

**FINANCING TVET SCHOOLS IN OROMIA:
A SURVEY STUDY OF SELECTED TVET SCHOOLS**

**A THESIS PRESENTED TO
THE SCHOOL OF GRADUATE STUDIES
ADDIS ABABA UNIVERSITY**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF ARTS IN MANAGEMENT OF
VOCATIONAL EDUCATION**

**BY
SOLOMON CHALI**



JANUARY 2007

Dedication

I dedicate this piece of work to my Lord Jesus Christ, whose Grace comforted my family during my absence and who carefully guided me in due courses and sustained me to complete this MA thesis.

"I am the LORD your God, who teaches you what is

best for you, who directs you in the way you should

go" Isaiah 48:17

Acknowledgments

First of all, I glorify the lord that carried me safe during my post-graduate study including at a very critical time of the research writing. Then I would like to express my gratitude to my advisor, Ato Grima Zewdie (Associate professor) for his valuable advice, complete enlightenment, genuine, and constructive comments and suggestions in a friendly approach.

I am also grateful to my family members particularly my wife Tigist Kebede for her moral support during my study.

I would also like to acknowledge my indebtedness to my friend Ato Befkadu Zeleke for his unreserved comment and support to the success of my work in the graduate program.

Finally, I am indebted to Alemu Chanyalew, Tsegaye Bedada, Tesfaye Dejenu, and Shalama Imana for their spiritual support during my study.

TABLE OF CONTENTS

<u>Content</u>	<u>Page</u>
Acknowledgements	I
Table of Contents	II
List of Tables	III
Acronyms	IV
Abstract	V
Chapter One	1
The Problem and Its Approach	1
1.1. Introduction.....	1
1.2. Statement of the Problem.....	5
1.3. Objectives of the study.....	7
1.4. Significance of the Study.....	7
1.5. Delimitation of the Study	7
1.6. Limitations of the Study.....	8
1.7. Operational Definition of Terms	9
1.8. Organization of the Study	9
Chapter Two	10
2. Review of Related Literature	10
2.1. The Concept of Finance in Education.....	10
2.2. Public Financing	14
2.3. Enterprise Financing.....	16
2.3.1. Payroll Tax.....	17
2.3.2 Tax Rebates and Credit.....	19
2.3.3. Vocational Training Funds	20
2.4. Private and Public Sponsored Financing	22
2.4.1. Fellowship, Grant and Loans	22
2.4.2. Co-Financing	23
2.4.3. Production for Profit.....	24
2.4.4. Paid Education leave.....	25
2.4.5. Non-governmental and Voluntary Organizations	27
2.5. International Donor Assistance	28
3. Funding Schemes or Approaches	31
3.1. Financing as a Management Technique	31
3.2. Structure of Financing Schemes	32
3.3. Allocation Formulas for Financing School	33

4. Types of Funding Scheme in Vocational Education	36
4.1. Multi-Level Funding Led by Central Government	36
4.2. Multi-Level Funding Led by Local Government.....	37
4.3. Funding Schemes that Involve Training Taxes	39
5. Funding Schemes that Involve Market Force	41
5.1. Performance-Related Financing.....	41
5.2. Financing through Voucher system.....	42
6. Budgeting Strategies.....	43
6.1. Incremental Budgeting.....	44
6.2. Program Budgeting	44
6.3. Zero Base Budgeting.....	45
7. Brief History of Development and Financing of Education in Ethiopia	45
Chapter Three.....	51
3. Research Design and Methodology	51
3.1. Data Gathering Instruments and Procedures	51
3.2. Sampling.....	52
3.3. Methods of Data Analysis.....	54
3.4. Presentation and Analysis of Data.....	54
Chapter Four.....	72
4. Summary, Conclusions and Recommendations	72
4.1. Summary	72
4.2. Conclusions	74
4.3. Recommendations.....	76
BIBLOGRAPHY	78
APPENDICES	82

LIST OF TABLES

NUMBER	TITLE	PAGE
I	Sample TVET Schools -----	9
II	Characteristics of the respondents in the study -----	58
III	Source of Education budget -----	60
IV	Comparison of Total regional budget with Education Sector budget -----	61
V	Comparison of Education Sector budget with TVET budget -----	62
VI	Education budget allocation formula used in The region -----	64
VII	Current facilities of TVET schools -----	65
VIII	Reasons for material scarcity in TVET schools -----	66
IX	Income generating schemes of TVET schools -----	67
X	Comparison of school budget support with internally generated income -----	69
XI	Yearly budget preparation and request of TVET schools ----	70
XII	Factors affecting the search for financial sources -----	71
XIII	The share of TVET school budget from Woreda Education budget -----	72
XIV	Education budget allocation formula at Woreda level -----	73
XV	Base of Yearly budget preparation formula at Woreda level -	74

Acronyms

ETB	Ethiopian Birr
ESDP	Education Sector Development Program
FTE	Full Time Equivalent
GNP	Gross National Product
ILO	International Labor Organization
JIVTA	Japan Industrial and Vocational Training Association
MOE	Ministry of Education
NGOs	Non Governmental Organizations
NTC	National Training Council
SENAI	National Service for Industrial Training, Brazil
TVET	Technical & Vocational Education and Training
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNICEF	United Nations Children's Fund
VTF	Vocational Training Fund

ABSTRACT

Education is not only a productive investment in human capital; it is also the best mechanism to attain a better capacity building program. Therefore, the availability of financial resources is quite indispensable to the effective implementation of educational reform. By the same token, the expansion and qualitative improvement of TVET can not be realized without adequate financial sources. This study was, therefore, designed to assess the major sources of revenue and funding schemes applied to TVET schools in Oromia. A deceptive survey method was employed to conduct the study.

The study was conducted in 4 TVET schools and 4 Woredas as they were selected randomly using their respective geographical locations and concentration. Respondents like Bureau heads with those expertises's related to finance and the TVET schools' officials and department heads were taken using purposive sampling technique as actual sources of information. The information was collected through 3 types of questionnaires (Region, Woredas, and TVET schools). Document analysis including annual abstracts and annual financial reports were consulted to see the current sources and the budget share of TVET schools. The collected data were analyzed mainly using percentages and rank order.

The results of this study depict that the annual budget and internal income have the lion's share on TVET financing in the region. Even though the TVET schools have internal revenue, it is found to be insignificant and could not cover the operating expenses. In the region under the study, TVET is mainly a government investment. No method is devised to bring additional resources. The budget allocation mechanism is found to be traditional that discourages TVET schools to apply performance based budgeting. Lack of awareness and lack of data during budgeting were considered as problems uncouncted the implementation of performance based budgeting.

In addition, most TVET schools obtain below 25% of the budget requested. On the other hand, yearly budget preparation of the region is based on previous year's budget. This shows that problems encountered in the previous year's annual budget would probably prevail in the preceding years.

In light of these findings the study concluded that, besides government budget subsidy, it is necessary to give due attention to diversify finance sources for TVET schools. There is no single or universal solution for financing TVET schools and no one method which can serve all sections of a society. Moreover, different financing mechanisms like vocational training fund, tax rebates and credits, co-financing and others can be used as a cocktail to minimize the problem. Through these mechanisms, the Oromia regional government can shift the financial burden of providing TVET education to other sources like employers, individuals and local communities.

Chapter One

The Problem and Its Approach

This Chapter deals with the problem and its approach. It consists of introduction, statement of the problem, significances of the study, delimitation of the study, limitations of the study, operational definition of terms and organization of the study.

1.1. Introduction

Education is an investment used as a vehicle for the realization of the broad objectives of society. The performance of educational activities requires resources such as human, material, and financial. Among these resources, financial resources have great contribution to achieve educational objectives (UNESCO, 1990:10).

In addition, education is not only an investment, but also it is the best mechanism to attain a better capacity building program. Recognizing the importance of developing sufficient supply of skilled and productive manpower for the economic development, the Education and Training Policy and Education Strategy assign a high priority for the development of technical and vocational education and training program(MOE (2003:31).

Under the capacity building program, we should emphasize the need for expanding TVET facilities, development of relevant curriculum, and improving standards of trainees. All those programs can be achieved only when there is sufficient source of finance, MOE (2002:15).

According to MOE (2002:63), the method of financing education in any given country is among the major elements that determine the extent of access of education, the type of education given, the pattern of student distribution, the level and unity of education, and the overall management and direction of education. In other words, the education of a given society and its role in helping meet clearly set objectives (for instance, development or economic and social growth) is closely tied with the resource available and the financing method it employs. Any given education system, therefore, has to have a clear financial policy by which it is directed.

Furthermore, Seyum (1996:25) pointed out that, the availability of resources is quite indispensable to the effective implementation of educational reform. Therefore, an educational reform that is bent to bring about improvement in an educational system without adequate resource would be nothing but an exercise in futility. It is true that in most third world countries; an educational budget could not keep pace with the ever increasing student enrollment. In fact, in many developing countries, as enrollment grows by geometric progression, resources increase only by arithmetic progression.

The expansion and qualitative improvement of TVET can't be realized without adequate financial sources. Thus, such influencing factors in providing educational needs to be checked at first. Otherwise, the implementation of plans and policies remain superficial and may not ultimately contribute to achieve national policy.

In this connection Girma (1982:1) noted that, it is scarcely possible to imagine a successful educational activity that is not simultaneously supported by adequate financial provision. As the World Bank (1980:67) reported, the average public expenditure on education in most countries

increased steadily both as a percentage of GNP and as a percentage of the national budget. In developing countries the percentage of national budget allocated to education rose from 3.2% in 1960 to 32.6% in 2003.

Similarly, Ziderman (2003:195) summarized the effects of inadequate financing, particularly from the context of developing countries as follows:

After teachers are paid, little is left to improve system planning and management, to provide the professional services-curriculum development, teachers' training and retraining, testing and qualification-needed or effective adjustment to new skills demands or to respond effectively to new training challenges... Vocational education and training institutions settle into routine provision of standardized programmes of generally poor quality.

According to Atchoarena & Delluc (2002:93), financing vocational training is complex as compared to general academic education. To this end, some of the features of financing vocational training encompass:

- a) More diversified target groups,
- b) Greater involvement of employers,
- c) Greater scope for introducing market oriented mechanisms, and
- d) High prospects or income generating activities at the institute level.

As one part of education, the financing of vocational education is the major concern of governments as well as, in many countries, to industries. Over the past decades many countries have been forced to introduce economic adjustment and stabilization policies. Such a

programme has had serious effect on patterns by governments to finance education (Samoff, 1994:45). In many cases, adjustment led to drastic measures aimed at minimizing government spending and transferring costs to other actors. This orthodox policy has not left vocational education unscathed. In this context, higher unit costs constitute an additional handicap in the financing of training.

According to a document from the World Bank (2004:66), the Ethiopian government has placed major emphasis on expending to TVET and the programs involve a rapid, ten fold increase in public TVET over four years. According to this document, in 2001/02 there were about 38,000 students enrolled in 10+1 and 10+2 TVET programs in the country.

Similarly, MOE (2003:1), the Education Sector Development Programme (ESDP) II calculates total recurrent expenditure for TVET of 508 million ETB, and total capital investment of 1,787million ETB over the three year period (2002/03-2004-05). Assuming a total enrollment capacity of 130,000 students by the year 2004/05, which was envisaged in ESDP II, these estimates would translate into average recurrent cost of training one TVET student over a period of one year of ETB 1340. However, recent calculation based on the requirements and standards of new curricula suggested average recurrent training cost of ETB 2252 per trainee/ year for programmes. The cost is even more for 10+3 programmes that requires more sophisticated equipment and recurrent budget.

It is clear that, as the number of student's increases the recurrent total cost of each TVET school will increase and this increase has direct relationship with the budget (finance) needed.

Accordingly, the share of TVET budget from education expenditure budget in Ethiopia for the years 1988/89, 1992/93, 1993/94, 1995/96,

and 2001/02 is 1.6%, 1.7%, 1.5%, 1%, and 5% respectively (World Bank, 1994:40). Similarly, the study conducted by the World Bank (2004:82) forecasted that, the consolidated social sector expenditure projection of recurrent and capital expenditure of TVET schools in Ethiopia for the years 2010, 2015, 2020 shows that the share of TVET budget to general education budget is expected to 12.3%, 11.54%, and 11.13% respectively.

Coombs (1985: 10) underlines that the scarcity of financial resources is the central challenge to educational managers. It is one of the causes for the higher rate of student's repetition in a class and/or dropping out. Therefore, the educational manager needs to focus to find not only other financing sources, but also on how to use the already available financial resources more efficiently and effectively in order to run the school system.

Oromia, which is the largest region of Ethiopia, has 34 government and 11 non-government TVET schools. The statistics of Oromia Education Bureau shows that, those TVET schools give training for 8535 students (1997 E.C intake) and 4624 students (10+1 and above) in 23 trades, totaling 13159.

1.2. Statement of the Problem

All TVET objectives would be achieved on the amount of finance invested on the program. TVET system needs adequate financial resources in order to implement the overall objectives.

It is true that inadequate facilities including consumables, such as raw materials and spare parts, insufficient skilled teachers, over crowded classrooms, shortage of books, and absence of coordinated

apprenticeship program can be cited as some of the basic indicators for the low quality of TVET programmes. These problems are mainly caused by financing TVET schools that are not sufficient to the institutions. Therefore, planning alone is not enough to attain a desired quality of training, but also the provision of adequate financial resources is highly essential.

With regard to financing, Brighton (1965:9) pointed out,

It is not wise to pay too much but worse to pay too little, when you pay too much you merely lose little money, when you pay too little, you sometimes lose all because the things you bought are not capable of doing that which you sought it to do.

This implies that to advance better and quality TVET education one has to finance TVET schools sufficiently. As it is impossible to buy quality goods with limited amount of money, the same is true in an educational system.

The major purpose of this study is, therefore, to investigate the current system of financing of TVET in some selected TVET schools in Oromia. Hence, this study is expected to give answers to the following basic questions.

