; whether they have orientation about COC or not and to know the expected challenges of trainees in the college.

Table 7: Trainees interest, orientation and challenges

No	Items	Respondents	
		Trainees	
		No	%
1	You are assigned in the training centre in your own selection. • Strongly agree • Agree • Disagree	 108 102 60	 40 37.7 22.2
2	You have received enough orientation to COC exam to award national certificate. • Strongly agree • Agree • Disagree	 90 150 30	 33.33 55.55 11.11
3	Which one is the major challenge for you in the college? • Lack of skilled trainer • Lack of facilities and machinery • Weak internal organization • all	 132 --- --- 138	 48.8 -- -- 51.1
4	After completion training, what you expect from the following • Unsuccessful of COC exam • Competent with others • Lack employer • all	 102 --- --- 168	 37.7 62.2
5	In the college teachers/trainers are fully skilled in their trade. • Agree • Undecided • Disagree	 168 66 36	 62.2 24.4 13.3
6	Cooperative training to be given for trainees on each occupational title. • Agree • Undecided • Disagree	 90 -- 180	 33.3 -- 66.6

Regarding the first item 40% and 37.7% replied strongly agree and agree in that they were assigned in the training centre by their own selection. But 22.2% of the trainees were assigned in their fields of training without their interest. Even though, the policy states that training occupation is lead by labor market demand according to trainees' interest, some occupational training programs have excess number of trainees. On the other hand, as observed by the researcher, in some occupations (wood technology, general metal fabrication so on) no trainees or a small number of trainees were involved.

The result of the second item shows that 55.5% of the respondents agreed that they had enough orientation. They also noted that their qualification will be approved through COC assessments. But lack of COC and accreditation center in the region described in table 6 is one of the bottlenecks to practice the current TVET strategy.

The third item in table 7 was to find out the challenges trainees faced in the College. Accordingly, 51.1% the trainees witnessed the major challenges in the College were lack of skilled trainer, lack of facilities and machinery, and weak internal organization. 48.8% of the respondents reported that lack of facilities and machinery is the major challenges in the college. Besides this, 62.2% answered that after completing the current training programs they expect challenges, which include being unsuccessful in COC exam, competing with others, and lacking employers.

Generally, one can understand from the above discussion market demand training program should be underlined. Lack of COC and accreditation center in the region is the major problem, even though trainees have understanding they will be certified after completing the training program. Lack of skilled trainer, lack of facilities and machinery, and weak internal organization are challenges in the TVET College. Fear of failure in COC exam which they sit for by themselves in other regions, stiff competition with others, and lack of employer are expected challenges for TVET graduates.

4.2.6 Human Resource

Quality vocational training requires adequate number and skilled manpower in general and qualified trainers/teachers in particular. Hence, the items included in table 8 are the major area where skilled trainer is needed to promote quality training.

Table 8: Human resource in the colleges

No	Item	Respondents	Choice						total	
			Agree		Undecided		Disagree			
			No,	%	No	%	No,	%	No	%
1	In the college teachers/trainers are fully skilled in their trade.	Management bodies	19	79.2	---	---	5	20.8	24	100
		Trainers	18	45	---	---	22	55	40	100
		Total	37	57.8	--	--	27	42.2	64	100
2	Qualification you have now is sufficient to teach in level 3 and level 4 TVET Program	Management bodies	18	75	---	----	6	25	24	100
		Trainers	30	75	---	----	10	25	40	100
		Total	48	75	---	----	16	25	64	100
3	Teachers face problems in manipulating or utilizing machines available.	Management bodies	20	83.3	---	----	4	16.6	24	100
		Trainers	29	72.5	---	----	11	27.5	40	100
		Total	49	76.5	---	----	15	23.4	64	100
4	Supervision carried out by TVET experts at the region was supportive.	Management bodies	8	33.3	4	16.6	12	30	24	100
		Trainers	11	27.5	---	---	29	72.5	40	100
		Total	19	29.6	4	6.2	41	64.1	64	100
5	Upgrading program for the Teachers/trainers are encouraging.	Management bodies	16	66.6	---	---	8	33.3	24	100
		Trainers	17	42.5	---	---	21	52.5	40	100
		Total	33	51.5	---	----	29	45.3	64	100
6	Teachers get timely response to their questions in the college.	Management bodies	10	41.6	---	---	14	58.3	24	100
		Trainers	9	22.5	11	27.5	20	50	40	100
		Total	19	29.6	11	17.2	34	53.1	64	100
7	Teachers satisfied with the job in the in the college	Management bodies	14	58.3	---	---	10	41.6	24	100
		Trainers	24	60	---	---	16	40	40	100
		Total	38	59.4	---	----	26	40.6	64	100

As indicated in the above table regarding skill of the trainers, 55% of the respondents disagreed that they are fully skilled in their trades. Besides this, regarding the qualification they have, 75 percent of the total respondents agreed that the qualification they have now is sufficient to teach level 3 and level 4 TVET programs. The reason may be that they have been certified from universities through theoretical knowledge rather than practical skills. When trainers are also asked whether they face problems in operating or utilizing machines available in the TVET College, 76.5% of the total respondents suggested that they are facing problems. These may indicate that the skills acquired by the teachers are not sufficient to the TVET College program.

