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## **Phase II**

**Synthesis of main findings from two case studies carried  
out in Ghana and Zambia on private technical and  
vocational education and training (TVET)**

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## Acronyms

### Ghana

ASHR	-	Ashanti Region
BAR	-	Brong Ahafo Region
B & C	-	Blocklaying and Concreting
BECE	-	Basic Education Certificate Examination
CAT	-	Catering
C & G	-	City and Guilds
CIDA	-	Canadian International Agency
C & J	-	Carpentry and Joinery
CR	-	Central Region
CRDD	-	Curriculum and Research Division
CTC	-	Construction Technician Certificate
D	-	Dressmaking
D & T	-	Dressmaking & Tailoring
EET	-	Electrical Engineering Technician
ER	-	Eastern Region
EST	-	Entrepreneurial Skills Training
EU	-	European Union
FTC	-	Full Technological Certificate
GAR	-	Greater Accra Region
GCE	-	General Certificate of Education
GES	-	Ghana Education Service
GNAPS	-	Ghana National Association of Private Schools
GNP	-	Gross National Product
GRATIS	-	Ghana Regional Appropriate Technology Industrial Service
HD	-	Hairdressing
HND	-	Higher National Diploma
ICCES	-	Integrated Community Centre for Employable Skills
IIEP	-	International Institute for Educational Planning
ITTU	-	Intermediate Technology Transfer Unit
JSS	-	Junior Secondary School
KEEA	-	Komenda Edina-Eguafo Assembly
KVIP	-	Kumasi Ventilated Improved Pit
MEST	-	Ministry of Environment, Science and Technology
MIS	-	Management Information Systems
MLGCD	-	Ministry of Local Government and Community Development
MMDE	-	Ministry of Manpower Development and Employment
MOE	-	Ministry of Education
MVM	-	Motor Vehicle Mechanic
MVT	-	Motor Vehicle Technician
MYS	-	Ministry of Youth and Sports
NABPTEX	-	National Board for Professional Technical Examinations
NACVET	-	National Co-ordinating Committee for Technical and Vocational Education and Training
NBSSI	-	National Board for Small Skill Industries
NCC	-	National Craftsman Certificate

NGO	-	Non-Governmental Organization
NVTI	-	National Vocational Training Institute
NR	-	Northern Region
OIC	-	Opportunity Industrialization Centre
OTD	-	Ordinary Technician Diploma
PCG	-	Presbyterian Church of Ghana
PNDC	-	Provisonal National Defence Council
PTR	-	Pupil/Teacher Ratio
RSA	-	Royal Society of Arts
SAEMA	-	Shama Ashanta East Metropolitan Assembly
SADC	-	Southern African Development Community
SRIMPR	-	Statistics, Research, Information Management and Public Relations Division
SSCE	-	Secondary School Certificate Examination
SSS	-	Senior Secondary School
STR	-	Student-Teacher Ratio
TEVETA	-	Technical Education Vocational and Entrepreneurship Training Authority
TI	-	Training Institute
TSU	-	Tracer Studies Unit
TVET	-	Technical and Vocational Education and Training
UNDP	-	United Nations Development Programme
UER	-	Upper West Region
UNESCO	-	United Nations Educational, Scientific and Cultural Organization
VR	-	Volta Region
VSP	-	Vocational Skills Project
WAEC	-	West African Examination Council
WB	-	World Bank
WR	-	Western Region
WTI	-	Women Training Institute

## **Zambia**

ACCA	-	Association of Certified and Chartered Accountants
ECZ	-	Examinations Council of Zambia
IIEP	-	International Institute for Educational Planning
IMIS	-	Institute of Management Information Systems
LCCI	-	London Chamber of Commerce and Industry
MSTVT	-	Ministry of Science Technology and Vocational Training
SADC	-	Southern Africa Development Community
TEVETA	-	Technical Education Vocational and Entrepreneurship Training Authority
TVET	-	Technical and Vocational Education and Training
TVTC	-	Technical and Vocational Teachers College
UNESCO	-	United Nations Educational, Scientific and Cultural Organization
VEET	-	Vocational Education and Entrepreneurship Training
ZICA	-	Zambia Institute of Certified Accountants

## Definitions

The meanings of the definitions used are taken from the World Bank and UNESCO sources.

*Technical and Vocational Education and Training (TVET)* is a comprehensive term which covers school-based as well as out-of-school education and training programmes, formal or non-formal, designed to prepare individuals with competencies for specific occupations or productive activities in the various sectors of social and economic life. TVET involves the study of related sciences and technologies, relevant general knowledge and the acquisition of practical employable skills.

*Technical Education* refers to education and training aimed at preparing individuals for middle-level positions, such as technicians, technologists, middle-level management personnel. Technical education normally takes place at the upper secondary and polytechnic levels. The study of related theory, science and technology involved in technical education is higher than that required for vocational education.

*Vocational Education* refers to the preparation of skilled personnel for positions below the technician level or its equivalent. The curriculum includes some general education and related theory, but with emphasis on skill acquisition.

*Vocational Training* aims at developing particular skills or a narrower range of skills for employment in a particular occupation. Although it may not involve any general education, related science or technology, it assumes a basic education in literacy, numeracy and writing, while emphasizing practical training.

*Skills Development* means the acquisition of the practical competencies, know-how and attitudes necessary to perform a trade or occupation in the labour market.

The above definitions suggest a compartmentalization of qualifications and skills. But, the adequacy of any national technical and vocational education and training system requires a flexible transition and articulation between various lower and higher level institutions and between basic and higher skills or complex and/or specialized skills. The *raison d'être* of any TVET system is to produce people with competencies required for productive activities in various sectors of the economy.

The term 'private education and training' is usually applied to those institutions that are not operated by a public authority, but rather controlled and managed by a private body or have a governing board most of whose members are not selected by a public agency or elected by public vote. More specifically for this project, the terms 'non-public' (or non-government) would refer collectively to 'private' training.

Within that, proprietary training is usually called 'for-profit'. And 'non-profit' types are made up of NGOs, religious, community, foundations and other institutions.

However nationally used definitions may sometimes differ.



## Executive Summary

The survey sought to give the answers to the following questions: ‘What is the experience with private service provisions in technical and vocational education and training (TVET) in Anglophone sub-Saharan Africa?’ ‘To what extent have private training markets developed in the region?’ ‘What is the size and profile of private post-basic education and training?’ ‘What are the strengths, weaknesses and constraints?’ ‘What skills do private suppliers produce?’ ‘How competitive are private training providers and how responsive to market demands?’ ‘How does the cost-effectiveness of private and public systems compare to one another?’ ‘What policy challenges in terms of regulations and incentives would improve and extend service provision?’

In *Ghana*, training and acquisition of skills in both the formal and informal sectors has very little Government support as compared to the regular education system. Usually support is limited to some initial investment in buildings and equipment, and teachers salaries. The private sector and especially the non-governmental organizations (NGOs), like the Churches, play a formidable role in the provision of TVET in Ghana.

Meanwhile, there is very little comprehensive or reliable data on technical and vocational education and training and its private providers in the country. This indicates a lack of attention on the part of past governments to TVET.

The survey has established the following facts - the majority of private TVET institutions are owned by religious bodies and individual proprietors - both accounting for about 33 per cent of all private schools observed. The proportion between for-profit and non-profit institutions in the survey was approximately 50:50. Ninety per cent of the institutions covered are registered officially with an authority or agency. The majority of them are registered with the Ghana Education Service.

All of the institutions run three-year programmes. However, there are a few institutions that run short courses of between three to six months. These courses are offered in areas such as batik and tie and dye, weaving, soap making, oil extraction, etc.

Regarding minimum entry requirements, all the institutions stated that junior secondary school (JSS) education is sufficient for admission. With regard to the curriculum, 50 per cent of the institutions use the NVTI curriculum. Most of the institutions grant admission through competitive written tests.

Concerning enrolment, there has been a 5 per cent increase annually over the period between the time of establishment and the time of the survey. Out of the total student population, females constitute about 76 per cent. Most of the institutions offer girls female-oriented trades/programmes like dressmaking, hairdressing, catering, etc.

The survey has shown that only an insignificant number of trainees dropped out of school and 80 per cent of those did so because they were faced with financial or economic problems resulting in the inability to pay fees.

As reported in the course of sampling, programmes are offered in schools where teacher requirements and qualifications are lacking. Most of the instructional staff members in practice have very low qualifications.

The survey has revealed that STR is approximately 28 students (trainees) to one teacher (instructor), a ratio of 28:1. This is above the national norm of 20:1 and may have implications such as inadequate transmission of knowledge and disciplinary problems.

Some instructors are compelled to teach programmes they are not familiar with because the proprietors are not in a position to employ additional staff due to cost implications.

Generally, salaries of instructors in private institutions are far lower than salaries of their counterparts in public schools and may represent from 30 to 70 per cent of the salaries in public institutions. Regular monthly payment of salaries is also not guaranteed, especially in schools where salaries depend solely on the collection of fees. Delay in the payment of salaries has become an established phenomenon in some institutions.

Teaching hours per week in schools vary from programme to programme and from theory to practical studies. However, the established workload for teachers is 30 hours per week.

The survey has also revealed the wide variations of fees levied by programmes. Of course, fees would naturally vary by type of programme offered, prestige of the institution and location of the institution, but in the case of Ghana, the variance is so vast that it cannot be explained solely by these factors.

The Government appears to have no control over students' fees in private technical and vocational schools. However, Government control over fees would discourage the establishment and expansion of private training provision. In terms of equity it would be a better policy if the Government financed the training of people from low -income groups. In the Ghanaian context the population tends to view the regulatory role of the Government in purely interventionist terms. The controlling function is administratively easier than a more complicated function of subsidizing training of children from poor families.

Even though physical facilities, machinery, equipment and hand tools play an important role in quality training, these facilities are inadequate and obsolete in some institutions. This, therefore, has a very negative impact on the performance of both the instructor and the trainee.

A number of constraints hindering effective performance in training have been identified. They include the lack of capital for expansion, lack of qualified teachers, inadequate physical facilities, high cost of consumable materials, obsolete machinery, poor supervision and control of operations of the schools, poor remuneration for staff, irregular payment of fees, high taxes and lack of guidance and counselling.

The important points made during the survey include:

- fragmentation of the regulatory environment (i.e. a great number of authorities registering private schools);
- lack of overall co-ordination by the NACVET;
- unclear legal framework for private TVET;
- dizzying array of examinations;
- strengths, constraints and weaknesses of the system. If the main strength of the system is apprenticeship, the key weakness is a lack of comprehensive policy for TVET development;
- comparative examination results (they were in favour of public institutions but the difference with the private institutions was not dramatic);
- concentration of female enrolments in traditional trades;
- critical obstacles to expansion – low and unattractive teacher salaries, relatively high fees and inadequate teaching/learning conditions.

In *Zambia*, an analysis of the Technical Education Vocational and Entrepreneurship Training Authority (TEVETA) register of TVET institutions for the year 2001, by ownership and province, shows that there are more non-government institutions in the Lusaka and Copperbelt provinces than the remaining provinces combined. The distribution of 166 institutions registered by TEVETA, by type of ownership, is as follows:

a) Public:	31 or 18%
b) Community	24 or 14%
c) Church/NGOs	30 or 18%
d) Private for-profit	81 or 49%
(including individual proprietors, company and trust)	

The present study of private TVET institutions confirmed this. For-profit TVET institutions (individual proprietors, companies and trusts) are growing faster than non-profit ones (religious, NGOs, community). The distribution of enrolment in the sample private institutions by ownership showed that the private for profit institutions accounted for 93 per cent of the total while Church, NGO and community owned institutions accounted for only 1 per cent and 6 per cent respectively.

The TEVETA conducts an annual evaluation of training institutions to ensure that minimum standards are met. An analysis of the grading of institutions showed that 67 per cent of the total registered institutions were in Grade 1, which implies that most institutions meet the minimum standards. It was also discovered that institutions owned by the Church and Trusts satisfy the standards more than any other institutions.

Geographically, most private TVET are concentrated in Lusaka and Copperbelt because of the dense economic and industrial activities there. Out of the 20 respondents, 12 stated that the institutions were established after 1990 and 8 were established before 1990. This is a significant positive indicator of the liberalization policy undertaken by the Government in 1992. Of the 12 that were established after 1990, 10 institutions were owned by individuals, 1 was owned by a joint venture and 1 by a company.

Most private providers admit mainly those who fail to gain access to public institutions. An analysis of drop-out, not due to examinations for each institution and by ownership, was carried out and it was found that drop out was mainly due to a lack of money to pay for fees.

A total of 13 (65 per cent) of the respondents adequately answered the question on budgeted income and expenditure thereby providing the necessary information. The main source of income reported was from fees, with only one institution having received a grant from the Government. Most institutions were reluctant to give adequate information in this part of the questionnaire. The reasons given were varied but those that were contacted stated that such information was 'secret' and therefore they were not allowed to give it.

Compared with public institutions, the unit costs in private institutions were found to be slightly lower in all the institutions that provided data on their income and expenditure. In public institutions, the unit cost was K340,772 which represents about 35 per cent of GDP per capita while the unit costs in private institutions was K316,148 which is about 32 per cent of GDP per capita for the year 2000.

Most institutions do not have a system in place to follow up students after graduation. They indicated that the main problems faced by students in finding employment were that employers looked for people with experience rather than new graduates.

Most respondents stated that the premises and equipment were in fair condition. All of those who responded to the question on 'what problems they face' stated that the main problems were financial in nature.

The institutions were in unison in proposing that Government should assist private institutions through TEVETA in terms of training or by giving scholarships to students for them to afford the fees.

On the opinion about private TVET in Zambia, 11 of the 19 that responded stated that they would like to see further development of private TVET, nine stated that private TVET is experiencing lack of means. On the complementarities of private TVET to public TVET, of the 10 out of 20 who responded they considered that private TVET was complementary.

The analysis on the comparative cost-effectiveness of private versus public TVET is difficult to make and would require additional and specific investigations. However, some major concerns were identified in this study: If for Ghana an improved legislation fostering better co-ordination is paramount, for Zambia, applying the TVET policy in practice, it remains problematic. TEVETA in Zambia is only two years old and has yet to display its regulatory role.

## **General introduction**

### **Background**

The following synthesis was prepared within the World Bank project on private technical and vocational education and training (TVET), and implemented by the IIEP. The IIEP continued the work on TVET in sub-Saharan Africa which explores individual country cases, highlights and assesses issues, draws together international and regional experience that will form a knowledge base for policy dialogue.

The overall questions that needed to be answered are: ‘What advice should the World Bank give to countries on TVET?’; ‘What does recent experience in Africa and elsewhere suggest is best practice under a variety of circumstances?’ The synthesis on private education and training in Ghana and Zambia described below is a part of the overall review. The synthesis is based on the analysis of two case studies, plus inputs received from institutions directly through interviews and meetings during the missions to both countries.

The IIEP has produced a first-phase Report on private technical and vocational education, focusing on a literature review and in-depth case studies of private training in Senegal and Mali. That was extended to cover two other countries, particularly in Anglophone Africa.

The studies and the synthesis were prepared in conformity with the terms of reference agreed between the World Bank and the IIEP.

### **Purpose of the study**

The overall purpose of the Phase II study is to ensure good quality policy advice and investments by countries, the World Bank and other donors on the subject of TVET including private provision, in sub-Saharan Africa.

### **Objectives of the study**

To extend the earlier study and complete a report on private provision of TVET in other countries (Anglophone) that identifies trends and issues, synthesizes the best available documentation and offers practical advice on the key issues, common pitfalls to avoid and the best approaches under conditions prevailing in sub-Saharan Africa.

### **Targets of the study**

The main targets of the study are (1) policy-makers in sub-Saharan Africa, (2) World Bank staff and (3) other donor agencies.



## **I. Design and implementation of the study**

### **1. Scope of the study**

The definition of ‘private’ education and training includes all types of non-public provision both non-profit (e.g. NGOs and religious institutions) and for-profit (proprietary companies). ‘Post-basic’ education and training means general education and occupational training provided after junior secondary (or approximately Grade 8 or 9) excluding universities and teacher training.

The review looked at the present scope of provision of education and training by private providers and private training markets, and identified constraints such as cost-effectiveness and limitations compared with public sector provision. Two countries were selected to follow the research done before in Francophone Africa. Ghana and Zambia provide contrasting cases for Anglophone Africa. Ghana has a well-established system of private TVET with some experience of its analysis. For Zambia where TVET provision was going through reforms and information on private TVET provision was scanty, the study was a serious endeavour for the government authorities involved.

The two countries have comparable levels of economic development – in each of them GNP per capita was slightly less than US\$400 in the recent years. Although their economic policies were very different in the past, more converging trends can be observed at present, in particular regarding obstacles towards development of private TVET.

Specific attention was given to the analysis of data on costs of private education and, to the extent possible, to comparisons of such data with those of the public sector-provided training. It was not possible to directly and accurately compare cost-effectiveness of private and public institutions, in particular, through performance of graduates in final examinations, especially in Zambia. However, views of private institutions on their comparisons with public ones, in terms of staff salaries and unit costs per student, were collected and examined.

The key research questions were as follows. ‘What is the experience with private service provision in Anglophone sub-Saharan Africa?’ ‘To what extent have private training markets developed in the region?’ ‘What is the size and profile of private post-basic education and training?’ ‘What are its strengths, weaknesses and constraints?’ ‘What skills do private suppliers produce?’ ‘How competitive are private training providers and how responsive are they to market demands?’ ‘How does the cost-effectiveness of private and public systems compare?’ ‘What policy challenges in terms of regulations and incentives would enable better and wider service provision?’

The study on private TVET in Ghana and Zambia was planned to be based on a survey of a sample of 30 institutions in each country. Specifically, both Teams were expected to:

- follow the guidelines in “A Handbook on Private Sector Participation in Education” (EdInvest and World Bank, 2002) for data collection and analysis. Both Teams made maximum possible use of it;
- use the ‘James 1991 - Forms of Regulation’ to present summary tables for each country case (and across the cases) on the types of regulation applied to private

training providers. Surprisingly it became less difficult in Zambia where legislation is recent and clear, but its enforcement is only beginning with the establishment of TEVETA in 2000. It was practically impossible in Ghana as legislation is old, fragmented and contradictory as too many governments and other bodies have a right to register private institutions;

- collect examples of laws and regulations, evaluate them and highlight good examples that could provide guidance elsewhere. This was done in the light of the above;
- develop benchmark statistics, e.g. documenting the number of steps and time required by private training providers to comply with various regulations. This was done subject to the problem of compliance in both cases;
- define what 'levelling the playing field' (or public school policy that is fair to private training providers) means in terms of policy for public institutions. This largely remains a question mark for both cases as private TVET providers are not in the focus of politicians and have to rely on their own resources, initiative and knowledge of demand. What would it take for private institutions to be able to compete with public institutions on an equal footing? Here the establishment of management boards in Zambia could be instructive as the public institutions will have to start charging fees approaching full costs.
- provide concise summaries of the main characteristics and findings of the case studies. To the extent possible, this is formulated in the main findings.

