

Republic of Zambia



Ministry of Education

Educating Our Future

National Policy on Education

May, 1996

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First published 1996 by
Zambia Educational Publishing House

ISBN: 9982-01-259-7

Reprinted 2008 by
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Minister's Foreword

This *National Policy* on Education is conceived on the basis of the democratic principles of efficiency, equity, accountability and cost effectiveness. To this effect, the education system will be liberalized and decentralized in accordance with the democratic principles of local governance. This calls for a drastic restructuring of the existing highly centralized system.

The restructuring of the Ministry involves the creation of Education Boards at district, school and college levels. The focal point of educational administration and management for primary and integrated schools will be District Education Boards, while secondary schools and teacher colleges will each have their own Education Boards. The Ministry of Education headquarters and the provincial education offices will mainly be concerned with policy development, training, goal-setting, monitoring of standards, and supervision.

The new system will also promote cost sharing between the state, the beneficiaries and other stake-holders. Individuals, families, communities, industry and non-governmental organizations will be encouraged to contribute (financially and in kind) to education and training. The state will, in turn, give the necessary support to these endeavors.

In order to run a responsible and democratic education system, there is need to pay particular attention to capacity building through training and re-training, provision of infrastructure and equipment, logistics and adequate funding. There will also be need for viable communication and records management systems which will contribute significantly to the efficiency and accountability of all education institutions and of the system as a whole.

Since issues and problems in education are not static, the policies enunciated in this document will be subject to regular review so as to ensure that, within the context of a rapidly changing and evolving society, the education delivery system does not lose sight of real needs, challenges and developments. It should further be noted that this *National Policy*, which is a product of broad-based consultation and research, is non-partisan. It is conceived as a blueprint for educational provision in Zambia in that it addresses needs and problems that the country has encountered and is likely to face for some time to come.

A guiding principle of this document is that in a democratic society the provision of education at all levels can best be effected by strong and vital partnerships between the Ministry of Education and all other providers of education and training. Although much of the focus of this *National Policy* is on the activities of the Ministry of Education, other government ministries and the non-governmental sector have a vital

role to play in "Educating Our Future". The present document will serve as a useful reference for their guidance and information.

In conclusion, I wish to express sincere gratitude to the many individuals and institutions who worked tirelessly in the development of this document. While acknowledging the contributions of a wide range of participants, I wish to pay special tribute to the Ministry of Education officials without whose dedication and persistence this work could not have been accomplished.

Hon. A. S. Hambayi, M. P.
MINISTER OF EDUCATION

Introduction

Since late 1993, the Ministry of Education has been evaluating the entire formal education system, with a view to determining the most appropriate framework for its future development. It has not done so alone but has endeavored to maximize stake holder participation through consultation, research, dissemination workshops, and professional meetings

The *National Policy* on Education is the fruit of this lengthy and broadly based consultation process. Extensive participation of personnel from other government ministries, as well as from the teaching profession and the universities, communities and the private sector, the churches and other non-governmental agencies, and international aid donors - all collaborating generously with the Ministry's own personnel -- has ensured that the *National Policy* is widely representative. While reflecting across-the board consensus in support of key developments, the Policy charts the directions the system should take in educating the women and men who will take charge of Zambia's destiny. It sets out the parameters for "Educating Our Future".

This is Zambia's third major educational policy document. The first was the Educational Reforms of 1977, while the second was *Focus on Learning* in 1992. *Educational Reform* emphasized education as an instrument for personal and national development, while *Focus on Learning* stressed the mobilization of resources for the development of school education.

Educating Our Future addresses the entire field of formal institutional education, paying particular attention to democratization, decentralization and productivity on the one hand, and curriculum relevance and diversification, efficient and cost-effective management, capacity building, cost sharing, and revitalized partnerships on the other. Flexibility, pluralism, responsiveness to needs, and the protection of quality are recurrent themes.

The Zambian Government recognizes the basic right of every Zambian to good quality education. Hence, emphasis in this *National Policy* has been placed on such key factors of educational provision as access, equity and quality maintenance at all delivery points in the system.

Some of the policies set forth in this document can be implemented immediately, whereas others will require a more prolonged period of time. From time to time, a separate implementation or strategic plan will be produced on the basis of this *National Policy*, indicating the actual priority activities to be undertaken, the financial

resources required, the time frames, and the major actors involved. As with the development of the document itself, implementation will be on a partnership basis, in full consultation with all concerned parties.

The Government is fully committed to the successful implementation of the policies set out in this document. To this end, it will provide the necessary human, material and financial resources. However, in view of the magnitude of what is to be accomplished, there will be need for firm commitment by all stake-holders to the achievement of the changes designed to make the education system more responsive to personal and national needs.

Ministry of Education

Mission Statement

The mission of the Ministry of Education is to guide the provision of education for all Zambians so that they are able to pursue knowledge and skills, manifest excellence in performance and moral uprightness, defend democratic ideals, and accept and value other persons on the basis of their personal worth and dignity, irrespective of gender, religion, ethnic origin, or any other discriminatory characteristic.

Chapter 1

The Philosophical Rationale for the National Education Policy

Introduction

Zambia is a liberal democratic society. Hence, it is the values of liberal democracy that must guide the formulation of educational policies and their implementation. The core 4 Lies of rational and moral autonomy, equality, fairness and liberty underpin the concept of a liberal democracy. In this system, the people are expected to participate fully and -rationally in the affairs of their country. A basic principle is that their consent is the only legitimate justification for their being governed. In a liberal society, therefore, the state is obliged to protect and promote fundamental human and civil rights, to propound educational policies and aims which focus on nurturing the holistic development of individuals, and to promote the social and economic welfare of society through the provision and renewal of the skills, knowledge and competencies necessary for the development of society and the economy.

The philosophical rationale for educational provision is informed by these principles which form the basis for a shared commitment among all partners towards educational development in the country. Clear articulation of the principles for the development of education contribute to establishing the direction such education ought to take. Further, it provides justification and support for resource allocations to educational development.

Within this framework, the philosophical rationale for future development of education is based on three broad considerations:

1. the role of the Government in education;
2. principles for the development of education policy and practice; and
3. the aims of the national education system.

The Role of the Government in Education

Education is a right for each individual. It is also a means for enhancing the well-being and quality of life for the entire society. The Government's role in education arises from its overall concern to protect the rights of individuals, promote social well-being and achieve a good quality of life for every person through all-embracing economic development,. The Government must therefore seek to create, promote and support the conditions within which education can realize its potential in society.

The Government respects the legitimate interests of various partners in education and supports the distinctive character of individual schools, colleges and universities. They, in turn, have a corresponding obligation to respect and support the principles and rights upon which a democratic society is based.

Because of the centrality of knowledge, skills and technology in shaping the organization and productivity of the economy, education is a productive investment. Since knowledge, skills and technology develop and change so quickly, this investment must be continually renewed. Individuals must learn continuously throughout their lives, acquiring new skills and technologies. The establishment of a liberal market economy, in which internal and external competition are central values, accentuates dependence on the knowledge and skills of the people and their ongoing access to education. Investment in education, therefore, is of crucial concern in the strongly competitive climate of the modern world. Hence, the Government strongly reaffirms the important role education plays in human resource development as the basis of all other development. It will act, therefore, as the watchdog for enhancing the contribution of education and training to economic development and improved social cohesion.

Three major principles inform the Government's important role in education:

1. the Government is the custodian of the human rights of all individuals, including their right to education. Its concern, therefore, will be with how well national education policy and practice promote equality, equity, efficiency, partnership, pluralism, transparency and accountability;
2. the demands of national development require that the Government pays attention to the role education plays in human capital formation, particularly in developing the types of knowledge, skills, values and competencies that are necessary for economic development and social welfare;
3. democratization of education, with its demands for partnership in educational provision, requires that the Government creates an enabling environment, and establishes rules and regulations, that will protect the right of various educational agencies to full and fair participation in educational development.

Principles For The Development Of Education

Education in Zambia is intended to serve individual, social and economic wellbeing and to enhance the quality of life for all. This aim will be guided by the principles of liberalization, decentralization, equality, equity, partnership, and accountability.

Liberalization

Liberalization of educational provision entails fundamental changes in power relations within the education sector. Under a liberalized educational system, the right of private organizations, individuals, religious bodies, and local communities to establish and control their own schools and other educational institutions is recognized and welcomed. Liberalization of educational provision allows those with resources to establish such institutions and to run them in accordance with their own principles - subject, however, to stipulated rules and regulations. In this way, liberalization contributes to expansion of educational opportunities while protecting the right of parents to send their children to educational institutions of their own choice, be they public, private, religious or communal.

Decentralization

Decentralization involves the devolution of power from the centre to the local level, in districts and schools. It promotes broad-based participation in the management of education with great emphasis placed on the creativity, innovation and imagination of the local-level education managers. By allowing various stake-holders to share in decision-making and to take responsibility for education at the local level, decentralization fosters a sense of local ownership and promotes better management. By decentralizing to the local and school levels, many of the bureaucratic procedures that currently impede efficiency in the educational system will be eliminated. Government expects that the newly-established Education Boards will

- relieve the Ministry of Education of much of the burden of day-to-day business,
- cater for a greater degree of democracy in the management and administration of the system; and
- allow for greater responsiveness to local needs.

Equality and Equity

Every individual in Zambia has a right to education. Hence it is a matter of fairness or justice that access to, and participation and benefit in, the education system be available to all. The development of education will therefore seek to promote equality of access, participation and benefit for all in accordance with individual needs and abilities. Measures to promote equality will include allocating resources to those in greatest need, providing appropriate support systems, and changing the tangible and intangible qualities of the system itself to cater for the diverse educational needs and interests of the population.

It will also include strategies for the earliest feasible intervention to support children at risk. The Government will ensure that special support measures for such children are developed to enable them to participate in education.

Where access, participation and achievement in education are impeded by gender, physical, mental, economic, or social factors, the Government will seek to eliminate sources of educational disadvantage in order to enhance equity.

The achievement of fairness in education demands that educational policies should value and promote a multifaceted development of the people, taking into account their uniqueness so that they can fully and rationally participate in the economic, cultural and social affairs of society. In all its educational endeavours, the state will aim at making it possible for its citizens to live useful lives, taking into account knowledge and skills appropriate to their age, their social and economic roles, the complexity of the modern world and the social environment in which they live. Educational policy will deal, therefore, with Zambia's cultural and intellectual heritage as well as with the knowledge, skills and values that are to be transmitted to future generations. In other words, the concept of equity in education necessitates the diversification of the curriculum in order to suit different abilities, talents and interests.

Quality

All learners should be facilitated in the attainment of the highest standards of learning through teaching of excellent quality. Quality is brought about by maximizing the efforts of all those responsible for the education of learners and by coordinating all the structures of the system so that centres of education, from pre-school to university, are places where effective teaching, learning and research take place and where the highest standards of achievement, in accordance with ability, are obtained by every student.

The Government has a bounden duty to promote the highest standard of education and learning for all. This entails giving attention to various interdependent factors, including the quality of the curriculum, teaching and assessment, the quality of teachers in schools, school and institutional arrangements, and planning processes. The Government will also develop rigorous procedures for the evaluation of educational effectiveness and outcomes, with due regard to the legitimate autonomy of individual institutions.

Partnerships

Building on the principle of liberalization and on the creation of an enabling environment, the Government will follow an education policy that encourages and strengthens partnerships in educational development. A cardinal principle is the acceptance by all parties that the various partners participate by right and not by sufferance in educational provision. To promote this participation, the Government will create conditions that allow the human, financial and other resources under the control of private and voluntary agencies, communities and religious bodies, to be channeled without hindrance into the education sector.

The development of a strong commitment to partnership will require improved co-operation among various stake-holders, coupled with better coordination and planning of educational provision. Accordingly, while recognizing the rightful autonomy of individual institutions, the Government will promote constructive cooperation that will enhance the welfare of all students.

Accountability

There are many legitimate competing demands for resources in the country. The amount of money available for education is limited. To ensure the best possible use of available resources and to allow for full public accountability, the Government will ensure effective systems are in place at national, provincial, district, and institutional levels evaluating the effectiveness and efficiency with which resources are used. Accountability measures will pay attention to how well education serves parents, learners and the wider community.

The Goals of the Education System

In the light of what has been said, the Ministry of Education has set for itself the goals of:

- a) producing a learner capable of**
 - (i) being animated by a personally held set of civic, moral and spiritual values;**
 - (ii) developing an analytical, innovative, creative and constructive mind;**
 - (iii) appreciating the relationship between scientific thought, action and technology on the one hand, and sustenance of the quality of life on the other;**
 - (iv) demonstrating free expression of one's own ideas and exercising tolerance for other people's views;**
 - (v) cherishing and safeguarding individual liberties and human rights;**
 - (vi) appreciating Zambia's ethnic cultures, customs and traditions, and upholding national pride, sovereignty, peace, freedom and independence;**
 - (vii) participating in the preservation of the ecosystems in one's immediate and distant environments;**
 - (viii) maintaining and observing discipline and hard work as the cornerstones of personal and national development**
- b) increasing access to education and life skills training**

- c) **building capacity for the provision of quality education**
- d) **creating conditions for effective coordination of policies, plans and programmes**
- e) **rationalizing resource mobilization and utilization.**

These goals will inform the education policies and practices of all partners in educational provision and they will also be the basis for teaching and learning in schools and colleges.

Chapter 2

Early Childhood Education

Early childhood education is an organized form of educational provision for children between the ages of three and six. Such provision is made in the form of pre-schools. Pre-schools perform their function most effectively when they offer an informal type of social and educational experience to very young children, with much of the learning taking place through play. Pre-school learning is transitional between learning in the home and learning in the school. The pre-school can never substitute for the home and it should never imitate the school. By providing children with a larger circle of play-mates and a wide range of supervised play activities and learning experiences, pre-schools supplement the extensive learning that occurs in a child's home and within the home environment. As children approach the age of school entry, their activities at pre-school may be less spontaneous and more ordered, in preparation for life at school, but purposeful play will still be the main mode of learning.

The significance of education at this level lies in the importance of early experiences in the development of a child's social, physical, mental and emotional capacities, and in the role that early childhood education can play in preparing children to adapt to the more formal learning atmosphere of the basic school. This initial education also helps to build up children's 'cultural capital' and to compensate for disadvantages that they may bring from homes where few reading, writing or other education-related materials are found.

At present, only a small minority of Zambia's children are able to profit from education at this level. This is because there are relatively few pre-schools. The majority of these are privately owned and operated, though some are run by local councils. All aim to meet their costs through fees, which few normal Zambian households can afford. In addition, most of the pre-schools are found in urban areas where the population is large enough to ensure their viability. Although some rural pre-schools exist, they are few and far between. Because of the associated costs, very few poor children enjoy the benefits of education at this level; because of its urban concentration, it reaches very few rural children.

The Ministry of Education will encourage the establishment of programmes that support all-round early childhood development, particularly those programmes intended for children living in rural and poor urban areas. Within the constraints of available resources it will work to this end with partner ministries, district and urban councils, local communities, non-governmental organizations, religious groups, families and individuals.

The Ministry will also continue to dedicate some of its resources to this level of education through the training of pre-school teachers, cooperation in the monitoring of pre-school standards, assistance in curriculum formulation and the design of materials, and support for the development of policy guidelines.

The Ministry recognizes that early childhood education is very beneficial for the development of the child and useful as a preparatory stage for entry into basic school. However, because of the limitations of access, it will not establish pre-school as a condition for entry to Grade 1.

Early Childhood Education

Policy

1. **The Ministry of Education acknowledges the important role of early childhood education in the multi-dimensional development of young children.**
2. **Within the constraints of available resources the Ministry will encourage and facilitate the establishment of pre-school programmes that would reach out to all children, especially to those living in rural and poor urban areas.**
3. **The provision and funding of early childhood and pre-school education will be the responsibility of Councils, local communities, non-governmental organizations, private individuals and families.**

Strategies

1. The Ministry will provide professional services to pre-school education by:
 - training teachers for pre-schools,
 - developing curriculum materials for use in pre-schools, and
 - monitoring standards at pre-schools.
2. The Ministry will collaborate with providers, partner ministries and others to develop policy guidelines for pre-school and early childhood education.

Chapter 3

The Structure of the Education System

Background

A long-standing educational goal in Zambia has been that every child who enters Grade I should be able to complete Grade 9. This aspiration goes back to the time of the struggle for independence when the nationalist movement established the goal that every Zambian should be able to complete at least a junior secondary education. In later years this crystallized as ten years of compulsory schooling for every child, but the 1977 Educational Reforms reduced this to nine years. The structure proposed in 1977 was that eventually every primary school would extend its offerings up to Grade 9, so that there could be a continuous programme from Grade 1 to Grade 9, with the curriculum organized on the basis of six years of primary and three years of junior secondary education. The education to be provided during these nine years was referred to in the 1977 and subsequent documents as 'basic education'.

The rationale for proposing this extended period of education was twofold. Basic education was to provide general education in basic subjects, skills training and productive work. Thereby, it was seen as enabling pupils to achieve a standard of functional education which would equip them to live productively in society, and to possess occupational competence in a skill or group of skills. In other words, its aim was to provide general education, including some practical skills and a sound preparation for further education (full-time or part-time). Secondly, it was seen that nine years of compulsory education would allow pupils to grow two years older before they would have to fend for themselves in the world of work, if they did not continue with full-time education or training. It was also believed that on completion of nine years of schooling the learner would be more mature when facing career or educational choices, and would base these on a fuller realization and understanding of his or her abilities, talents and interests.

It was recognized in 1977 and subsequently that the achievement of nine years of full-time education for all would take a long time. Financial constraints did not allow the Government to proceed vigorously with the provision of additional facilities to make this goal a reality. Ongoing efforts to expand secondary provision brought about some increase in the number proceeding from Grade 7 to Grade 8, but because of the

rapid growth in Grade 7 enrollments, the numbers leaving the school system on completion of Grade 7 increased very rapidly.

This situation prompted communities to adapt or provide facilities in primary schools for the commencement of Grade 8 and Grade 9 classes. Thus began the 'basic schools movement' which has gathered momentum over the years. The number of basic schools rose from 51 in 1986 to 399 in 1994, and their number continues to grow. Their contribution to educational provision can be gauged from the fact that they now account for more than half the Grade 8 entry.

In two respects, this popular movement has set the stage for the future development of education in Zambia: it sets down a major parameter for the structure of the education system, and it points to the all-important role of the community in educational provision.

The Current Structure of the Education System

Currently, Zambia's formal education system has a 7--5--4 structure, with seven years of primary education (four years of lower and three years of upper primary), five years of secondary (two years of junior and three years of senior secondary), and four years of university to first degree level. Transition from lower to higher educational levels is determined by national competitive examinations at the end of Grades 7, 9 and

Historically, primary and secondary education were offered in separate institutions, but this changed with the development of basic schools which provide the first nine years of schooling. This means that currently there are two parallel but related paths for educational progression after Grade 7: some pupils proceed into Grade 8 in a basic school, while others proceed into conventional secondary schools that run from Grade 8 to Grade 12. All, however, must have performed well in the selection examination held at the end of Grade 7, since there is room in Grade 8 for only one-third of those who complete Grade 7.

The New Structure of the Education System

The fundamental units around which Zambia's education system will henceforth be organized are basic schools, offering Grades I to 9, and high schools, offering Grades 10 to 12. This development means that the formal education system will have a 9--3--4 structure, comprising nine years of basic education, three years of high school education and, as before, four years of university to first degree level. This structural change is more than a matter of nomenclature. It underlines the fact that the first and basic level of education will last for nine years. Thus, it is a constant reminder that the goal of the education system is that every child in Zambia should have access to nine

years of good quality education. It also points to the need to re-organize the curriculum and teacher that both respond dynamically to the requirements of the new structure.

While the Ministry makes steady progress towards the goal of universal basic the existing primary school sector will continue to be a crucial part of the education system. So that this sector is likewise oriented towards the final goal of universal basic education, education for Grades 1 to 4 will henceforth be referred to as 'Lower Basic' and education for Grades 5 to 7 as 'Middle Basic'. Education for Grades 8 and 9 in basic schools will be referred to as 'Upper Basic'.

The existing secondary schools, that run from Grade 8 to Grade 12, will also remain a crucial part of the education system during the period of transition to universal basic education. As provision for Grades 8 and 9 increases in basic schools, the need for these grades in conventional secondary schools will decline. The Ministry will progressively transform these schools into high schools, offering Grades 10 to 12 (as it has done already in the case of secondary technical schools). As a temporary measure, the designation 'Junior Secondary' will be retained for Grade 8 and 9 provision in schools that offer Grades 8 to 12, but as these schools are transformed into high schools this designation will gradually fall out of use.

The Ministry will devise a comprehensive strategy for bringing about this structural transformation, in name and in reality, of the education system. The strategy will ensure that scarce inputs are not diverted from the lower and middle basic levels and that there is an adequate supply of teachers for the upper grades.

The normal entrance requirement for admission to university degree courses will to be what the universities judge as suitable performance in the School Certificate Examination, or its equivalent. This system has served the nation well since its inception in 1966 and accords with growing practice in many parts of the world. Any attempt to gear university admission to a higher qualification would so narrowly limit academic opportunities as to defeat the national interest.

The arrangements that have been outlined apply to all government schools. Non-governmental and private providers of education, will be free to make such structural arrangements as suit their clients, in particular by making A-level provision to meet the entrance requirements of institutions abroad that offer specialized forms of training not available in Zambia. In other respects, it seems likely that the arrangements non-governmental providers adopt will largely coincide with what has been laid out above.

Selection for Grade 8

The Ministry's intention is that eventually every primary school will be upgraded to complete basic school status, offering the full range of basic education from Grade 1 to Grade 9. In such circumstances, all Grade 7 pupils in a school would proceed without selection from Grade 7 into Grade 8 in the same school. There would be no need for pupils in such complete basic schools to sit for the Grade 7 composite selection and certification examination. As more primary schools attained full basic school status, the Grade 7 examination would play a progressively reduced role in the education system and eventually would be abolished.

Within complete basic schools, school-based assessment would perform the evaluative and diagnostic functions currently associated with the Grade 7 composite examination. Each school would have a comprehensive system for the evaluation of individual pupils. The system would specify how and when assessment would be conducted and how the results would be communicated to parents and within the education system. To facilitate this, the Ministry will introduce procedures that will enable teachers to standardize their assessment methods, thereby ensuring both transparency and the availability of properly validated information on pupil achievement.

Currently, there is no complete basic school where all the pupils can proceed without selection from Grade 7 into Grade 8 in the same school. However, the Ministry and District Education Boards will explore with communities the feasibility of enabling some schools in each district to reach this stage, subject to the necessary prerequisites (such as the use of properly validated school-based assessment) and resources being in place.

During the period of transition, before schools attain full basic education status, pupils will continue to be selected for Grade 8 on the basis of their performance in the Grade 7 composite examination. Those who are to proceed are assigned to schools in accordance with choices made well ahead of the examination. At present, the majority of pupils express preference for admission to conventional secondary schools, with basic schools ranking low on their order of priority. This has the drawback that those with superior performance in the Grade 7 examination tend to enter conventional secondary schools, leaving the basic with the less promising pupils. This depresses the standing of the basic schools in the eyes of the community, teachers and pupils, making it more difficult for it to achieve satisfactory standards of performance. The Ministry will explore with school authorities and Parent-Teacher Associations ways of resolving the dilemma of respecting parental and pupil's choice without at the same time reducing the quality intake into basic schools.

The Structure of the Education System

Policy

1. The fundamental units around which Zambia's school system will be organized are basic schools and high schools.
2. As basic education becomes more universal, the Grade 7 composite examination will become less important and eventually will be abolished.

Strategies

1. Basic education will cover a nine-year period, running from Grade 1 to Grade 9: Grade 1-4 education will be referred to as Lower Basic, Grade 5-7 as Middle Basic, and Grade 8-9 as Upper Basic.
2. High school education will cover a three year period, running from Grade 10 to Grade 12.
3. The Ministry of Education will devise a comprehensive strategy for the transformation of existing primary schools into basic schools and of secondary schools into high schools.
4. Pupils in a full basic school, that can accommodate in Grade 8 all of its own Grade 7 pupils, will not be required to sit for the Grade 7 composite selection and certification examination.
5. The Ministry will introduce standardized school-based assessment procedures for use in basic schools where pupils do not sit for the Grade 7 composite examination.

Chapter 4

Basic Education Access and Participation

Good quality education brings many personal, social, economic and educational benefits. It enables children to realize their potential, as they develop into complete and integral persons and are prepared for adult life. It promotes desirable attitudes, values, and ways of behavior and opens the minds of pupils to new ideas and methods. It leads to all-round improvements in health and declines in mortality rates. It increases the productivity of the participants. This is as true of basic as of other levels of education, especially as basic education lays the foundation on which all further education must build.

The salient facts about basic education in Zambia are that:

1. for the foreseeable future this is the only education that the majority of children may receive;
2. two-thirds of the children cannot proceed into the upper basic level, while a significant number do not have access to lower and middle basic education; and
3. the standards are generally low.

A further dimension of great significance to basic school provision is Zambia's population profile: the 1990 census showed over 48% of the population as being aged 15 or less, while the country has a high population growth rate of at least 2.7% per annum.

These considerations and facts establish the context for policies relating to basic education.

Access to Basic Education

Access to Lower and Middle Basic Education

In 1994 there were 3,715 government schools in Zambia with a total enrollment of 1,507,660 pupils in lower and middle basic classes. A school of average size has an enrollment of some 400 pupils, but in urban areas many schools are two and three times this size, while in rural areas the schools tend to be smaller. The number of classes stood at 40,671, giving a national average class size of 37. The national figure masks

considerable regional variations, ranging from classes of 45 as the norm in Lusaka Province to 30 in the North-Western Province. There were 36,757 teachers, giving an average pupil-teacher ratio of 41:1. Again there is considerable differentiation across the country, ranging from 48.5 in the Northern Province to 32.3 in the Western Province. In addition to government provision, there are about 60 private schools, catering for almost 20,000 pupils in Grades 1-7.

The lower and middle basic school system is able to admit about 90% of the children aged between 7 and 13 years. This relatively high gross enrollment ratio has declined since 1985, when the schools could admit 95% of the children. The decline is due to the failure to expand school infrastructure to match the needs of the rapidly growing child population. Moreover, the numerically high ratio has been achieved through the sacrifice of quality (*a*) by allowing excessively large classes in urban schools, and (*b*) by the widespread use of double, triple and even quadruple sessions, and the consequent shortening of the teaching-learning day.

Although there is room in the schools for approximately nine out of every ten children, the number of children aged 7-13 who are not in school is actually extremely large. Census data show that in 1990 their number exceeded 650,000, with more children out of school in rural than in urban areas. This is mainly due to the large number of children in lower and middle basic classes who are not of the correct age. Some are under-age, but most of those enrolled in schools who are not of correct school-going age are over the legal age of 14 years. The presence of these older children prevents the enrollment of eligible younger children. It also creates problems for curriculum and teaching methodologies that are directed towards younger children.

In urban areas and in certain more developed parts of the country, there are not enough school places to meet all the demands. This unsatisfied demand is particularly serious in Lusaka and the Copperbelt. Lower and middle basic schools in Lusaka have room for less than two-thirds of the eligible children. This inability of the schools to absorb all the eligible children aggravates urban youth problems, especially those relating to street children.

In rural areas the supply of school places typically exceeds demand in Grades 1-4, but since some rural schools are 'incomplete', ending at Grade 4, there are not always enough places for rural children to proceed into Grades 5-7. A particular problem in certain rural areas is the sparsity of the population which may not be large enough to justify upgrading to Grade 7 in the conventional way. Multigrade teaching is a satisfactory answer to this problem, provided the conditions for successful multigrade teaching are met. These include the necessary resources, adequately trained teachers and regular supervision.

Access to Upper Basic Education

In 1994, the total enrollment at the upper basic level was 130,775, of whom 78,003 (59.6%) were boys and 52,772 (40.4%) were girls. Slightly more than one-third the eligible population (those aged 14 and 15) are enrolled in Grades 8 and 9, but there are significant gender differences and differences between rural and urban areas. The census shows that 39.2% of the eligible boys were enrolled in these grades in 1990 and 29.4% of the girls. In rural areas, 20.9% of the eligible population were enrolled, compared 52.8% in urban areas. The lowest enrollment ratio at this level was that for rural girls, only 16.7% of these being recorded as participating in upper basic education.

Somewhat more than 18% of the pupils in upper basic classes are boarders in schools that run from Grade 8 to Grade 12. Sixty percent of these are boys and forty percent are girls. Boarding schools are found mostly in the rural areas, though there are some large boarding schools on the outskirts of a number of the provincial towns. In 1994, the average class size at this level was 42.7 in Grade 8 and 47.2 in Grade 9. Class sizes, which are large across the Country, tend to be very large in the more urbanized areas -- Lusaka, for example, shows an average class size of 51.5. These large classes do not conduce to quality teaching in which attention can be given to the particular needs of each pupil.