In relation to the above issue, from the observation check list and the researcher's knowledge no trainers' are certified by the center of competency (COC) except some diploma holder trainers in the region. As most of the teachers are fresh to their jobs, they have difficulty in the training process. Deans and regional officials were asked to comment on the skills of the trainers. They pointed out that "equitable skill for each trainer by giving skill gap training; and the availability of competent skilled man power in TVET in the region is better to none."

At last, one can deduce that as TVET program is conducted mostly through practical work, having trainers with such qualification and skills could be a challenge in the training program in the region.

With respect to the supervision, 64.1% percent of the total respondents disagreed that it was supportive. As mentioned earlier, there could be difficulty in the skills of the teachers. And when there is no supportive supervision activity the problem could be more serious. There is no supportive supervision because there is no technical person who is assigned to follow and assist the College in the region. Simon,(2002:43) points out that many teachers of TVET have little or no direct supervision. Consequently, these people are often confronted with the challenge of working alone.

Regarding the upgrading of teachers 52.5% sample of trainers disagreed that it was encouraging for the teachers. But as table two indicates TVET teachers/trainers as well as

management bodies in the region have got less chance of upgrading. As there are teachers/trainers and TVET leaders whose qualification is level 5 TVET program and assigned deans in the College, majority of them are degree holders. To run the TVET program effectively upgrading of teachers/trainers and TVET leaders into MA/MSC is a serious issue.

With regard to obtaining appropriate and on time responses 53.1 % of the total respondents disagreed that the teachers get timely and appropriate response to their requests. When they were asked to put basic problems of the College, the following observations related to this issue were made by the teachers:

- There is discrimination in payment of professional allowance among teachers. That is, some teachers hired at teacher training College have house allowance. However, those teachers working in TVET Colleges do not have house allowance.
- There exists a problem of getting transfer from one College to another in the region or outside the region.
- Their request of insurance and clinic service has not been answered.

On the other side, when satisfaction of trainers was assessed 59.7% of the respondents agreed that they are satisfied with the job in the TVET College. This might be because most of them have low working experience and there are more graduates from TVET College who could have less opportunity for employment. The salary rate has also some contribution in the satisfaction of teachers because it is not practiced for similar teachers teaching in high schools. However, the problems raised earlier in this section were supported by many teachers. Since these problems could affect the satisfaction of the teachers/trainers, the data may need further investigation. On the other side, the dissatisfaction of the small number of teachers/trainers could affect the training activities.

4.2.7 Job opportunities for TVET Graduates

This section is concerned with job opportunity of the TVET College graduates. Data on job opportunity is presented in table below with the aim of obtaining information about employment of the TVET graduates.

Table 9: Feasibilities of job opportunity for TVET graduates

No	Items	Respondents	Choice						total	
			Agree		Undecided		Disagree			
			No,	%	No	%	No	%	No,	%
1	The opportunity of getting relevant job after graduation is high	Management bodies	5	20.8	10	41.6	10	41.6	24	100
		Trainers	9	22.5	22	55	9	22.5	40	100
		Trainees	96	35.5	174	64.4			270	100
		Total	107	32.1	206	61.6	19	5.6	334	100
2	Guidance counseling service in the College.	Management bodies	14	58.3	---	---	10	41.6	24	100
		Trainers	24	60	---	---	16	40	40	100
		Trainees	138	51.1	36	13.3	96	35.5	270	100
		Total	176	52.5	36	10.7	122	36.5	334	100
3	The trades given are demand driven	Management bodies	4	16.6	7	29.2	13	54.2	24	100
		Trainers	8	20	6	15	26	65	40	100
		Total	12	18.7	13	20.3	39	60.9	64	100
4	There is assistance for the graduated students to have job	Management bodies	4	16.6	---	---	20	83.3	24	100
		Trainers	8	20	---	---	30	32.5	40	100
		Total	12	18.7	---	---	50	77.2	64	100
5	I will advice my friends to join the TVET College program for the future	Trainees	220	81.4	---	---	50	18.5	270	100
6	After graduation your aspiration and expectation is /was to be self employed	Trainees	138	51.1	102	37.7	30	11.1	270	100

As displayed in the above table, of the total respondents 61.6% were undecided on statement regarding the high opportunity of getting relevant job after graduation. This result indicates that not enough information was provided in the College as well as in the

region. Besides, there was no tracery study during the process of training and after graduation of the trainees.