## **2. Implementation schedule**

The studies were implemented during the period between March and September 2002. It included the following main stages:

- mobilization through establishing initial contacts and national team formation;
- development of questionnaire and its testing;
- training of interviewers;
- collection of background information on legislation, historical record, general statistics, etc.
- field data collection;
- data verification, aggregation and analysis;
- drafting case studies and synthesis;
- reviewing case studies synthesis;
- finalizing case studies taking into account comments by reviewers.

Two missions were made by IIEP to each country. The first one was necessary to launch the study (forming the Teams, developing the questionnaire, agreeing on the list of institutions for the survey etc.). The second was important to ensure that the data was received, processed and analyzed.

In both countries some constraints and delays occurred, particularly in Zambia, for the reasons explained below.

### **3. Brief record of project implementation in Ghana**

Prior to the mission, the contacts were identified, and the Team formed, based on staff from the National Co-ordinating Committee for Technical and Vocational Education and Training (NACVET), and the Ministry of Education (MOE) .

The composition of the Team seemed optimal as NACVET is *de facto* ministry of TVET. Due to its experience with similar surveys it already had all the tools and leverage required to accomplish the task.

Furthermore, Ghana has a longer tradition of private TVET, and the information channels between NACVET and private institutions are relatively well established.

The first mission by IIEP (April 2002) concerned developing the questionnaire and its main orientations, size of the survey and its geographical distribution; identification of general information required and identification of elements for comparing public and private institutions. As a result, 30 institutions in three regions were identified and six interviewers were trained and dispatched.

The second mission (August 2002) showed that the Team was behind schedule, as some institutions discontinued or merged and had to be replaced by others. A practical constraint was the distance to be covered to certain institutions. Another problem was that the Team enthusiastically developed too many variables with the result that the data processing and aggregation took too much time.

However, the team managed to obtain totally 30 detailed and representative responses to produce the case study.

### **4. Brief record of project implementation in Zambia**

The situation in Zambia contrasted to that in Ghana. The country's socialist past shaped the present generation of bureaucrats, for whom the state control over TVET is a way of life, and private TVET are often viewed as profit-making businesses. Therefore, the relationships between the two are either non-existent or difficult.

The study was implemented by the Ministry of Science Technology and Vocational Training (MSTVT).

The survey was launched in May 2002 in the course of the first mission by IIEP following the same pattern as in Ghana – by developing a questionnaire and its main orientations, size of the survey and its geographical distribution; identification of general information required; identification of elements for comparing public and private institutions. Thirty institutions in three regions, Lusaka, Copperbelt and Southern – the most representative and accessible – were identified.

The implementation was characterized by shortfalls and delays due to local institutional conditions. Out of the 30 institutions identified for the survey only 20 responses were received from the regions of Lusaka and Copperbelt. The Southern region was not visited.

Operators of private TVET institutions do not trust the government bureaucracy as they get no support from it. They know that the ministry has no real means of control over them except at the stage of registration. Many are unwilling to share information, particularly on financial management.

By early September, it was clear that more responses could not be expected from institutions. The Team had to complete data entry and statistical analysis with the elements available.

## **5. Developing the questionnaire**

The questionnaire was initially developed by the IIEP in Paris on the basis of previous questionnaires used during Phase I in Senegal and Mali. Naturally, it was adapted to the systems of TVET in Anglophone Africa, taking into account the specifics of learning cycles, grades, examinations, degrees, etc.

Every aspect of the questionnaire was discussed in detail, scrutinized and eventually finalized to address all concerns of the terms of reference.

## **6. Background material**

Both Teams had access to studies made earlier on this topic in other countries, in particular by the World Bank.

As mentioned above, in Zambia, the MSTVT had no previous experience in such surveys. Only two relatively similar studies were made before but either by private companies or with a rather different scope.

These two studies, which are worth attention, are:

- (a) Audit of Training Institutions, Ministry of Science Technology and Vocational Training, March 1996.
- (b) Analysis of Private Training Provision, Ministry of Science Technology and Vocational Training, June 2000.

The main findings of the Audit of Training Institutions conducted in 1996 were as follows:

- (a) Of the 231 institutions surveyed, the Church owned 19.5 per cent; NGOs 7.4 per cent; industry (in-house) 7.8 per cent; community 4.3 per cent; trusts 0.4 per cent; co-operatives 0.4 per cent; others (for-profit) 21.2 per cent; the district councils 6.5 per cent and government institutions only 32.9 per cent (Audit of Institutions Report).
- (b) In terms of adequacy of existing facilities, the report states that out of a total of 67 respondents, Church and individually owned institutions reported the highest number of adequate workshop facilities and training area/room availability. The private institutions, however, reported inadequate training rooms, libraries and furniture.

- (c) The survey found that private institutions used up more time and space compared to public institutions.
- (d) The survey also found that over 50 per cent of institutions owned by individuals and government had no maintenance programme. However, institutions owned by companies had the highest availability of an effective maintenance system.

The main findings of survey conducted in 2000 on private training provision were as follows:

- (a) The report found that most private providers admit mainly those students who fail to gain access to government institutions
- (b) Lack of seed capital, poor access to credit and generally poor economic conditions were identified as some of the most serious constraints for establishing and operating a private training centre;
- (c) The report also established that many private training institutions do not have libraries and access to textbooks was found to be generally poor.

The National Co-ordinating Committee for Technical and Vocational Education and Training (NACVET), Ghana, conducted a survey on private providers of Technical and Vocational Education and Training (TVET) in Ghana in October 2001, focused more on curriculum and infrastructure. The project benefited from the report of the above-stated survey for the present task.

In addition to this, existing literature and other documents from private technical and vocational schools, Technical/Vocational Education Division of Ghana Education Service (GES), and the report of the study for development of a Master Plan to strengthen technical education in Ghana, contributed towards the enrichment of the survey report.

## **7. Sample size and sampling method**

The decisions on the sample size were taken during the first missions of consultant in April-May 2002. As indicated, 30 institutions were selected in each country, from three regions in Zambia and four regions in Ghana, for the survey. The choice of regions was discussed thoroughly to represent the profiles of the prevailing majority of private TVET institutions. Clearly, the capital cities and industrial regions were selected for this reason, as well as individual institutions within them.

The key criteria were a large concentration of private TVET in particular locations (capital city, industrial regions), representative profile, accessibility and costs of survey.

In Ghana, as well as in Zambia, the 30 institutions selected were sufficient in number to represent the private TVET sector within the whole country profile. Nevertheless, both Teams experienced major setbacks in getting responses. In overall terms, much more in-depth information was received from Ghana than from Zambia.

## **8. Training of interviewers**

A one-day training workshop was organized by IIEP at the NACVET Secretariat in Accra for five field staff. The participants were carefully briefed on the questionnaire and each item was clarified and explained fully. Copies of the questionnaire were distributed to field staff at the close of the workshop and fieldwork commenced.

## **9. Data processing and report writing**

This activity consisted of development of a software application in SPSS, vetting and coding of the completed questionnaire, data entry and tabulation of data, analysis of data and writing up of the report.

## **10. Limitations in implementation**

It was found during the survey in both countries that some of the selected institutions were no longer operating.

Interviewers did not find it easy to administer the questionnaire in some schools. In the Greater Accra Region, they had to visit the institutions three to four times in order to meet the appropriate respondent. This resulted in financial, physical and time implications for the interviewers.

Some proprietors demonstrated little enthusiasm towards the administration of the questionnaire for the very reason that they were being disrupted by such an exercise, wherein they could not perceive the result as having any meaningful assistance.

In Zambia, some principals refused to provide any information or made obvious attempts to falsify it.

Those observations are also useful inputs for further analysis, in particular about the complex and uneasy relationships between government and private TVET providers.

## II. Case Study: Ghana

### 1. Introduction

Unlike Zambia, Ghana has a long tradition of private TVET developed from the grass-roots level; in fact the whole sector is dominated at present by private TVET. The proportion of private to public institutions is estimated as 3:1 (as certain private institutions are not registered and are 'fly-by-nights'). However, their record, sometimes better than that of public TVET, was not always sustainable for the reasons outlined in the previous section. Due to the past centralized planning of TVET, development public TVET were oriented more towards formal employment at heavy industries, however, that strategy appeared to have been wrong.

In Ghana there are many educational institutions offering technical and vocational education courses. These institutions are not only administered by the Ministry of Education (MOE), but also by other ministries such as the Ministry of Local Government and Community Development (MLGCD), the Ministry of Manpower Development and Employment (MMDE), the Ministry of Environment Science and Technology (MEST) and the Ministry of Youth and Sports (MYS).

The technical and vocational education and training sector is comprised of formal and informal systems.

The formal system comes under two headings, the 'formal public' and the 'formal private' (including non-profit and for-profit). The formal public system is divided into two separate branches, administered respectively by the Ghana Education Service (GES) of the Ministry of Education (MOE) and the National Vocational Training Institute (NVTI) run by the Ministry of Manpower Development and Employment. The GES has about 23 technical institutions, NVTI has 29, the Ministry of Local Government and Community Development has 15, the Department of Social Welfare has 10.

The formal private system is made up of 250 registered proprietary training institutions. There is also a considerable amount of training provided through the informal apprenticeship system.

Despite a restructuring of the education system in 1987, the formal skills training system has remained virtually unchanged for almost two decades. Existing training institutions provide basic vocational skills training, often unrelated to the needs of the market.

The few that provide useful and innovative training, with emphasis on job counselling and placement, play very marginal roles due to low enrolment capacity and financing.

In 1990, the National Co-ordinating Committee for Technical and Vocational Education and Training (NACVET) was established under the joint responsibility of MOE and MMDE, to formulate policy for the sector to effectively co-ordinate the public and private systems, and to meet the skilled personnel demands of the country. Unfortunately since NACVET has not been able to meet its extensive mandate adequately, the co-ordination issue remains due to the existence of many different bodies and of vested interests.

### 1.1. *Sample size and sampling method*

Thirty institutions were selected from four regions for the survey with breakdowns as follows:

**Table 1.1: Distribution of sample private TVET institutions by region**

No.	Region	No. of Institutions
1.	Greater Accra Region	15
2.	Volta Region	5
3.	Eastern Region	5
4.	Central Region	5

Source: Private TVET Survey, 2002.

- It was felt that the 30 institutions selected were sufficient in number to represent the regions concerned, and the nation as a whole.

## 2. **TVET provision: main features of the sector and profile of private institutions**

### 2.1 *Features of the TVET sector*

The main clauses from laws relating to TVET are summarized below. It should be noted that legislation on TVET was fragmented and inconsistent. It reflected different distributions of power between respective government bodies, to which TVET institutions belonged during a particular period of time. Co-ordination between them in terms of policies was poor, or non-existent, and even the creation of NACVET did not resolve this issue as already mentioned.

An example of the unco-ordinated nature of the existing legislation is school registration. TVET may register with any of the following bodies: the Ghana Education Service, the General Department of Registration, the Ghana National Association of Private Schools, the NVTI, the District Assemblies, the Ministry of Works and Housing, Ministry of Local Government and Community Development and other bodies.

Overall, procedures for registration are considered bureaucratic by operators of institutes. The majority of private TVET institutions are registered with the Ghana Education Service (GES) and use the standard NVTI curriculum.

#### ➤ **Polytechnic Law, 1992 (PNDCL 321)**

- (a) The Law upgraded the polytechnics to the status of tertiary institutions.
- (b) Created a polytechnic councils and made polytechnics semi-autonomous.
- (c) Authorized polytechnics to award diplomas and degrees subject to “*such conditions as the authority responsible for higher education shall direct*”.

The Polytechnic Law, passed in 1992, states that the primary roles of the polytechnics are to:

- provide tertiary education through full-time courses in the fields of manufacturing, commerce, science, technology, applied social science and applied arts;
- encourage study in technical subjects at tertiary level;
- provide opportunities for development, research and publication of research findings.

In order to realize the above objectives, the polytechnics have a governing body, the Polytechnic Council, to determine the mission of polytechnics and to oversee the activities of polytechnics including financial matters.

Since polytechnics have not generated income from any kind of well-developed commercial activity, they have all been heavily dependent on public funding, though some cost-recovery schemes, such as the academic user fees and the residential user fees (for students using dormitory accommodation) have been gradually introduced. Budget allocation to each polytechnic is per head of student (i.e. number of the students enrolled) and a priority rating system ensures that for enrolment of science and technology students, the polytechnics get 2.5 times more than for students majoring in business and liberal studies.

➤ **National Vocational Training Act, 1970**

This legislation provided for some co-ordination between the government bodies as well as standards. It established the National Vocational Training Institute (NVTI) with the following functions:

- (a) organize apprenticeship and in-plant training;
- (b) train instructors;
- (c) provide private vocational guidance and career development;
- (d) develop training standards and trade testing;
- (e) initiate continuing study of the country's manpower requirements;
- (f) establish and maintain technical and cultural relations with international organizations that engage in activities related to vocational training.

The Ministry of Manpower Development and Employment (MMDE) also administers and issues certification for training programmes. This Ministry awards the qualifications of Grade 1, Grade 2 and the National Craftsman's Certificate (NCC) through administration of the National Trade Test.

The National Vocational Training Institute (NVTI) was established for the purpose of co-ordinating all aspects of vocational training, including apprenticeship training. At the national level, under NVTI, the National Trade Test Committee was established in 1971 (National Vocational Training Board Regulation, 1971) to be in charge of curriculum development and examination for the students of vocational schools funded through the ministry. It is this Committee which provides the Grade 1 Certificate, the Grade 2 Certificate and the National Craftsman Certificate (NCC). Assessment is conducted in the form of a 'trade test' which includes a written test and a practical test. In addition to the formal trade test, the Committee also offers proficiency tests, which do not include a written test so that students with low English literacy levels can undertake them. Regarding articulation to

courses provided within the Ministry of Education, the pathway for Grade 2 holders is that they can apply to undertake the Intermediate Craft Course.

Practically-oriented courses such as catering and secretariat are also offered. All the polytechnics attempt to offer as large a range of courses as possible, but some highly specialized programmes such as Agricultural Engineering, Chemical Engineering and Dispensing are only available in just one or two polytechnics mainly because of the need for specialized facilities and equipment.

➤ **Higher National Diploma (HND) courses offered in the Polytechnics**

- (i) *Engineering*  
Mechanical Engineering, Electrical/Electronics Engineering, Building Construction, Civil Engineering, Agriculture Engineering, Automobile Engineering, Chemical Engineering, Metallurgy and Foundry, Furniture Design and Wood Processing.
- (ii) *Applied Science and Technology*  
Computer Science and Statistics, Hotel Catering and Institutional Management, Science Laboratory Technology, Dispensing Technology.
- (iii) *Business and Management Studies*  
Accountancy, Marketing, Secretariat and Management Studies, Purchasing and Supply, Bilingual Secretariat
- (iv) *Art and Design*  
Fashion Design and Modelling, Commercial Art.

**Source:** NCTE handbook, NCTE

The curricula for the HND programme are revised versions of the diploma programmes which used to be offered at university level as two-year programmes. The curricula are more theory-oriented than those of the craft and technician courses and theory-based mid-semester and end-of-semester examinations are the predominant forms of assessment. It is essentially the results of these examinations that determine students' performance in the programmes. The National Board for Professional Technical Examinations (NABPTEX) and university teachers as external examiners do quality assurance of the HND programme through the external checking of the examination questions.

The Ministry also oversees and supports the Integrated Community Centres for Employable Skills (ICCES). ICCES has been offering vocational training courses, and ICCES students can take the NVTI exam. ICCES also issues Certificates of Participation and the Certificate of Merit, even though students do not take the NVTI exam.

The Ministry of Environment, Science and Culture (MESC) is responsible for the operation of Intermediate Technology Transfer Units (ITTUs). With the assistance from EU and CIDA, ITTU provides three-year apprenticeship programmes on a small scale (On average about nine students comprise an annual ITTU intake). The curricula for these courses were developed by technical experts within the Ministry. To date, ITTU has not issued any certification for training, but ITTU is considering offering formal qualifications in the near future.

➤ **Junior Secondary Schools (JSS)**

In JSS (grade level to nine), several pre-vocational and pre-technical subjects such as catering, woodcraft, papercraft, graphic design, sculpture and sewing are offered. Students of JSS can select two subjects if the capacity to deliver these subjects exists at the school. The stated objective of these courses is to prepare students for the real world, because approximately 65 per cent of JSS students do not have the opportunity to make it to the next level on the formal educational ladder.

The Curriculum and Research Division (CRDD) of the Ghana Education Service (GES) is in charge of curriculum development for the above courses. It is intended that whenever CRDD tries to revise the curriculum, it consults with the members of the National Board for Small Skill Industries (NBSSI) for the purpose of incorporating emerging industry needs into the curriculum. The process of consultation with industry is not a formal one, however, and there was no evidence of how industry input was being solicited and used to modify the curriculum.

After JSS, there is opportunity for some students to continue in a technical/vocational education stream by gaining access to SSS, TI, NVTI, ITTU, ICCES.

➤ **Technical Senior Secondary Schools**

- Functions

Gaining entry into academic senior secondary schools and technical senior secondary schools is a possibility for those who have achieved very high scores in the Basic Education Certificate Examination (BECE) examination administered in the final year of JSS. Results in the Senior Secondary Certificate Examinations (SSCE) which students sit for at the end of the third year determine entry into university and the polytechnic. The senior secondary schools are administratively under the Secondary Education Division of GES within MOE, but the curriculum and the examination are the responsibility of the West African Education Council (WAEC), the Senior Secondary Certificate (SSC) is also issued by WAEC.

The primary objective of creating secondary technical schools (and the feature that is intended to distinguish these institutions from academic secondary schools) is to provide graduates from this stream with both a good general education and practical skills to enable them to more effectively undertake technically and vocationally oriented courses in the tertiary institutions.

- Curriculum orientation

The academic component of the curriculum (subjects such as English, mathematics, and science) offered to students in both streams is similar in orientation and content. The practical subjects offered within the technical stream which are currently under review are intended to give students a greater degree of design skills and hands-on experience. The curricular documentation, however, indicates that there is more of a focus on design skills than practical work.

➤ **NACVET**

NACVET was set up in 1990 and initially co-chaired by the Minister of Education and the Minister of Employment and Social Welfare, and later chaired by the Minister of Education. It was established under the PNDC (Provisional National Defence Council), and has been given the role of co-ordinating all vocational and technical education institutions, at least at non-tertiary level. Since its inception, NACVET has been engaged in various activities such as the Umbrella Programme for the Sustainable Employment Generation, funded by the ILO/UNDP, and the technical implementation of vocational skills and informal sector support project, funded by the World Bank.