Since the commencement of the basic school movement in the early 1980s, the numbers proceeding from Grade 7 to Grade 8 have more than doubled, the number selected from the 1995 Grade 7 candidates being 122% more than in 1984. This is a remarkable achievement that stands as a tribute to the efforts and resources that communities have invested. Nevertheless, the data show clearly that the provision of upper basic education is quite inadequate, and that the benefits of education at this level are not equally available across the country or to all groups. The inadequacy of provision is most pronounced at the entry point, with room in the Grade 8 classes for less than one-third of those who complete Grade 7. In 1996, only 59,620 Grade 7 pupils were selected for progression to Grade 8 out of a total of 180,054 who sat for the selection examination late in 1995, giving a progression rate of 33.1%.

Demand for Education

The Ministry of Education is greatly concerned that many parents throughout the country do not make adequate use of the opportunities available for the education of their children. Both the urban phenomenon of street-children and the rural phenomenon of erratic participation and non-utilization of facilities indicate low levels of explicit demand. Family dependence on the economic activities of children, the impact of AIDS on family organization and income, the increasing number of orphans (estimated to exceed half a million by the year 2000), the growing number of child-headed households (estimated in 1994 at 7% of all households in Zambia), and levels of poverty that preclude any school-related, outlays, are among newer circumstances that

may reduce explicit demand for education or that may require that the implicit demand be met in imaginative and novel ways. Of special concern to the Ministry is the fact that these circumstances may reduce the school participation of girls more than that of boys.

Completion Rates and Dropouts

Indicative of the decline in demand is the growing number who leave school voluntarily before completing lower and middle basic education. Overall, only 79% of those who entered Grade 1 in 1988 reached Grade 7 in 1994. Since the mid-1980s, this completion rate has been declining steadily in both rural and urban areas. Relatively high dropout rates have always been characteristic of rural schools, but what is new in recent is the increasing incidence of pupil dropout in urban schools. The Ministry is greatly concerned about this phenomenon which indicates less popular commitment to education than in the past. It is especially concerned that school completion rates show that girls are more severely affected than boys -- the 1988-1994 completion rate for girls was 71.4% compared with 86.9% for boys.

Quantitative Needs for Universal Basic Education

Despite the remarkable progress achieved during the past thirty years, the need for further expansion remains. As Appendix I shows, an additional 150,000 lower and middle basic school places would be needed at once if all children in the 7 to 13 age-range were attend school. This is the equivalent of almost 270 double-streamed primary schools, with an enrolment of 560 pupils. If the current rate of population growth is sustained, a further 500 such schools would be needed by the year 2000 to cater for the increase in the number of children of school-going age.

At the upper basic level, approximately, 3,000 additional Grade 8 classes would be needed at once if all of the 120,000 who are 'pushed out' of the school system or completion of Grade 7 were to proceed into Grade 8. Because the population of 14-15 year-olds is growing steadily and rapidly, more than 1,000 additional 750 Grade 8 classes would be needed by the year 2000, and a further 3,250 by the year 2015, which is the target year for the attainment of universal basic education. At the most basic level of provision, nine years of education for all by the year 2015 would necessitate more than 16,000 additional classrooms and teachers and 3,500 science or practical rooms and libraries.

The Challenge Facing the Ministry

The foregoing indicates that the Ministry faces a triple task in promoting universal basic education:

- it must, ensure additional school facilities so that every child has a fair and equal chance of being admitted to and continuing in school;
- it must stimulate demand so that parents, especially in disadvantaged groups or areas, make full use of available facilities; and
- it must explore ways of reaching out to children who, for a variety of reasons, are unable or unwilling to attend school.

The Ministry will respond to these challenges by pursuing the goal of nine years of education for all within the framework of the following principles and priorities—

- the first step will be to enable every child to enter school no later than the age of seven and receive at least seven years of education,
- while this is being accomplished, access to Grades 8 and 9 will be progressively expanded so that an increasing proportion of those who complete Grade 7 can proceed into Grade 8;
- immediate interventions will be put in place to raise the standards of the existing poorly resourced and educationally inadequate basic schools;
- the articulation of Grades 8 and 9 in basic schools with Grades 8 and 9 in conventional secondary schools will be thoroughly examined and clearly specified;
- a comprehensive strategy for the attainment of universal basic education will be devised.

Against this background, the Ministry will focus attention on the improvement of existing basic schools, and will strive to mobilize resources to meet these needs. It will also direct its attention to basic education as an integrated system, ensuring that proper planning is undertaken in order that essential inputs may be organized and prepared before new developments take place. One crucial aspect of visualizing the system as a whole is that as more pupils proceed on a non-selective basis into Grade 8, the curriculum will need radical revision in order to cater for a spread of pupil ability which will be much wider than is presently the case in Grades 8 and 9. Extensive curriculum review will also be needed to ensure the inclusion of a sufficiently wide range of practical and pre-vocational subjects, together with some vocational orientation in every subject .

The Ministry will direct a considerable part of the activities of the existing secondary school inspectorate to these basic schools, with a view to bringing about quality-related improvements in these and other areas. In addition, it will provide for special in-service programmes, at resource centres and elsewhere, for the Heads of these schools, to improve their skills as school managers and educational leaders. Priority will also be given to the needs of these schools in the allocation of educational materials destined for the junior secondary level.

The Role of the Community in the Development of Basic Schools

Communities have wholeheartedly adopted responsibility for providing much of classroom space needed for the upgrading of primary schools to basic school status. In a country-wide demonstration of self-reliance, communities - rich and poor, rural and per-urban - have mobilized themselves to provide the labour, materials, or funds needed for construction of classrooms. This initial community zeal has set the pattern for the future, since the further development of basic schools must depend largely on the continuation of such participation by the community. The Ministry will provide technical advice and, once the physical facilities are in place, will provide teachers, equipment and teaching materials for approved developments.

This partnership between communities and the Ministry in the upgrading of primary schools to basic school status needs to be defined somewhat more closely, so as to avoid the double hazard of schools that are altogether too basic and growth that is unplanned and unsustainable. One element of this definition is a clear understanding that facilities which are needed for Grades 1-7 must be retained for the purposes of these classes and may not be requisitioned for Grade 8 and 9 use.

A further element is a clear recognition by the community that classroom space is not sufficient in itself to merit school upgrading. These classrooms need to be properly furnished. Moreover, as noted already, Grade 8 and 9 need suitable science or practical facilities. Also, the extension of the school by the addition of more classes for pupils of adolescent age necessitates careful attention to sanitary facilities, to ensuring an adequate water supply, and to catering for sport at an altogether new level. There is also need in all school extension work for attention to the special needs of disabled children. In addition, there is the question of housing at rural schools for the extra teachers the upgrading will require.

The person who should keep all of this in the forefront of the community's attention is the school head who usually plays a prominent role in the Parent-Teacher Association's work to upgrade a school. To help the head in this task, the Ministry's Planning Unit will prepare guidelines that will set out schedules of facilities required and procedures to be followed.

To ensure that the recurrent funding needs of schools to be upgraded are built into estimates, and that there is some parity of provision across the country, the Planning Unit will formulate a rolling plan for such upgrading on a provincial and district basis. As District Education Boards are established they will be authorized to sanction school upgrading within their areas, within the framework of this national plan and subject to the procedures set out by the Planning Unit.

Communities that wish to establish schools, that would operate as community schools outside the government or District Education Board system, will be strongly encouraged to do so. The Ministry will contribute to the running costs of such school through the provision of teachers and teaching supplies, or through a system of capitation grants.

Communities and School Infrastructure

Affecting problems of access and the use made of school provision are a number of issues related to school infrastructure. The over-use of school buildings, through multiple sessions and large classes, coupled with the near-absence of public funds for school: maintenance and repairs, has left most schools in an unacceptably poor physical condition. Except in a few rehabilitated schools, classrooms are typically bare, with few or no desks, no teacher's table or chair, and a broken chalkboard. In rural areas a large proportion of the classrooms possibly as many as 20% of the total number - are temporary mud and grass structures. Almost half the rural schools do not have their own source of safe drinking water, while urban schools have grown well beyond their planned size, but without any commensurate increase in sanitary facilities. These factors affect the public perception of schools and what they have to offer. They also affect the ability of the schools to provide education of reasonable quality.

There is also the question of the community's sense of ownership for its school. In some places this is well developed, but many communities still feel little or no responsibility towards the schools their children attend. Education is regarded as the Government's responsibility and the schools as government property. One of the challenges facing educational provision today, particularly in impoverished rural areas, is to re-awaken an awareness that the first responsibility for the education of children rests with families and with the wider community in which families live. Aspects of this challenge are a deepening of the community's sense of ownership for the local school and a fostering of interest in the maintenance of its fabric.

Investment in Basic Education

Principles

The education sector has an important role to play in the social and economic development of Zambia. Reducing poverty - the most important goal of development - depends largely on economic growth which, in turn, depends heavily on the knowledge and skills available within the economy. The development of these is largely the responsibility of the education sector. Expanding and improving educational services, especially at the base and for girls, is crucial, therefore, for national and economic prosperity. Moreover, carefully targeted investment in education serves not merely as an input for high growth, but also as a means of ensuring widespread participation in the growth process, thereby strengthening the democratic nature of society.

These considerations highlight the twofold importance of basic education, particularly lower and middle basic, to Zambia's economy. It is the only formal education that the majority of young people receive. Hence it forms the main source for the knowledge and skills required for the development of social and economic life. It is also the foundation on which all further education and training must build. Hence it underlies the development of all the human resources that Zambia requires for meeting economic and social needs. In addition to obligations arising from the acceptance of education as a human right, these factors underscore how important it is that every Zambian child should have access to school education of the highest quality, preferably for a minimum period of nine years.

Framework for Financing

The Ministry of Education will give high priority to the provision of adequate resources for basic education. To ensure that the three levels of basic education are adequately financed, the Ministry will press for an improved allocation of public funds to the education sector in general; within this allocation, it will set aside a meaningful proportion of discretionary (non-salary) funds for various interventions targeted at enhancing the quality of lower, middle and upper basic education.

At the same time it is clear that government budgetary allocations alone will not be sufficient for the universalization of basic education or for ensuring its quality. Hence there is a critical need to involve district councils, communities, private providers, religious non-governmental organizations, and voluntary bodies in the provision of basic education and the improvement of its quality. Zambia also looks to the donor community for continued and increased assistance to enable it to provide good quality lower, middle and upper basic education to all eligible children.

In recent years families have been assuming an increasing proportion of the overall cost of educational provision at all levels. This partnership between the Government and beneficiaries in the financing of education is a healthy development which the Ministry will continue to promote. The contributions from families have been devoted largely to special funds and levies, educational materials, school uniforms, school-related transport meals, and school developments. The major financial responsibility for teachers' salaries, some teaching supplies and materials, school management, significant rehabilitation and building works, staff development, and limited overheads has been borne by the Government, with extensive assistance from the international donor community. The arrangements will remain in place for basic education.

The Role of Non-Governmental Providers of Education

In accordance with the general principle of liberalization, the Ministry will support participation in educational provision by non-governmental providers of education, including the private sector, recognizing that they participate by right and not by sufferance. To this end, it will work out ways of encouraging private and voluntary investment in educational provision. In particular will ensure that non-governmental providers receive their fair share of educational materials and are accorded access to donor funds. The Ministry will also encourage and facilitate churches and other bodies in re-possessing schools that had been taken over by the Government.

Basic School Education

Access and Participation

Policy

1. The goal of the Ministry of Education is that every child should have access to nine years of good quality education.
2. As the first step leading to the attainment of the goal of universal basic education, the Ministry will ensure that every child will have access to a minimum of seven years of good quality schooling in a school of parental choice.
3. Attainment of the goal of nine years of good quality education for all will be pursued on a partnership basis between the Ministry on the one hand, and local communities and other providers of education on the other.
4. In cooperation with relevant partner ministries, and with communities, non-governmental organizations and religious groups, the Ministry will explore ways of establishing out-reach learning programmes that will bring the benefits of school education to children who for valid reasons are not able to attend school in the conventional way.
5. Local communities will participate in the development, maintenance and repair of basic schools. As District Education Boards are established they will be mandated to promote such participation.

6. **The Ministry will negotiate with local authorities, church groups and other bodies for the resumption by these bodies of some of the responsibility they had in the past for the management of schools.**

Strategies

1. The Ministry will adopt a two-pronged approach for the attainment of the goal of nine years of quality education for all:
 - the first element of the approach will be to ensure that every child can enter school at the appropriate age and receive at least seven years of good quality education;
 - the second element will be to ensure that every pupil who completes Grade 7 can continue into Grades 8 and 9.
2. In order to ensure that every child has access to seven years of good quality education, the Ministry will
 - upgrade all lower basic schools to middle basic level,
 - rehabilitate existing infrastructure; and
 - provide additional or new facilities in response to demand, with special attention to the needs of peri-urban areas.
3. The target year for the attainment of universal lower and middle basic education (Grades 1-7) is 2005. Accordingly, the provision of seven years of good quality education for all, as the first step in the attainment of universal-basic educational, will be accorded priority in educational development during the period 1996-2005.
4. The target year for the attainment of nine years of education for all is 2015. In order to achieve this, the Ministry will
 - progressively increase the number of Grade 8 and 9 places during the period 1996-2005, so that in the immediate future an increasing number of children can enter Grade 8 and complete Grade 9;
 - aim at a Grade 7 to Grade 8 progression rate of 50% by 2005; and
 - give priority during the period 2005-2015 to upgrading all primary schools to full basic school status.
5. Partnership between the Ministry of Education and communities in moving towards the goal of nine years of education for all will be affected through joint responsibility towards the development of basic schools. The responsibility of the community will be to provide the infrastructure required for adequate educational provision; the responsibility of the Ministry will be to provide technical advice and, once the physical facilities are in place, to supply teachers, equipment and material for approved developments.

6. In order to protect educational quality and to ensure planned and affordable developments, the upgrading of a lower and middle basic school to upper basic status will require the formal sanction of the Ministry of Education.
7. The Ministry will mobilize local and donor funds for the rehabilitation of existing school infrastructure and for the construction of new or additional facilities.
8. Through its Planning Unit, the Ministry will carry out regular school mapping exercises to identify areas needing educational provision. As District Education Boards are established, the Planning Unit will provide them with the training needed to conduct such planning exercises within their districts.
9. The Ministry will assist communities and voluntary organizations that wish to develop their own schools by providing them with technical assistance and guidance, supporting their efforts to mobilize funds and resources, supplying the new schools with educational materials, and providing them with an agreed number of state-funded teachers.
10. The Ministry will actively encourage the development of private schools through carefully designed legal and extra-legal incentives. To this end, it will review the procedures governing the establishment and ongoing registration of such schools with a view to facilitating the involvement of private entrepreneurs in the provision of education. It will also facilitate the access of private providers of education to land, capital, educational materials and training.
11. The provision of a source of safe drinking water and adequate sanitary facilities will be integral to all school rehabilitation and construction programmes.
12. In rehabilitating existing infrastructure and providing new facilities, the Ministry will ensure that structures and facilities respond to the needs of impaired children.
13. The Ministry will
 - strengthen the Preventive Maintenance Programme to ensure that school infrastructure is cared for on a regular basis;
 - generate funds for infrastructure care and maintenance by imposing a levy on those from outside the education sector who make use of school facilities, and
 - include provision for school maintenance in its annual estimates.

The Financing of Basic Education

Policy

1. **The provision of adequate financial resources for basic education is a priority for the Ministry of Education.**
2. **While communities will share in appropriate fashion in the financing of education, the Government will continue to bear the major responsibility for the running costs of basic schools.**
3. **The development of new basic schools and the upgrading of lower and middle basic schools to upper basic status will be undertaken on a partnership basis between communities and the Ministry.**
4. **The Ministry of Education encourages private sector and non-governmental participation in the provision of basic education and the improvement of its quality.**

Strategies

1. The Ministry will seek to have the budgetary allocation to basic education raised to a level commensurate with the needs of a growing and inadequately-resourced sector.
2. In its budgetary submissions, the Ministry will make generous provision for inputs and activities that will enhance the quality of basic education.
3. No tuition fees will be charged in basic schools that are operated by the Ministry of Education, local councils or Education Boards.
4. Parental and community responsibility for the running and developmental costs of basic schools will be met through the School Fund, PTA levies, stationery payments, textbook cost-sharing schemes, self-help undertakings, and the provision of services.

Chapter 5

Basic Education Quality, Aims and the Curriculum

One of the main purposes of the school system is to provide quality education to all students. The numbers enrolled in schools or participating in established programmes are important, but much of the investment that these involve does not bear fruit unless children actually learn as a result of the opportunities provided to them. A well functioning education system should be able to point to evidence of the personal incorporation by children of useful knowledge, reasoning ability, skills and values. Its success should be judged by the success of the teaching-learning process in developing the analytic skills of children, promoting their ability to form and transform concepts, enabling them to use knowledge as well as to acquire it, stimulating them to identify and solve problems, equipping them to express their beliefs intelligibly, empowering them to develop and live by a personally held set of values.

Quality of Current Provision

Over the years, many factors have contributed to undermining the standards and quality of education in Zambia. Predominant among these have been the rapid expansion of the system, coupled with a decline in real funding for the sector. Indications of low educational quality at the lower and middle basic levels abound:

- double, triple and quadruple sessions that have reduced in-class learning time below acceptable limits;
- over-crowded classrooms;
- physical infrastructure, that is dilapidated and in need of extensive repair;
- a dearth of textbooks and other learning materials;
- an extensive use of untrained or unqualified teachers, particularly in the lower and upper basic classes;
- periods of three or four years elapsing between one visit of a school inspector and the next;
- an excessively compartmentalized, overloaded and inflexible curriculum;
- a dominant examination system that places heavy emphasis on factual information, that does not assess critical learning areas, and that controls much of the teaching and learning at the middle basic level;

- a language used in school that is alien to the majority of pupils, with which many teachers have difficulties, and which, for virtually all children, is different from the language of the home.

At the upper basic level, much of the growth took place without adequate planning. In many instances, communities and school authorities went ahead with the establishment of Grade 8 and 9 classes without due consideration for the creation of the infrastructure or the need to recruit qualified teachers for the upper grades. Although there are noteworthy exceptions, many of the basic schools are seriously deficient in physical facilities, classroom furnishings, teaching materials, qualified teachers, facilities for sports and extra-curricular activities.

The outcomes are predictable. Children who complete the lower and middle basic are not exhibiting the expected fundamental reading, writing and numeracy skills. There is extensive rote learning geared largely to the memorization of facts, simply for the purpose of passing examinations. School-based assessments are insufficiently used as tools for the improvement of learning and teaching and are ignored in selection decisions for higher levels. School leavers find it difficult to communicate confidently and intelligibly, whether in speech or in writing, be this in a Zambian language or in English. At the upper basic level, many have had very restricted educational experiences, so that they leave school lacking in the knowledge, understanding and skills that should characterize a Grade 9 school-leaver.

This situation means that the education system is not providing pupils with the standard of education to which they are entitled. Neither is the system providing the people of Zambia with a good return for the substantial investment in basic education that the Government makes each year. Children in basic schools have a right to the fullest possible personal development, through high standards of teaching and educational support that will promote really effective learning. To safeguard this right, the Ministry of Education has the obligation to ensure that the many factors that contribute to quality in education - the curriculum and its associated materials, the actual teaching methodologies, the assessment processes, school supervision, the management structures, the infrastructure - are such that they will indeed promote effective teaching and learning.

Enhancing the Effectiveness of Existing Basic Schools

In the existing basic schools, almost all of the factors that, determine school effectiveness are in need of special attention, support and improvement. Material support needs to be increased in terms of classroom furniture, books, various types of learning materials, science apparatus and supplies, and classroom equipment. Library facilities need to be provided. Some increase is desirable in the number of hours of actual teaching. Teaching methodologies need to place greater emphasis on self-

initiated and self-sustained learning. Dynamic and inspirational leadership on the part of the school head needs to be created. The school head and every member of the teaching staff must be enabled to engender pride in the school, communicating the expectation that each pupil will work hard and will excel academically. Important pedagogic routines, such as careful preparation of lesson plans and materials, frequent pupil assessment and feedback, and the regular assignment and marking of homework, need to be institutionalized.

Teacher Preparation

A critical input for basic schools is teachers who are qualified for subject-based teaching in Grades 8 and 9. Currently, some primary-level teachers are being upgraded for this purpose at the National In-service Training College (NISTCOL) in Chalimbana. This programme will continue and will be enlarged when the upgrading of NISTCOL has been completed. The output from NISTCOL will help to meet some of the current needs, but will not be adequate to respond to all of them. Neither will NISTCOL be able on its own to respond to future needs for a greatly increased number of teachers for Grades 8 and 9. The increase in Grade 1-7 enrollments, arising from meeting hitherto unfulfilled demand and from the increasing child population, precludes the possibility of being able to divert any of the existing Teacher Training Colleges to the training of teachers for basic Grades 8 and 9. In view of this, and as a major step towards the attainment of nine years of education for all, the Ministry will seek to mobilize resources for the development of a new college for the training of teachers for the complete range of basic education, from Grade 1 to Grade 9.

Providing for Science and Practical Subjects

If science, technology and practical subjects are to be properly taught and meaningfully learned in basic schools, they will require not only teachers who are competent to teach these fields, but also schools that are adequately supplied with equipment, apparatus and relevant books. Meeting the needs in this regard of the 400 or so existing basic schools will be a daunting task, but it is one that the Ministry must undertake if the education provided through these schools is to be of value to the pupils and to society.

The School Learner

The Ministry of Education emphasizes that the child is at the centre of the entire education process which exists solely for the sake of the learner. It also recognizes that each child is unique, with his or her own individuality and personality, fashioned in family and community backgrounds that are themselves unique. This contributes a rich diversity to the entire educational enterprise which should seek to cultivate the qualities and potentialities of each learner, without trying to mould all children according to the same pattern.

A further dimension is more sobering. It is the fact that a large proportion of learners in Zambia's basic schools are severely disadvantaged through under-nourishment, regular experience of hunger while in school, multiple parasitic infections, recurrent experiences of malaria, and diarrheal problems brought on by lack of safe drinking water. These multiple disabilities adversely affect the child's capacity to interact with and make use of whatever learning resources the school can offer.

A related issue is that in many parts of the country child-rearing practices promote possessiveness and passivity, but discourage qualities which the school system strives to develop, such as child independence, self-assertion, questioning, and inquiry.

Finally, there is a new dimension, occasioned by HIV/AIDS. This has made such inroads into families and communities that many children come to school emotionally disturbed, traumatized at what they have experienced at home, and lacking in a sense of psycho-social security.

These various issues affect its principal clients so deeply that the Ministry of Education cannot ignore them. It will, therefore, collaborate fully with all other agencies that seek to address and remedy these pervasive problems. It will strengthen its own Child Guidance and Counselling Services which in turn can provide in-service training for teachers in how to deal with these and related problems. It will also re-focus the school curriculum so that it is more clearly child-centred and so that it promotes knowledge and skills that are basic to sound and healthy living.

The Aims of Basic Education

Under the Convention on the Rights of the Child, Zambia has pledged itself to Protect the right of every child and promote a healthy, happy and caring upbringing. Accordingly, the school environment should be such that it ensures each young person's right to a joyful, safe and formative childhood and early adolescence. This principle informs the statements of educational goals and objectives and the curriculum principles to which they give rise.

The education system exists for the sake of the learners and the institutions in which the learning takes place. At the level of the schools, the system aims at enabling them to provide an education and learning environment which facilitates the cultivation of each pupil's full educational potential. *The overarching aim of school education, therefore, is to promote the full and well-rounded development of the physical, intellectual, social, affective, moral and spiritual qualities of all pupils so that each can develop into a complete person, for his or her own personal fulfillment and the good of society.*

Within this broad framework, there are more specific aims, each level of education having its own objectives appropriate to the pupil's particular stage of personal and educational development. Thus, *basic education aims at providing each pupil with a solid academic and practical formation that will serve as the basis for a fulfilling life and that it will equip each one with the pre-requisites needed for a working life, various forms of training, or the continuation of school education.*

The Aims of Lower and Middle Basic Education

Currently, some 120,000 pupils, many of them aged no more than 14 years, are required to leave the school system at the end of Grade 7. As progress is made towards the goal of universal basic education, this number will decline. But for the coming decade or longer the number completing their education in Grade 7 will remain substantial. Hence it is necessary to be clear on the specific objectives for lower and middle basic education and to formulate a curriculum that will lead to their attainment.

At the lower and middle basic level, the specific aims are to:

1. ensure that pupils acquire essential literacy, numeracy and communication skills;
2. enable pupils to develop practical skills in one or more relevant areas;
3. nurture an ability, appropriate to the pupil's stage of development, to think reflectively, logically, scientifically, and critically;
4. foster healthy living, physical coordination and growth;
5. promote positive social behaviour and skills for coping with negative pressures;
6. encourage the formation of socially desirable attitudes;
7. shape the development of a personally held set of civic, moral and spiritual values;
8. further the acquisition of knowledge and understanding of Zambia's democratic and cultural institutions
9. facilitate the development of each pupil's imaginative, affective and creative qualities.

The Aims of Upper Basic Education

The specific objectives for upper basic education must take account of the fact that this is the terminal educational level for the majority of pupils. Currently, close to 50,000 pupils leave the school system each year on completion of Grade 9. The numbers ending school at this point will increase steadily as progress is made towards the goal of universal basic education. The specific objectives for this level must take account of the need to provide such pupils with a recognizable preparation for the world of work, without ceasing to cater for the minority who will continue into high school.

The objectives, and the curriculum to which they give rise, must also respond to certain characteristics of pupils at this level. In principle, pupils at this stage will be competent in using the essential learning tools of literacy, oral and written communication, basic numeracy and problem-solving. They will also have acquired basic learning content in the form of knowledge, skills, values and attitudes. Secondly, all Grade 8 or 9 pupils will be at some stage of adolescent development, a factor which

is highly relevant to how they learn, the range of their interests, and their personal growth as individuals.

Finally, Grade 8 and 9 pupils at present are highly selected, coming from the best performing 30-35% in the Grade 7 examinations. However, one of the consequences of increasing access to Grades 8 and 9 will be an increase in the number of pupils in upper basic classes with lower academic potential. The goals of education at this level must be enough to cater for the needs and interests of such pupils.

In the light of these considerations the specific aims of upper basic education are to:

1. consolidate the basic learning skills and content acquired in primary school;
2. expand the range of pupils' knowledge and understanding in critical areas of learning;
3. enlarge pupil capacity in scientific and technological areas;
4. equip pupils with relevant skills and attitudes in practical or entrepreneurial areas;
5. improve pupils' skills in dealing with intellectual, social and personal issues and with the physical environment;
6. promote satisfaction in learning, the desire to learn, and the skill of learning, in intellectual, practical and other fields;
7. create an environment in which pupils can develop their special talents and aptitudes, and assist them in doing so;
8. foster the development of personally held civic, moral and spiritual values.

Whether or not these aims translate into meaningful personal development depends ultimately on pupils' actual learning acquisition. Hence, the Ministry of Education expects that upon completion of Grade 9, every pupil should have attained a suitable level of competence in the following:

- the communication skills of speaking, listening, reading and writing in both English and a Zambian language;
- numeracy and the skills of using mathematical concepts and processes in matters of everyday life;
- basic scientific and technological knowledge, understanding and principles, including such understanding of scientific method as would enable the pupil to approach a topic in a scientific way;
- a practical or entrepreneurial skill that is potentially relevant to the world of work;
- knowledge and appreciation of the social, cultural and physical environment and of the achievements and traditions of Zambia's past;
- knowledge and understanding of the democratic structure of Zambian society and of the principles and rights on which it is based;
- knowledge and understanding of spiritual, religious and moral values and appreciation of the traditions within which they have developed;
- selected options in such areas as language, the creative arts, or sport;
- life-skills necessary for the promotion of personal health, interpersonal relations, and healthy sexuality.

The Curriculum for Basic Education

The school curriculum consists in the content, structure and processes of teaching and learning which the school provides in accordance with its educational objectives and values. It includes the concepts, knowledge, skills, attitudes and values which pupils incorporate through the process of schooling. But it also denotes those aspects that arise from the general character and organization of each individual school and which collectively make up the culture or ethos of the school.

The way in which the curriculum is prescribed ('the curriculum as planned'), implemented ('the curriculum as taught') and incorporated by pupils ('the curriculum as learned') has a major impact on the quality of education provided. At every level of education, there is need to identify what is to be taught and learned, how it is to be taught and learned, and the evidence that satisfactory teaching and learning have taken place. In an effective education system, these three aspects of the curriculum tend to correspond closely: a well-designed and relevant curriculum is well taught and well learned. The Ministry of Education wishes this to be characteristic of all of its educational institutions.

Curriculum Principles for Lower and Middle Basic Education

The child's right to a safe, joyful and formative childhood implies that the curriculum at the lower and middle basic levels must be concerned with the pupil's complete needs: those of the body (physical education, sport, performing arts) as well as those of the mind (concepts, literacy, numeracy, knowledge); affective (music, dance, creative arts) as well as social needs (hygiene, citizenship); moral (values, attitudes) as well as spiritual needs (living in harmony with self, with others, with the supernatural).