The second item in the same table was intended to know whether there was professional guidance and counseling service in the TVET College or not. Consequently, the result implied that from the total sample respondents 52.5% agreed that there is no professional guidance and counseling services in the College. Based on the observation check list, the two governmental TVET colleges had a representative guidance and counselor selected from trainers and gets short term training. On the other side at the two samples private TVET Colleges in the region there is no representative; they get advices by trainers only.

Changing trainees' attitude towards TVET policy; enabling TVET graduates to be self employed; understanding trainees' ability and others are necessary. Therefore, the existence of guidance and counseling service in college is a serious issue.

Accordingly, of the total respondents 60.9% disagreed that the trades given in the Colleges are demand driven. The Deans interviewed made clear that "TVET Colleges opened training occupations and manage trainees depending on their interests rather than market demand". Besides, 83.3% of the respondents of the management bodies and 32.5% of the trainers indicated that there is no assistance for the graduate students to obtain jobs.

As a consequence when the sample trainees were asked whether they would advise their friends to join the TVET College program for the future or not, 81.4% said that they would. Because of shortage of middle trained human power trends in the region employed all graduates from TVET College. The reason might be that trainees consider TVET as source of employment.

To understand trainees' aspirations for the future, more than 51.1% of the trainees' aspiration and expectation has been to be self employed. On the contrary according to the researcher's observation check list trainees joined soft skills training streams such as business and information technology rather than hard skills and all trainees joined level 3 and level 4 TVET programs. But the policy encourages short term training level 1 and level

2 programs and the trainees in the region ignore this. According to the respondents the main reason for this was their interest in getting wage employment than self employment.

Therefore, it can be said that the same trades given in all the Colleges and some training occupations (hard skill training) are not selected by trainees. It could be an implication that needs assessment was not carried out. This means that the labor market and the economy at large were not sufficiently considered. In other words, it is very doubtful that the selected fields of training correspond to the actual and future needs of performing government's five year growth and transformation plan of the region. This could be one of the current challenges of TVET Colleges in the region.

CHAPTER 5

5. SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The main purpose of the study was to look in to the challenges of TVET Colleges in BGRS. In order to achieve the purpose of this study, basic questions were raised regarding the challenges of TVET Colleges in the region.

Under the review related literature, historical development of vocational education, concept of TVET policy, the purpose and objectives of TVET, challenge of TVET, the system of TVET training, human resource of TVET, material resource in TVET, guidance in TVET, information source of TVET, and the current practice TVET in BGRS were the major topics that have been reviewed from relevant books, journals, proceedings, thesis, and other documents to provide firm theoretical ground to the study and in support of the findings.

Descriptive method was chosen and used for its appropriateness to the research topics. Sample of population were TVET trainees, Trainers, Management bodies, found in the four TVET Colleges in the region. Moreover, regional TVET experts were also included. Stratified simple random sampling method was employed for trainees and trainers. Frequency, percentage, and weight mean were used as an instrument of data analysis.

Accordingly, the data were tabulated and presented in nine tables, analyzed and interpreted.

Regarding the profile of the respondents, 50% of them have below five years services. This indicates insufficient experience in the field they give training. Moreover, in the industrial area trainers were newly hired in the colleges. The result indicates that labor turnover and less experienced number of trainers in the industry area were the challenges.

70.0% of the respondents indicated that facilities, equipment, and machinery availability in the college was not satisfactory. Moreover, 83.3% of management bodies and 47.5% of trainers reported that the availability of electric service, water service, cafeteria, standard workshop, library service, and classrooms were not enough in the colleges. The interview

data indicates that budget constraints, poor management, and lack of highly committed, experienced, and dedicated TVET leaders and experts were the main challenges.

Besides, the other challenges of the college which hinder it from achieving its goal were lack of adequate facilities, shortage of skilled manpower, and lack of awareness about TVET strategy and these were ranked from one to three respectively. Likewise 87.5% of the management bodies and 67.5% of the trainers stated that shortage of competent manpower, lack of adequate budget, and lack of commitment of concerned bodies were the major challenges of the colleges in the region.

With regard to internal organization and resources available, 70.8% of management bodies 87.5% of trainers asserted that there was no technology transfer. In addition to this, 54.2% of the management bodies, 57.5% of the trainers, and 33.3% of the trainees asserted that the colleges were not well organized and did not have enough resources to implement the current TVET curriculum.

About the current practice of the TVET strategy in the colleges, 57.8% of the respondents agreed that there was no cooperation for training functions between institutions and industries/stakeholders. 80% of the trainers and 75% of the management bodies stated that no trainees were measured by Center of Competency (COC) after completion college training program. According to the Federal TVET strategy, training should be given from level 1 to level 5 with the ratio of 24:3:1. However, 65.6% of the total respondents reported that this was not implemented in the colleges.