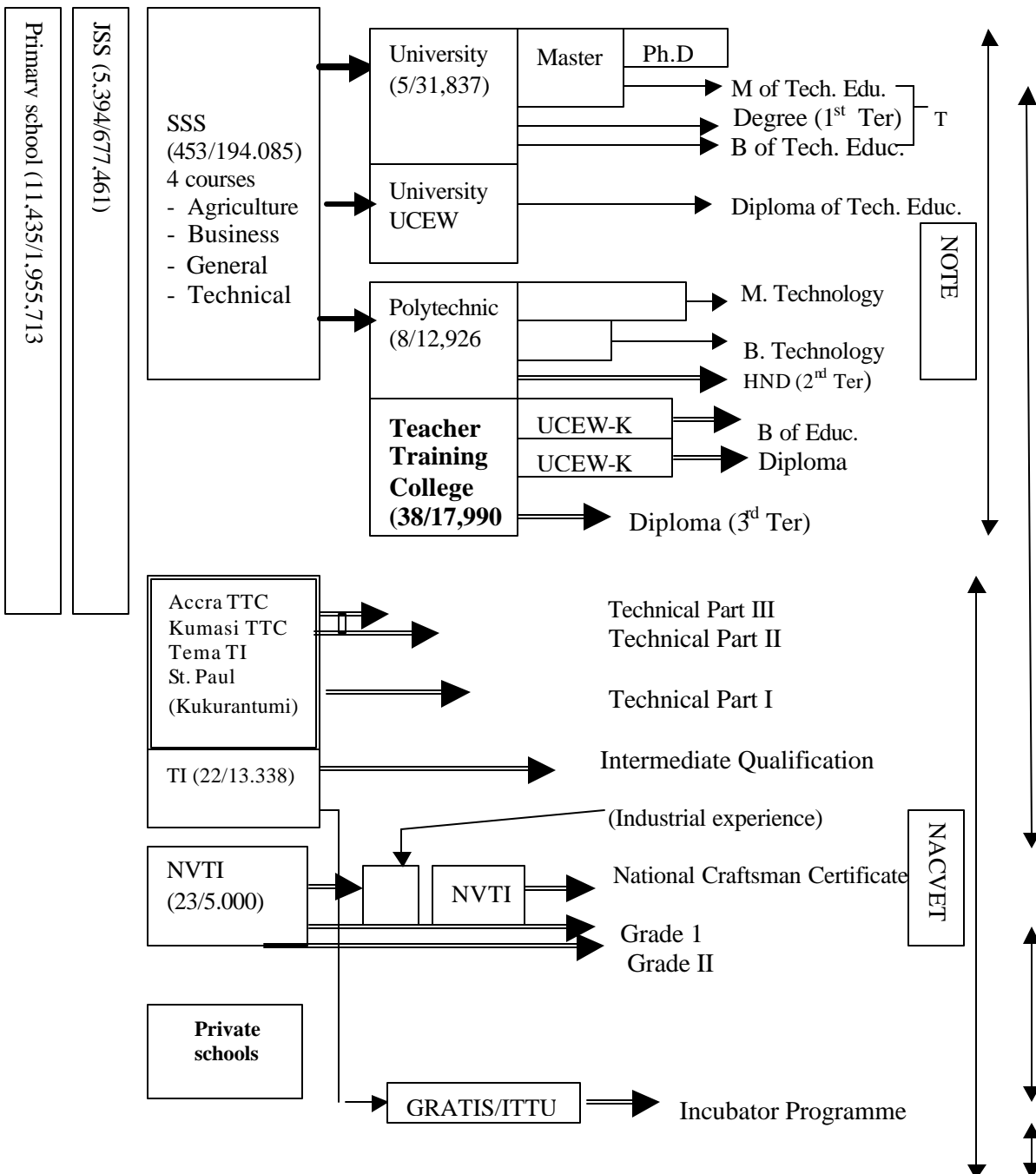
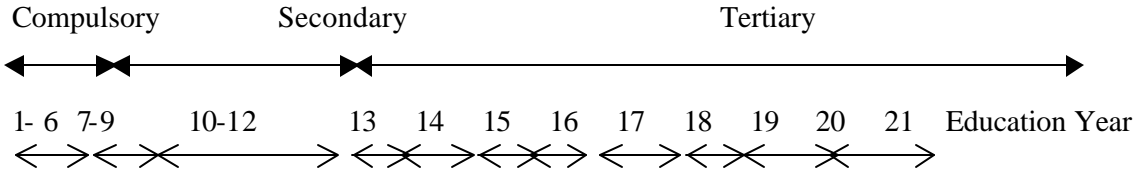
Apart from these achievements, however, lack of the clear regulation of authority has made it difficult for NACVET to carry out its function effectively. The Ghanaian Cabinet is currently reviewing the “National Council for Technical and Vocational Education and Training Act” with the intention of defining the authority of the NACVET, and consolidating the financial security of the organization. If this act is effectively enacted then co-ordination among various technical and vocational education institutions, at least at the non-tertiary level, can possibly be expected to improve.

2.1.1 *The TVET Sub-Sector*

The chart below shows the place of the TVET sub-sector in the education system of Ghana.

***Chart I – Place of the TVET sub-sector in the education system of Ghana***

[see next page]



NOTE: The figures indicate (No. of schools/No of Student),  
M. Tech and B. Tech. Are supposed to start in 2001/2002  
ATTC, KTTO, Tema, and St. Paul (Kukurantumi) are considered to be well equipped  
Entrance Exam for universities and polytechnics has been cancelled since 1999.  
UCEW was reformed by merger of (1) Diploma Awarding College, Wineba, (2) Mampong Teacher Training College and (3) KATTC.

Non-formal TVET covers the traditional apprenticeship system, on-the-job training and all those skill training activities that do not lead to formal certification.

Characteristics of the non-formal TVET include the following:

- it has no clear organizational structure;
- it caters for the majority of TVET recipients, including illiterate and semi-illiterates;
- there is a close link between training and real production;
- there is no formal curriculum; what is taught depends on what is actually produced;
- skill training, customer service and work attitudes are integrated;
- standards vary, there are no common competency-assessment procedures;
- until recent interventions through GRATIS, ITTU and the World Bank/VSP project, it had no link with the formal education system;
- it serves mainly rural populations and the urban poor;
- no one single government ministry has responsibility for it;
- there is virtually no government support, control or supervision; the burden of training falls on parents and apprentices.

Ghana has a long tradition of informal apprenticeship in such trades as carpentry, masonry, auto-mechanics welding, foundering, photography, tailoring, dressmaking and cosmetology. Operators in the sector exhibit creativity, but lack the necessary technological knowledge related to their skills and the capital to expand these enterprises. An appropriate policy intervention needs to address these constraints in order to release the tremendous potential of the sector.

## 2.1.2 *Weaknesses, constraints and strengths of the formal TVET system*

### 2.1.2.1 *Weaknesses and constraints of the formal TVET system*

The current TVET system in Ghana suffers from the main following weaknesses and constraints:

- i. There is no comprehensive national policy for the TVET sector. Activities and programmes are organized in isolation.
- ii. The legal mandate for TVET organization and delivery is limited, weak and ineffective as legislation regulating policies of different ministries and other bodies is often contradictory.
- iii. There is a lack of co-ordination and identification of roles and responsibilities among government ministries and private agencies delivering TVET.
- iv. Public funding of TVET has been inadequate and unstable.
- v. The link between the TVET system and industry is weak, resulting in serious mismatches between supply and demand for skills.

- vi. There are mismatches between the demand and supply of skills due to lack of labour market information
- vii. Training equipment and facilities are inadequate and generally obsolete.
- viii. There is a multiplicity of testing and certification standards within the system.
- ix. The low social status of TVET affects student recruitment, staffing, and funding for the sector. There is always a gap between official recognition of the role of TVET and actual support given to the sector.
- x. The quality of teaching and learning is unsatisfactory, due to inadequate teaching preparation and lack of instructional support facilities.
- xi. There is poor articulation within the TVET system itself and with the mainstream education system.
- xii. Career guidance, counselling, placement and follow-up services are inadequate.
- xiii. Females are grossly under-represented in formal TVET, especially in engineering programmes. This can be explained by early age of marriage.

#### 2.1.2.2 Strengths of the formal TVET System

The TVET system also has strengths which can be built on. These include:

- i. The existence of a striving apprenticeship both in the informal and formal sectors.
- ii. The availability of indigenous trained personnel, able craftsmen and artisans whose expertise can be tapped.
- iii. The considerable number of TVET institutions and infrastructure in place all over the country.
- iv. The facilities for in-service training available in the country and government support for further training of staff abroad.
- v. Active private sector participation in TVET provision evidenced by the large number private vocational training institutes.
- vi. The existence of certain laws, e.g. the NVTI law that supports TVET.

## 2.2 Characteristics and distribution of private TVET schools by type of ownership

### 2.2.1 Characteristics of types of private TVET

#### 2.2.1.1 Religious

The objective for the provision of technical and vocational education and training by religious organizations is to fulfil their considerable attention to social purposes, for example, training to empower deprived and low-income people. The institutions concentrate more on vocational skills, mainly in the commercial sector. The institutions under this category are located both in rural and urban areas.

#### 2.2.1.2 Non-governmental organizations (NGOs)

The objective for the provision of TVET by NGOs, has been more linked to community development as well as the personal development of the individual training beneficiaries. Programmes pursued have, in one way or the other, been the answer to the development aspirations of the communities. The NGO institutions are mainly located in rural areas.

#### 2.2.1.3 For-profit providers (commercial or joint ventures, and individual proprietors)

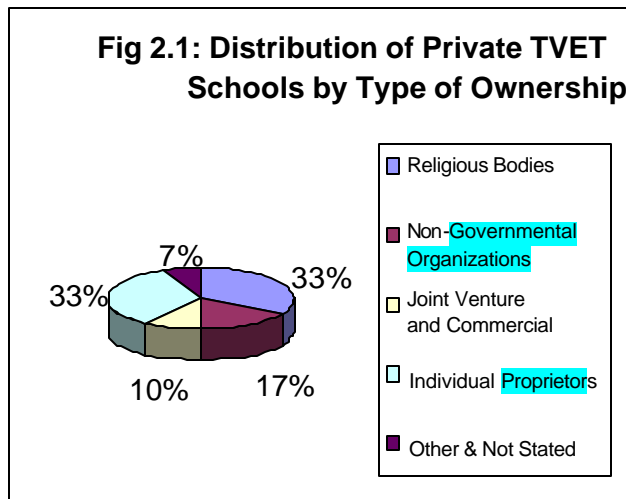
By definition, the objective of these institutions is profit-making. Institutions under this category are located in the urban and metropolitan areas.

Table 2.1 presents the distribution of the 30 schools in the four regions by type of ownership.

**Table 2.1 - Distribution of Private TVET Schools by type of ownership**

Regions	Religious Bodies		Non-Governmental Organizations		Joint venture and Commercial		Individual Proprietors		Other and not stated		Total No.
	No.	%	No.	%	No.	%	No.	%	No.	%	
Central	3	60.0	0	0.0	1	20.0	1	20.0	0	0.0	5
Eastern	2	40.0	0	0.0	1	20.0	2	40.0	0	0.0	5
Greater Accra	3	20.0	4	26.7	1	6.7	5	33.3	2	13.4	15
Volta	2	40.0	1	20.0	0	0.0	2	40.0	0	0.0	5
<b>TOTAL</b>	<b>10</b>	<b>33.3</b>	<b>5</b>	<b>16.7</b>	<b>3</b>	<b>10.0</b>	<b>10</b>	<b>33.3</b>	<b>2</b>	<b>6.7</b>	<b>30</b>

Source: Private TVET Survey, 2002.



An illustration of the distribution of the private TVET schools by type of ownership is given in *Figure 2.1*. It is observed that 33.3 per cent of the schools were owned by individual proprietors (for-profit), 33.3 per cent were owned by religious bodies, 16.7 per cent were owned by non-governmental organizations, 10.0 per cent were owned through joint ventures, while the remaining 6.7 per cent were owned by others, some of whom were not specified.

The survey results confirm and testify the significant role played by the Churches and individual proprietors in the development of TVET in Ghana

### 2.3 *Geographic distribution of private TVET schools*

It is significant to note that the study conducted by NACVET covered 179 TVET private schools in Ghana. A distribution of private TVET schools by region is shown in *Table 2.2* below.

**Table 2.2 - Distribution of all private TVET schools by region**

	Regions	Number
1	Greater Accra	50
2	Volta	21
3	Eastern	15
4	Central	12
5	Western	9
6	Ashanti	24
7	Brong Ahafo	23
8	Northern	11
9	Upper East	7
10	Upper West	7
	<b>Total</b>	<b>179</b>

**Source:** NACVET, 2001.

As shown in *Table 2.2*, the Greater Accra, Ashanti, Brong Ahafo and Volta regions all had more than 20 private TVET schools. It is pertinent to note that the Greater Accra Region alone had 50 institutions, followed by the Ashanti Region (24), whilst the Upper East and Upper West Regions had the least (seven schools each).

From the foregoing analysis, it is evident that most TVET institutions were located in the southern part of the country and this was probably due to the concentration of industrial and commercial activities in those areas.

#### 2.4 Academic qualification of heads of institutions

*Table 2.3* presents a distribution of heads of the 30 selected private TVET institutions by their academic qualification and region. It is observed that 30 per cent of the heads were diploma holders. There were 13.3 per cent of university graduates with a first degree and 13.3 per cent were also holders of specialist certificates. Ten per cent held post-graduate degrees (MSc/M.A.) whilst another 10 per cent did not state their qualification and 6.7 per cent were holders of the Junior Secondary School Certificate (BECE) and another 6.7 per cent were holders of GCE Ordinary Level/SSSCE Certificate. PhDs were held by 3.3 per cent and another 3.3 per cent held the GCE Advanced Level Certificate.

**Table 2.3: Academic background of heads of private TVET institutions by region**

Academic Background	Region									
	Central		Eastern		Greater Accra		Volta		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Middle/JSS			1	20.0	1	6.7			2	6.7
O'Level/SSSCE					1	6.7	1	20.0	2	6.7
A'Level							1	20.0	1	3.3
Specialist Cert.			1	20.0	2	13.3	1	20.0	4	13.3
Diploma	1	20.0	2	40.0	5	33.3	1	20.0	9	30.0
B.Sc./B.A./1 <sup>st</sup> Degree	1	20.0	1	20.0	1	6.7	1	20.0	4	13.3
M.Sc./M.A./Post Grad	2	40.0			1	6.7			3	10.0
PhD					1	6.7			1	3.3
Other					1	6.7			1	3.3
Not Stated	1	20.0			2	13.3			3	10.0
Total	5	100.0	5	100.0	15	100.0	5	100.0	30	100.0

Source: Private TVET Survey, 2002.

#### 2.5 Duration of the programmes/courses

All the 30 institutions under the study run three-year programmes in order to meet the requirements for terminal examinations. Nevertheless, there are few institutions that run courses between three and six months in areas such as Batik, tie and dye, computer studies, soap making, oil extraction weaving, etc.

All the 30 institutions under the study indicated that the JSS level of education was adequate for anyone seeking admission in an institution.

Twelve schools representing 40 per cent of the 30 institutions stated that the method of admission into the school was through competitive written tests, 12 schools or 40 per cent through interviews, whilst eight schools, or 20 per cent, through submission of applications. It is important to note that unlike the public technical schools which conducted admissions once a year, the private technical and vocational institutes admitted students three times a year, depending on vacancies. The private institutions admit mainly those who fail to gain access to public institutions.

## **2.6 *Types of examinations***

There is a diversity of possible types of examinations depending on various authorities. Institutions may hold more than one type of examination. The main types are GES and NVTI examinations. With regard to the types of examinations on a regional basis the statistics are as follows:

- (i) Central Region  
Of the five schools, three schools representing 60 per cent wrote NVTI examinations, one school constituting 20 per cent wrote both NVTI and Social Welfare examinations, whilst one school representing 20 per cent wrote NACVET examinations.
- (ii) Eastern Region  
Of the five schools, three schools representing 60 per cent wrote both GES and NVTI examinations, one school constituting 20 per cent wrote NVTI examinations, whilst one school representing 20 per cent wrote both NVTI and WAEC examinations.
- (iii) Volta Region  
Of the five schools, four schools representing 80 per cent wrote NVTI examinations, whilst one school constituting 20 per cent wrote both NVTI and Social Welfare examinations.
- (iv) Greater Accra Region  
Of the fifteen schools, seven schools representing 46.7 per cent wrote NVTI examinations, one school constituting 6.7 per cent wrote WAEC examinations, two schools representing 13.3 per cent wrote both GES and NVTI examinations, one school constituting 6.7 per cent wrote both NVTI and NACVET examinations, two schools representing 13.3 per cent wrote GES, NVTI and NACVET examinations, one school constituting 6.7 per cent wrote GES, NVTI, NACVET and C&G examinations, whilst one school representing 6.7 per cent did not specify the examination authority.

The variety of examinations used shows the fragmentation of the TVET system and difficulties encountered in its co-ordination and management.

## 2.7 Performance of public versus private TVET institutions in terms of examination pass rates

This comparison gives critical results when comparing the cost-effectiveness of public and private institutions. However, some important trade-offs of this data should be observed with care:

- the proportion of students who register and sit for examinations from the private institutions is probably less than that from the public ones;
- the courses offered and specializations are often different;
- the breakdown for different types of private institutions is not available;
- the breakdown for different types of crafts was not available for 1997 and 1999; the 2000 figure includes only carpentry and joinery;
- all types of examinations are aggregated.

**Table 2.4 - Pass rates (in percentage)**

	1997	1999	2000*
Public institutions	44.1	47.5	34.0
Private institutions	39.2	37.6	28.4

Source : Private TVET Survey, 2002.

\* Carpentry and joinery only.

It can be observed that the results were in favour of public institutions. Again, their direct interpretation in this manner would be statistically and analytically inaccurate. An explanation for private institutions performing less well than public institutions lies probably in the qualifications of incoming students.

### 3. Enrolment in schools

#### 3.1 Enrolment by programmes

The study has shown that the overall patterns are the steady growth of enrolment, as reported by private school operators, and the level of interest in various programmes offered in TVET schools. Subject to the reliability of data on registration, the share of private TVET enrolment in total constituted 28.3 per cent in 1999, in 2000 it shot up to 33.4 per cent and rose to 38.3 per cent in 2001. This can be attributed to the effects of economic liberalization and more flexible response of the private TVET to the market needs (informatics, computer sciences, telecommunications and other new technologies).

Figures in *Table 3.1* indicate that dominant among the various courses offered in terms of enrolment were the following:

- |    |                      |   |                |
|----|----------------------|---|----------------|
| a. | Catering             | - | 1,911 trainees |
| b. | Secretarial (typing) | - | 1,197 trainees |
| c. | Dressmaking          | - | 1,144 trainees |

Details of enrolment figures for all 30 TVET schools can be seen in *Table 3.1*.