1. What are the major sources of revenue to finance TVET in Oromia?
2. What are the funding schemes applied to TVET in Oromia?
3. Is the annual budget sufficient to run the programmes?
4. If the annual budget is not sufficient, how do the schools try to solve the problem?
5. What measures should be taken to overcome the constraints, if any, encountered in financing TVET in Oromia?

1.3. Objectives of the study

The general objective of this study is to identify the problem and process of TEVT financing in Oromia region. It also investigates the sources, and approaches to allocate budget for education particularly for TVET schools. Thus the specific research objectives of this study are formulated as follows:

1. To identify the source of finance of TVET schools.
2. To examine the system (approach) of budget allocation Particularly for TVET schools.
3. To ascertain whether or not the allocated budget of the school is adequate to undertake their activities that are needed for the attainment of the educational objectives.

1.4. Significance of the Study

This research study has the following major significances.

- A It will help the government of the regional state to device better ways of financing TVET
- B It will encourage TVET institutions in the regional state to utilize the scarce financial recourses effectively.
- C It will help other interested researchers to conduct more and extensive research in the field of financing TVET.

1.5. Delimitation of the Study

Currently, there are 34 government and 11 NGO funded TVET schools in Oromia. This study deals only with government sponsored TVET schools in the region since it is difficult for the researcher to make an exhaustive study on all of these government TVET schools in Oromia. Out of the

total government TVET schools in the region, 13 are located in the eastern zone; another 13 are found in western zones, while the remaining 4 are found in the Northern and 4 in southern zones. Using their geographic location and their concentration, 4 sample TVET schools are randomly selected for this study as shown in Table I.

Table I. sample TVET schools

No	Name	Zone	Geographic Location	Fields of training
1	Asalla technical and Agriculture college	Arsi	East	Industrial technology
2	D/zayit TVET schools	E. Shoa	East	Business
3	Dabana TVET schools	Ilubabor	West	Construction
4	Sebata technical and Agriculture college	S.W. shoa	West	Home science

1.6. Limitations of the Study

The “Technical and Vocational Education Training Proclamation No 391/2004.” states that every public training institutions shall have the right to undertake income-generating activities and to utilize any income there from. However, the sources of income were not specified and no standard were set on financial matters.

In addition, during establishment and accreditation of TVET schools, there is no financial standard that should be fulfilled by the owners. Therefore, in this study, we can’t compare the financial sources with standards.

The major problem during the study encounter was lack of financial data on regional bureaus. Financial data are not organized yearly. As a result, it was difficult to check the reliability of data. Moreover, some expertises in regional bureaus were not willing to disclose the budget data.

1.7. Operational Definition of Terms

Allocation: - Dividing a sum of money in various ways, allocation of capital, allocation of funds to project (Collin, 1986:11).

Budget: - Budget is a plan of expected spending and income (usually for one year). The annual plan of taxes and government spending proposed by a Ministry of finance (Collin, 1986:35).

Budgeting: - Preparing of budgets to help plan expenditure and income (Collin, 1986:35)

Budget Process: - It is the sequence of activities, which includes a budget call, submission of budget proposal, budget defined, approvals and release of budget.

Financing: - Refers to the purchase and sales of legal instruments that give owners specified right to a series of future cash flows (Radcliffe, 1994; 50)

1.8. Organization of the Study

This study is organized in to four major chapters. Chapter one deals with the problem and its approach. Chapter two treats review of the related Literature. Chapter three deals with methodology, presentation and analysis of the data. The final chapter discusses the summery, Conclusions and Recommendation of the Study.

Chapter Two

2. Review of the Related Literature

This chapter attempts to examine the research ideas and data presented on educational financing by earlier researchers. It presents the most known sources of TVET finance, basis of budget allocation and brief history of educational financing in Ethiopia.

2.1. *The Concept of Finance in Education*

The term finance lacks a commonly accepted definition and it is subject specific on how the term is conceptualized by different writers (Kennedy, 1983:3).

Bodler and Merton, (1998:2) for instance, defined finance "... is the study of how people allocate scarce resources over time." Similarly, Kennedy (1983:3) said that finance is a science which treats the income and expense of government.

Shultz in Bodler and Merton (1998:2), said that "Finance is the sum total of economic relation in the process of which monetary funds of the socialist state and the economy formed, utilized and control is exercised.

Furthermore, the term finance as defined by Radcliffe (1994:50) refers to the purchase and sales of legal instruments that give owners specified right to a series of future cash flows. These legal instruments are financial assets or securities that include bond, loan and stock made by financial institution.

This implies that the original issuer of securities is referred to as a borrower and the purchaser is referred to as a lender. Borrowers have an immediate need for cash, whereas lenders have an excess of cash. When the buyer issues a security to the lender both parties benefit. The borrower obtains the current use of cash and the lender obtains claims to future cash flows (Radcliffe, 1994:51).

However, from the above definitions we can understand that different writers define the word finance according to their opinion and political outlook. Therefore the common definition which is defined by Good (1973:242) is used in this thesis.

Educational financing is the science and practice of raising; expending revenue for education and the management of monetary affairs for school (Good, 1973:242).

Kennedy (1983:28) noted, "Finance has been called the life blood of an organization. Without an adequate supply of finance all the activities of an organization are restrained and progress is impaired." This implies that the progress of any organization is highly affected by the flow and amount of finance.

Carter (1982:13) further states that, money or finance is one of the most important and compulsory resources used by all social organizations, and that its deployment determines the effectiveness of other resources. In this regard financing education should need sufficient money that is allocated to support specific activity in educational system (Jordan et al, 1985:188).

Financing vocational training is expensive and the government alone cannot afford the cost of training. The cost of one technical vocational

school is equivalent to two or three schools offering general education (Atchoarena, 1996; UNESCO, 1996:32). Middleton, Ziderman and Adams (1993:69) in Yekunoamlak (2006:92) also stated that recurrent costs per student for vocational schools exceed those of academic schools by an average of 153% in developing countries.

The above authors further pointed out the following reasons for the higher recurrent costs of vocational training.

- a) Low student-teacher ratios required for training in workshops increase the cost of instructors.
- b) Where wage policies permit the hiring of skilled workers as instructors, the need to compete with other employers rises of the cost of instructors.
- c) Technical requirements and cost factors for specialized equipment. This is caused by under-enrollment, which stems from limited employment opportunities and consequently low student demand for places (Middleton, Ziderman & Adams, 1993:36).

According to ILO report by Johansson, (1996:67), in (Yekunoamlak 2006:98) there are three methods to alleviate financial constraints.

- a) Expending revenues from traditional sources (government budget or tax).
- b) Diversifying financing vocational training through non-traditional sources (Contributions from enterprises, individuals, training providers, donors, and other non-tax sources).
- c) Making better use of existing resources.

Due to economic declines, governments particularly in developing countries, have no adequate money to finance vocational training. To this end, there is a shift towards the second and third alternatives mentioned above. However, government intervention is still important in equity aspects. The equity agenda in government financing is permissible if the disadvantaged groups cannot afford to buy the services themselves but need the skills to improve their incomes. This argument is acceptable in so far as the skills can be marketable. In country to equity issues of the government, the private sector financing is geared to benefit or profit principle. Market imperfection takes place when the market does not provide efficient incentives for employers or individuals to invest in training. For instance, apprentices accept lower wages during the training session. This is because if employers are required to pay higher wages, they are not encouraged to invest in training. At this moment, it is also justifiable for government intervention through incentives (Johansson, 1996:72).

Although various finance strategies are practiced in different parts of the world, different researchers identify some of the better-known mechanisms for financing TVET in the following four types (BOLINA 1996:7; Ziderman, 2004:17; Johansson 1996:12). These are:

1. Public financing
2. Enterprise financing
3. Private and Public sponsored Financing
4. International Donor Assistance

2.2. Public Financing

Public financing is provided through public revenue (government fund). When the state finances vocational training through public funds it is on the assumption that the ultimate responsibility for development of human resources for national development lies with the state.

In most countries, the budget for TVET from public source is relatively small, ranging from 1 to 12% of the current expenditure on the education (Bolina, 1996:7). According to this source, the vocational expenditures as percentage of public current expenditure on education for example Ecuador, Costa Rica, Botswana, Singapore and Ethiopia was 10%, 6.7%, 5.5%, 5.1% and 0.9% respectively. This figure shows the priority of governments to vocational education in budget allocation from public expenditure. In developing countries like, Pakistan, India, and Thailand the main financial contribution for TVET comes from public fund (government).

Furthermore, when government finance vocational training through tax revenue, it can co-ordinate the requirement in accordance with the demand projected in the economic and employment policies. And also, in public distribution system there is more equity. Publicly financed vocational training system offer opportunities to the poorer section of the society. For them it may be the only opportunity to become trained.

Despite this fact, the cost effectiveness of vocational training through public financing is found to be low in many countries as public training institutions are not very keen to evaluate the qualitative and quantitative training needs (Bolina: 1996:9). In addition, sometimes governments are under pressure to open more TVET institutions even when resources are

inadequate. This leads to implementation of programs which are under financed and the quality of training may decline.

When public financing is the sole source of support to TVET, institutions may face fluctuations in budget allocation. This can cause shortage of resources which may lead to low quality programmes with limited returns on investment.

Generally, the study by Yekunoamlak (2006) points out the following limitations in public financing of vocational training:

- a) Under financing-budget reductions from structural adjustment and chronic public revenue shortfalls.
- b) Instability-year-to-year variations and changing priorities.
- c) Distortions-cuts on non-salary expenditures, needed investments.
- d) Over control-central financing brings central control.

According to Ziderman (2003), there is a growing realization of a need for private participation in the provision of training, declining role of the government in financing the training and enhance the role of enterprises in offering training through on-the-job, apprenticeship and in some cases provision of formal training. As discussed by Atchoarena (2003), the financing of vocational training varies from country to country and with the ownership of training institution. Private training institutes are assumed to be market-led. But these days, there is doubt on the quality of training, mainly in equipment-intensive technical training in developing countries, where they do not get subsidies or other incentives. Policy options on government financing are not justified unless for reasons associated with equity, skill deficiency or deterioration of standards. In this respect, Middleton, Ziderman and Adams (1993:115) have the following to say about the role of government in financing training.

There is no blanket case for governments either to provide or to finance training. It might be appropriate for the government to provide training but not financing, and vice versa. The type of extent of the required government intervention will change markedly from country to country, depending on many factors such as those relating to the country's economic development, the quality of the existing training institutions (on and off the job), and distortions in the economic environment that may militate against training development.

We can understand that vocational training institutions funded through national budget have more Instability as there is no consistent flow of resources and the institution can not plan its training possibilities accordingly.

2.3. Enterprise Financing

The enterprise/Company conducts the vocational training of its labor force directly and bears the entire cost of training. Often an enterprise finances a major part of the training but actual training occurs in specialized Vocational training institutions. Sometimes enterprises contribute small amount of money to a central vocational training fund as taxes and these sources are used in different ways to finance training.

For example, Japan is well known for its vocational training organized within large private companies using single employer financing approach. Employers prefer to recruit fresh school leaver with general education and then provide them with continuous training with in the enterprise (Zederman, 2003:39).

The Japan Industrial and Vocational Training Association (JIVTA) is the main organization in Japan concerned with training within industry. It is

a private association of employers and has a constitution and its budget is supervised by the Ministry of International Trade and Industry. The government does not provide funding to JIVTA. 25% of its budget is collected from membership fee and 75% is generated from course fee (BOLINA,1996: 11).

In addition, in South Korea the Basic law for vocational training enforced in 1976 makes it mandatory for enterprises with over 300 employees to conduct in -plant- training. If they do not do so they pay a training levy based on a certain percentage of payroll costs ranging from 1% to 3.9%. More over, large companies in Japan and Korean have training budgets and consider training as an important investment. (ATCHOARENA 1994:35).

As the concept of enterprise financing implies, it reduces the burden of government to produce middle level man power requirement of a country. Enterprise financing, as a source of finance, has different mechanisms like, payroll tax, Tax rebates and credits and Vocational raining funds.

2.3.1. Payroll Tax

According to MOE (2003:11), Payroll tax system is also included as enterprise financing system. Employers are usually considered as direct beneficiaries of the TVET system and are expected to contribute to the training system above their normal tax contribution to the public budget. In an increasing number of countries, particularly in developing world, cost sharing with employers has therefore been organized through a payroll tax. Already in 1993, it was estimated that some 30 developed countries had introduced payroll tax system. A classical example in the

developing world is Brazil, which set up its tax-based training fund in 1942.

In Brazil payroll tax was generally used to support vocational training. For example, in Brazil, SENAI (National Service for Industrial Training, Brazil) who have a right to collect and manage the system, financing modalities are based on a 1% payroll tax paid by enterprise from the industry, transportation, Communication and fish processing sector. Business employing more than 500 workers is subjected to an additional levy of 0.2%. This tax is collected by the government agency in charge of social security, and then transferred to SENAI. (ATCHOARENA, 1994:33).

However, in every country there is variation. Sometimes state enterprises and government bodies do not contribute .While small firms are exempted and large firms pay more. Sometimes workers also pay but most of the funds come from enterprises.

For example, in United Kingdom, through payroll tax system, all firms contribute towards costs of training which ranged from 1% to over 3% of total wages and salaries. In France there is a compulsory tax system of training funds and an apprenticeship tax so that all firms must pay a certain proportion of their total wages and salaries as a payroll tax, and these funds are used for financing vocational education (BOLINA, 1996:11).

Similarly, in some Latin American countries, the payroll taxes have been criticized (Ducci, 1991:22). In Argentina the payroll tax was removed in 1981 as attempts were made to restructure public expenditure to cope with the economic crisis. In Colombia, on one side the payroll taxes have been questioned and on the other hand its application has been diversified.

