

**REPORT OF THE COMMITTEE ON EDUCATION, SCIENCE AND TECHNOLOGY
FOR THE FIRST SESSION OF THE ELEVENTH NATIONAL ASSEMBLY,
APPOINTED ON FRIDAY, 21ST OCTOBER, 2011**

Consisting of:

Dr C K Kalila, MP (Chairperson); Ms S Sayifwanda, MP; Mr M M B Mwale, MP; Mr B Mutale, MP; Mr D Livune, MP; Mr C Miyanda, MP; Mr O C Chisala, MP; and Mr L Chabala, MP.

The Honourable Mr Speaker
National Assembly
Parliament Buildings
LUSAKA

Sir,

Your Committee has the honour to present its Report for the First Session of the Eleventh National Assembly.

Functions of the Committee

2.0 The functions of your Committee are to:

- (i) study, report and make appropriate recommendations to the Government through the House on the mandate, management and operations of the Ministry of Education, Science, Vocational Training and Early Education, departments and agencies under its portfolio;
- (ii) carry out detailed scrutiny of certain activities being undertaken by the Ministry of Education, Science, Vocational Training and Early Education, departments and agencies under its portfolio and make appropriate recommendations to the House for ultimate consideration by the Government;
- (iii) make, if considered necessary, recommendations to the Government on the need to review certain policies and/or certain existing legislation relating to the Ministry of Education, Science, Vocational Training and Early Education;
- (iv) examine annual reports of the Ministry of Education, Science, Vocational Training and Early Education, departments and agencies under its portfolio in the context of the autonomy and efficiency of government ministries and departments and determine whether the affairs of the said bodies are being managed according to relevant Acts of Parliament, established regulations, rules and general orders; and
- (v) consider any Bills that may be referred to it by the House.

Meetings of the Committee

3.0 Your Committee held fifteen meetings during the session. Your Committee's Report is in three parts. Part One is the consideration of the topical issue; Part Two is on the local tours; and Part Three is the consideration of the Action-Taken Report on your Committees Report for the Fifth Session of the Tenth National Assembly.

Programme of Work

4.0 Your Committee adopted the following programme of work:

- (i) consideration of the Action-Taken Report (ATR) on the Committee's Report for the Fifth Session of the Tenth National Assembly;
- (ii) consideration of New Topical Issue;
- (iii) local and foreign tour; and
- (iv) consideration and adoption of the Committee's Draft Report for the First Session of the Eleventh National Assembly.

PART ONE

CONSIDERATION OF TOPICAL ISSUE

THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTs) IN THE ZAMBIAN EDUCATION SYSTEM

5.0 Background/Rationale

In a presentation at a World Summit of the Information Society , held in Geneva, Switzerland, in 2002, one of the presenters, Ms Victoria L Tino, told the Summit that, *“Globalization and technological change - processes that have accelerated in tandem over the past fifteen years, have created a new global economy powered by technology, fuelled by information and driven by knowledge. The emergence of this new global economy has serious implications for the nature and purpose of educational institutions. As the half-life of information continues to shrink and access to information continues to grow exponentially, Schools cannot remain mere venues for the transmission of a prescribed set of information from teacher to student over a fixed period of time. Rather, Schools must promote “learning to learn,” i.e., the acquisition of knowledge and skills that make possible continuous learning over the lifetime. “The illiterate of the 21st century,” according to futurist Alvin Toffler, “will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.”*

She went further to state that, *“Information and communication technologies (ICTs) - which include radio and television, as well as newer digital technologies such as computers and the Internet - have been touted as potentially powerful enabling tools for educational change and reform. When used appropriately, different ICTs are said to help expand access to education, strengthen the relevance of education to the increasingly digital workplace, and raise educational quality by, among others, helping make teaching and learning into an engaging, active process connected to real life.”*

Objectives

In light of the above, it is imperative that the education system in Zambia accelerates the pace at which ICTs are integrated in the entire education system.

The objectives of the study, therefore, were to:

- (i) ascertain the extent to which the Government, through the Ministry of Education, has provided and/or facilitated the access of educational institutions to ICTs;
- (ii) assess the impact of ICTs on the delivery of education in Zambia from basic to tertiary educational institutions;
- (iii) find out what constraints, if any, Government faces in integrating ICTs in education; and

- (iv) make recommendations to the Executive on the way forward with regard to the use of ICTs in the education sector.

In specific terms, your Committee inquired into the following:

- (i) Government policy with regard to Information and Communication Technologies (ICTs) in the Zambian education system;
- (ii) The extent to which the Government, through the Ministry of Education, Science, Vocational Training and Early Education had provided and/or facilitated the access to and use of ICTs in Zambian educational institutions;
- (iii) The impact of ICTs on the delivery and management of education from basic to tertiary education;
- (iv) Hindrances to the integration and use of ICTs in the Zambian education system; and
- (v) The way-forward for the Zambian education system with regard to the access and use of ICTs.

Procedure Adopted

6.0 In order to gain insight into the topic under studying, your Committee interacted with the following stakeholders:

- (i) Ministry of Education, Science, Vocational Training and Early Education;
- (ii) Ministry of Transport, Works, Supply and Communication;
- (iii) Zambia Information and Communications Technology Authority (ZICTA);
- (iv) Zambia National Education Coalition (ZANEC);
- (v) Secondary School Teachers' Union of Zambia (SESTUZ);
- (vi) The Basic Education Teachers' Union (BETUZ);
- (vii) The International Institute for Communication and Development (IICD);
- (viii) USAID-Zambia;
- (ix) UNESCO- Zambia Chapter;
- (x) The Copperbelt University;
- (xi) Mulungushi University;
- (xii) The University of Zambia;
- (xiii) Nkrumah College of Education;
- (xiv) National Institute of Public Administration (NIPA);
- (xv) Zambian Open University;
- (xvi) Zambia Open Community Schools (ZOCS)
- (xvii) Copperstone University;
- (xviii) Evelyn Hone College of Applied Arts and Commerce;
- (xix) Chalimbana In-Service Training Centre; and
- (xx) National Science and Technology Council.

Summary of Submissions by Stakeholders

7.0 Your Committee received and considered written and oral submissions from stakeholders as outlined below.

Preliminary Issues

Your Committee was informed that many classification systems had been devised to describe the roles of computers in learning and teaching. For example, Perkins (1992) proposed five generic categories to describe the variety of ways in which educational technology could be used in classroom learning: Information Banks, Symbol Pads, Construction Kits, Phenomenaria, and Task Managers. Your Committee learnt that Information Banks were resources whose main task was to provide a source of information about topics. Symbol pads were defined as resources, such as word processors, calculators and pencils, which were designed to provide construction and manipulation of symbols. Further, phenomenaria resources allowed learners to scrutinise and manipulate phenomena (e.g. microscopes). Finally Task Managers were described as those resources which set tasks for learners and may also help with the execution of the tasks and provide feedback. Your Committee learnt that as a learning resource, computers have the capacity to fulfil all these roles.

Further, your Committee was informed that Schanks and Cleary (1995) focused on what they called, goal-directed learning. They discussed the need to develop active learning environments in which students were encouraged to pursue intrinsically motivating goals which were related to intended learning outcomes. They suggested that computer software could be used to support this scenario. For example, they created a simulation, Sickle Cell, of a medical counselling situation which included a blood laboratory where the goal was to "identify the clients' gene types" which was related to the intended outcome of "learning about red cells and haemoglobin". They recommend a range of software tools to support goal-directed learning with scenarios. Some of the most used learning methodologies using a computer are stated hereunder.

- (a) Simulation-Based Learning by Doing Tools: Tools that would enable people to "learn by doing" by placing them within simulated situations that replicate real world environments.
- (b) Knowledge Organization and Retrieval Tools: Tools that can help organise the massive amounts of video, textual, and machine readable data required.
- (c) Teaching Tools: Tools that would support different teaching methods, which are appropriate in different contexts.
- (d) Tools to Enhance Thinking: The computer has the power to serve as a real thinking aid by asking pertinent questions that help the user clarify his/her thoughts.
- (e) Interaction Tools: There are many ways to enhance the process of interacting with a computer such as with natural language processing tools.

Government Policy with Regard to Information and Communication Technologies (ICTs) in the Zambian Education System

Your Committee was informed that in Zambia, a number of encouraging ICT initiatives were already in place but the initiatives and their impact were not sufficiently known or publicised and therefore risked staying as pilot projects rather than setting the stage for programmes accessible to the wider education sector community.

Your Committee was further informed that the introduction and implementation of ICT strategies in the education system was currently fragmented and lacked co-ordination. Most ICT strategies were being implemented at institutional level. At this level, various stakeholders have made a number of interventions. For example, digital satellite television sets have been installed in High Schools through Multi-Choice Zambia. Non-Governmental Organizations (NGOs) like One-World and Computers for Zambian Secondary Schools had provided personal computers to some Schools. In terms of teaching ICTs in Schools, a syllabus for grades 1-9 has been developed, while those teaching grades 10-12 were using international syllabi. The tertiary level (colleges and universities) have institutional initiatives to acquire ICTs with own and/or donated resources for purposes of training IT human resources, manage information systems, and general use in daily academic activities.

According to the then Ministry of Education, Science and Technology's ICT Strategic Plan, which covered 2011 to 2015, the ICT strategic objectives were anchored on its quest to integrate ICTs in education that fostered:

- (i) ICT literacy at all levels;
- (ii) provision of educational and training services;
- (iii) meeting the challenges in the changing educational, management and business needs of the Ministry; and
- (iv) provision of a platform for e-Governance services and synergies with other Ministries and the private sector.

Your Committee was informed that the four key objectives for ICTs in the education sector were as set out below.