At the regional level, it is observed that the Eastern Region had the most number of programmes offered (17) followed by the Volta Region (15), the Greater Accra Region (14), whilst the Central Region, with four, had the lowest number of programmes .

### **3.2 Enrolment by gender**

It is pertinent to note from *Table 3.1* that female trainees constituted about 76 per cent of the total enrolment. That can be explained by the profile of courses offered. Naturally, private TVET institutions offered courses not requiring large investment in buildings and equipment, hence their domination in segments corresponding to female dominated occupations – catering, secretarial, dressmaking, hairdressing, etc.

At the regional level, the pattern of female enrolment was as follows:

Highest	-	Greater Accra
	-	Volta Region
	-	Eastern Region
Lowest	-	Central Region

On the other hand, the pattern of male enrolment at the regional level was as follows:

Highest	-	Eastern Region
	-	Greater Accra
	-	Volta Region
Lowest	-	Central Region

**Table 3.1: Enrolment in day private TVET at craft and intermediate levels**

Programme	Central			Eastern			GT. Accra			Volta			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Accountancy	-	-	-	39	53	92	-	-	-	-	-	-	39	53	92
Agric. & Animal Husbandry	-	-	-	31	12	43	-	-	-	-	-	-	31	12	43
Auto Body Works	-	-	-	64	1	65	-	-	-	-	-	-	64	1	65
Automobile Engineering	-	-	-	180	-	180	-	-	-	-	-	-	180	-	180
Batik/Tye & Dye	-	70	70	-	50	50	-	13	13	2	94	96	2	227	229
Blocklaying & Concreting	-	-	-	-	-	-	57	-	57	18	1	19	75	1	76
Building Construction	-	-	-	76	-	76	-	-	-	-	-	-	76	-	76
Business Studies	-	150	150	49	79	128	-	-	-	-	-	-	49	229	278
Carpentry & Joinery	-	-	-	35	-	35	88	1	89	7	-	7	130	1	131
Catering	1	386	387	3	466	469	60	886	946	-	109	109	64	1,847	1,911
Computing	-	-	-	523	-	523	-	-	-	-	45	45	523	45	568
Cookery	-	-	-	-	-	-	5	469	474	-	38	38	5	507	512
Draughtmanship	-	-	-	-	-	-	5	25	30	-	-	-	5	25	30
Dressmaking	-	96	96	3	171	174	11	647	658	1	215	216	15	1,129	1,144
Electricals	-	-	-	125	-	125	-	-	-	-	-	-	125	-	125
Electrical Engineering	-	-	-	145	-	145	-	-	-	-	-	-	145	-	145
Electrical Installation	-	-	-	154	-	154	5	1	6	-	-	-	159	1	160
Electronics	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electronics & Telecom Eng.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Embroidery	-	-	-	-	-	-	-	147	147	-	-	-	-	147	147
Fashion & Design	-	-	-	-	42	42	-	-	-	-	-	-	-	42	42
Furniture Craft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
General Agric. Science	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hairdressing	-	-	-	-	-	-	10	328	338	-	47	47	10	375	385
Hand Textile Weaving	-	-	-	-	-	-	-	-	-	-	80	80	-	80	80
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Masonry	-	-	-	-	-	-	1	-	1	-	-	-	1	-	1
Motor Vehicle Mechanic	-	-	-	104	-	104	-	-	-	-	-	-	104	-	104
Needlework	-	-	-	-	-	-	-	20	20	-	7	7	-	27	27
Office Practice	-	-	-	-	-	-	1	93	94	-	39	39	1	132	133
Painting & Decoration	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Radio & Television	-	-	-	154	-	154	-	-	-	-	-	-	154	-	154
Refridgeration & Air-cond.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Secretarial (Typing)	-	-	-	-	-	-	24	1,134	1,158	-	39	39	24	1,173	1,197
Sewing	-	-	-	-	-	-	-	80	80	-	-	-	-	80	80
Soap Making	-	-	-	-	-	-	-	-	-	-	86	86	-	86	86
Tailoring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Typing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Weaving	-	-	-	-	-	-	-	-	-	-	12	12	-	12	12
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	176	176	-	176	176
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL</b>	<b>1</b>	<b>702</b>	<b>703</b>	<b>1,685</b>	<b>874</b>	<b>2,559</b>	<b>267</b>	<b>3,844</b>	<b>4,111</b>	<b>28</b>	<b>988</b>	<b>1,016</b>	<b>1,981</b>	<b>6,408</b>	<b>8,389</b>

Source: Private TVET Survey, 2002.

It is also pertinent to note that, only a few females are enrolled in male-dominated trades like blocklaying and concreting, carpentry and joinery, welding, auto mechanic, electrical installation works, plumbing, refrigeration and air-conditioning. In fact, these trade areas are generally regarded as non-traditional for females. However, it is generally accepted that diversification of skills of females, in these non-traditional trades, could contribute enormously to the alleviation of poverty in their families as well as becoming role models for the female youth in their communities.

### **3.3 *Drop-outs in private schools***

The number of drop-outs in the selected institutions is small. It is observed that the Greater Accra Region had the largest number of drop-outs (236) and the largest mean number of 15.7 drop-outs per school. This was followed by the Eastern Region with a total number of 56 drop-outs and a mean number of 11.2 drop-outs per school. The least recorded number of 34 drop-outs was in the Central Region where the mean number of dropouts per school was 6.8. The number of drop-outs is fairly reasonable compared to enrolment which can be explained by the reputation and learning conditions in these schools. Overall, the rate of drop-outs was insignificant in the selected institutions.

A number of reasons were forwarded by selected institutions for students dropping out of school. Twenty four institutions representing 80 per cent of the selected 30 institutions indicated that students who dropped out were faced with financial or economic problems resulting in the inability to pay fees.

## **4. Staffing in schools**

### **4.1 *Number and salaries of teaching and non-teaching staff in schools***

A distribution of teachers in the selected 30 institutions by their remuneration and region is provided in *Table 4.1*. It is observed in the table that a total number of 305 teachers were employed in the selected institutions. Of the 305 teachers, 259 representing 85 per cent were permanent teachers whilst 44 teachers constituting 15 per cent were temporary teachers.

At the regional level, it is noted that the Greater Accra Region had the highest number of teachers (145), followed by the Eastern Region (82), the Central Region (45), and the Volta Region (33). The 30 institutions had a total staff, teaching and non-teaching, of 441.

**Table 4.1: Distribution of teachers by salary level and region**

Region	All teachers				
	No. of Teachers	Av. Monthly Rem. (¢)	Total Monthly Rem. (¢)	Av. Hourly Rem. (¢)	Total Hourly Rem. (¢)
Central	45	206,778	9,305,000	2,700	121,500
Eastern	82	476,587	39,080,163	2,156	176,822
Gt. Accra	145	403,552	58,514,998	2,612	378,676
Volta	33	242,477	8,001,750	1,788	59,000
Total	305	376,728	114,901,911	2,413	735,998

Region	Permanent teachers				
	No. of Teachers	Av. Monthly Rem. (¢)	Total Monthly Rem. (¢)	Av. Hourly Rem. (¢)	Total Hourly Rem. (¢)
Central	26	215,577	5,605,000	2,865	74,500
Eastern	72	477,949	34,412,349	2,152	154,946
Gt. Accra	139	408,984	56,848,710	2,648	368,012
Volta	22	251,125	5,524,750	1,818	40,000
Total	259	395,331	102,390,809	2,461	637,458

Region	Temporary teachers				
	No. of Teachers	Av. Monthly Rem. (¢)	Total Monthly Rem. (¢)	Av. Hourly Rem. (¢)	Total Hourly Rem. (¢)
Central	19	91,895	1,746,000	2,191	41,625
Eastern	10	264,000	2,640,000	2,300	23,000
Gt. Accra	6	266,667	1,600,000	1,813	10,875
Volta	9	219,833	1,978,500	1,667	15,000
Total	44	181,011	7,964,500	2,057	90,500

Region	Temporary teachers from public sector				
	No. of Teachers	Av. Monthly Rem. (¢)	Total Monthly Rem. (¢)	Av. Hourly Rem. (¢)	Total Hourly Rem. (¢)
Central	3	100,000	300,000	6,150	18,450
Eastern	-	-	-	-	-
Gt. Accra	-	-	-	-	-
Volta	5	257,700	1,288,500	1,800	9,000
Total	8	198,563	1,588,500	3,431	27,450

Source: Private TVET Survey, 2002.

Regional variations are significant, for example between Greater Accra and Central regions. Private school operators consider that on average, depending on profile, establishment and location, they pay lower remuneration (between 30 to 70 per cent) compared to public schools (See *Table 4.1*). However, it is not the size of remuneration *per se* but job stability that often matters more. In some cases, private sector teachers may work for food or be paid in kind as well.

According to the survey, (see *Table 4.1*) the 30 selected private institutions spent a total of ₵114,901,911 per month on their 305 teachers representing an average monthly salary of ₵376,728 (or about US\$45) per teacher. A total amount of ₵102,390,809 was spent on 259 permanent teachers per month representing an average monthly salary of ₵395,331 (or about US\$47) per permanent teacher. A total amount of ₵7,964,500 was spent on temporary teachers per month representing an average monthly salary of ₵181,011 (or about US\$23) per temporary teacher.

**Table 4.2: Distribution of non-teaching staff by their remuneration and region**

Region	Non-teaching staff				
	No. of Non-Teaching Staff	Av. Monthly Rem. (₵)	Total Monthly Rem. (₵)	Av. Hourly Rem. (₵)	Total Hourly Rem. (₵)
Central	3	80,000	240,000	1,250	3,750
Eastern	80	187,500	15,000,000	1,425	114,000
Gt. Accra	41	254,652	10,440,716	1,702	69,796
Volta	12	125,000	1,500,000	1,000	12,000
Total	136	199,858	27,180,716	1,467	199,546

**Source:** Private TVET Survey, 2002.

The distribution of non-teaching staff in the 30 selected institutions by region and by their remuneration is provided in *Table 4.2*. This table shows that a total amount of ₵27,180,716 was spent on 136 non-teaching staff representing an average monthly salary of ₵199,858 (or about US\$25) per non-teaching member of staff.

It is relevant to point out that in some schools, long delays of payment of salaries demoralized teachers in such a way that effective performance cannot be guaranteed.

#### **4.2 Pupil/teacher ratio (PTR) in schools**

The national norm for PTR in secondary, technical and vocational schools in Ghana is one teacher to twenty trainees (1:20). The survey however revealed that the PTR in private TVET was approximately one instructor to 28 trainees (1:28). These figures suggest that there is an inadequate number of teachers within private TVET institutions.

### **5. Teaching hours per week: theory and practical studies**

Even though the policy of the Ministry of Education stipulates that teaching or contact hours per week should be 30 hours per week for TVET institutions, the study revealed that the duration of teaching vary widely from school to school, programme to programme and from theory to practical studies.

*Table 5.1* provides time allocation for theory and practical studies in three programmes of some selected private technical and vocational institutions in the country.

**Table 5.1: Teaching hours per week for theory and practical studies**

INSTITUTION	HOURS PER WEEK					
	FIRST YEAR		SECOND YEAR		THIRD YEAR	
	Theory	Pract.	Theory	Pract.	Theory	Pract.
<b>DRESSMAKING</b>						
St. Clares Voc. Training Centre, Tumu	25	2	25	2	25	2
St. Bernadette Voc. Sch., Navrongo	4	20	4	20	4	20
Suhum Voc. Institute, Suhum	3	8	3	8	3	8
Pentecost Voc. Trg. Institute, Goaso	12	18	12	18	12	18
Abura Voc. Institute, Agona-Ahanta	24	12	24	12	24	12
<b>CARPENTRY &amp; JOINERY</b>						
Royal Technical Institute, Nungua	24	6	24	6	24	6
Bawku Voc. Trg. Centre, Tamale	10	15	10	15	10	15
Warizehi Women Voc. Trg. Centre, Tamale	3	36	3	36	3	36
CYO Voc. Trg. Centre, Kpando	23	7	-	-	19	11
Opportunity Indust. Centre, Takoradi	12	13	12	13	12	13
<b>BLOCKLAYING &amp; CONCRETING</b>						
Asogli Technical Inst., Ho	24	6	24	6	24	6
Anglican Voc. Sch., Teshie	18	12	15	15	12	18
Fr. Dogli Memorial Trade Sch., Jasikan	13	17	18	12	18	12
E. P. Trades, Trg. Centre, Hohoe	14	16	14	16	14	16
Ramseyer Voc. Sch., Kumasi	5	5	6	4	4	6

Source: NACVET, 2001.

It is observed in *Table 5.1* that seven out of the 15 institutions presented adhered to the Ministry of Education policy directives. For instance, Suhum Vocational Institute in the Eastern Region and Ramsayer Vocational School in Kumasi had as low as 11 hours and 10 hours per week respectively for teaching. It is not clear what was done with the remaining hours in those schools and whether the trainees acquired the maximum knowledge and skills from their tutors. Probably, it is an indication of a failure to observe ministry norms and of a lack of government supervision.

It is further noted that some institutions devoted more time to theory than practical studies. The common reasons given by such institutions were the lack of materials/consumables and insufficient equipment/machines and hand tools for the practical work. Other institutions also claimed that their examinations were more on the theory than practical studies.

## 6. Fees and other incomes

All the 30 selected institutions charge fees for programmes offered in the schools. Registration and term fees paid by students at craft and intermediate levels are provided respectively in *Tables 6.1* and *6.2* below.

**Table 6.1 - Fees paid by students in all programmes at craft level by region**

Region	Fees for all programmes at craft level			
	No. of Students	Tot. Reg. Fee (¢)		Tot. Term. Fee (¢)
Central	553	1,313,000		126,420,000
Eastern	2,158	13,412,000		1,409,806,000
Gt. Accra	3,628	7,645,000		745,166,000
Volta	703	1,373,000		41,647,000
Total	7,042	23,743,000		2,323,039,000

Source: Private TVET Survey, 2002.

**Table 6.2 - Fees paid by students in all programmes at intermediate level by region**

Region	Fees for all programmes at intermediate level			
	No. of Students	Tot. Reg. Fee (¢)		Tot. Term. Fee (¢)
Central	150	800,000		120,000,000
Eastern	401	2,306,000		108,491,000
Gt. Accra	389	1,517,500		71,750,000
Volta	n.a.	n.a.		n.a.

Source: Private TVET Survey, 2002.

Even though fees paid by students were collected for all courses, fees paid by students for the four most predominant and popular courses are analysed in this section as a representation of the rest.

It is observed in the *Tables 6.1 and 6.2* that institutions offering the courses at craft and intermediate levels had a wide variations of fees.

The highest fee paid by boarders per year was ¢1,426,500 (or about US\$160). This fee was paid by catering (CAT) students. The minimal fee for boarders was ¢75,000 (or about US\$8) for dressmaking courses. The maximum fee paid per year by day students in dressmaking (D), catering (CAT) and hairdressing in Prince Boateng Memorial Vocational School at Nsawam in the Eastern Region was ¢1,654,500 (or about US\$190). While the minimal was charged at the level of ¢45,000 (or about US\$5) for carpentry courses.

Fees show a large variation between institutions due to boarding or day studies, and the school reputation and location. However, the variance was too vast to be explained only by these factors; the disparities between demand and supply of training should also be taken into account. Considering that GNP per capita in Ghana is less than US\$400, fees could be a hefty burden for a number of families.

Although fees represent the largest single source of income for private TVET, some school operators confessed that if it were not for internally generated revenue (sale of own goods and services, rental of space, tools and equipment, access to catering, sports, facilities, etc.) and external support (alumni assistance, fund-raising through social and cultural events, fairs, contests, exhibitions), they would not have been able to pay their staff.

## **Conclusions**

The results of the survey have confirmed the contribution of the private sector in the provision of technical and vocational education and training in Ghana, it is shown by the dynamics of enrolment, and without any consistent or considerable government support.

- ***Staff salaries***

According to the views of private school operators, staff salaries of private TVET schools are generally unattractive, compared to public TVET institutions (estimated to be between 30 to 70 per cent of public salaries by private TVET managers). Qualified teachers in both private and public TVET institutions are often attracted to other jobs that are deemed more lucrative. Job stability in private TVET is of great concern.

- ***High Fees***

The study has revealed that trainees pay high fees (compared to GNP per capita) in most of the schools. Some trainees at times cannot afford to pay such fees and hence they drop out.

- ***Drop out***

There has been a number of drop-outs over the past three years. Various reasons have been identified in the survey for students dropping out, the outstanding one being their inability to pay fees.

- ***Comparative cost-effectiveness of public versus private***

To make an exact, and straightforward conclusion, in favour of one of them would not be statistically or analytically accurate. The available examination results (aggregated pass rates) show that public institutions have a certain advantage over private. However, this difference should be considered taking into account lower funding and underpaid staff and sometimes poor conditions in private TVET institutions. Furthermore, public and private institutions occupy different segments of the market for training and have different profiles and teaching/learning conditions.

- *System fragmentation and institutional support as main concerns*

The study has shown that the TVET system in Ghana is fragmented. There is no legal framework for the co-ordination of the activities of government ministries, private organizations and agencies that participate in the provision of TVET. Sector ministries and their agencies each have separate legal mandates for policy formulation implementation with regard to the delivery of TVET.

This is considered the main concern at the system level by the Team. While virtually no support from the Government is given to private institutions, it is the critical obstacle to their improvement and further development.



### **III. Case Study: Zambia**

#### **1. Introduction**

The pioneers of TVET in Zambia were missionaries who needed skilled people to build churches, schools, stations and hospitals. In the early 1920s therefore missionaries established, what they used to call, practical training schools for carpentry and bricklaying at Kawimbi and Mbereshi in Luapula province and Sefula in Western province. By the 1940s most mission schools had included training facilities for carpenters and builders.

The specific provisions in the TVET policy with regard to private TVET provision are that the Government will co-ordinate the activities of private providers and also develop incentives for companies and institutions that provide training. One of the key proposals in the policy is that the Government would eventually set up a training fund which would provide funds to all TVET providers (government institutions and all private).

The setting up of this fund has been elusive as since the policy was approved in 1996, the Government is only now trying to propose the modalities of the fund in 2002. The main reason for this could be that the Government needed additional time to consult stakeholders, many of whom may not have been willing to contribute. For example, in the 1996 report on Survey Phase II of the TVET Policy Review Project Synthesis Study Report No. 9, it was found that out of the 72 companies questioned on the introduction of the payroll levy, 20 said 'No' and 14 would not commit themselves. This was an important finding as the basis of the training fund was the payroll levy.