In addition, the main criticism of payroll tax lies in their inflationary effects on labor costs. This concern is particularly strong when fiscal and social levies on labor are already high. Eventually, using payroll as the basis for training tax might have other macro economic effects .In particular, such a system produces a distortion between labor intensive and capital intensive enterprises that could supposedly affects investment patterns and, in the long run, the economic structure(Atchoarena,1994:31)

Furthermore, in Costa Rica, although the payroll contribution increased from 1% to 2%, the surplus money was transferred to another fund and used for purposes other than vocational training. In Peru, the government lowered payroll taxes and is trying to find funding from other sources (Ducci, 1991:23).

When we observe the current situation, excessive dependence on payroll levies as an important financing source has been changing slowly. There has been criticism that taxes imposed on employers eventually discourage the demand for manpower. Payroll levies have however been effective in building national training capacity especially in middle income countries.

2.3.2 Tax Rebates and Credit

Tax rebates and credit schemes is also included in enterprise financing. BOLINA (1996:12) underlined that, in tax rebates, a portion of tax is returned to the firms as subsidy for training. In Singapore and Tunisia, the rebate is on the basis of costs incurred. In Nigeria and Zimbabwe it is in the form of grants to set up training systems. In most regions other than Latin America, tax rebate or tax credit system is more frequently

used. The principle is the same as payroll levies i.e. those who benefit, pay the costs of training.

Furthermore, in Ivory cost modern sector enterprises have to pay 1.2% for continuing vocational training and 0.4% for apprenticeship and initial training. In Taiwan the small and medium sized firms took a keen interest for training in the enterprises and firms get up to 80% of training costs reimbursed.

Similarly, in Argentina credit system was introduced by law in 1980. Enterprise was authorized to deduct from their taxes up to 8 per thousand of overall wages and salaries as expenditure in technical educational and training of workers.

Even though tax rebates of financing TVET were conducted in Argentina (1981), Brazil and Chile (1976), the impact was small. There was evidence that tax rebates were mainly being used by those enterprises which already had ambitions in training programs (Ducci, 1991:54)

2.3.3. Vocational Training Funds

The other source of enterprise financing is vocational training fund. In many countries where employers are active participants in TVET this programme has been set up. Tax contribution from the employers collected through payroll levies or subsidy from the government are transferred to the training fund.

Training funds which collect and allocate the resources raised by the tax, combine financial and training responsibilities. The use of large centralized fund tends to redistribute training costs between training non-training firms (ATCHOARENA, 1996:31).

Atchoarena (1994:44), also showed that it is possible to identify three functions performed by vocational training funds: banking, mutual funding, and insurances. As in a bank, enterprise can withdraw from their account funds required to cover their training expenditure: this constitutes the basic function of training funds. The redistribution function, present in many systems, made possible by the constitution of mutual funds, contribute towards tackling the needs of disadvantaged worker, enterprises or regions (Brazil, Coted'Ivoire, and Singapore). Finally, enterprises facing sudden technological change may be able to benefit from the funds accumulated saving to finance emergency training programmes. To this extent, the payroll tax can represent a form of mandatory savings account, which can offer additional protection to enterprises requiring greater training-related financial support at certain stages of their development.

Fore example, in Zimbabwe companies by an act of law have to contribute 1% of their wage bill to a central fund managed by Ministry of Education. This fund is used for financing vocational training activities e.g. apprenticeship training for various categories of trainees, up-grading training of skilled workers. Also companies that provide "On the job" training to apprentices can claim rebates from this fund at a prescribed rate (BOLINA, 1996:13).

Moreover, in Coted' Ivoir the law of financing of TVET provides that all enterprises, in the industrial, agricultural and commercial sector, subject to corporate tax, and shall pay a training levy equivalent to 1.5% of their payroll. The tax department of the ministry of finance plays a significant role in the organization of the system. It collects the tax together with other levies and transfers those sums in to an account opened in the name of the fund (ATCHOARENA 1994:41).

2.4. Private and Public Sponsored Financing

Government budgets are one major sources of TVET financing, but, since education and training also generate private benefit that accrue to trainees and employers, they are the major direct beneficiaries and finance TVET (Gasskov 2000:196).

When government faced with a shortage of resources, individuals, enterprises and non-government organizations (NGOs) would share the financial responsibility for TVET.

Different mechanisms like fellowship, grant, Loans, Co-financing, Production for profit, paid educational leave , and non-government and voluntary organizations are mechanisms to generate revenue in which employers or trainees bear part of the cost and government finances the remaining

2.4.1. Fellowship, Grant and Loans

Fellowship, grants and loans are included in private and public sponsored financing. Grant is money that is given by the government for a particular purpose particularly to help pay for universities. Fellowship, which is designed to offer training opportunities to unemployed young people, the poorer section, and the workers from informal sector and handicapped. The system is a supplement to tax rebates and the most important system of fellowship and grants is being implemented in Chile (BOLINA, 1996:15).

Training Loans can facilitate training for students coming from poor families if they have to pay vocational training and it can provide student with the means to pay tuition fees (and living expenses); thus, they ease

student payment burdens during study by enabling them to delay payment until they are in receipt of the higher earnings that the education course has made possible.

Even though training loans have some advantages, according to Ziderman (2003:65), there are a number of reasons why training loans are unlikely to be appropriate in Africa training system. The track record for student loans scheme, particularly in Sub-Saharan African Countries, is poor. Student loans schemes, introduced in Kenya, Tanzania and Zimbabwe, for example, have all resulted in very low loan recovery, due largely to overly generous repayment conditions, including below-market rates of interest, and long grace period. Generally this mechanism, at present, does not appear as a realistic option over medium term due to low recover rate and unsound administration loan scheme.

2.4.2. Co-Financing

Co-financing can be applied when there is an agreement between different parties then availability of funds becomes assured and training can be related to the actual demand. In Argentina co-financing has been arranged with enterprises, communities and vocational schools. In Colombia, Brazil and Peru also Co-financing is popular .Countries those uses co-financing agreements raise the volume of resources available for vocational training. Institutions which have such agreements keep their courses updated and relevant to new technology (Ducci, 1991:76).

For example, in Germany, under German dual system, expenditure on training is covered by the state and the enterprise. School costs are provided by the federal state (BOLINA, 1996:16).

The Federal Institute for Vocational Training is totally funded from the federal budget. The Chamber and training boards get their finances from levies on all member firms. Specific fees from companies who demand services of the chambers and boards (for counseling and examinations) are subsidized from state budgets for special activities. The enterprises finance training from their own resources by overruling them onto the price of goods and services sold in the market; Shifting part of the costs on the tax payer; returns from the training through the contribution of the trainees to productive work; Sale of training to other firms (BOLINA 1996:16).

While Co-financing agreements are emerging as a popular method of generating resources, other sources of funding are required for providing financial stability. Co-financing in the form of Cost-sharing is now a communist idea. German dual system as model on Co-financing is the best way to train a skilled work force according to their requirement. A constructive collaboration between enterprises, communities, and vocational schools can make sustainable finance source for TVET schools.

2.4.3. Production for Profit

According to MOE (2003:17), as public resources for vocational training become scarcer, systematic strategies to increase income generating activities of training institutions are gaining popularity worldwide. Increasingly, public training schools in African countries are encouraged and incentives to earn their own income through sales of item produced during the training and other commercial activities.

In many training programmes, income is generated from the sales of production and service activities of trainees. Such income generation

may take many forms. Income may be derived from the training process itself. This could be in the form of the provision of services (Such as car repair or hairdressing services), which also offers trainees valuable practical experience gained from working with real clients, or, items produced as part of training may be sold.

In some countries, a systematic training with production approach in public training sector has produced good result. A well known example of combining training with income generating activities was fruitful in Botswana.

In line with this, the proportion of recurrent expenses that can be covered by production sales may vary considerably from country to country. For example in Botswana, training with production has been able to cover, on average, 20 percent of total training cost (Ziderman; 2003:66).

However, high percentage of costs can not be offset through productive activities. And also, production for profit is not a reliable way to generate a large amount of resources for formal TVET programme. Despite this fact, the major objection, often voiced in relation to Botswana is that training institutions may be competing un-fairly with the local companies because of their low-labor-in put costs.

2.4.4. Paid Education leave

Another pattern of financing vocational and industrial education in some countries is the provision of paid educational leave. Employers continue to pay wages to employees while they receive part time or full time vocational education. In some countries for example in France and

Sweden there is legislation giving the right of paid educational leave to workers. And private sector employees with indefinite-term contracts have the right to individual training leave, which is financed by the 0.2 percent contribution (with in training tax) paid by employers to join management union bodies set up for the administration of individual training leave (BOLINA 1996:18).

In other countries there are variations in the method of financing paid educational leave. A study conducted by World Bank (1976) concluded that the system shifts the burden on the employers and creates many ambiguous situations. Almost all countries make the financing of educational leave the responsibility of the community. Therefore paid educational leave also becomes another way of distributing costs between the employers, workers and tax payees.

According to (Gasskov, 2000: 242), paid educational leave in Belgium entitles full-time workers in the private sector to be absent from work for a certain number of hours in order to attend recognized training and education courses. Since 1995, employees have been entitled to an annual maximum of 120 hours of paid educational leave for vocational training and to the maximum of 80 hours of education courses. Employers have to pay wages while workers are on paid education leave. Trainee's wages and social security contributions are reimbursed to the employer by the federal ministry of labor and employment. The state pays the full cost of paid education leave-related general education programmes but only half the cost of vocational courses.

2.4.5. Non-governmental and Voluntary Organizations

The involvement of Non-Government Organizations (NGOs) and voluntary organizations in the implementation of TVET is yet another way of cost sharing or financing of vocational programmes. Sometimes NGOs are charitable institutions working with the aim of upliftment of weaker and poorer sections of the society. Such institutions may have their own infrastructure and when they come forward to participate in TVET, they can be successful especially in conducting short-term training programmes in the rural or urban informal sector

For example, in Philippines the involvement of NGOs in the social development process of the country has gained momentum in the last few years. The institutes have been offering vocational training in Manila and other parts of the Philippines through the dual system with the involvement of the companies. It stated its activities in 1982 with contribution from the industry and donation from the Hanns Seider Foundation in Germany (World Bank, 2003:26).

NGOs generally work for charitable cause with the aim to contribute to the socio-economic development of the country. When they become involved in vocational training they take over the liability of financing some of the costs which would otherwise fall on the government. Also, as they are highly motivated and often work for the upliftment of the poorer and weaker sections of the society, their contribution leads to social equity.

Involvement of NGOs in the cost sharing of TVET in developing countries is gaining momentum. Not only do these organizations bear a part the financial liability but they are also known to work with a commitment for

the socio-economic development of the country. Government should try to bring forward more NGOs as partners in vocational training.

2.5. International Donor Assistance

International donor support plays a very important role in developing and financing TVET system. In many developing countries the large amount of international aid has contributed to the setting up of a base of training capacity. Infrastructure and facilities have been created, staff trained and instructional system implemented through donor assistance. Mostly donors provide financial resources for capital costs and it is limited for short period (BOLINA, 1996, 21).

According to World Bank (1991:132), in the 1980's, total cost incurred to vocational and technical education in training average about \$ 600,000 million annually of which the World Bank provides 45%, bilateral agencies 30% and other multilateral agencies 25%. Approximately 40% of multilateral assistance for education was used to support TVET programme. Moreover, in Africa about 7% of direct international aid goes to finance primary education, 40% to secondary education and 17% to TVET (BOLINA, 1996, 21).

NGOs and private source also made a sizeable contribution but the exact amount is not known. From 1963 to 1976, 40% of lending for education by the World Bank was for TVET programmes. But evaluation conducted in 1970's regarding cost effectiveness of vocational schooling especially diversified schools began to raise doubts. The World Bank lending then began to shift from diversified vocational education to center based vocational training and development of national authorities' (World Bank 1980:12).

Among multinational donors a very high amount goes towards capital expenditure and among bilateral donors a great share goes for technical assistance and overseas fellowships at the expense of support for recurrent costs.

In addition, donor assistance facilitates transfer of latest productive technology to low-income countries, which can stimulate economic growth. However, TVET programme requires long term support as they take long periods to mature, sometimes decades. Donor assistance is generally short term, sometimes for few years. Donor's agencies generally do not make long-term commitments and this limits the effectiveness of assistance, as recipient countries are not able to make long-term plans.

Moreover, donor agencies like to fund capital expenditure, as it is easier to calculate and measure. Capital investments such as newly constructed buildings are visible and proof of the contribution made by the donor and therefore said to have greater impact. Extensive facilities are thus built which may not get adequate recurrent support from government because they do not have adequate resources.

Donor assistance is found to concentrate on capital costs creating large training facilities. Programmes can not operate successfully with out adequate support of recurrent expenditure by the host country. Therefore the size of the project to be funded by the donor and its duration should be based on the capacity of the recurrent funding available. Otherwise a project started with good intention may start malfunctioning. The most successful donor projects are those, which lay emphasis on strengthening the management and up grading the quality of staff of training institutions (BOLINA 1996, 21).

Consequently, and also distortions should be avoided between over importance on capital expenditure as compared with recurrent costs. If initial investments are very extensive; countries may not be able to sustain TVET institutions. When this happens the quality of the programs in the instructions deteriorate and the project does not yield adequate return on the investment.

Donor assistance is most effective when moderate level of finance is provided over a long period of time. Long-term partnership with government helps them in their efforts to build proper training facilities (Ziderman, 2004:112).

To generalize on financing, there is no single or universal solution for financing vocational training and no one method, which can serve all sections of the society. There are many different limitations in every system. Questions about who should meet the costs, the employers, individuals or the government are raised from time to time. A world Bank study reviewed the literature on these questions and concluded that the survey eventually raised more questions than it was answered and that there is no universal solution about the absolute effectiveness of any one method (Zyemlman,1996 in BOLINA 1996:24). A combination of funding leads to great access in TVET financing. Diversifying financing will create better opportunities and improve the quality of training. Governments have to realize that funding from public revenue is not the only way to finance investment in vocational education and training. There should be determination to involve employers, individuals and the local communities.