On the challenges trainees face during training and after graduation, 51.1% of trainees indicated that the major challenges in the colleges were lack of skilled trainers, lack of facilities and machinery and weak internal organization. 62.2% of trainees also revealed their expected challenges were being unsuccessful in COC exam, high competition with others, and lack of employer.

Concerning human resources in the colleges, 55% of the total respondents stated that many of the trainers were not fully skilled on their trades. Besides, 52.5% of the trainers asserted

confirmed that upgrading of teachers was not encouraged. However, 60% of trainers were satisfied with their job in the TVET colleges.

With respect to supervision, 62% of the total respondents disagreed that supervision was supportive in the region.

For feasibilities of job opportunity for TVET graduates, 61.6% of the total respondents were uncertain about the opportunity of getting relevant job after graduation.

On the practice of guidance and counseling service in the colleges, 50.8% of the total respondents agreed that there was no professional guidance and counseling service in the colleges. In addition, 83.1% of the management bodies and 42.3% of the trainers indicated that no assistance was given for the graduates on how they obtain jobs.

The major findings of the study could therefore be summarized as follows:

- There have been labor turnover and less experienced trainers in the industrial area.
- The availability of workshops, libraries, classrooms books, equipments, machines, and other facilities (such as electricity, water service etc) in the colleges are not satisfactory.
- Lack of adequate facilities, shortage of skilled manpower, lack of awareness regarding TVET strategy, lack of adequate budget, and lack of commitment of concerned bodies are challenges of TVET colleges in the region.
- There is no technology transfer department in the colleges.
- Colleges are not well organized and have not enough resources to implement current TVET curriculum.
- There is no functional cooperative training with stakeholders.
- No trainees and trainers are measured by COC assessments to evaluate their skills.
- The training system given in the colleges from level 5 to level 1 with the ratio of 1:3:24 not implemented.

- Lack of skilled trainers, lack of facilities and machinery and weak internal organization are major challenges in the college while, unsuccessful COC exam, competent with others and lack of employers are expected challenges.
- Trainers in the college were not fully skilled on their trades.
- The supervision activities in the colleges were nor supportive.
- Trainers and management bodies had less chance in upgrading programs.
- Most trainers are satisfied on their jobs in the college.
- Trainees' are uncertain about the opportunity of getting relevant job.
- There is no professional guidance and counseling in the colleges.

5.2 Conclusion

Based on the findings of the study the following conclusions were reached:

5.2.1 The availability of experienced and skilled teachers/trainers is a key element for the provisions of quality training. Contrary to its importance, the study revealed that all the colleges lack qualified teachers/trainers with practical skill and they were not assessed by Center of Competency and, hence were not certified. Besides, it was identified that some teachers/trainers had less working experience and there was labor turnover in the Colleges. Less effort was made by the department of TVET under the Regional Education Bureau to narrow this gap and there was no COC center in the region. It is obvious that less technical skill and experience affect the quality of training greatly.

5.2.2 To provide technical and vocational training, the Colleges should be furnished with necessary equipment, machines, and other training materials. However, the study has shown that the Colleges are still lacking with some machines, equipment, and tools. The TVET training being provided in the region is also constrained by in adequate facilities such as library, vehicles, clinics, maintenance room, and water service. These affect the balance of theory and practice in the provision of the training process to be implemented as intended in the curriculum. Therefore, these are the challenges of providing quality training.

5.2.3 As has been found out in the study, there were a number of challenges which can affect Colleges to achieve their goal. The main reasons include absence of quality management and lack of continuous monitoring on the relevance of TVET programs, as well as on support and guidance to TVET institutions to achieve defined quality standards.

5.2.4 Guidance and counseling service is pertinent in helping trainees to know career goals and understand the world of work. It helps them to decide their field of training, further training, initial job choice, and job change. Contrary to its importance, the study revealed that guidance and counseling service was not given special emphasis in the TVET system. Hence the service being provided is poor. Consequently, this can adversely affect the training process starting from orientation up to employment.

5.2.5 The TVET strategy underscores the importance of technology transfer through the replication of new and selected technologies. Such task should be managed by departments set up for this purpose. However, the finding of the study indicates that there was no technology transfer because there were no technology transfer departments in the colleges.

5.2.6 To enhance the quality of training and implementation of TVET strategy, the current practices of the Colleges should be providing training in collaboration with enterprises/industries; certifying trainees and trainers at COC center and giving training from level 5 to level 1 with the ratio of 1:3:24. In the contrary, as revealed in the study cooperative training is not implemented effectively. In all training programs only level 3 and level 4 are given in the region. Even though some trainers attempted to take assessment from other regions, they were not successful. Therefore, with respect to the national TVET strategy, the current practices of these TVET colleges in the region seem to be doubtful.