It is important to note that there are a number of limitations in the implementation of the survey. The main issues to take into account are as follows:

- (a) Some respondents complained of completing so many questionnaires from the Government and donors, without seeing significant changes in the environment in which they operate, they were reluctant to answer the questionnaire. Very few were enthusiastic about giving forth information and this made data collection very difficult because it required persistent persuasion to encourage them to complete the questionnaires.
- (b) Most of the institutions had reservations about disclosing information relating to income and expenditure. The analysis of unit costs will therefore be greatly affected by the lack of this information.
- (c) Some institutions exhibited problems in listing and stating the condition of their buildings and equipment because they use rented facilities in public institutions.

#### **2. Findings and observations**

This section presents the findings from the general literature review of the policy and legal framework, the analysis of recent surveys of private TVET and the analysis of 20 questionnaires collected.

## 2.1 *Policy framework*

Zambia has had two main policy frameworks in the area of TVET since Independence in 1964:

- The Statement of Policy and Intent, Commission for Technical Education and Vocational Training, 1969, and
- Technical Education Vocational and Entrepreneurship Training, Ministry of Science Technology and Vocational Training, 1996.

In 1969 the Government of Zambia formulated the policy on TVET with the main aim of expanding public TVET provision. Some of the specific interventions in the Statement of Policy and Intent were as follows:

- Establishment of technologist education and training.
- Establishment of technician education and training.
- Expansion of tradesman education and training.
- Standards and certification.
- Management and delivery of training.
- The apprenticeship system was abolished.
- The Commission of Technical Education and Vocational Training required that all private TVET providers register with it
- Private TVET providers were also required to use the syllabi and offer the examinations from the Commission. The Commission conducted inspections in all TVET institutions to ensure that standards were maintained.

In 1972, however, a government department replaced the Commission and from then on the quality of TVET provision in Zambia started deteriorating. In 1996, the Government reviewed its policy on TVET and came up with a new policy. The main aim of the new '*Technical Education Vocational and Entrepreneurship Training Policy*' is to improve technical education and vocational training and to link it to the requirements of the employment sector.

The new policy is broad compared to the previous one in three respects:

- (a) it incorporates entrepreneurship development. This is a major change of focus in TVET provision in Zambia. The need arose from the increased number of people retrenched after the privatization of state-owned companies in the early 1990s. Also, formal sector employment as a ratio of the labour force has always been small (16.4 per cent in 1969, 12.1 per cent in 1996 and 11 per cent in 1999 (Zambia Human Development Report 1999/2000). There was therefore a need to refocus the training system to face the new challenges;
- (b) the new policy encompasses all types of technical education and vocational training like nursing, agriculture, community development and engineering, which were not covered in the Statement of Policy and Intent of 1969;
- (c) it covers training being conducted at all levels in both the formal and informal sector. There was also a significant change in the focus of TVET provision in

Zambia due to the deliberate effort by the Government to provide TVET to informal sector operators;

- (d) the TVET policy also facilitated the establishment of management boards in public training institutions under the Ministry of Science Technology and Vocational Training (MSTVT) and the creation of a regulatory authority, the Technical Education Vocational and Entrepreneurship Training Authority (TEVETA). The main objective of establishing management boards was to broaden stakeholder participation in the management of TVET.

In 1998, the Zambian Parliament enacted the Technical Education Vocational and Entrepreneurship Training Act No. 13 to facilitate the implementation of the TVET Policy formulated in 1996. The major issues of this Law are:

- *Establishment of the Technical Education Vocational and Entrepreneurship Training Authority (TEVETA).* The functions of this authority are to regulate, monitor and co-ordinate technical education vocational and entrepreneurship training in consultation with industry, employers, workers and other stakeholders.
- *Creation of management boards for institutions under the Ministry of Science Technology and Vocational Training (MSTVT).* The functions of management boards in these government institutions are to provide TVET training, develop curricula, maintain standards as prescribed by TEVETA, provide human resources development for staff and to charge and collect fees.
- *Registration of institutions.* Every institution providing TVET in Zambia is required by this law to register with TEVETA unless it is established under a separate law (e.g. the Universities Act). The authority has powers under this law to deregister any institution that fails to meet the prescribed standards.
- *Inspection of institutions.* The law also provides for the authority to conduct inspection of all institutions that fall under the law. This is done to enforce the standards set by TEVETA.

An audit of training institutions conducted in 1996 produced the following results:

- (a) nine categories of ownership were used. Of the 231 institutions surveyed, the Church owned 19.5 per cent, NGOs 7.4 per cent, company or industry (in-plant) 7.8 per cent, community 4.3 per cent, trust 0.4 per cent, co-operatives 0.4 per cent others (for profit) 21.2 per cent, district councils 6.5 per cent while government institutions accounted for only 32.9 per cent (Audit of Institutions Report 1996). For the purpose of the present report it would be correct to say that for-profit private institutions, including company trusts and co-operatives added up to 29.8 per cent of the total while non-profit private institutions (Church, NGOs and community projects) came to 26.9 per cent;
- (b) in terms of adequacy of existing facilities, the report states that out of a total of 67 per cent of respondents, Church and individually owned institutions reported the greatest number of adequate workshop facilities and training area/room

availability. The private institutions, however, reported inadequate training rooms, libraries and furniture.

- (c) the survey discovered that private institutions had more time and space utilization compared to public institutions.
- (d) the survey also found that over 50 per cent of institutions owned by individuals and government had no maintenance programme. However, institutions owned by companies had the highest availability of an effective maintenance system.

The main findings of a survey conducted in 2000 on private training provision were as follows:

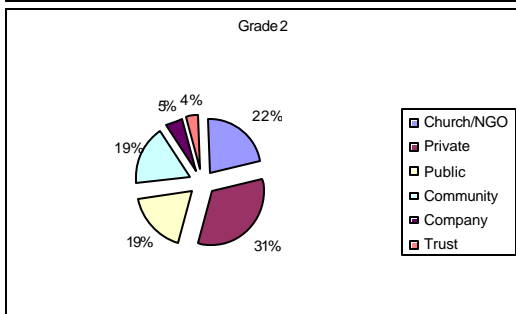
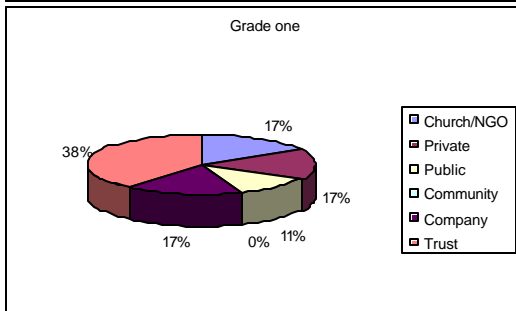
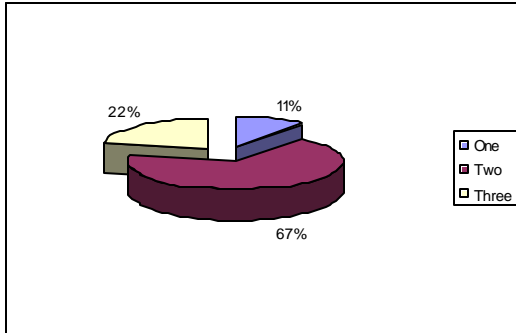
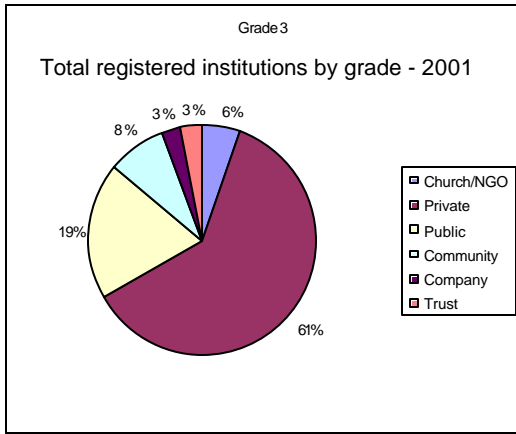
- (a) most private providers attract students who have been rejected by government institutions;
- (b) lack of seed capital, poor access to credit and generally poor economic conditions were identified as some of the most serious constraints for establishing and operating a private training centre.
- (c) many private training institutions do not have libraries, and access to textbooks was found to be generally poor.

TEVETA has developed minimum standards through which all TVET providers are assessed and accredited annually. The standards cover issues relating to management and teaching staff qualifications, maximum teaching hours per day, staff to student ratio, physical environment (state and specification of buildings and furniture), minimum equipment and tools and conduct of examinations.

These minimum standards are used by the Authority to accredit an institution each year. There are three broad types of grading that are used : Grades 1, 2 and 3. The specific details of this grading is as follows :

1. **Outstanding:** Very good institution with regard to management staff, lecturers/trainers, training facilities and environment. There are many strengths and few weaknesses [75%-100%].
2. **Good:** Good institution with regard to management staff, lecturers/trainers, training facilities and environment. Strengths clearly outweigh weaknesses [51%-74%].
3. **Satisfactory:** Institution meeting the minimum training standards. [40%-50%].

TEVETA evaluates each institution based on the inspection reports and each institution is graded as either Grade 1, 2 or 3. An analysis of the three grades for the year 2001 revealed that only 11 per cent were in Grade 1, 67 per cent in Grade 2 and 22 per cent were Grade 3 institutions.



**Other observations:**

- From Charts 1-4 we see that private institutions are fairing well in terms of accreditation by TEVETA.
- For example, of the 67 per cent institutions in Grade 2, 31 per cent are private institutions; also private institutions take 61 per cent of all the Grade 3 institutions. This shows that many private institutions fail to meet the minimum quality standards.
- The institutions owned by the Church and trusts satisfy the minimum standards more than any other institutions.
- Of the 20 institutions that responded, one was in Grade 1, 14 were in Grade 2 and five were in Grade 3.

TEVETA uses part-time inspectors to carry out quality control and these inspectors are former teachers, or retired teachers, who are given contracts to inspect a number of institutions within the locality or province where they live. It is an innovative measure to adopt especially where resources are limited, however, to ensure that the inspectors are current with the dynamics in the TVET, TEVETA should ensure that a regular programme is implemented to inform the inspectors of the new trends in technical and vocational education and training. TEVETA has also embarked on a programme to review the curriculum of TVET in Zambia in line with the requirements of the *Technical Education Vocational and Entrepreneurship Training Policy*. In 2001, the authority reported that it had terminated the review of curricula in tanning and leatherwork craft, certificate in library and information science and electrical programmes.

**Table 2.1 – Regulations of private TVET in Zambia**

<b>Type of regulations</b>	<b>Norms</b>	<b>Answer</b>	<b>Comment</b>
Regulations of physical facilities	Schools must register	Yes	Technical Education, Vocational and Entrepreneurship Training Act No. 13 of 1998 requires <b>all</b> institutions providing TVET to register and the registration to be renewed annually
	Health and safety standards must be met	Yes	The Minimum Training Standards Guide developed and implemented by TEVETA requires all institutions to meet this requirement. The institutions are inspected at least once every year
	Standards regarding space and furniture must be met	Yes	The Minimum Training Standards Guide developed and implemented by TEVETA requires all institutions to meet this requirement. The institutions are inspected at least once every year
	Target enrolments are related to physical facilities	No	Institutions are free to maximize utilization of facilities as can be seen from the information where some institutions provide evening classes
Academic regulations	Schools must follow detailed government curriculum	Not all	Institutions are free to choose the curriculum to follow, however TEVETA specifies the maximum teaching hours per day and the staff to student ratio
	Degree requirements are specified by government	Not all	Only those institutions that adopt the TEVETA-specified certificates. Foreign certificates are common in Zambia particularly from the United Kingdom
	Calendar and timetable are specified by government	Not all	Only those institutions that adopt the TEVETA-specified certificates and offer Examination Council of Zambia exams
	Students must take national exams periodically	No	Not applicable
	Medium (language) of instruction is specified	No	But English is the official language of instruction in Zambia. So normally all instructors use this language
Organization and reporting requirements	Schools must have non-profit status	No	Institutions set up for-profit purposes are allowed in Zambia, but may not receive Government grants
	Schools must submit periodical financial reports	Yes	At registration and renewal of registration, institutions are requested to demonstrate financial viability
	Minimum investment is specified	No	At registration and renewal of registration, institutions are requested to demonstrate financial viability

Teachers and students	Teachers' salaries and qualifications are specified by government	No	Not even for government-owned institutions. Individual institutions set the conditions of services
	Procedures and criteria for appointment and dismissal of teachers are specified by Government	No	Not even for government-owned institutions. Individual institutions set the conditions of services. However, for government owned, the teachers have a right of appeal to the minister
	Allocation of budget between teachers and other inputs is specified	No	Not even for government-owned institutions
	Fees are controlled by government	No	Not even for government-owned institutions. Individual institutions set the fees. However, for government owned, the fees have to be approved by the minister
	Expenditures per student are limited	No	Not applicable
	Criteria and procedures for selecting students are specified	No	No form of discrimination is allowed in Zambia and any person who is discriminated against can appeal to the minister or to the courts for redress
	Government representatives serve on management boards of schools	No	Only those institutions that invite government to be represented. Many Church and community owned institutions invite government to serve on management boards
Decisions generally reserved schools	Selection of specific teachers	Yes	All teachers are selected by institutions
	Selection of specific students	Yes	All teachers are selected by institutions
	Teaching methods	Yes	Responsibility of individual management board
	Religious instruction	Yes	But teaching of religion that brings about hatred among religions is not allowed at any institution.

**Source:** (James, 1991).

From the analysis of *Table 2.1* above, it can be concluded that the regulatory framework in Zambia is generally not restricted to the development of private TVET. For example, the regulatory procedures and the TEVETA minimum standards are set to apply to both public and private institutions. If an institution fails to meet the minimum requirements, and TEVETA deems it necessary to close it down to protect the interest of students, then such an institution will be closed down. However, this measure is adopted as a last resort and only implemented if the institution is not able to improve after being advised of this intention. For example TEVETA reported that in 2001 it closed down 14 institutions, four in Lusaka and 10 in Copperbelt due to low quality of training, failure to pay registration fees and unsuitable premises.

In addition to the regulations as analysed above, it is worth noting that no systematic system of subsidy for private TVET was in place despite the fact that the government does provide annual grants to some private TVET. For example, in 2001 and 2002, the government had allocations for four private TVET in its budget but an investigation of the procedures to select these four institutions revealed that no laid down procedures were found.

The Government also does offer an indirect subsidies form of tax incentive on education materials, such as books, and no taxes are liable on the fees charged to students. We also note, however, that the provision of these incentives is not accompanied by controls as can be seen from Table 2.1. It would be recommended therefore that as TEVETA swings into action to enforce its standards, indirect subsidies to private TVET should be broadened to enable the institutions improve their facilities, acquire the much needed training materials and also make a profit (especially for those profit- oriented institutions).”

## **2.2 *Characteristics and dimensions of private TVET***

### **2.2.1 *Characteristics of types of TVET institutions***

The register of TVET institutions by TEVETA provides for the following types:

**Public.** These are institutions owned by government through the Ministries of Science, Technology and Vocational Training, Community Development and Social Services, Youth and Sports and Education.

**Company or industry (in-plant).** Large commercial establishments in the context of their overall strategic plans generally establish these. Most of the facilities were devoted to internal staff development programmes but some are now opening up to outsiders who need similar training. These are highly specialized, based on the special needs of the parent company. For large organizations, the training centres are usually established in separate physical locations on an autonomous basis. In some cases the training facilities are within the physical surroundings of the parent company.

**Trusts.** These are institutions established with generous donations that cover initial establishment costs, and sometimes expansions or special capital investments. They are normally expected to generate sufficient income to cover operational expenses including salaries and training consumables. The initial donations usually come from government, major local corporations and foreign donors.

**Community based.** These are institutions run by members of a particular community with special objectives of empowering communities with basic survival skills. Training for such institutions is basically free. They play a major role in empowering low-income communities to cope with challenges of social, economic and human development among the poor communities.

**Church.** These are training centres owned by different religious organizations such as Catholic, Reformed Church in Zambia, United Church of Zambia. They mainly target the vulnerable or under-privileged members of the society. Trainees pay minimum fees and in some cases do not pay any fees at all.

**Non-Governmental Organisation (NGO).** These are training centres owned by Non-Governmental Organisations (NGOs) such as Young Women’s/Men’s Christian Associations, Zambia Welfare Society, etc.

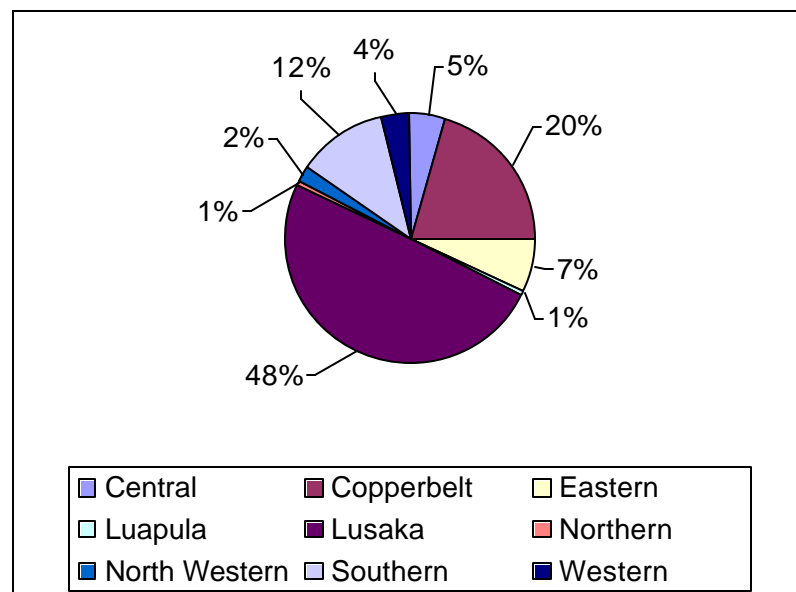
**Other private for-profit (individual proprietors).** These are institutions run by individuals, or groups of individuals, with the main purpose of making a profit.

However, it should be noted that for the purpose of this study, company and trust-owned institutions should be added to what TEVETA calls for-profit, i.e. individual proprietors.

### 2.2.2 Location of private institutions

An analysis of the TEVETA register of TVET institutions for the year 2001 by ownership and province shows that there are more private institutions in Lusaka and Copperbelt provinces than the remaining provinces combined. *Figure 2.1* below shows the distribution of institutions by province with Lusaka Province having 48 per cent and Copperbelt with 20 per cent.

**Figure 2.1 - Distribution of TEVETA registered institutions by province**



### 2.2.3 Ownership of institutions and year of establishment

It is significant to note that when the distribution of institutions is made by ownership, private for-profit institutions (individual proprietors, companies and trusts) account for about a half of the total institutions registered by TEVETA while public-owned institutions account for only 18 per cent. Private non-profit institutions (Church, NGOs and community) account for 32 per cent of the total. The distribution of institutions by ownership as defined by the TEVETA categories is given below in *Table 2.2* and *Figure 2.2*.

