PROJECT REPORT

ALTERNATIVE SOURCES OF FINANCING TECHNICAL INSTITUTIONS IN MERU CENTRAL DISTRICT (KENYA)

BY

MUTHAA MUNGIRIA GEORGE
E54/0026/2002

Research work presented to the Department of Education Administration, Planning and Curriculum Development in partial fulfillment for the Masters of Education Degree, Kenyatta University.

AUGUST 2004
DECLARATION

This project is my original work and has not been submitted for a degree in any other university.

NAME SIGN DATE

MUTHAA M. G

19/3/04

This project has been submitted for consideration with my approval as a university supervisor.

NAME SIGN DATE

PROF. OLEMBO J.O

19/3/04
DEDICATION

This research work is dedicated wholly to my family - my dear wife Juster Nthinga Mungiria and my daughters Carol Gatwiri and Evelyne Kawira. My parents Mr & Mrs Joseph Muthaa and family.
ACKNOWLEDGEMENT

My supervisor Prof. Olembo J.O who helped me in shaping my work.

Dr. Onyango who taught research methodology and guided me in fine tuning the problem.

My Principal Mr. Muthomi J. R of M.T.T.I for his co-operation and understanding during the study period.

All my respondents, principals and teachers of Meru Technical Training Institute, Kiirua Technical and Nkabune Technical Institute.

My friends and colleagues George Lutomia, Kanjwangi Timothy, Lucy Mbabu among others.

Rose Gacheri of Meru College of Technology, Martine O’ Karithi James Mwangi of Meru Technical and Mutwiri Kalenywa who edited my work.

Once more my dear wife Juster Nthinga Mungiria for her consistent care, encouragement and patience during this research and study period.

My father Joseph Muthaa, mother Pauline Muthaa, my brothers Gitonga J., Dr. Kiriinya T, Sisters Hellen N.M and Purity K.M, my cousin Tabitha Mwongera for their material and non material support during my study period.

For all of you who helped directly or indirectly; are mentioned or not I duly appreciate.
ABSTRACT
Since the introduction of cost sharing in education (Republic of Kenya 1988), Technical Institutions have been massively affected. This has been a result of the diminishing government subsidy. The funds they raise from fees charged on students is inadequate for the smooth and effective running of their expensive technical curricula. This has led to use of obsolete or inadequate facilities, which has greatly eroded their capacity to offer quality training, relevant to the industrial development needs of the country.

Consequently, if these institutions have to overcome their current financial hardships, their only option is to seek for alternative sources of raising additional income. This study was therefore to explore internal income generating activities pursued by the technical institutions.

Literature review of this study addressed the positive relationship between education and development. The literature review winds up by addressing the Kenyan situation and the gaps that need to be filled.

This study adopted the survey design. The population of the study comprised of three technical institutions in Meru Central, namely: - Meru Technical, Nkabune Technical and Kiirua Technical. Data was collected through questionnaires and observation schedule, which were administered personally by the researcher. Quantitative data was analyzed using descriptive statistics and results presented in percentages and charts. Qualitative data was organized into themes, categories and patterns pertinent to the study and from which the researcher closely evaluated the usefulness of the information in answering research questions.

The researcher analyzed the information gathered from the field with a view of fulfilling the research objective and answering the research questions. On the basis of information gathered the researcher made conclusions and recommendations. The researcher concluded that the major current source of income for technical institutions is student fees. This source is inadequate in meeting institutional financial demands in pursuit of institutional objectives. The researcher recommends that apart from fees institutions should develop and exploit alternative sources of finance in order to effectively meet budgetary requirements.
TABLE OF CONTENT

Title page i
Declaration ii
Dedication iii
Acknowledgement iv
Abstract v
Table of content vi
List of Tables viii
List of abbreviations ix

CHAPTER ONE
1.0 BACKGROUND TO THE STUDY 1
1.1 Introduction 1
1.2 Background to the problem 1
1.3 Impact of cost sharing on technical education 4
1.4 Statement of the problem 6
1.5 Purpose of the study 7
1.6 Specific objectives of the study 7
1.7 Basic research questions 8
1.8 Significance of the study 8
1.9 Assumptions of the study 9
1.10 Scope and limitations of the study 9
1.11 Theoretical framework 10
1.12 Conceptual framework 13
1.13 Definition of terms 15

CHAPTER TWO
2.0 LITERATURE REVIEW 16
2.1 Introduction 16
2.2 Education and development 16
2.3 Inadequate resources for education 19
2.4 Alternative sources of finance 20
2.5 The Kenyan experience 24
2.6 Conclusion 29

CHAPTER THREE
3.0 RESEARCH METHODOLOGY 31
3.1 Introduction 31
3.2 Design of the study 31
3.3 Study location 32
3.4 Study population 32
3.5 Sample and sampling procedure 32
3.6 Research instrument 33
3.6.1 Questionnaires 33
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6.2 Observation schedules</td>
<td>34</td>
</tr>
<tr>
<td>3.7 Piloting</td>
<td>35</td>
</tr>
<tr>
<td>3.8 Data collection procedure</td>
<td>35</td>
</tr>
<tr>
<td>3.9 Methods of data analysis and presentation</td>
<td>36</td>
</tr>
<tr>
<td><strong>CHAPTER FOUR</strong></td>
<td></td>
</tr>
<tr>
<td>4.0 FINDINGS AND DISCUSSION</td>
<td>37</td>
</tr>
<tr>
<td>4.1 Introduction</td>
<td>37</td>
</tr>
<tr>
<td>4.2 Nature of existing facilities</td>
<td>37</td>
</tr>
<tr>
<td>4.3 Effects of lack of facilities on institutional objectives</td>
<td>38</td>
</tr>
<tr>
<td>4.4 Current sources of finance</td>
<td>39</td>
</tr>
<tr>
<td>4.5 Alternative sources of finance</td>
<td>40</td>
</tr>
<tr>
<td>4.6 Hindrances to exploiting alternative sources of finance</td>
<td>41</td>
</tr>
<tr>
<td>4.7 Management of income generating units</td>
<td>42</td>
</tr>
<tr>
<td>4.8 Perceived role of institutional management in income generation</td>
<td>43</td>
</tr>
<tr>
<td>4.9 Suggested solutions to problems of raising finance</td>
<td>44</td>
</tr>
<tr>
<td>4.10 Contributions of income generating units</td>
<td>45</td>
</tr>
<tr>
<td>4.11 Future of income generating activities</td>
<td>46</td>
</tr>
<tr>
<td><strong>CHAPTER FIVE</strong></td>
<td></td>
</tr>
<tr>
<td>5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS</td>
<td>47</td>
</tr>
<tr>
<td>5.1 Introduction</td>
<td>47</td>
</tr>
<tr>
<td>5.2 Summary</td>
<td>47</td>
</tr>
<tr>
<td>5.3 Conclusions</td>
<td>49</td>
</tr>
<tr>
<td>5.4 Recommendations</td>
<td>50</td>
</tr>
<tr>
<td>5.5 Recommendations for further research</td>
<td>51</td>
</tr>
<tr>
<td><strong>BIBLIOGRAPHY</strong></td>
<td></td>
</tr>
<tr>
<td>Appendix 1 A letter to respondents</td>
<td>56</td>
</tr>
<tr>
<td>Appendix 2 Principals questionnaire</td>
<td>57</td>
</tr>
<tr>
<td>Appendix 3 Teachers questionnaire</td>
<td>64</td>
</tr>
<tr>
<td>Appendix 4 Observation schedule</td>
<td>68</td>
</tr>
<tr>
<td>Appendix 5 Budget</td>
<td>70</td>
</tr>
<tr>
<td>Appendix 6 Study plan.</td>
<td>71</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1.1</td>
<td>Recurrent allocation to Education</td>
</tr>
<tr>
<td>4.1</td>
<td>Nature of existing facilities</td>
</tr>
<tr>
<td>4.2</td>
<td>Effects of lack of facilities on institutional objectives</td>
</tr>
<tr>
<td>4.3</td>
<td>Current sources of finance</td>
</tr>
<tr>
<td>4.4</td>
<td>Alternative sources of finance</td>
</tr>
<tr>
<td>4.5</td>
<td>Hindrances to exploiting alternative sources of finance</td>
</tr>
<tr>
<td>4.6</td>
<td>Management of income generating units</td>
</tr>
<tr>
<td>4.7</td>
<td>Perceived role of institutional management in income generation</td>
</tr>
<tr>
<td>4.8</td>
<td>Suggested solutions to problems of raising finance</td>
</tr>
<tr>
<td>4.9</td>
<td>Contribution of income generating units</td>
</tr>
<tr>
<td>4.10</td>
<td>Future of income generating activities</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>C.B.S</td>
<td>Central Bureau of Statistics</td>
</tr>
<tr>
<td>G.O.K</td>
<td>Government of Kenya</td>
</tr>
<tr>
<td>T.T.I's</td>
<td>Technical Training Institutions</td>
</tr>
<tr>
<td>M.O.E.S.T</td>
<td>Ministry of Education Science &amp; Technology</td>
</tr>
<tr>
<td>I.P.A.R</td>
<td>Institute of Policy Analysis and Research</td>
</tr>
<tr>
<td>G.D.P</td>
<td>Gross Domestic product</td>
</tr>
<tr>
<td>G.N.P</td>
<td>Gross National Product</td>
</tr>
</tbody>
</table>
CHAPTER ONE

1.0 BACKGROUND TO THE STUDY

1.1 INTRODUCTION

This chapter sets the basis of the study. It highlights the background to the study, the statement of the problem, the purpose of the study, assumptions of the study, scope and limitations of the study among others. Theoretical and conceptual framework were also given. The chapter winds up by giving a definition of terms.