Although it must deal with wide areas of human experience, knowledge and abilities, the curriculum at these levels should not be fragmented into rigid subject-defined compartments. The child at this stage has not acquired the analytic capability of separating the world of experience, which is unified and integrated, into clearly defined categories. The curriculum, therefore, should respond to the child's unified outlook on life by itself being unified and integrated.

A further general requirement of the curriculum at this stage is that it should take account of the fact that the child's dominant way of experiencing and learning is through exploration and activity. Hence, the curriculum as taught should stimulate learning through inquiry, guided discovery, problem-solving, application, and similar activity-based teaching and learning methods.

A final guiding principle is that the content and methodologies of the curriculum should be relevant. Clearly it is not possible in the modern world that every topic and every skill should be directly related to the child's immediate environment, but the establishment of such relationships should be of concern to those who develop

the curriculum and to teachers in the preparation of their lessons. This also calls for flexibility in allowing schools to adapt aspects of the curriculum to match local needs and circumstances. It further suggests the need for regular curriculum reviews that will discard dead wood, reduce the tendency to overload, and retain a curriculum that is comprehensive, well-integrated, and sufficiently focused. Recalling that, for many years to come, middle basic education will be terminal for many pupils the school curriculum must also demonstrate its relevance in providing them with a substantial and recognizable preparation for adult life.

Curriculum Principles for Upper Basic Education

Building on the foundation laid at the lower levels and guided by the principle of relevance, the curriculum and programme of school activities for upper basic education should be broad and balanced and allow for treatment at a depth appropriate to the level of education and the age and experience of the pupils. While striving for the comprehensive development of pupil knowledge, understanding and skills, the curriculum should not be unduly fragmented or overloaded. Hence, several areas and issues, instead of being offered as independent subjects, will be integrated across the curriculum; others will be structured as special modules that can be offered within the framework of an appropriate discipline.

Building on the Foundations of Middle Basic Education

One of the first tasks to which teachers in Grade 8 must apply themselves is to evaluate what has been accomplished at the earlier levels and to move forward from there. Pupils entering Grade 8 experience considerable transitional problems, many of them arising from their adolescent status, but once the routines of teaching begin they should be reassured by the experience of continuity between what was previously learned and what is now being encountered. However, this may not always be the case because of deficiencies carried forward from the lower levels.

Due to the many factors that adversely affect the quality of education, many of those who proceed into Grade 8 are not adequately equipped with essential reading, writing and mathematical skills. Their understanding of the physical and social sciences is minimal. Much of their knowledge consists in an assemblage of facts that have been memorized, but their ability to deal intelligently with these facts is very limited. They may have had little experience in the use of books and little opportunity for self-expression in creative writing or in speech. Generally they are very eager to learn, but many lack the skills and techniques that will enable them to do so.

Much of the initial Grade 8 teaching needs to be directed towards remedying these defects. In particular, language, mathematics and science need special attention. If these are not corrected and reformed from the outset, much of the subsequent work will be difficult for pupils and a disappointment to their teachers. Schools should place this remedial work under the guidance of their best teachers and devote much of the first term to it, with a wide range of activities that will require active pupil participation. The Inspectorate will monitor progress and achievements and, in collaboration with the

Curriculum Development Centre, will develop transitional and remedial modules for the guidance and support of teachers.

Curriculum Content

The task of specifying in detail the content of the curriculum for basic education belongs to curriculum specialists working in collaboration with teachers and, as much as possible, with parents and other stake-holders. Nevertheless, it is necessary to set out certain broad themes for the guidance of these specialists.

Education for democracy

Zambia is still in the process of consolidating the democratic character of its society. It is essential, therefore, that the schools help every young Zambian to acquire an understanding of the values that have shaped this society and the practices that will preserve it. This calls for incorporating into the curriculum education for democracy, for peace, for international understanding.

Literacy and Numeracy

A fundamental aim of the curriculum for lower and middle basic classes is to enable pupils to read and write clearly, correctly and confidently, in a Zambian language and in English, and to acquire basic numeracy and problem-solving skills. The levels of achievement to be attained should be such that those who leave school are able to function effectively in society, while those who continue in school have an adequate basis for further education. The Ministry of Education attaches the highest priority to the attainment of this goal. It will encourage and support strategies and interventions that are likely to foster its achievement. To the extent that resource constraints allow, it will provide schools with additional teaching materials and will promote in-service programmes for teachers in pursuit of this goal. Particular interventions will be to have its curriculum and other specialists define basic levels of competency in literacy and numeracy that children should attain by certain Grades, to develop related performance measures that will indicate whether the targets have been achieved and, through the Inspectorate, to have each school indicate the steps being taken to bring about the desired levels of literacy and numeracy.

While language subjects and mathematics are of particular importance in the attainment of adequate levels of literacy and numeracy, all subjects have a part to play here. In other words, these are areas that will be integrated across the curriculum.

Science and Technology

Science and technology have had a radical impact on Zambia's economy and on the way of life of almost every one of her people. Increasingly, the ability to think scientifically and to understand scientific processes is becoming a condition for survival. The scientific outlook is becoming the hallmark of the approach to problem-solving. National progress depends critically on the ability to adapt and use scientific and technological developments. The curriculum for basic education must take this into account.

A prime goal for science teaching at this stage should be to help develop processes of scientific thinking in children. For this, it will not be sufficient that pupils are told about certain processes, or even that they can observe them. It will be necessary, in science as in all other subjects, for pupils to be enabled to apply their own ideas, use their own hands, conduct their own investigations, however simple. From a curriculum aspect, this necessitates balancing the content of what pupils learn in science with the processes by which they learn; it also implies an enhanced role for guided discovery teaching-learning methods. From a resource aspect, it necessitates better school infrastructure, more copious supplies of simple materials, adequate supervision, and better trained teachers.

The science syllabus, for all schools, should contain a core of environmental science, dealing with issues that are relevant to pupils in every part of Zambia. There should also be room within the syllabus for topics that are relevant to particular localities or to dominant characteristics of the local economy. While there is a certain foundation level of knowledge and understanding about the physical world that every child should grasp, the development of scientific thought processes in children can be approached from a number of starting points and does not require uniform content across the country. The criterion should be the relevance of the material to the environment and to the possible later sphere of employment of the pupil.

Practical and Technical Subjects

Practical and technical subjects have four claims to justify their inclusion in the school curriculum:

1. they provide some compensation for the traditional knowledge and practical skills that pupils would have acquired in their home environment if they had not been attending school;
2. they constitute a form of knowing, experiencing and dealing with the physical world that every educated person should possess, and hence have intrinsic educational value;
3. they possess a potential relationship to the world of work, and hence may help to prepare pupils for post-school employment or vocational training;
4. they equip pupils with skills conducive to the constructive use of leisure.

In recognition of these claims, the curriculum for Grades 1-7 includes provision for practical subjects. In Grades 1-4, these consist of simple crafts, which are extended in Grades 5-7 to include more explicitly practical subjects. At these levels, practical subjects are of importance more for their educational than for their vocational significance.

Agriculture, horticulture, home economics, art and crafts, and similar subjects have the educational objectives of developing certain qualities in pupils, such as powers of observation, attention to detail, the need for vigilance and persistence, and the ability to observe. Every child in Grades 1 to 7 should participate in one or more of these subjects. The subjects chosen by a school, and the ways in which they are taught, should relate to the domestic life and commercial activities of the community served by the school. Participation in these subjects will enable many children to lay down a groundwork for the development of more sophisticated and economically useful skills later in life.

In addition, Zambia has pursued, since the late 1960s, a policy of limited diversification in its secondary schools, with pupils in Grades 8 and 9 being able to choose from industrial arts, agricultural science, a commercial subject, and home economics. Pupils take one of these subject areas in accordance with programme availability, personal aptitudes, and interest. The choice of subject is limited in smaller schools, particularly in basic schools. Because of ongoing resource constraints, the provision of materials, equipment and books for these subject areas is problematic. In many cases this has resulted in a theoretical and bookish approach to the subject, without opportunities for the hands-on practical experience that is of its essence. The schools are now better staffed than in the past for the teaching of practical and technical subjects, but the supply of teachers is not yet enough to meet all the demands, while those who are available are not evenly distributed.

The Ministry believes that it is of the highest importance that upper basic education provide pupils with an opportunity to take at least one practical or technical subject that is taught by a qualified teacher in a reasonably adequately resourced learning environment. To this end the Ministry will attach priority to enhancing school provision for such subjects.

Further, recognizing that adequate pre-vocational competence requires considerably more exposure to a practical subject than is possible within the framework of the present curriculum, the Ministry will explore the possibility of building complete upper basic programmes around different practical subjects, such as agriculture or home economics, that are relevant to the domestic and economic activities of the community served by a school. The experience of such programmes would provide pupils with a sounder preparation for subsequent training or for entry into the world of work. This diversified curriculum would also provide a wider range of choice to the increasing number of pupils of more diverse abilities proceeding into Grades 8 and 9.

Education for an Occupation

Though not strictly a school subject, this is an area of great educational concern. The curriculum for basic education cannot lose sight of the fact that this is the only formal education that the majority of pupils are likely to get. Therefore, it must continually look to how well it is preparing pupils for life after school. During the period of transition to universal basic education, many will still leave school after completion of Grade 7. As the goal of universal basic education is attained, an increasingly large number will leave after completion of Grade 9. In these

circumstances, it must constantly be asked whether the curriculum and school teaching are geared towards preparing the majority for entry into life, or whether they concentrate excessively on preparing the few who will proceed to the next level of education.

For the Grade 7 school-leaver, much of the answer lies in ensuring that schools do better what they are supposed to be doing. The mastery of literacy and numeracy and the development of problem-solving skills are the essential vocational competencies needed by all pupils. They are likewise the first priority for lower and middle basic education. These are the foundation skills on which all else must build - further education, vocational skills training, productive work of whatever type. A solid grounding in broad scientific and socio-cultural understanding is also essential for a Grade 7 school-leaver today's world. Whatever other strategies they adopt to prepare pupils for adult schools would fail them utterly if they did not attend to these as areas of the highest priority.

Practical subjects are also important, though their vocational impact for children of Grade 7 age is limited. Of greater moment will be initiatives that will re-shape the curriculum for middle basic education so that it imparts knowledge, develops skills, and fosters understanding that will be of value to those who must leave school on completion of Grade 7. The knowledge, practices and attitudes needed for entrepreneurship and personal self-reliance require special emphasis. The Curriculum Development Centre will give special attention to this issue and will develop modules related to entrepreneurship for incorporation into suitable Grade 5-7 subjects.

The increased age and maturity of pupils in Grades 8 and 9, and their more realistic expectations, should facilitate schools in their task of preparing them meaningfully for the world of work. At this level also, communication, numeracy and problem-solving are the essential skills. They promote the capacity to profit from further training and enhance the flexibility and productivity of those who enter employment or seek to generate it for themselves. For these reasons, the curriculum for this level of education will attach the highest priority to the development of high levels of pupil competence in mathematical and communication skills and in the problem-solving ability that is fostered largely through science and practical subjects. Through the provision of resources, ongoing teacher education, regular monitoring by the Inspectorate, and a system of school rewards and incentives, the Ministry will keep the idea of excellence in these curricular areas in the forefront of every Grade 8 and 9 teacher's attention.

In addition, the Ministry will develop special modules in such areas as *Starting and Running a Business*, *Education for Work*, and *Entrepreneurship Education*, for pupils at this level. It will also commission curriculum specialists to examine ways in which an increase in vocational orientation can be built into all subjects, without prejudice to their distinctive character. Further, the Ministry will strengthen school guidance and counselling services and, through career teachers, it will disseminate information relating to post Grade-9 training and employment opportunities.

Health and Personal Well-being

Areas of major national concern include HIV/AIDS, malnutrition, environmentally related sicknesses, and the general health of the people and children of Zambia. It is imperative that the basic school curriculum deal with these issues, striving to create attitudes and establish practices that will be conducive to good health and personal well-being. One aspect of this is what has traditionally been known as 'Health Education'. Another is physical education and sport, both of which are essential for the growth and development of a child, but neither of which rank high in the normal order of priorities.

In very many cases, the health of a school-child is intimately related to the size and health of the child's family. This in itself is good reason for including aspects of population education in the school curriculum. The case becomes more compelling when the adverse effects of rapid population growth and short intervals between births are considered.

Sexuality and Personal Relationships

Young people frequently experience problems arising from their developing sexuality. Many of those attending school have not been given the help they need in this area. The school has an obligation to compensate for losses they may have experienced elsewhere by helping pupils to form an enlightened outlook on sexuality. This is all the more urgent today in view of the prevalence of HIV/AIDS. Because of this, the curriculum for each school will include an education programme in the areas of sexuality and interpersonal relationships, appropriate to the age and development of its pupils. Within the broad framework of guidelines which the Ministry will develop, each school will formulate its own educational programme in this area, working closely with parents, local health personnel, and relevant members of the community. Certain aspects of such a programme will require explicit instruction within the formal curriculum; other aspects will be more appropriately dealt with through the school's various extra-curricular activities, particularly those that promote the development of life-skills.

The Formation of Attitudes

The school is a leading agency in helping young people to form socially acceptable habits and to adopt a set of personally held values, although in this area more than in any other its activities must be complemented by the home, the community and the wider society. The Ministry stresses the central importance of basic education in fostering the development of values and attitudes, through civic, moral and religious education, the example of school staff, and the whole ethos of the school. This is all the more important at this level as pupils are at a critical stage of personal development when they shape for themselves their own personal philosophy of life, interiorizing and adopting a set of values and attitudes by which they will direct their lives.

Performing and Creative Arts

The performing and creative arts have a twofold role to play in the education of young people. According to them, some importance in the school curriculum promotes wider knowledge of and deeper appreciation for Zambia's rich cultural heritage and thereby

contributes to the preservation and development of this heritage. The arts also have a critically important role to play in the development of the individual. They are a powerful channel for expressing feelings, communicating messages, fostering imagination and inventiveness, interacting with others, expressing solidarity, and balancing feelings and emotions against 'intellectualism' and 'bookishness'. They are of particular importance to the development of young children, whose powers of verbal expression are still rudimentary; they are also an integral component in the all-round education of every pupil in Grade 1-9. While much that relates to the arts can be integrated across the curriculum, the arts can also serve for the teaching and learning of other areas. What is important is that the Ministry recognizes the importance of the performing and creative arts and intends to promote their status in schools more vigorously than in the past.

Language of Instruction

Zambia has had almost thirty years experience of using English as the medium of instruction from Grade I onwards. Children, who have very little contact with English outside the school, have been required to learn how to read and write through and in this language which is quite alien to them. They have also been required to learn content-subjects through this medium. The experience has not been altogether satisfactory. The fact that initial reading skills are taught in and through a language that is unfamiliar to the majority of children is believed to be a major contributory factor to the backwardness in reading shown by many Zambian children. It is also a major factor in fostering rote learning, since from the outset the child has difficulties in associating the printed forms of words with their real, underlying meaning.

On the other hand, there is strong evidence that children learn literacy skills more easily and successfully through their mother-tongue, and subsequently they are able to transfer these skills quickly and with ease to English or another language. Successful first language learning is, in fact, believed to be essential for successful literacy in a second language and for learning content-subjects through the second language.

These considerations do not obscure the fact that the use of English in primary education has played a significant role in promoting a sense of national unity. Neither do they overlook the fact that English is the official language of public life and the *sine qua non* for all further education in Zambia. It must also be borne in mind that the introduction of a language other than English as the official medium of instruction would encounter insoluble implementation problems and would entail enormous costs both in developing and producing materials and in training teachers to use them.

In the light of these considerations, all pupils will be given an opportunity to learn initial basic skills of reading and writing in a local language; where as English will remain as the official medium of instruction. By providing for the use of a local language for initial literacy acquisition, children's learning of essential reading and writing skills should be better assured. By providing for the use of English as the official language of instruction for other content areas, children's preparation for the use

of this language in school and subsequent life will be facilitated, while the implementation problems of changing over to other languages will be avoided.

Moreover, in order to foster better initial pupil learning, to enhance the status of Zambian languages, and to integrate the school more meaningfully into the life of local communities, each child will be required to take a local language from Grade I onwards.

Learning Resources

Quality education requires the availability and use of textbooks and other educational materials. Without these aids to the learning process, effective teaching and learning, in the modern sense cannot take place. Suitable materials enable pupils to acquire and apply knowledge, to learn at their own pace and to assess their own progress. Although considerable improvements have been made in recent years in the provision of educational materials, these still remain critically short in many schools. The supply of books has improved greatly, thanks in large measure to donor assistance, but the same cannot be said for the utilization of these new resources. The legacy of years of resource starvation has left its mark on schools and teachers. Few classrooms have facilities for the storage or display of books and materials, with the result that these items tend to be locked away in storerooms or heads' offices. There appears to be considerable reluctance to make use of books, partly because teachers have not been trained in the use of this resource; partly because of fear that the books might be damaged or lost. It has become clear that merely 'dropping' resources into schools is not having the desired educational outcomes. More attention needs to be paid to the use of these resources for teaching and learning purposes.

Other classroom supplies and items of equipment, such as charts, maps, and chalkboard rulers, remain in short supply. Likewise, few classrooms have any form of storage or display area. The Ministry will enrich the learning environment in each classroom with suitable materials, as well as with facilities for the display of pupil work. Such facilities are essential if success is to attend the adoption of pupil-centred methodologies, with the stress on group-work, projects, and guided-discovery. With this in mind, the Ministry will include provision for these in all rehabilitated and new facilities and will encourage all who provide resources for school rehabilitation or construction to ensure that arrangements are made to cater for the educational activities that are to go on in classrooms.

Assessment and Evaluation

Evaluation is a process by which it is determined whether the education system is, in fact, achieving its objectives. It has internal and external aspects. The internal aspect is concerned with determining whether the curriculum, programmes, methods and materials employed do in fact promote the expected learning and attitudinal outcomes. It is also concerned with the pupil, essentially by determining his or her standard of performance in school areas. The external aspect relates to evaluation undertaken to determine how effective the school system is in producing graduates of the calibre expected by society. In this regard, society's interest focuses largely on the public examinations that mark the end of one stage of education and serve as selection instruments for admission to the next stage.

These two aspects of evaluation are complementary, though in practice they tend to be conducted independently of each other. More specifically, the highly structured, formalized assessment that takes place through public examinations remains separate, in the Zambian system, from the ongoing process of assessment whereby, using formal and informal methods, teachers monitor their pupils' progress. This represents a considerable loss. Class-teachers assess their pupils on an almost daily basis, through observing how they learn, initiate or respond to questions, meet difficulties, attempt tasks. From this interaction they learn about the achievements, problems, and potentialities of pupils, as well as about the effectiveness of their teaching. Teachers also learn much about the work-habits of pupils, their persistence, their problem-solving ability, their adaptability, their inventiveness, their self-reliance. Teachers supplement this understanding of pupils through more formal classroom exercises, homework assignments, and periodic tests. Cumulatively, they build up a great fund of information about each individual pupil and are the best placed to determine whether the required learning and the desired attitudes have been established. Teachers and schools (through their records) are also best placed to identify a pupil's learning strengths and weaknesses in relation to future learning needs.

Hitherto, almost all the public assessment of students has been conducted externally through the examinations set by the Examinations Council. The rich source of information available in schools has been ignored, except in the case of certain subjects at secondary level. Although the 1977 Educational Reforms explicitly provided for the use of continuous assessment in determining borderline cases or difficult cases resulting from personal handicaps or circumstances, this provision does not seem to have been applied at the level of the Grade 7 composite examination. In future, however, more scope will be provided for the use of school-based assessment as part of the overall evaluation of pupils and for its inclusion as a component of certification and selection procedures.

However, much preparatory work has to be undertaken before this can be done. Crucial elements are the readiness of teachers, the education of the public, and the ensuring of transparency. But what can be done at once is to have each school develop a comprehensive programme of school-based pupil assessment and feedback as an integral part of its teaching and learning processes. Each school, therefore, will be

required to have a clear schedule of performance-monitoring activities that check pupils' progress. Prominent among these will be homework given to pupils on a regular basis, thoroughly marked, and quickly returned. Moreover, as noted already, the Ministry will develop procedures that will enable teachers to standardize their assessment methods and will develop standardized tests for use as an integral part of school-based assessment.

These and other instruments will enable teachers to collect reliable information on the strengths and weaknesses of their pupils and to assess their performance fairly and systematically. Teachers will use the outcomes of these assessment procedures to identify and respond to potential problems and to determine how successful their own teaching and the school's curriculum have been in meetings specified learning objectives. The outcomes of the pupil assessment will also be recorded on the student record cards that the Ministry's Planning Unit has developed as part of the National Educational Statistics and Information System (NESIS). The use of school-based assessment for selection and certification purposes will be more meaningful when it occurs within the context of a system that is designed for improvement of the quality of the regular teaching and learning process and for the pastoral care of pupils. In other words, the primary purpose of more systematic school-based assessment will be to provide diagnostic feedback to pupils and teachers; its role in certification and selection, though important, will be secondary.

Time in School

The amount of time that pupils spend in organized learning activities has a strong bearing on how much they learn and on their subsequent academic performance. Learning is made more possible when pupils spend more days per year in school and are actively engaged in longer school hours. But it is not enough if children are merely present in the school for more hours. It is necessary also that the maximum amount of school time be used for learning and that classroom learning-time be used efficiently. This means that most of the time in school is spent on activities arising from the formal curriculum, and that other school activities or events are scheduled in such a way that learning time is not disrupted. It also means that everybody in the school, from the head to the youngest pupil, is imbued with a sense of discipline that minimizes absenteeism, late-coming, and early stopping of work, and is so well organized that the school day and individual class sessions can start and end on time.

In Zambia, schools are in operation for teaching for 190 days a year. This is the same as many other school systems offer, in developed and developing countries. The number of actual teaching days may be reduced, however, by unscheduled school closings (due to sicknesses, hunger, weather and terrain factors, the use of school premises for other purposes, etc.) and time given over to the Grade 7 and 9 examinations. Of great concern is the fact that only 3.5 hours a day are spent in classroom instruction in Grades 1-4. This means that, at best, pupils in these classes receive no more than 665 hours of active teaching each year. This is only about two-thirds of what pupils in other countries receive. The norm, for Africa and elsewhere, is about 5 hours of classroom work each day at the lower basic level. The short teaching

day clearly contributes to pupils' low levels of learning acquisition in reading, writing, numeracy, communication, and other areas.

The widespread use of teachers and facilities for double and triple session teaching has contributed to this shortening of the teaching day. Because of resource constraints, it be necessary to maintain the double session system for the foreseeable future. But this argument does not apply to triple and quadruple sessions, the use of which has spread educational provision and quality so thinly that it is hard to justify the investments implied. The Ministry will gradually phase these out and will take other measures to guarantee that pupils at all levels can spend the necessary amount of time in organized learning activities. These measures will include a review of the school calendar and the duration of the school year.

Life-Skills and Extra-Curricular Activities

Every pupil in Grades 1-9 is at some stage of physical and psychological development. At the lower basic level, almost all are still children, with the child's need for security, exploration and activity. At the upper basic level, almost all are adolescents, many of them in the early stages of adolescent development. The psychosomatic changes young people experience as they grow from childhood into adolescence frequently manifest themselves in a spirit of guilelessness, altruism and idealism, a desire to make an impact in life, and a wish to change the world for the better. This is also a time of questioning, venturesomeness and exploration. Through its curriculum, its teaching methods, its organization, its challenges, and its whole ethos, the school should take account of these developments, but without in any way exploiting the young person.

This is also the period of transition from childhood to adulthood when the young person has to learn the skills of coping with personal problems, of exercising personal autonomy and independence, of coming to terms with his or her own sexuality, of being able to confront and resist drug and other substance abuse, and of establishing mature personal relationships with others. The school, as a major socializing agency, has a responsibility to help the young person in this all-important learning process.

The school can make a notable contribution here through helping pupils to develop 'life-skills' which equip them for positive social behavior and for coping with negative pressures. A core set of life-skills for the promotion of the health and well-being of pupils includes decision-making, problem-solving, creative-thinking, critical-thinking, effective, communication, interpersonal relationships, self-awareness, stress and anxiety Management, coping with pressures, self-esteem and confidence.

Clearly, routine experiences in the classroom help in promoting some of these, though the classroom focus tends to be more on the intellectual than the emotional domain. The development of other life and social skills will depend largely on the whole ethos of the school and on its programme of extra-curricular school activities,

such as various sporting activities, clubs, societies, school debates, drama and cultural presentations, meetings of cultural and religious groups, and the provision of services to disadvantaged persons in the school's immediate neighborhood.

The full and well-rounded development of pupils, which is the goal of school education, would be better attained if it was universally accepted that activities of this nature are an essential component of school education. Extra-curricular activities belong in every school and are integral to the proper education and formation of young people. The Ministry sets great store by them and wishes every school to develop a rich and varied programme of such activities that will promote the balanced and healthy development of its pupils. It also wishes to see every member of the school's teaching staff involved in such activities.

Basic Education Quality and Curriculum

Policy

1. **The philosophy of the Ministry of Education is that the education process centres on the pupil who has an active role to play in developing his or her intellectual and other qualities.**
2. **The overall goal of basic education is to provide each pupil with a solid intellectual, practical and moral foundation that will serve as a basis for a fulfilling life. Hence it will seek to provide a comprehensive programme of study and school activities that will**
 - **promote the full and harmonious development of every pupil;**
 - **give some preparation for adult working life;**
 - **serve as a basis for further training; and**
 - **lead to the level of competence necessary for proceeding to highschool.**
3. **The Ministry attaches high priority to improvement in the quality of educational provision in basic schools.**
4. **In order to enhance the effectiveness and quality of basic education, the Ministry will**

- promote the development of a curriculum that is comprehensive, balanced, integrated, diversified and relevant to the real needs of both the pupil and society;
 - take steps to ensure that it is well understood and taught; and
 - seek evidence that it has been well learned.
5. The Ministry's first priority for lower and middle basic education is to ensure that pupils master essential literacy and numeracy skills.
 6. The Ministry's foremost priority for upper basic education is the acquisition by pupils of high levels of competence in communication and mathematical skills and in the problem-solving ability that is fostered through scientific and practical subjects. Accordingly, the curriculum will stress language, mathematics, science and practical subjects.
 7. The Ministry will undertake an extensive review of the Grade 8 and 9 curriculum to ensure that it provides a broad and balanced education that caters for a wide spread of pupil ability and includes an increased emphasis on the vocational orientation of all subjects.
 8. Officially English will be used as the language of instruction, but the language used for initial literacy learning in Grades 1-4 will be one that seems best suited to promote meaningful learning by children.
 9. A comprehensive programme of school-based pupil assessment and feedback will be an integral part of the teaching and learning process in every school.
 10. In order to provide conditions conducive to the more comprehensive and effective education of children, the Ministry will seek to extend the number of hours of actual teaching per week, particularly in Grades 1-4.
 11. Within the broad framework of Ministry guidelines, and working closely with parents and communities, each school will provide its pupils with suitable education in sexuality and relationships.
 12. Every school will develop a rich and varied programme of extra-curricular activities that will promote the balanced development of its pupils and that will involve every member of teaching staff.

Strategies

The School Learner

1. The Ministry of Education will work closely with partner ministries, communities, non-governmental organizations, voluntary bodies and families in enhancing the nutritional and health status of children.
2. The Ministry will develop training modules in counselling for use by teachers to enable them to counsel and guide children who are affected by psycho-social problems connected with HIV/AIDS, family bereavements, conflicts between customary and modern values or priorities, and similar anxiety-inducing situations.

Quality of Provision

1. In order to improve the quality of education at lower, middle and upper basic levels, the Ministry will ensure that the schools receive effective support from the education system and adequate material inputs.
2. In order to enhance the quality of provision at the upper basic level, the Ministry will
 - give priority to these schools in the allocation of appropriate materials,
 - direct a considerable part of the activity of the secondary school inspectorate to assisting their staff, and
 - institute special in-service training programmes for their personnel.

The Curriculum for Lower and Upper Basic Education

1. The core curriculum will address itself to literacy, self-expression and communication in a Zambian language and English and through the medium of the creative and performing arts; numeracy, mathematics and science; environmental and health education and personal well-being (including sport and physical education); social and civic education; values, morals, and religious education; and practical subjects.
2. Curriculum specialists and others will ensure that existing major subjects, as well as areas of major national concern, such as HIV/AIDS, education for democracy, peace and understanding, population education, human rights, and 'education for an occupation', are integrated across the lower and middle basic school curriculum, but without fragmenting it into a number of distinct subjects.

The Curriculum for Upper Basic Education

1. To ensure comprehensive and flexible coverage while avoiding overload, the curriculum for Grades 8 and 9 will comprise a number of full subjects together with modules on important issues and areas that can be offered either independently or within the framework of an appropriate subject.
2. To promote high levels of competence in communication and mathematical skills, and to strengthen the foundation on which Grade 8 and 9 education is

based, schools will, where necessary, direct resources to remedial teaching in the early stages of Grade 8. The Inspectorate will pay special attention to monitoring this teaching and will develop teaching modules for its support.