- (i) Education and Training Services: To introduce and enhance the quality of teaching and learning through the provision of innovative, technology-based educational programs and services by the Ministry of Education, Science, Vocational Training and Early Education in the provision of quality education and training services;
- (ii) ICT Literacy: To introduce and enhance the ICT literacy of administrators, students, staff and members of the community to meet their education, work, societal and life needs;

- (iii) E-Governance Services and Synergies: To develop systems and support for administrators, students, staff and the community through innovative e-services (web based services) and establish synergies with other line Ministries and stakeholders. The synergies should include the environmental impact mitigation strategies; and
- (iv) ICT Infrastructure: To establish and enhance the ICT infrastructure to meet the changing educational, management and business needs of the Ministry of Education in particular and the nation as a whole, through Private Public Partnerships. In this regard, the Government of Zambia had carried out the following ICT implementation activities for educational institutions:-

Hosting of the ICT Conference

Your Committee was informed that the Government, through the then Ministry of Education, Science and Technology, facilitated an ICT Conference at the Taj Pamodzi Hotel from 13th to 14th July, 2011. This Conference was aimed at educating and sensitising lecturers, teachers, administrators and educational stakeholders at all levels, on the need to incorporate the teaching of ICTs in educational institutions (Universities, Colleges, High Schools and Primary).

Development of the ICT Policy on Education

Your Committee was informed that the then Ministry of Education, Science and Technology developed an ICT Policy aimed at directing how ICTs should be used in educational institutions country-wide. This Policy gave policy direction for the utilisation of ICTs in the education sector as a whole. Unfortunately, this Policy has remained a draft for over six years.

Development of ICT Curricular

Your Committee was informed that Government through the Ministry of Education, Science, Vocational Training and Early Education has developed an ICT curricular that embraced ICTs for kindergarten and primary Schools only. This curricular has not yet been implemented in the various Schools for various reasons among which were the lack of ICT teachers in the country, lack of computing facilities in the learning institutions and lack of ICT teaching materials at all levels of education.

The Extent to which the Government, through the Ministry of Education, Science and Technology had provided and/or facilitated the access to and use of ICTs in the Zambian educational institutions

Your Committee was informed that largely, the Ministry of Education has not been the major player behind initiatives to facilitate provision, access to and use of ICTs in the educational system but NGOs and the private sector. Your Committee heard that in 2007, the Ministry of Education acknowledged that the introduction and implementation of ICT strategies in the education system were fragmented and lacked coordination (MOE, 2007).

Your Committee was informed that Multi-Choice Zambia installed satellites and provided some programmes at High School level and that One World and Computers for Zambian Secondary Schools have provided personal computers to some Schools. The impact of these two initiatives have not been assessed. Your Committee was also informed that at individual college and university levels, use of ICT for educational purposes has gradually increased but not fully studied.

Your Committee learnt that one major effort to develop ICTs among tertiary education institutions from quarters other than Government, has emanated from an institution called Zambia Research and Education Network (ZAMREN), a non-profit making association.

Your Committee was informed that ZAMREN would:

- (i) secure broadband connectivity to member institutions and promote sharing of education resources via a dedicated infrastructure of ZAMREN; and
- (ii) promote research among three public Universities (University of Zambia, Mulungushi University and Copperbelt University).

However, it was also noted that at the Headquarters, the Ministry of Education has introduced Educational Management Information System (EMIS), a system that had considerably improved management and analysis of educational statistics. At Basic School level, Government has promoted the Interactive Radio Instruction (IRI), which started as a pilot project for grade one learners at 22 IRI centres, in which a total of 75,000 pupils were enrolled.

Impact of ICTs in the Educational Sector in Zambia

Your Committee was informed that in Zambia's education institutions, penetration of ICTs has gradually improved over the years although the levels of penetration remained low with many, if not all, mostly equipped with either second-hand, refurbished or/and outdated ICT services and products which did not support the use of modern applications such as internet and latest education software.

Your Committee was further informed that the levels of access and use of ICT in the education sector varied widely. It was observed that tertiary institutions such as universities were using ICTs for the various purposes such as delivery of lectures and creating knowledge and information sharing networks. However, the ratio between available ICT facilities, to existing student population was still very low, with certain universities having a ratio of 200 computers to about 10,000 students. As a teaching tool, ICTs were playing an increasing role particularly in distance education. In high Schools, however, access and use of ICTs was generally lower than in tertiary institutions for various reasons. In basic and primary Schools, it was observed that the level of access remained low or was non-existent in many of them.

The table below shows the findings on Access and Use of ICTs in the education sector in selected urban and rural learning institutions in Lusaka Province.

Category	No.of institutions visited	Level of Access				Remarks
		High	Moderate	Low	No Access	
Provincial Education offices	1		√			Uses ICTs for administration purpose only
District Education Offices	3			√		Uses ICTs for administration purpose only
Tertiary Institutions	2		√			For both administration and academic purpose
High Schools	3			√		Mainly for administration and occasionally for academic purpose with isolated cases where it is available
Basic and Primary Schools	3			√	√	Mainly for administrative purpose and in isolated private Schools they use ICTs for both academic and administrative purposes

Your Committee was informed that in institutions where ICTs were embraced, it had yielded a lot of positive results and that this has compelled Schools and universities to continue struggling to maintain these ICTs amid limited budgets and seriously competing needs.

Some of the general positive impacts of ICTs in the Zambian Educational sector were as set out below.

Students and Pupils

- (i) Students using ICT applications generally showed gains on measures of depth of understanding and reflection.
- (ii) Students used ICT to analyse, organise and creatively represent real information in reconstructing knowledge.

- (iii) ICTs promoted active learning and authentic student assessment.
- (iv) ICTs helped to engage students by motivating and challenging them.
- (v) The use of ICT has consistently improved students' attitudes towards learning and their own self-image.
- (vi) Appropriate use of ICT resulted in new learning experiences and required higher levels of thinking and problem-solving.
- (vii) ICTs have potential to provide tools to increase student productivity.
- (viii) Animation and video has enhanced learning when the skills or concepts to be learned involved motion or action.
- (ix) ICTs have helped improve and increase learner independence.
- (x) Increase collaboration and cooperation. In courses that used computer-based networks, many students who seldom participate in face-to-face class discussions become more active participants online.

Lecturers and Teachers

- (i) ICTs have provided greater access to more information thus leading to increased interest in teaching experimentation among lecturers and teachers.
- (ii) ICTs have created an environment that required more collaboration among teachers, students, parents and administrators.
- (iii) Teachers and lecturers tend to have more time to carry out research and other activities since ICTs help students to learn independently.
- (iv) ICTs have provided more time for teachers and lecturers to engage with students, leading to greater productivity.

Impact on Pedagogy

- (i) More learner-centred learning.
- (ii) More cooperative and collaborative instruction.
- (iii) Teaching based on greater access to information and sources of information.

Impact on Management of Educational Institutions

Tertiary Institutions

Your Committee learnt that tertiary learning institutions have evolved tremendously in the use and application of ICTs. This was attributed to the great exposure of senior administrators to the way other institutions abroad were applying ICTs. Your Committee was also informed that most tertiary institutions were utilising ICTs mainly for administrative purposes such as the management of accounting systems and human resource requirements. However, these institutions have not prioritised their core business which was to use electronic systems to manage research, results, teaching and learning processes.

Your Committee heard that online registration was used world-wide in various learning institutions and in fact the world has introduced what was termed, 'Self-Service Concept.' This has led to tremendous efficiency and effectiveness in service delivery and the fight against corruption. This was because there was no physical contact between the customer and the service provider.

E-learning systems

Your Committee learnt that currently, some tertiary learning institutions were using e-learning to deliver lessons. This e-learning, involved uploading lecture notes, hand-outs, assignments and other materials accessed by students using their usernames and passwords.

Short Message Systems (SMS)

Your Committee was also informed that some universities have started using the SMS system to deliver assignments, announcements and test results to students. This was working very effectively especially with distance education. Since mobile phones were more affordable and widespread than computers, it would be advisable for more institutions to adopt it.

Challenges or Hindrances to the integration of ICTs in Zambia's Educational Sector

Your Committee was informed that although Zambia was the second country in Africa to adopt ICTs in 1994 after Egypt, it has lagged behind in pushing the ICT agenda particularly in the education sector for a number of reasons. Your Committee learnt that ICTs were started at the University of Zambia where the first Internet Service Provider (ZAMNET) was born and that the main idea at the time was to develop ICTs for the educational sector. However, this vision failed because of lack of Government support.

Some of the identified hindrances are listed hereunder.

(i) *Non-availability of computers in learning institutions*

Your Committee was informed that 95% of learning institutions in Zambia did not have computers for both students and staff. This had negatively affected the use and value of ICTs in learning institutions. However, a few institutions have struggled to source computers for their students – most of which were second-hand and hence did not have significant value as they could not carry out most of the computing requirements of the users.

(ii) *Lack of clarity from the Ministry of Education, Science, Vocational Training and Early Education on the use of ICTs in learning institutions (Policy)*

Your Committee was informed that the Ministry of Education, Science, Vocational Training and Early Education has not published any document outlining how ICTs were to be used at various levels of education. The National ICT Policy in education has remained a draft for a very long time. Your Committee was told that the Ministry needed to provide guidelines on the type of ICTs that were to be applied at kindergarten, primary Schools, secondary Schools and tertiary institutions. Currently, the integration of ICTs at these various levels differed from institution to institution and was un-coordinated.

(iii) *ICT illiteracy among teachers and administrators of learning institutions*

Your Committee learnt that most administrators in tertiary and higher institutions of learning did not appreciate the value of ICTs, as such, they did not consider it a priority even within their limited finances. Information Technology was viewed as a preserve of secretarial work and not a strategic tool for the teachers and students.

(iv) *Lack of specialists in ICTs for education purposes*

Your Committee was also informed that Information Communication Technology (ICT) was a field which has several sub-fields into which professionals could specialise. Among these sub-fields were e-Health, e-Education, e-Agriculture, e-Governance, e-Commerce, e-Tourism, etc. As such, e-Education was the specialisation that was required in the Ministry of Education, Science, Vocational Training and Early Education. This requires that ICTs were well planned to meet the changing needs of the teachers, students and administrators. It therefore, needs specialised training for effective use. Currently, the type of ICT professionals in the Ministry was that of technicians who dealt with ICT infrastructure or ICTs in general and not the application of ICTs to education. This has created a gap such that ICTs were not applied and implemented for the benefit of learners and teachers alike.

(v) *Lack of a dedicated budget to fund ICTs in educational institutions*

Your Committee was informed that most countries that have a well-developed ICT-propelled educational sector were those which have deliberately set aside an ICT budget for learning institutions. This budget was strategically dedicated to the development of ICT facilities for lecturers, teachers and students in learning institutions. In Zambia, unfortunately, there was no dedicated resource envelope to deliberately fund ICTs in learning institutions and the little grants that the Government sent to institutions were not sufficient to significantly fund ICTs.