1.2 BACKGROUND OF THE PROBLEM

Since independence, education has taken the largest share of the national budget. This is observed in the report of the national committee on Education objectives and policies (Government of Kenya, 1976). This was necessary to meet the economic demand for manpower development. To meet this pressing manpower demand, the post independence government had to co-operate with the communities through harambees to finance education (Olembo 1992). The outcome of these efforts was an increase in educational institutions and enrolment at all levels of learning.

The expansion of education was accompanied by a big increase in the recurrent public expenditure on education. The report of the Presidential Working Party on Education and Manpower Training for the next Decade and Beyond (Government of Kenya 1988) recommended measures to check on the recurrent expenditure by the Ministry of Education. However, back in 1975, the government had stated an intention to curb
spending on education. (Sessional paper, Government of Kenya 1975). The paper points out:

The fast rate of increase in educational expenditure of over 17
Per cent per annum can not be sustained during the years when
Total government expenditure are expected to grow by only
7 per cent per annum. If this situation continues in 12 years
time, the entire recurrent budget would be required for
education alone (p. 22).

Sessional paper number one of 1986 on “Economic Management for Renewed Growth”
states the government’s decision to reduce the recurrent expenditure on formal education
and training under the Ministry of Education to about 30 per cent. (Government of
Kenya 1986).

The report of the presidential working party on education and manpower training for the
next decade and beyond (Government of Kenya 1988) pointed out on the high education
budget which stood at 37.7 per cent of the national recurrent budget in the 1987/88
financial year. The report recommended introduction of cost-sharing in the financing of
education and training as well as adapting cost effective measures in the utilization of
education facilities, equipment and personnel.

The government in its endeavor to implement these recommendations published sessional
paper no 6 of 1988 on Education for Manpower Training for the Next decade and beyond
(Government of Kenya 1988) which officially ushered in cost-sharing in education
system. Aringo O. the then Minister for Education asserted that it is only through cost sharing that the government would reduce the high public expenditure on education. (The Standard, 1988).

The report of the presidential working party on education and manpower training for the next decade and beyond 1988 places the responsibility of building and maintaining classrooms and teacher’s houses on parents (Government of Kenya 1988). It states:

The government will continue to finance the provision of education administration and professional services while communities, parents and sponsors provide physical facilities, books and supplementary readers, stationery and consumable materials (P. 119).

This recommendation was echoed by the Minister for Education Aringo O. on “Education system changed”. Daily Nation October 10th 1989 P. 17 who maintains that:

It is the policy of the government to provide teachers while the parents will have to provide schools with builds and teaching materials.

Despite all these efforts to curb high public expenditure in education success has been elusive. This can be shown through government allocations on education in the recent financial years.
### Table 1:
Recurrent Allocation to Education (Kshs. Millions)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>EDUCATION</th>
<th>TOTAL GOVERNMENT</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995/96</td>
<td>28,099</td>
<td>79,228</td>
<td>35.46</td>
</tr>
<tr>
<td>1996/97</td>
<td>30,424</td>
<td>87,456</td>
<td>34.78</td>
</tr>
<tr>
<td>1997/98</td>
<td>42,224</td>
<td>108,214</td>
<td>39.02</td>
</tr>
<tr>
<td>1998/99</td>
<td>44,006</td>
<td>105,399</td>
<td>41.75</td>
</tr>
<tr>
<td>1999/2000</td>
<td>46,949</td>
<td>111,526</td>
<td>42.09</td>
</tr>
<tr>
<td>2000/2001</td>
<td>48,266</td>
<td>135,491</td>
<td>35.62</td>
</tr>
</tbody>
</table>

Source CBS - Estimates of recurrent expenditure 1990-2001

#### 1.3 IMPACT OF COST SHARING ON TECHNICAL EDUCATION

The advent of cost sharing policy in education in Kenya has seriously affected technical training institutions in that technical training is expensive and it is difficult to offer relevant skills on the inadequate finance raised through cost sharing. As Knight (1983) observes, school unit costs tend to rise when education becomes more technical and science oriented. Also the government seems to have neglected the technical training sector in favour of other sectors. Victoria consultants (1995) observes that in the 1992-93 academic year, the government subsidy per student at various levels of education was:

- Primary  - Kshs. 1,520.79
- Secondary - Kshs. 4,076.51
- Technical training - Kshs. 1,476.81
- Universities - Kshs. 61,730.00

Thus it is worth noting that technical training sector which was the focus of this study received least subsidy per student. Victoria consultants recommended an infusion of
Kshs. 500 million for capital expenditure to upgrade their technical education due to the poor state of training equipment in T.T.I's.

Limited funding of educational programmes in the technical sector has greatly hampered their capacity to offer quality training. By 1995, the industries were already querying the competence of the graduates of technical training institutes, which were accused of being slow to adapt to new technology forcing companies to train their own staff (Daily Nation, 22/6/2002). Aduda (Daily Nation, 3/6/2002) reported that a number of T.T.I's were on the verge of collapse due to deep seated financial crisis. He further observed that:

The institutions are unable to acquire new equipment or upgrade existing ones and offer saleable skills. Thus the students are trained using obsolete equipment, which put them at disadvantage when they join the industry where technology is the in thing.

In the light of this the technical training sector is at cross roads. On the one hand it's faced with financial problems for both recurrent and development expenditure. This has made it impossible to upgrade their facilities and equipment which would enable them to offer quality training. On the other hand both the industry and the government expect it to produce high quality graduate with the relevant industrial skills.

For technical training to realize its objectives in rapidly changing technology the sector needs sound financial base. However neither the government nor the community is in a position to provide for all of its financial needs since as Olembo (1992) points out each
has given more than their equal share.

Therefore the only other option left is for the sector to look for alternative sources of finance by mobilizing new sources of funds (World Bank, 1980, Psacharopolous, 1985, Angela et al, 1993)

The Presidential Working Party on Education and Manpower Training for the next Decade and Beyond (government of Kenya 1998) had recommended that technical training institutions could set up production units which would serve the dual purpose of giving their students practical skills at the same time earning extra income for the institutions.

Therefore if these technical institutions have to overcome the current financial hardships, which have impacted negatively on their capacity to offer quality training, then the idea of institutions in this sector generating their own income through production units is one whose time has come.

1.4 STATEMENT OF THE PROBLEM

Provision of necessary resources is a significant element of education. Acquisition of the resources requires finances. As Aduda (2002) Victoria consultants (1995), Olembo (1992) pointed out it is evident that finance is a major problem to institutional development and hence education provision. International organizations and various agencies in the seventh conference of African Education of April 1988, highlighted that in many African countries children were not in school because of lack of adequate learning facilities like classrooms, workshops, Libraries, Laboratories e.t.c.
With the declining government subsidy, the money that technical institutions raise through tuition fees charged is insufficient for the efficient and effective running of their expensive technical curricula. Faced with rapidly changing technology Technical institutions should have large resources to provide relevant skills and knowledge. This calls for steady source of funding.

This study sought to identify the internal income generating activities that technical training institutions could exploit in an attempt to boost and stabilize their financial base with specific reference to Meru Central district.

1.5 PURPOSE OF THE STUDY

The study sought to identify possible unexploited opportunities through which the technical institutions in Meru Central could boost their income hence enable them realize their full potential.

1.6 SPECIFIC OBJECTIVES OF THE STUDY

- To find out the current sources of financing educational activities in technical institutions.
- Find out how the management of the technical institutions perceive their role in income generation.
- To find out other possible alternatives of financing institutional activities.
- Identify problems, if any, that hinder administrators from exploiting alternative
sources of finance.

- Solicit suggestions on methods of overcoming the bottlenecks to institutional initiatives on income generating activities.

1.7 BASIC RESEARCH QUESTIONS

To satisfy the research objectives, the following questions were formulated to guide the researcher in gathering necessary information.

- What is the view of the management of technical institutions about their role in income generation?
- What income-generating activities have technical institutions tapped?
- What other potential income generating activities could be exploited?
- What problems hinder the realization of the full potential of the income generating units?
- What are the possible solutions to problems highlighted above?

1.8 SIGNIFICANCE OF THE STUDY

It's hoped that the findings and recommendations of this study shall:

- Inspire institutional administrators to broaden their thinking on open sources of finance that can be exploited to fund institutional expenditure.
- It's hoped to highlight various financing methods likely to augment resource and to define a strategy of education financing more closely adapted to social and economic realities.
➢ Will help the technical institutes to improve their teaching-learning facilities and equipment once they realize returns from income generating activities.

➢ Highlight to the ministry of education and public in general the opportunities open to the institutions as regards financing.

➢ Help fill the gap in research in this area and might prompt other researchers to undertake similar studies in other tertiary institutions.

1.9 ASSUMPTION OF THE STUDY

There are three main assumptions of this study

➢ The institution source of income does not satisfy the expenditure demands of the institutions.

➢ The source of finance is primarily limited to levies charged on students in form of fees.

➢ There are open opportunities that if exploited by the technical institutes could generate additional income to support educational activities.

1.10 SCOPE AND LIMITATION OF THE STUDY

This study is confined to the technical institutes located in Meru Central district. These are Meru Technical Training Institute, Nkabune Technical and Kiirua Technical. They fall under the Ministry of Education, Science and Technology. The three are national educational institutions. They admit students from across the country and therefore do not rely on the host community for the financial demands.
The researcher was limited by financial constraints as he financed it wholly from depleted personal budget. There was also limited time frame within which duration the researcher was to present his research findings for assessment.