3. Pupils in Grades 8 and 9 will take a practical or technical subject and a scientific or technological subject.
4. The Ministry will -build a number of special Grade 8 and 9 programmes around different practical subjects in order to provide pupils with a sounder preparation for subsequent training or for entry to the world of work.
5. In order to prepare pupils better for the world of work the Ministry will:
 - develop special learning modules related to work;
 - increase the vocational orientation of all subjects; and
 - strengthen school guidance and counselling services and the activities of careers teachers.
6. The Curriculum in Grades 8 and 9 will:
 - provide options in such fields as languages, the arts, and leisure areas; and
 - promote the development by pupils of a personally held system of values and attitudes that will enable them to direct their own lives.

Pedagogy

1. Through the Inspectorate, Teacher Training Colleges, Resource Centres and school-based activities, the Ministry will promote a variety of teaching strategies with a focus on stimulating learning through inquiry, guided-discovery, problem solving, application, and similar activity-based teaching and learning methods.

The Language of Instruction

1. The medium of instruction in schools will continue to be English. However, all children will be given an early opportunity to learn to read and write in a local language.
2. Every pupil shall be required to take a local language from Grade 1 to 4 and may continue to learn a local language as an option thereafter.

Classroom Resources

1. To ensure that resources acquired for schools are properly used in the teaching and learning process, the Ministry will facilitate the distribution of materials to resource and zonal centres.
2. The Ministry will incorporate systematic in-service training in the use of newly supplied teaching materials into programmes for resource and zonal centres.
3. The provision of basic classroom furnishings, equipment, materials, and display areas will be integral to all primary school rehabilitation and construction programmes.

Assessment

1. Each school will develop a clear schedule of performance-monitoring activities that check pupils' progress.
2. The Inspectorate will monitor each school's programme of school-based assessment and the use to which it is being put by teachers in improving the quality of teaching and learning.
3. The Inspectorate, in cooperation with the Examinations Council, will determine how school-based assessment can be better conducted so that it can contribute to final Grade 7 and Grade 9 examination results for pupil certification and promotion to the subsequent levels, and when it can be introduced

Basic Competencies

1. The Curriculum Development Centre (CDC) will specify basic levels of competency, initially in literacy and numeracy, but later in other key areas, that pupils should have attained by certain stages of basic education, and will develop competency tests that will indicate whether the required learning has been attained.
2. Schools will apply these tests directly (in collaboration with the Inspectorate and the CDC) in order to give teachers immediate, accurate and systematic information on pupils' standards of literacy and numeracy, so that they can adjust their teaching accordingly.
3. The results of the competency tests will be made available to the Ministry and relevant Education Board to enable them to monitor literacy and numeracy attainments.

Time in School

1. The Ministry will encourage every school and Education Board to seek imaginative ways of ensuring that pupils in Grades I-4 receive a minimum of five hours of instruction each day. Where it is shown that this is not possible without the services of additional teachers, it will approve of their appointment on a part-time basis, particularly in schools serving disadvantaged children in rural and poor urban areas;
2. In order to safeguard the quality of education and provide for more hours of actual teaching, the Ministry will gradually phase out triple and quadruple sessions by providing additional facilities, or cooperating with others in doing so, to cater for the children to whose educational needs such sessions are addressed.

Life-Skills and Extra-Curricula Activities

1. The Ministry will, in collaboration with institutions responsible for sport notably the Ministry of Youth, Sport and Child Development, ensure that the adequate sporting facilities are provided at all educational institutions;
2. The Ministry will collaborate with the institutions responsible for training in practical and life skills disciplines e.g. the Ministry of Science, Technology and Vocational Training to expose learners at an early age and at all levels to the culture of entrepreneurship.
3. The pupils will specifically be introduced to useful and relevant survival and world - of - work skills such as computer and agricultural sciences, crafts and other technical skills.
4. The Ministry will generally promote entrepreneurship education in learning institutions.

Chapter 6

High School Education

Admission to high school is based on performance in the terminal examination, currently called the Junior Secondary School Leaving Examination, that pupils take at the end of Grade 9. This is a public examination, set and marked by the Examinations Council of Zambia. On the basis of performance in this examination, about 30% of the school candidates proceed into Grade 10. On completion of high school, at the end of Grade 12, pupils sit for a further public examination, also set and marked by the Examinations Council. This is the Zambia School Certificate Examination, which is roughly the equivalent of the Ordinary-Level ('O'-level) standard in the British system. Admission to post-school education and training and prospects for wage-sector employment hinge critically on School Certificate performance. This accounts in large measure for the intensity of the pressure to enter and stay in school until this point and for the urgency with which the work of virtually every member of the school community is addressed to performance in the School Certificate Examination.

Current Provision

In 1994, there were more than 150 government and grant-aided schools offering Grades 10-12, with a total enrollment of 68,379, of whom 44,754 (65%) were boys and 23,625 (35%) were girls. About 14% of the eligible population (those aged 16 to 18) are enrolled in Grades 10-12. As with other levels of education, there are significant differences between rural and urban areas. Census data show that in 1990 the gross enrollment rates at this level were 24.1% for urban areas and 7.1% for rural areas. Likewise there are great differences between the enrollment ratios for boys and girls. At the national level, 19.3% of the boys in the 16-18 age-range were enrolled in Grades 10-12 in 1990, and 9.7% of the girls. The lowest of all enrollment ratios was that for rural girls, with only 4.2% of the girls in the 16-18 age-range being enrolled.

In 1994, boarding school accommodation was provided for 33,231 Grade 10-12 pupils, or almost half of those enrolled. Of these 22,838 were boys, representing 51% of the boys enrolled at this level, and 10,393 were girls, representing 44% of all the girls.

The average class size is over 45, which is too high for this level. Very large classes are particularly characteristic of Grade 12 where, in 1994, average class sizes of 47 more were recorded for five of the large provinces.

The numbers enrolled in senior secondary school increased by some 70% in the period 1984-1994. This increase was not the result of any major programme of school expansion, but was made possible by a restructuring of the secondary system in 1985, when the junior secondary segment was shortened from three to two years and the senior segment extended from two to three years. The space that this change released in schools was devoted almost entirely to additional senior secondary provision. Additional space for Grades 10-12 has also been created in some schools by phasing out junior secondary, in consideration of Grade 8 and 9 provision in basic schools. The combination of these factors allowed the number of full-time pupils enrolled in Grade 12 to increase from 13,253 in 1984 to 22,675 in 1994.

The Aims and Objectives of High School Education

Building on the foundation laid in Grades 8 and 9, the broad aim of high school education is the integrated and comprehensive development of each pupil's potential. On completion of the programme, pupils should be accounted as well-educated persons who are adequately prepared for the furtherance of their education, through full-time or part-time study, or for becoming self-supporting workers. They should also be responsible persons, capable of making a useful contribution to society and adequately qualified for the adoption of adult roles.

The particular objectives of education at this level are to:

1. develop desirable intellectual skills and qualities such as reflective reasoning, logical thinking, ability to concentrate, attentiveness to detail, and objectivity in appraisal of evidence;
2. foster creativity, imagination, resourcefulness, and innovativeness, and provide occasions for their exercise;
3. promote extensive knowledge, exact skills, and accurate understanding of chosen areas in languages, mathematics, science and technology, the social sciences, practical subjects, and the arts;
4. provide educational experiences that will nurture skills that will enable pupils to take charge of their own learning;

- 5 establish an environment that will cater for the psycho-social needs of pupils and that will facilitate their growth to maturity as moral and responsible individuals;
- 6 instill a spirit of self-discipline, integrity, accuracy and hard work;
- 7 awaken concern for the promotion of civil liberties and human rights, for the consolidation of the democratic character of Zambian society, for the more equitable distribution of global and national wealth, and for sustainable human development in Zambia and elsewhere.
8. Develop desirable attitudes and qualities of personal, inter-personal, national and international peace and understanding.

The content, structure and processes of teaching in high schools, the range of extra-curricular activities undertaken, and the organization and ethos of the school should all be directed towards meeting these objectives.

The High School Curriculum

At present, the Grade 10-12 curriculum consists of a small number of required or core subjects (English, mathematics, a science subject) and a wide range of optional subjects in the fields of humanities (languages and various social sciences), science mathematics, commerce, and technical, practical and aesthetic areas. Evidence from School Certificate performance data over the years shows that almost all pupils take biology and geography; about half take history, commerce, or science, while between a third and quarter take agricultural science, literature in English, religious education, or one of the Zambian languages. Less than 15% take any of the practical, technical or art subjects (food and nutrition, woodwork, metalwork, art and craft, fashion and fabrics, etc.). This is indicative of the heavy academic bias that in practice is predominant at this level and the general failure to make extensive use of the wide range of possibilities catered for by the curriculum.

General Academic Education

There are several reasons for this, among them the inadequacy of facilities, the lack of materials, and the scarcity of qualified teachers in the less popular areas. But the radical reason is that academic traditions in education die hard. The general academic subjects are more popular with pupils, with teachers, with parents, and, it must be admitted, with the majority of educational managers and administrators. They are considered to be more prestigious than the practical, technical and aesthetic subjects. They lead more readily to entry to higher education and they tend to be valued more highly by employers. They are relatively cheap to mount since, apart from the sciences, they do not require much by way of special facilities and supplies. They are comparatively easy to staff, since large numbers offer themselves for training as teachers in the general academic areas and, once trained, they are less likely than well-qualified technical teachers to be attracted into industrial employment.

Strengthening the case in favour of academic subjects is a considerable body of international evidence showing that practical or pre-vocational subjects as part of a general education are not more effective than academic secondary education in enabling secondary school graduates to find wage employment or work in the informal sector. Prospects do improve, however, when there is solid performance in language, mathematics and science.

Practical Subjects and Practical Programmes

In the past, Zambia has not been sufficiently wholehearted in promoting specialized programmes as viable alternatives to the more popular academic programme. Practical, technical and aesthetic subjects, where offered, constitute less than one-fifth of a pupil's workload. Even in the secondary technical schools, the time allocations are so weighted in favour of general and science subjects that only a small proportion remains for practical areas. In fact, Zambia does not have any coherent, comprehensive secondary school programme in technology, technical areas, agriculture, or the creative arts. Everything that is on offer is essentially a general academic programme, with some technical, practical or aesthetic areas patched on.

Mathematics and the Sciences

One further aspect of current high school performance requires comment. It is that achievement is far from satisfactory, especially in the key areas of mathematics and science. This comes out strongly in examination results. On average, less than two-thirds of the candidates obtain a full pass in School Certificate each year. This is not a good return for the many years of investment made by the nation and students themselves in their education. It is all the more unsatisfactory when it is recalled that these students are the pick of their cohort who were successful in rigorous selection examinations at the end of Grades 7 and 9.

The overall unsatisfactory performance in School Certificate is attributable in large measure to poor performance in mathematics and science. Cumulatively, one-third of boys and two-thirds of girls have registered total failure in mathematics in the years since 1987, while only half of the boys and one-fifth of the girls have obtained the equivalent of an O-level pass in mathematics. The picture is not quite so bad in the sciences, but even here a massive proportion of candidates obtain failing or only mediocre passing grades each year, with girls' performance always lagging far behind that of boys. The subsequent performance of those whose results are good enough for them to proceed into higher level science and mathematics programmes is very mixed. Some do extremely well, the performance of the majority is average, and a sizable proportion cannot cope.

This distressing picture of poor in-school performance in mathematics and science and subsequent inadequacy in these areas points to deficiencies at the school level. The deficiency may be in the facilities, the resources or the teaching. It may be in the balance of the curriculum. It may be in the expectations that pupils set for themselves and that others entertain for them, since these are known to have a major impact on student performance. Clearly, there is a situation here which requires urgent

attention and major interventions. The pupils themselves and the country as a whole cannot sustain a continuation of this unsatisfactory performance in mathematics and science, leading to equally unsatisfactory performance in the School Certificate as a whole and subsequent impairment of the national potential for technological development

Strengthening the High School Curriculum

In the light of these considerations, the Ministry's major tasks in relation to high school education are to

- concentrate efforts on improving achievement in mathematics and science;
- develop holistic programmes around critical technological, agricultural, commercial, and aesthetic areas and facilitate their being offered in selected schools; and
- strengthen the vocational dimension of the learning experiences available to every high school pupil.

The implication of this approach is that there will be several programmes of Grade 10-12 education. This strategy has three major aspects, the first addressing mathematics and science education, the second technological and other specialist forms of education, and the third education for employment.

Improving Mathematics and Science

First, the majority of schools will continue to offer the current general academic programmes. As far as resources permit, these schools also continue to offer practical and technical subjects on the educational grounds that these constitute a unique and valuable mode of knowledge and experience for the development of worthwhile understanding, qualities and skills. In accordance with the concerns that have been expressed about mathematics and science, schools offering a general academic education will concentrate efforts on effecting significant improvements in these subjects. Moreover, some among them will be identified to specialize more explicitly in mathematics and the sciences, in order to augment the output of trainable individuals needed by higher education and industry and so that they can serve as centres of excellence that might help to raise the quality of mathematics and science education in other schools.

The difficulties of many pupils with mathematics and science go back to the way they were introduced to these areas in primary school. One aspect, therefore, of a long-term solution to the problem must be suitable interventions at the basic and teacher training levels. In the shorter term, however, it is still possible for the schools to provide considerable remediation and establish an adequate foundation for high school work in mathematics and science. To accomplish this, qualified teachers need to work with pupils from Grade 8 onwards. It is too late trying to lay in Grade 10 a foundation that should have been in place much earlier. This points to the need to strengthen the teaching of mathematics and science at the upper basic level. It also

highlights the importance, noted above, of providing remedial teaching in these areas at the commencement of Grade 8.

Comprehensive Diversification of the Curriculum

Second, when the appropriate programmes have been created, certain schools will become specialist schools for technology, practical areas, business and commercial studies, and the creative arts. The first schools to be affected in this way will be the existing secondary technical schools, for which more unambiguously technical programmes will be eloped. When resources permit, other schools will be added to their number.

These specialist schools will draw their intake from within the regions where they are located or, if appropriate, from across the country, in accordance with pupil ability and interest. Unless the detailed curriculum design necessitates otherwise, their programmes will be confined to the Grade 10-12 level. The phasing out of Grades 8 and 9 from existing secondary schools will release facilities for use in the specialist areas and will make accommodation available for an increase in the numbers that can follow the technological and other programmes.

Education for Employment

Currently, about 23,000 students leave school on completion of Grade 12. About 20% of these have access to higher education or training opportunities. The remainder seek wage sector employment, paid work in the informal sector, or employment in family farms and enterprises. The scale of the employment problem affecting Grade 12 graduates is not as great as it is for the large numbers who leave school on completion of Grades 7 and 9. Nevertheless, 15,000-20,000 Grade 12 leavers, educated at considerable private and public expense, annually seek employment. In addition, there is a finality that is absent at the lower levels. The years of schooling and preparation are definitely over. The young person is now physically mature, a young adult who, if not going for further education or training, should be self-supporting.

The high school, therefore, must continue to prepare its pupils for the eventual assumption of employment. For this reason, the measures outlined for Grades 8 and 9 will continue through Grades 10, 11 and 12. At this level also, the curriculum will include modules such as *Preparation for Work*, *Work Experience*, and *Entrepreneurship Education*. The purpose will be to develop pupils' creative and innovative capacities and thereby to foster the skills and attributes which will assist them to be successful as employees or as entrepreneurs or employers in their own right. The greater maturity of the pupil and the nearness of the completion of the school programme will heighten interest in the special learning experiences (such as presenting oneself at an interview or through a curriculum vitae, writing a report, preparing a project proposal, or applying for an advertised post) that the school, under the direction of the Ministry and in collaboration with other agencies, may be able to mount. Also, careers teachers will be supported in efforts to establish contacts with potential employers and in mounting feasible employment-related projects and training days.

Education for Responsible Citizenship

The education of a young person in today's world would not be complete if it did not include preparation for living responsibly within civil society. Those who leave school should have knowledge and appreciation of the values that inspire society, knowledge and understanding of individual liberties and human rights, and awareness of their responsibilities to themselves, to others and to society in general. While education towards this is important at all school levels, it is crucial for those in high school who are on the threshold of becoming adults.

Since the school aims at cooperating with home, family and society in helping a pupil develop into a whole person, it must also, at this final stage, seek to lead its senior pupils into an understanding of themselves and of others. Doing this calls for an investment of time and resources in the fourth 'R', that is, seriously conducted human relations education and the development of interpersonal skills. This may be a more complex and challenging task than the teaching of normal school subjects, but the returns are great in terms of more successful preparation of young people for responsible living as adults.

Some of the issues on which Grade 12 graduates need proper information and sound attitudes include the nature of democracy in Zambia, participation in civil life, respect for the personal and sexual integrity of others, maintaining health and personal well-being, managing personal interests and interpersonal relationships, crucial demographic and population control issues, respect for the environment, understanding of the pervasiveness, causes and human dimensions of poverty, and the positive use of leisure.

The formal curriculum should cater for some aspects of these topics, while a school's extra-curricular activities will be an important supplementary channel for learning experiences in these and similar areas. Schools would err greatly if they gave so much attention to the intellectual formation of pupils that they neglected these other important dimensions of personal development. While schools cannot respond to every need, they play an important role in promoting the personal growth that leads to responsibility in young adults. Much of this is effected through the activities that go on outside the classroom and through school structures that give increasing levels of personal responsibility to pupils in their later years. The participation of senior pupils as members of School Boards will help to develop the type of understanding that is being spoken of in this section. Likewise, in view of the relatively privileged status of high school pupils and the great needs in society around them, schools are encouraged to promote a sense of caring in such pupils by establishing activities directed towards alleviating the needs of others. An example would be in teaching literacy and numeracy to out-of-school children or to interested adults.

Assessment and Evaluation

As at the lower levels, there is very little articulation between the ongoing assessment procedures conducted by the schools and the highly formalized Grade 12 public examinations. Some does occur, particularly in practical subjects and similar areas, but there is room for considerably more. The Inspectorate, in cooperation with the Curriculum Development Centre and the Examinations Council, will determine how school-based assessment can be better conducted in Grades 10-12 so that it can become a component of final examination grading.

The School Certificate Examination evaluates how successful the school system has been in attaining very specific curricular objectives. It does not, however, evaluate whether other important educational objectives have been achieved. Without some method of determining individual and institutional success in attaining stated goals for the system, the vision for education may come to consist of little more than sterile clichés. The Ministry will seek to develop evaluation procedures that can assess not merely narrowly intellectual areas but also attitudinal and dispositional outcomes, and such areas as innovativeness, problem-solving ability, and capacity for self-initiated and self-sustaining learning.

The Expansion of High Schools

For several years, there has been almost no increase in the number of schools offering Grades 10 to 12. Major investments in the 1980s were made in rehabilitating the existing schools, but without providing for any notable increase in their number. Adjustments within the system have allowed the numbers sitting the School Certificate Examination to increase to about 23,000. The conversion of some schools to specialist status will allow of some further increases, but rather more substantial increase in Grade 10-12 provision is required. The reasons for this are many.

Although the level of wage employment is not high, national efforts are concentrated on achieving more substantial economic development, which can only be attained and sustained on the basis of well-developed human resources, with a sufficiency of educated persons at the various levels. The most important level is at the base and this continues to be the priority area. But considerable increase and improvement in human resources are also vitally important at the senior level, to provide a growing economy with the educated persons needed by industry, commerce and training institutions. The erosion by AIDS of the educated work-force also suggests the need for increase in the replacement numbers.

From within the education system, expansions at the base create pressures for expansion at higher levels. These pressures cannot all be responded to; but neither can they be entirely ignored. There must be some accommodation to public demand and expectations.

Finally, it will not be possible to rectify the present large gender imbalance in Grades 10 to 12 without the creation of more facilities specifically for girls.

For these reasons, the Ministry of Education will aim at increasing high school provision, particularly by the establishment of additional facilities for girls. To promote this, the Ministry will work in partnership with communities and non-governmental bodies for the establishment of high schools in the same way as has been proposed for basic schools (Grades 1-9). In particular, it will encourage and assist where there is question of upgradings or conversions that will increase girls' admission to Grades 10-12. Because experience has shown that private schools have significant potential in urban areas to meet the demands for more provision at this level, the Ministry will actively encourage the establishment of such schools.

Framework for Financing

Government's concern for the adequate provision of good quality education in high schools will be clearly demonstrated by its continued willingness to bear a large proportion of the related running and development costs. The largest component of the running costs will arise from personal emoluments for teachers and others. The Government will fund these, in accordance with approved norms, in government, Education Board, community; and grant-aided schools.

Other running costs will be met on a shared basis between the Government and the beneficiaries.

A third element in the recurring costs of high schools is expenditure on school boarding. The subsidization of boarding costs at government and grant-aided schools places a heavy burden on government resources. However, it will be necessary to maintain this subsidy until a satisfactory bursary and scholarships scheme is in place for girls, rural pupils and the poor. Once this has been established, the general boarding subsidy will be reduced and eventually phased out.

The principles governing the financing of education for Grades 10-12, therefore, will be as follows:

1. Education at this level will be financed on the basis of cost-sharing between the Government and the beneficiaries.
2. The Government will provide the School Boards with grants in aid of their running costs and will meet the personal emoluments costs of approved staff.

3. Beneficiaries and families will be expected to share the cost of Grade 10-12 education by:
 - paying the tuition fees determined by the Ministry or School Board,
 - contributing to the School Fund;
 - paying approved levies imposed by the Parent-Teacher Association or School Board;
 - parental responsibility for stationery costs; and
 - participation in self-help activities determined by the PTA or School Board for school improvement.
4. Pupils who are given board and accommodation at a school will be required to pay boarding fees. Where the boarding fees are not sufficient to meet the actual costs, the Government will provide for the balance, in accordance with an approved rate.
5. For the protection of poor and vulnerable groups, the Government will establish scholarship and bursary schemes which the various Education Boards will administer at district and school levels.

The existing arrangements for the financing of grant-aided schools will remain, with the Government meeting the costs of salaries for approved staffing levels, as set out in the annual budgets of the Boards of Management, providing a grant towards running costs and overheads, and providing a grant towards the costs of boarders. This latter grant will be gradually phased out, as with the boarding subsidy in other schools.

The Ministry of Education acknowledges the sizable contribution that the private sector is already making to the provision of education at this level. In order to stimulate further private and non-governmental participation in this provision, it will facilitate private providers in access to finance, land, training and educational supplies.

High School Education

Policy

1. **The goal of high school education is to enable every pupil to become a well-educated person who is useful to society and who is adequately prepared for the furtherance of his or her education or for becoming a self-supporting worker.**

2. High schools will be required to intensify the preparation they give to pupils for the conclusion of life in school and the commencement of adult life.
3. The education provided in high schools should respond to the needs of the country for individuals who are soundly grounded in communication, mathematics, science and problem-solving skills. It should also respond to the needs of individuals for a range of post-school vocational choices.
4. The Ministry of Education will give priority to the improvement of mathematics and science in high schools of all types. To this end it will ensure that:
 - all of the schools which offer general academic programmes will devote more of their resources and time to the teaching of mathematics and science; and
 - some of the schools which offer general academic programmes will specialize more explicitly in the teaching of mathematics and science.
5. The curriculum for Grades 10-12 will be diversified in a comprehensive and holistic way by developing several distinct programmes for this level of education. To this end, certain schools will become specialist schools for technology, practical areas, business and commercial studies, and the creative arts. The programmes offered by these schools will be unambiguously specialized in nature, but in all other regards these schools will be on a par with those that offer general academic programmes.
6. The Inspectorate, in cooperation with the Examinations Council, will determine how school-based assessment can be better conducted in Grades 10-12 so that it can become a component of the final grading for the School Certificate Examination.
7. The Ministry will expand provision for high schools, and in particular will establish additional facilities for girls.
8. The financing of education in Grades 10 to 12 will be on a shared basis between the Government and the beneficiaries.
9. The Ministry will support private and non-governmental participation in the provision of high school education and in the improvement of its quality.

Strategies

1. The Ministry will promote entrepreneurship education and place particular emphasis on scientific, mathematical and practical skills; and will specifically promote computer science in schools.
2. Every high school will give explicit attention to preparing pupils for living responsibly and appreciating a set of civic, moral and spiritual values within civil society in today's world and for the eventual assumption of employment.
3. The Ministry will seek to expand high school provision so that an increasing number of those who complete Grade 9 can proceed into Grade 10. The Ministry's target is to achieve a Grade 9 to Grade 10 progression rate of 50% by 2005.
4. In the expansion of high school facilities, the Ministry will work in partnership with communities, non-governmental bodies and the private sector.
5. The Government will fund personal emoluments for approved numbers of teachers and other staff in government, Education Board, community and grant-aided schools.
6. Education Boards will determine the level of tuition fees to be paid in high schools.
7. Boarders in high schools will be required to contribute towards the costs of their keep.
8. The Government will establish scholarship and bursary schemes for the protection of poor and vulnerable groups and will entrust the administration of these schemes to the relevant Education Boards.

Chapter 7

Educational Areas of Special Concern

Gender in Education

Context

The centrality of women's contribution to national development underlines the importance of integrating gender concerns into all development interventions. The national goal of accelerated development cannot be attained without special attention to the needs of women and girls. It is necessary, therefore, that all national policies include gender specific considerations.

This is all the more important in Zambia where, although progress has been made in enhancing the socio-economic status of women, they still remain among the disadvantaged and marginalized. This is particularly evident in the feminization of poverty as reflected in the limited access of females to productive resources, social services, remunerative employment opportunities, and participation in political and managerial decision-making processes. The disadvantaged status of women and girls is also strongly marked in the education sector.

This represents a great loss for Zambia since the benefits of education in improving the overall quality of life multiply with increased participation of girls and women. Their education is particularly associated with significant reductions in infant mortality and morbidity, improvement in family nutrition and health, lowering of fertility rates, improved chances of children's education, and increased opportunities for income earning in both wage and non-wage sectors.

The Zambian Government has committed itself to the socio-economic improvement and empowerment of women through various programmes and affirmative actions. Within this framework, the National Policy on Education gives high priority to the education of girls and commits the Ministry of Education to the elimination of all gender disparities within the education sector.

Current Situation

Available statistics indicate that girls' enrollment in Grade 1 is almost equal to that of boys. In subsequent grades, however, the number of girls decreases steadily, with a noticeably high female drop-out from Grade 4 onwards. For every 100 girls who begin primary school, only 70 complete the full primary course, 23 proceed into junior

secondary school, 9 into senior secondary, and 7 sit for the School Certificate Examination in Grade 12. Opportunities for boys are considerably better, with 87 out of every 100 Grade 1 entrants completing the primary course, 37 entering junior secondary classes, 16 going forward to senior secondary level, and 15 sitting for the School Certificate Examination.

This narrowing of educational opportunities for girls becomes even more pronounced at tertiary level. The only exception is in primary teacher training where a reasonable gender balance is maintained, with some 49% of the students being female. Among those training for secondary school teaching, little more than one-third are female, while in vocational and technical institutions less than one-third of the enrollment is female, with almost all female students training in secretarial and office work. At the universities, gender imbalance is even more pronounced, both in terms of numbers and of fields of study. In general there is one female student to every four males, meaning that female students account for only 20% of total university enrollments. The majority of these are in the arts and humanities areas, with females who take some form of science programme accounting for only 5% of total university enrollments.

The position is equally unsatisfactory within the Ministry of Education itself. Overall, women are greatly outnumbered by men, while there are very few women in managerial posts. All cadres within the Ministry reflect this unfavourable gender imbalance. At the time of writing, there is only one female provincial education officer in the whole country. In the Copperbelt, two out of six district education officers (DEOs) are female, but in the Southern Province all nine DEOs are male. In the inspectorate, the situation is somewhat similar, there being, for example, only two female inspectors out of the twelve in the Western Province.

At primary school level, women comprise 44% of the trained teachers. Two-thirds of these female teachers are deployed in urban schools. Although they constitute the majority of teachers in urban schools, very few women have been appointed to the rank of head. In Lusaka Province, only 29 out of 103 primary schools have female heads. The situation is considerably worse in rural areas. The North-Western Province has 335 primary schools, but only 13 are female-headed, while in the Southern Province only 3 out of 555 schools are headed by women. At the national level, out of 4,304 head teachers in 1994, only 54 were female.

Causal Factors

Institutional, socio-cultural and personal factors combine to impede girls in realizing their potential through education. Institutional factors include the distance of schools from the girl's home, fees and levies to be paid at the school, and the negative image of women and girls portrayed by many school-books. Socio-cultural hindrances include the low value placed on educating a girl, the over-burdening of girls with household chores, expectations that girls will automatically find personal fulfillment in child-bearing and male support in marriage, early marriages, and widespread doubt about girls' intellectual abilities. Personal factors include a negative self-image which

the school frequently reinforces and radical socialization to be passive and submissive. Collectively, these and other factors contribute to a situation which effectively denies to girls and women equal rights and status with men and boys.