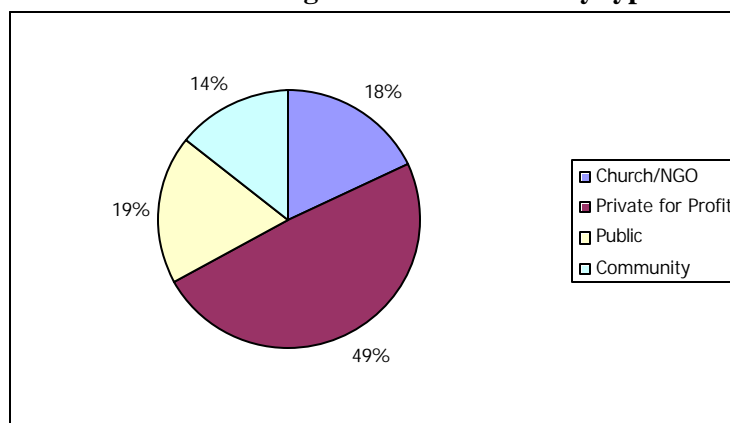
**Table 2.2 - Distribution of TEVET institutions by province and ownership**

		Owner						
Province		Church/ NGO	Individual proprietors	Public	Community	Company	Trust	Total
		Central	0	3	3	2	0	0
	Copperbelt	7	6	9	5	5	2	34
	Eastern	3	3	2	3	0	0	11
	Luapula	0	0	1	0	0	0	1
	Lusaka	9	45	7	9	3	9	82
	Northern	0	0	1	0	0	0	1
	North Western	0	1	2	0	0	0	3
	Southern	8	1	4	4	2	1	20
	Western	3	0	2	1	0	0	6
	<b>Total</b>	<b>30</b>	<b>59</b>	<b>31</b>	<b>24</b>	<b>10</b>	<b>12</b>	<b>166</b>

Source: TEVETA 2001 Register.

The total number of registered institutions, shown above, is lower when compared to the number recorded in the 1996 audit. This is due mainly to the fact that some of the institutions audited were not of the standard required for registration under the TEVET Act No. 13 of 1998, consequently they could not be registered by TEVETA. Institutions like the nursing schools under the Ministry of Health, and farmers training centres under the Ministry of Agriculture and Co-operatives, were included in the 1996 audit but, to date, do not fulfil the TEVET Act requirements. The situation may change in the coming year since discussions are underway to include nursing schools which are currently under the Ministry of Health and are not affected by TEVET Act.

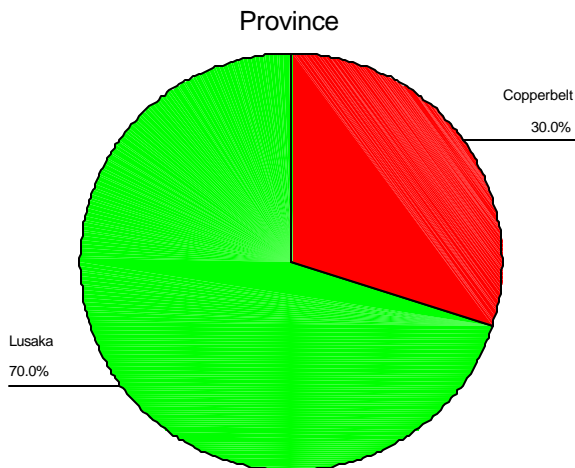
**Figure 2.2 – Distribution of registered institutions by type of ownership**



From *Figure 2.2* above, 'Private for-profit' institutions as defined above account for 49 per cent of the total institutions registered by TEVETA. These institutions include those owned by companies, trusts and individuals. Distribution of selected institutions by province is shown in *Figure 2.3*.

**Figure 2.3 - Distribution of sample institutions by province**

Province	Frequency	Percent	Valid Percent	Cumulative %
Copperbelt	6	30.0	30.0	30.0
Lusaka	14	70.0	70.0	100.0
Total	20	100.0	100.0	



An analysis was made on the year of establishment and the survey brought to light that of the 20 respondents, 12 stated that the institutions were established after 1990, and eight were established before 1990. This indicates that most institutions were probably established as a result of the liberalization policy undertaken by the Government in 1992. Of the 12 that were established after 1990, 10 were owned by individuals, one by a joint venture and one by a company.

The distribution of institutions by ownership shows a positive relationship with the distribution of the population and economic activities of the country. For example, the largest numbers of church/NGO institutions are found in Lusaka, Southern and the Copperbelt provinces which are not only the most populous but also that is where the economic activities of the country are concentrated.

The Northern and Luapula provinces had the lowest number of institutions on the TEVETA 2001 Register. In both provinces, there were no other providers registered other than public. It should be noted here that the picture presented in Figure 2.3 above does not necessarily mean that there are no private TVET in the two provinces, it simply shows that by 2001, the TEVETA did not accredit any private institutions from the two provinces.

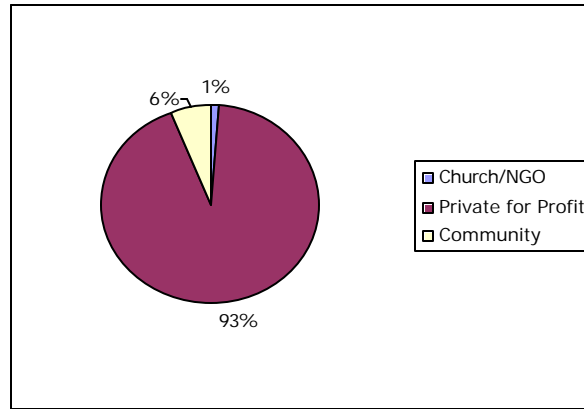
### **3. Enrolment in private institutions in 2001/2002**

#### **3.1 Enrolment by type of institution**

In 2001, TEVETA reported a total enrolment of 16,550 of which about 38 per cent was accounted for by public institutions, it can be concluded that the enrolment from private for-profit, Church/NGO and community-owned institutions accounted for the larger share of 62 per cent of total enrolment. The sample enrolment of 5,521 represents about 54 per cent of the total private enrolment (i.e. 16,550 minus 6,289 public).

As for the results of this survey specifically on private TVET, an analysis of Figure 3.1 shows that private for-profit institutions accounted for 93 per cent of the enrolment in the sample, while the Church, NGO had only 1 per cent and community 6 per cent.

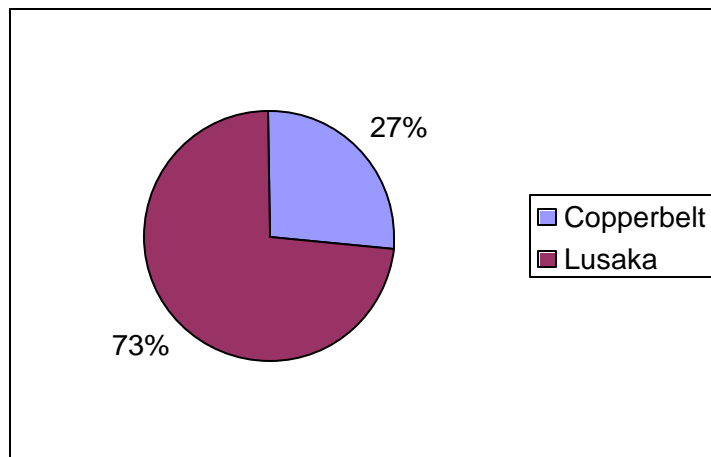
**Figure 3.1 – Enrolment by type of institution, 2001/2002**



**3.2 Total enrolment by province for the year 2001/2002**

The total enrolment for the selected institutions was 5,521; of these 27 per cent were from Copperbelt-based institutions and 73 per cent from Lusaka, see Figure 3.2. The largest enrolment in the Copperbelt-based institutions is from an institution under a trust. This institution, NIEC School of Business Studies was parastatal and was then privatized under the Government’s economic reform programme. The institution has a greater capacity to enrol more students because of the availability of infrastructure.

**Figure 3.2 - Distribution of total enrolment of selected institutions by province**



About 93 per cent of enrolment in the Copperbelt-based institutions and 89 per cent of enrolment in Lusaka-based institutions were at craft level. Of the total Copperbelt enrolment, over 75 per cent were in service-related courses (accountancy, journalism and business studies) and only about 25 per cent were technical engineering courses, while in Lusaka the proportion of technical engineering courses as a component of the Lusaka enrolment was

about 35 per cent higher compared to Copperbelt. This may be explained by the high enrolment in computing and automotive mechanics courses in Lusaka. The low enrolment in technical engineering courses may be linked to the closure of many engineering companies in Ndola in particular; however, there is no empirical evidence for this relationship.

### 3.3 Enrolment by institution and gender 2001/2002

Table 3.1 below depicts gender distribution of students enrolled at the selected private training institutions. The figures show a gender balance in enrolment. However, when individual institutions are analysed, for example, at Mansfield Institute of Technology in Lusaka, the female enrolment accounted for only 11.45 per cent while at Valley View Secretarial and Business College female enrolment is was over 95 per cent. This is mainly due to the fact that most courses at Valley View Secretarial and Business College are those that are traditionally female courses while Mansfield Institute of Technology has traditionally male-dominated courses. This pattern is common in all TEVET institutions in Zambia, regardless of the ownership.

The figures in Table 3.1 also show that enrolment for evening classes only accounts for 10.34 per cent of the total enrolment.

**Table 3.1: Enrolment by institution, gender and mode of training 2001/2002**

Institution	Day			Evening			All
	M	F	Total	M	F	Total	Modes
Africa Literature Centre	19	19	38	0	0	0	38
Amec Mechanical and Auto-Electrical Training	27	3	30	0	0	0	30
Chilenje Trades School	149	134	283	0	0	0	283
City College of Management Studies	387	345	732	113	75	188	920
Dzithandizen Trades School	25	25	50	0	0	0	50
Greenwood Institute	193	136	329	21	12	33	362
Kays Technologies Ltd	162	128	290	30	45	75	365
Kitwe Trades School	115	1	116	0	0	0	116
Mansfield Institute of Technology	555	62	617	102	23	125	742
Massi Computer College	35	56	91	0	0	0	91
Mel Computers College	39	86	125	0	0	0	125
Nalab Computer Consultancy Ltd	10	12	22	0	0	0	22
Ndola Polytechnic	75	38	113	21	4	25	138
Ndola Young Men's Christian Association	0	25	25	0	0	0	25
Niec School of Business Management Trust	587	440	1,027	0	0	0	1,027
Parrot Secretarial College	3	23	26	0	0	0	26
Regent College	0	386	386	0	56	56	442
Royal Secretarial and Management College Ltd	13	178	191	6	63	69	260
Sylvia Professional Catering and College	89	214	303	0	0	0	303
Valleview Secretarial and Business College	6	150	156	0	0	0	156
<b>Total</b>	<b>2,489</b>	<b>2,461</b>	<b>4,950</b>	<b>293</b>	<b>278</b>	<b>571</b>	<b>5,521</b>

When the variation of enrolment is analysed by sex and ownership, we see that Church/NGOs and community owned institutions have better gender parity than the private for-profit. For example, at the Africa Literature Centre, Chilenje Trades School, the Dzithandizeni Trades School which are Church/NGO and Community owned institutions, the enrolment is balanced in terms of gender compared to the private for-profit.

On the one hand, the very few institutions reported as giving evening classes implied that most of the private technical and vocational education and training provide TVET as a programme on a full-time basis. On the other hand, the institutions that reported having evening classes are those that are operating for-profit. The higher enrolment among these was in the Lusaka based institutions: the City College of Management Studies and the Mansfield Institute of Technology.

### **3.4 *Enrolment by programme and province 2001/2002***

The enrolment pattern by course indicates that most institutions offer craft level courses in both Copperbelt and Lusaka provinces. In Copperbelt province, craft courses accounted for 93 per cent of the total enrolment in 2001/2002 while in Lusaka, craft courses accounted for 89 per cent of the total enrolment in the province.

The study also discovered that most private TEVET institutions are offering courses that require low investment in equipment and machinery. For example, the Mansfield Institute of Technology and the City College of Management Studies in Lusaka are renting premises from the Lusaka Business and Technical College (a public institution); when asked why this was so they indicated that the cost of owning such facilities was astronomical.

**Table 3.2 - Enrolment by programme and level of training 2001/2002**

Programme	Craft			Technician			Technologist			All Levels
	M	F	T	M	F	T	M	F	T	
<b><i>Copperbelt</i></b>										
Tailoring and design	0	15	15	0	0	0	0	0	0	15
Information technology	0	40	40	10	30	40	0	0	0	80
Electrical and electronics	57	7	64	25	2	27	0	0	0	91
Mechanical and automotives	154	6	160	0	0	0	0	0	0	160
Commerce and business studies	587	470	1057	4	14	18	0	0	0	1075
Journalism and academic	7	20	27	0	0	0	12	9	21	48
<b>Total</b>	<b>805</b>	<b>558</b>	<b>1363</b>	<b>39</b>	<b>46</b>	<b>85</b>	<b>12</b>	<b>9</b>	<b>21</b>	<b>1469</b>
<b><i>Lusaka</i></b>										
Construction	63	2	65	0	0	0	0	0	0	65
Tailoring and design	6	119	125	0	0	0	0	0	0	125
Information technology	179	179	358	40	30	70	60	49	109	537
Electrical and electronics	419	45	464	0	0	0	22	1	23	487
Mechanical and automotives	316	10	326	0	0	0	13	0	13	339
Commerce and business studies	486	1162	1648	47	18	65	68	64	132	1845
Hospitality	187	419	606	0	0	0	0	0	0	606
Journalism and academic	4	3	7	0	0	0	16	25	41	48
<b>Total</b>	<b>1660</b>	<b>1939</b>	<b>3599</b>	<b>87</b>	<b>48</b>	<b>135</b>	<b>179</b>	<b>139</b>	<b>318</b>	<b>4052</b>
<b>Grand total</b>	<b>2465</b>	<b>2497</b>	<b>4962</b>	<b>126</b>	<b>94</b>	<b>220</b>	<b>191</b>	<b>148</b>	<b>339</b>	<b>5521</b>

Female enrolment at craft level is higher in commerce and business studies, tailoring and design and hospitality programmes, while male enrolment is high in heavy TVET programmes like mechanical and automotives and electrical and electronics.

At technician and technologist levels, female enrolment drops, but in programmes at craft level female enrolments dominate. One major factor is that most of the female dominated programmes, like secretarial, hotel and tourism, do not go beyond craft level. The case was slightly different on the Copperbelt where there was more female enrolment at technician and technologist levels combined.

About 93 per cent of the enrolment in the Copperbelt-based institutions and 89 per cent of the enrolment of Lusaka-based institutions were at the craft level. Of the total Copperbelt enrolment, over 75 per cent were in service-related courses (accountancy, journalism and business studies) and only about 25 per cent were technical engineering courses, while in Lusaka, the proportion of technical engineering courses as a component of the Lusaka enrolment was higher at about 35 per cent compared to Copperbelt.

An attempt was also made to compare public and private TVET in terms of costs of provision of programmes based on the assumed cost level, taking into account the skill area. (See *Table 3.3*).

**Table 3.3 – Enrolment by type of institution and cost level**

Cost level	Type of institution	
	Private	Public
Relatively expensive	1,142	3,136
Relatively inexpensive	4,379	3,153
<b>Total</b>	<b>5,521</b>	<b>6,289</b>

The enrolment was analysed in terms of relative cost with regard to the provision of programmes. Relatively inexpensive programmes were those in fields like journalism, business studies, accounting, secretarial, information technology, travel and tourism while relatively expensive programmes included carpentry and joinery, electrical and electronics, mechanical and automotive mechanics. It was noted that about 21 per cent of the total enrolment of the sample private institutions was in relatively expensive courses, while in public MSTVT institutions the proportion of enrolment in the more expensive programmes accounted for about 50 per cent during the same period.

### **3.5 Female participation by level and province 2001/2002**

Female participation in TVET is higher in Lusaka at 52 per cent than in Copperbelt at 42 per cent as shown in *Table 3.3* below. However, an analysis of individual institution's enrolment reveals that female participation is low in male-dominated courses such as plant fitting, electrical, automotive mechanics and electronics. For example, the Kitwe Trades School, which the Mining Company runs, and offers capital-intensive courses, had only one female student out of an enrolment of 116.

Female participation is also low at technician and technologist levels. For example only 43 per cent and 44 per cent of enrolment at technologist level was female in Copperbelt and Lusaka respectively.

**Table 3.4 - Female participation and level of training 2001/2002**

	Enrolment	Female	Percentage
<b>Copperbelt</b>			
Craft	1,363	558	41%
Technician	85	46	54%
Technologist	21	9	43%
<b>Total</b>	<b>1,469</b>	<b>613</b>	<b>42%</b>
<b>Lusaka</b>			
Craft	3,599	1,939	54%
Technician	135	48	36%
Technologist	318	139	44%
<b>Total</b>	<b>4,052</b>	<b>2,126</b>	<b>52%</b>
<b>Grand Total</b>	<b>5,521</b>	<b>2,739</b>	<b>50%</b>

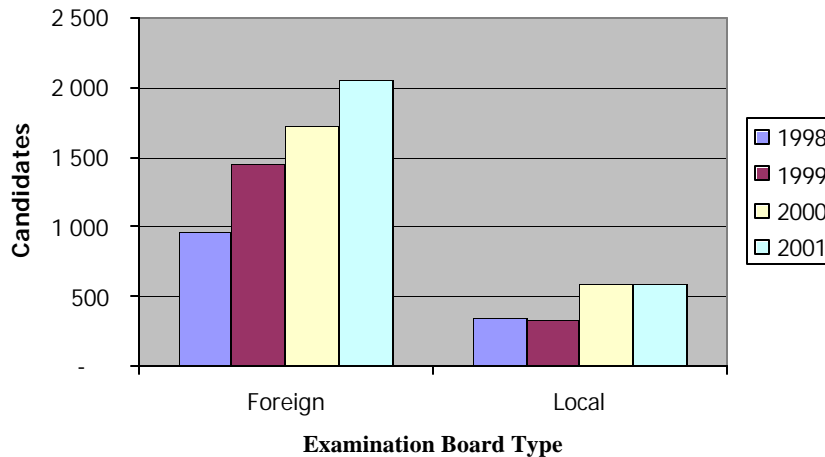
Of the total 613 female enrolment on the Copperbelt, 440 were at the NIEC School of Business Management Trust and the lowest female enrolment was at the Kitwe Trades School, where only one female student was reported. The result at the Kitwe Trades School is interesting in that it may indicate that female employment at craft level, in heavy occupation in the mines, is low because this institution is owned by a mining company and the institution only provides training for in-house purposes.

In Lusaka the situation in terms of female participation was not different either. Of the total female enrolment, about 44 per cent could be accounted for as taking secretarial or hospitality related programmes. It was noted however, that female enrolment was higher in private for-profit owned institutions than any other type of ownership in Lusaka province.