1.11 THEORETICAL FRAMEWORK

This study derived its theoretical framework from the theory of public goods. Stretton (1994) identifies two major categories of public goods. The first category is the pure public goods, which have the characteristic of being non-excludable and non-rival. This implies that they cannot be supplied to anybody without being available to everybody and their consumption by one person does not reduce the share for the other. Consequently the government has to pay for them. In this category are things like defense, law and order, street lighting etc.

The second category is referred to as quasi-public goods. These are goods which can quite well be supplied in a market way but which government choose to supply to some or all of their citizens free or below cost. In this category are things like education, health services, public transport etc.

Wigley et al (1992) observed that government undertakes the provision of quasi public goods because:

If quasi public goods were left to the market some people would not demand any; others would not be able to afford any; and producers would supply only the type and quantity which maximize profits and the country would lose
externalities derived from these goods. (p 83)

These externalities accrue to third parties or the society at large. John et al (1983) identifies a number of externalities associated with education. These are increased labour productivity, reduction in the need of other services, social consciousness and intergenerational transfers.

Mc Connel et al (1996) notes that in order to avoid losing the externalities associated with quasi-public goods, the government has three options:

- Subsidize consumers (thereby increasing demand)
- Subsidize producers (thereby increasing supply)
- Engage in the production of the good

With regard to education the government increases the demand by either offering free education at the basic level or by providing low interest students loans and grants at higher levels. The government could as well increase the supply of education by setting up and funding educational institutions.

Provision of subsidized goods has problems. First, there is the danger of over consumption where people demand more than they need of a service or good because it is cheap or free Harvey (1977). Secondly, a situation arises where there is not enough subsidy for every one. This translates to a situation where the subsidy is thinly spread thereby compromising on the quality of the good or service being provided. The latter is
quite common in education where inadequate or declining government subsidy due to budgetary constraints impacts negatively on quality. It is as a result of budgetary constraints that the Kenyan government instituted cost sharing measures in education in 1988. However, due to the low purchasing power of the consumers of education, the proceeds from cost sharing are not sufficient for the financial demands of the Technical Training Institutions. Consequently, it is vital that Technical Training Institutions in Meru Central District take steps towards income generation as outlined in the following conceptual framework.
1.12 CONCEPTUAL FRAMEWORK

Figure 1.1

A schematic model of raising adequate finance for Technical training Institutions.

Raising adequate Finances for meeting Technical Training Education (Recurrent and Development) cost

2) Traditional sources of finances for T. T. I

Private
- Fees from students

Private
- Donors

Public
- Government budgetary allocation

3) Problems associated with the above sources

- Low income
- Poverty
- Unreliable

- Unreliable
- Strings attached
- Partiality

- Inadequate due to budgetary constraints and competition from other public sectors

4) Role of managers of T. T. I's

Effort

Initiate

Motivation

a) Cost effective measures

b) Income generating measures
Figure 1.1 above shows the conceptual model which captures the major variables and their interrelationships. The major task to be accomplished in the model is raising adequate finance to meet both the recurrent and development expenditure for the Technical Training Institutions. In the model, the sources of educational finance for the Technical Training Institutions are identified and the constraints facing each of them. Due to these constraints there arises a need to search for alternative sources of finance. In developing the conceptual model the following variables in the theoretical framework have been identified. These are:

- The private and public sources of finance for the T.T.I's
- The various problems associated with the above sources
- The need for managers of the T.T.I's to find solutions to these problems through cost effective measures and income generation activities.

The private sources of finance for the Technical Institutions draws mainly from the fees paid by students. However, due to incidents of poverty and low income, there is an upper limit beyond which this source cannot be exploited. For equity purposes the government has set a ceiling on fees chargeable. On the other hand, the public source of finance is also facing constraints. Poor economic growth has impacted negatively on government revenue, the principle of pareto optimality on resource allocation dictates against education getting more than its due share of the public resources to the detriment of other social sectors like health, infrastructure e.t.c

From the discussion, it becomes clear that internal income generating activities offer the
Technical Training Institutions the most secure and reliable source of finance which would enable them meet their educational costs, which is a prerequisite if quality teaching and learning is to be realized.

1.13 DEFINITION OF TERMS

Obsolete equipments - Equipment whose technological standards are ancient and do not match the current type in the industries.

Opportunities - Unexploited avenues that could be explored to enhance the financial base of the institutions.

Financial allocation - Refers to monetary sums assigned to each expenditure items e.g. Health, Education, Agriculture e.t.c. Therefore financial allocation on education is the amount of government spending assigned to education.

Recurrent expenditure - Expenditure incurred to support the day-to-day running of the education institution e.g. expenditure on salaries, educational consumables e.t.c

Development/capital expenditure - Refers to costs or spending to establish or acquire physical and relatively permanent learning resources.

Harambee - Refers to the process of pooling of resources by the community to support a project.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 INTRODUCTION

This literature review addresses the issue of educational finance with regard to the changing patterns since 1980's to the present time. The review will draw from pioneering studies by Schultz and Denison in the early 1960's on the contribution of education to economic growth. The review will address the issue of inadequate resources for education. The review will then address the concerns that started emerging in the 1970's about the heavy public spending on education and calls to tame the education budget. The review will also look at the appeal that was first made in the 1980's on educational finance and which has gained momentum into the current century. This is the call to diversifying sources of education finance rather than over relying on the state. Finally, the review will narrow down to look at the Kenyan situation and specifically to how this call to diversified sources of income by educational institutions has been adapted.

2.2 EDUCATION AND DEVELOPMENT

Education has been acknowledged as playing a positive role in development. Schultz (1961), in his pioneering work on the contribution of education to economic growth, found that in America, between 1920 and 1957, increase in national outputs was large compared with the increase of land, man hours and physical reproducible capital, which led him to conclude that investment in human capital was probably the major explanation...
for the difference. Denison (1962) reinforced Schultz findings and his studies on the contribution of education to economic growth showed that from 1929 to 1958, 23 percent of 2.93 percentage point growth rate of the U.S.A’s national product was the direct contribution of more education.

Studies by other scholars also supported the importance of education in local and national development. Jamison et al (1982) in studies carried out in 37 countries on the relationship between education and productivity found out that farm productivity increased on average by 7.4 percent as a result of a farmer completing four additional years of elementary education rather than none. This was achieved through exposure to new methods.

Psacharopolous (1980), in a study on returns to education found that returns to higher education in developing countries were higher than returns to physical capital (149 percent and 12.8 per cent respectively). Studies also showed that education is a major determinant of upward social mobility. Blaug (1968) and Psachropolous (1980) in studies on the relationship between education and income point out that education accounts for about 70-80 per cent of one’s income, holding other factors constant. Thus the populace in many countries all over the world put a heavy popular demand on the government to provide education.

Studies of these and other scholars prompted governments to heavily invest in education. Education was no longer viewed as consumption but as an investment, which conferred
direct and indirect monetary and non-monetary benefits to both the individual who acquired it and the society (Rogers et al 1971). The resultant effect of this was that most African governments are spending over 30 percent of the national budgets on education. The changing moods on the huge educational expenditure witnessed in the 1960’s was also addressed by Jallade (1973). He notes:-

While it was a particular feature of the sixties to welcome the drain caused by education expenditure on public finance, a shift of attitude can already be perceived among a number of researchers and policy makers for whom high spending on education is no longer held as a panacea for economic growth and social development (P.93).

Orivel (in Olembo and Harold 1992) describes the period 1950-1975 as the ‘happy period’ of educational finances in that the reasonably strong economic growth and international trade helped the healthy expansion of government income so that over the period public revenues typically increased at faster rates than the gross domestic product. During this period, education received more than its equal share of the total public budget due to not only its political popularity but also the wide spread belief in its private and public benefits.

However the oil shock of the mid 1970’s ended this happy period as sharp increase in oil prices radically affected the terms of trade and increased the international indebtedness of oil importing nations. This also marked the beginning of sharp competition in claims for budget shares from other equally important sectors like health, agriculture, infrastructure etc. Chinapah (1992) echoed Orivel and pointed out that recent studies in educational
finance seemed to confirm that the 1980’s marked the end of the epoch of continued growth of public resources. He highlighted the search for new sources of finance as one of the characteristic features of the new phase of educational development.

Jallade observed that another powerful factor militating against the unquestioned priority that was granted to education was to be found in some new areas such as health, population, nutrition among others, which were emerging as important consumers of public funds.

UNESCO (1985) observes that due to financial constraints in many countries alternative methods of financing education was the only feasible and possible solution.

2.3 INADEQUATE RESOURCES FOR EDUCATION

The world bank has been a major source of funding education in developing countries. However, in its education section policy paper (1980), the World Bank notes that:-

Plans for extending education opportunities, improving the quality of education and building national capacity in management, planning and research are often hampered by the limited resources devoted to education (P. 67)

This shows the world banks’ concern on education resource inadequacy despite its heavy investment in education. In observing that the increasing demand of education on public finances was not easily resolved, the World Bank recommended two possible courses of
action: -

- Reducing unit costs by improving the efficiency of the education system and
- Finding additional sources of finance.

Psacharopolous et al (1985) echoed the world banks view in 1995 when he observed that inefficiencies and inequities along the expanding enrolments in public schools at all levels had led to an increase of the share of G. N. P. devoted to public education which resulted to increasing pressure on public fund at a time that many countries especially in Eastern Europe and Africa were experiencing general fiscal difficulties. The world bank (1995) pointed out that although measures to increase the efficiency of public spending on education could make existing funds more productive, such measures alone were not enough and thus the need to enhance on alternative sources of finance in various education institutions.