(vi) *Uncoordinated donor and corporate company funding towards ICTs in learning institutions*

Your Committee was informed that many countries have created a special fund from various donor agencies and co-operating partners to specifically fund ICTs in learning institutions. This has helped them develop the educational sector tremendously. Zambia currently did not have a coordinated approach to funding ICT development through donors and cooperating partners. Each learning institution was left to solicit for its own funding towards ICTs from the donors.

(vii) *Lack of supporting infrastructure*

Your Committee was informed that one of the biggest hindrances to the integration of ICTs in the education sector was lack of requisite infrastructure in the form of electricity and connectivity. Your Committee learnt that it did not matter how zealous and innovative an educational administrator was in getting their institution on ICTs, as long as these facilities and particularly power, were not in place as it would be an exercise in futility. This was why penetration levels in rural areas were so low.

The Way Forward

Your Committee was informed that Zambia was one of the competitors in the global economy and as such, it needs to harness Information Communication Technologies (ICTs) for the speedy development of its educational sector, otherwise Zambian children would not be competitive for wealth and job creation.

Your Committee was informed that in order for Zambia to fully benefit from and adopt ICTs in the educational sector, the strategies set out below would be required.

(i) *Developing clear ICT guidelines on education*

The very starting point in implementing ICTs in learning institutions at all levels was by clearly defining the Policy on ICTs. This would help to guide the development of appropriate ICTs for kindergarten, primary, secondary Schools and at tertiary levels. This was necessary because the use and application of ICTs differed from level to level both in approach and content as well as the devices to be used.

These would have to be clearly defined so that educational stakeholders could easily access and implement them according to their needs and requirements. Further, this would also help the Ministry of Education, Science, Vocational Training and Early Education to easily monitor the performance of learning institutions at all levels because they would have a bench mark.

(ii) Developing of ICT lecturers in higher learning institutions

Your Committee was informed that Government should develop a deliberate programme to sponsor Zambians to do PhD and Masters Programmes in ICTs so that these would act as a buffer to teach ICTs in colleges and universities. Currently, universities and colleges in Zambia did not have sufficient numbers of lecturers in ICTs, resulting in fewer intakes of students in these courses. Your Committee heard that Computer Science graduates averaged between 50-60 per year, which was not enough for a growing economy like Zambia. These new graduates were quickly absorbed into industry and none ventured into teaching. As a result of this, the educational sector did not have adequate qualified ICT teachers or lecturers. Coupled with this would be the creation of an ICT diploma or degree course for teachers.

(iii) Dedicating a specific budget for ICT development in learning institutions at all levels

Your Committee was informed that like other Governments had done, Government, through the Ministry of Education, Science, Vocational Training and Early Education, should develop a deliberate budget for the development and enhancement of ICTs in learning institutions. This would help to have a speedy development of ICT tools and systems in learning institutions.

(iv) Development of ICT infrastructure in learning institutions at all levels

Your Committee was informed that before anyone could think of the application of ICTs in learning institutions, it was very important to develop the necessary ICT infrastructure on which the various educational applications would run. This was necessary because just as before one thought of buying a Benz car, they must ensure that a road already existed on which the Benz would be driven. This should be the same for ICTs. Currently 95% of Zambia's learning institutions did not have ICT infrastructure and so this should be the first focus of Government. Your Committee learnt that the grants from the Government were not enough to cover the development of ICT infrastructure in the institutions and so these learning institutions could not afford to develop expensive ICT infrastructure on their own.

Components of ICT infrastructure included, but were not limited to:-

- Local Area Networks
- Server farms
- Computer laboratories
- Internet connectivity
- Wireless internet connectivity
- Back-up and Disaster Recovery Systems
- Mobile Computing Infrastructure

(v) Strong collaboration with ICT stakeholders

Your Committee was informed that Government has not been working with its citizens in the development of ICTs for education. Zambia has men and women who were certified in e-Education and these could develop virtually any system for learning institutions at all levels of education. Therefore, the only way for the Ministry of Education, Science, Vocational Training and Early Education to access these ICT professionals, was to work hand-in-hand with Computer Society of Zambia under which these ICT professionals fall. This was considered the cheapest and easiest method because dealing with a company would mean that other ICT specialisations would not be available in that company hence derailing the projects.

(vi) Development of ICT implementing committees

Your Committee was informed that it was very important that the Ministry of Education, Science, Vocational Training and Early Education establishes various committees that would spearhead the development of ICTs in education. These committees would carry out various jobs and augment each other.

Examples of these committees include:-

(a) Educational Policy Committee

This Committee would be responsible for developing and sharing the Government Policy with other committees so that all developments were within the strategy and thinking of Government. This Committee would address things such as modes of teaching, access to learning materials, curricular, etc.

(b) ICT Committee

This Committee would be responsible for the final product or services that students and lecturers should finally access. It would develop systems for kindergarten, primary, secondary Schools and tertiary levels. They would also set-up networks and other ICT infrastructure in the learning institutions. It would also develop special simulation tools for the teaching of Mathematics, Science and high-level courses in colleges and universities.

(c) Lecturer/Teachers Committee

The responsibility of this Committee would be to design the subject content in the form prescribed by the ICT Committee. They would package the subjects in such a way that the ICT Committee would have no problems developing and transforming the content into an ICT System. This Committee would comprise various subject teachers and lecturers at various levels.

(d) Finance Committee

This Committee would comprise financial institutions, cooperating partners and Government officials. Their main job would be to raise funds for the development of ICT infrastructure and systems in the various learning institutions.

Committee's Observations and Recommendations

8.0 In view of the foregoing, your Committee made the observations set out hereunder.

- (i) There are no clear guidelines in the form of a policy on the use of ICTs in the education sector. The National Policy on ICTs in education has remained a draft for a long time.
- (ii) Although the Ministry of education, Science, Vocational Training and Early Education have developed an ICT curricular for primary Schools and kindergarten, this has not yet been implemented.
- (iii) There is no dedicated directorate or department at the Ministry of Education, Science, Vocational Training and Early Education to superintend over the implementation of ICTs in the education sector.
- (iv) There is no dedicated budget line for ICTs at both national and ministry level to spearhead the integration.
- (v) There is no requisite infrastructure both around and within learning institutions such as electricity, connectivity and laboratories to support ICT usage.
- (vi) There is no collaboration between the Ministry of Education, Science, Vocational Training and Early Education and ICT specialists such as the Computer Society of Zambia and others.
- (vii) Donor and corporate funding towards ICTs in educational institutions is haphazard and uncoordinated leading to duplication and/or concentration in same areas, leaving others uncovered.
- (viii) Government has left the provision and facilitation of the access to and use of ICTs in the Zambian educational institutions to Non Governmental Organisations (NGOs) and the private sector, most of whom have donated obsolete computers which are incompatible with modern educational packages and other software and applications.
- (ix) The ICT illiteracy levels among teachers and education administrators are so high that the officers who should ordinarily have been facilitators, have become a stumbling block to their integration;

- (x) There are no staff development programmes in ICTs because the education establishment does not recognise and include ICT teachers and technicians.
 - (xi) The speed and cost of connectivity in terms of bandwidth has frustrated the efforts of many institutions which have ventured into using ICTs for their teaching and management operations.
 - (xii) In high Schools where computers are available, there is more concentration on teaching computers rather than on using computers as a tool for learning and teaching (Pedagogy).
- 9.0 In view of the foregoing observations, your Committee makes recommendations as set out hereunder.
- (i) The Ministry of Education, Science, Vocational Training and Early Education, should expedite the launch and the subsequent operationalisation of the National Policy on ICTs in education.
 - (ii) ICT curricular for primary Schools and kindergarten should be implemented as a matter of urgency to give direction to the so many Schools that are groping in the dark in this area.
 - (iii) The Ministry of Education, Science, Vocational Training and Early Education, should establish an ICT directorate or department at its Headquarters to superintend over the implementation of ICTs in the education sector.
 - (iv) Government should provide for the development and integration of ICTs in the education sector in the national budget in order to render credence to the programme.
 - (v) Donor and corporate funding towards ICTs in educational institutions should be well coordinated to avoid duplicity and/or concentration in the same areas, leaving others uncovered.
 - (vi) Government should invest in the development of requisite infrastructure such as electricity, connectivity and laboratories both around and within learning institutions to support ICT usage.
 - (vii) There should be sustainable collaboration between the Ministry of Education, Science, Vocational Training and Early Education and ICT specialists such as the Computer Society of Zambia in order to develop appropriate educational software.

- (viii) The provision and facilitation of the access to and use of ICTs in the Zambian educational institutions should be Government's undertaking. Non-Governmental Organisations (NGOs) and the private sector, must compliment Government effort. This will guarantee that the computers provided are compatible with modern educational packages and other software and applications.
- (ix) The Ministry of Education, Science, Vocational Training and Early Education, should work at raising ICT literacy levels among teachers and education administrators so that they become agents of change instead of being stumbling blocks.
- (x) Government should include ICT technician and teaching positions in the Ministry's establishment in order to facilitate staff development programmes.
- (xi) Government should quickly lay the optic fibre in order to improve speed and lower the cost of internet connectivity.
- (xii) There should be a paradigm shift in the use of ICTs, particularly in high Schools so that there is a balance between teaching computers and using computers as a tool for learning and teaching.

PART TWO

LOCAL TOUR: LUSAKA, CENTRAL, COPPERBELT AND NORTH-WESTERN PROVINCES

Objectives

10.0 The objective of the tour was to carry out an on-the-spot check on the use of Information and Communication Technologies (ICTs) in selected educational institutions, as a follow-up to the meetings of the Committee. Some of the institutions visited, did not make an appearance before your Committee to make submissions.