From above literature we can simply understand that, donor assistance is a very important source of financing vocational training system. Therefore, donor assistance that has long term development polices and

that give special attention to recurrent budgets can eliminate inefficiencies within TVET Schools.

3. Funding Schemes or approaches

3.1. Financing as a Management Technique

There are three basic management approaches to finance TVET. The first view is, as Gasskov (2000:98) pointed out, funding as **traditional funding disbursement**. Simple budgeting and disbursement procedures assume that certain standard costs for existing TVET institutions (Wages, and other operational and maintenance costs) are established and resources are allocated to them from year to year, irrespective of the types of programme they deliver, enrollments and outputs (budgeting and funding per institute rather than per output). When types of programmes and planned enrollment are not considered in budgeting, the resource allocated determines the type of courses and training capacity. In this case, ministry routinely performs funding functions. Many industrialized and developing countries apply this approach.

The second approach views financing as a **management technique**. Financing schemes can aim at directing providers towards certain priorities and outputs (e.g. number of graduates, their level of achievements and rate of labor market success); encouraging a reduction in training unit cost; and improving providers' flexibility. This approach would distinguish between types of programme and planned enrollments and assumes that, since more sophisticated programmes are more costly than entry level training, the institutions involved in technological courses should be better financed. Such funding schemes usually

incorporate mechanisms for measuring performance and outputs/outcomes, and they link funding to the achieved outputs.

The third approach views education and training as **an investment**, emphasizing social and private rates of return expected measures of cost-effectiveness and rates of return can drive resources allocation, as well as organizational management and programming decision. Applying TVET financing as an investment or as a management technique calls for solid management competence from administrators.

3.2. Structure of Financing Schemes

Diverse TVET financing mechanisms exist and they all send signals to their respective beneficiaries. Each of these mechanisms has limitations and produce the best result in particular environment. TVET financing mechanisms can be distinguished in terms of combinations of (1) the sources of funds and methods of redistribution (2) the types of authority, which administer funds; and (3) the formula and conditions for allocating funds to training providers (Gasskov, 2000:198).

The first variety of financing mechanism arises from the types of funding sources and their distribution. TVET funds can be taken from general revenues, with school budgets allocated directly from the state education budget. (Central collection and redistribution of general revenue between regions do not encourage cost efficient uses of funds at local level, but remains viable in many larger countries). Alternatively, general revenues can be raised centrally but distributed through formula based transfer towards low levels of government. Or, governments at each level can tax and raise their own education funds, with training schools receiving funds from one or more government levels. Another option assumes that

a special tax earmarked for TVET is collected from enterprises or other entities and administered centrally or redistributed, with schools receiving their funds either directly from the national fund or as a combination of government grants and tax-based money.

The second factor is the government levels and bodies, which administer training funds, are not always the same as those, which generate them. The second variety of combinations arises, therefore, from distinguishing government levels and other actors from the authority to administer the training funds. The responsibility for managing public funds may be delegated to lower level of government, specially created professional management bodies or national training agencies and employers and workers originations (Gasskov, 2000:199).

The third point is the allocation formula, in its turn, establishes the link between training funds and providers. The formula may take account of national targets, if any, in order to ensure that providers are working towards them. The formula may also be linked to enrollment and school outputs. In this case, the TVET financing mechanisms becomes a management tool.

3.3. Allocation Formulas for Financing School

According to Gasskov (2000:201), in practice, there are two main types of resource allocation formula. The first may be called **normative**. It assumes that each training school is equipped with a certain number of teachers and technical and administrative staff and that a certain level of wage-related expenses as well as operational and maintenance costs are covered, sometimes with no link to enrollments, performance and outputs. Certain ratios, such as the number of students per teacher, may also be established for the purpose of budgeting. The school's

performance may not affect its funding. The central administration and funding model, which is normally based on standard decision and uses a standard cost principle, is simple and often cheap to implement. However, central decisions and funding schemes, by their nature, constrain schools initiative.

However, this approach lack operational flexibility and do not consider local variation in the demand for training and the corresponding need to reallocate funds. This approach also fails to respond to local and regional variations in school maintenance and operational costs. Normative models are often unable to command the best possible performance from individual school.

The second allocation formula is **performance** based financing. This approach links funding to providers' current or planned performance and output indicator. The following schemes have been applied.

State grants are linked to enrollment figures, so that schools, which attract and enroll more students, are encouraged. This mechanism however, promote enrollment alone and has been unable to encourage providers to develop expensive progrmames. As a result, low level and low cost courses have been encouraged. In addition, this scheme encourages providers to enroll only the students who are most likely to remain on the courses, rather than those most in need of training.

On contrary, State grants per student vary for programmes of different degrees of sophistication. Since more comply programmes are assigned higher funding rates per students, schools may be encouraged to offer the programs that the government wishes to promote. By establishing higher rates for particular progrmmes, the supply of certain qualification can be expanded. It also allows promotion of training for particular target groups. Provider's efforts to attract and train disadvantaged populations,

which are often potentially unsuccessful, could be rewarded through higher funding rates or each student enrolled and graduate from the program (Ziderman, 2004:14).

Additional grants to schools can be linked to the percentage of students who graduated with certificates and who graduated with higher level of achievement.

The other point is, grants can also be linked to the percentage of graduates who find jobs and remained employed for certain period of time (e.g. 6-12 months). However, the availability of jobs is often beyond the control of training providers and such schemes should be applied with caution. They are primary used to finance providers of labor market training, which should be directly linked to the laborer market success of graduates.

Under performance related mechanism, no public funding is guaranteed to providers unless they demonstrate certain levels of performance and out put. Those that are funded may have full or almost full freedom in the use of funds. Providers will find themselves close to the free market when they need to compete for enrolments and generate higher student's achievement in order to earn their funds. They can even be encouraged to make a profit. Obviously, in performance related funding schemes, audit of enrollment and assessment of graduates should be external. The introduction of such funding schemes seems to make providers' operations market driven and ensure that better performance are rewarded.

4. Types of Funding Scheme in Vocational Education

A variety of schemes, various combinations of sources, all arrays of sophisticated allocation formulas and authorities functioning at different levels can all be seen in the funding of vocational education. Among these, the major ones are:

4.1. Multi-Level Funding Led by Central Government

This funding scheme is a part of normative scheme in which money is generated and administered centrally and is still applied in many countries, especially developing countries experiencing resource shortage and attempting to plan operation and distribute of money directly (Gasskov, 2000:205).

Central administration of public education funds is also used in some industrialized countries, which combine this model with a high level of independence for training providers funded according to performance and output (World Bank, 2004:66).

Multi-level funding schemes with the central government in the leading role assume that most education funds are generated at national level. Although lower authorities receive formula based transfer, spending conditions are established and controlled by central government.

For instance, in France, the major decision-making authorities are the National Ministry of Education, which is responsible for the most important elements in the educational process (i.e. teaching staff,

curriculum development and inspection of educational instruction) and the regions, which are strongly involved in financing TVET institutions (Ziderman, 2004:37).

Moreover, construction and maintenance cost of TVET and other facilities, technological equipment, teaching materials and running costs (except for staff costs) are co-financed by central and regional governments. For this purpose, the state gives each region an annual decentralization grant to cover the TVET running costs and an annual regional grant for TVET equipment. On average, about 60% of construction costs and 95% of operational and maintenance costs have been covered control (Gasskov, 2000:206).

TVET staff costs are fully paid by the state. However, the number of teachers allocated to each TVET schools is decided by regional education authorities and depends on enrollment and various local conditions. The regions may, if they wish, allocate extra funds to TVET from their own resources, including tax revenue.

4.2. Multi-Level Funding Led by Local Government

Funding mechanisms controlled by local governments assume that funds sufficient to maintain TVET institutions can be generated at local level. Contribution from other government levels or national training funds plays a complementary role.

For instance, in the United States of America, there are three levels of government administration. Federal, State, and local. Educational authority rests with the state, which in turn, delegates authority to local school districts. Local governments raise education funds through property taxes, which are based on periodic assessment of property

values; they generate considerable revenue and are the most stable form of taxation. Individual school districts, however, vary greatly in the value of their taxable property. Property, wealth and the need for education funds are not distributed evenly between school districts. Local jurisdictions can choose to tax at higher rate if they want a higher level of local funding. These tax rates are set by public vote. State funding is used to offset local funding disparities, at least in part (World Bank, 2004:72).

State financing for public education comes mainly from income taxes, which are less stable than property taxes because they are directly influenced by economic fluctuations. Most states use some type of equalization scheme to equalize between school districts in their ability to support education. States usually allocate a given amount full-time equivalent (FTE) student enrollment to all schools. In order to compensate for differences in taxable wealth, states provide additional funds basic level regardless of community wealth. Common practice among state is to provide additional funding for TVET because it is a higher cost programme. The allocation may also vary according to different categories of programme. Special TVET funds are usually percentage of regular FTE funding (Ziderman, 2004:96).

Federal funds are distributed to correct differences in wealth and to encourage certain kinds of TVET programming locally. The federal government allocates funding from general tax revenues in two basic ways: **matching** and **categorical**. Matching funds are allocated to local districts on the basis of an equalizing formula. However, the local school district must first commit a certain amount of its own resources. Matching funds do not supplement public funding; they also encourage local initiative in generating funding, with local institution that wish to receive government funding embarking on revenue generation activities

(Ziderman 2003:64). In this way, the Federal Government gains influence over local programming, but its resource commitment is modest. Matching funds, however, are an unstable source of funding, since Federal appropriations are subject to delay and fluctuation. They usually account for no more than 6 to 8 percent of local school's recurrent expenditure (Gasskov 2000:207).

Local school districts provide the most funding and have the greatest control over vocational training operations. Although the over all level of state contribution to vocational schools is considerably higher than the Federal level, it is largely general aid based on FTE enrollments with out much policy leverage. In contrast, Federal funds encourage innovations with a very limited financial investment: most states align their priorities with those of the federal government. A relatively high level of federal funding is provided to state authorities to carry out monitoring.

Through collaborative funding, each government level achieves objectives that it otherwise could not be attained by funding TVET alone. The three levels of funding complement one another's. In this way, some of the diverse consequence soft public financing are encountered and greater equity and sustainability is achieved. A collaborative relationship must be developed between three governmental levels, with clearly defined authority and responsibly. A three-tier system of a financing vocational education funds, like that in the United States, work in conditions of high decentralization and a very limited federal government role.

4.3. Funding Schemes that Involve Training Taxes

Some countries collect taxes earmarked for TVET from enterprises. In such cases, enterprise funds may become part of the overall funding mechanisms. Other countries encourage enterprises to provide grants to

the institutions that supply them with trained labor. Although enterprises contributions may be substantial they tend to remain sporadic and training schools need to make continuous efforts to secure them. Such funding schemes are applied for instance, in Hungary and France.

Vocational education in Hungary is financed from three sources-State subsidies, local government subsidies, and the vocational training fund. Companies are legally required to spend 1.5 percent of their wage bill on training within the compulsory training allocation; companies can make a payment to the vocational Training fund (VTF), which is administered by the tripartite National Training Council (NTC). Alternatively they can finance their own courses or provide direct assistance to vocational schools for instance, in 1995, out of the compulsory training allocation companies spent about 43 percent on training their employees and 37 percent on direct financial assistance to schools, while 20 percent was remitted to the VTF (Gasskov, 2002:208).

The education fund comes from the wage tax, between 15 and 30 percent is left for local budgets. Country educational authorities receive and combine state grants with their own funds and make-up the budgets of local training schools. School budgets are enrollment-based, but schools are free to spend them as they see fit. In addition, the tripartite country labor council receives the VTF contribution, which they distribute between local schools on a competitive basis. Schools are invited to submit proposal for the development of training programmes.

The role of the three sources has been changing over time. In 1996, TVET schools received funding, on an average, in the following proportion: from state budget, 27.5 percent; from local governments, 53.5 percent; and from the VTF, 19 percent (Gasskov, 2000:209).

5. Funding Schemes that Involve Market Force

5.1. Performance-Related Financing

According to (Ziderman 2003:72) the concept of "Payment by results" and rewarding performance underlie output based method of funding. Output related funding provides financial incentive to training institutions by rewarding them for meeting certain predetermined level of training delivery outputs may be measured in absolute terms (often defined as the number of courses completions) but may also relate to the speed with which outputs are produced (to minimize cost).

The most important benefit to be gained from adopting performance related financing is enhanced efficiency of the training process. Since a training institutions budgets is linked to the achievement of particular outputs, an incentive is present for training institutions to change and improve various aspects of their training policies and practice in order to increase their training performance and, hence, funding.

Performance-related funding assumes that TVET schools demonstrate certain performance levels or achieve prescribed outputs in order to be financed.

This approach uses formulas and conditions for funding, and also for contracts between TVET schools and those who buy their services. The most developed version of such schemes is applied in Denmark and the United Kingdom.

In Denmark, the Ministry of Education no longer administers training schools. Instead it develops vocational training policies and issues.

Education orders which established a broad framework for TVET Course; independent schools within to obtain public funds must comply with the education orders. The schools are expected to earn revenues through selling courses in the market, through the Ministry of Education remains the major purchaser of authorized training courses. Training schools receive grants that are calculated on the basis of actual performance (Grasskov, 1996:210).

In United Kingdom performance related financing aim to meet national training targets. For example, the main priority of 1994-95 was to achieve a 7 percent increases in student number. Institutions were invited to apply for additional funds to achieve this target. However, the availability of additional funding is linked to the degree to which college's achieved the previous year's performance targets. Applications for additional funding from those meeting targets were given priority, while the balance of growth funding was applied to those who had not met them. The funding model seeks to ensure efficiency gains; therefore, institutions are required to produce more output with less recurrent funding (World Bank, 2004:110).