2.4 ALTERNATIVE SOURCES OF FINANCE

The call for alternative sources of financing education was a result of pressure emerging due to difficulties in financing public education since early '1980's. Ziderman et al 1992 observed that, funding mechanisms work well when resources are plentiful, but once resources are scarce, budgets can fluctuate significantly, seriously interfering with the stability and efficiency of institutions. To contain this situation they proposed a diversified funding base. These alternative sources of finance would help minimize dependency on traditional sources of education finance and hence reduce on potential
shocks of eventual changes in available public resources. It's therefore advisable for institutions to engage in income generating activities in order to widen their resource base. Ziderman pointed out Sanford and Warwick Universities in the U. K. which diversified their activities to engage in profit making activities with their local industrial and commercial communities in the 1980's when the government cut funding to universities.

William observed that the British Government in 1980/81 public expenditure survey announced a substantial reduction in the general recurrent funds for higher education. This, he concedes, not only brought a financial crisis but also shaped the subsequent government higher education policy, which was dominated by two main concerns. On one hand, the concern was to reduce public expenditure and on the other it was to increase efficiency by encouraging institutions to earn a larger proportion of their income from both government and non-governmental sources.

The latter theme was given more importance in the 1990's. Academic institutions in U.K. could organize and manage their income generating enterprises in three main ways. First, academic departments could be encouraged to undertake consultancy and full cost course provision as part of their regular portfolio of activities. Secondly, the institutions could set up research and development centers or units and finally, there was the option of establishing limited companies that had a legal status separate from the parent institution.
Demsky et al (1989) while pointing out that direct subsidy had been justifiable in early stages of systems development even in middle income countries also observed that increasing attention has been given to alternative financing arrangements. The impetus for this arrangement, they observed was derived from two sources. The first one was economic, whereby socially efficient investment requires that those who benefit pays for services received. Higher education, as noted elsewhere, bestows higher returns to the individual than the society. The second source was institutional, whereby they observed that the sustained effort required to develop complex vocational educational training systems depended heavily on stable financial resources. Uncertain government budgets, they observed, constrained long range institutional development and could have devastating effects on recurrent cost budgets and thus institutional effectiveness.

Augela et al (1993) stated that financing policies not only determine how efficiently higher education institutions mobilize and use the available resources but also the quality and effectiveness of their teaching and research programmes as well as their ability to increase training and research in productive sectors.

They observed that the prevailing situation in most developing countries of free or below cost higher education irrespective of private or social returns produced inefficiencies and inequity. They noted that as competition for resources and demand for places increased, governments would be unable to subsidize all programs at a level that would ensure quality and effectiveness. Therefore, higher education institutes would have to come up
with strategies for reducing their exclusive reliance on public financing.

Rakotamalla’s report on education on rural environment (1974) drew attention to self financing methods and cited Rwanda as an example where there has been an attempt to make schools self supporting and where local participation in education has been substantial.

Kaluba and Achola (1985) hold that in Zambia education institutions do generate funds through their own activities or through the ownership of structures of schools.

Ozigi (1977) discusses the sources of finances for school development projects in Nigeria as grants from state, donations from Philanthropic organizations or individuals and schools based sources such as proceeds from the sale of school magazine or from student activities such as drama performance. In Ethiopia, institutions based economic activities have supplemented the resources from government and community effort. Many schools produce their own teaching aids as well as some crafts and garden crops for local sale (Ogdu and Gallagher, 1991). This has a direct bearing of Technical education in Kenya where technical skills such as woodwork, agriculture, metal work and home economics can be used to generate additional income for the schools.

The idea of schools running businesses may be recent in Kenya and other African countries, but not in China. Chang et al (2001) pointed out that school run businesses in China first appeared in 1958. Though they were initiated in order to link work and study
skills and relating theory and practice, their role has since changed and in the 1990's it became unambiguously clear that their main function was to generate additional income to cover the running of the schools. They noted that schools with well established and located businesses had recorded substantial increases in expenditure per student while public expenditure had at the same time diminished as a proportion of the total to the extent that off budget revenue could be larger than that provided by the state.

2.5 THE KENYAN SITUATION

Empirical based studies on alternative sources of finance in education, especially at technical institutional level is scanty.

Technical schools however require additional funds to supplement existing sources which are becoming increasingly strained. The funds are required for provision of the much needed educational facilities and equipments.

The then director of education Professor Waithaka (Kenya Times June, 6 1990:3) noted that more than half of the physical facilities required for the implementation of the cost sharing facilities had not been completed in education institutions. There is therefore the need to explore institutional based activities to supplement existing sources of income to alleviate the financial burden on parents communities and the government.

The concern for additional resources for institutions of learning has been shown by education administrators, scholars, education writers and even the government. Gravenir (1991) states that over emphasis on education in terms of allocation from the budget will
not only generate dis-equilibrium in social-economic development but will also affect education adversely in that the education system will be producing graduates from each of its levels at a rate faster than the economy can absorb. He suggests that a combination of alternative methods of financing education, including cost sharing and the generation of extra funds by institutions of learning seem unavoidable in the near future.

Gravenir stresses that the generation of extra funds by education institution should play an important role in financing education. He does not however give details of the particular activities that institutions could generate such funds from.

Achola (1998) observes that tertiary education institutions operate with insufficient funds to meet the boarding costs, learning material needs, needs for adequate and presentable physical facilities and organization of education tours and sporting activities. He warns:-

The possibility of raising further funds for education from parents is already diminishing rapidly. The prevailing situation is that most parents and guardians are already over burdened with school related expenses for their dependants. A parent in Kenya has to meet educational expenses which exceed the G.N.P per capita. A preponderant number of Kenyan parents earn income which can hardly meet education expenses. One consequence of this has been a gross under representation of children from economically deprived social backgrounds in the nations and higher education institutions (P. 17)

He goes further to recommend that since the economy and other agencies (parents, communities) are no longer able to provide massive funds required by the education sector, new sources of educational financing should be found. To maintain let alone improve current educational enrolments and quality. He suggests some of the new
sources as public sources apart from those of central government for example education levy, private sources like private business sector and sources of funds within the education system. For instance, school producing their own food to cut down on the cost of feeding students, undertaking commercial activities among others.

The government (Government of Kenya, 1988 P. 47) outlines in sessional paper number 6 of 1988, the need to cost effectively use resources at the disposal of schools including land, finances, teachers, time, facilities and equipments to bring about efficient provision of quality and relevance in education. It observes:-

The boards of governors, school committees and managers of educational institutions should plan the most economic way of utilizing available institutional land. In particular land should be planned and utilized to the optimum on a master plan and to generate revenue for educational institutions.

The government's concern shows how educational institutions should exploit their resources for supplementing the government's, community's and parents efforts. This study sought to explore how far this alternative has been implemented.

This government’s call has been supported by other government officials. The then Minister for Education, Olo O Aringo (Kenya Times, September 2, 1988:5) noted:-

The government can no longer afford to spend more than 30 per cent of its national budget on education; board of governors should formulate ways of generating income for their institutions. Empty land should be utilized to produce food crops and rear chicken
for the production of eggs and meat for students.

Waithaka (Kenya Times June 24, 1991) makes a directive to boards of governors and P.T.A’s to initiate profit-making projects to enable schools to raise some of their finances.

The minister for education Joseph Kamotho (Sunday Nation, January 23, 1994) urges schools to utilize idle land for agriculture to reduce food bill. He observes that schools with idle land could use it commercially through farming or by putting up houses to let. Kamotho’s suggestion supported this study in the sense that it recognizes the importance of school based economic activities and proves that such projects have the support of the Ministry of education at policy level.

Olembo and Omoka (1982) made observations on the various ways of financing education. Olembo (1985) deals with the major financial sources for education institutions but examines schools based economic activities too.

The study indicates, however, that few schools have used this method (alternative methods of financing). He maintains:-

Students under proper guidance from teacher could convert these pieces of land for agricultural and livestock production and thus into a major source of revenue.

The discussion by the scholar therefore indicate that alternative financing mechanisms at school level is viable and should be used to provide the much needed finance for technical institutions in Kenya.
Olembo and Ross (1992) maintains the view that educational institutions should play a role in providing supplementary finance. They discuss the possible solutions to problems of financing public education in Kenya among them the loan system, harambee and goes a head to make recommendations for more efficient systems of financing education in Kenya.

Kiugu (1990) carried out a study in south Imenti, Meru district on primary school economic activities and initiatives that generate income for this education level. He noted that primary schools which utilized their farms well generated an average of Kshs. 29,742/= annually. He recommended for a study at the same level in a different geographical setting or at other levels of education.

Wesonga (1996) conducted a study in Kakamega district on supplementary sources of finance for secondary schools. He reveals that income-generating units generate an average Kshs. 152,031.52 and contribute an average of 4 percent of the schools annual budgetary requirement.

Riechi (1993) carried out a study on how public universities in Kenya generated funds internally. His study illuminates the potential of this facility in generating funds for recurrent expenditure. He established that public universities in Kenya generated about 10 percent of their funds, from internal sources. He identifies the potential activities and problems encountered in running the economic units.

Studies done by Riechi (1993), Kiugu (1990) and Wesonga (1996) gave impetus to this
study as the alternative sources of finance for technical institution, having not been explored. This study was therefore to fill the gap for need of data at the technical institutions level of education on alternative financing.

2.6 CONCLUSION

From the literature review, it emerges that educational institutions both within and without Kenya, in the face of declining public expenditure and rising involvements at all levels, have no recourse but to look for supplementary sources of income through engaging in internal incoming generating activities, amongst other measures. This is inevitably if they are to bridge the gap created by the short fall in public expenditure available to education. Psacharopolous (1990) notes in spite of effort by many African governments to come up with many educational policies the financing of the recurrent policies cost of educational investments has been the main constraint to further or improvement of the systems quality.