Your Committee toured the following institutions:

- (i) The University of Zambia;
- (ii) National Institute of Public Administration (NIPA);
- (iii) Evelyn Hone College;
- (iv) David Kaunda Technical High School;
- (v) Zambian Open University;
- (vi) Munali Girls' High School;
- (vii) Munali Boys' High School;
- (viii) Munali Centre of Excellency (Construction site);
- (ix) Nkrumah College of Education;
- (x) High Ridge High School;
- (xi) Kalonga High School;
- (xii) Mulungushi University;
- (xiii) Northern technical College (NORTEC);
- (xiv) Copperbelt University (CBU);
- (xv) Zambia Institute of Business Studies and Industrial Practice (ZIBSIP);
- (xvi) Mukuba High School;
- (xvii) Copperbelt Secondary School Teachers' College (COSTECO);
- (xviii) Rokana Basic School;
- (xix) Solwezi College of Education;
- (xx) Solwezi Technical High School; and
- (xxi) Kikombe Basic School.

Findings

(i) The University of Zambia

11.0 Your Committee learnt that the University of Zambia was the pioneer of Information and Communication Technologies through the launching of Zamnet, an Internet Service Provider that was still running under its auspices. Further, your Committee was informed that all Schools in the institutions were connected to optic fibre and national grid, a project that was funded by Zambia Information and Communications Technologies Authority (ZICTA). With this facility in place, staff and students could access electronic materials and subscribe to e-learning programmes within and outside the institution.

Your Committee was informed that the University was in the process of digitalising the library with assistance from the Netherlands Universities Foundation for International Cooperation (NUFFIC). Currently all dissertations had been digitalised.

The most striking innovation your Committee came across at the institution was the video conferencing made possible through eXtraordinary Video Disc (XVD) technology. This connectivity was among the three public universities, namely University of Zambia, Copperbelt University and Mulungushi University, though Mulungushi University was not yet connected. Through this facility, a lecturer in the university could offer a lecture which would be followed by students at Copperbelt University and Mulungushi University. This is an innovation that surmounts the limitations of room space and shortage of staff as one professor can lecture to thousands in different localities. Through tele-education, lecturers were now able to upload and sell lecture notes on line on a shared benefit basis. The lecturer got 80% while 20% went to the University. The institution also has a Short Message Service (SMS) server which allowed the lecturers to disseminate information about lectures, results and assignments using cell phones. Up to ten pages of information could be sent this way. The University has also partnered with Muvi Television, through USAT, to send notes and assignments.

The University also has a Centre of Excellence. This is where students who need some computer training take self instruction modules at a fee. The Institution also has embarked on an empowerment programme to enable students obtain laptops.

Challenges

The grant given to the Institution was not adequate to enable it carry out its ICT aspirations. As a consequence of inadequate funding, the library does not benefit from the e-journals. The Institution cannot provide wireless internet service to all the student halls due to the cost of bandwidth.

(ii) National Institute of Public Administration (NIPA)

Your Committee learnt that although the National Institute for Public Administration (NIPA), has a well furnished computer laboratory, it was not used for purposes of pedagogy. This meant that computers were only used for students taking computers as a course. The only ICT gadgets being used were projectors and power-point presentations. Both student registration and publication of results were still manual. There was no wireless connectivity in the Institution. However, there was a server where student records and accounting system were managed from.

In general, the Institution lags far behind in using ITCs for the improvement of management systems and as a tool for teaching.

(iii) **Evelyn Hone College**

Your Committee found that little was being done in ICT infrastructure development and usage. The Institution has a server room controlling accounting and students records. Registration and publication of results were still manual. The Institution was also experiencing limited bandwidth. Evelyn Hone College has one computer lab but only for computer lessons for students taking computers.

Although Evelyn Hone College was the biggest printing college in Southern Africa, it was poorly funded, resulting in the college being unable to invest in new technology and so be competitive.

With regard to training journalists, your Committee found that whereas the Institution was training journalists in all media; print and electronic, it was not allowed to have more than one licence. It was, therefore the view of your Committee that by virtue of the training Evelyn Hone College was offering, it was necessary that a cross licence be offered to make all-round training possible.

(iv) **David Kaunda Technical High School (DK)**

Your Committee found that David Kaunda Technical High School, was offering Computer Science as an optional but examinable subject. There was a specific class assigned Computer Science as a subject. There were intentions to extend computer appreciation to all students but this was hampered by the limited number of computers, staff and other infrastructure. The School, therefore, has a computer lab with twenty computers but catering for forty students. These computers were donated by Bank of Zambia in a bid to promote ICTs in Schools. The School was connected to internet through Zamtel and was paying K1, 500,000.00 per month. It had no website for now.

With regard to using ICTs as a teaching tool, your Committee was pleasantly surprised that the School has a smart board. This is an electronic gadget by which teachers can deliver lessons. With it, a scientific experiment can be performed outside a laboratory, without physical reagents, beakers and other apparatus.

The Committee expressed concern at how the Government could collect the best brains in the nation, send them to the School but abandon them after their completion of grade twelve. This was in view of the fact that there did not seem to be a plan in place to monitor what these students were doing let alone to assist them continue with their studies. It was the view of the Committee that the creation of a technical School such as David Kaunda Technical High School should have been motivated by a very clear long term objective.

(v) **Zambian Open University**

Your Committee expected that by nature of its orientation, Zambian Open University should be relying more on internet than any other higher institution of learning but this was not presently the case. The Institution, however, has a website and internet in place and was using Moodle to post materials and assignments. The only handicap to this means of communication was that not all students enrolled with the University have access to internet. The Institution has a chartroom where students can participate in a lesson taking place elsewhere.

Online registration was not presently possible, but the Committee was assured that this would be available in three weeks time. A partnership has been established between the University and Zambia National Commercial Bank (ZANACO) for students to remit the fees. Information Technology was not offered as a course but it would be offered as Study and Communication Skill.

(vi) **Munali Girls' High School**

Your Committee learnt that Munali Girls' High School had two sections; the special unit dealing with the deaf and the blind and the regular School. The blind, however, did not have a class of their own but were integrated into the deaf. The School has twenty-seven laptops donated by Seattle Academy of Arts and Science, in the United States of America. These are expected to service a population of 1,200 students. The School did not initially have a computer laboratory and had to convert an ablution block into a computer lab. The lab was connected to the internet but as usual, the cost and size of bandwidth, was a serious challenge. Even more challenging, was how to use ICTs to teach the blind, considering that there were no facilities for them presently. Further, lack of knowledge of the sign language by the teachers and lecturers made it difficult for the deaf students to communicate with both teachers and fellow students. It was also difficult for teachers at Secondary School level to explain technical and scientific terms because many did not know sign language, therefore, the need for more teaching and learning aids.

(vii) **Munali Boys' High School**

Your Committee found that Munali Boys' High School has thirty-eight computers, donated by an institution known as the Seattle Academy of Arts and Science, in the United States of America. Out of the number, only twenty-five were in working order. The School did not offer computers as a subject but all pupils were expected to attend computer appreciation lessons. Due to the small number of computers, the student contact time was very short.

There was very little use of ICTs as a tool for teaching as the only ICT gadgets available were CDs and projectors.

(viii) **Munali Centre of Excellency (Construction site)**

Your Committee visited the construction site and found work on staff houses, dormitories and administration block in progress.

The purpose of the visit was to make a follow-up on the assurance made in the Action-Taken Report, to the effect that the construction of the Centre of Excellence, meant for learners with disabilities would start in 2012. Your Committee was informed that construction works were scheduled to finish by the end of December, 2013.

(ix) **Nkrumah College of Education**

At Nkrumah, your Committee found that the institution has forty computers donated by the Netherlands Universities Foundation for International Cooperation (NUFFIC). These were housed in a very neat laboratory and computer appreciation was compulsory for all students. Zambia Information and Communication Technologies Authority (ZICTA) have provided the software to block unwanted sites. The Commercial or Business Studies Department have its own computers and use them as typewriters as well as for programmes such as pastel.

The Institution was connected to the internet through i-connect but it was intermittent and quite unreliable. Wireless connectivity was limited to the area around the library.

Your Committee was further informed that the Institution was using ICTs for distance learning and that resource centres connected to the internet have been established in different localities and students could access their assignment and tests from there. Further, student records were now digitalised. However, online registration and publication of results was not available yet.

(x) **High Ridge High School**

Your Committee found that High Ridge High School, which used to be a nursery for Nkrumah Teachers' College, for purposes of teaching practice, has a very scantily equipped computer laboratory with obsolete computers donated by Computer Aid, through Matero Boys' School. Of the ten computers, only two were working. The only other ICT equipment in the School, was a television set and decoder donated by Multi-Choice Zambia Ltd.

It was evident that the School did not consider computers a priority because notwithstanding the pathetic situation in that area, the School was raising money to purchase a School bus.

(xi) **Kalonga High School**

Your Committee found that the School has a computer lab with twenty second hand computers bought by the School, but there was no trained IT teacher and only volunteer teachers, who had an idea, helped pupils and their colleagues. The School was not yet connected to the internet and was only using the Zamtel dongle to access the internet. The only other ICT programme working was supported by Multi-Choice Zambia Ltd and students and teachers were using it to access information through geographic and history channels.

Your Committee was informed that ZICTA promised to supply computers but had not yet done so. Most teachers were computer illiterate and this has been an impediment to using ICTs in the School.

(xii) **Mulungushi University**

Your Committee was informed that the University has a centre for Information Communication Technologies – Education in Kabwe town, which was the ICT hub for the Institution. Your Committee did not, however, have a chance to see it, having already left Kabwe town.

Network and Server Systems

Your Committee was informed that Mulungushi University has three campuses, namely: Great North Road, Town and Masiye campuses, which were yet to be linked via internet. Two of the three campuses, namely, Great North Road and Town Campus, had both cable and wireless networks. The University has five servers, donated by the Ministry of Education and Universities from the Netherlands (NUFFIC). Computer knowledge was compulsory for every student at the institution

Web site and Intranet

The University has a website <http://www.mu.ac.zm> hosted by Zamnet. The same website is hosted on the university server as intranet and could be accessed on the network as <http://intranet> or simply typing intranet from any web browser.

With regard to online registration and examination results system, your Committee was informed that in order to assist academic office and dean of students in the registration of courses, students could visit the University website <http://www.mu.ac.zm> from any part of the country and register courses. The Dean and Assistant Dean were able to approve the courses online. Academic Office was then able to produce reports in terms of class lists, examination slips, number of registered students and related matters. Students were able to access the examination results online by providing their identity and credentials. Manual application was also still available for those who have no access to the internet.