5.2.7 As found out by the study, trainers and management bodies had less chance of upgrading themselves. In addition, supervision activities were not supportive to the colleges. These are the challenges that hinder colleges from implementing effective training system. The result also shows that there were no professional and dedicated TVET experts; there was no allocated budget for upgrading programs and well organized of TVET in the region.

5.2.8 To implement current TVET curriculums, there needs to be well internal organization and enough resources. The result of the study shows, colleges are not well organized internally and do not have enough resources. Budget constraints, poor managements and lack of skilled manpower are some of the main reasons. Hence, these made the quality of training poor.

5.2.9 The implementation of the current TVET program had faced challenges in achieving its pre-set objectives. This is due to lack of appropriate information provision to stakeholders. Therefore, disseminating information to stakeholders is vital because this will help to increase their awareness and develop the capacity of institutions. This can also empower training staffs in various ways.

5.3 Recommendation

Based on the findings and conclusion reached, the following recommendations are forwarded:

5.3.1 The Regional Education Bureau (REB) has responsibility to organize TVET system in the region as Agency/ Commission with facilities and human resources. Colleges should be internally well organized as they have potential to implement TVET strategy. And they should work with the MOE to raise social awareness about the importance of TVET in the region.

5.3.2 It is necessary that the TVET Colleges should enable the trainees that TVET is designed not only to be employed but also to be self-employed. And it is necessary to create partnerships with enterprises.

5.3.3 It is necessary to establish professional guidance and counseling services. Guidance and counseling service is of utmost importance for all clients of the education and training system and need to be significantly strengthened. It should take into account the need of industries, the individuals, and the family of the trainees. It is extremely useful for each training requirement. It is helpful not only for training institutions but also for the society at large through creating awareness.

5.3.4 Trainers' competencies and their performance should be enhanced through training and support because better trained and motivated trainers are more likely to feel

committed to their profession. So, the need to enhance trainers' level of competency so as to obtain better performance:

- Testing competencies and subsequent certification are important features of TVET that result in enhancing competency and quality of TVET. To accomplish this mission, Center of Competencies (COC) should be established in the region as core institution for testing proficiency. This is mainly the responsibility of REB in collaboration with MOE.
- Provision of skill gap training has to be arranged by REB. Continuous revision and updating of knowledge and skill are essential.
- Trainers themselves should make efforts to improve their own competencies and abilities. Self-development through using available learning resources could be helpful and appropriate for continuous and effective development. Modern learning resource such as internet, computer based multimedia, and cluster sharing experiences are good means.

5.3.5 Trainers and TVET institutions are expected to prepare their graduates in job components and employability skills like self confidence, being creative, facing job challenges, access to finance and how to deal with people in the work place to be successful entrepreneurs. To achieve this goal courses like entrepreneur and civics and ethical education should be strengthened.

5.3.6 Fulfilling basic facilities such as libraries with adequate reference books, workshops with adequate machines and equipment in the Colleges is very important. This requires careful investigation of the institutions, identification of the priority area and preparation of projects. Therefore, REB in collaboration with Colleges should conduct project preparation. Then, governments, private employers, NGO's and communities at large should participate in the implementation of the project.

5.3.7 Accordingly, TVET Colleges should conduct this with the help of technical support from REB TVET experts. Thus, some of the major areas in focus during assessment include the following:

- Market demand survey must be carried out focusing on employers and would be trainees.
- Tracery studies need be made on graduates
- Potentials of enterprises/industries to run cooperative training should be studied.

Finally, REB and regional government should give attention to allocate sufficient budget for these activities.

5.3.8 Labor market information system and data base of the institution are critical factors. These could be carried out by establishing net work system with employers, enterprises, other relevant stake holders, and different hierarchical level of the TVET system in the region. This helps to facilitate timely, adequate and reliable information exchange.

5.3.9 It is the responsibility of TVET Colleges to establish and enhance technology transfer department. This effort will have the following advantages for the colleges:

- Trainers and trainees could increase their understanding and creativity of new technologies.
- The society will get easy and cost effective technology and become successful economically.
- Budget constraints could be reduced by marketing the products.

5.3.10 Steps should be taken by REB and TVET experts to enhance supervisory and professional support. It will be helpful if regional experts conduct periodic monitoring and evaluation in all institution.

5.3.11 REB in collaborate with MOE should arrange and offer opportunities for further education for trainers and management bodies, for example in second degree programs and short term trainings in relevant fields.

5.3.12 TVET colleges must devise mechanisms to reduce financial constraints. This could be achieved by generate their own income from various possible sources. Some of the means could be selling of products produced by trainees, providing consultancy

service, adapting and transferring new technologies to the user, and rendering maintenance service in their workshops.