During the review of literature, serious gaps were noticed and especially in the area of technical training, it became apparent that very few studies have been undertaken in this area.

Orodho (1984) carried out a study to find out the role of village polytechnics in the social economic development of Western Kenya. Owano (1989) also carried out a study on the contribution of the youth polytechnics programmes to youth employment in Kenya. These studies revealed that training equipment and materials were in adequate in most youth polytechnics and there was need to provide better-equipped workshops and
adequate training materials. This review shows that none of these studies addressed the technical training institutions which created a potential gap in literature which this study sought to fill.

In addition, from these studies, it is evident that the issue of inadequate teaching-learning facilities and equipment which compromises the quality of training in the T.T.I’s at various training levels comes out strongly. However, their provision would require substantial sums of money which both the government and the beneficiaries of training would be hard to provide. The literature review has revealed that educational institutions in Kenya have taken up the contemporary theme of diversifying the sources of income. Studies on the efforts of educational institutions in raising extra income have been carried out in primary schools, Secondary schools and universities. The only area that has not been covered is that of technical training which, is currently facing massive financial problems which are hindering the smooth and effective running of its programmes. This has raised concern over the competence of technical training graduates which implies that the quality of training is wanting. This study was intended to fill gaps by finding out what the T. T. I. Have done and could do in order to diversify their sources of income. The study has contributed to the body of knowledge on financing available on technical training and specifically in Meru Central District.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter focused on the research methodology that was employed in the study. The researcher addresses the research design used in the study, as well as the study population. Research instrument used for data collection were identified and described. Finally, the method of data analysis, and presentation adapted by the researcher were highlighted.

3.2 DESIGN OF THE STUDY

This was a descriptive research, which was conducted using a survey design. A survey was appropriate for this study since as Wiersma (1985) observes survey studies are conducted to determine the status quo and are concerned with the gathering of facts rather than the manipulation of variables. In this study the researcher was interested in identifying alternative methods of financing technical institutions and the extent to which they have been exploited. Furthermore, according to Good (1992) a survey is useful in that it not only secures evidence concerning existing situation or current conditions but also identifies standards or norms with which to compare present conditions in order to plan the next step. Thus findings of the survey would help the technical institutions chart their way forward.
3.3 STUDY LOCATION

The study was based in Meru Central District and carried out in three technical institutions. These are Meru Technical Training Institute, Nkabune Technical Training Institute and Kiirua Technical Training Institute. The researcher being a teacher in the region in a technical institution therefore the topic was of special interest. Financial and time constraints dictated the study location.

3.4 STUDY POPULATION

The population for the study comprised of three Technical Institutions, namely Meru Technical Institute, Nkabune Technical and Kiirua Technical Institute.

Three principals and the teachers formed the study population.

3.5 SAMPLE AND SAMPLING PROCEDURE

This study was survey design in which an attempt was made to select a sample that was representative of the population. According to Gay (1992) a researcher selects a sample due to various limitations that may not allow researching the whole population. A small sample of the population will be targeted for this study.

A sample of 10 percent of the population is considered minimum (Gay 1992) for small population 20 percent of the population may be required (Gay 1992). Purposeful procedural sampling was adapted and then random sampling was used to determine the respondents from each department.
In each institution the names of all teachers in each department were listed on a piece of paper, folded, shaken and then picked randomly. Thirty (30%) per cent of the teachers' population in each department per institution were sampled. A sample size of 48 respondents was realized. Meru Technical Institute had a teachers population of eighty, Nkabune forty and Kirua Technical thirty, these translated to fifty (50%) percent twenty five (25%) and nineteen (19%) percent respectively for the sample size.

3.6 RESEARCH INSTRUMENTS

The research instruments that were used in data collection included questionnaires and observation schedules.

3.6.1 QUESTIONNAIRES

Questionnaires provide a cheap means of collecting data from large numbers of people (Peil 1995). There were two sets of questionnaires, one for each head of institution (Principal) and the other for teachers.

Gall et al (1996) points out that questionnaires are appropriate for studies since they collect information that is directly observable as they inquire about feelings, motivation, attitudes, accomplishments as well as the experiences of individuals.

The questionnaire for the principal was divided into five sections labeled A, B, C, D, and E. Section A sought background information of the institution touching on courses that are offered, number of students and lecturers. Section B deals with physical facilities and
equipments and sought information on their availability or lack of, as well as their condition. Section C probed on the financial position of the institutions - whether healthy or unhealthy and what ought to be done. Section D sought to find out what economic activities the institutions are engaged in or can engage in. Section E sought formation on management of existing income generating activities, their weaknesses and potential.

The questionnaire for teachers was divided into five sections, A, B, C, D and E. Section A sought background information of the individual teacher and institution. B dealt with physical facilities and equipment and sought information on their condition and how they affect teaching and learning. Section C probed on sources of finance for the institution. Section D sought to find out the economic activities the institutions are engaged in. Section E sought information on the management of initiated income generating activities, bringing to light problems experienced in pursuit of these activities their solution and expose potential sources of finance yet to be exploited. Questionnaires employed both forced responses and open ended questions depending on the nature of information sought. Open ended questions sought opinions and feelings of the respondents while the forced items sought factual information. Questionnaires were chosen on this strength.

3.6.2 OBSERVATION SCHEDULES

Supplementing the information from formal responses with observation and informal conversation with the informants is useful (Peil 1995). Much is learned by observing
what people actually do, how they do it and that observation is almost always combined with casual or informal interviewing (ibid).

Observation was used by the researcher to select the departments and sections. The researcher also looked at the education facilities, buildings, tools equipments and activities around the institution. Observation schedules were meant to supplement information collected through questionnaires.

3.7 PILOTING

The research instruments were piloted at the Meru College of technology. Wiersma (1995), observes that piloting is important as it helps identify misunderstandings, ambiguities and useless or inadequate items.

3.8 DATA COLLECTION PROCEDURE

After the validity and reliability of the instruments was ascertained and a permit issued by the office of the president the researcher personally administered the instruments to all the respondents. This entailed giving respondents about two weeks so as to respond to all items adequately.

A careful observation was made in the institutions as the researcher toured them severally. During the visit to the institution the researcher recorded the details of the observation made on education facilities such as classrooms, home science rooms,
workshops, laboratories, library, furniture, gardens, livestock and other income
generating units.

3.9 METHODS OF DATA ANALYSIS AND PRESENTATION

Items from the questionnaires and interview schedules were arranged and grouped
according to particular research questions. Responses received from the questionnaires
and observations schedules conducted were organized, tabulated and analyzed using
simple frequencies and percentages. Peil (1995) maintains that when making the results
of research known to a variety of readers, percentages have a considerable advantage
over more complex statistics. Best and Kahn (1989) hold that the most widely used and
understood standard proportion is the percentage.

Care was taken by the researcher to note the number of times views were expressed and
the number of respondents that expressed similar views. This formed the basis for
drawing conclusions.
CHAPTER FOUR

4.0 PRESENTATION OF FINDINGS AND DISCUSSION.

4.1 INTRODUCTION

The study intended to identify the internal income generating activities that technical training institutions could exploit in an attempt to boost and stabilize their financial base. This chapter presents the findings of the study focusing on the following areas:

- Nature of existing facilities in the technical training institutions.
- Effects of lack of facilities on institutional objectives.
- Current sources of finance for technical institution.
- Alternative sources of finance.
- Hindrances to exploiting alternative sources of finance.
- Management of income generating units.
- Suggested solutions to problems of raising finance.
- Perceived role of institutional management in income generation.
- Contribution of income generating units.
- Future of income generating activities.

4.2 NATURE OF EXISTING FACILITIES:

For the purpose of meeting research objectives the researcher felt a need to prove into the nature of existing facilities in technical training institutions with a view of establishing their relevance to training. Facilities are an important element in skill training. Aduda (Daily Nation 3/6/2002) reported that:
Students of technical training institutions are trained using obsolete equipment which put them at disadvantage when they join the industry where technology is the in thing (P. 21)

In this study respondents were asked to state their opinion on the nature of facilities in their institutions. Table 4.1 summarizes their responses

<table>
<thead>
<tr>
<th></th>
<th>HIGHLY SATISFACTORY</th>
<th>SATISFACTORY</th>
<th>NEUTRAL</th>
<th>UNSATISFACTORY</th>
<th>HIGHLY UNSATISFACTORY</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>MERU T.T.C</td>
<td>0</td>
<td>40%</td>
<td>4%</td>
<td>11%</td>
<td>0</td>
<td>56%</td>
</tr>
<tr>
<td>KIRUA</td>
<td>0</td>
<td>13%</td>
<td>7%</td>
<td>0</td>
<td>0</td>
<td>20%</td>
</tr>
<tr>
<td>NKABUNE</td>
<td>0</td>
<td>8%</td>
<td>2%</td>
<td>13%</td>
<td>0</td>
<td>24%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>0</td>
<td>62%</td>
<td>13%</td>
<td>25%</td>
<td>0</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4.1

Sixty two (62%) percent of the respondents thought that the existing facilities in their institutions are satisfactory while twenty five (25%) per cent reported that the facilities were unsatisfactory. Thirteen percent were neutral. No respondent found the facilities to be either highly satisfactory or highly unsatisfactory.