### **3.6 Graduates in the private TVET 1998-2002**

An analysis of the programmes for graduates, from the selected private institutions, revealed that most of the institutions offer courses that are examined by foreign examination boards other than the local Examinations Council of Zambia (ECZ) and the Zambia Institute of Certified Accountants (ZICA). *Figure 3.3* below shows that candidates in private TVET institutions have preferred foreign examinations to local. In fact the number of candidates has increased at an annual rate of 19.1 per cent.

**Figure 3.3 - Examination candidates for private TVET institutions 1998 -2001**



**Table 3.5 - Examination results by type of examination boards (public and private)**

	Candidates				Graduates				Pass Rates			
	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001
<b>Foreign</b>	971	1,448	1,724	2,060	596	885	1,175	1,597	61%	61%	68%	78%
	74%	81%	74%	78%	70%	76%	71%	76%				
<b>Local</b>	344	334	595	586	260	286	489	497	76%	86%	82%	85%
	26%	19%	26%	22%	30%	24%	29%	24%				
<b>Total</b>	<b>1,315</b>	<b>1,782</b>	<b>2,319</b>	<b>2,646</b>	<b>856</b>	<b>1,171</b>	<b>1,664</b>	<b>2,094</b>	<b>65%</b>	<b>66%</b>	<b>72%</b>	<b>79%</b>

The number of candidates for local examinations increased by about 70 per cent between 1998 and 2001 while the number of candidates for foreign examinations increased by 112 per cent during the same period. (See Figure 3.3). The demand on foreign qualification could be associated with the increasing pressure on job seekers to acquire ‘more marketable’ qualifications for the extremely limited job market prevalent in the country.

While all other institutions use external examinations for quality control, the Africa Literature Centre in Kitwe has its own internally designed examinations. The institution does offer training to students from other members of the Southern Africa Development Community (SADC).

All the foreign examination boards derive from the United Kingdom and the most popular ones are the Institute for Management Information System (IMIS), Pitman, City and Guides, Institute of Chartered Marketers, London Chamber of Commerce and Industry and Association of Chartered Accountants. Other than City and Guides and IMIS, all of these examination boards offer skills in business studies-related fields. These are the fields that are demand driven, and institutions provide these courses mainly because graduates hope to find employment in privatized companies.

The pass rates for both local and foreign examinations increased generally between 1998 and 2001, though the pass rates for local exams fell by about 4 per cent in 2000 compared to 1999 and increased by a similar percentage point in 2001. What is also observed from the data above is that pass rates were higher in local examinations than in foreign examinations during the whole period.

**Figure 3.4 - Graduates by examination board type 1998-2001**

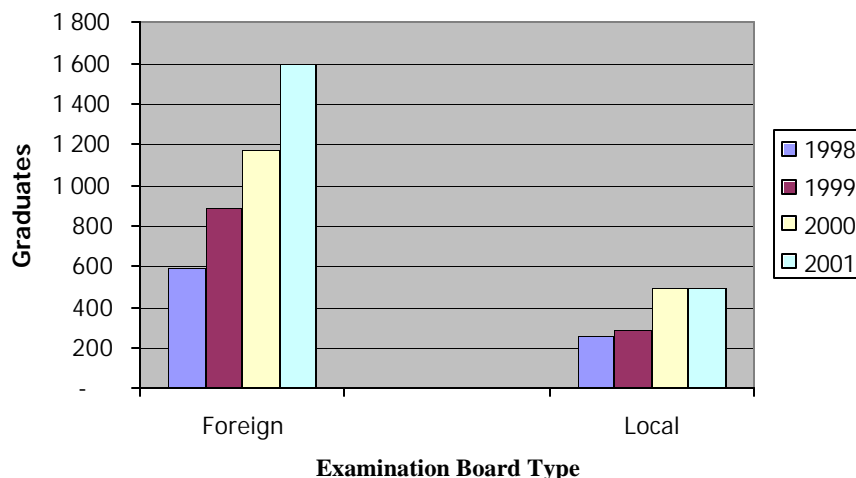


Figure 3.4 above shows the number of graduates from the selected private TVET institutions. The total number more than doubled between 1998 and 2001 from 856 in 1998 to 2094 in 2001, showing an annual increase of about 25.1 per cent.

The performance of students in TEVETA-accredited examinations by programme, for the years 2000 and 2001, is shown in Table 3.6 below. The results show that there was a general lowering of performance, except for the secretarial and advanced certificate and technician programmes, which show an increase. The performance results improved only in the secretarial programme by 4.3 points, and in the advanced certificate technician programme by 5.4 points, during the same period.

**Table 3.6 - TEVET examination results 2000 – 2001**

Course	Pass rates (%)			
	2000		2001	
	All	Sample	All	Sample
Aviation	28.8	0.0	14.6	0.0
Business Studies	51.7	64.3	42.4	69.9
Craft	67.6	74.7	53.5	74.4
Hotel and Tourism	69.7	91.0	59.7	91.9
Media Studies	81.5	100.0	77.7	85.7
Paramedical	66.7	0.0	66.1	0.0
Secretarial	23.8	66.4	28.1	82.2
Advanced Certificate Technician	37.1	100.0	42.5	100.0
Technology	66.7	72.7	62.7	87.5
<b>Total</b>	<b>54.8</b>	<b>81.3</b>	<b>49.7</b>	<b>84.5</b>

Source: TEVETA Training Standards Division, 2002.

During the same period, the pass rate for the sample institutions was higher than the average, in all courses, and the total average increased by 3.2 points. For example, results improved in the secretarial programme by 15.8 points between 2000 and 2001 as compared to 4.3 points increase in the performance for all the institutions accredited by TEVETA.

**4. Staff issues**

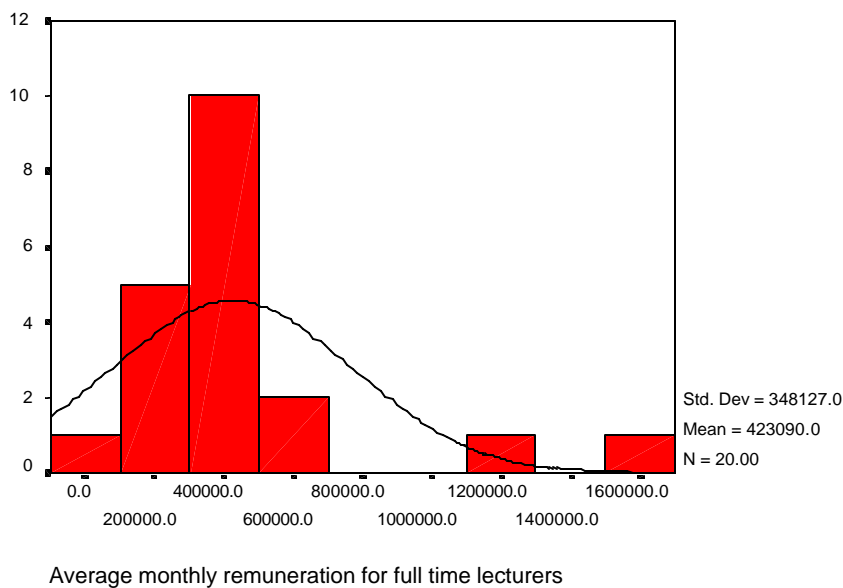
**4.1 Staff qualification and salary in sampled institutions**

One of the broad objectives of the TEVET policy reforms, in public institutions, was to set up management boards in order to improve the decision-making process, and also improve the conditions of service of staff in public institutions, instead of co-ordinating the conditions of services with general government structures. An analysis of the qualifications of the teaching staff was made by comparing with the TEVETA minimum standard requirements. It was observed that private TVET institutions face a shortage of qualified lecturers. The TEVETA minimum standards require that teaching staff should have a qualification higher than the level in which they are assigned to teach, however, the results of the survey showed that out of 159 teaching staff, only 36 per cent had a teaching certificate.

Figure 4.1 below indicates the amount of salaries per month of teaching staff. One institution did not respond regarding the amount of money paid to individual staff as a salary per month for teaching and 12 institutions did not indicate the amount for non-teaching staff.

From the data available, the highest salary per month for a lecturer was K1, 500,000 at the NIEC School of Business Management and the lowest was K110, 000 per month at the Ndola Young Men’s Christian Association.

**Figure 4.1 - Distribution of monthly salaries for lecturers in selected private TEVET institutions**



As shown from *Figure 4.1* salaries in most of the private institutions were between K200,000 (or US\$ 43) and K800, (or US\$ 170).

It is interesting to note that the institution with the highest salary scale (K1,500,000 per month) was a former parastatal-owned which became a Trust after the liquidation of the parent company. That institution is the NIEC School of Business Management Trust. The institution with the lowest salary scale is owned by a Church organisation (see Table 4.1).

**Table 4.1 - Salaries of teaching and non-teaching staff per month by institution**

Institutions	Salaries	
	Teaching	Non Teaching
Africa Literature Centre	500,000	n.a.
Amec Mechanical and Auto-Electrical Training	670,000	n.a.
Chilenje Trades School	226,000	189,000
City College of Management Studies	350,000	320,000
Dzithandizen Trades School	316,800	n.a.
Greenwood Institute	300,000	250,000
Kays Technologies Ltd	300,000	n.a.
Kitwe Trades School	1,200,000	800,000
Mansfield Institute of Technology	375,000	n.a.
Massi Computer College	400,000	190,000
Mel Computers College	250,000	n.a.
Nalab Computer Consultancy Ltd	400,000	n.a.
Ndola Polytechnic	350,000	150,000
Ndola Young Men's Christian Association (YMCA)	110,000	n.a.
NIEC School of Business Management Trust	1,500,000	n.a.
Parrot Secretarial College	n.a.	n.a.
Regent College	264,000	204,000
Royal Secretarial and Management College Ltd	250,000	n.a.
Sylvia Professional Catering and College	400,000	n.a.
Valleview Secretarial and Business College	300,000	80,000
<b>Average</b>	<b>423,090</b>	<b>109,150</b>

n.a.: not available.

The teachers salaries were lowest among institutions owned by the Church/NGOs and community. For example at the Ndola Young Men's Christian Association, the average salary for teaching staff was K110,000 which was far below the average of K423,090. This institution, however, also has one of the lowest levels of fees charged.

In consequence of the average level of salary, as indicated in *Table 4.1*, it is difficult for these private TVET institutions to attract teaching staff on a full-time employment basis. It is true, however, that private TVET prefer to hire part-time teaching staff in order to minimize the staff costs. While this strategy might be attractive in terms of cost control, the frequent change of teaching staff is associated with low student achievement which is a risk that might eventually affect the reputation of private TVET.

The average salary scales of teachers in the selected private institutions are the same as those in force in public institutions. For example a newly-recruited lecturer at the Evelyn Hone college in Lusaka would be given a salary of K1,200,000 while a newly-recruited teacher at Kitwe Vocational Training Centre in Copperbelt would be paid about K500,000. In the year 2000, the Government decentralized the management of all salaries in public institutions under the Ministry of Science Technology and Vocational Training (MSTVT) to institutional management boards. The management boards also decide on the recruitment of all staff, including principals, however, the Government has been giving salary grants to institutions which was based on the 1999 wage bill.

While some public institutions may have better conditions than others, particularly those in the rural areas where it is difficult to attract students with the necessary financial backing, the salaries of staff in public institutions may be lower than many private providers.

#### 4.2 Student/teacher ratios

The standard student lecturer ratio in Zambia in the TVET system is determined by the TEVETA. The average standard ratio for 2001 was 20:1. *Table 4.2* below gives the average ratios per institution.

**Table 4.2 – Student/teacher ratios in private TVET institutions**

Institution	Enrolment	Teaching Staff		Non Teaching	
		Number	Ratio	Number	Ratio
Africa Literature Centre	38	7	5	0	n/a
Amec Mechanical and Auto-Electrical Training	30	4	8	0	n/a
Chilenje Trades School	283	5	57	21	13
City College of Management Studies	920	12	77	4	230
Dzithandizen Trades School	50	6	8	0	n/a
Greenwood Institute	362	16	23	2	181
Kays Technologies Ltd	365	4	91	0	n/a
Kitwe Trades School	116	20	6	3	39
Mansfield Institute of Technology	742	14	53	0	n/a
Massi Computer College	91	9	10	5	18
Mel Computers College	125	8	16	2	63
Nalab Computer Consultancy Ltd	22	5	4	2	11
Ndola Polytechnic	138	11	13	4	35
Ndola Young Men's Christian Association	25	4	6	4	6
NIEC School of Business Management Trust	1,027	12	86	0	n/a
Parrot Secretarial College	26	2	13	0	n/a
Regent College	442	4	111	4	111
Royal Secretarial and Management College Ltd	260	6	43	4	65
Sylvia Professional Catering and College	303	6	51	8	38
Valleview Secretarial and Business College	156	4	39	0	n/a

Since all the institutions were TEVETA accredited, it implies that they met the minimum standards in particular the requirement that the ratio should be 20 students per teacher. It can be clear from the enrolment size that some institutions have other activities, as their core business, than training.

Eight institutions had very low student/teacher ratios. For example, the Africa Literature Centre and the Kitwe Trades School had a ratio of five and six respectively. But the Regent College and the City College of Management Studies had very high ratios of 111:1 and 77:1 respectively. It should be noted, however, that these institutions with high ratios are offering mainly business-related courses such as computing, marketing, accounting and secretarial courses compared to institutions with low rates, with the exception of the Nalab Computer Consultancy Ltd, which offers mainly short courses, such as application software training support. The interpretation of these ratios should also be done with caution for two basic reasons: first and foremost, the institutions may be offering flexible timetables which enable teachers to service many groups of students. This could be true of Regent College. Secondly, the core business of institutions like the Nalab Computer Consultancy Ltd and the Kays Technologies Ltd is in the provision of information technology solutions and products. The same teaching staff may have other duties, within the companies, other than teaching.

Compared to public institutions, the ratios above are similar to most of the institutions under the Ministry of Science Technology and Vocational Training. In TVET, the interpretation of student/teacher ratios should be regarded with caution due to the fact that the programmes on offer may not easily be broken down into the subjects within the programme. For example, many business programmes have subjects which students take in modules depending upon the convenience of the timetable and also sometimes the capacity to pay fees. In addition some institutions like the Chilenje Trades School and Dzithandizeni Trades School combine training and production so that their arrangement of the training process may be different from similar institutions like the Ndola Polytechnic.

## **5. Fees and incomes**

The study also requested institutions to indicate per course how much they charge for registration and term fees. Seventeen institutions (85 per cent) of the 20 institutions that responded indicated that they charge fees; only two (10 per cent) did not indicate despite being private for-profit and one institution (5 per cent) indicated that fees are paid for by the holding company (meaning that the training offered was intended for the employees of the holding company only). The two institutions that did not respond were the Mel Computers College and the Nalab Computer Consultancy Ltd while the Kitwe Trades School did not indicate the fees but explained that the institution provides training for the holding company Konkola Copper Mines. *Table 5.1* below gives the details of fees by course, and level of the course, per institution. All the institutions offered full-time day release courses while seven institutions also offered part-time evening courses. For example, of the total enrolment reported, about 10 per cent were in evening classes (*Table 3.1* above). Some institutions also have boarding facilities but this information was not collected for private institutions.

As can be seen from *Table 5.1*, the highest fee per student, per term, was recorded at the Africa Literature Centre in Kitwe at K5, 425,000 for the technologist level of the journalism course, and the lowest was K44,000 per term for the batik tie and dye craft level at the Chilenje Trades School.

**Table 5.1 - Fees by course and level of training per institution – 2001/2002**

Institution and Course	Termly Fees		
	Craft	Technician	Technologist
Africa Literature Centre	465,000	n.a.	5,425,000
Amec Mechanical and Auto-Electrical Training	150,000	n.a.	n.a.
Chilenje Trades School	44,000	n.a.	n.a.
City College of Management Studies	256,500	240,000	253,000
Dzithandizeni Trades School	125,000	n.a.	n.a.
Greenwood Institute	735,000	n.a.	n.a.
Kays Technologies Ltd	600,000	680,000	680,000
Kitwe Trades School	n.a.	n.a.	n.a.
Mansfield Institute of Technology	207,500	n.a.	233,333
Massi Computer College	325,000	n.a.	385,000
Ndola Polytechnic	183,333	n.a.	n.a.
Ndola Young Men's Christian Association (YMCA)	90,000	n.a.	n.a.
NIEC School of Business Management Trust	637,500	n.a.	n.a.
Parrot Secretarial College	160,000	n.a.	n.a.
Regent College	170,000	n.a.	n.a.
Royal Secretarial and Management College Ltd	280,000	n.a.	n.a.
Sylvia Professional Catering and College	297,667	n.a.	n.a.
Valleview Secretarial and Business College	270,000	n.a.	n.a.

n.a.: not available or not applicable.

Average fees also varied very much among institutions when analyzed by ownership, with the highest being the private for-profit at K333,542 and the lowest being community owned institutions that charged an average of K84,500 per student per term.

Table 5.2 below shows the fees in selected public institutions for the years 2000 and 2001. The average tuition fee in public institutions in 2000 was about K345,568 and in 2001 it was K573,667 per year which would increase to about K115,190 and K191,222 per term respectively. When the tuition fees (*excluding boarding*) in public institutions are compared with those of private institutions, there seems to be no major difference. At the Northern Technical College, for example, the tuition fees are similar to those at the Greenwood Institute while tuition fees at the Evelyn Hone College were higher than most private providers except for the Africa Literature Centre, where the fees for technologist/diploma were higher.

**Table 5.2 – Fees in selected public (MSTVT) institutions**

Institution	Fees					
	2000			2001		
	Tuition	Board	Total	Tuition	Board	Total
Evelyn Hone College	265,407	107,235	372,642	1,050,000	750,000	1,800,000
Lusaka Technical and Business College	120,705	750,000	870,705	390,000	825,000	1,215,000
Northern Technical College	450,000	450,000	900,000	750,000	900,000	1,650,000
Livingstone Institute of Business and Engineering Studies	219,000	336,630	555,630	270,000	450,000	720,000
Choma Trades Training Institute	315,000	135,000	450,000	513,000	135,000	648,000
Luanshya Trades Training Institute	300,000	480,000	780,000	300,000	480,000	780,000
Technical and Vocational Teachers College	690,000	210,000	900,000	690,000	210,000	900,000
Zambia Institute of Business Studies and Industrial Practice	750,000	900,000	1,650,000	1,200,000	1,200,000	2,400,000
<b>Average</b>	<b>345,568</b>	<b>374,318</b>	<b>719,886</b>	<b>573,667</b>	<b>550,000</b>	<b>1,123,667</b>

The development of a Bursary Scheme for the benefit of vulnerable groups is being considered by the Government and this could be broadened to embrace, not only students in public institutions but also students from private institutions who have difficulties in paying their fees. If special mechanisms were developed these students would, also, benefit from this bursary scheme and so have more choice of courses.