To facilitate internal and external communication, web mail has been installed and was available from the website for all students and members of staff. This could be accessed locally from <http://mail.mu.ac.zm>

Modular Object-Oriented Dynamic Learning Environment (Moodle) E-Learning

The Institution also has Moodle, which is an open source e-learning management system to help lecturers and students interact. It was currently being used by Centre for ICT Education, lecturers and students and would soon be available to other Schools and centres. It could be accessed on <http://intranet/moodle>

In financial administration and management, your Committee learnt that the institution was using Pastel Accounting system, to quickly generate annual and financial reports, payroll and human resource data.

Further, the University was also involved with Pan-African E-Network Project, which provided e-Services with priority on tele-education and tele-medicine services, and VVIP connectivity (for Video-conferencing and VoIP services) among the Heads of State. The University was also associated with Help-Africa, which was involved in capacity building by way of imparting quality education to students, through the best Indian Universities and educational institutions. For the future, the University intended to install local campus fibre network and increase internet bandwidth from the current 1Mbps to 10Mbps through ZAMREN optical fibre, which was being installed. The other project was to digitalise and automate the library management system. The challenge, however, was to provide wireless internet in the hostels. Your Committee was furthermore informed there was a deficit of K1.5 billion to bring the optic fibre, which has reached the junction, compliments of ZICTA, on to the campus.

(xiii) **Northern Technical College (NORTEC)**

At NORTEC, your Committee learnt that the Institution has sixty-two computers; forty-eight in the Department of Applied Mechanics, twenty-four in the Automotive Department and six overhead projectors in all the computer labs.

Further, your Committee was informed that all programmes at the Institution were computer based, hence the need to have not just computers but requisite software. All first year students were required to learn computer fundamentals and staff were afforded an opportunity to undertake short courses to upgrade their skills.

The Committee learnt that the Institution was connected to the internet through Coppernet and has an internet cafe' in the library. As a result of the availability of internet, correspondence within the Institution was by internet. The Institution was, however, unable to use ICTs for administrative purposes due to lack of requisite software. As with other institutions, NORTEC was also a victim of expensive, yet unreliable internet connectivity.

Your Committee was informed that NORTEC has not yet started online registration and publication of results, though it has a website. There was no sms server, a facility that allows lecturers and management to send assignments and general information to students. The biggest challenge the Institution faces is that whereas it trains students in technology, the machinery available is so old that it is not compatible with modern technology and therefore impossible to digitalise. This calls for the overhaul of the machinery in order to bring it in consonance with modern trends in technology and industry.

(xiv) **Copperbelt University (CBU)**

Your Committee was informed that the University offered the following programmes:

- (a) degree in Computer Science (4 years) and has been running since 1996;
- (b) diploma in Information Technology (2 and a half years) and has been running since 2003; and
- (c) degree in Information Technology (5 years) and has been running since 2010.

Further, the University was planning to offer a master's degree programme in Computer Science (MSc.) and that the curriculum had been approved by Senate in 2010. The programme was expected to commence in 2012.

Your Committee was informed that currently, Copperbelt University has 400 computers, some of which were donated by the Netherlands Universities Foundation for International Cooperation (NUFFIC).

Your Committee was further informed that CBU has introduced a facility for on-line course registration and students no longer needed to queue up at the campus for registration. Students could do course registration anywhere in the world, so long they had paid their fees at any ZANACO branch in Zambia. Your Committee was informed that the Institution has made a lot of savings in terms of finances, stationery and time. Instead of allocating two weeks for course registration and orientation for first year students, one week was now sufficient. This was a tremendous gain in academic time.

Further, the Institution was in the process of introducing on-line application for study places for prospective students. Applicants all over Zambia would no longer need to make long journeys to purchase application forms from CBU, go back home and fill in the forms and then trek back to deposit the forms.

Community programme with Mitanto High School in Kwacha

Your Committee was informed that this project was sponsored by the Institute of Electrical and Electronics Engineers (IEEE) under what was termed as Engineering Projects in Community Schools (EPICS). The EPICS programme of the IEEE aims at bringing science and engineering to pupils in Schools.

The eXtraordinary Video Disc Project

This facility was being used to interact with the University of Zambia but Copperbelt University also hoped to start utilising it within Copperbelt University so that lectures could be provided to big combined classes at the same time. The equipment was donated by Japan. This will help the Institution to save on finances because the number of hours for some lecturers will reduce and there will be better utilisation of lecture rooms.

Your Committee was informed that Mercer, a computer manufacturing company, has come on board to supply computers at a reduced price.

The Committee toured selected computer laboratories, the Cyber Library and the Server room.

The Committee was informed that the Institution did not have a short message service (SMS) by which students would receive assignments, test results and other information. Moodle was, however, available.

Some of the challenges faced by the Institution included the following:

- (a) high computer student ratio;
 - (b) low and expensive bandwidth, currently at 4mg while the ideal was between 8 and 10mg;
 - (c) limited wireless especially during the day when both staff and students needed it;
 - (d) the Institution did not have any white or smart boards;
 - (e) inadequate funding from Government; and
 - (f) no direct support for ICT related programmes from Government.
- (xv) **Zambia Institute of Business Studies and Industrial Practice (ZIBSIP)**

Your Committee was informed that the institute has 40 computers but had no wireless connectivity. Not all students learnt computers but they were encouraged to acquaint themselves with ICTs. Most of the operations such as registration of students were manually done though application forms were available on the website.

With regard to support from the Government, your Committee was informed that the institution received the following ICT equipment:

- (i) Proliant Server in;
- (ii) One Sony Data Projector; and
- (iii) (03) Canon IR 2020 copiers.

Your Committee was also informed that the Government has been supportive in capacity building through a programme known as Flexible Skills in Development (FSD) in collaboration with Commonwealth of Learning (COL) and that over seven (07) members of staff have either attended workshops or been trained on-line in FSD.

With regard to the impact on education, your Committee learnt that the following were now possible in the Institution:

- (i) staff were able to use ICTs to make time-tables;
- (ii) the Library lending of books and other materials had been automated;
- (iii) Open and Distance Learning (ODL) uses internet for communicating with students; this was also used for learner support and application for enrolment;
- (iv) Modular Objective Oriented Dynamic Learning Environment (Moodle) was being used on pilot basis for project management course;
- (v) lecturers and students were using internet for research and other academic purposes;
- (vi) the Institution had a website for communication and marketing purposes;
- (vii) the Institution was using server-based Academic Information Management System (AIMS); and
- (viii) The Institution was using automated PASTEL accounting system.

Pertaining to initiatives by the College, your Committee was informed that:

- (i) ZIBSIP has purchased thirty (30) computers to enhance the capacity of ICT infrastructure;
- (ii) the Institution has paid for its own running costs of the internet service;
- (iii) the Institution has subcontracted office automation services;
- (iv) ZIBSIP has purchased a heavy duty photocopier for compiling study materials for Open and Distance learning (ODL); and
- (v) the Institution was switching from radio connectivity to optic fibre.

Challenges

Your Committee was informed that the major challenge the Institution faced was that it had limited financial capacity to undertake, among other issues, capacity building; and faster internet and wireless connectivity.

There was, therefore, need to increase Government funding to ICT related activities to solve the problems highlighted above.

(ix) Mukuba High School

Your Committee was informed that Mukuba High School was the second School on the Copperbelt, apart from Mpelembe Secondary School, to offer computer studies for examination purposes. The Institution has forty computers, most of which were donated by Kingsmead, a 'sister' School in the UK. The School has also been assisted by Konkola Copper Mines (KCM) to establish a media room. The School has one qualified IT teacher and one apprentice. Your Committee was further informed that the School was recently visited by ZICTA, who donated two computers and one printer.

Your Committee was furthermore informed that although the School offered computers for examination purposes, it was not available to other pupils, even just for appreciation. This was because of the size of the laboratory and the number of computers available, could not permit this.

The School was temporarily connected to the internet through i-connect but financial constraints has made it difficult for the School to continue and was now with micro-link's pay-as-you-go.

The Committee learnt that the School did not have smart or white boards and student as well as staff records were manual.

(x) Copperbelt Secondary Teachers' College (COSETCO)

Your Committee was informed that the Copperbelt College of Education was one of the affiliated colleges of the University of Zambia and that it has the important specialized function of training teachers of Home Economics, Mathematics and Science, a task it has performed since it was first opened in 1974. Further, your Committee learnt that the College, which was built in 1958 by the Catholic Franciscan Fathers, began as a Secondary School and was originally called St. Francis Secondary School. The original buildings formed the nucleus of the present campus.

Pertaining to Information and Communication Technology (ICT) provision, your Committee was informed that the Government of the Republic of Zambia, through the then Ministry of Education Science, and Vocational Training, provided access to ICT through many ways and

organisations such as the Flemish Association for Development Aid and Technical Assistance (VVOB), Netherlands Universities Foundation for International Cooperation (NUFFIC), International Institute for Communication and Development (IICD), Zambia Information Communication Technology Authority (ZICTA), Zambia Research in Education Network (ZAMREN) as well as Education Broadcasting Services.

Furthermore, your Committee was informed that VVOB introduced the use ICT facilities in the College in the 1990s. Staff then started learning how to use computers and scanners for the purpose of teaching and learning. VVOB also started the project called ICT in the curriculum, which has since continued through curriculum reviews. The Netherlands Universities Foundation for International Cooperation (NUFFIC) has also been helping the Institution to buy some ICT equipment and refurbishing of existing ones.

The International Institute for Communication and Development (IICD) has been funding the project of ICT in education and was currently in the second phase. With the help of IICD, the College has provided ICT equipment to ten District Resource Centres (DRC) around the country and ten more DRCs would receive similar equipment which have already been ordered. These were for use by Open and Distance Learning (ODL) students. The Zambia Information Communication Technology Authority (ZICTA), was connecting learning institutions and has supplied the College with forty-four computers and a printer. Four of the computers were stand alone and forty were on the network and all of them were being used for teaching and learning. More was yet to come from ZICTA.