4.3 EFFECTS OF LACK OF FACILITIES ON INSTITUTIONAL OBJECTIVES

The consequences or effects of lack of facilities or their inadequacy cannot be overemphasized. The researcher was interested in knowing some of challenges posed by the lack of facilities. The research findings are summarized in the table 4.2 as shown below.
Inadequacy of teaching materials appear to have the highest effect on institutional objectives with a score of thirty nine (39%) per cent, followed by time wastage twenty one (21%) per cent and teacher frustration fifteen (15%) per cent. Nine (9%) percent of the total respondents recorded congestion as a major effect. Logistical problems like time tabling and low enrollment coupled with student migration had eight (8%) per cent in both cases respectively.

Meru T.T.I only experienced effects in all areas. Kiirua had no effect on time wastages and logistical problems whereas Nkabune still continue to register rising enrollment despite the other effects.

4.4 CURRENT SOURCES OF FINANCE

Government institutions used to be provided with funds from the central government in the form of grants, before the adoption of the cost sharing policy. This money was in addition to that obtained by institutions through collection of students’ fees, donations from individual organizations, sponsors, contributions and community support through ‘harambee’ fund drives.

Currently T.T.I’s no longer receive grants and they have to rely on fees as their major
source of finance, and especially with the government banned 'harambees' funds drive. Reliance on fees as the main source of revenue has not been without strain on parents and training institutions. In this study, respondents were asked to indicate their main source of finance. Table 4.3 below summarizes their responses.

<table>
<thead>
<tr>
<th>SOURCE OF FINANCE / INST</th>
<th>FEES</th>
<th>GRANTS</th>
<th>PRODUCTION UNIT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIIRUA</td>
<td>14%</td>
<td>0</td>
<td>3%</td>
<td>17%</td>
</tr>
<tr>
<td>MERU T.T.I</td>
<td>33%</td>
<td>7%</td>
<td>19%</td>
<td>60%</td>
</tr>
<tr>
<td>NKABUNE</td>
<td>14%</td>
<td>7%</td>
<td>3%</td>
<td>23%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>61%</td>
<td>14%</td>
<td>25%</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.3

With a sixty one (61%) per cent score fees remain the major current source of finance in the three institutions.

Production units and grants follow a distance second and third twenty five (25%) per cent and fourteen (14%) per cent respectively.

4.5 SUGGESTED ALTERNATIVE SOURCES OF FINANCE

Olembo (1992) pointed out that the traditional sources of finance have been overstretched. Therefore the only other option left is for the sector to look for alternative sources of finance by mobilizing new sources of funds (World bank, 1980).

The researcher wanted to explore the alternative sources of finance which could otherwise if exploited boost the financial position of T.T.I's.
Table 4.4 below reflects the respondents feeling on viable options to T.T.I's.

<table>
<thead>
<tr>
<th>ALTERNATIVES/ INSTITUTION</th>
<th>PART TIME CLASSES</th>
<th>START NEW COURSES</th>
<th>ENTREPRENEURIAL FACILITY</th>
<th>CONSULTANCY</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIHRUA</td>
<td>3%</td>
<td>6%</td>
<td>12%</td>
<td>0</td>
<td>21%</td>
</tr>
<tr>
<td>MERU T.T.I</td>
<td>18%</td>
<td>9%</td>
<td>24%</td>
<td>3%</td>
<td>54%</td>
</tr>
<tr>
<td>NKABUNE</td>
<td>9%</td>
<td>1%</td>
<td>15%</td>
<td>0</td>
<td>25%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30%</td>
<td>16%</td>
<td>51%</td>
<td>3%</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.4

Fifty one (51%) percent of the responses indicated that starting an entrepreneurial facility (that generates quick income) would boost the existing core income generating activities and initiate the entrepreneurial spirit in the institution.

At a response score of thirty (30%) per cent part time classes came second followed by a sixteen (16%) per cent from the starting of new courses.

Its only three (3%) per cent of the respondents that proposed consultancy as a serious alternative source of finance.

Meru Technical Training Institute where consultancy seems to attract an interest is due to its prime location just in Meru town.

### 4.6 HINDRANCES TO EXPLOITING ALTERNATIVE SOURCES OF FINANCE

Based on the findings of options to boost finance by T.T.I's the researcher intended to highlight bottlenecks to exploration of the alternative sources of funding. The
Table 4.5

<table>
<thead>
<tr>
<th>Hindrance</th>
<th>KIIRUA</th>
<th>MERU T.T.I</th>
<th>NKABUNE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Bureaucracy</td>
<td>0%</td>
<td>7%</td>
<td>1%</td>
<td>8%</td>
</tr>
<tr>
<td>Poor Planning</td>
<td>2%</td>
<td>11%</td>
<td>3%</td>
<td>8%</td>
</tr>
<tr>
<td>Inadequate Resources</td>
<td>3%</td>
<td>13%</td>
<td>7%</td>
<td>23%</td>
</tr>
<tr>
<td>Poor Motivation</td>
<td>1%</td>
<td>13%</td>
<td>5%</td>
<td>19%</td>
</tr>
<tr>
<td>Poor Marketing</td>
<td>5%</td>
<td>9%</td>
<td>3%</td>
<td>17%</td>
</tr>
<tr>
<td>Poor Supervision</td>
<td>0%</td>
<td>6%</td>
<td>5%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Table 4.5

Inadequate resources twenty three (23%) per cent, poor motivation nineteen (19%) per cent, poor marketing seventeen (17%) per cent and poor planning sixteen (16%) per cent are the greatest hindrances to the exploitation of alternative sources of finance. Poor supervision follows at eleven (11%) per cent while both bureaucracy eight (8%) per cent and environmental conditions six (6%) per cent comes second last and last respectively.

Nkabune T.T.I suffers a heavy fall due to its geographical location in a remote part away from town and cut off from major infrastructure and services.

4.7 MANAGEMENT OF INCOME GENERATING UNITS

Management is an important aspect for the success of any initiative. The researcher intended to find out the persons charged with the responsibility of managing the income generating units/initiatives in the T.T.I's. In this study the respondents were asked to indicate as to whether management of these units were under contracted managers, academic staff or support staff. Table 4.7 gives a summary of their responses
From the respondents fifty six (56%) per cent academic staff are the ones mostly used to manage income generating units. Support and non teaching staff come second as a source of managers at thirty (32%) per cent while contracted managers are rarely used at twelve (12%) per cent.

Kiirua Technical Training Institute is the organization that utilizes one source of management staff that is academic staff only.

4.8 PERCEIVED ROLE OF INSTITUTIONAL MANAGEMENT IN INCOME GENERATION

The researcher intended to find the perceived opinion of respondents as pertains to their role in management of the income generating units. Table 4.7 depicts their perceived opinions.

<table>
<thead>
<tr>
<th>Role perception/Institution</th>
<th>Very important</th>
<th>Important</th>
<th>Neutral</th>
<th>Less Important</th>
<th>Not important</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIIRUA</td>
<td>2%</td>
<td>14%</td>
<td>2%</td>
<td>0</td>
<td>2%</td>
<td>21%</td>
</tr>
<tr>
<td>MERU T.T.I</td>
<td>7%</td>
<td>35%</td>
<td>2%</td>
<td>7%</td>
<td>5%</td>
<td>56%</td>
</tr>
<tr>
<td>NKABUNE</td>
<td>0</td>
<td>9%</td>
<td>0</td>
<td>7%</td>
<td>7%</td>
<td>23%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>9%</td>
<td>58%</td>
<td>5%</td>
<td>14%</td>
<td>14%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Fifty eight (58%) per cent of the respondents perceived the role of institutional
management in income generation as being important. Fourteen (14%) per cent thought their role was less important and not important at all respectively. The role was perceived as very important by nine (9%) per cent of the respondents and five (5%) per cent did not want to commit themselves. Its only Meru Technical Institute respondents who treated the role as being very important.

4.9 SUGGESTED SOLUTIONS TO PROBLEMS OF RAISING FINANCE

In the light the varied hindrances raised by respondents the researcher wanted suggested solutions that could overcome the highlighted problems. Many and varied suggestions were listed.

Table 4.8 summarizes the suggested solutions as listed by the respondents.

<table>
<thead>
<tr>
<th>Suggested Solution Institution</th>
<th>Marketing</th>
<th>Staff Training</th>
<th>Autonomy</th>
<th>Staff Motivation</th>
<th>Planning</th>
<th>Supervision</th>
<th>Capital Sourcing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIIRUA</td>
<td>5%</td>
<td>0</td>
<td>1%</td>
<td>1%</td>
<td>3%</td>
<td>0</td>
<td>2%</td>
<td>11%</td>
</tr>
<tr>
<td>MERU T.T.I</td>
<td>9%</td>
<td>1%</td>
<td>10%</td>
<td>14%</td>
<td>19%</td>
<td>7%</td>
<td>5%</td>
<td>66%</td>
</tr>
<tr>
<td>NKABUNE</td>
<td>3%</td>
<td>2%</td>
<td>4%</td>
<td>4%</td>
<td>3%</td>
<td>4%</td>
<td>5%</td>
<td>23%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16%</td>
<td>3%</td>
<td>15%</td>
<td>19%</td>
<td>25%</td>
<td>11%</td>
<td>12%</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.8

Effective planning twenty five (25%) per cent was the most commonly suggested solution in order to solve the problem of raising finance. Appropriate staff motivation ranked second nineteen (19%) per cent followed by effective marketing strategies sixteen (16%) per cent, making income generating units autonomous came fourth fifteen (15%) per cent while twelve (12%) per cent recommended increased capital sourcing. More serious supervision should be implemented eleven (11%) per cent as well as taking staff...
for appropriate training three (3%) per cent. It is only Kiirua T. T. I. that did not recommend staff training as well as supervision.