Policy Dimensions

A major policy objective of the Government is to promote equality in access to, participation in and successful completion of education at all levels, irrespective of gender, social class, or disability. In future, therefore, all policy development for education will be informed by a recognition of the need to take affirmative action on behalf of girls' education. The Ministry will aim at ensuring that they are equal participants and beneficiaries of education at all levels and that they are equally integrated in the education sector, whether as pupils, students, teachers, managers or supervisors, and within the various fields of education and training.

Strategic interventions will include:

- requirements that Education Boards develop action plans for the promotion of equal opportunities of access to and participation in the various levels of school education
- the adoption by the Ministry and Education Boards of strategies for improved gender balance in supervisory, managerial and responsibility posts
- the formulation of strategies to encourage increased participation by girls in science and technology courses and programmes at all levels of education
- the development by the Ministry and Education Boards of procedures for preventing sexual harassment of employees and pupils
- creating more schools and school places for girls
- the establishment of special bursary schemes for girls.

As part of its overall responsibility for the provision of education in the country, the Ministry will monitor progress in achieving an appropriate gender balance at the various levels and sectors of the system and in the institutions for which it has responsibility.

Gender in Education

Policy

1. **The Ministry of Education is committed to achieving gender balance in educational institutions and within the educational system.**
2. **The Ministry aims at ensuring that female students are integrated with males as equal beneficiaries and participants at all levels of education.**
3. **The Ministry will seek to eliminate factors that hinder the access, progression and accomplishment of girls in schools and colleges.**
4. **The Ministry will take measures to encourage the participation of girls in science and technology at all levels of education.**

Strategies

1. Education Boards will prepare action plans for the promotion of equal opportunities of access to and participation in educational institutions for which they are responsible.
2. The Ministry, and Education Boards, will ensure that there are female teachers on the staff of every school, to provide appropriate role models for girls.
3. The Ministry will review the school curriculum so as to ensure that both it and the associated teaching materials are gender-sensitive.
4. Gender issues and the development of gender-sensitive teaching methodologies will be integral to the pre-service and in-service training of teachers.
5. The Ministry will provide an equal number of school places for girls and boys at all school levels.
6. To enhance the performance of girls at secondary level, the Ministry will create more girls' boarding places and establish more schools for girls only.
7. The Ministry will establish a special bursary scheme for girls and will provide scholarships for girls who excel in mathematics, science or technological areas.

8. In cooperation with other agencies, the Ministry will sensitize parents and communities on gender issues in development, and in particular will sensitize families on the need to release girls from domestic chores so that they can have more time for study.
9. In cooperation with other agencies, the Ministry will strengthen and re-orientate guidance and counselling programmes to address socio-cultural problems which may hinder the progress of girls in education.
10. The Ministry will ensure that none of its regulations discriminate against the participation, progression or performance of girls in schools and colleges.
11. The Ministry will ensure that all management positions in the system are equitably shared between deserving men and women.
12. The Ministry will review and enforce penalties against school pupils, teachers and other educational personnel engaging in sexual harassment of pupils or education employees or making a school-girl pregnant.
13. The Ministry will cause legislation to be effected which will make it a punishable offence for parents or guardians to withdraw children from school before the completion of basic education.

Pupils with Special Educational Needs

The Ministry of Education upholds the principle that every individual has an equal right to educational opportunity. This means that every individual, regardless of personal circumstances or capacity, has a right of access to and participation in the education system. Ensuring full equality of access, participation and benefit for all pupils necessitates interventions at all levels to support children at risk.

Pupils with special educational needs are exceptional. The exceptional child or individual is one who differs from others in mental, physical or social characteristics to such an extent that, for the full development of inherent potential, he or she needs a modification of school, college or university provision and practice, or special educational services. Other disciplines, such as medicine, physiology, sociology and psychology, address the needs of exceptional children from their own perspectives. The educational perspective is that children are exceptional if their difference from others is such that it interferes with their development in normal school circumstances and necessitates special educational provision, either in conjunction with the regular class or in a special class or school. More specifically, an exceptional child is one who

- has a physical, hearing, speech or visual impairment;

- is significantly different from others mentally, whether by being very bright, being a slow learner, or being severely impaired mentally; or
- is socially maladjusted or emotionally disturbed.

Learners with special educational needs are found throughout the education system, from pre-school through to university.

Current Situation

The consensus of expert opinion is that ten to fifteen percent of children are exceptional and require active intervention and specialized services. This means that in Zambia there were 160,000 to 250,000 children of primary school age in 1995 with special educational needs arising from physical and mental causes. These figures do not include the maladjusted or emotionally disturbed children. Neither do they take account of those who are exceptionally gifted or talented and require a more challenging educational environment.

Only a small percentage of the physically or mentally impaired children are catered for in schools. There are several reasons for this. One is the lack of sufficient educational provision for the profoundly impaired. Another is that systems for identifying and contacting children with special needs are not well developed. Furthermore, family attitudes are not always favourable. From a false sense of shame or embarrassment, many parents do not divulge information on their exceptional children, with the result that their children's problems remain unknown and untreated.

Currently, the educational needs of children with severe impairments are catered for through special education schools and special education units attached to normal schools. In 1995 there were 31 special education institutions - 28 at primary, one at secondary and two at tertiary levels. There were also 80 special education units, of which 51 were at the primary and 29 at the secondary school levels.

Educational Principles

The guiding principle for the education of exceptional children is that to the greatest extent possible they should be integrated into the programmes that are offered in ordinary classrooms. Hence, special education is not an educational programme entirely different from that normally provided for pupils of the same age, but refers to those aspects which are unique or are additional to the regular education programme. Different arrangements exist, depending on the extent of the child's difference from the norm. Where the difference is profound, the child might spend most of the time in a special class with a specialist teacher. Many children, however, are not members of special classes, but receive occasional help outside of the activities of the normal class. Thus, a child with a speech impairment may spend one or two hours a week with a speech therapist, while a gifted child may be facilitated to work independently for short periods at tasks that are more challenging than those provided in the ordinary classroom. What is required for individuals like these are special separate rooms, furnished and equipped to meet their needs.

There are also special schools that cater for the specific educational needs of certain categories of exceptional children. There may also be schools attached to hospitals for children who are hospitalized for long periods of time. The type of special educational facility to be established depends on the nature and severity of the exceptionality. The main argument in favour of special schools is that this makes it possible to concentrate in such schools the personnel and resources needed for the children and to create for them a learning environment that responds positively to their special learning needs. But experience has shown that exceptional children adapt more easily to living in the normal community the earlier they begin to do so. Their segregation in special schools tends to create negative expectations of their ability and after school many tend to live up to these expectations. For these reasons it is not desirable that exceptional children should be treated as persons outside the mainstream of community life. As much as possible, they should be integrated into the normal life and activities of the community and into ordinary schools, and should live a life that is comparable with that of other children of the same age.

Hence, the preferred model entails a judicious balance of special education programmes and activities within the framework of a regular school. Where necessary, however, a pupil should be able to move from provision in an ordinary school to a special school, and vice versa, in accordance with need.

While quality is an important consideration in the education provided for all children, it is of particular importance in the education of exceptional children. Those with physical problems, or who are slow learners, need education of high quality to compensate for difficulties they experience. Those who are gifted need an education that challenges them to stretch their powers to the full and that will not let their talents lie fallow. While much depends upon the nature of the exceptionality, as well as on the facilities and resources available, the Ministry of Education is committed to ensuring that children with special educational needs can attend well-resourced schools, staffed by qualified and dedicated teachers.

The effectiveness of special education provision in meeting the needs of exceptional children depends to a large extent on the efficiency and management of the education system. At present, the management and supervision of special education in Zambia is over-centralized and understaffed. Currently, there are only two inspectors for this area and one education officer, all based in Lusaka. There are no special education inspectors or education officers in any other part of the country. This makes it virtually impossible to monitor and supervise the programmes in special schools and units. It also hampers the generation of good information on needs and how they are being met, thereby undermining planning for this area.

Pupils with Special Educational Needs

Policy

1. **The Ministry of Education will ensure equality of educational opportunity for children with special educational needs.**
2. **The Ministry is committed to providing education of particularly good quality to pupils with special educational needs.**
3. **The Ministry will improve and strengthen the supervision and management of special education across the country.**

Strategies

1. Working closely with the Ministry of Health, the Ministry of Education will decentralize services for the identification, assessment and placement of children with special educational needs.
2. To the greatest extent possible, the Ministry will integrate pupils with special educational needs into mainstream institutions and will provide them with necessary facilities. However, where need is established, the Ministry will participate in the provision of new special schools for the severely impaired.
3. The Ministry will cooperate with private, religious, community and philanthropic organizations in
 - meeting the special educational needs of exceptional children, and
 - providing outreach services for children whose impairments prevent normal attendance in school.
4. Education Boards will have responsibility for ensuring that the special education needs of children within their jurisdiction are met, and will be evaluated on their discharge of this responsibility.
5. The Ministry will dispense with all direct educational costs for children with special educational needs and will provide bursaries for such individuals at tertiary level.
6. The Ministry will give attention to the educational needs of exceptional children by

- training an adequate number of teachers in special education;
 - designing appropriate curricula and teaching materials;
 - prescribing specifications for special furniture, equipment, aids and infrastructure provision;
 - developing appropriate support technology systems; and
 - providing adequate supervision of special education programmes.
7. The Ministry will enlarge and decentralize the special education inspectorate.
 8. Planning for special education provision will be built into the Ministry's mainstream strategic planning, and in support of this the information system on special education and national needs in this area will be improved.

Ensuring the Benefits of Education for the Poor and Vulnerable

The Priority Survey shows that in 1993 only 18% of households in Zambia had an income which was sufficient to provide for nutritional and other basic requirements. On the other hand, almost three-quarters of the households were extremely poor, that is, their income was not sufficient to provide for basic nutritional needs. Poverty is more intense among rural people, in the more remote provinces, in the more remote districts within any province, and among women and children. The past fifteen years, however, have seen rapid growth in the level of urban poverty. The highest incidence of rural poverty occurs in the North-Western Province, while the urban poor tend to be concentrated in peri-urban squatter compounds. The worst affected socio-economic group are small-scale farmers, with 88% of their households being rated as extremely poor. The access of the poor to social services and household assets tends to be limited. Areas of deprivation include information, health, education, shelter, potable water, and sanitation.

Poverty and Education

This widespread poverty affects education in several ways. Many of the poor have little understanding of the extensive benefits of education, seeing it only as a route to wage employment. If there is little prospect of such employment, they may attach little value to school attendance, preferring to employ their children in the home, on the farm, in petty trading, or elsewhere. With their very limited financial resources, they may not be able to afford the costs arising from the school participation of their children or to buy the necessary stationery and other learning materials.

When they are able to attend school, children of the poor encounter a great divorce between what they meet there and what they have experienced at home. The academic world of literacy and numeracy, the norms and values of the school, and the entire philosophical underpinning of school education are very remote from anything in their previous experience. Finding themselves poorly prepared, frequently hungry, and

in a seemingly artificial world, they struggle to perform. To their great credit, many succeed. But there are many who do not and who are glad when they can escape from the chore and seeming irrelevance of school. Semi-literate when they leave school, they quickly lose the literacy skills acquired in school and join the ranks of the illiterate. It is significant that the maps of poverty and illiteracy are almost identical, in Zambia as in so many other parts of the world.

Educational provision does not always take sufficient account of these factors or of the needs of the poor. The remotest areas, where the poverty is most intense, are characterized by the poorest schools - poor buildings, inadequate materials, few trained teachers. The Parent-Teacher Associations of the schools attended by the children of the poor are seldom able to mobilize the cash resources needed for school improvements. As a result, many of these schools are not well equipped with the basic furniture and learning materials that conduce to school effectiveness. Children of the poor need an enriched school environment to compensate for the deprivations experienced in their homes. For many, however, the poverty of home is matched by the poverty of school.

It is universally acknowledged that the fundamental issue in human and economic development in today's world is the alleviation of poverty. A principal strategy for achieving this is improvement in the human capital of the poor, through better quality and more universal education, better access to primary health care, more sustainable population growth, and better nutrition. This highlights the importance of ensuring that every child has access to education and that such education is of good quality.

Safeguarding Quality Education for the Poor and Vulnerable

The Ministry of Education affirms the need to ensure that the poor and vulnerable are enabled to draw maximum profit from the education system. Their participation must be assured by adequate provision. They must not be denied access through inability to meet school-related expenses. Their continuation in school and completion of the various education levels must be fostered through a varied, interesting and relevant curriculum. Their in-school performance must be enhanced through a well-resourced school environment, good teaching, and an active network of relationships between the school and the community. These general considerations will guide the Ministry in the distribution and use of its limited resources. The over-riding principle will be that priority will be in favour of whatever promises to bring the greatest benefit to the poor and vulnerable. Their human dignity merits this; the moral and economic standing of the nation requires it.

More specifically, the Ministry will establish bursary and scholarship schemes for the needy. It will work with the Ministry of Community Development and Social Services, and with traditional and local authorities and others, in identifying and responding to these, giving special attention to the plight of the girl-child and of orphans. Boarding places in rural schools will be reserved for those from rural communities and bursary assistance will be forthcoming. All measures aimed at sharing

the costs of education with communities, including text-book rental schemes, will take account of the capacity to pay, especially in so far as poor urban and rural families are concerned. The Ministry is aware that at present many children from poor families are still attending schools because school heads have used their discretion in extending the time limits for required payments and in not pressing for such payments. The Ministry will regularize this situation by entrusting Education Boards with sufficient discretionary powers to enable them to take positive and affirmative action on behalf of the poor and vulnerable. This discretion will extend to school uniforms, so that no child may be excluded from school on the grounds of not having the uniform or items specified by the school.

Ensuring the Benefits of Education for the Poor and Vulnerable

Policy

1. The Ministry of Education affirms that it will take positive action to ensure that the education system caters satisfactorily for the poor and vulnerable.
2. Priority in educational provision and in the distribution of educational resources will be in favour of whatever is more likely to benefit the poor and vulnerable.

Strategies

1. The Ministry of Education will work closely with the Ministry of Community Development and Social Services, with traditional and local authorities, and with non-governmental organizations and religious bodies, in identifying vulnerable groups, assessing their needs, and determining how best to meet such needs.
2. Education Boards will be required to adopt a policy of positive and affirmative action in relation to the poor and vulnerable whose needs they serve.
3. All measures aimed at sharing the cost of education with communities will take account of families' capacity to pay.

4. No child will be excluded from school or from any school activity on grounds of failure to pay or for being unable to afford the necessary materials, school uniform or similar item.
5. The Ministry will establish bursary and scholarship schemes targeted towards the poor and vulnerable, with special provision for the needs of the girl-child, orphans, and rural children attending boarding schools.

The School, Personal and Environmental Health

A two-way relationship exists between health and education. Teaching and learning are affected by the personal health of members of the school community, while school activities and what is learned can be powerfully influential factors in promoting the health and well-being of pupils. The relationship between health and education is of great importance in Zambia where poverty-related malnutrition, environmentally-related malaria, lifestyle-related sexually-transmitted diseases, and other health problems are widespread. HIV/AIDS has aggravated the impact of health problems on education and poses the education system with the dual challenge of coping with its effects and empowering both teachers and pupils to avoid infection.

The Impact of Health Problems on Education

An essential prerequisite for effective learning is that a child comes to school healthy and ready to learn. Good school facilities, abundant materials, and high quality teaching cannot result in the intended learning if children are too sick or too weak to learn. Reference has already been made to the fact that a large proportion of the learners in Zambia's schools are handicapped in this way. Chronic malnutrition affects 46% of rural and 33% of urban children. Almost every Zambian child carries a heavy burden of parasites - high levels of hookworm, whipworm and roundworm infection are found in all parts of the country, and bilharzia-causing schistosomes occur almost everywhere. Iodine deficiency affects between 50 and 80% of school children, while almost half the young children are anemic, with low haemoglobin levels.

The learning ability of a child affected by any one of these conditions is likely to be impaired. In Zambia, however, a large proportion of children may experience several of these conditions simultaneously. The affected children come mostly from the homes of the poor or are found in the rural areas. The outlook for the educational development of such children is not reassuring. They are likely to show poor cognitive functioning, which displays itself exteriorly in difficulty in maintaining the alertness, attention and concentration needed for classroom performance, and which works interiorly to slow down the mental processes of registering, selecting and reacting to information. Levels of verbal development may be lower than for healthier children; this is the case also for performance on reading, spelling and arithmetic tests. In

addition, these unfavourable health factors have a negative effect school enrollments, attendance and completion.

The Impact of Education on Personal and Environmental Health

Pupils bring with them to the school the problems just outlined. In many cases, the quality of the school environment does little to lessen them, but may add problems of its own. Many schools do not have their own source of safe water. Sanitary facilities, particularly in large urban schools, may be inadequate for the number of pupils. Earlier practices of paying attention to these and other factors in the school environment have almost all lapsed. Both parents and teachers have tended to concentrate more on the academic performance of children than on their personal and immediate environmental health needs.

Schools must be concerned for the health of their pupils, not only because good health is basic to good learning, but also because pupils are significant transmitters of health messages to the community. Moreover, knowledge, practices and attitudes conducive to good health, which are learned at school, are of inestimable benefit to pupils in their post-school adult life. Schools, therefore, must promote both health and health education in so far as they relate to individuals, communities and the environment.

Interventions directed principally at remedying the personal health problems of pupils belong with the Ministry of Health. The Ministry of Education's responsibility is to facilitate the Ministry of Health's activities and to work jointly with it in maintaining pupil health and well-being. To this end, it will work with the Ministry of Health in establishing and strengthening school clinics and will seek to introduce and maintain regular health checks in all of its institutions. Further, it will introduce preventive health schemes, such as dosing and vaccinations, in all schools. The Ministry of Education will also cooperate extensively with the Ministry of Environment and Community Development workers and others in the improvement of nutritional status, provision of safe water, establishment of sanitary systems, control of mosquitoes, and similar community areas of personal and environmental health. It will authorize the free use of schools as community centres for the education of communities on these matters and for mobilizing participation and support.

Within the primary school curriculum, special attention will be paid to health education. This will be either an integrating subject that brings together many different strands from various parts of the curriculum, or a field that is integrated right across the curriculum, appearing where appropriate in a variety of different subjects.

Schools and HIV/AIDS

The current HIV/AIDS situation adds to the complexity of health issues in education. The effects on education are many. AIDS-affected families may devote so much of their limited resources to the care of a sick individual that they may not be able to afford the costs associated with school participation, or they may withdraw a child

from school to help look after the patient or to undertake domestic chores or supplementary income-related activities that otherwise an adult would have discharged. A related issue is the prospect that the burden of family support will tend to fall increasingly on the young. Already it is reported that more than 7% of Zambia's households are without any adult member, being headed by boys or girls aged 14 or less. To carry this responsibility, such children will need to leave school adequately equipped with useful skills, a perspective that has far-reaching consequences for the school curriculum.

The exploding problem of AIDS orphans poses further problems. Currently there are between 150,000 and 200,000 such orphans in Zambia. Projections are that by the turn of the century there will be over half a million. About half the orphans have lost their father, a quarter their mother, and a quarter both parents. A high proportion of these orphans are likely to experience low living standards and high levels of morbidity and mortality. For economic or health reasons, many of them may be unable to attend school. Shattered psychologically by the traumatic loss of parents, many may not wish to do so. The Ministry of Education will endeavour to cater for the needs of these children in the constructive ways that have already been proposed when dealing with primary education - through out-reach learning programmes for those who do not attend school, and through enlarging the capacity of teachers to counsel and guide children who are affected by psycho-social problems arising from HIV/AIDS.

A further dimension of the HIV/AIDS problem is the fact that teachers fall within the education and age groups that are most vulnerable to infection. The profession has already seen the loss of many of its members and may lose many more. Such losses make it increasingly difficult to ensure that existing schools are fully staffed by qualified teachers, and reduce the potential for extending educational provision to all eligible children. This consideration underscores how important it is that the Ministry adopt a variety of strategies aimed at increasing the supply of qualified teachers.

Given the magnitude of the crisis that HIV/AIDS has brought into the lives of individuals and of the country, the education system has a serious obligation to cooperate with all other bodies in stemming the spread of this infection. As one of the major socializing forces in society, it has a grave obligation to educate the young on this matter, providing knowledge, fostering awareness, promoting life-asserting attitudes. It also has an obligation to those who work in the system, heightening their awareness and strengthening their determination and efforts to remain uninfected. The system has a further responsibility towards those who are already infected, helping them in a compassionate and unpatronizing manner, to live positively. This latter responsibility is all the more grave and delicate in relation to school-going children who are HIV/AIDS infected.

The programmes referred to in chapter 5, for the development of life-skills and in the areas of sexuality and personal relationships, will serve as the channels for messages about HIV/AIDS. While there may be need for facts and knowledge, the

greater need of young people is for strategies that will enable them to cope with the hazards of threatening situations and resist negative pressures from their peers or other sources. The focus of the proposed programmes will be on equipping them with such strategies. They are in need of these, not only in relation to issues of sexuality and HIV/AIDS, but also as a help in preserving themselves from drug and alcohol abuse.

These programmes will begin early in basic school and will continue on into high school. The content and methods will be as appropriate to the age of the pupils. Parents, local health personnel and relevant community members will be involved in specifying the precise programme content and, at the basic level, will be encouraged to participate in programme delivery. Ministry support for the Anti-AIDS Programme and for Anti-AIDS Clubs in schools, will also continue, as these are spearheading an important awareness movement that is gradually reaching out to every pupil.

In view of the magnitude of the personal problem that HIV/AIDS potentially poses for every teacher, the Ministry will introduce counselling in the workplace. The aim will be to prevent HIV infection and to help those already infected to live positively. For this purpose, the Ministry will call upon health personnel and on non-governmental organizations that are active in the area of HIV/AIDS counselling. The Ministry will also integrate HIV/AIDS awareness into its in-service training programmes.

The School, Personal and Environmental Health

Policy

1. Recognizing that good pupil health is an essential Pre-requisite for effective pupil learning, the Ministry of Education will work closely with the Ministry of Health and other agencies in promoting the personal health and well-being of school pupils.
2. The Ministry of Education endorses the role of the school as a health affirming and health-promoting institution for all pupils and, through them, for the community from which the pupils come and for the families which they will eventually establish.
3. Recognising that good pupil, community and societal health is dependent on a healthy environment, the Ministry of Education will work closely with the Ministry of Health and Environment and other national and international agencies in promoting the health and well-being of the pupils' immediate and global environment.

Strategies

1. In order to promote pupil and environmental health and well-being, the Ministry of Education will:
 - work closely with the Ministries of Health and Environment and other agencies in setting standards for maintaining personal and environmental health in schools and colleges;
 - establish and strengthen school clinics;
 - introduce and maintain regular health checks in all schools;
 - introduce preventive health schemes, such as dosing and vaccination, in schools;
 - monitor and prevent drug and alcohol abuse in its institutions; and
 - reintroduce pupils' school and community environmental programmes
2. The Ministry will cooperate closely with agencies that work to improve the nutritional, health, sanitary and environmental-health status of communities to which school pupils belong.
3. Health education will constitute an essential part of the curriculum for the lower and middle basic levels.
4. Recognizing the importance of education and the formation of attitudes in relation to HIV/AIDS, the Ministry will ensure close attention to this matter through the health education programme, the development of life-skills, the sexuality and personal relationships programmes, and the activities of Anti-AIDS Clubs.
5. In order to sensitize and protect uninfected staff and to help those already infected to live positively, the Ministry will introduce HIV/AIDS counselling for teachers and other education personnel, and will integrate HIV/AIDS awareness into its in-service training programmes.

Chapter 8

Media for the Delivery of Education

Continuing and Distance Education

Continuing and distance education are interrelated. Continuing education is that which is provided in parallel with the formal teaching provided in schools and colleges. The mode of instruction is by face-to-face contact between the learner and teacher. Teaching takes place during the day, after work, over the weekends or in the evenings. Distance education is a form of educational provision in which the learner and teacher are at some distance from each other most of the time. Instruction is provided mainly through the print medium, but this may be supplemented by other media such as radio, television, a computer network, or residential school.

The Ministry of Education provides for both forms of education through the Department of Continuing Education. The Department is responsible for four major types of educational programmes:

- providing junior and senior secondary courses to 30,000 students enrolled in the National Correspondence College;
- organizing and managing open secondary schools where 19,000 students study, under supervision, learning-materials produced by the National Correspondence College;
- organizing and teaching evening classes at primary and secondary levels for 15,000 students, most of them adults; and
- training in specific skills for 1,250 recent school-leavers and adults in Schools for Continuing Education.

The main focus of the programmes offered by the Department of Continuing Education is the provision of formal school-type education for those who have not had an opportunity to undertake or complete this. For many of the students, the programmes provide a second chance to obtain formal qualifications that they were unable to obtain in school. In this way, they provide a route for re-entering the formal system of schools and colleges. A structural problem with the philosophy of continuing education of this type is the subordination it implies to the formal school system.

Continuing and distance education face serious problems of under-funding, a lack of skilled personnel and transport, and inadequate materials for learning and teaching. They also suffer from uncoordinated planning. Although there is potential for

enormous growth in the number of students reached by the programmes, the capacity to sustain immediate and rapid growth does not exist. This problem will persist as long as these forms of education remain the sole responsibility of the Ministry. In addition, for as long as continuing and distance education programmes aim mostly at providing a second chance to obtain formal qualifications, their potential to provide lifelong education for adults will be constrained..

Currently, the University of Zambia provides part of its education degree programmes through distance education. In the light of Zambia's pressing need for an increase in the supply of trained teachers, as well as for the ongoing professional development of teachers, the Ministry will likewise develop distance education programmes for the pre-service and in-service training of teachers.

Media for the Delivery of Education

Continuing and Distance Education

Policy

1. **The Ministry recognizes the central importance of continuing and distance education for personal development, for updating knowledge and skills, and for overcoming disadvantage suffered during initial education.**
2. **The Ministry will promote open learning, lifelong education, and a wide variety of mechanisms for continuing and distance education.**

Strategies

1. The Ministry will integrate the provision of continuing and distance education into its mainstream planning processes.
2. The Ministry will increase access to quality continuing education programmes as another avenue of educational provision for out-of-school children, youths and adults.

3. Recognizing its inability to respond to all the needs, the Ministry will encourage partnerships with other stake-holders, communities, non-governmental organizations, and the private sector in the provision of continuing and distance education.
4. The Ministry will promote continuing education programmes which combine the formal acquisition of knowledge with the development of skills and competencies relevant to employment, economic growth and development.
5. The Ministry will promote the use of distance education for the initial and ongoing training of teachers.

Educational Broadcasting and Audio-Visual Aids

In 1990, the World Conference on Education for All, in which Zambia participated, recommended that all available channels of information, communications, and social action be used to help convey essential knowledge and inform and educate people on social issues. Education media comprise print materials - books, journals, magazines and newspapers - and non-print materials, much of which is produced or transmitted electronically - radio and television programmes, and audio and video materials. The computer and communications revolution has enlarged the scope of instructional media, through computer-aided instruction and computer networking.

Zambia's resources do not yet allow extensive provision of computers for use as educational media in the school system, though they are increasingly being used for in-service teacher education in resource centres and are extensively used at the higher level. On the other hand, considerable resources have been invested in the Educational Broadcasting Services which were established in the 1960s (radio in 1965, television in 1967, and the audio-visual aids service also in 1967). The aim was to create an integrated system that would enhance regular classroom learning while developing possibilities for lifelong learning. Hence, programmes and materials were directed towards enriching and supplementing the educational experiences of those in the formal system, and likewise of those enrolled in distance education programmes and in open secondary schools.

From the time of their establishment until the 1980s, when they were most active, the Educational Broadcasting Services were transmitting an average of seventy-five radio and between thirty-two and forty-eight television programmes each week. An estimated 60% of primary schools and 20% of secondary schools made use of the radio programmes, while the audience for television was estimated as 14,000 viewers. The widespread availability in schools of radio and television sets provided by the Ministry of Education contributed to this extensive client utilization of transmissions. Thus in 1975, the Ministry distributed 5,000 radios to 1,500 schools in all parts of Zambia,

while 350 television sets were distributed to 180 schools in areas that could receive transmissions. That the services were used and appreciated is demonstrated by the concern schools showed about the receipt of broadcasting time-tables and the frequency with which they requested the audio-visual aids service to provide copies of transmissions.

Current Situation

Recent years have seen a decline in the use of the Educational Broadcasting Services and a deterioration in the quality and quantity of services provided. There are many reasons for this situation. Very few schools have radio or television sets for receiving the transmissions, or players for making use of tapes and cassettes. Schools which do not have electricity may be unable to locate or purchase batteries for receivers they may have. User ignorance has also resulted in transmissions not being properly used or appreciated.

From the point of view of the unit itself, the greatest problem is the very high cost of studio and broadcasting time. In the past, the Zambia National Broadcasting Corporation provided free air-time for educational programmes, but this situation no longer obtains. In common with other users, the Educational Broadcasting Services have access to studio and air-time only on a commercial basis. It is estimated that recording and transmitting programmes on the same scale as in the past would now cost the equivalent of about 7.5% of the recurrent budget for the Ministry of Education. Clearly this is quite unaffordable. More than half of these costs would not arise if the unit's own recording studios were in working order, but much of the equipment has not been well maintained and much is obsolete. The unit has also been operating without the necessary human resources for programme production and equipment maintenance, and has lacked the transport needed for making films and recordings and for providing professional support to users.