Your Committee further learnt that ZAMREN has also donated two industrial servers to enhance ICT in the learning environment and to undertake research and studies. The Institution has also bought ICT equipment for teaching and learning. These included laptops for lecturers, office printers, copy printers, photocopy machines and Public Address System.

Impact of ICTs on college delivery of education

Your Committee was informed that ICTs have impacted the Institution's delivery of education in the sectors set out below.

1. Communication
 - a. through partnership and sponsorship of IICD, NUFFIC and VVOB, internet service was accessible by staff who were now able to link with their clients locally and worldwide;and
 - b. students have access to internet to facilitate communication to lecturers and fellow students from the two fully equipped student ICT Laboratories.

2. Record keeping

- a. an electronic recording keeping system was introduced to keep vital information for both students and staff;
- b. simple data bases in Microsoft Access software were introduced to keep record of assessment and examination for students;
- c. financial records were slowly being migrated to electronic copies to insure speedy access, updating and record retrieval; and
- d. a college trial static website was launched to provide vital information to the public and to keep track of what was being offered to the public.

3. Teaching and learning

- a. use of electronic equipment has been introduced that included use of data projectors, and cameras during lessons/lecturers;
- b. public address system was acquired to enhance sound while teaching, to be used by lecturers in case of large classes;
- c. smart boards have been installed in two locations to promote interactions while teaching;
- d. internet was available to promote access to information; and
- e. lesson preparation had been enhanced by providing digital lessons.

For the future, the Institution intends to do the following:

- lecturers and Students to have 24hours access to internet to enhance research and study.
- to use ICT tools for day to day processes in the College (Integration).
- all classrooms to be ICT compatible for teaching and learning.
- connect the Institution to the fibre optic.

Your Committee was informed that despite the good impact of ICTs on the Institution, there were still a lot of challenges which included the following:

- (i) ICT was not part of the college establishment, thereby making it difficult to allocate funds and staff;
- (ii) there were no specialised trained staff to cope with modern technology;
- (iii) there was limited capacity for students, lecturers and administrators to effectively use ICT tools;
- (iv) attitude change to embrace change of practice was difficult for many lecturers and administrators;
- (v) there was little capacity to sustain infrastructure and initiatives;
- (vi) due to the absence of the National Policy on ICTs in education, the vision of the institution as how to use ICT was blurred;
- (vii) there were frequent power outages, posing a danger to equipment); and
- (viii) the College could not engage technicians on fulltime basis due to meagre salaries.
- (xi) **Rokana Basic School**

Your Committee was informed that the School has eighty computers, donated by a 'sister' School in the United Kingdom, known as High-field Middle School, through the initiative of the School Manager. Your Committee was further informed that Konkola Copper Mines (KCM) and NUFFIC have helped in establishing the computer laboratory. All the computers in the lab were connected to the internet through a modem.

Your Committee was fascinated to learn that Rokana Basic School, was able to use eXtraordinary Video Disc (XVD) and students at the School and their counterparts at the 'sister' School in the UK, could participate in activities and lessons taking place in the two Schools as long as prior arrangements were made about the timings. This was the only basic School where this was possible. The School also has white boards, projectors and cameras.

The lamentation of the School, however, was that it could not employ a computer teacher because the establishment did not provide for it. The School, therefore, relied on volunteer teachers.

(xii) **Solwezi College of Education**

Your Committee was informed that a good number of students and staff were able to browse for information on the internet and that most lecturers used digital lesson preparation and presentation. Further, some lecturers used exe learning and Moodle and Poodle to assess students.

Your Committee also learnt that some students and staff used e-granary, an electronic kind of library, to access books installed on it. The College was connected to the internet through i-connect and was paying K2, 500,000.00 per month. Therefore, there was interaction between lecturers and students using email, as well as between lecturers of other colleges using skype. The College was also using ICTs to store and process student records. At the time of the visit, Zambia Information and Communication Technologies Authority (ZICTA), was installing the forty-two new computers that it had donated to the School, bringing the total number of computers in the institution to sixty.

The College has not yet started online registration and distance learning, owing to the catchment area of the student clientele, most of whom did not have access to the internet. The library was in the process of being digitalised.

Constraints/Challenges

The following were presented to your Committee as the challenges the institution was facing:

- (i) the software in the computer lab was outdated and therefore often incompatible with modern educational applications;
- (ii) there was an insufficient number of computers, printers and photocopiers to cater for all students and lecturers;
- (iii) the college did not have effective anti-viruses but relied on trial and free ones, which did not last long;
- (iv) there was limited radius of the e-granary for it to be more useful;
- (v) since computer teachers were not on the college establishment, lecturers taught ICT as volunteers;
- (vi) there was no trained staff in uploading information on the college website;
- (vii) there was no ICT policy for the nation to give direction to the college; and
- (viii) the Institution did not have a full time ICT technician and out-sourcing services when computers broke down, had pushed up maintenance costs.

(xiii) **Solwezi Technical High School**

Your Committee was informed that between 2001 and 2006, the School received twenty computers but all of them had broken down. This meant that presently, the School did not have any serviceable computer. The only other ICT equipment were five laptops (bought by the School), three photocopiers and one television set, donated by Multi-Choice. Your Committee also learnt that the School was once connected to the internet but the cost was unsustainable and the School was consequently disconnected.

Your Committee was disappointed to discover that a technical high School and the biggest in the region, was neglected to that extent and yet it was located in an area where big mines were operating.

(xiv) **Kikombe Basic School**

Your Committee found that the School had a computer lab with eight computers, six of which were donated by Computer for Zambian Schools and two by ZICTA. The computer lab was, however, rather small.

The Committee was informed that computer appreciation was timetabled for all grades; 1-9 and all pupils were able to operate a computer. Some teachers were reportedly disinterested in computer appreciation but most of them were even able to prepare end of term tests using computers. The School was, however, not yet connected to the internet.

Committee's Observations and Recommendations

12.0 Arising from the findings of the tour, your Committee observes that:

- (i) due to the absence of a National Policy (still in draft form), there is no coordinated approach to the use of ICTs in educational institutions; each institution does what they considered fit;
- (ii) in the same manner that there is no directorate dealing specifically with ICTs at the Ministry Headquarters, there is no stand-alone ICT Department in all the high and basic Schools;
- (iii) only the three public universities, namely, University of Zambia, Copperbelt University and Mulungushi University, are making headway in the use of ICTs, even in the absence of a National ICT Policy in education, while there is very poor penetration in secondary and basic Schools;
- (iv) most of the institutions in which there is a semblance of the use of ICTs, have either used their initiative or received assistance from other quarters, with very little or no support from the Ministry of education and Government;

- (v) there is gross misconception about using ICTs for pedagogy (to teach) and teaching ICTs and many institutions where ICTs are being used , are doing the latter;
- (vi) many institutions are relying on donated computers, most of which are obsolete;
- (vii) since the education system does not provide for computer teachers in its institutional establishment, it is difficult to get trained teachers in the subject and Schools are relying on volunteers among the existing staff to help out;
- (viii) even where institutional effort is made in getting internet connectivity, there are constraints of limited and high cost of bandwidth;
- (ix) the Zambia Information and Communication Technologies Authority (ZICTA) Universal Access Programme, by which many institutions have been assisted with computers, have not reached the expected number of institutions and many are still waiting;
- (x) there is no requisite infrastructure, such as electricity and affordable connectivity upon which the roll-out of ICTs, particularly in rural areas, should ride;
- (xi) machinery in institutions such as NORTEC, is so obsolete that it cannot be computerised to enable the College prepare students for what they are going to find in the industry;
- (xii) whereas Evelyn Hone College is training journalists in all areas of media; broadcasting, print and electronic, it is not allowed to have more than one licence (Television licence), due to the law that prohibits possession of a cross licence; and
- (xiii) there are no specific ICT learning programmes to address the needs of the blind and the deaf. This is compounded by the difficulty for teachers, especially at secondary School level, to explain technical and scientific terms through sign language.

Your Committee therefore recommends that:

- (i) Government should expedite the launch of the National Policy on ICTs in education in order to provide direction and coordination in the integration of ICTs in the *Zambian* education sector;
- (ii) the Ministry of Education, Science, Vocational Training and Early Education should, as a matter of urgency, establish an ICT directorate to deal specifically with ICTs;

- (iii) Government should take deliberate steps to improve the penetration levels of ICTs in basic and high Schools and extend the same to early education, as is the case in private Schools;
- (iv) Government should not leave the roll-out of ICTs in the education sector to individual institutional initiative but must consider it its duty to do so;
- (v) since not all Schools may teach computers for examination purposes, there should be a paradigm shift from teaching ICTs or computers, to using computers or ICTs to teach;
- (vi) in order to avoid Schools being used as dumping ground for obsolete computers, Government should step in to provide new computers;
- (vii) Government should have a re-look at the education establishment to include and describe computer teachers in order to allow individual institutions to recruit and retain computer teachers and/or technicians;
- (viii) Government should speed up the process of laying fibre optic to improve speed and bring down the cost of connectivity;
- (ix) Zambia Information and Communication Technologies Authority (ZICTA) should deliver on their promises to provide computers and affordable connectivity to learning institutions through its Universal Free Access Programme;
- (x) if any meaningful roll-out of ICTs in education and other sectors of the Zambian economy is to be achieved, Government should develop requisite infrastructure, such as electricity and affordable connectivity upon which the roll-out of ICTs, particularly in rural areas, largely depends;
- (xi) Government should consider providing state-of-the art machinery to NORTEC in order to help the institution be technologically relevant to the current industry;
- (xii) by virtue of the training Evelyn Hone College offers, it is necessary that special consideration is made for the Institution to be exempted from the law that forbids possession of more than one licence in the same industry (cross licence); this will enable the institution to offer all-round training to the students pursuing journalism; and
- (xiii) Government should invest in developing or acquiring ICT learning and teaching materials and equipment for institutions of the deaf and the blind.

PART THREE

13.0 CONSIDERATION OF THE ACTION-TAKEN REPORT FOR THE FIFTH SESSION OF THE TENTH NATIONAL ASSEMBLY

Consideration of Topical Issue

2.1 COMMUNITY SCHOOLS IN ZAMBIA

Your previous Committee considered the topical issue “*Community Schools in Zambia*”.