4.10 CONTRIBUTION OF INCOME GENERATING UNITS

The researcher inquired from the respondents on the contribution of income generating units to the teaching learning process. The main objective of income generating units as popularly called by the respondents is to boost the income base of the institutions. Proper utilization of proceeds from such initiatives could greatly boost the teaching learning process.

Table 4.9 depicts the opinion of respondents as pertains the contribution of income generating units to the teaching learning process.

<table>
<thead>
<tr>
<th>Extent of Contribution</th>
<th>Great extent</th>
<th>Small Extent</th>
<th>Not Much</th>
<th>No Contribution</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KIIRUA</td>
<td>0</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
<td>15%</td>
</tr>
<tr>
<td>MERU T. T. I.</td>
<td>2%</td>
<td>25%</td>
<td>29%</td>
<td>5%</td>
<td>61%</td>
</tr>
<tr>
<td>NKABUNE</td>
<td>10%</td>
<td>7%</td>
<td>7%</td>
<td>0</td>
<td>24%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>12%</td>
<td>37%</td>
<td>41%</td>
<td>10%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4.9

Income generating units do not contribute much according to forty one (41%) per cent of the respondents while thirty seven (37%) per cent thought that contribution was only to a small extent.

Twelve (12%) per cent of respondents felt that income generating units contribution to a great extent but ten (10%) per cent were of the opinion that income generating unit had no contribution at all.
4.11 FUTURE OF INCOME GENERATING ACTIVITIES

The researcher sought the opinion of respondents as to the future of income generating units. The respondents were expected to state whether the future was promising or unpromising.

Table 4.10 below summarizes the findings of the study.

<table>
<thead>
<tr>
<th>View of Future Institution</th>
<th>Very Promising</th>
<th>Promising</th>
<th>Un Promising</th>
<th>Very Unpromising</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIIRUA</td>
<td>0</td>
<td>7%</td>
<td>7%</td>
<td>2.5%</td>
<td>17%</td>
</tr>
<tr>
<td>MERU T. T. I.</td>
<td>5%</td>
<td>39%</td>
<td>17%</td>
<td>0</td>
<td>61%</td>
</tr>
<tr>
<td>NKABUNE</td>
<td>0</td>
<td>9%</td>
<td>10%</td>
<td>2.5%</td>
<td>22%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>5%</td>
<td>56%</td>
<td>34%</td>
<td>5%</td>
<td></td>
</tr>
</tbody>
</table>

The future of income generating activities looks promising according to fifty six (56%) per cent of the respondents. However thirty four (34%) per cent view it as unpromising.

It is very promising according to five (5%) per cent of the respondents but very unpromising as given by another five (5%) per cent of the respondents.

It's only Meru T. T. I that finds the future very promising.
CHAPTER FIVE

5.0 SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

This chapter sought to summarize the entire project work and finally bring in the researchers’ conclusions and recommendations based on the findings.

5.2 SUMMARY

The study was intended to identify unexploited opportunities through which technical institutions in Meru central could boost their income hence enable them realize their full potential as centers of training and skill development.

The study was conducted in Meru central district and all the technical institutions were taken for the study namely:- Meru Technical Training Institute, Nkabune Technical and Kiirua Technical. The principals were taken as respondents and 30% of the teaching staff in each institution randomly sampled.

For the purpose of data collection the questionnaires and observation schedules were used. The researcher availed questionnaires to the respondents personally and collected them after a period of two weeks to enable them respond to each item as clearly as possible. The researcher who visited each institution severally personally administered the observation schedules; the observation schedules were often accompanied by informal interviewing. This was meant to supplement information got from
The researchers analyzed the information gathered from the field with a view of fulfilling the research objective and answering the research questions. The study revealed:

- Sixty two (62%) percent of respondents indicated that the existing facilities in their institutions were satisfactory.

- Lack of facilities in the institution affected the availability of teaching materials, resulting in time wastage and teacher frustration among others.

- The current sources of finance were revealed as student fees, grants and production units with students’ fees making the biggest proportion at sixty one (61%) per cent.

- Alternative sources of finance were suggested to be entrepreneurial facility, part-time classes, starting new courses and consultancy with fifty one (51%) per cent, thirty (30%) per cent, sixteen (16%) per cent, and three (3%) per cent respectively.

- Hindrances to exploiting alternative sources of finance were inadequate investment resources, poor motivation among staff, poor marketing and poor planning as major bottlenecks to exploitation of finance.

- Management of income generating units is mainly in the hands of academic staff and support staff with fifty six (56%) per cent and thirty two (32%) per cent respectively.

- Fifty eight percent of the respondents perceived their role as important in income
generation by their institutions.

- Effective planning, staff motivation, effective marketing and autonomy of income generation units were suggested as solutions to income generating problems (Hindrances).

- Forty five percent of respondents felt that income generating units have not made much contribution in the teaching learning process.

- Fifty six percent of the respondents felt that the future of income generating activities was promising.

5.3 CONCLUSIONS

- Existing facilities in most institutions are satisfactory.

- Inadequate teaching materials are a major hindrance in the pursuit of institutional objectives.

- The major current source of finance in the institutions is fees.

- The most preferred alternative source of finance is an entrepreneurial facility (quick business ventures).

- The greatest hindrance to the exploitation of alternative sources of finance is inadequacy of resources.

- Income generating units are usually managed by academic staff.

- The role of teachers in income generation is perceived as being important.

- Planning is the most optimal solution to the problems of raising
Income generating units do not contribute much in enhancing the quality of the teaching-learning process.

The future of income generating activities looks rather promising.

5.4 RECOMMENDATIONS

In view of the discussions in the proceeding chapters the following recommendations were offered:

- Although existing facilities are rather satisfactory, there is need to up-grade and enhance the existing ones as well as add on them.
- Institutions should ensure that adequate teaching materials are availed and provided in order to enhance overall student performance.
- Apart from fees, institutions should develop and exploit alternative sources of finance in order to effectively meet their budgetary requirements.
- Institutions should develop and nurture a strong entrepreneurial spirit in order to make entrepreneurial facilities alternative sources of finance a reality.
- Institutions should Marshall and manage enough resources in order to effectively exploit alternative sources of finance.
- Managers of income generating units should be well-trained contracted managers in order to remove excess work load on academic staff and adapt business management principles to ensure profitability.
- Apart from planning, institutions should effectively train and motivate project
staff, strengthen supervision as well as market aggressively.

- Income generating units should be strengthened and supported much more seriously so that they may contribute more in enhancing the quality of the teaching and learning process.

5.5 RECOMMENDATIONS FOR FURTHER RESEARCH

- A similar study should be carried out in a different geographical region, to investigate the economic activities unique to these areas and establish their viability.

- A study to establish the role of management in the efficient implementation of internal income generating activities in technical training institutions.

- A comparative study of how administrator’s in public/private institutions generate supplementary funds from income generating activities.
BIBLIOGRAPHY


Aringo, O (1988), The Standard, 29th April 1988, Nairobi

Aringo O (1988), The Kenya Times, 2nd September, Nairobi

Aringo, O (1989), Daily Nation October 10th, Nairobi

Best, J.N. & Kahn I. (1989), Research in Education New Delhi, Prentice of India Ltd


Daily Nation (2002), June 22nd pg. 16


Kamotho, J (1994), Sunday Nation, 23rd January


Rakotamalla, G (1974), Education on rural environment, Nairobi, East African Publishers


William, G (1992), Changing Patterns of Finance in Higher Education. Open University Press, Buckingham

World bank (1980), Education sector policy paper. Washington D.C


Dear respondent,

The respondent is a student in the above named institution pursuing masters Degree in Education Course. My research project is focusing on the themes of financing education and specifically looking at the endeavours Technical Institutions engage in to diversify their revenue base. Financing of education is a problem due to inadequate recourses not in Kenya but also in most other countries in the world. Thus, it is envisioned that the findings will be useful to not only technical institution in Meru but also to many other technical institution in Kenya and beyond.

Therefore you are kindly requested to go through the following questionnaires and provide the answers to the question to the best of your knowledge. You are assured that the information collected will be treated with utmost confidence and will be used only for research purposes.

Yours faithfully,

Muthaa M. George.
APPENDIX 2.

PRINCIPAL'S QUESTIONNAIRE ON INCOME GENERATING ACTIVITIES.

A. BACKGROUND INFORMATION

1. Name of institution_____________________________________.

2. How many courses are offered at your levels.

<table>
<thead>
<tr>
<th>Certificate</th>
<th>Diploma</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. What is the total student capacity of your institution in the following levels?

<table>
<thead>
<tr>
<th>Certificate</th>
<th>Diploma</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. How many students are in the institution currently?

Males _______________________________________.

Females _______________________________________.

Total _______________________________________.

5. How many students are in the institution?

Males _______________________________________.

Females _______________________________________.

Totals _______________________________________.

6. When was the institution started?

_________________________________________________________________

7. How many years have you served as a principal in this station? (Please tick appropriately)

☐ Less the 3-years ☐ 3 - 6 years

☐ 6 - 10 years ☐ Over 10 years

8. a. How many acres of land does your institution own?________________
b. How would you rate the amount of land your institution has in terms of adequacy? (Tick one)

☐ More than adequate  ☐ Adequate  ☐ Fairly adequate

☐ Not adequate  ☐ Quite inadequate

9. a. Does your institution have enough physical facilities?

☐ Yes  ☐ No

b. If no in the (a) above list the facilities lacking?

1. __________________________

2. __________________________

3. __________________________

4. __________________________

5. __________________________

c. Why are the facilities above lacking?

1. __________________________

2. __________________________

3. __________________________

10. a. Does the lack of facilities hinder the smooth running of your academic programs?