In view of these problems, the Educational Broadcasting Services maintain no more than a skeleton staff. Essentially these are engaged in the preparation of broadcasting materials, but not in the actual provision of the service.

Appraisal

Despite the seemingly great potential of educational broadcasting, it has not proved cost-effective in Zambia. Revitalizing the services would need a large capital outlay and maintaining them would place a heavy burden on the annual budget. Such commitments might be sustained if they ensured substantial educational gains, commensurate with the scale of the investment. But where the educational impact is limited, resource constraints require that the operations be scaled back.

A more viable way forward would be to commercialize the unit, requiring it to be financially self-sustaining through the commercial provision of audio-visual services in education and other areas. This would open an avenue to cooperation with the private

sector and to working on commercial terms with local radio and television stations to develop and transmit programmes.

Educational Broadcasting and Audio- Visual Aids

Policy

1. **Given the serious financial implications of educational broadcasting, the Educational Broadcasting Services will concentrate on the preparation and production of Audio-Visual educational materials for use by the learners at various levels.**
2. **The Ministry will commercialize the activities of the current Educational Broadcasting Services.**

Strategies

1. In conjunction with the Curriculum Development Centre and similar bodies, the Educational Broadcasting Services will produce audio and video educational material for hire or purchase by schools, colleges, broadcasting stations, and other interested parties.

Chapter 9

Essential Supports for Educational Provision

Books and Educational Materials

Quality educational provision requires the supply of books, writing materials and educational items in sufficient quantity to meet the needs of all students. The availability and use of these have a positive effect on student learning. In their absence, learning occurs only with difficulty.

The current situation in schools is that, although the position is better than it was five years ago, the supplies of educational materials are generally inadequate for needs. The improvement has been achieved through the channeling of increased local and donor resources to this area. Shortfalls remain, however, because of the immensity of the problem that developed throughout several years of inadequate budgetary allocation for the development and procurement of educational materials. The problems are compounded by the underdeveloped state of the book and educational materials industries in Zambia.

The Book Industry

The development of books for school use should be the responsibility of publishers. Preferably, a publisher should develop a book at own risk, in response to a perceived market need, and should sell it through the normal marketing mechanisms. Increasingly this is happening, though book development and production are still so underdeveloped that only a small fraction of the schools' needs are being met in this way. An alternative approach would be for the Ministry, through the Curriculum Development Centre, to develop a book in collaboration with a publisher. The advantage of this approach is that the Ministry is satisfied from an early stage that the book will be suitable for school use, while the publisher is assured of a market. The disadvantage is that it tends to bestow a privileged status on the book and contributes to the undesirable situation of "one book per course".

In keeping with Zambia's espousal of an open and free market economy, the Ministry wishes to see the establishment of a fully liberalized school-book industry where publishers assume responsibility for book initiation, development, production and marketing. In the normal course, this responsibility will fall to private publishers, but where these fail to provide, or where special need arises, the Ministry will initiate and develop course textbooks and teachers' guides/manuals. Moreover, because of its

special interest and competence, the Ministry will initiate, develop, publish, and distribute course syllabi and supplementary materials.

There should be a choice of books available on the market in each subject and grade, and schools should be able to purchase their choice of books from local booksellers. Because public resources are used for these purchases, textbooks for use in government and aided schools would require Ministry approval. However, this aspect of public accountability should not inhibit the development of a flourishing Zambian publishing industry. In order to encourage the development of such an industry the Ministry will provide Zambian publishers with information concerning its educational book requirements, as well as information on the school curriculum and syllabuses. It will also support the publishing industry's efforts to abolish tariffs on the importation of printing inputs and equipment for book production.

In the past, the Curriculum Development Centre, working on its own or with donor assistance, developed many of the textbooks used in Zambia's schools. More recently, the Centre has commissioned the private development of textbooks, the subsequent publishing being attended to through a tendering process. This development has stimulated teachers and others to write books and other educational materials. The Ministry will strongly encourage developments in this direction.

The market for school texts is so large that this feature tends to dominate all other aspects of the book publishing industry. But regard should also be had for the needs of all other users of printed materials, whether for educational, technical or leisure purposes. A National Book Development Council would ensure that such needs are protected, while at the same time promoting the development of a local publishing industry.

Other Educational Materials

The Ministry of Education acknowledges that there are shortcomings in procedures for the purchase and supply of educational materials. When materials are ordered, purchased and distributed from the centre, according to an analysis of needs from centralized planning data, they do not always match actual school requirements and may not reach schools in time for use in their teaching programmes. With the decentralization of the education system, procurement will also be decentralized. Education Boards will be directly responsible for procuring the equipment and materials required by the syllabus, as specified by the Curriculum Development Centre. In the interim, before Boards are established for all schools and districts, a modified form of decentralized procurement will operate: a school will select educational materials from approved lists provided by the Curriculum Development Centre, according to the school's own identification of needs. The materials will be ordered through the District Education Officer, against the school's vote for student requisites. This arrangement will not affect the school's right to purchase materials (and books) directly from suppliers, using Parent-Teacher-Association or other funds.

Libraries in Education

Information is important in the life of an individual or organization. So also is knowledge that opens up new horizons and develops imagination and creative powers. Equally important is leisure which accounts for a substantial part of every person's life. All are catered for in books and libraries. More than a century and a half ago it was said that "the true university of these days is a collection of books", while even earlier it was said that "without books God is silent, justice dormant, natural science at a stand, philosophy lame, letters dumb, and all things involved in utter darkness". Libraries hold resources that can help everybody to improve their lives. Within a school, a library is an indispensable resource, which at the same time establishes an environment for continued learning outside the classroom.

Current Situation

Library facilities in Zambia are scarce, at both institutional and public levels:

- although almost all primary schools have recently received small book collections there are no libraries in government primary schools;
- approximately 800 schools have collections of 250 library books loaned by the Zambia Library Services, each collection serving 500 to 1,000 pupils and 12 to 20 teachers;
- most secondary schools have no libraries, and very few have trained librarians;
- libraries in teacher training colleges are stocked with inappropriate books and are not well organized;
- there are six provincial libraries with at least 10,000 books each;
- 16 branch libraries, each with at least 3,000 books, have been established in district council offices, secondary school library buildings or other premises.

Context for a Policy on Libraries in Education

The almost total absence of libraries in schools, and their marginalization in colleges, means that education tends to become equated with the contents of the textbook or with what the teacher expounds. Pupils and students have little more to which they can have recourse. Cut off as they are from the wisdom of the world, their education is narrow and restricted. They are unable to develop a taste for reading or to improve themselves through reading. Ambitious plans to have students take charge of their own learning and to foster a desire to continue learning throughout life must come to nothing, in the absence of libraries and sufficient reading materials.

Within the formal school setting, libraries appear to have direct educational benefits. Research shows that levels of reading ability among Zambia's primary school children are dangerously low. The development of reading skills and the formation of reading habits are heavily dependent on the availability of suitable and varied reading materials. Hence, it is no surprise that research also shows that the presence and active use of a school library boost pupil reading achievement.

Further, the virtual impossibility of developing a reading culture in the absence of libraries has retarded the development of both local authorship and the Zambian publishing industry. It has also severely curtailed individual possibilities for the constructive and enjoyable use of leisure time.

Finally, there is the important issue of the retention of hard-won literacy skills which are easily lost, particularly by primary school leavers. It is significant that in a nearby country those who had completed full primary education constituted the majority of participants in literacy classes. If fragile literacy skills are to be preserved, they must be nurtured and exercised. This points to the need for widespread dissemination of suitable reading materials, especially in rural areas. The availability of such materials should be of particular value in raising the literacy levels of women and girls.

These facts and considerations underline the importance of providing a policy framework to guide the provision of libraries in Zambia's schools and colleges.

Essential Supports for Educational Provision

Books and Educational Materials

Policy

1. **The Ministry of Education will work together with publishers and suppliers to ensure the supply of textbooks and other educational materials for use in schools.**
2. **The Ministry will encourage the development of a strong and competitive local book industry.**

Strategies

1. The Ministry will liberalize the 'textbook industry' by committing to publishers responsibility for initiating, developing, producing and marketing books for school use.

2. Recognizing the need for a body that will promote the widespread development and use of books throughout the country, the Ministry will create a Book Development Council.
3. The Ministry will seek the removal of tariffs on raw materials and equipment, imported for the purpose of producing educational materials and books for schools and colleges.
4. The Ministry will encourage and support teachers in the writing of books for the education system and in the development of other educational materials.

Libraries in Education

Policy

1. **The Ministry of Education will seek to make books and other literature more easily available in order to promote open learning and literacy.**
2. **The Ministry will promote the concept of the library as an essential learning resource in all of its schools and colleges.**

Strategies

1. The Ministry will include an appropriately stocked, adequately funded and properly staffed library as part of the standard facility to be provided at every school and college.
2. Recognizing the responsibility of the Zambia Library Services (ZLS) to support a literacy and reading culture throughout the country, the Ministry will:
 - improve funding to enable ZLS to increase access to reading materials in rural areas, and
 - facilitate it in establishing more public libraries.

3. Acknowledging the importance of the library services provided to schools, the Ministry will revitalize the School Library Service, with priority being given to the establishment of book collections at basic schools.
4. The Ministry will recruit and seek to retain the services of appropriately qualified librarians for its colleges and high schools.

Chapter 10

Higher Education

Context

Higher education is of central importance to the economic and social development of a country. The activities of higher level institutions and the recipients of higher education advance and preserve a society's intellectual, scientific, cultural and artistic endeavours. This conservation and furtherance of a society's accomplishments entail that higher education institutions pursue a vigorous and sustained critical evaluation of the society's past and present achievements and, on the basis of such evaluation, chart the possible directions for future developments.

The Government recognizes its responsibility to safeguard and uphold the traditional role of higher education. The Ministry of Education likewise acknowledges its role in fostering the wholesome development of individuals at this level, in promoting the well-being of higher institutions, and in ensuring that the principle of academic freedom -- cardinal for the independent pursuit of knowledge - is maintained. On the other hand, higher education institutions, and the staff and students who comprise them, have the grave responsibility of being ever responsive to the changing needs and circumstances of society, including the legitimate interests of the state.

A critically important function of higher institutions is the provision of education to students at this level. This teaching function requires that besides imparting bodies of knowledge in the various branches of learning, the third level institutions develop the creative, communicative and problem-solving skills and capacities of their students.

The proper discharge of their functions requires that higher institutions, especially universities, be committed to the highest standards of research in the many branches of learning, and that they enrich society with the knowledge, skills and qualities necessary for integral human development. Their ultimate purpose is the improvement of human lives through enlarging human capabilities and enabling those capabilities to be put to the best use in all fields - economic, social, cultural, scientific, and political.

Third level institutions also have the responsibility of creating new knowledge and developing new insights through research. The creation and subsequent

dissemination of new knowledge is important for individual, technological and economic development. Higher institutions and their personnel further serve as conduits for the transfer of knowledge and skills generated elsewhere in the world. They also support the public and private sectors with advice and consultancy services.

From what has been said it should be clear that higher education has a multiplicity of purposes. Hence no single higher institution can effectively carry out all the tasks that society and individuals expect at this level and that the system as a whole needs to accomplish. It is for this reason that Zambia has a diversity of higher institutions, each with its own distinct aims and objectives and performing its distinctive tasks, but all operating within the framework of the national philosophy for educational provision set out at the beginning of this document.

Taking this philosophy as the basis for educational provision at all levels, the Ministry of Education has responsibility for general policy development at the higher level and, in the case of the teacher education institutions, for -goal-setting, standards monitoring and supervision. Within these parameters, the Ministry will respect the autonomy of the institutions to determine how exactly they will fulfill their particular roles. The councils and senates of the universities and the Education Boards of the colleges give concrete expression to this autonomy and responsibility.

Current Provision

There is a varied array of higher education institutions in Zambia, designed to meet the special needs of various sectors of the national economy for qualified personnel. Government-supported institutions fall under different ministries, depending upon the particular ministry's function and the type of qualified person the ministry, requires. Currently, the responsibilities of different ministries for the principal third level institutions are as follows:

- Agriculture, Food and Fisheries the Natural Resources Development College and other agriculture-based institutions;
- Cabinet Office - the National Institute of Public Administration;
- Defence - the Military Training Establishment of Zambia;
- Education - teachers' colleges; it is also the mother ministry for the two universities;
- Environment - Mwekera Forestry College;
- Health - colleges of nursing, medical training and dental training;
- Science, Technology and Vocational Training - technical education, vocational training, arts and business colleges.

In addition, some parastatal companies, such as the Zambia State Insurance Corporation and the Zambia Consolidated Copper Mines, and private companies, such as banks, also fund and run their own higher institutions. To these must be added a large number of semi-public and private training institutions and establishments,

including management institutes, accountancy colleges, correspondence colleges, major seminaries and bible colleges.

These widely diverse higher education institutions share one common characteristic: they all draw their intake from amongst those who have successfully completed secondary school, with satisfactory levels of performance in the School Certificate Examination (or equivalent). Almost all of these will be students who have attended schools run by the Ministry of Education, the voluntary agencies or the private sector, and have taken the examinations set by the Examinations Council. Through this mechanism, and through the programmes offered at the lower levels of the education system, the Ministry prepares the candidates who are admitted to the various higher institutions and thereby indirectly affects the types of programmes that higher institutions can offer. For this reason, it is necessary that the educational programmes of the Ministry and those of the higher education institutions be well articulated and that there be a mechanism for the proper coordination, at secondary and higher levels, of educational policies and other relevant issues.

Access to Higher Level Institutions

Demand

Satisfactory passes in the School Certificate Examination, or their O-level equivalents, are required for admission to all higher levels institutions. The passes must be at the levels and in the subject combinations needed for the programmes in the different institutions. The admission requirements sometimes cause problems for applicants who may not know what subject combinations are required for institutions or programmes in which they wish to enroll.

The demand for admission to higher institutions is very high and is far from being satisfied. More than 20,000 pupils complete secondary school each year. Of these, 13,000 or more obtain a full School Certificate. The higher institutions have a total annual intake of about 5,000, some of whom are mature students. The outcome is that only about a quarter of the applicants to higher institutions are admitted each year. There are two reasons for this mismatch between the numbers applying and the numbers admitted. One is that applicants do not all satisfy an institution's admission criteria; the second is that the institutions do not have the capacity to admit all the qualified applicants. Both reasons apply, but the major reason is that admission capacity in higher education institutions falls short of the demand.

Because of the excess demand, applicants, especially those applying straight from secondary school, frequently try to ensure admission to at least one institution by applying simultaneously to several. If, as is possible, they are accepted by more than one institution, there may be some under-utilization of scarce facilities or a last-minute effort on the part of an institution to fill up places from less deserving applicants. This points to the need for greater coordination in admissions across the entire higher education sector.

Gender

Admissions and enrollments in higher level institutions show serious gender imbalances. Because there are twice as many boys as girls in the final years of secondary school, more males than females apply and are admitted to higher institutions. In general, the secondary school situation reproduces itself at higher level, there being twice as many males as females. However, the situation varies between institutions. In the universities there are four times as many males as females. This imbalance becomes even more pronounced in a number of university programmes. About 45% of the total university enrollments take science-based programmes; within these, males outnumber females by about seven to one. Amongst the 55% who take arts and humanities based programmes, the male to female ratio is three to one. The majority of female students who do science are found in the biological and life sciences, and almost none in engineering or similar technological fields. In almost every other type of higher institution a similar picture obtains, with males far outnumbering females. The only exception: are the primary teacher training colleges where virtual gender parity in enrollments is found.

This problem of gender inequalities in higher education must be addressed. Full equality between men and women is a fundamental human right. This right entails the moral imperative of seeking more extensive female participation in higher education, and in all programmes at this level. Equally, the integral human and economic development of Zambia necessitates the full use of the talents of all for the betterment of society. Women's low levels of participation in Higher education institutions and programmes has deprived society of the abilities, qualities, energy and skills of thousands of capable individuals. Policies need to be set in place to rectify this situation. Redressing present imbalances will require persistent, targeted and regularly evaluated actions which seek over time to achieve more extensive female participation.

Groups at Risk

Although the evidence is sparse, it appears that those from the poorer socio-economic groups are not adequately represented in higher institutions. Research findings suggest that the majority of university students come from salaried families, and only a minority from the urban poor, peasant farmers, and the informal sector. The evolution of cost-sharing at higher level needs to take account of two problems faced by students from poor families: the difficulties they experience in raising the cash payments required, and the loss of income they and their families sustain during their years of higher education.

Those with special educational needs are even more severely under-represented than the poor. Compounding problems of admission is the fact that the physical facilities at the majority of institutions do not correspond to the needs of students with disabilities or impairments.

Neither situation accords with Government's overall policy objective of promoting equality of access to higher education, irrespective of social class or disability. The attainment of greater equality at this level entails the adoption of specific measures targeted at individuals perceived to be at risk, to enable those who have the capability to benefit from higher education.

Response to National Needs

If higher institutions are to respond to national needs, they must know what those needs are. This calls for regular higher education and labour market surveys. The last comprehensive study of this nature was undertaken in 1976. Those undertaken since then have been piecemeal or rather narrowly focused. The conduct of the type of study needed is made difficult by the absence of a comprehensive national human resources development policy. Although third level institutions exist for the sake of responding to society's human resource needs, less than 30% are confident that they are doing so; the remainder are uncertain because they do not have precise information on those needs.

Relevance of Programmes

The relevance of training and programmes would be ensured by extensive interaction between the higher institutions and various sectors of the economy. Some direct involvement in the institutions' activities by bodies such as the Employers Federation, the Manufacturers Association, or the Association of Commerce and Industry, as well as by relevant government ministries and other organizations, would help to ensure that the programmes offered by institutions were what industry, commerce and society required. Currently there is very little participation by employers in the development of curricula for higher level institutions. Moreover, except in the case of institutions established by companies to serve their own needs, very few employers contribute towards the cost of educating their future employees. These issues have clear implications for higher education policies.

Linkages between the economy and the higher institutions are in need of strengthening, for the benefit of both the economy and the institutions themselves. Such linkages could take the form of:

- centres financed by industry for the conduct of joint industry-higher institution cooperative research;
- company-sponsored internships for students;
- part-time appointments in higher institutions of personnel from relevant sectors of the economy;
- recourse by commerce and industry to local higher level personnel for seminar presentations, consultancy work, research, participation in planning, and advice; and

- facilitation by industry of the access of third level staff to technological developments, operational techniques, and socio-economic information.

Programme Flexibility

The human resource needs of the country require a wide diversity of third level programmes. An important aspect of this diversity is programme flexibility, both in the curriculum and in the presentation structures. The speed with which knowledge and techniques are growing requires that the curriculum for higher level institutions be regularly updated. Failing this, the world for which students are prepared will be the world of the past, not that of the future.

At the level of presentation structures, full-time courses are the norm in almost all public higher institutions. This is limiting and restricts participation. The provision of part-time and sandwich programmes, or adopting a modular structure, would enhance the ability of third level institutions to respond to the changing needs of society. Flexibility in presentation structures would have the advantages of

- facilitating the participation of mature and part-time students, without their having to sacrifice full-time employment;
- ensuring more productive use of facilities and resources, especially in the evenings and at weekends; and
- facilitating student transfers between programmes and between institutions.

Quality of Higher Education

A high standard of quality is a *sine qua non* for relevant higher education. The calibre of teaching staff, adequacy of physical facilities, sufficiency of consumables, quality of library holdings, and availability of necessary transport, all play an important role in determining the quality of those who emerge from higher level institutions. At present, most institutions judge that, although their staffing may be adequate, they are not sufficiently well resourced in the other areas to ensure the necessary quality of output.

Despite this, recent research indicates that employers are generally satisfied with the performance of the graduates from higher institutions. While this might mean that students learn notwithstanding the inadequacy of resources, it remains an area of concern. The quality of teaching, research and development that is undertaken by the higher institutions is critically important for economic growth, national prosperity, and social cohesiveness. The contribution that higher education can make in this regard is being severely compromised by the continuing grave lack of resources and inadequate funding.

The Ministry of Education's Role in Higher Education

The activities of the Ministry underpin the activities of every higher level institution in the country. The curriculum and general quality of education provided in primary and secondary schools have a direct impact on the programmes that the higher institutions can offer. In fundamental respects, improvements in the quality of higher education can only build on improvements in the quality of high school education, and this in turn requires improvements at the basic level. In this way, education from basic to higher level constitutes an integrated, unified system which would benefit from better articulation between its various levels.

Conversely, what the higher institutions undertake has an impact on the Ministry's programmes at school level. As already noted, this appears most clearly in terms of formal admission requirements. It is also reflected in levels of proficiency and competence that the higher institutions expect to find in newly admitted students.

The Ministry of Education also influences higher institutions through the universities for which it has statutory responsibility. This is because the universities produce the professionals required by the economy, while the other higher institutions produce supporting personnel. In subsequent life, the professionals cannot function without the support of technical and ancillary staff who have gained their qualifications in non-university institutions, while such staff require the overall direction and guidance of professionals who have clear expectations and understanding of what can be jointly achieved.

This implies some articulation between the work of the various institutions on the one hand and that of the universities on the other. This articulation may occur formally, through university involvement in accrediting programmes at various institutions, or less formally through the participation of university staff in the activities of different institutions. The strong representation of the universities on professional bodies also implies that the universities exercise a national role in the establishment and preservation of standards, including the standards of non-university higher institutions.

At the institutional level, the Ministry of Education is responsible for the training colleges that meet its needs for qualified school teachers. Because issues of teacher education relate so intimately to all that concerns the teaching profession, they are dealt with separately in the following chapter. Attention here will be focused on the country's two public universities, the University of Zambia and the Copperbelt University, for both of which the Ministry of Education has responsibility before Parliament.

The Universities

The University of Zambia, which is the older and larger of the two public universities, has nine schools (known in some universities as faculties) - Agricultural Sciences, Education, Engineering, Humanities & Social Sciences, Law, Medicine, Mines, Natural Sciences, and Veterinary Medicine. The Copperbelt University has four schools - Business Studies, Environmental Studies, Forestry & Wood Sciences, and Technology. Both universities offer diploma and first degree programmes. In addition, the University of Zambia offers postgraduate programmes.

The universities operate under legislation which makes them responsible to Parliament through the Ministry of Education and confers on them academic freedom and managerial autonomy. Academically, each university is responsible for determining its own programmes of instruction at all levels, determining and regulating the requirements for admission, regulating and conducting examinations, conferring degrees and other awards, and promoting, coordinating and controlling the direction of research. Each university engages its own staff, manages its own affairs, charges fees, and carries out any business or undertaking that seems proper to it. The universities derive their income from an annual government grant, student fees, and income-generating undertakings. Approximately two thirds of their annual income comes from government grants which are based on a formula that involves staff student ratios. The universities also enjoy substantial donor assistance, in terms of donor-supported staff and direct donor inputs, amounting to the equivalent of as much as 40% of total annual costs per student.

The universities operate within a general policy framework articulated by the Government. The two cardinal principles of this policy are that:

1. the universities must be responsive to the real needs of Zambia; and
2. they must, on merit, win the respect and proper recognition of the university world.

The University of Zambia's motto, "Service and Excellence", encapsulates these twin national goals of university education.

That the universities have done much to meet society's needs for high level human resources is evidenced by the statistics. When Zambia became independent in 1964, the country had a total of only 107 university graduates. When the older university, the University of Zambia, was established in 1966, it opened its doors to 310 students. By 1994, however, the two universities had a total enrollment of almost 6,000 students - 4,592 at the University of Zambia and 1,393 at the Copperbelt University - and cumulatively had awarded more than 16,000 degrees, diplomas and certificates. But more is required from the universities than a mere increase in student output. For their contribution to be effective in the development of society, the quality of their products - graduates, research, and service - need to be of high standard. The achievement of this necessitates the ability to recruit and retain good quality staff, to

admit and stimulate good quality students, and to function in a supportive and enabling environment.

Staff Retention

Deteriorating economic conditions in Zambia have made it difficult for the universities to retain the services of qualified local staff. Although university salaries are high relative to those paid in other areas of the Zambian economy, they are low in comparison with what academics are paid elsewhere in southern Africa. The exodus of highly qualified Zambians is clear attestation of this fact. Particular problems that many university staff experience are inability to purchase or build their own houses on a local university salary or to obtain their own transport.

The loss that Zambia has suffered through this exodus is serious. Between 1984 and 1994 the University of Zambia alone lost over 230 of its lecturers, 161 of them being Ph.D. holders with a considerable degree of seniority. This is the equivalent of about 60% of its current total number of staff. The loss to the country, in terms of investment in training and expertise, is immense. The loss to the institution, in terms of replacement needs, disrupted programmes, and demoralization of ongoing staff, is incalculable. The threat of further losses remains, so long as a large gap remains between the terms and conditions of service that the Zambian universities can offer and those offered at universities elsewhere in the region. The inadequate and unstable staffing levels to which this situation has led make it difficult for the universities to discharge their mandate effectively.

The loss of so many members of academic staff puts quality teaching of students at risk, since the services of the remaining staff must be dispersed over ever larger student numbers. The primary responsibilities of the universities are to teach, conduct research and provide service, but because of staff losses and shortages attention has had to be focused on meeting the immediate needs of the student body. This has jeopardized research, which is critical to the well-being of the country and to the academic health of a university, and has put a question mark over the ability of the institutions to provide government, industry and society with the service and advice they need. The universities' research mandate has also been jeopardized by poor funding and the small interest that government ministries and the commercial and industrial sectors show in calling upon its expertise.

Consultancy Work

The universities comprise a community of persons of the highest intellectual qualities and education, devoted to their chosen specialties. They constitute a body of experts, present on the spot for consultation by the Government and other public bodies and by private interests. Some government ministries make excellent use of these concentrations of national expertise. Others do not. Experience with the economic sectors of society is equally mixed. What is anomalous is that large sums are spent in procuring the services of consultants from abroad while locally available expertise is present at the universities. A long-standing policy position of the universities has been

that it should be standard practice to first approach local third level institutions for consultancy or advice before inviting or accepting experts from outside Zambia. The Ministry's position is that within the framework of Zambia's liberalized economy, the universities and other higher level institutions will be given equal opportunity of access to government consultancies, for which they will be expected to compete on an equal footing with other applicants.

The failure in many quarters to make adequate use of the services available in the universities points to the need for closer interaction between the universities and the clients they serve, whether these be government ministries or other sectors of society. In the absence of strong institutional arrangements for promoting this interaction, much is left to the initiatives and contacts individuals can establish on a personal basis. There is room for structures that would promote closer relationships and interactions between the universities and representatives of their clients, and between the universities themselves.

Accountability

The universities are major recipients of government funds, accounting between them for more than 20% of total public expenditure on education. Despite the competing needs of other educational and social sectors for resources, this level of support has been maintained and even increased during years of severe economic difficulty. The extent of this support places responsibility on the universities for public accountability in relation to value for money and quality of provision. This responsibility is all the greater because of the potential of university education for extensive social and economic impact.

Financial probity is addressed through the statutory requirement that the universities submit annual audited accounts to the Minister of Education for laying before Parliament. Proper financial accounting, however, does not automatically ensure that funds are being used effectively or that quality is being protected. There is need, therefore, for further procedures and mechanisms for evaluating the activities of the universities (and other autonomous higher level institutions). As autonomous institutions, it will be the responsibility and right of the universities themselves to establish these mechanisms, identify their own performance indicators, and conduct their own self-evaluation. As the principal funding source and the custodian of public interests, the Government's role is to underline the importance of public accountability and to establish the policy that the universities establish suitable quality assurance and public accountability systems.

Establishment of a Higher Education Authority

The provision of higher education in the country is diverse. With further development it will become even more so. It is provided in autonomous, semi-autonomous and government institutions. It is the responsibility of various government ministries, parastatal and private bodies. Its programmes differ in scope, depth, and

duration. These considerations mean that, in the absence of an integrated national policy for higher education, provision at this level tends to be fragmented and uncoordinated.

To remedy this situation, the Government will establish a Higher Education Authority for the coordination of all higher level education and will mandate the Ministry of Education to facilitate its establishment. The Authority will have advisory, planning, quality assurance, financial, and administrative functions.

Specifically, the responsibilities of the Higher Education Authority will include:

1. advising government on the general policy of the higher education sector in the country;
2. coordinating the long-term planning and overall development of higher education for government approval;
3. receiving and appraising applications for the establishment of private higher institutions and dealing with such proposals and applications;
4. ensuring that within agreed policy parameters a balance is established between institutions as to the level, type and variety of programmes, including an appropriate balance between certificate, diploma, degree, and postgraduate work;
5. ensuring that the programmes offered in publicly-funded institutions maintain relevance to the human, occupational and skills needs of the country;
6. planning the recurrent and development funding needs of higher education, across the whole sector and, in collaboration with the appropriate institutional authorities, for individual institutions;
7. ensuring that systems and procedures are put in place which will facilitate public accountability and the evaluation of cost-effectiveness within institutions and throughout the higher education sector as a whole;
8. ensuring that quality assurance procedures are put in place, followed, and monitored;
9. serving as a clearing-house for all applications for admission to higher institutions;
10. administering publicly-financed loan schemes for students in higher institutions;
11. ensuring greater equality of access to higher education, having particular regard to gender, socio-economic status and special educational needs;
12. promoting links between third-level institutions, the economy and society.