The performance of each college is monitored against the funding agreement, and funding may be reduced if it fails to achieve specified outputs. Funding is exclusively based on enrolment and output

5.2. Financing through Voucher

Vouchers are government-financed entitlements to certain services for a given amount of money. States establish eligibility requirements, issue vouchers and monitor quality and compliance. Both private individuals and schools may be eligible for vouchers to buy public services (Grasskov, 2000:213).

Funding schemes involving vouchers have several objectives. First, they attempt to improve the efficiency of training system by enhancing individual choice. Second, they expose providers to market forces. Providers have to compete for trainees' Vouchers, from which they obtain part of their budget.

According to Ziderman (2003:75), financing through voucher is one mechanism of subsidizing training. Thus, subsidization could take one of two paths; subsidies could be paid directly to the institution themselves, as a training fund as in current practice, or via the trainees. Students would meet tuition fees charged by training institutions, wholly (or in parts) through vouchers or entitlement to training courses.

In the early 1990s, the United Kingdom added a voucher system in an attempt to create a genuine training market. This voucher system increased competition between colleges for trainees with credit entitlements. The need to attract trainees has led colleges to adopt marketing strategies of a kind traditionally used in the private sector. College capacity to manage training programs under the new market conditions has improved. Reform of College management, featuring increased autonomy and employer participation in the newly established management boards, has contributed to genuine market development (World Bank, 2004:150).

6. Budgeting Strategies

Budgeting is a process of preparing a statement of the anticipated income and the proposed expenditure. The purpose of budget is to implement the policy which is formulated by management to attain the given goals and objectives. It is one most popular devices used for

planning, it is deciding what should be done and how it should be done, while controlling assuring that the desired result are obtained. Therefore a budget, as a planning device provides a detailed plan of action for attainment of the educational institutions objectives and goals. In planning many problems are anticipated in advance and solution can be designed through research and studies. Budgeting as controlling device, ensures that plans and objectives are correctly implemented. This means that actual performance regularly monitored the result compared with the first plan and knows the variance Lemma, (2001:25).

The education sector strategy of Ethiopia says that the financing of educational system shall be improved increasing the government budget allocation particularly for infrastructure, building and provision of educational materials (MOE, 1994:18).

6.1. Incremental budgeting

This involves adjusting the previous year's budget with increments for any change in volume. It is the traditional and most widely used budgeting technique through which the budget level of an institution of next year is determined by considering the current periods budget and actual results as well as expectation for the up coming budget year. It takes the current allocation pattern as the bases for budgeting for next year and adds a certain percentage to the current budget by taking allowances of additional activities and price up dates (Poston et.al., 1992:163).

6.2. Program Budgeting

It is an attempt to link a set of resources to a particular program. Program budgeting is not a mere estimate. There is sound planning.

The decision will be made to utilize a particular set of resources for a particular purpose by laying down the steps for carrying out the program all the expenditure or resources at each stage. Program budgeting recognizes the law of scarcity. Resources available to education are limited as they are in all other sectors. Economic resources generally have alternative uses. Money available for education can be spent for the cost of some other activities. However, an effective adoption of program budgeting is not an easy task. It needs to quantify the out comes, requires staff with analytical skill, and needs accounting system that supports it (Forojalla, 1993:322).

6.3. Zero Base Budgeting

It is an approach to budgeting which starts from the zero-level, regardless of the budget item is entirely new or an existing one. It requires every budget item to be justified every year. ZBB is a way which tries to reduce or eliminate non-essential activities. It is an innovative technique developed to guard wasteful use of public resources. This approach requires educational managers who are able to rank objectives, operations, and activities, to explore alternative means of conducting each of activity and determine activity costs. The disadvantage of this approach is that it might take a long time Lemma, (2001:36).

7. Brief History of Development and Financing of Education in Ethiopia

In traditional Ethiopia, the Orthodox Church and the mosque are the major institutions that contributed for the development of education. The government at the beginning of 19th century introduced modern

education. But during the five years of Italian occupation of the country, fascists closed all schools for Ethiopia, and virtually all of those Ethiopians who had been exposed to some form of modern education were ruthlessly eliminated. At the time of the restoration of independence, therefore, the government keenly felt the need for the reconstruction and expansion of education (Fassil, 1990:4).

It was, however, after 1941 that a type of effective educational policy was introduced for the promotion of education in the country. After the liberation of the country the government paid a great attention on education. Accordingly, one of the initial tasks of government was reconstruction of the very few schools that has existed in the pre-war period.

By 1947, the government had already felt the need for opening a wider avenue for expansion of education in the country and made a new system that provides for tax on imports for the promotion of education and public health. This proclaimed tax was to be levied on land in support of primary education (Fasil, 1990:6).

In connection to this, Teshome (1979:6) noted that, a new system of financing education, which was devised by the government, was levied on rural land in order to cover a large share of expense. Accordingly the financing of elementary school was based on those taxes but all other education including TVET was financed by the national treasury (Fassil, 1990:15).

The system of financing had promoted in equality of educational opportunities among the different regions (rural areas become fewer users of the financial resources of educational system). To remedy this defect however, the government once again introduced a new educational tax system, which was to be levied on urban property and personal

income. This tax was not only intended to narrow the gap with respect to educational opportunity, but also to encourage the opening of additional school in the province (Abir, 1970:53).

In addition to these the government sought a considerable amount of foreign aid from different international organizations such as United Nation International Children Education Fund (UNICEF) and United Nations International Scientific and Cultural Organization (UNISCO) in order to finance the capital expenditure (Teshome, 1979:117).

In 1974, the country was made radical social transformation from civilian government to Marxist oriented military government. The educational programme was intended to provide free education step by step to the broad mass such a programme aimed at intensifying the struggle against feudalism, Imperialism and bureaucratic capitalism.

The government made proclamation providing for the administration and control of school that is integrating education with the lives of the broad mass and to enhance popular participation in the management of school. Under this method, the school committee was given legal responsibility for operating each school system by generating resources from their own localities. At the same time the government was partly able to maintain most of recurrent expenditure incurred by all government school system. However, the financing of capital expenditure remained the major concern for the society because the national economy did not seem to show any sign of progress. Therefore, the governments face problem to cover these and need due support from other international organization

1984 E.C onwards the education system particularly the TVET system in Ethiopia is undergoing a major reform process. A profound reform of the system determinants is discussed at federal and regional level aimed

at creating a TVET system which is self employment oriented, demand driven and appropriate to the development needs of the Ethiopia economy. To this end, a comprehensive National TVET Strategy has been developed.

One challenge of the system reform is to develop a financing mechanism for TVET in Ethiopia that will facilitate the generation of additional resource needed to implement the strengthening of the TVET system and its capacity increases. Against this background, all relevant policy statements and strategy papers, including the National Education and Training Policy, the Capacity Building Strategy and the National TVET Strategy, call for new concept of cost sharing in TVET with the intention that all beneficiaries (including trainees, employers in all sector and the communities) contribute to the cost of training according to their capabilities (MOE, 2003:1).

In 2002, the Ethiopian Capacity Building Strategy formulated a number of premises and principles regarding mechanisms to broaden the financial base of TVET. Some of the important points raised in this strategy include:

- √ Cost Sharing is expected from trainees above first cycle of secondary education i.e. 10+1, 10+2, and 10+3 programmes are expected to pay fee.
- √ Nevertheless as it is expected that training fees may tend to exclude students from poor economic background, a graduation tax should be considered in the long run.
- √ An important means of income for TVET should be income generating activities of public training institutions. These could

take the form of selling products produced by trainees, providing evening courses and providing tailor-made courses or industry.

- √ The government should also encourage private enterprises to get involved in training, including setting-up their own training centers, as one incentive, the government may exempt costs involved in TVET from tax.

In Ethiopia, the introduction of fees for TVET beyond the first cycle of secondary education (after grade 10) was stipulated in the Education and Training Policy of 1994 and has again been taken up, as shown above, in the Capacity Building Strategy and programme document.

According to MOE (2003:7), training fees are not uncommon in the Ethiopia TVET system. High fees paid for training courses in the growing private training market shows that good portion of the target group is prepared and able to share the training cost or even carry it in full. Tuition fees in private training sector can range between ETB 100 to 200per month, and may be even higher.

However, the introduction of fees for TVET must be conceptualized with in the financing structure for other career path beyond Grade 10. At the moment, other training schemes including the agricultural TVET progmmes and training in the health sector, are not only free of charge, but even grants further benefits to their students such as meals, accommodation and allowances. Therefore, it may not be true to expect from TVET students in some specific areas to share the cost of their training, while students in other regular educational streams do not.

At the moment, the public training sector is mainly funded through budgetary allocation of the government and donor funds, through

contribution to the Education Sector Development Programme (ESDP) and direct program support.

To sum up, financing TVET schools is expensive and the government alone can't afford the cost of training. Even though different writers showed their idea in different ways, almost all are agreed on the following points.

- Financing TVET schools by expending revenue from traditional sources (government budget).
- Diversifying different sources of finances like enterprise financing, private and public sponsored financing, and international donor assistance.

In every county there is variation. However, Cost-sharing mechanism including Co-financing, production for profit, vocational training funds are the most common methods of financing.

Regarding the funding scheme, performance based allocation formula is popular. This mechanism promotes the schools to attract and enroll more students. Under this mechanism, no public funding is granted to providers unless they demonstrate certain level of performance and out put. Those that are funded may have full or almost full freedom in the use of funds.

Chapter Three

3. Research Design and Methodology

As reiteratively stated, the purpose of this study was to investigate the major sources of TVET financing, funding mechanisms and budget allocation strategies and identify the major impediments and come up with the possible strategies to be implemented to alleviate the problem. Thus, to attain this goal, a descriptive survey method is employed on the assumption that it could help to reveal the current or existing problem related to TVET financing. Accordingly, the following techniques and procedures were implemented to collect and analyze the data.

3.1. Data Gathering Instruments and Procedures

The main data gathering methods used for this study was a questionnaire, since it is more appropriate to secure factual information. In addition, document analysis was made to see the current sources and the budget share of TVET schools. The data for document analysis were obtained from Annual Abstract from Oromia Education offices, annual report of Woreda Educational and Finance Bureaus, and annual reports from TVET schools included in the study.

Regarding the questionnaire, three types of questionnaires were prepared and distributed to different sample respondents of the study. The 1st questionnaire that deals with sources of TVET finance and budget allocation mechanisms in the region was distributed to regional Finance and Education Bureaus. The 2nd type of questionnaire that deals with the methods of sharing the allocated finance to different sectors and the share of TVET schools from Education budget in Education office was

distributed to sample respondents from Woreda Finance and Education offices.

The 3rd type of questionnaire deals with the sufficiency of allocated budget to TVET schools and the amount of internally generated income and their sources were included in the questionnaire and distributed to sample respondents from the 4 sample TVET schools such as Deans, assistant Deans, department heads, administrators and finance heads.

In the first part of questionnaire, multiple choice-type of questions were forwarded where necessary. In the case of actual figures on allocated budget, the items were prepared in the form of tables including data for different successive years (1994 E.C-1998 E.C) to understand the budget allocation trends practiced in the region.

3.2. Sampling

As it is discussed in the delimitation section, 4 sample TVET schools were selected and included in the study using their respective geographic location and their concentration. The four fields of trainings i.e. Construction, Industrial Technology, Business and Home Science require high investment and working Capital and hence included in the study.

Regarding individual respondents of the study, the following bodies were included in the study.

A. At regional offices (bureaus)

- Education bureau head
- Finance bureau head
- TVET unit head
- All TVET expertise, who are related only with budget preparation and

- Budget allocation section heads of Finance Bureau were selected and included using purposive sampling technique due to their positions.

B. At Woreda level

- Woreda Education desk head
- Woreda TVET section head
- Woreda Education accounting (finance) section head
- Woreda Finance office head, and
- Woreda budget allocation head of Finance offices were also selected and included using purposive sampling procedure.

C. At TVET school level

- TVET Deans
- TVET assistant Deans
- Administrator and
- Finance section head
- Department heads were selected and included in the study since they are more appropriate to provide information on financing and related issues through questionnaire using purposive sampling.

Regarding the number of respondents, at regional level 10 questionnaires were distributed and 6 questionnaires were filled and collected. Out of 20 questionnaires distributed to Woreda Finance and Education offices, all questionnaires were completed and collected. In addition, 40 questionnaires were distributed, and 35 questionnaires were collected from 4 sample TVET schools (D/zayit- 11, Sabata -7, Dababa -9 and Asalla-8).

Thus, out of the total 70 questionnaires distributed to respondents 61(87%) were returned and used in the analysis of data.

3.3. Methods of Data analysis

The data collected using the above data gathering tools were tabulated, analyzed and interpreted using different techniques. The quantitative data were analyzed using percentages and rank orders, while qualitative descriptions were given for qualitative data collected in the study.

3.4. Presentation and Analysis of the Data

This part of the thesis deals with the presentation and analysis of the data gathered from documents in Oromia Education Bureau (OEB), 4 Woredas Finance and Education offices and 4 TVET sample schools, through questionnaires. Out of the total 70 questionnaires distributed for this study 61(87%) of them were returned and used for the analysis. The analysis was made based on the responses obtained from these groups of respondents and the data collected from documents.