5.3.13 TVET Colleges can enhance employability of their graduates by promoting attachments with employers. To prepare their graduates in a more effective way TVET Colleges need to conduct tracery studies which provide them with valuable information regarding graduates. Based on the feedbacks trainers can improve their preparation of graduates.

5.3.14 Finally, further in depth study focusing on the challenges of TVET Colleges in Benshangul Gummuz Regional State should be carried out.

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Appendix A

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF BUSINESS EDUCATION

QUESTIONNAIRE: To be filled by **Trainers and Management bodies** in the TVET Colleges.

The purpose of this questionnaire is to gather data for a study leading to an M.A. degree in Management of Vocational Education. It is administered to survey your views about the Challenges and Prospects of TVET Colleges in Benshangul Gummuz Region.

Since the success of this study depends on your genuine responses, you are kindly requested to be honest towards all items provided in this questionnaire. The information you supply will remain confidential.

You are not required to write your name. Thank you in advance for your cooperation.

Sincerely,

Part One

Please read the following and fill in the box by using 'X' mark or by writing a short answer when required.

1. Name of training College _____.

2. Sex a) Male ☐ b) Female ☐

3. Age a) 20-24years ☐ b) 25-29years ☐ c) 30-34years ☐ d) 35-39years ☐

e) 40 years and above _

4. Qualification: a) 12+1 and below ☐ b) diploma ☐ c) First degree ☐

d) M.A/M.Sc. ☐ e) other_____

5. Your current position:_____

6. Field of study_____

7. Subject you teach_____.

8. Years of service a) 0-4 ☐ b) 5-9 ☐ c) 10-14 ☐ d) 15-19 ☐

e) 20 years and above ☐

9. How do you think that your TVET College is internal organized and resource available to implement?

a) Very well organized ☐ Not satisfactory ☐

10. Does your training college have technology transformation department?

a) Yes ☐ b) No ☐

11. Is your training college well organized internally? a) Yes b) No c) I can't determine

Part Two

Please read each statement carefully and put 'X' below the number of your response for each statement.

The numbers indicate:

1= agree, 2=undecided, 3= disagree

No, of Items Choices

1 2 3

No,	**Items**	**Choices**		
		1	**2**	**3**
1	The availability of workshop, libraries, class rooms, furniture, text and reference books and machines in the college are satisfactory.			
2	The training centre equipped with modern and adequate facilities and equipment (such as machines, computers etc) in relation to the current TVET policy.			

3	All machines available in the college are working actively (no idle machine) and there is regular maintenance program for the broken machines and tools.			
4	Cooperative training and in company training system to be given for trainees on each occupational title.			
5	As the current policy training is given in the college from level 1 to level 5 with the ratio of 1:3:24.			
6	Raw materials for training are provided at the right time.			
7	Trainees' interest to participate at level 1 and level 2 training program is very low.			
8	The educational qualification you have now is sufficient to teach in the level 3 and level 4 TVET program.			
9	The TVET College you belong to has enough skilled teachers/trainers.			
10	Some teachers get timely and appropriate response to their Questions.			
11	Teachers face problems in manipulating or utilizing the machines available.			
12	The supervision carried by the TVET experts was supportive to the training program.			
13	The upgrading program conducted for the TVET teachers is encouraging.			
14	I am satisfied with my job in the College.			
15	Shortage of competent man power, lack of adequate budget and lack of commitment of concerned bodies are major challenges of the college.			
16	The students' interest towards vocational training is encouraging.			
17	Trainees are measured by the center of competency (CoC) after completion college training.			
18	Most of the TVET graduated students get relevant employment.			
19	The trades given in the TVET College are demand driven.			
20	There is assistance for the graduated students to have job.			
21	The availability of electricity service, water service, cafeteria workshops, and class rooms are enough in the college.			
22	There is no professional guidance and counseling service in the college.			
23	The work relationship in the training process between trainers and trainees; trainers and management; and colleges and employers are strong.			
24	Shortage of competent man power, lack of awareness regarding the objective, and shortage of materials are not challenges for achieve the objective of the college.			
25	Implementing new curriculum, cooperative training with stack holders are the current activities of the college.			
26	Your college is well organized internally and has enough resource to implement current TVET curriculum.			

Part Three

Please read the following and write a short answer in the space provided.

1. Among the training fields being provided in your college or institution concerning business, industrial technology, information technology, construction technology, and their sub fields list down the fields in priority order assuming 1 is the most marketable to the least marketable in order.