The quality assurance function of the Higher Education Authority would include responsibility for the diplomas, certificates and other awards of all non-university institutions. Responsibilities presently exercised in this regard by the Examinations Council would be transferred to the Authority, leaving the Council with responsibility for the system of school examinations. This is a more appropriate role for the Examinations Council, which functions within the framework of the Ministry of Education, and which has experienced some difficulties in the discharge of responsibilities relating to technical and other awards.

For the discharge of its many responsibilities, the Higher Education Authority will need a competent secretariat of adequate size. Part of this secretariat would be provided by the existing Bursaries Committee, which would be absorbed into the Authority.

The Funding of Higher Education Institutions

Current Situation

Public higher education institutions, including the two universities, derive most of their funding from the Government. While there are variations according to the type of institution, the remainder of their funding comes from fees and income-generating activities: Costs for capital development, personal emoluments, staff development, and programme development are borne either directly by the state or are paid by the institution with the aid of a state grant. Fees meet the other running costs and overheads. Other institutionally generated revenues provide for some financial leeway and allow of minor developments and improvements.

The principle of this tripartite financing arrangement is satisfactory. The practice is not. The Government continues to bear an excessively large proportion of the costs of higher education. The contribution from the other financing partners, that is, the institutions themselves and the beneficiaries, remains small.

Higher Institutions' Diversification of Revenue Sources

The higher level institutions need to increase efforts to diversify the sources of their revenues and to take the initiative in mobilizing non-government resources that will enable them to conduct their diverse teaching and research functions. In doing so, they will have the full support of the Government. What this amounts to is that they need to become more entrepreneurial and profit-motivated. They can become so by charging full economic costs for their services, whether these be teaching, research, consultancies, or the use of facilities. They can also undertake commercial enterprises, such as farming, but without prejudice to the preservation or the highest standards of quality in their essential educational, research and development roles. In the climate of economic liberalization, higher level institutions also need a greater spirit of competitiveness and better awareness of the importance of marketing themselves more aggressively.

It is also necessary that the resources made available to higher level institutions be used more productively. There is room in several institutions for improvements in the internal allocation of resources. All need to establish a management culture that is guided by the principles of transparency, efficiency and cost-effectiveness.

There is scope, also, for increased support for higher education, above all at university level, by the business and industrial sector. While in the name of society the Government may be a major beneficiary from the education provided at this level, every sector of the economy benefits. Commerce and industry, therefore, must play

their part in supporting the higher education systems that prepare their future employees and promote the development of knowledge and technology. Government expects that they will increasingly do so through student support, the endowment of chairs, assistance in the procurement of educational materials and equipment, and contributions towards development projects in higher level institutions. It also expects that the higher institutions will themselves actively seek such support.

Funding and Institutional Autonomy

Higher level institutions that meet a sizeable proportion of their own resource needs are much more favourably placed than those that depend almost exclusively on the Government for their funding. They are less severely affected by whatever constraints may affect the public budget. Their greater measure of financial freedom enhances their managerial, administrative and academic freedom. They enjoy more substantial institutional autonomy. This autonomy is of particular importance in determining the educational aims and content of programmes, in the internal redeployment of resources in accordance with perceived needs, and in controlling the inflow of new entrants.

Autonomy does not dispense with the need for public accountability, whether in regard to funds received from the Government or in regard to those coming from other sectors of society, greater accountability being part of the price that is paid for greater autonomy. Moreover, it is universally recognized that some tension will always exist between the demands of accountability and those of legitimate autonomy. However, as suggested already, accountability can be achieved by putting in place procedures for the assessment of institutions, departments and individuals; autonomy can be safeguarded by entrusting to the institutions themselves the primary responsibility for this evaluation process.

Public Support for Higher Education

The Government acknowledges that public support remains essential to ensure the educational, social and institutional mission of higher education. It further recognizes that, although it is a substantial charge on the national budget, higher education is equally a national investment for enhancing economic performance, cultural development, and social cohesiveness. For these reasons, it will continue to provide generous support for this level of education. It wishes to do so, however, within the framework of rational and logical arrangements that include multiple sources of support and funding for the activities of the institutions. The greater part of the funding for higher education may still continue to come from the Government, but arrangements need to be in place that will ensure adequate and ample revenues from the institutions' own activities and from cost-sharing schemes.

One of the first tasks of the Higher Education Authority will be to develop suitable funding arrangements for the universities and other higher level institutions. In this, the authority will work in collaboration with Government and with the institutions to ensure that available resources are allocated and utilized in the most cost-effective manner. In the meantime, the Government will be responsible for staff costs, staff and

capital development, programme development, and research, all within agreed limits and to the extent that national and institutional needs justify the outlays. Moreover, the Government will promote the development of a culture of revenue-generation in the higher level institutions by a system of matching grants, initially for institutional revenues generated from research.

Government Support for Students

In almost all higher institutions students are required to pay fees for tuition, board and accommodation. In many institutions the fees are, for all practical purposes, nominal, with the burden of support falling on the Government, either through its direct financial involvement or through its grants and subventions. At the universities, the fees are substantial, though not sufficient to meet the economic costs. The majority of students at the universities - some 70% in 1994 - are sponsored by the Government which pays the full accommodation costs and up to 90% of the tuition fee, and gives each student a living allowance to cover the cost of food and personal educational items. In addition, there are allowances for research courses and vacation training. The remainder of the students at the universities are sponsored by other public and private bodies or are self-sponsored. .

Government support for the majority of students in public higher level institution.³ has strained public resources in a way that can no longer be sustained. To relieve the pressure, it is government policy that henceforth much of the support for students will no longer be a grant but will be in the form of a loan that will be recovered from students during the early years of their working life, after completion of studies. This is the practice in many parts of the world. It is acknowledged that there are difficulties in implementing a student loan scheme, but the benefits outweigh the difficulties. The introduction of this scheme will help to reduce the disparity between public spending per basic school pupil and per higher level student

In awarding student loans, the Government will henceforth pay greater attention to areas where the country is experiencing critical human resource problems, as well as to student quality. This will lead to greater competitiveness in the awarding of loans. Government support will tilt in favour of crucial professional and academic needs, such as - at present - education and health. Support will also be forthcoming for a limited number of scholarships to students of high academic attainment in various fields. Adequate support will also be provided for students from poor socio-economic backgrounds and for achieving greater gender equality in higher education.

This new strategy requires regular evaluation of national human resource needs and the periodic review of priorities. This in turn will necessitate cooperation among government ministries, commercial and industrial firms, and various human resource development agencies.

Higher Education

Policy

1. The Ministry of Education will promote the coordination and harmonization of higher education and policy.
2. The Ministry's policy framework for publicly funded universities is that
 - their teaching and research programmes be responsive to the real needs of society;
 - their teaching, research and service be of such high standard that, on merit, they win the respect of the university world;
 - they establish suitable quality assurance and public accountability systems.
3. The financing of higher education will be on a shared basis between the Government, the institutions themselves, and students.
4. Higher education institutions will develop strategies for widening their resource base and diversifying their sources of revenue.
5. Government support for students in higher education institutions will be in the form of loans that will be recovered during the students' subsequent working life.
6. Higher education institutions will be given equal opportunity of access to government consultancies for which they will compete on an equal footing with other applicants.

Strategies

1. The Ministry of Education will facilitate the establishment of a Higher Education Authority which will be responsible for coordinating and harmonizing policy and practice in the higher education sector.
2. In the immediate future, the arrangements for the financing of higher education will be as follows:
 - the Government, through the Ministry of Education, will be responsible for staff costs, staff and capital development, programme development, and research, all within agreed limits and to the extent justified by national needs;

- students, at the universities and teacher colleges, will meet a proportion of their tuition and maintenance costs;
 - institutions will meet general running costs and overheads through tuition fees and income-generating activities.
3. In the longer-term, the Higher Education Authority, working in collaboration with the Government and higher education institutions, will develop arrangements for the form that public support for higher education will take.
 4. In order to promote the development of a culture of revenue-generation in higher education, part of the government subvention for an institution will be in the form of grants that, within agreed parameters, match revenues generated by the institution.
 5. Publicly funded universities will submit to the Ministry on a regular basis their policies, strategic plans, progress reports, reports of quality audit systems, and financial reports.
 6. The Ministry will encourage professional collaboration between government ministries and the universities, and between the universities and other higher institutions within Zambia and abroad.
 7. In mobilizing resources within and outside the country, the Ministry will pay special attention to the needs of the universities.
 8. The Ministry will vigorously support the universities' budgetary submissions that are based on their policies and strategic plans and that accord with agreed arrangements for financing.
 9. Government support for students in higher education will be directed principally to agreed areas of national need. In addition, the Government will provide a limited number of scholarships to reward superior academic performance and will provide special support to facilitate the participation in higher education of women, the poor, and those with disabilities or impairments.
 10. The Ministry will support the initiatives of private organizations and individuals in the establishment of private universities.

Chapter 11

The Teaching Profession

Context

The quality and effectiveness of an education system depend heavily on the quality of its teachers. They are the key persons in determining success in meeting the system's goals. The educational and personal well-being of children in schools hinges crucially on their competence, commitment and resourcefulness.

In view of this, the calibre of teachers and of the teaching profession is of paramount importance. The Ministry of Education has the important task of sustaining the quality of individual teachers and of the profession as a whole. It will accomplish this by attracting suitable persons to take up teaching as a career, equipping them with initial professional education, and providing for their subsequent in-career development. Running parallel with this, it also has responsibility for rewarding their services and sustaining their morale through satisfactory terms and conditions of service.

In 1994, there were 47,519 publicly supported teachers in Zambia's primary and secondary schools - 36,697 or 77.2% of them in primary schools and 10,822 or 22.8% in secondary schools. With these numbers, teachers constitute the largest single group of public sector employees. They are also a major beneficiary of government spending. Their remuneration constitutes a heavy charge on the public budget and on the Ministry's resources - at the primary level, teacher emoluments tend to account for 90% or more of recurrent expenditure, while at the secondary level it is some 75% of actual school expenditures (excluding payments for boarding). The Ministry is accountable to the public for the use made of these funds. Hence it must constantly ensure the adequacy of the preparation and professional development it arranges for teachers, and review the services they provide.

Reviewing professional matters in this way does not belittle teachers or ignore the contribution they have made to the development of the nation. Currently teachers are working with close to two million children in schools spread across the country. These young people are the men and women of tomorrow, the persons who will guide Zambia's destiny in the twenty-first century. The Ministry of Education salutes the great number of teachers who are working so valiantly, frequently under very difficult circumstances, to educate Zambia's future. It acknowledges that the progress, stability and unity that Zambia has experienced since Independence have been built on the foundations laid by teachers.

The country is indebted to them for what they have accomplished. Through this policy review it hopes to deepen that indebtedness by equipping them to do even more.

Training and professional development underpin what a teacher can accomplish in a school. The essential competencies required in every teacher are mastery of the material that is to be taught, and skill in communicating that material to pupils. These deceptively simple formulations cover a great array of knowledge, understanding and skills that must become integral to every teacher. The preparation of a medical doctor to be able to diagnose a patient's problem and then to treat it successfully takes many long years of arduous preparation and training. Likewise, the preparation of teachers in the understanding of their field and in how to teach requires lengthy and careful attention.

The initial preparation, provided at training colleges and the university, does no more than lay the foundation for a lifetime of teaching. There is need for regular ongoing development in a process that is never complete. This is because a teacher's professional life revolves around two areas of never-ending growth and progression: knowledge, which is always increasing and changing; and children, each one unique and developing within the fabric of a changing social environment. Initial teacher education is little more than the start. Provision must also be made for the ongoing development of each member of the profession.

The Supply of Teachers for Lower and Middle Basic Education

Some 1,900 trained teachers emerge annually from the existing primary teacher training colleges. This number has not increased significantly in the past decade. With this static output, the colleges are unable to produce teachers in the numbers needed by the schools. Because of this, the schools have to fall back on the services of untrained teachers. In 1994, about 15% of those teaching at lower and middle basic levels were untrained. This situation will deteriorate in the near and middle future. There are two reasons for this.

First, expansions of the school system to meet the needs of the rapidly growing child population necessitate proportionate increases in the number of teachers. Providing seven years of education for all eligible children by the year target year, 2005, entails an additional 12,650 teachers (over and above the 5,500 currently needed to replace untrained teachers). The output from the colleges will not be sufficient to meet this need.

Second, as the teaching force grows older, and as the toll of HIV/AIDS increases, the existing stock of teachers will be depleted. The output from the training colleges can still provide replacements and increase the stock somewhat on the previous year.

However, by the year 2005 replacements for retired, deceased or chronically ill teachers will equal the total college output. Thereafter, unless suitable measures have been put in place, the number of teachers will decline, even though the inexorable growth of the child population continues.

Clearly, there is need for a great increase in the number of trained teachers for lower and middle basic classes. Some of the need could be met by the re-engagement of retired teachers. The Ministry will continue to pursue this line of approach. One of its values is that it would bring back into the system individuals with considerable teaching experience. It would not, however, ensure teachers in the numbers required by all the schools. What is needed for this is a substantial increase in the supply of teachers who are new to the system.

Strategies for bringing about such an increase include:

- making more use of untrained teachers;
- reducing the current two-year training programme to one-year in order to accelerate the supply coming from the existing colleges;
- establishing sandwich-type programmes that would make use of existing facilities throughout the year, thereby facilitating increased numbers;
- providing initial teacher preparation through distance education programmes;
- increasing capacity at the existing colleges;
- establishing one or more new colleges for the training of teacher for Grades 1-7.

Because of its concern for the quality of education, especially at the base, the Ministry will not pursue the first option, since untrained teachers do not have the understanding or skills needed for the education of young children.

The second option - a crash programme - was adopted in the 1960s in order to provide teachers for the rapidly expanding primary sub-sector. By introducing a one-year college training programme, the strategy helped to ensure that schools were staffed by trained teachers. The educational impact of the one-year programme would have been even greater if more thought had gone into how the two-year college curriculum was to be covered in one year, if college lecturers had been enabled to conduct the planned one-year follow-up of newly-trained teachers, and if planned vacation contacts had been maintained with the colleges. To reduce the current reliance on untrained teachers and to provide for the necessary expansions at the lower and middle basic levels, the Ministry will establish an accelerated programme for teacher training, but in doing so it will ensure the inclusion of measures designed to protect the quality of training and to ensure the professional competence of graduates from the programme.

In consultation with the University of Zambia, potential non-governmental providers of teacher education, and aid agencies, the Ministry will examine the other options and will adopt one or more of them. The urgency of the matter is such that decisions cannot be delayed too long.

The Pre-Service Training of Teachers

Training for Lower and Middle Basic Levels

The outstanding achievement of the Teacher Training Colleges is that they have never failed to provide the country with a regular supply of qualified teachers. But they have been handicapped in the accomplishment of their mission by inability to bring the quality of their output to the level they would have desired. In 1992, Focus on Learning highlighted the following quality-related problems in the colleges:

- an overloaded and inappropriate curriculum;
- promotion of rigid teacher-centred methodologies;
- an excessively demanding examinations system;
- staff with inadequate or unsuitable educational and professional qualifications; and
- shortage of educational resources of all kinds.

Many of these problems remain. To their number could be added constraints in providing adequate supervision to students on teaching practice.

The Ministry has already taken the initial steps in reviewing and restructuring the teacher training curriculum. This process will continue and will take account of developments in the curriculum for lower and middle basic education. There has also been some alleviation of the pressure from the examinations, which are set and marked by the Examinations Council, though there is room for more progress.

The training students receive in the Teacher Training Colleges should not be narrowly confined to what goes on in lower and middle basic classrooms. No adult learner could thrive on such fare. Instead the training should also make provision for the personal education and growth of the students. The Ministry envisages that the training programme will be extended to include some level of specialization in a chosen discipline, but without detriment to the essential training in basic school content and methodologies. This specialized knowledge will be of value to the schools in which the trainee eventually teaches. It will also be of value to the individual in providing the foundation and stimulus for continued self-improvement.

The establishment by the University of Zambia of a degree programme in primary education is a significant step forward. Initially, this programme will concentrate on the needs of college tutors and hence will provide the formal higher level training that many college staff currently lack. Eventually, the Ministry will require that all new appointees to Teacher Training College posts possess this, or comparable, qualification.

The new degree programme will also provide a channel for close interaction between the Colleges and the university School of Education. In time this should lead to the upgrading of the certificate awarded by the Colleges to university diploma level. In the more immediate future, it should lead to more widespread and effective participation by college tutors - both those who enroll in the new degree programme

and those who participate in its spin-off benefits from their college base - in research, consultancy and evaluation.

Training for Upper Basic and High School Levels

Currently, two principal programmes exist for the pre-service training of teachers for Grades 8 to 12:

1. the University of Zambia mounts a four-year concurrent degree programme in which students take selected courses in educational foundations and methodology, while specializing in one or two teaching subjects; and
2. two teachers' colleges, Nkrumah and the Copperbelt Teachers' College, and a technical college, Luanshya Technical and Vocational College, offer a two-year training programme in which students follow courses in education and specialize in two or three teaching subjects.

In addition, a three-year programme at an agricultural college, the Natural Resources Development College (NRDC), trains teachers for agricultural science, while teachers of art and music are trained at the Evelyn Hone College of Applied Arts and Commerce. Further, a private college, the George Benson College at Namwianga in the Southern Province, offers a three-year training programme for secondary teachers. In theory, Nkrumah and Copperbelt graduates teach in Grades 8 and 9, university graduates in Grades 10-12, and graduates from NRDC and Evelyn Hone in Grades 8 to 12. In practice, because of the shortage of university-trained graduates, especially in mathematics, science and English, diploma-holders from Nkrumah and the Copperbelt Colleges may be required to teach Grade 10-12 classes.

The University of Zambia is responsible for all of these programmes, except that at the Evelyn Hone College. The non-university institutions are associate colleges of the University which determines the curriculum, monitors the standards, and makes the academic awards for each college. As of 1995, the University also undertook this role in respect of the diploma programme at the National In-service Training College, NISTCOL, for the upgrading of lower level teachers to teach in the Grade 8 and 9 classes of basic schools.

The annual output from these various training institutions is approximately 700 qualified secondary school teachers - 150 to 180 university graduates and 500 to 550 diploma-holders. This output is insufficient because of

- the mismatch between supply and demand;
- the loss of teachers through wastage; and
- the needs of basic schools.

At the supply level, not enough teachers are trained for certain areas, notably mathematics, the sciences and English, making it necessary for schools to adopt various strategies, some of them educationally unsound, to cover these subjects. In other areas, such as home economics, there is over-production of teachers, resulting in the inefficient use of scarce training capacities and the under-utilization of teachers when they are posted to schools that are already adequately staffed in the relevant subject.

Teacher Wastage

Teacher wastage occurs in two forms. The individual who was trained as a teacher may not begin teaching and so may never enter the profession; alternatively, having entered, he or she may leave teaching after some time. More wastage, of both forms, occurs with university graduates than with those who have passed through the other teacher-education programmes. The rates of wastage, though lower now than in the past, are sufficiently high to deprive a large number of schools of the graduate teachers they require. Very approximately, the current need is for some 3,000 university graduate teachers, which is the equivalent of the total output from the university School of Education since its inception, but only about half this number are-actually in the schools.

Research has consistently shown that the dominant factors contributing to teacher wastage are the material incentives represented by salaries and conditions of service. Virtually all teachers, whether they leave the system or remain in it, feel that the salaries they receive are insufficient to enable them to live in a way that befits their status. Dissatisfaction with conditions of service relates to

- lack of proper accommodation;
- lack of a housing scheme to prepare teachers for retirement;
- inadequate provision of loans⁷
- absence of a health scheme for teachers;
- inadequate provision of in-service training;
- poor promotion prospects and lack of clear guidelines on promotion ;
- concern that corruption affects promotions and selections for in-service training; and
- difficult communications with the employer, with a sense that teachers' problems are disregarded.

A number of the policy interventions suggested below will address these problems, thereby helping to stem the flow of qualified personnel from the teaching profession into other fields in Zambia and elsewhere.

The Needs of the Basic Schools

The existing basic schools are not adequately staffed with teachers qualified for subject-based teaching in Grades 8 and 9. In many cases, the teaching in these grades is conducted by teachers who have been trained for teaching at the lower and middle basic levels. This is harmful to all levels of the basic school system. It deprives the lower levels of the qualified teachers they need (and increases the pressures for the use of untrained teachers), and it puts teaching at the upper basic level in the hands of teachers not trained for this level. As noted earlier, teachers qualified to teach in Grades 8 and 9 are critical to the success of basic schools. Responding to this need in the existing basic schools could absorb all of the graduates from Nkrumah and Copperbelt Colleges for some years to come, leaving none for the Grade 8 and 9 classes in existing secondary schools. This highlights the inadequacy of the supply of teachers trained for this level.

The need for further steady expansion of basic school provision only accentuates the problem.

Graduate Teachers of Mathematics, Science and English

The shortage of university graduate teachers is experienced most acutely in the three crucial areas of mathematics, science and English. The University's output of teachers qualified in English is quite high, but these graduates apparently find it easy to obtain employment in non-teaching fields. The output of mathematics and science teachers is low, with scarcely more than 40 graduating annually with qualifications in science education. More than twice that number begin the programme, but since many have had a poor school foundation in the sciences the annual loss through failures is high. The relatively weak students who take the science education programme may also have difficulty in spreading their efforts over university science and education courses, instead of concentrating them on the sciences.

The requirement that all high schools concentrate more of their resources and time on the teaching of mathematics and science should, in time, bear fruit in the form of better qualified candidates for admission to the university science education programme. Some small increase in graduate science teachers may also occur when the School of Education resumes postgraduate teacher education programmes for graduates who wish to take up teaching but do not have a professional qualification in education. But unless other measures are adopted the situation is likely to remain critical for a considerable time to come.

Possible measures are the upgrading of existing diploma holding teachers for teaching in Grades 10-12 or the adaptation of pre-service training to prepare teachers for work at the higher level. The Ministry has had satisfactory experience with teacher upgrading, through the establishment of an advanced diploma scheme. It will continue with this scheme and in addition will examine other options that would lead to a resolution of this problem. In examining these various options, the Ministry will pay special attention to the need for teachers with higher-level preparation in critical scarcity areas, such as science, mathematics and English.

The Future Structure of Teacher Education

Currently, the system of teacher preparation comprises three levels:

- certificate-level teachers for Grades 1-7 are trained in Teacher Training Colleges;
- diploma-level teachers for Grades 8 and 9 are trained in the Teachers' Colleges;
- graduate teachers for Grades 10-12 are trained at the University of Zambia.

These training arrangements are dictated by the needs of the existing system of primary, junior secondary and senior secondary education. In the new structure of

education, however, the fundamental units are basic schools, running from Grade I to 9, and high schools, running from Grade 10 to 12. Accordingly, the system of teacher education needs to be restructured in a corresponding manner.

The ideal arrangement would be to underline the essential unity of basic education by conducting the training for lower, middle and upper basic education within the one institution. This would give some common core training and would provide trainees with the opportunity to specialize in one or other of the levels. This model will be adopted in developing new colleges, but without precluding the possibility of further new colleges that would specialize in training for any individual level, or combination of levels, of basic education. Economies of scale, and the desirability of having sufficient students and lecturers for the establishment of vibrant programmes of teacher preparation, suggest that a college that is to train across the complete Grade 1-9 range should be rather large, catering for 500 to 1,000 students.

The need for an increased and sustained output of teachers qualified for work in Grades 1-7 precludes the possibility of any wholesale transformation of the existing Teacher Training Colleges to this model. Such a transformation would also have serious staffing implications, since existing college personnel are specialized in preparing teachers for lower and middle basic, but not for upper basic. Similar considerations exclude the possibility of extending downwards the programmes offered at Nkrumah and Copperbelt Teachers' Colleges, so that these Colleges could prepare teachers for lower school Grades, as well as for upper basic.

The Ministry will regularly review this matter, taking particular account of the growth in the number of basic schools. The principles that will guide its approach will be recognition of the unity of basic education, responsiveness to perceived needs, flexibility of provision, protection of quality, feasibility, and the availability of human and financial resources.

The Duration of Training Programmes

A related issue is the possibility of extending by one year the initial teacher education programmes provided by Nkrumah and the Copperbelt Teachers' Colleges. When these institutions were established, the original thinking was that their training programmes should last for three years. However, from the time the colleges commenced operations, the programme duration was reduced to two years because of the extreme shortage of Zambian secondary teachers, the consequent great reliance on expatriates, and a rapidly expanding secondary school system. The change-over to a three-year programme, planned for the early 1970s, did not take place because exceptionally high teacher wastage rates led to a continuing great shortfall of Zambian teachers.

Conditions have changed radically in the quarter century that has since elapsed. The schools already have a relatively large staff of Zambian teachers. Clearly, all schools, whether basic or secondary, would be better served by having better qualified teachers. A three-year programme would lend itself to the preparation of the needed

senior level teachers of mathematics, science and English. Closer articulation with the university School of Education could also be developed, with the possibility of the extended college programme being accepted as the basis for an external university degree in education.

The Participation of the Non-Government Sector

There are eleven Teacher Training Colleges (TTCs) in Zambia that train teachers for lower and middle basic levels, and four principal colleges, not counting NRDC and Evelyn Hone College, that train teachers to diploma level. Four of the eleven TTCs are grant-aided institutions, owned and managed by the churches, and one of the diploma-level colleges is a private church institution. This shows the contribution that non-government agencies are already making to the training of teachers. As with the school sector, the Ministry will encourage and facilitate this participation.

The Ongoing Professional Development of Teachers

Teacher education is a continuing process that must be extended throughout the individual's years of actual teaching. The foundation laid in the pre-service programme may be sound and adequate as a start, but it is not sufficient for life. As with other professionals, teachers have a responsibility, to themselves and to their profession, to deepen their knowledge, extend their professional skills, and keep themselves up-to-date on major developments affecting their profession. A vital education system is not static, but dynamic, promoting change, in response to the needs and expectations of society, in such areas as subject content, pedagogical approaches, pastoral care for pupils, assessment procedures, school organization and management, and relationships with parents and the community. Developments in all these aspects are under-way in Zambia's schools. Teachers need to be equipped with the capacity to deal with and incorporate these changes into their professional activities so that the planned educational benefits may follow.

In addition to ongoing professional development, teachers need to attend to their own personal development in chosen areas of specialization. Teaching is a learned and a learning profession. Ideally, every teacher should also be learned and a learner. Diploma level teachers have been given considerable opportunity for this personal development through registration for distance education studies, followed by full-time programmes, at the University of Zambia. The Ministry's support in this area is shown by its readiness to release large numbers of teachers for full-time university studies. The same readiness will be shown in relation to the new primary education degree and any other relevant degree programme for teachers. While bearing in mind the needs of its institutions, the Ministry also recognizes its obligation to facilitate teachers in improving their academic status.

The Ministry's capacity to offer in-service training programmes is quite limited. In 1994, only 1% of serving teachers underwent formal training of one kind or another. No master plan exists to show the number and categories of teachers requiring in-service training, the nature of their training needs, the needs of the education system, and the types of programmes that would best meet these needs. At the same time, interventions to improve the quality of education may not be having the desired effects, largely because the strategy has been to move resources into schools, without sufficient attention to enabling teachers use those resources effectively for educational purposes. Cases in point are the distribution of materials for the new Zambia Basic English Course and the increase in number of textbooks and other books for class use. Many teachers do not know how to put these materials to effective use.

Meeting the diverse needs of teachers for ongoing professional and personal development is too extensive a task to be the responsibility of the Ministry alone. It requires the participation of a number of agencies, working along several different lines of approach. The Ministry will formulate the broad guidelines and strategic approach that will promote such development and will ensure the annual availability of some funds for this purpose. The Ministry will also exercise a coordinating function, ensuring that programmes fit within the framework of an overall comprehensive scheme for teacher development, and are not just haphazard, one-off experiences that accomplish little.

The strategic approach will embody a number of basic principles of provision, among them the following:

1. programmes will be demand driven, responding to identified needs;
2. the majority of in-service programmes will focus on school needs and will be based in schools themselves or in Resource Centres;
3. cascade models will be given special consideration, subject to avoiding too much dilution at the base;
4. cost-effective programmes, that reach large numbers for a relatively small outlay, will be given high priority;
5. the distribution of materials to schools, the introduction of new subject content, and substantial changes in management and organizational features will normally be accompanied by in-service courses for teachers and other field workers.

These principles bring out the importance of Resource Centres in providing teachers with opportunities for in-career development. They also open the door to programmes that can reach teachers through the electronic or print media. The scale of operations may be too massive for the latter to emanate only from the centre. The Ministry encourages training institutions to maintain contact with their former trainees and to contribute to their further professional development, through newsletters, information sheets, and other forms of correspondence material. A suitable arrangement would be the integration of decentralized college-based development of materials into the framework of a national programme of distance education for serving teachers.