Table 2. Characteristics of respondents of the study

No	Variables	Characteristics of categories	Region n=6		Woreda n=20		TVET schools n=35		Total			
			No	%age	No	%age	No	%age	NO	%age		
1	Sex	Male	6	100	20	100	33	94.2	59	96.7		
		Female	-	-	-	-	2	5.8	2	3.3		
		Total	6	100	20	100	35	100	61	100		
2	Age	20-25	-	-	-	-	-	-	2	5.71	2	3.5
		26-30	-	-	-	-	2	5.71	2	3.3	3.5	
		31-35	3	50	7	35	8	22.85	18	29.5	29.5	
		36-40	2	33.3	9	45	19	54.3	30	49	49	
		Above 40	1	16.6	4	20	6	17.14	11	18	18	
		Total	6	100	20	100	35	100	61	100	100	
3	Work Experience	1-10	-	-	-	-	1	2.85	1	1.8	1.8	
		10-15	1	16.6	7	35	8	22.85	16	26.2	26.2	
		15-20	4	66.6	11	55	19	54	34	55.7	55.7	
		Above 20	1	16.6	2	10	7	20	10	16.3	16.3	
		Total	6	100	20	100	35	100	61	100	100	
4	Educational back ground	TTI	-	-	-	-	3	8.57	3	5	5	
		Diploma	-	-	5	25	22	62.86	27	44	44	
		BA(MA)	4	66.6	4	20	10	28.57	18	29.5	29.5	
		MA(MSC)	2	33.3	-	-	-	-	2	3.5	3.5	
		OTHERS	-	-	11	55	-	-	11	18	18	
		Total	6	100	20	100	35	100	61	100	100	
5	Position	Management	3	50	8	40	8	22.85	19	31	31	
		Teachers	-	-	-	-	27	77.15	27	44	44	
		Experts	3	50	12	60	-	-	15	25	25	
		Total	6	100	20	100	35	100	61	100	100	

As indicated in the introductory part of this chapter, a total of 61 respondents were involved in the study. As table II above shows, 35 (57.5%) of them were respondents from TVET schools, while 20 (32.7%) are from Woreda Education and Finance offices and the remaining 6 (9.8%) were from region Education and Finance Bureaus.

Out of those who completed and returned the questionnaires, 59 (96.7%) were males and 2 (3.3%) were females. This shows us that males mainly occupy the managerial positions in the region and Woreda offices. The participation rate of females in the decision- making process is therefore found to be very low. With regard to respondents age, the majority (49%) and (29.5%) are between 36-40 and 31-35 years respectively. The remaining (3.5%) and (18%) are between the age's group of 26-30 and above 40 years respectively. This shows that the majority of respondents are found in the adult age group and their responses could be dependable.

Besides, among the respondents, 34 (55.7%) have the experiences of 15-20 years, 16 (26-2%) have served between 10-15 years, 10 (16-3%) above 20 years and 1 (1-6%) between 1-10 years.

Concerning the educational background of the respondents, 27 (44%) and 18 (29.5%) are Diploma and BA graduates respectively. Furthermore, only 2 (3.5%) MA graduates. This shows that majority of instructors can not fulfill the requirement of MOE. As far as their position is concerned, 27 (44%) are teachers, 19 (31%) are management members and 15 (25%) are expertise.

A. Analysis on data Collected from the Regional Bureaus

Table III. Source of Education Budget

No	Items	Respondent n=6	% age
1	A. Annual budget	6	100
	B. Funds from Enterprise	-	-
	C. Vocational training fund	-	-
	D. Co-financing	-	-
	E. Internal income	6	100
	F. Production for profit	-	-
	G. NGo's and voluntary organization		
	H. External aid	4	66.66

As seen in Table III, all respondents indicated that the annual budget and internal income as the major sources of education budget in the region. Among the respondents, more than half also considered external aid as a source of education budget. As it can be inferred from above Table, the government subsidy and internal income constitutes the lion's share on TVET schools financing.

Table IV. Comparison of Total Regional Budget and Education Sector Budget (in millions Birr)

No	Sources	1993 E.C			1994E.C			1995E.C			1996E.C			1997E.C		
		Regiona l budget	Educa tion budge t	% of educati on bud.	Regiona l budget	Educa tion budge t	% of educati on bud.	Region budget	Educati on. budget	%edu catio n bud.	Region budget	Educatio n. budget	% education bud.	Region budget	Educati on budget	% educati on bud.
1	Annual budget	1591.9 7	572.7 6	35.97	1698.7 8	650.2 4	38.27	1600.2 3	676.70	42.2	2283.10	798.40	34.96	2341.15	864,01	36.90

Source Educational Statistics Annual Abstract 1997 E.C MOE Dec, 2005 A.A and Annual Report of the Finance Bureau

As it can be seen from Table IV, the share of education budget of the region from total regional budget, the annual budget subsidy is increasing by 35.97% (1993 E.C) to 38.27 (1994 E.C) and extended to 42.2 (1995 E.C). But, due to budget shortage, 7.24% of budget reductions were observed in 1996 E.C and the annual budget in 1997 has increased by 1.94% compared to 1996 E.C. From the above data one can infer that, among different sectors (bureaus) in the region, the education sector obtained the major share of regional budget subsidy.

Table V. Comparison of Education Sector Budget with TVET Budget (in millions Birr)

No	Sources	1993E.C			1994 E.C			1995 E.C			1996 E.C			1997E.C		
		Educational budget	TVET budget	% of TVET bud	Educational budget	TVET budget	%of TVET	Educational budget	TVET budget	% of TVET	Educational budget	TVET budget	%of TVE T	Educational budget	TVET budget	% of TVET
1	Annual budget	572.76	50,554,932	8.8	650.24	70,616,217	10.86	676.70	110,217,319	16.28	798.40	130,188,646.96	16.3	864.01	280,360,815	32.4

Source Educational Statistics Annual Abstract 1997 E.C MOE Dec, 2005 A.A (for Education budget) & Statistics from Finance bureau (for TVET budget)

As indicated in table V, one can observe the share of TVET from the regional Education budget. The share of TVET budget in Oromia Education bureau for the years 1993E.C, 1994E.C, 1995E.C, 1996E.C and 1997E.C constitute 8.8%, 10.86%, 16.28%, 16.30% and 32.4% respectively. From this document, one can infer that the share of TVET budget from the region's Education Bureau budget was below average and this further implies less attention given to Finance TVET schools from budget subsidy. The problem might be probably other institutions like Colleges and teaching training institutions found in the region consume more resources.

Table VI. Education Budget Allocation Formula used in region

No	Items	REGION		WOREDAS	
		Respondents	%	Respondents	%
1	Budget Allocation formula A) Normative (traditional) B) Performance based C) As requested by bureaus Total	6 - - 6	100 % - - 100	20 20	100 100
2	Why not used performance based budgeting? A) lack of awareness on performance based budget B) lack of data during budgeting C) Lack of standard to implement performance budgeting. D) B/c the method encourage enrollment only E) Other cases Total	3 5 4 - - Total	50 83.3 66.6 - - Total	12 6 2 20	60 30 10 100
3	Budget allocation strategy A) zero base budgeting B) incremental budgeting C) program budgeting	1 5 -	16.6% 83.3 -		
4	Do you expect that the annual budget is sufficient to run TVET programmes • Yes • No • Total	- - 6 6	- - 100 100	- - 20 20	- - 100 100

As table VI above shows, all respondents from regional bureaus and woreda offices indicated normative (traditional) budget allocation formula is widely used. This implies that, using this allocation formula each training school is equipped with certain number of teachers and technical and administrative staff and certain level of wage-related expense as well as operational and maintenance costs are covered.

Also item II of the Table indicates, majority of respondents (both from the region and Woredas) replied that performance based formula is not used as budget allocation formula. They underlined that, lack of data during budgeting and lack of standard on budget allocation were created problems to implement performance based budgeting. Whereas, half of respondents in the region and majority from Woredas disclosed lack of awareness on performance based budgeting were a problem to apply performance based budgeting.

B. ANALYSIS OF DATA COLLECTED FROM TVET SCHOOLS

Table VII. Current Facilities of TVET Schools

No	Items	Weighted Mean	Mean	Rank order
1	Adequate furniture	51	1.45	4
2	Black board	60	1.71	1
3	Sport materials	32	0.91	8
4	Instructional material	45	1.28	5
5	Work shop	43	1.22	6
6	Raw material for workshop	39	1.11	7
7	Laboratories	53	1.51	3
8	Libraries and books	55	1.57	2

Table VII above depicts that, most crucial facilities needed to provide quality training for graduates such as work shops, raw materials for workshops, and instructional materials ranked least .This implies that the scarcity of those essential materials might be from shortage of budget and financing problem prevailed in the schools and this problem has a direct impact on the quality of the training provided in the TVET schools in the region.

Table VIII. Reasons for Material Scarcity in TVET Schools

No	Items	No	%
1	Reasons for material scarcity		
	A. Scarcity of budget	29	82.8
	B. Misuse of budget	2	5.7
	C. Administrative problems	4	11.5
	D. Other problems	-	-
	Total	35	100
2	Does the school have enough finance to run the program?		
	• yes	1	2.9
	• No	34	97.1
	Total	35	
3	Is there any program collapsed due to budget shortage		
	• Yes	27	77.1
	• No	8	22.9
	• Total	35	100

Table VIII is designed to investigate reasons for scarcity of materials observed. Accordingly, the data reveals that the majority (82.8%) responded scarcity of budget as reason for material scarcity. While, administrative problems 4 (11.5%) and misuse of budget 2 (5.7%) were also contributed for material scarcity.

Respondents were also requested under item 2 of table VIII, about sufficiency of annual budget. Accordingly, the data reveals that all respondents said that they do not expect that the annual budget is sufficient to run the TVET programme. From this and the data collected from Woreda and TVET schools, one can see that all respondents at all levels do not expect that annual budget is sufficient to run the TVET program's (see table VI of item 2).

As table VIII, item 3 indicates, 27 (77.1%) said that different programs were collapsed due to budget shortage, and 8 (22.9%) responded that no programme was collapsed due to shortage of budget. Furthermore, the variation might be from those TVET schools with relatively better budget support. Hence, from the data, we can understand that different training programs, like 10⁺² general mechanics programme (Dabana) and Home-science department at (Asalla) are collapsed due to shortage of budget.

Table IX. Income Generating Schemes of TVET Schools

No	Items	No	%
1	Does the school have internal income other than direct budget support		
	• Yes	35	100
	• No	-	-
	• Total	35	100
2	Sources of internal income		
	• from consultancy	-	
	• from night class	26	
	• from sales of product	12	
	• from rent of class others	19 1	
3	Does your school collect training tuition fee from trainees		
	• Yes	35	100
	• No	-	-
	• Total	35	100
4	Right to utilization of Internally generated income		
	• Yes		
	• No	12	34
	• To some extent	5	15
	• Total	18	51
		35	100

The first item in table IX above deals with whether the TVET schools have internal income other than direct budget support or not. Accordingly, all respondents indicated that the TVET schools have internal income other than direct budget. The other questions raised in item 2 of table IX were to obtain information about the source of internal income of TVET schools. As a result, the majority of TVET schools obtain their internal income from night classes, rent of class and sales of product. The third item was about collection of training tuition fees. As indicated in table IX, all respondents said that the TVET schools collect training tuition fees. The last question on table IX emphasized the right to utilize the internally generated income by them. Accordingly, 18 (51%) said that the TVET schools have autonomy to use the internal budget to some extent. 12 (34%) responded that they have limited autonomy to use it. Whereas, 5 (15%) said the TVET schools have no autonomy to use it. From the above information, we can infer that, the TVET schools have limited autonomy to use internally generated revenue that may discourage the TVET schools to search for other sources of finances to strengthen their financial capacities and there by improve their facilities and offer quality TVET trainings in their TVET schools in the region.

**Table X. Comparison of School Budget Support with Internally
Generated income**

No	Name School	Variables	1994 E.C	1995 E.C	1996 E.C	1997 E.C	1998 E.C
1	D/Zayit	Budget support	632,216	692,772	818,212	916,551	1,236,992
		Generated income	80,288.91	112,276.25	93,040.40	91,698.56	91,527
		Share on %	12.69	16.2	11.37	10	7.39
2	Dabana	Budget support	527426	652,706	741,828	846,543	996,352
		Generated income	31,021	36,672	153,669.06	38,700	129,500
		Share on %	5.8	5.61	20.71	4.5	12.99
3	Asalla	Budget support	526,312	616,302	726,914	972,909	1,089.400
		Generated income	12,342	9,026	11,817	17,070	18,830
		Share on %	2.3	1.46	1.62	1.75	1.72
4	Sabata	Budget support	416,214.50	526,296.40	744,222	776,369	899,111
		Generated income	1032.26	-	-	2299	4024
		Share on %	0.24	-	-	0.29	0.44

Source: Annual Report from Woreda Finance Office.

N.B. (the above figure on Woreda budget support shows operating expense only)

Table X above was intended to obtain information and compare the share of internally generated revenue with school budget support (operating expenses only) by the Woreda. In response to this question, the 4 sample TVET schools have different shares. For example, in D/zayit, the minimum share was recorded in 1997 (10%) and the maximum in 1995E.C i.e. (16.20%). In Dabana, while the minimum share were recorded in 1997 (4.5%) and the maximum were recorded in 1996 (20.71%) However, as table X explicitly shows in Asalla and Sabata, the share of internal revenue with school budget support was very insignificant (below 3%). From this data we can simply understand that

even though, the TVET schools have internal income, it is insignificant and if government would not support them all programs could not run properly.

Table XI. Yearly budget preparation and request of TVET School

No	Items	Number	% age
1	Base of yearly budget preparation		
	A. Intermedes of performance	-	
	B. Intermedes of pervious year's budget	28	80
	C. As budget formula of a region	7	20
	D. Others	-	-
	Total	35	100
2	How much of the budget requested was allocated to your school last year?		
	A. 100%		
	B. 75%		
	C. 50%	3	8.6
	D. 25%	14	40
	E. Blow 25%	18	51.4
	Total	35	100

The other question raised in this study was about base for budget preparation and the extent school budget support was allocated to TVET schools. As indicated in item 1 of table XI, 28 (80%) of respondents said that school budget preparation is based on previous year's budget. Accordingly, 7 (20%) of respondents said that the budget formula of the region is used as a base for budget preparation. As II item in table XI indicates, 18 (51.4%) of respondents said that the budget allocated to school were below 25% of the requested budget. And 14 (40%) of them replied that the allocated budget of the last year was 25% of the

requested budget. From the table XI we can also infer that budget preparation of the TVET school do not consider the requisition of the TVET schools and how much amount the schools request, they obtained only 25% and below the requested amount.