1._____

2._____

3._____

4._____

2. What are the basic challenges of the college in achieving its goal?

a)_____

b)_____

c)_____

d) _____

3. What is the potential prospects/prediction of TVET College in the region in terms of organization of TVET agency, stake holders, college management etc?

a)_____

b)_____

c)_____

d)_____

Thank you again for your cooperation.

Appendix B

xÄ!S xbÆ †NvRStE
yDHr Mr” _ÂT T¼b@T
yb@ZnS x!Çk@>N Á-RTmNT

bt&Kn!K XÂ ÑÃ TMHRT SL-Â ÷l@J bsLÈ®C y¸ä§ m-YQ

yz!H m-YQ ›§¥ bb@NšNg#L g#ÑZ KLL µl#T yt&Kn!K XÂ ÑÃ TMHRT SL-Â ÷l@íC¼tÌäC Sl SL-ÂW msr¬êE mr© bmsBsB bmmRmR XÂ bmtNtN Sl-ÂW ylbTN kFt¾ CGéCN mlyT XÂ ymFTÿ ¦úB lm-öM nWÝÝ

Slz!H bz!H m-YQ lqrb#T _Ãq&ãC XRSã y¸sÈ*cW TKKl¾ mLîC _Ât$N t›¥n!nT ÃlW ÃdRgêLÝÝ bt=¥¶M _Ât$ lSL-ÂW xm‰R `§ðãC XÂ ±l!s! xW+ãC SL-ÂWN l¥šŠL l¸ÃdRg#T _rT ybk#l#N Xg² ÃdRULÝÝ SlçnM T:²øc$N b_N”q& xNBbW h#l#NM _Ãq&ãC bmmlS l¸ÃdRg#L" TBbR bQD¸Ã xmsGÂlh#ÝÝ

¥úsb!ÃÝ

- SM mÚF xÃSfLGM

« ks§M¬ UR´

KFL xND

y¸ ktlWN xNbH¼b> bÄ¹# ï¬ §Y «X´ MLKT xSqM_ wYM ¥B‰¶Ã k¸ÃSfLgW ¥B‰¶ÃWN ÚF¼ð

1. y¥sL-¾ tÌÑ SM _____.

2. ò¬: a) wND ___ b) s@T ____

3. :D»: a) 14-18 ›mT ____ b) 19-23 ›mT ____ c) 24-28 ›mT ____ d) 29-33 ›mT ____ e) k 33 ›mT b§Y _____

4. xh#N Xysl-NHbT¼>bT ÃlW ÑÃ _____

5. ySL-Â dr© ¼Level/_____

KFL h#lT¼Part Two/

XÆKãN xrFt ng„N b_äÂ xNBbW µgÂzb# b“§ bq$_éc$ TY† «X´ MLKT ÃSqM-# q$_éc$ y¸wKl#T XNd¸ktlW YçÂL:

1=XS¥¥lh# 2=lmwsN xLCLM 3= xLS¥¥M

t¼q $	›YnT	MRÅ		
		1	2	3
1	ySL-Â mSK lmMr_ Sl SL-Â mSk# bqE yGN²b@ ¥S=bÅ b÷l@° tsõ" nbR			
2	xh#N bMsl_NbT ySL-Â mSK ytmdBh#T b‰s@ MRÅ nW			
3	y÷l@° xsLÈ®C¼mMH‰ñC¼ b¸Ãsl_n#bT ÑÃ Bq$ ÂcW			
4	÷l@° lSL-Â y¸ÃSfLg# X”ãCN xh#N µlW yTMHRT XÂ SL-Â ±l!s! UR xÈ_ä ÃqRÆL			
5	y¥sL-¾ X”ãC ¼machine/ kt¥¶W q$_R UR ytmÈ-n nW			
6	SL-ÂWN µ-ÂqQ>¼H b“§ F§¯T>¼H XÂ y¸-bqW bGL S‰ mF-R nW			
7	SL-ÂWN µ-ÂqQh# b“§ S‰ y¥GßT XDl@ kFt¾ nW By xMÂlh#			
8	k÷l@° Ãgßh#T SL-Â k-bQh#T b¬C nW			
9	bxÄ!s# ySL-Â ±l!s! msrT kxs¶ mS¶ b@èC UR ys‰ §Y Sl-Â LMMD xÃdrgh# nW			
10	lb@tsïc&NM çn lÙd®c& b÷l@° gBtW SL-Â XNÄ!k¬tl# lwdðt$ MKR XsÈlh#			
11	b÷l@° bSL-Â öY¬y bUYÄnS XÂ µWNSl!NG lsL-®C bqE yMKR xgLGlÖT YsÈL			
12	b÷l@° Xyts-" ÃlW SL-Â yb”T ftÂ tfTß@ l¥lF bqE GÆT nW			
13	xgR xqF yMSKR wrqT l¥GßT yB”T ftÂ XNdMftN GN²b@W xl"			
14	÷l@° ysLÈßCN F§¯T b¸Ãrµ mLk# ytd‰j nW			
15	b÷l@° bsLÈ®C XÂ bxsLÈ®C¼mMH‰N½bsLÈ®C XÂ b÷l@° `§ðãC			