Your Committee had recommended that:

- (i)** The Government should not be comforted by the quantitative access to education by vulnerable children in rural communities enhanced by community Schools but should work on improving quality.
- A.** In the Action-Taken Report your Committee was informed that the Ministry of Education was concerned with quality of teaching and learning methods. It had, therefore, been lobbying for more budgetary allocation towards the provision of teaching and learning materials so as to match the increase in enrolment figures in both community and Government Schools.

Committee’s Observation and Recommendation

The Committee considers this response inadequate as it does not address the issue of provision of teaching staff and infrastructure and therefore insists that Government should integrate community Schools in the main stream of the education system.

- (ii)** Your previous Committee had recommended that the Government should not leave the responsibility of providing training, finance and resources to community Schools, as espoused in the National Education Policy, in the hands of Non-Governmental and Faith Based Organisations.
- A.** In the Action-Taken Report, your Committee was informed that the Government was in the process of reviewing the Policy document “Educating our Future” and it was envisaged that once the policy review process had been concluded, Government would take the responsibility of providing training, as outlined by the Committee.

Committee’s Observation and Recommendation

Your Committee urges Government to expedite this process which must also be accompanied and strengthened by legislation.

- (iii) Your previous Committee had recommended that the Government should adhere to the agreed 30% of the education budget to be allocated to community Schools in line with the community Schools guidelines.
- A. Your Committee was informed through the Action-Taken Report that there was no Government policy that stated that 30% of the education budget would be allocated to Community Schools. However, the Community Schools Guidelines stated that 30% of the Basic School allocation to the District Education Board Secretary's Office would go towards supporting Community Schools.

Committee's Observation and Recommendation

Your Committee urges the Government to ensure that the said 30% of the Basic School allocation to the DEBS office reaches Community Schools.

- (iv) Your previous Committee had recommended that in order to improve on the quality of education being provided in Community Schools, the Government should provide the requisite infrastructure, materials and teachers.
- A. In the Action-Taken report, your Committee was informed that Government took keen interest in Community Schools as they complimented Government effort in providing education. Government seconded trained or qualified teachers to Community Schools to enhance quality education service provision. The Government had made efforts in supporting Community Schools through infrastructure development by linking some Community Schools to Co-operating Partners.

Further the Permanent Secretary submitted that the Ministry of Education had developed and provided suitable low cost designs for School Infrastructure in Community Schools. Community Schools equally accessed educational materials through the office of the District Education Board Secretaries (DEBS).

Committee's Observation and Recommendation

In noting the submission, your Committee urges Government to closely monitor the disbursement of funds and distribution of learning and teaching materials to Community Schools to ensure that they reach the intended Schools.

- (v) Your previous Committee had recommended that the Ministry of Education, under the Directorate of Standards and Curriculum, should scale up the monitoring of standards in Community Schools and ensure that all Community Schools use the Zambia Basic Education Curriculum and must be given the means to get to far-to-reach areas, where Community Schools are located.

- A.** In the Action-Taken Report, your Committee was informed that the Ministry of Education had mandated Education Standards Officers to inspect and monitor all learning institutions including Community Schools to ensure compliance to set standards.

Committee’s Observation and Recommendation

In noting the Executive’s response, your Committee insists that mandating Standards Officers to ensure compliance to set standards does not amount to giving them capacity to do so and therefore maintains that Standards Officers be adequately funded and equipped.

- (vi)** In order to harmonise the education system and remove the perception that there are two education systems; one for the rich and the other for the poor, your Committee had recommended that the Government should integrate Community Schools into the national education system and upgrade their infrastructure to bring it to acceptable standards.

- A.** Your Committee was informed, in the Action-Taken Report, that community Schools were being absorbed into the main Education system through the enactment of the new Education Act, which was recently assented to by the President.

Committee’s Observation and Recommendation

Your Committee notes the submission from the Executive but urges Government to follow up enactment of the law with implementation and move quickly on the matter.

PART TWO

LOCAL TOURS: CENTRAL AND LUAPULA PROVINCES

3.1 Objectives of the Study

The purpose of the tours was to carry out an on-the-spot check of selected Community Schools in Central and Luapula Provinces, in order to examine the conditions under which the Schools were operating and to ascertain to what extent the education being provided by the Schools was contributing to the overall quality of education in the nation.

Committee's Recommendations

Your previous Committee had recommended that:

- (i)** The Government should provide a bursary scheme to assist volunteer teachers in Community Schools, who have pre-requisite qualifications to go for training, considering that they have already shown commitment to the education system under very trying conditions.
- A.** In the Action-Taken Report, your Committee was informed that the Ministry of Education had provided a comprehensive framework for professional development of all teachers in Community Schools in partnership with stakeholders.

Committee's Observation and Recommendation

In noting the response from the Executive, your Committee urges Government to do more in this area, considering that there are many teachers in Community Schools who need this facility.

- (ii)** The Government should not allow individuals and families to establish Community Schools, since proprietors of such Schools have pecuniary interest and find it difficult to hand over such Schools to the Government, even when it is evident that the quality of education being provided leaves much to be desired.
- A.** Your Committee was informed, through the Action-Taken Report, that the observation was noted. However, Community Schools were established where there was need. The Ministry of Education had mandated the District Education Board Secretaries to ensure that new Community Schools were only established in areas where they were needed.

Committee's Observation and Recommendation

Your Committee, in noting this response, urges Government to ensure that Community Schools are indeed community driven.

(iv) The Government should improve radio reception in rural areas so that Community Schools can benefit from the programme commonly known as “Learning at Taonga Market.”

A. In the Action-Taken Report, your Committee was informed that the Ministry of Education had entered into an agreement with community radio stations for airing the IRI programme. However, MOE would like to have an education Channel for airing educational programmes seeing that depending on commercial radio stations, which included ZNBC, had become very expensive.

Committee’s Observation and Recommendation

Your Committee urges Government that with the expansion of bandwidth due to digitalisation, a channel must be reserved on the national broadcaster for educational broadcasts.

PART THREE

Consideration of the Action-Taken Report on the Committee's Second Report for the Fourth Session of the Tenth National Assembly

4.1 TOPICAL ISSUES: ADULT LITERACY

LOCAL TOURS - NYIMBA, KATETE, CHIPATA AND CHADIZA

The previous Committee undertook tours in four districts in the Eastern Province to have an on-the-spot check of adult literacy classes, viz Danide Literacy Class in Nyimba, Katete Central Literacy Class, Kanyarija, Adult Literacy Learning Centre, Lunkhwakwa Community Literacy Class and Madiliso Learning Centre in Chadiza.

Committee's Recommendations

In this regard, your Committee had recommended that:

- (i) The Government should expedite the development of the Policy on adult literacy as this would guide all adult literacy providers.

In the Action-Taken Report it was reported to your Committee that progress had been made on the development of Youth and Adult Literacy Policy. So far, stakeholder consultative meetings had been held and the document was ready for submission to Cabinet for approval.

Your previous Committee had urged the Government to put a time frame as to when this document would be submitted for Cabinet approval and how soon it would be implemented.

- A.** Your previous Committee was informed that the Ministry of Education had so far completed the development of a National policy on Youth and Adult Literacy and submitted to Cabinet Office for input from other Ministries. It was expected that by September 2011, the feedback would be received from other Ministries. It was hoped that Cabinet would approve the Policy by December 2011.

Committee's Observations and Recommendations

Your Committee resolves that an update be provided on this matter.

- (ii) The Government should establish standards for instructors in order to have quality adult literacy, and provide for the training of Instructors and for the retraining of those currently teaching.

In response, it was submitted in the Action-Taken Report that the Government, through the Ministry of Community Development and Social Services, had revised the training curriculum which had already been approved by TEVETA and would be launched soon. In this regard, seven manuals had been developed to incorporate courses such as bricklaying, carpentry, tailoring, home management, metal fabrication, general agriculture and fabric printing. In order to facilitate the effective implementation of the revised curriculum, the Government recently trained and retrained Volunteer Instructors in Lusaka, Luapula, North-Western and Southern Provinces.

- (iii) In noting the Ministry's submission, your Committee urged the Executive to expedite the launch of the training programme and to extend the training of volunteer instructors in Adult Literacy to all provinces.

A. In the Action-Taken Report, your Committee was informed that Government was finalising a few matters with regard to the training programme with a view of launching the Training Programme by September, 2011. The Permanent Secretary said Government would also like to inform the Committee that the Ministry of Community Development and Social Services had commenced the extension of the training of Volunteer instructors in adult literacy to the remaining provinces. In the year, 2011, the Ministry intended to extend training to volunteer instructors on the Copperbelt and Central Provinces. This would be done in a phased approach depending on the availability of funds. The priority was to offset the arrears in form of allowances owed to the volunteer instructors. Government was committed to providing adult literacy, however, there should be concerted effort among stakeholders for Zambia to have an enlightened society that could read and write for sustained development.

Committee's Observation and Recommendation

Your Committee resolves that it be provided with the status-quo on this matter, considering that 2011 ended.

- (iv) The allowance should be increased in order to motivate instructors and there was need to provide accommodation and transport for the instructors.

In the Action-Taken Report, your Committee was informed that the Government appreciated the views of the previous Committee and would have wished to increase allowances for instructors but for reasons of budgetary constraints, it was difficult to do so now. For this reason, the Government would like to work with other stakeholders in the provision of adult literacy. However, the Government, through the Ministry of Community Development and Social Services (in addition to Volunteer Literacy Instructors) used Community Development Assistants, who were civil servants and were on salary. The Government also had plans to establish adult literacy clubs in upper basic Schools and high Schools, which would be helping to teach adults after members of adult literacy clubs were trained.

With regard to the provision of accommodation, the volunteer literacy instructors were identified by the communities where they lived and already had their own accommodation within those localities. Concerning transport, the Government, through the Ministry of Community Development and Social Services, had started procuring bicycles for the instructors.

(v) Your previous Committee had insisted that the Government should increase the remuneration for instructors and not rely on social workers, who may not be found in every district and that bicycles should be provided to all instructors. The Committee also recommended that Basic School teachers be engaged to teach literacy classes on an extra pay or allowance.