☐ Yes  ☐ No

b. If yes, explain? __________________________

11. How would you rate the state of your training equipment?

Modern  ☐ Good  ☐ Neutral  ☐

Bad  ☐ Obsolete  ☐

12. a. If in the question (11) above you rated the state of your training equipment as either bad or obsolete, does this erode the effectiveness of your training programmes?

☐ Yes  ☐ No
b. If yes, briefly explain:

13. a. Is there a need to modernize your training equipment?
   [ ] Yes  [ ] No

b. If yes, how urgent is the need?
   [ ] Very urgent  [ ] Urgent  [ ] Neutral
   [ ] Not very urgent  [ ] Not urgent

C. SOURCES OF FINANCE

14. What is the financial position of your institution? (Please tick)
   [ ] Very good  [ ] Good  [ ] Satisfactory
   [ ] Bad  [ ] Very bad

15. List the main sources of income for your institution
   1. 
   2. 
   3. 
   4. 
   5. 
   6. 

16. If the sources of funds for your institution are inadequate how has this hindered the smooth running of education programmes? Briefly explain

17. What ways could be adapted by technical institutions to raise additional funds for the smooth and efficient running of their programmes?
D. **ECONOMIC ACTIVITIES**

18. a. Has your institution set up any internal income generating activities?
   - Yes
   - No

   b. If yes, mention the activities
   1. 
   2. 
   3. 
   4. 
   5. 
   6. 

19. What was the average annual income generated from these internal income generating activities in the last financial year?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Total annual Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
</tbody>
</table>

20. a. Does your institution have land which is put in economic use?
   - Yes
   - No

   b. If yes, please list down the activities and the annual income realized from each?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Income Kshs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
</tbody>
</table>

   Total
   

21. How much rental income did the institute net in the last financial year?

   - Institution hostels: Kshs
   - Institution halls: Kshs
Institution houses
Buses (vehicles)
Others (specify)

1.
2.
3.

22. What was the total income earned from all income-generating activities in the last financial year?
Amount in Kshs.

23. What percentage of your total institutional expenditure in the last financial year was raised from income generating activities? (Please tick)

- 0-10%
- 10-20%
- 20-30%
- 30-40%
- Over 40%

24. To what extent has income from income generating activities enhanced the quality of teaching learning in your institution? (Please tick)

- Great extent
- Small extent
- Neutral
- Not much
- No contribution

E. MANAGEMENT

25.a. In your opinion what is the assessment of the current management structure of the income generating units? (Please tick appropriately)

- Very good
- Good
- Satisfactory
- Bad
- Very bad

b. Briefly explain your answer above:

26. Who are charged with management of these income-generating units?
   a. Contracted Manager
   b. Members of staff
   c. Others (Specify)
b. For your answer above list the advantages and disadvantages

ADVANTAGES

1. 
2. 
3. 

DISADVANTAGES

1. 
2. 
3. 

d. How often are accounting records for these units audited?

☐ Monthly  ☐ Twice a year
☐ Annually  ☐ Not at all

28. a. What are the main problems hindering the success of income generating units?

1. 
2. 
3. 
4. 
5. 

(b) Suggest possible remedies if any:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

29. a. What other income generating activities does your institution have potential to establish?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

(b) Give reasons why you have so far not exploited the potential activities listed above?

________________________________________________________________________
________________________________________________________________________
30. What is your view on the future of income generating activities in your institution?
(Please tick)

[ ] Very promising
[ ] Promising
[ ] Neutral

[ ] Unpromising
[ ] Very promising

31. What recommendations would you make towards improvement of the income generating activities in technical institutions?

________________________________________________________________________

________________________________________________________________________
TEACHERS QUESTIONNAIRE ON INCOME GENERATING ACTIVITIES:

This questionnaire is for educational purpose only. The information provided will be treated with confidentiality. Provide answers to each question in the spaces provided.

A. BACKGROUND INFORMATION

1. Name of the institution: ____________________________________________

2. How long have you served in this Institution? _______________________ Years

3.a. What position do you hold in your institution? (Class teacher, Head of Department etc) ____________________________________________

   b. For how long have you held that position? _______________________ Years.

B. PHYSICAL FACILITIES

4.a. How would you rate the educational facilities that exist in your institution? (Please tick)

   [ ] Highly satisfactory  [ ] Satisfactory  [ ] Neutral

   [ ] Unsatisfactory  [ ] Highly unsatisfactory

B. If unsatisfactory in (4 (a) above) what are the main causes?

1.  __________________________________________________________________________

2.  __________________________________________________________________________

3.  __________________________________________________________________________

4.  __________________________________________________________________________

5. Which facilities does your school lack?

1.  __________________________________________________________________________

6. How does the lack of these facilities hamper the smooth running of your institution?

1.  __________________________________________________________________________

2.  __________________________________________________________________________

C. SOURCES OF FINANCE

7. Name the main source of finance for your institution?  ___________________
8.a. Are the current sources of finance for your institution sufficient for the smooth running of education programmes?

☐ Yes  ☐ No

b. If the sources of funds for your school are insufficient, how has this hindered the smooth running of programmes in your school? (Briefly explain)

9. What do you think technical institutions should do to raise enough funds for the smooth running of their programmes? (Briefly explain)

D. ECONOMIC ACTIVITIES

10.a. How do you perceive your role with regard to income generation in your institution?

☐ Very important  ☐ Important  ☐ Neutral

☐ Less important  ☐ Not important

11.a. Has your institution set up any internal income generating activities

☐ Yes  ☐ No

12.a. Does your institution have land which it exploits commercially?

☐ Yes  ☐ No

b. If yes, please list down the commercial activities your institution is engaged in?

1.

2.

3.

13.a. To what extent has income from the income generating activities enhanced the quality of the teaching learning process in your institution? (Tick appropriately)

☐ Great extent  ☐ Small extent  ☐ Neutral

☐ Not much  ☐ No extent
b. Briefly explain your answer

E. MANAGEMENT

14. How are the income generating units managed. (Tick appropriately)
   - Contracted managers
   - Members of academic staff
   - Others (specify)

15. a. What is your assessment of the current management structure of income generation units?
   - Highly satisfactory
   - Satisfactory
   - Neutral
   - Unsatisfactory
   - Highly satisfactory

b. Why do you rate them so? Give reasons

16. a. What are the main problems hindering the success of income generating units?
   1. 
   2. 
   3. 
   4. 

b. For each the above problems suggest a possible remedy

17. a. What other unexploited income-generating activities does your institution have?

b. Give reasons why you think the activities in (a) above have not been exploited.
18. What is your view on future income generating activities in your institution? (please tick)

☐ Very promising  ☐ Promising  ☐ Neutral

☐ Unpromising  ☐ Very unpromising

19. What suggestions would you make towards improvement of the income generating activities in Technical Institution?

------------------------------------------------------------------------------------------------------------------------------------------

------------------------------------------------------------------------------------------------------------------------------------------

------------------------------------------------------------------------------------------------------------------------------------------
APPENDIX 4

OBSERVATION SCHEDULE

1. Economic activities
   1.
   2.
   3.
   4.
   5.
   6.

2. FACILITIES
   A. Classrooms
      i. Very adequate [ ]         Adequate [ ]      Inadequate [ ]
      ii. Crowded [ ]              Not crowded [ ]   Spacious [ ]

   B. LIBRARY
      i. Spacious [ ]              Not spacious [ ]        Neutral [ ]
         Fairly crowded [ ]         Crowded [ ]
      ii. Well equipped [ ]         Poorly equipped [ ]

WORKSHOP (specify)
   (i) 1. Wood [ ]          2. Metal [ ]         3. Masonry [ ]
    7. Others (specify)
   (ii) Adequacy of each (specify)
   (iii) Condition of each (specify)
SPECIAL ROOMS (tick appropriately)

1. Computer lab
2. Typing room
3. Conference hall
4. Learning resource centre
5. Others (specify)

VEHICLES

Buses
Lorries
Vans
Motorcycles
Other (specify)

3. (a) Hindrances to success of currently established income generating activities

(b) Suggested solutions to (a) above

4. Potential income generating activities.

1.
2.
3.
4.
## APPENDIX 5

### EXPENDITURE BUDGET

<table>
<thead>
<tr>
<th>Type of Expenditure</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typing and printing services</td>
<td>9,500</td>
</tr>
<tr>
<td>Binding</td>
<td>1,500</td>
</tr>
<tr>
<td>Traveling</td>
<td>6,500</td>
</tr>
<tr>
<td>Miscellaneous expenditure</td>
<td>10,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>27,500</strong></td>
</tr>
</tbody>
</table>
APPENDIX 6

STUDY WORK PLAN

<table>
<thead>
<tr>
<th>MONTH</th>
<th>ACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td></td>
</tr>
<tr>
<td>APRIL</td>
<td>Problem identification</td>
</tr>
<tr>
<td>MAY-JULY</td>
<td>Draft proposal</td>
</tr>
<tr>
<td>AUGUST</td>
<td>Submission of draft</td>
</tr>
<tr>
<td></td>
<td>Proposal to supervisor</td>
</tr>
<tr>
<td>SEPTEMBER</td>
<td>Piloting</td>
</tr>
<tr>
<td>OCTOBER</td>
<td>Data collection</td>
</tr>
<tr>
<td>NOVEMBER</td>
<td>Data analysis</td>
</tr>
<tr>
<td>JANUARY-JULY 2004</td>
<td>Final draft</td>
</tr>
<tr>
<td>AUGUST 2004</td>
<td>Submission of project report</td>
</tr>
</tbody>
</table>