	mµkL y-bq GNß#nT xl			
16	b÷l@° bqE yW¦½ymB‰T½yµFt&rÃ½ywRK ëP½ yb@t mÚHFT xQRiT xl			
17	yw§íc& XÂ kxh#n bðT b÷l@° sL_nW yw-# Ùd®c& MKR Sl-ÂWN bB”T XNDk¬tL –Qä¾L			
18	y÷l@° yWs_ xdr©jT yslË®CN F§ T Æ¥kl mLk# ytd‰Ë nW			

KFL ƒST ¼ Part Three

y¸ ktlWN _Ãq& bTKKL xNbH ktrÄH b“§ kqrb#T x¥‰ôC mLS y¸ çNHN¼>N xKb!¼B

1 b÷l@J öY¬H¼¹ k¸ ktl#T kFt¾ CGR yMTlW¼YW yT¾W nW¿

h¼ B”T ÃlW mmHR¼xsLÈ" xlmñR

l¼ y¥sL-¾ q$úq$S XÂ ¥>n¶ X_rT

/¼ y÷l@° xStÄd‰êE mêQR lSL-Â b¸ ÃmC mLk# xlmd‰jT

m¼ h#l#M mLS YçÂl#

\¼ l@§ µl xB‰‰¼¶ _____

2 SL-ÂWN x-ÂqH¼> kwÈH¼> b“§ lÃg_m" YC§L BlH yM-BqW CGR MNDN nW

h¼ B”T tfTñ xl¥lF

l¼ Bq$ ÆlÑÃ çñ kl@§ ÷l@J ksl-n#T UR twÄDé ¥¹nF

/¼ yqÈ¶ DRJT xl¥GßT

m¼ h#l#M mLS YçÂl#

\¼ l@§ µl xB‰‰¼¶ _____

« bDU» SltÆbR,"¼>" xmsGÂlh# ´

Appendix C

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

DEPARTMENT OF BUSINESS EDUCATION

Interview Questions with Regional TVET Experts Some Selected Deans.

1. What are the challenges of TVET in the region to achieve their goals?

2. How are the resources available to implement the current TVET curriculum?

3. What is the current practice of these TVET colleges with respect to national TVET strategy?

4. What are the potential prospects of the TVET colleges in the region?

5. To what degree the TVET colleges in the region have been fulfilled by the necessary machines, tools, equipments and a competent manpower?

6. What do suggest the possible solutions to these challenges?

Appendix D

ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

DEPARTMENT OF BUSINESS EDUCATION

Observation checklist

The purpose of this checklist is to gather facts about the relevance of curriculum; staffing equipment; facilities; services and the training process etc through observation at the site.

1. Name of TVET institution ----------
2. Year of establishment as technical- vocational education----------
3. The training day consists in the College----------hours/week.
4. Staff population

   A). Academic Staff

   Male---------- Female----------Total----------

   B). Administration Staff

   Male---------- Female---------- Total----------

5. Trainer/Trainee ratio----------
6. The major requirements of admission to TVET College

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7. Tuition fee per student in birr----------
8. Income generating by means of production in the College cover----------% of the total budget.
9. The fields of training in the TVET College. ----------

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10. Facilities and Services in the TVET College

Facilities	Adequately Available	Moderately Available	Not Available	Remark
• Water				
• Electricity Supply				
• Class Room				

• Work shops				
• Libraries				
• Administration Offices				
• Department Office				
• Teachers' Staff Room				
• Store				
• Meeting Hall				
• Toilet for boys				
• Toilet for girls				
• Toilet for Staff				
• Guidance & career council				
• Maintains Service				

Yes No Remark

12. The College has separate and attractive compound ----- ----- -----

13. The class Rooms are ventilated and furnished ----- ----- -----

14. The Workshops are well organized according to the needs of occupation ----- ----- -----

15. There is adequate ventilation and enough space for practical work ----- ----- -----

16. Appropriate number of trainees are assigned per shop in terms of shop facilities and Work ----- ----- -----

17. The machines; tools and equipments are available in sufficient quantity and quality ----- ----- -----

18. The machines, tools and equipments are relevant to the new policy training program ----- ----- -----

19. The machines and equipments are relevant to the content of the modules ----- ----- -----

Appendix E

Key: mean = weighted mean = $\frac{w1f1+w2f2.....+w5f1.}{f1+f2.....+f5}$

Where: $f_1 + f_2$……$+f_5$ = observed frequencies

$W_1 + w_2 +$ …….w_5 = Weights given