From the above data we can infer that, the Oromia region is using the traditional and most widely used budgeting techniques through which the budget level of an institution for current year is determined by considering the last period's budget. It takes the past year allocation pattern as the bases for budgeting current year and adds certain percentages to the current budget.

Table XII. Factors Affecting the Search for Financial Sources

No	Items	Number	% age
	What are the reason that hinder searching for other financial sources at school level		
	A. Lack of awareness on source of finances	31	88.5
	B. Prohibition by law	-	-
	C. Others (eg. bureaucracy to use the budget)	4	11.5
	Total	35	100

Table XII is designed to investigate factors that hinder searching for other financial sources at school level. Accordingly, the data reveals that, 31 (88.5%) said lack of awareness on sources of finance as an obstacle to search other sources. Where as, 4 (11.5%) responded that bureaucracy to use the budget affects searching other sources of finance. From this data one can infer that, there was an awareness problem on how to search other sources of finances to support TVET schools in the region.

C. Data collected from Woredas Education and Finance Office.

Table XIII. The share of TVET Schools from woreda Education Budget

No	Woreda		1994	1995	1996	1997	1998
1	D/zayit	Education Budget	1,996,319	2,118,318	2,632,127	3,122,372	3,939,274
		TVET Budget	826,111	1,017,216	1,514,876	1,736,916	1,902,314
		Share in %	41	48	57	55.6	48
2	Bedele Dabo	Education Budget	1,833,620.09	2,057,672.70	2,106,026.15	2,196,806.03	3,638,790.04
		TVET Budget	722,314	916,772	1,010,223	1,012,000	1,526,776
		Share in %	39.3	44.5	47.9	46	41.9
3	Asalla	Education Budget	991,217.06	946,934.01	3,010,000	3,517,216	3,916.276
		TVET Budget	1,006,237.21	1,012,399.07	1,026,992.90	1,111,112.40	1,719,221.90
		Share in %	34.56	34.3	34.1	31.5	43
4	Alemgena (Sabata)	Education Budget	1,816,210	2,031,994	2,442,930	2,666,229	2,802,992
		TVET Budget	616,216	724,396	857,892	1,069,999	1,288,261
		Share in %	33.9	35.6	35.1	40.1	45.9

Source:-Woreda Annual Report

N.B. the above figures include salary paid for teachers and operating expenses.

Table XIII deals with the share of TVET schools budget with total Woreda education budget. It has been observed that, the maximum share were in 1996 E.C (57%) in D/zayit and in 1996 (47.9%) in Dabana. While, the minimum share were in 1994 (41%) and (39.9%) in D/zayit and Dabana respectively.

As indicated in table above, in Asalla the maximum share was recorded in 1998 (43%) and the minimum was in 1996 (34.1%). In Sabata it is similar with that of Asalla. From the above figure one can observe that, in sample TVET schools the share of TVET school budget with that of total Woreda education budget were greater than 30% for the last 5 years. Where as, in table V (at regional level) the share of TVET budget is

below 30%. Hence, when we compare the two, one can infer that Woredas Education Office gave more attention than Education bureau on budget allocation to their TVET Schools.

Table XIV. Education Budget Allocation Formula, at Woreda level

No	Items	Number	% age
1	Do you apply any formula in budget allocation?		
	• Yes	16	80
	• No	4	20
	• Total	20	100

Table XIV deals with formula used at Woreda level to allocate budget. The first item deals with whether the Woredas have their own budget allocation formula or not. Accordingly, 16 (80%) said that they had traditional formula which are used to allocate the budget. Where as, 4 (20%) responded that they do not have budget allocation formula. From this data and data from table XI we can simply infer that, neither the region nor the Woredas use performance based formula. They use the traditional method that does not encourage and consider the performance of the school.

Table XV Yearly Budget Preparation at Woreda level

No	Items	Number	% age
1	What is the base of your yearly budget preparation?		
	A. In terms of performance (number of enrollments)	-	
	B. Interme of last year budget	20	100
	C. As the budget formula of the region	-	
	D. As budget request of TVET schools	-	
	E. Others	-	-
	Total	20	100

The last question presented to Woredas was about the base of yearly budget preparation. All respondents replied that yearly budget preparation was based on last year's budget. . Besides, all concerned bodies strongly agree on the inadequacy of budget subsidized by the government. From the above table one can easily infer that this small amount budget allocated to TVET schools was based on last year's budget. This shows that problems encountered in the previous annual budgets would probably prevail in the proceeding year.

To sum up, the first basic question of this study asked to assess the major sources of TVET financing. As the result, the above analyzed data's depicts, government subsidy and internal income constitutes the lion's share on TVET school finances.

Regarding the funding schemes, normative (traditional) budget allocating formula is used in Oromia region and using this allocation formula each TVET schools is equipped with certain number of teachers, technical and administrative staff and certain level of wage related expenses as well as operational and maintenance costs are covered. Also the Oromia region is using traditional and most widely used budgeting strategies which could not consider the current performance of TVET schools through which the budget level of the institution for the current year is determined by considering last years budget.

The third question asked the adequacy of annual budget support given to TVET schools. As the result of the above analyzed data's depicts, the annual budget subsidy of government were not sufficient and internally generated income was also insignificant and could not cover the operating expenses.

Chapter Four

4. Summary, Conclusions and Recommendations

The final chapter of this thesis deals with the summary of the major findings of the study, conclusions and recommendations.

4.1. Summary

The main proposes of this study were to assess the major sources of TVET finance, funding schemes applied and measures should be taken in the future to over come the constraints encountered in financing TVET schools in Oromia and there by to forward the possible solutions. To this effect, a descriptive survey method was employed and the following basic questions were raised.

- 1 What are the major sources of revenue to finance TVET schools in Oromia?
- 2 What are funding schemes applied on TVET schools?
- 3 Is the annual budget sufficient to run the program?
- 4 If the annual budget is not sufficient, how do the schools try to solve the problem?
- 5 What measures should be taken to overcome the constraints encountered in financing TVET schools in Oromia?

A total of 61 respondents drawn from regional Finance and Education bureaus, 4 sample Woredas, and 4 samples TVET schools which are found with in that Woredas were used as data sources. The data were collected by means of questionnaires and careful inspection of documents. The collected data were analyzed based on the specified

research questions of the study. The following major findings were identified in the study.

1. The study indicated that government subsidy was the major source of TVET finance, while external aid was an additional source of finance in the region.
2. When we compare the total regional budget with that of the Education sector budget, among different sectors (bureaus) in the region, the education sector has obtained the lion's share of the budget subsidy.
3. On top of this, when one compares the Education sector budget with TVET budget at regional level, it was found to be below average which implies that very less attention was given to finance TVET schools from budget subsidy in the region.
4. Almost all respondents indicated that, budget allocation formula of the region is traditional. Moreover, lack of data during budgeting and lack of standard to implement performance based budgeting hinders to use performance based budgeting.
5. The majority of respondents replied that incremental budgeting was used as budget allocation strategy and all respondents showed that annual budget subsidized by the government was not enough to carry out TVET programmes.
6. The majority of respondents disclosed that scarcity of budget was the major reason for scarcity of material occurred in TVET schools. Besides, all respondents agreed that the TVET schools do not have enough finance to run their programmes and resulted different programmes to collapse due to budget shortage.
7. All respondents indicated that TVET schools have internal income from different sources like night classes, sales of product, and rent of classes. But more than half of the respondents said that TVET schools have limited access to utilize internally generated revenue.

Even though the TVET schools have internal sources, they generate insignificant amount that could not cover their operating expenses.

8. The majority of respondents indicated that the base of yearly budget preparation was in terms of previous year's budget (incremental budgeting) and TVET schools subsidized below 25% of their requested budget.
9. The majority of respondents further responded that lack of awareness on source of finances hinder to search for other financial sources at school level.
10. Even though, the share of TVET budget with that of education budget is below average at regional level, this share was better at Woreda level (above 30%) and Woredas provided more attention to TVET schools than regional education bureau.

4.2. Conclusions

1. The government subsidy is the major sources of TVET finance because education is primary owned by the government. The World Bank (1995:156) stated that financing of education is legally a state responsibility and a state function because government intervention in education could reduce inequality and given open opportunity for the poor and disadvantages communities. The great majority of the respondent of the questionnaire in this study, too, believed that the government is the major source of TVET finance. It is therefore, possible to conclude that the government should continue on financing TVET schools
2. Although government sources are the major ones, it is important to fund TVET schools from other sources. In this respect, Lockheed et al (1991:193) pointed out that government sources may be limited depending on local economy. The World Bank (1995:157) also

stated that heavily reliance on single source like public revenue has a substantial impact on the amount of fund flow to education. Thus, the government should shift the financial burden of providing TVET education to other sources. In connection to this, the respondents of this study indicated that the sample TVET schools have other revenue like sales of product, rent of classes and night classes. But the income generated was very small and insignificant.

3. Financing activity involves funding schemes that can encourage the TVET schools to use internally generated income. Financing based on performance of TVET schools i.e. state grants when linked to enrollment figures, so the schools, which attract and enroll more students, are encouraged.
4. Budgeting strategies have an impact on TVET school financing. Moreover, in incremental budgeting, the efficiency of this year activity is based on last year's budgeting. Therefore, the performance of a single year might be dependent on other factors including management style of leaders, the motivation of workers and so on. So, budget preparation based on last year's budget could have an impact on the current year budgeting.

4.3. Recommendations

On the basis of findings obtained and conclusions arrived at, the following recommendations are forwarded to improve the financing TVET schools in Oromia.

1. Oromia regional state will continue to finance TVET in the region through public revenue as the over all responsibility for the development of human resources in the region rests with it. Without adequate investment in education, it is almost impossible to promote development. There is no single or universal solution for financing TVET schools and no one method which can serve all section of a society. There are many different limitations in every system. However, a combination of funding leads to greater access in TVET. Diversifying financing will create greater opportunities and improve the quality of training. Oromia regional state has to rely that funding from public revenue is not the only way to finance investment in vocational education and training. There should be a determination to involve employers individuals and the local communities
2. As the findings of this study revealed, it has been observed that most of TVET schools appear to be inactive in making and searching other means of financing like enterprise financing (Tax rebates and credit, vocational training fund) private and public sponsored financing (fellowship, Grant and loans Co-financing, paid educational level). Therefore, all concerned bodies should be active to investigate other sources which are common even in developing countries. Moreover, lack of awareness on TVET financing was the major obstacle on TVET schools. Therefore, Oromia Education bureau ought to create more awareness using different workshops, panel discussions to concerned bodies.

3. As the first step, employers will be involved in policy and decision making (e.g. in TVET councils and managing board of TVET schools). During the second phase employers should be full partners and are encouraged to get involved in training and sharing the financial burden with government.
4. As public resources for vocational training became scarcer, systematic strategies to increase income generating capacities of TVET schools are gaining popularity world wide. Incentive and mechanisms to encourage schools to embark on income generating activities usually include training and reorientation of school managements towards market-oriented management approaches, as well as financial autonomy of the school, in particular the right to retain earned income with in the school.
5. Possible income generating activities are manifold and dependent on the specific economic environment to the training institutions. They may range from sales of items that were production and service delivery. They may include:
 - "Training with production" i.e. practical training as contract work (e.g. Construction work, building maintenance, furniture production, sewing of school uniforms, typing and office services.
 - Commercial use of equipment (e.g. internet facilities in computer labs.
 - Special events, such as open days with fundraising activities.
6. Oromia regional state should attempt to link a set of resources to a particular programme. Program budgeting recognizes the law of scarcity. Therefore, it is preferable to use program budgeting than incremental budgeting.
7. Oromia regional state has to use performance based budgeting in order to encourage TVET schools on financial matters.

BIBLIOGRAPHY

- Abir, M. (1970). " *Education and National Unity in Ethiopia*". **African Affairs**.
Vol. 69 No 274.
- Atchoarena, D. (1994). ***Financing Vocational Education Concepts, Examples, and Tendencies***. Paris: UNESCO/IIEP.
- Atchoarena, D. (ed.) 1996. ***The Financing and Management of Vocational Education and Training in Eastern and Southern Africa***.
Paris: UNESCO/IIEP
- Atchoarena, D. (2002) ***Revisiting Technical and Vocational Education in Sub-Saharan Africa: an update on trends, innovations and challenges***: Paris Unesco.
- Brighton, S. (1965) ***Financing Public Schools***: a Study guide prepared for the Committee on Educational finance. Washington: National Education Association
- Brockington, R. (ed) (1987). ***Financial Management***. East-lancing Publication Ltd.
- Bolina, P. (1996) ***Financing Technical and Vocational Education: Modalities and Experiences***: Berlin: Gower Publishing Companies.
- Carter, R. (1982). ***Business Administration: A Textbook for Computer age***.
London: William Meinemann Ltd.
- Coombs, P. (1985). ***The World Crisis in Education. The View from the Eighties***. New York: Oxford University Press.
- Duccl, M.A. (1991). ***Financing of Vocational Training in Latin America***.
Training Discussion paper No 71, ILO. Geneva.
- Durbin, J.A. et al. (1989) ***Management and Organization***. Ohio: Southern Publishing Company.