A. The Permanent Secretary informed your Committee through the Action-Taken Report that the Ministry of Education would increase the adult literacy budget from 0.3% to 3% of the Ministry's total allocation to ensure that instructors were supported adequately by increasing on the learning resources. The Ministry would engage pupils in grades 9, 10 and 11 to teach adult literacy learners. The learners would form clubs of interested pupils who would be trained in adult literacy teaching methodologies. Basic School teachers on the other hand would be oriented in the adult literacy teaching methodologies and would be paid extra allowance.

Committee's Observation and Recommendation

Your Committee wishes to await the implementation of this plan and to be provided with an update.

(vi) The Government should establish mechanisms for providing adequate implements.

Your previous Committee was informed through the Action-Taken Report that the mechanisms for the provision of adequate implements for teaching of adult literacy, especially by Government departments dealing with functional literacy on agriculture, vocation and other ventures would be put in place.

(vii) Your previous Committee, in noting the submission, urged the Government to put a time-frame as to when these implements would actually be provided.

A. In the Action-Taken Report your Committee was informed that the Ministry of Education dealt with Basic Adult literacy to teach people how to read and write. Other Ministries were concerned with functional literacy. Therefore, the Ministry of Education would ensure that by March 2012, Adult Literacy materials, both Basic and functional were provided.

Committee's Observation and Recommendation

Your Committee requests an update on this matter considering March has already passed.

FOREIGN TOUR TO BOTSWANA

COMMITTEE'S OBSERVATIONS

Based on their findings in Botswana, the Committee had recommended that:

- (i) there should be increased funding by the Zambian Government in the overall education sector so that part of this was given to adult literacy.

Your Committee was informed through the Action-Taken Report, that there had been increased funding in the Education Sector in the last five years. As this trend continued, the Government would increase funding to adult literacy in order to facilitate the following programmes:

- (i) training of District Education Board Personnel in the implementation of adult literacy programmes in their respective districts;
- (ii) training of adult literacy instructors in the adult education techniques and methodology;
- (iii) carrying out sensitisation programmes for Adult Literacy in provinces and districts;
- (iv) sensitisation and dissemination of National Adult Literacy Policy;
- (v) establishment of adult literacy centres throughout the country;
- (vi) remuneration of adult literacy instructors;
- (vii) development and distribution of adult literacy teaching and learning materials;
- (viii) training instructors in the use of materials; and
- (ix) monitoring of Ministry of Education and other providers of adult literacy programmes to ensure quality education delivery to the adults.

- (i) Your Committee had indicated that it would like to see these programmes on the ground and await a progress report on these matters.
- A. In the Action-Taken Report, the Permanent Secretary informed your Committee that the Ministry of Education would increase funding for adult literacy by 2012 if adult literacy had to be implemented successfully.

Committee's Observation and Recommendation

Your Committee would like a verification of whether this has actually been included in the 2012 budget before closing the matter.

CONSIDERATION OF THE ACTION-TAKEN REPORT OF THE COMMITTEES REPORT FOR 2009

5.1 SCIENCE AND TECHNOLOGY IN BASIC AND HIGH SCHOOLS

Adequacy of Laboratories in Basic and High Schools

Your previous Committee had recommended that the Government should increase resources to Basic Schools to ensure that pupils accessed quality education by having the required facilities such as well equipped laboratories and qualified teachers.

The Committee was informed that, in the 2010 budget, an amount of K3 billion had been set aside for the purpose of procuring teaching and learning materials for the production of improved mobile laboratories which would be distributed to more Schools.

In noting the submission, your Committee was of the view that the amount of K3 billion was negligible. It recommended that Government should increase the amount if the impact was to be felt. It further requested to be availed a report on what had been procured so far.

In the Action-Taken Report, the previous Committee was informed that the materials for production of mobile science laboratories had not yet been procured because there were no funds allocated to this activity.

Committee's Observations and Recommendations

- (i) Your Committee expressed disappointment at the non availability of funds for such an important activity, especially when Government initially promised that K3 billion would be availed for the purpose. The Committee, therefore, urged the Government to treat this matter with the seriousness it deserved.

- A.** In the Action-Taken Report, your Committee was informed that the materials for of mobile laboratories had not yet been procured because funds to this activity had not yet been released by the Ministry of Finance and National Planning against that budget line. The Permanent Secretary, therefore, thanked the Committee on the observation and agreed with the recommendations that the Ministry should provide for the improvement of mobile laboratories and therefore had taken note of the recommendation.

Committee's Observation and Recommendation

The Committee urges Government to prevail on the Ministry of Finance and National planning to release the funds for the provision of mobile laboratories and awaits an update on this matter.

6.0 TOURS

6.1 MULUNGUSHI UNIVERSITY, KABWE

Your previous Committee had observed that infrastructure development and management at the Institution were commendable. Its only concern was the user fees which the Institution was charging, which it felt, were beyond the reach of the average Zambian. In this regard, the Committee had urged the Government to expedite the study on the unit cost of producing a graduate so that there was clarity on fees charged by public universities to ensure that these were not too high.

Regarding the unit cost of producing a university graduate, the Committee was informed that a Consultant, who was hired to work out the unit cost, was currently finalising the inception report, and it was hoped that the report would be submitted before the end of the first quarter of the year 2010.

Your Committee had requested to be availed a progress report on the Consultant's report.

In the Action-Taken Report, your Committee was informed that the Consultant, who was hired to work out the unit cost of producing a graduate, presented a report which was not adopted by the Ministry of Education because the fixed cost charged to students was not broken down to show how it was be arrived at. It was, therefore, resolved that the report be re-done taking into account the observations by the Ministry of Education. The Consultant was given up to 31st December, 2010 to re-submit the report, considering the amount of work to be done.

Your previous Committee expressed its disappointment at how casually this matter was treated and insisted on getting an update on the Consultant's report urgently. Further, the Committee suggested that the Ministry of Education, in consultation with the University, should work out the bench cost instead of engaging a consultant.

In the Action-Taken Report, your previous Committee was informed that the Consultant's report had two components which were the Unit Cost study and the Academic Audit Study. The report was first submitted to the Ministry in December 2010. The reference group received the report and the Consultant was asked to re-do the report because the Fixed Cost charged to students was not broken down to show how it could be arrived at. Further, the report had gaps on the Academic Audit component. The Consultant had since been notified and the Ministry was still awaiting an update report. The essence of the Consultant on the unit cost was to be the basis on which the Ministry of Education would build the study of the same by Government.

Committee's Observation and Recommendation

Your Committee urges Government to be decisive on this matter and bring it to rest.

6.2 COPPERBELT COLLEGE OF EDUCATION, KITWE

The previous Committee had urged the Government to speedily put the necessary legal framework as well as the necessary infrastructure in place before the 'conversion' of Copperbelt College of Education into a University College could take place.

The Committee was informed that the process of building additional and renovating existing infrastructure had begun. It was hoped that once the works were completed, the outlook of the Institution would be brought to acceptable levels. Furthermore, the College had not yet been transformed into a University College because there was no legal framework yet.

However, the College had begun offering degree programmes using the existing affiliation status because there was a provision under the *University Act* for affiliate colleges to introduce new programmes that were approved by the senate. Copperbelt College of Education had sufficient numbers of qualified staff whose capacity to handle degree programmes would be improved through upgrading courses.

The previous Committee had resolved to await information on the progress made on the renovation works.

In the previous Action-Taken Report, the Committee was informed that the contractor was on site at the Copperbelt College of Education in Kitwe and the following was being done; construction of two triple storey student hostels at first floor level, library at slab level and columns had been raised, lecture theater at slab level now raising columns and two double storey lecture rooms at first floor level. The completion rate was 25% as at end of April, 2010.

Qualified staff had also been recruited. The College had ten masters' degree holders, seven bachelor degree holders and two diploma holders. The diploma holders were in Home Economics because the University only trained Primary School degree holders. The Government had started the process of putting in place the legal framework and Cabinet authority had since been granted to transform the College into a University.

The previous Committee urged the Government to expedite the formulation of the frame-work for the transformation of the College into a University and insisted that no transformation should be undertaken until both the framework and infrastructure were in place. Further, Home Economics teachers should be sent to institutions where such programmes are available such as Universities in Malawi.

The Committee was informed that the Ministry was currently working on the actual administrative and academic structures of the college. However, the College would not be transformed into a University of Education until key infrastructure was in place.

The Ministry was in agreement with the Committee's proposal that Home Economics lecturers at the College be sent to institutions where such programmes were available, such as Universities in Malawi. Nonetheless, the transformed universities would run these programmes in future.

Committee's Observation and Recommendation

Your Committee urges Government to move quickly in implementing this programme of upgrading colleges and to ensure that all requirements are fulfilled.

PUBLIC HEARINGS

Special Education

Your previous Committee had requested that the Government, through the Ministry of Education, should develop the ECCDE Curriculum and establish co-ordination mechanisms for the provision of ECCDE at all levels of the education sector. It was hoped that resources would be made available to the ECCDE once the ECCDE curriculum was developed. The Committee had requested for a progress report on the matter.

The Committee was informed that the Ministry had received the inception report for the design of Munali Centre of Excellence. The report was being studied.

The Committee had requested for a progress report on the matter.

It was reported in the Action-Taken Report that the design of Munali Centre of Excellence was completed in May 2010. Documents were received and the School had been advertised for procurement of construction services by Zambia Public Procurement Authority. The advert for the tender was closed on 13th August, 2010.

Your previous had requested further update on the out-come of the tender and the subsequent progress on the matter.

Your previous Committee was informed that the contractor had moved on site on the 15th June, 2011 to start the construction of Munali Centre of Excellency at a total cost of K110 billion.

The Committee resolved that it be afforded an opportunity to see the site and what was happening on it during the local tour before closing this matter.

During the local tour, the Committee visited the construction site and found work in progress. The matter is, therefore, closed.

Conclusion

14.0 Your Committee wishes to express its indebtedness to you, Mr Speaker, for the guidance rendered to it during the Session. Your Committee further wishes to express its gratitude to the Permanent Secretaries and Chief Executive Officers of various institutions for their co-operation and input into the Committee's deliberations.

Lastly, your Committee wishes to extend its appreciation to the Clerk of the National Assembly and her staff for the services rendered to it during the Session.

Dr C K Kalila, MP
CHAIRPERSON

June 2012
LUSAKA