## **6. Availability of physical facilities, equipment and tools in the private institutions**

It is important to note that all the 20 institutions that responded provided some level of inventory information of physical facilities, equipment and furniture. All the 20 institutions indicated that, at least, one of these facilities was not adequate. For example, five institutions did not have a library, seven did not indicate whether a library existed, or not. However, from the information available from TEVETA inspection reports, 14 institutions were closed down in 2002 for various reasons, such as for operating from facilities unsuitable for the provision of training. This again demonstrates the unstable and fragile nature of private TVET development in the country. Availability of physical facilities like classrooms, workshops, libraries, furniture and textbooks were reported to be inadequate by all institutions and this was also confirmed by TEVETA. Development of infrastructure is expensive and for private institutions, it would be even more difficult. However, institutions like the Mansfield Institute of Technology, the Greenwood Institute and the City College of Management Studies reported that they had agreements with some workshops and public institutions where they take their students for practical lessons. This was found to be an interesting development that would facilitate not only the efficient utilization of facilities in the public institutions, but also ensure that students in the private sector have practical lessons.

Table 5.3 shows the utilization of the selected facilities (chairs, tables and toilets) at each institution. When compared to the TEVETA standard it was found that all institutions have deficiencies in these facilities. However, this observation should be taken with caution in that the utilization of such facilities may be dependent on the timetables and, subsequently, not all enrolled students would be found at the institution at the same time.

**Table 5.3 - Student-facility ratio for selected facilities by institution 2001/2002**

Institutions	Student/Facility Ratio		
	Tables	Chairs	Toilets
Africa Literature Centre	1.27	1.09	19.00
Amec Mechanical and Auto-Electrical Training	0.86	1.20	15.00
Chilenje Trades School	8.09	4.04	283.00
City College of Management Studies	0.00	0.00	230.00
Dzithandizeni Trades School	8.33	2.00	16.67
Greenwood Institute	0.00	8.42	120.67
Kays Technologies Ltd	9.13	9.13	182.50
Kitwe Trades School	0.97	0.77	5.27
Mansfield Institute of Technology	10.03	10.03	742.00
Massi Computer College	1.98	1.98	91.00
Mel Computers College	0.83	0.83	62.50
Nalab Computer Consultancy Ltd	3.14	1.10	22.00
Ndola Polytechnic	1.73	1.73	69.00
Ndola Young Men's Christian Association (YMCA)	1.25	1.25	12.50
NIEC School of Business Management Trust	2.85	2.03	57.06
Parrot Secretarial College	1.30	1.18	13.00
Regent College	3.54	3.54	147.33
Royal Secretarial and Management College	15.29	15.29	130.00
Sylvia Professional Catering and College	2.02	2.02	30.30
Valleview Secretarial and Business College	2.60	1.95	78.00

The high ratios at institutions like the Mansfield Institute of Technology and the Royal Secretarial and Management College while indicating inadequacy of chairs and tables, does not necessarily mean that the students at these two institutions stand during lessons. This ratio simply indicates the number of students that use a specific facility. Most of private for-profit institutions have very flexible timetables in order to maximize utilization of these facilities.

However, since the cost of desks/tables is relatively high, it is not uncommon to find that in private, as well as in public institutions, the state of these facilities is deplorable.

## IV. Main findings

### 1. Historical record and policy framework

Both Ghana and Zambia have now walked a long and winding road in TVET development, and its prospects are yet to be clarified. Both countries acknowledge that there have been errors in the past and are engaged in a reform process. Unfortunately, as in some other sub-Saharan countries, TVET did not receive enough attention from decision-makers and major stakeholders.

Overall, more progress has been made in Ghana than in Zambia as the former realized much earlier the need for results-oriented action to upgrade this neglected sector. However, given the time it takes to understand what is required, Ghana did not escape its share of 'mistakes' (the term used by the Team).

Ghana's long-term development objective embodied in Vision 2020, projects the country's desire to achieve 'the status and standard of living of a middle-income nation' by the year 2020. The specific contribution of the country's TVET system to national development is envisaged as "*enhanced technical proficiency and competence of the labour force through increased opportunities for technical and vocational training including apprenticeship schemes*".

Zambia has had two main policy frameworks in the area of TVET since Independence in 1964:

- The Statement of Policy and Intent, Commission for Technical Education and Vocational Training, 1969; and
- Technical Education Vocational and Entrepreneurship Training, Ministry of Science Technology and Vocational Training, 1996.

In 1969, the Government of Zambia formulated the policy on TVET with the main aim of expanding public TVET provision.

In 1996, the Government reviewed the policy on TVET. The main aim of the policy was to improve the performance of technical education and vocational training, and to link it to the requirements of the employment sector.

The new policy was adopted at the time of market reforms and encompassed a number of major changes:

- (a) It incorporates entrepreneurship development.
- (b) The new policy encompasses all types of technical and vocational education.
- (c) It covers training conducted at all levels in both the formal and informal sectors.

The TVET policy in Zambia also facilitated the establishment of management boards in public training institutions under the Ministry of Science Technology and Vocational Training (MSTVT) and the creation of a regulatory authority, the Technical Education

Vocational and Entrepreneurship Training Authority (TEVETA). The main objective of establishing management boards was to broaden stakeholder participation in the management of TVET. The Zambian Government is currently implementing reforms in TVET, including the creation of management boards and the restructuring of the MSTVT, however, the main challenges they face are the provision of support services to institutions, both public and private. The proposed development programme for TVET in Zambia, identifies the training of teachers, provision of teaching materials and consumables, curriculum review, management staff and the improvement the information management system as priorities. It is hoped that these measures will improve the provision of TVET.

Based on the minimum training standards that the authority has developed, all institutions are inspected and graded. Depending upon whether the institution satisfies the standards, it may be graded as Grade 1, 2 or 3. Grade 1 institutions are those with excellent records, Grade 2 – with good records, Grade 3 – with satisfactory records, meeting minimum requirements.

The regulatory framework for private TVET was developed much earlier in Ghana than in Zambia for political reasons. However, both countries experience continuing problems with it. In Ghana, provision and regulation are too fragmented and unco-ordinated between the various government bodies with which institutions may be registered (as these institutions may have contradictory or conflicting interests and procedures).

In Zambia, the legislation on private TVET is recent and liberal. Due to that it favours more for-profit institutions which are mushrooming but unstable, and may disappear as ‘fly-by-nights’. The major problem in Zambia is a lack of law enforcement and supervision.

## **2. Comparative pattern of private provision**

### **2.1 *Distribution of private TVET schools by type of ownership***

As indicated in the methodology, 30 private TVET institutions were selected for the survey in each country but although 30 responses were received in Ghana, only 20 responses of varying quality were received in Zambia.

In Ghana, it was observed that 33.3 per cent of the schools were owned by individual proprietors, 33.3 per cent were owned by religious bodies, 16.7 per cent were owned by non-governmental organizations, 10.0 per cent were owned through joint ventures, while the remaining 6.7 per cent were owned by others, some of whom were not specified. The statistical distinction of ownership of private TVET institutions in the survey confirms and testifies the significant role played by the Churches, and individual proprietors, in the development of TVET in Ghana.

In Zambia, it was noted that when the distribution of institutions is made by ownership, private (for-profit) institutions, including individual proprietors, company and Trust owned account for about half the total institutions registered by TEVETA, while public institutions represent about 17 per cent. The present study of private TVET institutions confirmed that for-profit TVET institutions (individual proprietors, companies and Trusts) are growing faster than non-profit ones (religious, NGOs, community).

## **2.2 Geographical distribution**

In Ghana, the Greater Accra (capital city), Ashanti, Brong Ahafo and Volta Regions all had more than 20 private TVET schools. It is pertinent to note that the Greater Accra Region alone had 50 institutions, followed by the Ashanti Region (24), whilst the Upper East and Upper West Regions had the least, seven schools each.

From the foregoing analysis, it is evident that most of the TVET institutions were located in the southern sector of the country and this was due to the concentration of industrial and commercial activities in those areas.

A similar gravitation of private TVET towards main country markets was observed in Zambia. An analysis of the TEVETA register of TVET institutions for the year 2001 by ownership shows that there are more of all types of private institutions in Lusaka and Copperbelt provinces than in the remaining provinces combined.

## **2.3 Physical facilities**

For the purpose of the questionnaire, physical facilities included classrooms, workshops, textbooks, libraries, boarding houses and furniture. In both countries, even though some institutions have some of the facilities, none of the schools have expressed satisfaction with the adequacy of these facilities.

Apart from that, the quantity of facilities available in each school varies. However, it is clear that the majority of the schools lack libraries and textbooks, which are very essential for learning.

In Zambia, schools have classrooms ranging from two to 23 classrooms. Although the study observed most of the private institutions were operating in rented or leased buildings and only eight out of 20 were operating in their own buildings. All of those that were operating in their own buildings were established before 1990 and were Church, Trust or community owned.

Most of the institutions that were operating in their own buildings have not expanded or extended their buildings in the last five years; and only two indicated that they had extended their buildings in the last three years.

Few respondents wished to provide information on the surface area of the buildings and terrain. In Zambia, only seven indicated the surface area occupied by the buildings. Some expressed lack of information since they were operating in rented premises.

## **2.4 Sources of income**

This was a very sensitive issue in both countries. In Zambia, as stated earlier, most institutions were reluctant to give adequate information in this part of the questionnaire. The reasons are varied but those that were contacted stated that such information was 'secret' and, therefore, they were not allowed to provide it. Only 10 or 50 per cent of the respondents adequately answered this item by providing information on both the budgeted income and expenditure. The main source of income reported was from fees, with only one institution having received a Government grant.

In both countries it appeared that the main source of income was tuition fees. No-one wished to enter into details about school income in either country.

With regard to other income, some school heads in Ghana confessed that if not for internally-generated revenue and external support, they would not have been able to pay their teachers. Funds were raised from the productive units of schools whilst some donors also provided support in cash or kind.

In both countries all the selected institutions charge fees per programme. In Ghana fees for four of the most predominant and popular courses are being considered in the study as a representation of all fees. They include Blocklaying and Concreting (B & C), Carpentry and Joinery (C & J), Dressmaking and Tailoring (D & T) and Catering (CAT). Analysis of the data has shown that institutions had a wide variations of fees. Boarding fees are generally higher than fees for day students.

It is observed that the highest fee paid by boarders per year was ₵1,426,500 (or about US\$160). This fee was paid by Catering (CAT) students. The minimal fee for boarders was ₵75,000 (or about US\$10) for dressmaking courses. The maximum fee paid per year by day students in Dressmaking (D), Catering (CAT), Hairdressing in Prince Boateng Memorial Vocational School at Nsawam in the Eastern Region was ₵1,654,500 (or about US\$190). While the minimal was charged at the level of ₵45,000 (or about US\$5) for carpentry courses.

Fees show a large variation between institutions due to boarding or day studies, and the school reputation and location. Considering that GNP per capita in Ghana is less than US\$400, fees can be considered as high.

In Zambia, the highest fee per student per term was recorded at K5,425,000 (or US\$1,154) for the technologist level of mass media course and the lowest was K44,000 (or US\$8) per term for batik craft level.

The institutions were also requested to indicate their annual income and expenditure estimated for the year 2000/2001. Only 13 institutions responded to this request most of them giving only a block estimate and not broken down as requested. The unit costs were lower in private institutions than in public institutions.

In Zambia, the fees charged by public institutions under the Ministry of Science Technology and Vocational Training (MSTVT) are lower than those charged by most of the private institutions. However, the fees in these public institutions have increased sharply over 100 since the year 2000 when management boards were established in the public institutions under the MSTVT. The competitive advantage enjoyed by public institutions based on fees will soon disappear. The Government is currently working on a Bursary Scheme aimed at the vulnerable groups to facilitate access to TVET by the students who have difficulties in paying their fees. The Ministry of Science Technology and Vocational Training is expected to pilot the scheme under the Technical Education Vocational and Entrepreneurship Training Development Programme (TDP) that is being implemented with some financing from the World Bank, the Netherlands Government and the Danish Government.

The statistics in both countries show that the main reason for dropping out was the inability to pay fees.

## **2.5 Staff remuneration**

In Zambia, teacher salaries in most of the private institutions were between K200,000 (or about US\$43) and K800, 000 (or about US\$170) with the mean at the level of 423,000 (or about US\$90).

In Ghana, the 30 selected private institutions spent a total of ¢114,901,911 per month on their 305 teachers representing an average monthly salary of ¢376,728 (or about US\$45) per teacher.

It is important to remember that in both countries GNP per capita is comparable and is somewhat below US\$400.

## **3. Main constraints experienced by private TVET**

Fewer views were received on the constraints experienced in Zambia than in Ghana, indicating an underestimation of external assistance expected by the former. Another striking feature is a considerable difference in the description of constraints between the two countries.

For Zambians, the attitude towards private TVET has not gone beyond the idea of just getting more financial support and believing the rest will be settle in place, indicating that their approach is more short-term and mainly concerned with issues of finance, management, curriculum and teacher-training.

On the contrary, the approach in Ghana is more elaborated. Unlike Zambia they put the emphasis on teachers and trainees as first priorities rather than financial and material items.

### **3.1 Responses from Ghana**

#### **➤ Lack of adequate qualified teaching personnel**

It was observed that the institutions lacked the required staff, hence some had to teach additional subjects beyond their area of specialization and many lack the required qualification and pedagogical skills.

It was observed that, in general, TVET teachers have lower qualifications.

#### **➤ Poor educational background of the trainees**

Basic education of the Ghana Education Service (GES) has not been able to adequately prepare and provide basic skills training, hence trainees are found wanting when they gain admission to TVET institutions. Moreover, many have problems with English and simple mathematical calculations.

➤ Lack of physical facilities and equipment

The study observed that only a few institutions have facilities like workshops, classrooms, machinery, equipment and hand tools and the majority of them lack the necessary facilities to operate effectively. It was also noticed that some pieces of machinery were obsolete and others had broken down completely.

➤ High cost of materials

Due to increasing inflation in the country, prices of materials and other consumables continue to escalate to high levels. This has had a significant effect on the provision of materials and other inputs for skills training. In Ghana, the schools in the northern regions have not only faced the problem of inadequacy of inputs but also high cost of materials in comparison to their counterparts in the southern part.

➤ Poor remuneration for staff

Wages and salaries of the staff in private TVET institutions are low compared with those of the public sector. According to some of the staff interviewed, they attribute this problem to the fact that their salaries depend largely on the payment of school fees, leading to delays in payment. This situation adversely affects the morale and anxiety of teachers to effectively deliver.

➤ Irregular payment of school fees and high taxes

This has been a key issue in the private institutions providing technical and vocational education and training in Ghana. The private institutions are over-reliant on fees as a source of income. Nevertheless, parents are usually not able to pay fees on time for their children. The Government also places high taxes on institutions even though returns on their investment are relatively low.

➤ Lack of guidance and counselling

Trainees gain admission to institutions without the necessary counselling. Being indecisive about what they want to do in the future affects their performance and leads to lack of interest and, eventually, dropping out.

### **3.2 Responses from Zambia**

Most respondents stated that the general condition of premises and equipment was fair and that all of those that responded to the question on what problems they faced, stated that the main problems were financial in nature while 10 of those stated that the problems were both financial and pedagogical problems.

The institutions were united in proposing that Government should assist private institutions through TEVETA in terms of training or by giving scholarships to students to enable them to pay fees. There was also an interesting proposal that private institutions should be assisted to obtain permanent premises, as most were in rented buildings.

In their opinion on private TVET in Zambia, 11 of the 19 that responded stated that they would like private TVET to be further developed and 9 stated that it has a lack of means. It was also interesting to note that 50 per cent considered that private TVET was complementary to the public TVET.

Teacher qualifications vary from one institution to another to a large extent. It depends on the nature of courses offered. The best lecturers can be found in institutions that are in greater demand and they usually possess certified diplomas. Although there are some minimum requirements for recruitment, they are rarely observed.

#### **4. Conclusions and directions for support**

Much more information is needed on private TVET in Ghana and Zambia. In particular, the analysis on the comparative cost-effectiveness of private versus public TVET would require specific investigations.

Some major concerns were identified in this study. If, for Ghana, an improved legislation fostering better co-ordination is paramount, for Zambia, applying the TVET policy in practice remains problematic. TEVETA in Zambia is only two years old and has yet to display its regulatory role.

Monitoring of the private TVET development in both countries is essential, demonstrated by the phenomenon of 'fly-by-nights' (not documented in either country).

Based on these findings, the following recommendations are proposed for the improvement of the sector:

- Further research and establishment of a management information system (MIS).

A detailed census of all technical and vocational institutions in both countries should be conducted and a management information system (MIS) set up to specifically handle information on technical and vocational education and training. More specifically, the collection of information on private TVET costs and effectiveness (e.g. examination results, employment of graduates, etc.) should be organized.

- Training of owners and managers in financial management and other priority topics

Lack of experience and difficulties in running private TVET institutions point to a serious lacuna in managerial skills of owners and operators. Providing institutional owners and managers with training in financial management and other priority topics is worth considering.

- Qualification of instructors

With regard to the low qualification of teachers, it is recommended that instructors of private TVET institutions be given short periodic technical and pedagogical training to upgrade their knowledge and skills for the improvement of their performance. Training needs' assessment of instructors is crucial in identifying their weaknesses. Since technology is

dynamic, instructors should be trained to meet the technological changes and the challenges of the future. This can be achieved by organizing sandwich, in-service training courses, with support from government.

➤ Access to credit

The financial situation of most institutions seems fragile. This results in relatively high student/teacher ratios and low teacher salary scale levels which affects the quality of delivery. Institutions could be supported financially through access to credit. Since the usual channels of credit are not always appropriate for private TVET, innovative credit schemes could offer a promising solution. Such a direction needs to be further explored.

➤ Curriculum and textbooks

Apart from the programmes offered in the schools, subjects like English, mathematics, physics, science, technical drawing, etc. should be included in the curriculum of TVET institutions and be examined by an independent examining body (such as the West African Examinations Council for Ghana). Apart from ensuring better development of life skills and other useful and marketable skills, it would facilitate the graduates' search for employment in various segments of the labour market, including informal sector opportunities. Because of the high risk of unemployment of graduates, it is also recommended that entrepreneurial skills training (EST) should be developed and mainstreamed in the curriculum for all institutions to implement. This should help graduates to find their niche in a market already saturated by supply.

Government could also support private institutions by supplying textbooks and other teaching and learning materials. This would lead to a reduction in the exorbitant fees paid by some trainees.

➤ Supervision

Regulations concerning supervision are not enforced. The information from the survey has revealed that there has been a high proliferation of TVET institutions. Without the necessary human, financial and material resources for their operation, quality training cannot be guaranteed.

➤ Students support

The study has revealed that trainees pay high fees in most schools. This leads to drop-out and raises an equity issue. Ways of supporting poor students need to be considered.

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