- _____ (1969) ***Educational Development in Africa Costing and Financing IIEP African Research studies***: Paris, IIEP, France.
- Fasil, R. Kiros. (1990). "*Implementing Education Policies in Ethiopia*". **World Bank discussion paper Africa technical departments Series**. Washington Dc: World Bank
- Gasskov, V. (2000) *Managing Vocational Training System. A Handbook for Senior Administrator Great Brittan /Biddies Ltd.*
- Gasskov, V. (2002) *Managing Vocational Training System*. Geneva: ILO
- Girma A. (1982). ***Education in Ethiopia: Education in Africa*** A Comparative survey, Sydney: George Allen Urain.
- Good, C.V (1973). **Dictionary of Education**. New York: Mc Graw Hall Inc.
- Guthrie, J. et al (1988). ***School Finance and Education Policy: Enhancing Educational Efficiency***. Boston: Allyn and Bacon Inc.
- Hallak, J. (1990) ***Investing in the Future setting Educational Priorities in the Developing World***. London: Pergaman press, Unesco
- ILO, (2001) . ***Modernization in Vocational Education and Training in Latin America and the Caribbean Region***: Montevideo.
- IIEP (1969). ***Educational Development in Africa: Costing and Financing African Research Studies***: Paris
- Jacques, H. (1972). ***Financing and Educational planning in Srilanka***. UNESCO: International Institute for Education Planning
- Jon, L. and Rupert, M. (2005). ***Vocationalization of Secondary Education Revisited***: Springer.
- Johansson, R. (1997). "***Diversifying the Source of Financing Vocational Training: a Set of Training modules***", (Unpublished Report for ILO).

- Jordan, K. F. et al (1985). ***School Business and Administration***, New Bury Park: SAGE Publications.
- Kennedy, R.Y. (1983). ***Hand Book of Financial Planning and Control***. England: Gower Publishing Companies.
- Lemma Argaw (2001) ***NFP Budget Planning and Control***: Addis Ababa: Ethiopian management Institute.
- Leon E. Hay (1999) ***Accounting for Governmental and Non Profit Entities*** University of Arkansas, USA
- Lock heed, M.E. et al (1991) ***Education in Sub-Saharan African Policies for adjustment, Revitalization and Expansion***. Oxford: The World Bank University.
- Manger, A. (1991). ***Education Projects Elaboration Financing and Management***. Paris: UNESCO/IIEP.
- MOE (2002). ***Education Sector Development Programme II (ESDP II) program action Plan (PAP)***. A.A: MOE.
- MOE (2002 b). ***Ethiopian Technical and Vocational Education and Training strategy***: Addis Ababa: Berhna Selam Printing press.
- MOE (2003). ***Financing TVET in Ethiopia***: Addis Ababa. MOE
- _____ (2002). ***The Education and Training Policy and Its Implementation*** Feb. 2002.
- _____ (2005) ***Educational Statistics Annual Abstract***. Dec. 2005. Addis Ababa
- Poston et.al(1992) "***Vocational education and training today: challenge and response*** "Journal of Vocational education and training.
- Radcliffe C, R. (1994). ***Investment: concept, Analysis, and Strategy***, Florida: University of Florida.
- SAMOFF, J., (Ed.). 1994. ***Coping with Crisis, austerity, adjustment and human resources***. London/Paris: Cassel / UNESCO

- Seyoum Tefera (1996). **The Ethiopian Journal of Education Vol XVI #1**
December, 1996 IER.
- Steven Klein (2001) **Financing vocational Education: A State Policy**
Maker's Guide, California (CA).
- Teshome Wagaw. (1979). **Education in Ethiopia Prospect and Retrospect.**
USA: Ann Arbor: University of Michigan Press.
- UNESCO, (1990). **Development in Technical and Vocational Education.** A
Comparative Study UNESCO, Paris.
- Whalley, T., Ziderman, A. (1990). "**Financing Training in Developing**
Counties: the Role of Payroll taxes" Economics of Education
Review, Vol. 9, No. 4.
- World Bank (1995). **Priorities and Strategies for World Bank (2004) Aid and**
Reform in Africa Final educational, Washington: Green Wood
Printing Press.
- World Bank, (1991). "**Vocational and technical education and training**", A
World Bank Policy paper. Washington, D.C: World Bank.
- World Bank. (1980).**Vocational and technical Education and training.**
World Bank policy paper. Washington,D.C:World Bank.
- Yekunoamlak Alemu(2006). **Networking between Vocational Training and**
Employment in Ethiopia (Unpublished Dissertation Paper).
- Zekaria,H (2002) "**The Financing of Selected Government Secondary**
Schools in Addis Ababa" (Unpublished senior essay).
- Ziderman, A. (1997). "**National Programs in Technical and Vocational**
Education relationship", Journal of Vocational Education and
Training 49(3).
- Ziderman A. (2003) **Financing Vocational Training in Sub-Saharan**
Africa. WASHGTON, D.C, THE WORLD BANK.

APPENDICES

APPENDIX 1

ADDIS ABABA UNIVERSITY

FACULTY OF EDUCATION

MASTERS OF MANAGEMENT IN VOCATIONAL EDUCATION

[QUESTIONNAIRE TO BE FILLED BY REGIONAL FINANCE AND EDUCATION BUREAU]

The following questionnaire pertains to a thesis to be conducted by a student in masters of management in vocational education. The intent of the study is to assess financing sources and funding schemes of vocational education in Oromia region. Therefore, Bureau heads, TVET heads, TVET expertise, planning section and budget section are the major sources of information. To maintain the quality of a research and to have a true picture of what is actually practiced you are kindly requested to fill in the questionnaires with due care on figures you give for me. The questionnaire consists of closed and open-ended items. You do not need to write your name.

Thank you in advance for taking your precious time!

PART ONE

1. Personal Data

- 1.1. Sex A. Male
- B. Female
- 1.2. Age A. 20-25 C. 31-35 E. above 40
- B. 26-30 D. 36-40
- 1.3. Educational Background
- A. 12TH C. BA/BSC E. Others
- B. Diploma D. MA/MSC
- 1.4 Your field of specialization _____
- 1.5 Your total service in year's _____
- 1.6 Current position _____

Part Two Refers to the different source of TVET financing and budget allocation mechanisms

1. What are the sources of education budget of the region?

- A. Annual budget (government budget)
- B. Funds from Enterprises (Companies)
- C. Vocational training fund
- D. Co-financing
- E. Internal Income
- F. Production for Profit
- G. Non-governmental and voluntary organization
- H. External aid (assistance)
- I. Others(specify) _____

2 What is the amount of general annual budget (in birr?)

1994 E.C _____

1995 E.C _____

1996 E.C _____

1997 E.C _____

1998 E.C _____

3 Amount of budget allocated to education for the last 5 years

NO	Sources	1994 E.C	1995E. C	1996E. C	1997E. C	1998E. C
1	Annual budget					
2	Enterprises (companies)					
3	Vocational training fund					
4	Co-financing					
5	Internal income					
6	Production for profit					
7	NGO's and voluntary organization					
8	External aid					
9	Others					

4. The share of TVET budget from general education budget in %

NO	Sources	1994	1995	1996	1997	1998
		E.C	E.C	E.C	E.C	E.C
1	Annual budget					
2	Enterprises (companies)					
3	Vocational training fund					
4	Co-financing					
5	Internal income					
6	Production for profit					
7	NGO's and voluntary organization					
8	External aid					
9	Others					

5. If your source of education is only government why not diversify (Search) other sources.

6. What is your budget allocation formula for education particularly for TVET schools?

- A. Normative (traditional)
- B. Performance based (no. of student enrolled)
- C. As requested by bureaus

7. If your answer for question Number 6 is A, why not used performance based budgeting?

- A. Lack of awareness on performance based budgeting.
- B. Lack of data during budgeting.
- C. Lack of standards to implement performance budgeting.
- D. Because the method encourages enrollments only
- E. Other cases

8. What is your budget allocation strategy?

- A. Zero base budgeting.
- B. Incremental budgeting
- C. Program budgeting

9. Do you expect that the annual budget is sufficient to run the TVET programmes?

Yes

No

10. If your answer is "no", what do you suggest to solve the problem?

11 If you have other financing methods to suggest please give below.

APPENDIX 2

ADDIS ABABA UNIVERSITY

FACULTY OF EDUCATION

MASTERS OF MANAGEMENT IN VOCATIONAL EDUCATION

[Questionnaire filled by TVET school Heads (Principals), assistant deans, department heads, administrator and finance heads.]

The following questionnaire pertains to a thesis to be conducted by a student in masters of management in vocational education. The intent of the study is to assess financing sources and funding schemes of vocational education in Oromia region. Therefore, School heads (principals), Assistant deans, Department heads, Administrators and Finance heads are the major sources of information. To maintain the quality of a research and to have a true picture of what is actually practiced you are kindly requested to fill in the questionnaires with due care on figure you give for me. The questionnaire consists of closed and open-ended items. You do not need to write your name.

Thank you in advance for taking your precious time!

Part One

1. Personal Data

- 1.1. Sex A. Male
B. Female
- 1.2. Age A. 20-25 C. 31-35 E. Above 40
B. 26-30 D. 36-40
- 1.3. Educational Back ground
- A. 12TH C. BA/BSC E. Others
B. Diploma D. MA/MSC
- 1.4 Field of specialization _____
- 1.5 Your total service year's _____
- 1.6 Current position _____

Part Two: Refers to Budget Utilization in your TVET School

1. How do you rate the availability of the following facilities in your TVET School?

Item	Very sufficient	Sufficient	Less Sufficient	Not at all
Adequate furniture				
Black board				
Sport materials				
Instructional materials				
Workshops				
Row materials for workshops				
Laboratories				
Libraries and books				

2. If the availability of each of the above facilities in your school is scarce, what do you think are the reasons?

- A. Scarcity of the budget
- B. Misuse of the budget
- C. Administrative problem
- D. other problem _____

3. Does the school have enough finance (running cost) to run the programme?

Yes No

4. What is the annual running cost allocated for the school for each of the last 5 academic years?

<i>Years</i>	<i>Amount in Birr</i>
A. 1994	_____
B. 1995	_____
C. 1996	_____
D. 1997	_____
E. 1998	_____

5. Is there any programme or plan collapsed due to budget shortage?

Yes

No

6. If your answer for question number 5 is yes specify the plans (programmes).

7. Does the school have internal income sources other than direct budget Support allocated from government?

A. Yes

B. No

8. If your response for item 7 is "yes" what are the sources of income for the school?

(More than one answer is possible)

A. From consultancy

B. From night class

C. From sales of product

D. From rent of class

F. Others _____

9. Does your school collect training tuition fee from trainees?

A. Yes

B. No

10. If your answer for question number 9 is "no", what are the reasons?

11. Amount of the school income generated internally from different sources for the last 5 years.

Years

Amount in birr

1994 E.C

1995 E.C

1996 E.C

1997 E.C

1998 E.C

12. Does the school have the right to utilize the income generated internally?

- A. Yes B. No C. To some extent

13. If your answer for question 12 is "no", what are the reasons?

14. What is the base of your yearly budget preparation?

- A. In terms of performance (number of enrollments)
B. In terms of previous year's budget.
C. As the budget formula of the region
D. Others

15. How much of the budget requested was allocated to your school last year?

- A. 100% C. 50% E. Below 25%
B. 75% D. 25% F. No budget is requested

16. What are the reasons that hinder searching for other financial sources at school level?

- A. Lack of awareness on source of finance
B. Prohibition by law.
C. Others

APPENDIX 3

ADDIS ABABA UNIVERSITY
FACULTY OF EDUCATION
MASTERS OF MANAGEMENT IN VOCATIONAL EDUCATION

(Questionnaire to be filled by Woreda education and finance offices)

The following questionnaire pertains to a thesis to be conducted by a student in masters of management in vocational education. The intent of the study is to assess financing sources and funding schemes of vocational education in Oromia region. Therefore, Woreda education and finance heads, Woreda TVET section head, Woreda planning and budget section are the major sources of information. To maintain the quality of a research and to have a true picture of what is actually practiced you are kindly requested to fill in the questionnaires with due care on figure you give for me. The questionnaire consists of closed and open-ended items. You do not need to write your name.

Thank you in advance for taking your precious time!

PART ONE

2. Personal Data

- 1.1. Sex A. Male
B. Female
- 1.2. Age A. 20-25 C. 31-35 E. Above 40
B. 26-30 D. 36-40
- 1.3. Educational Back ground
- A. 12TH C. BA/BSC E. Others
B. Diploma D. MA/MSC
- 1.4. Field of specialization _____
- 1.5. Your total service year's _____
- 1.6. Current position _____

PART TWO

1. What is the amount of education budget subsidized by the government?

<u>YEARS</u>	<u>AMOUNT IN BIRR</u>
1994	_____
1995	_____
1996	_____
1997	_____
1998	_____

2. The share of TVET budget from Woreda general education budget

<u>YEARS</u>	<u>AMOUNT BIRR</u>
1994	_____
1995	_____
1996	_____
1997	_____
1998	_____

3. Do you use (apply) any formulas in budget allocation for TVET school?

Yes No

4. If your answer for question number 3 above is yes what is your budget allocation formula for education particularly for TVET Schools?

- A. Normative (traditional)
- B. Performance based (enrollments)

5. If your answer for question number 4 is "A" the reason for not using performance base is

- A. Lack of awareness on performance based budgeting.
- B. Lack of data during budgeting.
- C. Lack of standards to implement performance budgeting.
- D. Because the method encourage enrollments only
- E. Other cases

6. What is the base of your yearly budget preparation?

- A. In terms of performance (number of enrollments)
- B. In terms of last year budget
- C. As the budget formula of the region
- D. The budget request of TVET schools
- E. Others

7. Do you expect that the annual budget is sufficient to run the TVET programmes?

Yes No

8. If your answer is "no", what do you suggest to solve the problem?

Advisor's Approval

This thesis has been submitted for examination with my approval as a university advisor.

Name Girma Zewdie (Associate professor)

Signature-----

Date-----

DECLARATION

I, the undersigned, declare that this thesis is my work and that all sources of material used for this thesis have been duly acknowledged.

Name Solomon Chali

Signature Sonyca

Place: Department of Business education.

Addis Ababa University

Addis Ababa

Date of Submission: April 4, 2007