School heads and their deputies form a special group that stands in need of purpose-designed training programmes. Before the year 2000, all heads of lower and middle basic schools should have participated in a management training programme mounted by the Ministry. These training activities need to be extended to include deputy heads, and the heads of high schools and their deputies. They also need to become a permanent feature of the education system, to cater for newly-appointed personnel, to keep school heads abreast of changes and innovations, to extend their capacities for educational management and supervision, and to sharpen the organizational and leadership skills of this critically important group.

The restructuring of the Ministry of Education, with the creation of Education Boards at district, school and college levels, necessitates a special kind of in-service training, that will help to equip the Boards to deal effectively with the educational fields for which they are responsible. The lessons from such training need to be incorporated into an extensive education programme for Parent-Teacher Associations, parents themselves, and the public at large, if the purposes, functions and authority of Boards are to be well understood. In particular it will be necessary to generate wide understanding of the role of the Education Boards in the recruitment, deployment and discipline of staff.

Regardless of the ownership of the institution where they underwent training, teachers enter a unified teaching profession that responds to the needs of all the children of Zambia. Teachers in private schools are full members of this profession. Hence they should not be debarred from participating in in-service training programmes. The Ministry will establish a special quota for these teachers, to ensure that their needs are not overlooked.

The Deployment of Teachers

Teachers are the most costly resource within the education system. Accountability to the public who ultimately provide the finances for their employment requires that they be enabled to give their services in the most effective and cost-efficient manner possible. Teachers should be assigned to schools that heed their services. The schools, in their turn, should be able to allocate a full working load to each member of staff.

The situation in the field is quite different. Qualified Grade 1-7 teachers are over concentrated in towns and cities, while rural schools are understaffed. In order to maintain their operations, rural schools have to depend much more extensively than urban schools on the services of untrained teachers. Only one-third of the teachers in rural schools are female, whereas in urban schools there are twice as many female as

male teachers. In the existing secondary schools, the average pupil to teacher ratio is 18, which is low. Given that the average secondary class size is 45, a significant number of teachers must be carrying less than the normal workload.

Not all teachers favour posting to a rural school. Because of differential staffing levels, the workload in a rural school may be heavier. On the other hand, because teachers in rural areas qualify for a rural allowance, their average salary may be higher than that of their urban counterparts. But this is offset by the difficulties of rural conditions - problems of access to health facilities, remoteness from shops, scarcity of transport, high costs of buying and transporting essential supplies, lack of ready access to education officials, fewness of individuals of equivalent educational level. Compounding these problems for female teachers is the fact that a high proportion are married women who establish their homes, and hence seek a teaching post, within the locality of employment of their husbands. For many of them, this means either that they be posted to an urban school or that they be denied a teaching appointment until a vacancy occurs in a conveniently located school.

Government has the clear policy that appointments within the public sector be restricted to the number of approved posts, at both system and institutional levels. The mere availability of additional qualified teachers does not justify their appointment to schools which already have their full complement of staff. The Ministry will ensure full compliance with this policy in regard to all educational institutions for which it is responsible. It will also examine the staffing situation in secondary schools, to ensure that fully effective use is made of teachers' time. The Ministry would also wish to secure extra incentives for teachers serving in rural areas. The economic conditions make it difficult to ensure meaningful additional monetary incentives, but there is scope for other interventions, such as priority for rural teachers in in-service training programmes, or providing more extensive educational resources to rural schools.

Terms and Conditions of Service

Terms and conditions of service crucially affect the morale and commitment of teachers. In the past, teachers commanded great respect in Zambian society. Their level of remuneration, though it never reached a very high level, enabled them to live in modest comfort and with some dignity. However, their status has been greatly diminished by a deterioration in their conditions of service. Over the past twenty years they have experienced a progressive decline in their real incomes. Salary levels are now so low that very many teachers must be classified among the poor who are unable to afford all of the essentials of life.

Despite these unsatisfactory conditions, the majority of teachers continue to give excellent service to the education system by conscientious dedication to their teaching responsibilities. A few may bring a bad name on the profession through absenteeism or unprofessional conduct, but this is not characteristic of the majority. The remarkable and highly encouraging fact is that schools continue to function and children continue to learn, even though their teachers are not being well-paid. The Ministry of Education is only giving voice to what the people of Zambia know when it acknowledges and acclaims the devotedness of teachers.

But it is not satisfactory that the situation continues as it is. It would be even less satisfactory if it were allowed to deteriorate further. Schools cannot be effective if teachers are demoralized. Significant strides forward in preparing children for the world of the twenty-first century cannot be made on the basis of a demotivated cadre of teachers. Ongoing professional and personal development, which lie at the very heart of school and educational improvement, are not the priority concerns of a person whose remuneration does not match the status and responsibility attaching to his or her appointment.

Recognizing all this, the Ministry, in consultation with the parties concerned, will strive for real improvement in the salaries and other conditions of service of teachers. Realistically, however, all negotiations on this matter must be set within the framework of nationally agreed procedures and guidelines and in the context of the state of the economy. There can be no doubt about the good will of the Government and the strong wish of the Ministry for improved salaries, but the critical issue is the ability of the employer, that is, of the Government, to pay - and this depends on the capacity of the public and the economy to provide the revenues that are required.

An area where the Ministry will seek radical improvement is in the career structure for teachers. The present structure encompasses relatively few promotion posts. As a result, many teachers find that if they are to forward their own interests, they must leave classroom teaching and seek a management or similar post. This leads to the loss from teaching of several excellent teachers, and the frustration of those who fail to secure a new post. This problem would not arise if promotion paths within the teaching channel allowed a teacher's salary to progress to the level of management salaries, or even beyond.

Teachers' Housing

Teachers' accommodation is also a matter of concern, to teachers themselves and to the Ministry. At present, most urban primary school teachers make their own off campus accommodation arrangements, whereas a high proportion of rural teachers are provided with housing on the school site. Much of this rural accommodation is not of a very high standard. Some is in the form of temporary structures that have long outlasted their ability to provide a decent home for a teacher. Because of the lack of resources for maintenance, several teachers' houses have deteriorated in tandem with the deterioration of the rest of the school plant, and are now in need of extensive rehabilitation.

The provision and rehabilitation of teachers' houses is a matter in which the community must be intimately involved. This is one of the most effective ways in which the community can signify its commitment to the education of its children and its willingness to sacrifice its time and other resources for this purpose. The Ministry will work in partnership with communities and will support their efforts to provide accommodation of a decent standard for their teachers. It can do this through technical support and advice and the monitoring of standards. It can also keep before donor agencies the need to support community initiatives for the rehabilitation or construction of teachers' houses, particularly where such improvements would facilitate the deployment of female teachers to rural schools.

Decisions relating to levels and standards of provision of teachers' houses will rest with District Education Boards. An early task for the Boards will be to establish the precise needs within their districts and to determine with the communities involved how these needs are to be met.

Apart from these measures, the Ministry will take whatever steps are needed in order to promote home ownership schemes.

A Teacher Accreditation Board

Educational Reform noted in 1977 that in Zambia there is no professional body as such for teachers, although a strong union exists. Since then the idea of establishing a professional board for teachers, along the lines of the Medical Council for medical practitioners, has been raised periodically. An Accreditation Board would serve teachers in such a capacity. The role of the Board would be to set and maintain the highest professional standards among teachers in the interests of the teachers themselves, and of pupils, parents and the entire community. Its functions would be to:

- determine the conditions for registration;
- establish a register for all teachers;
- adopt a professional code to regulate the professional conduct and behavior of members of the teaching force;
- institute proceedings in cases needing its attention and, on completion of the necessary inquiries that followed prescribed lines, take disciplinary action, including de-registration, where this is found to be necessary.

In the event of its being established, only teachers registered with the Board would be allowed to teach in any of Zambia's schools. Those who were de-registered, or who were never registered, would be prohibited from teaching in any school, public or private, until such time as they appeared on the Board's register.

As noted in *Focus on Learning*, the establishment of a legalized professional body for teachers necessitates an examination of the implications for training and

certification, the requirements for registration, and the development of a code of conduct for teachers.

Other complexities include the relationship of an Accreditation Board to the Teaching Service Commission and to Education Boards, the contractual implications of compulsory registration for serving and new teachers, and providing a suitable legal framework for the disciplinary procedures. The cost of establishing and running the Board also requires investigation. In principle, the annual costs should be recovered from registration fees, but this may be problematic in Zambia because of the low level of teachers' salaries. The Ministry will examine these issues with the teachers' unions and other concerned parties before preparing the necessary legislation.

Framework for Financing

The financing of teacher education must be directed towards the pre-service training of basic and high school teachers and towards the in-service professional and personal development of serving teachers. The financial frame differs for these two categories

Facilities for pre-service training at college level are currently provided through a form of partnership between the Ministry and the churches. This arrangement will continue and, if possible, will be extended. The Government will meet the costs of personal emoluments for approved personnel in government and grant-aided colleges. It will also pay annual grants in aid of the running expenses of the colleges, in accordance with the approved budget of each College Board. Educational materials, equipment, and resources from donors for capital or running costs will be allocated to colleges on the basis of need.

Colleges will be expected to raise revenue by charging tuition fees to all students. In addition, residential students will be required to pay the boarding fee determined by the Board of the relevant college. However, the bursary scheme which at present is applicable only to university students will be extended to cover students in teacher education institutions, with resources being made available on a part-loan-part-grant basis.

The financing of university teacher-education programmes will take place within the framework of government assistance to the universities and of bursary schemes for student support. A bursary quota will be established for those following approved programmes leading to qualifications in education.

The major responsibility for financing the in-service education and training of teachers lies with the Ministry. Hence, it will make provision for this in its annual estimates. The Ministry will also look to the donor community to continue, as in the past, to provide extensive support for the professional improvement of serving teachers. In addition, it will encourage College Boards to assume some of the responsibility for the ongoing professional development of their staff.

The Teaching Profession

Policy

1. In order to foster the quality and effectiveness of the education system, the Ministry of Education will promote the quality of individual teachers and of the teaching profession as a whole.
2. The Ministry acknowledges that the two pillars on which the professional competence of teachers rests are initial training and ongoing in-career professional and personal development.
3. Organizational arrangements for the training of teachers will take increasing account of the way the school system is structured into basic and high schools.
4. The Ministry will pursue various options in order to increase the supply of trained teachers for basic and high schools.
5. The Ministry will formulate broad guidelines and strategic approaches for the in-service education and training of teachers and will exercise a coordinating role in respect of such training.
6. Recognizing that terms and conditions of service crucially affect the morale and commitment of teachers, the Ministry will strive to have these improved.
7. The Ministry recognizes the need for a professional teachers' body that would set and maintain the highest professional standards among teachers.
8. The arrangement whereby the Ministry and religious bodies collaborate to provide pre-service teacher education will continue and will, if possible, be extended to include other partners.

Strategies

1. In order to increase the supply of trained teachers for lower and middle basic schools, the Ministry will introduce an accelerated teacher training programme, but in doing so it will ensure careful attention to the measures needed to protect the quality of education.

2. In further initiatives to increase the supply of trained teachers, the Ministry will consider, among other options:
 - re-engaging retired teachers;
 - establishing sandwich-type training programmes;
 - providing initial teacher preparation through distance education programmes;
 - increasing capacity at the existing colleges; and
 - establishing new colleges.
3. The Ministry will seek to mobilize resources for the development of new teachers' colleges that will train teachers for all levels of basic education.
4. In order to protect the quality of education, dependence on untrained teachers will be reduced, but untrained teachers already in the system will be given an opportunity to undergo training.
5. The Ministry will articulate the supply of teachers with the known needs of schools, and to this end will reduce student entry into areas that are over-supplied.
6. The Ministry will deploy teachers to schools only where their services are needed.
7. The Ministry will continue the work of reviewing the curriculum for teacher-training colleges so that it is in conformity with the curriculum of the schools, promotes a variety of teaching strategies, and caters for the personal growth and development of the trainees.
8. In order to raise the standards of basic schools and provide more effectively for teachers of senior classes, the Ministry will consider extending the basic training programme in the Teachers' Colleges to three years.
9. In-service training programmes will be based on identified needs of teachers and the education system, and will be predominantly school-based, with extensive involvement of Resource Centres.
10. The distribution of books and similar materials to schools, the introduction of new subject content, and substantial changes in management and organizational features, will normally be accompanied by in-service courses for teachers and other field workers.
11. Education Boards will be encouraged to establish suitable training programmes for Board and Parent-Teacher Association members, to equip them to discharge their responsibilities effectively.

12. To increase the attractiveness of a posting to a rural school, and to enhance commitment to teaching in a rural area, the Ministry will provide extra incentives for rural teachers.
13. The Ministry will continue to negotiate with all parties concerned in order to bring about improvements in teachers' terms and conditions of service.
14. In consultation with the parties concerned, the Ministry will introduce promotion paths within the teaching channel which will allow steady progress in a teacher's salary up to and beyond the levels in management or other sectors.
15. The Ministry will work in partnership with communities in the rehabilitation and building of teachers' houses, particularly in the rural areas.
16. District Education Boards will establish the precise needs for teachers' accommodation within their districts and will determine with the communities how these needs are to be met.
17. The Ministry will facilitate teachers' access to plots and funds for the building of their own houses.
18. The Ministry will examine with teacher representatives and other concerned parties the legal and other implications of establishing an Accreditation Board for teachers and will prepare the necessary legislation when it is timely to do so.

Chapter 12

Organization and Management of Education

Context

The effective delivery of public educational services is heavily dependent on the suitability of the management structures and procedures employed. Structural arrangements should be such that, basing its decisions on comprehensive and accurate information, management can deal quickly and effectively with issues that arise. The arrangements should also be such that they are adequate for the size and complexity of the system.

Meeting the requirements for efficient and effective management of the education system in Zambia is not an easy task. There are many factors at play. Quantitatively, the system of schools, colleges and support services has expanded rapidly, but with little commensurate development or redeployment of management services. Organizationally, the entire system is highly centralized, with hierarchical decision-making procedures that run from the national headquarters to provincial, district and institutional levels.

Moreover, the structure and organization of the system raise a number of problems that have a bearing on the management of education. These include:

1. The top-heavy management at national and provincial levels arising from the centralized structure of the system.
2. Long lines of communication and decision-making, resulting in inefficiencies.
3. Because matters regarding planning and management are decided upon at Ministry headquarters, in liaison with Provincial Education Officers, district and institutional authorities have lost the power and authority they once exercised in the management of education.
4. The appointment, confirmation, promotion, retirement and disciplining of teachers is characterized by protracted bureaucratic procedures that discourage the exercise of initiative and contribute to low morale among teachers. The Teaching Service Commission, which performs these functions, is centrally located and has the mammoth task of serving the needs of about 50,000 teachers and other educational staff.
5. The excessive centralization of power and authority is accompanied by over-reliance on civil service procedures that have severely compromised efficiency in the areas of planning; policy formulation, analysis and coordination; information

and records management; human resource development and management; and financial and material resource mobilization and utilization.

6. Little coordination exists between units, departments and sections within the Ministry. As a result, conflict may arise when discharging common responsibilities.
7. Due to the unclear chain of command, adequate supervision and performance criteria have been lacking at the points of delivery.
8. Record keeping and the whole area of information systems are quite inadequate.
9. The structures for planning and performance monitoring are deficient.
10. Management training and career development programmes are under-developed and are not focused on improvements in the performance of individuals and organizations.
11. Serious gender imbalances occur at senior and managerial levels in schools and colleges. In 1994, there were no female heads in any of the primary or secondary colleges for teachers, while only 2.3% of the secondary school heads and 1.1% of those in primary schools were female.
12. Ongoing problems are experienced with teacher deployment. There is an over-supply of trained primary teachers in urban schools and a shortage in rural schools, resulting in excessive reliance by the latter on untrained teachers.
13. Although communities have been involved in the development and expansion of schools, there have been significant limitations in the procedures for establishing educational institutions. The efforts of private proprietors are hindered by bureaucratic procedures and lack of incentives, while Parent-Teacher Associations are constrained by the absence of guidelines about their roles and responsibilities.
14. Despite several changes which have occurred during the past three decades, the Education Act of 1966 continues to set the basic framework for the system. The Act has not been comprehensively reviewed to cater for the changes and developments that have occurred.

In order to remedy the situation that has been portrayed above, the Ministry of Education will undertake a programme of

- *decentralization*: devolving key functions and powers to points of delivery;
- *restructuring*: reorganizing the Ministry so that it is more responsive to the changing needs and requirements of society; and
- *systems management*: improving all aspects of management systems in education.

Decentralization

In keeping with the democratic and liberal philosophy that Zambia has embraced, the Government has adopted the policy of decentralizing control and management of the education system. This is being effected through the establishment of Education Boards at school, college and district level

Decentralization of the educational system in Zambia entails:

1. granting legal and financial powers over education to local units. Central authorities will normally exercise only indirect supervisory control over such units.
2. entrusting local units with administrative responsibility and discretion to plan and implement programmes and projects or to adjust central directives to local conditions, within guidelines set by ministry headquarters.
3. transfer of managerial responsibility for specifically defined education functions to organizations that are outside the regular bureaucratic structure of the education system and that are only indirectly controlled by the Ministry of Education.
4. Government divesting itself of some responsibility for ownership, power and control over education and the transfer of these to voluntary organizations or private enterprises.

The advantages of decentralization are numerous:

- It relieves the Ministry of much of the burden of day-to-day business, thereby enabling senior officers to give attention to their principal functions.
- Decisions will be made closer to the points of delivery, where the action is taking place. This will allow for greater responsiveness to local needs.
- The implementation design embodies active community participation in the delivery of educational services and in decisions on the use and management of resources for schools and colleges.
- By entrusting greater power and authority to education managers at all levels, while simultaneously ensuring the effective involvement of the community, decentralization will promote a sense of ownership and responsibility for educational institutions.
- There will be an improvement in capacity building at national and local levels.

Within the decentralized system, Ministry headquarters will continue to be responsible for:

- policy analysis and development,
- strategic planning for the system as a whole,
- resource mobilization and allocation,
- the development of the national curriculum,
- quality assurance and the setting of standards,
- monitoring and evaluation of outcomes,
- establishing an effective accountability system,

- determination of overall personnel policies for the system, and
- collecting and analyzing data.

The establishment of Education Boards will bring extensive changes in existing power and authority structures. It will also transfer a number of responsibilities and functions to points where presently they do not exist. This implies the training and re-orientation of key local personnel so that they can perform efficiently and effectively. The building of capacity through this training is an essential pre-condition for the success of the decentralization policy.

Restructuring the Ministry Of Education

The Ministry needs an administrative structure that is appropriate to managing the diverse sub-sectors in their present size and that will promote their rational development in accordance with nationally adopted objectives. This implies a fundamental review of the roles of all units, sections and departments in the Ministry, with a view to clarifying, streamlining and, where appropriate, strengthening their functions. The decentralization of certain powers to local level will be accompanied by some redeployment of personnel to the provinces and districts and within headquarters. With the majority of routine and repetitive management tasks being dealt with at local levels, the Ministry will be able to reorganize itself into a leaner and more cost-effective organization that will be more efficient in the delivery of educational services.

The important core functions that will remain the responsibility of ministry headquarters require that the Ministry reorganize itself in a way that is conducive to their implementation. This will necessitate

- strengthening its capacity in the critical areas of policy formulation, strategic planning, budgetary and financial management, and quality assurance;
- developing and putting in place an effective and transparent system of accountability for all levels of education; and
- developing an efficient communications system with its provincial and district offices and with all its institutions.

Systems Management

There is considerable room for improvement in the management systems in education. The basic legal framework for the system, the Education Act of 1966, is in need of comprehensive revision so that it can provide a democratic and liberalized foundation for educational provision, rationalize the numerous items of subsidiary legislation, and reflect educational conditions as they exist. Moreover, changes in the education system have consequential changes on other systems that may necessitate further changes in legislation. A case in point concerns the Teaching Service Commission and the powers which will be entrusted to Education Boards.

At the level of information, a pressing need is for accurate, up-to-date and easily accessible information about educational personnel. The absence of this leads to costly and demoralizing delays in dealing with teachers. There is also a lack of comprehensive, reliable, up-to-date and accessible data on many aspects of the system - school facilities and infrastructure, enrollments, teaching supplies, and finances, to name but a few. The non-availability of this information hinders not only the day-to-day management of the system, but also the planning for future needs. Comprehensive information is at the heart of good management and is basic in planning. It is also a vital ingredient for policy analysis and development.

At the level of personnel, educational managers are appointed on permanent and pensionable conditions of service. This contributes to inefficiency, since it is very difficult to have such appointments terminated on the grounds of failure to perform satisfactorily. A further problem has already been noted, namely the serious lack of gender balance in managerial posts, with very few females in positions of responsibility.

Organization and Management of Education

Decentralization

Policy

1. The Ministry will decentralize and devolve power, authority and the relevant functions from national and provincial headquarters to the districts, colleges and schools.
2. Within the decentralized system, Ministry headquarters will retain responsibility for key national functions in the areas of
 - making legislation;
 - formulating policies;
 - planning at national level;
 - resource mobilization and allocation;
 - developing the national curriculum;
 - setting national standards;
 - monitoring and evaluation;
 - collecting and analyzing data; and
 - providing effective mechanisms for accountability at different levels.

Strategies

1. The Ministry will establish Education Boards at district and institutional levels.
2. In line with the needs of the restructured and decentralized system of education, the Ministry will advocate for a review of the role of the Teaching Service Commission.
3. Key personnel at district, college and school level will undergo re-orientation and training to enable them to perform effectively in the decentralized system.
4. The Ministry will channel financial disbursements directly to the points of delivery.
5. To ensure that all financial disbursements are properly applied and accounted for, the Ministry will institute financial controls at district, college and school levels, and will require strict adherence to financial regulations and guidelines.

Restructuring the Ministry of Education

Policy

1. The existing organizational structure of the Ministry of Education will be changed so that the restructured Ministry may:
 - (a) be more responsive to the changing needs and requirements of society, and
 - (b) improve its operational efficiency and effectiveness.

Strategies

1. With a view to clarifying, streamlining and strengthening their functions, the Ministry will review the roles of all of its units, sections and departments.
2. The Ministry will strengthen its capacity in the critical areas of policy analysis and development, strategic planning, the identification of priorities, and the evaluation of educational outcomes.
3. The Ministry will devise an efficient system of communication, externally with all of its institutions and internally between its various units.
4. The Ministry will develop and put in place effective and transparent systems of accountability at all levels of the system.

Systems Management

Policy

1. **The Government will develop a legal framework for the education system that will accord with the democratic and liberalized nature of society and will respond to the realities of current educational provision.**
2. **The Ministry will improve management systems in the education sector.**
3. **The information base needed for routine management of the system and for the development of education policies will be strengthened and extended.**

Strategies

1. The Ministry will carry out a comprehensive revision of the Education Act of 1966,
2. In order to improve personnel management, the Ministry will establish and maintain a comprehensive teachers' management information system.
3. In order to facilitate planning, monitoring and supervision at all points of the system, the Ministry will
 - revise the existing data collecting instruments, and

- establish and maintain a comprehensive education management information system.
4. For the purposes of enhancing efficiency, the Ministry will make the post of educational manager (including that of head of a school or college) a secondment or contractual position.

Chapter 13

Partnerships In Educational Provision

Background

Historically, formal education in Zambia originated through the work of voluntary agencies, dominant among them being Christian missionaries. From the time that an organized educational structure was established in the mid-1920s up until independence in 1964, the basis of educational provision was a wide-ranging partnership that involved central and local government agencies, missionary societies and the private sector.

Guiding principles in development policies after independence were the establishment of state control in all areas of public life and the free or subsidized provision by a socialist state of basic services. These principles struck hard at the policy of partnership in educational provision as the state assumed to itself increasing responsibility for the running of schools, the management of education at all levels, and the financing of the system. Under the new arrangements, pressure was placed on the voluntary agencies to surrender control of their schools, while the education functions of local education authorities were taken over by the central government. The facts tell the story: in 1964, approximately 1,000 of the primary schools were run by voluntary agencies, a further 700 by local education authorities, and less than 100 by the central government. In 1967, government schools numbered 1,562, against 914 agency schools, while by 1979 government primary schools totalled 3,431 and only 62 voluntary agency schools remained.

The virtual monopoly exercised by the Government over the provision of education, particularly at the primary level, had several negative consequences. Contrary to the provisions of the 1966 Education Act, it greatly restricted parents' rights to choose the type of education they wanted for their children. It failed to tap the valuable human and financial resources available in the non-governmental sector. It fostered the oppressive culture of over-dependency on the state that served to prevent communities from tackling their own problems. Finally it was incapable of responding to all the needs and failed to provide education in either the quantity or the quality that individuals and the country needed.

Restoring Partnerships in Educational Provision

An overall objective of national policy in education is to establish new and revitalized partnerships, involving all providers of education and all levels : partnerships between the Ministry of Education and other government ministries; partnerships between the Government and non-governmental organizations, the private sector, local communities, religious groups, and families. Effective partnership involves giving attention to the role that cooperating partners can play, formulating policies to guide the partnership, and establishing strategies that facilitate it.

Inter-Ministry Collaboration

Several government ministries are involved in the field of education. Key among these is the Ministry of Education which is mainly responsible for primary and secondary education, teacher training and continuing education, and for much relating to curriculum evaluation and quality control. The Ministry is also responsible for broad policy directions for the public universities. As the principal provider of formal education within the country, the Ministry has extensive management and financial functions.

Other key government stake-holders in education include:

- the Ministry of Science, Technology and Vocational Training (MSTVT), which trains lower and middle level human resources in vocational and technical fields offered in technical, vocational and business colleges;
- the Ministry of Community Development and Social Services (MCDSS), which offers non-formal education programmes that provide functional literacy and life skills to out-of-school youth and adults; and
- the Ministry of Sport, Youth and Child Development (MSYCD), which offers skills training to unemployed youth, provides child advocacy programmes and support systems to ensure that the rights and well-being of the child are protected, and fosters the development of sport.

In addition, several other ministries, such as Health and Agriculture, Food and Fisheries, train staff for their own operations.

Each government ministry involved in educational provision currently works almost in isolation, there being very little coordination among ministries. Consequently, the government approach to educational provision tends to be fragmented. This may lead to wasteful duplication of some services while in other areas there is inadequate provision. To overcome such problems, the Government has adopted an initiative aimed at improving the coordination of policy and programmes in the entire education sector. This initiative, known as the Education Sector Integrated Programme (ESIP), is a sector-wide integration of educational activities, programmes and projects currently under the authority of the Ministries of Education; Science, Technology & Vocational Training; Community Development and Social Services; and Youth, Sport & Child Development.

Community Participation

A major objective of liberalization and democratization is to enhance the involvement of individuals and civic society in development. Community participation in education is one way of realizing this. A principal thrust of educational policy, therefore, must be to give people the opportunity to provide educational services or to improve on what is being offered. Such community involvement should be the rule and not the exception that it tended to be in the past.

The issue of community participation assumes special significance in the light of the fact that the first responsibility for the education of children lies with parents and after that with the wider community in which the family lives. This concept, which underpins the attention that the United Nations Declaration on Human Rights gives to the protection of the parents' right to choose the type of education their children will receive, means that parents and the community have a basic right to participate in education. The state's duty is to support and encourage them in the exercise of this right.

There are different ways in which communities are participating in education in Zambia today. Cost-sharing is one of them. The drastic reduction in public resources for education has resulted in a major part of the direct costs being transferred to parents. Parent-Teachers Associations are active in raising money for various services in schools. Business companies, churches, and NGOs provide support to schools and other institutions in such forms as direct ownership of schools, adoption of existing schools, and support for disadvantaged children. This financial involvement of parents, the community, and the wider non-governmental sector is central to the improvement and expansion of education, within the frameworks of liberalization and constrained government resources for the sector.

Objectives For Community Participation.

Community participation in education will be directed towards meeting three objectives:

1. educational provision;
2. school improvement; and
3. strengthening school-community linkages.

Educational provision involves increasing school places by expanding the educational system through community resources. Communities can participate in educational provision through construction of school buildings, management of schools, maintenance of classrooms, and provision of school furniture like desks and

chairs. Zambia has a long record of this form of community participation, manifested most remarkably in recent years in the upgrading of primary schools to include provision for Grades 8 and 9. A more recent development has been the establishment of more fully-fledged "community schools", that is, schools provided, run and financed by communities to meet their own needs. The Ministry will strongly support developments along these lines and will facilitate the access of such schools to educational resources, training, finance, and donor resources.

School improvement involves several objectives. The most important ones to which community participation should be directed are raising the learning achievements of pupils; increasing the levels of access, participation, retention and completion among girls and other disadvantaged children; improving school infrastructure; and enhancing school credibility among parents and other members of the wider community.

The primary objective for school-community linkages should be to narrow the gap between the school and its community. The school is a community institution. From this it follows that

- the school should play a greater role in the life of the community;
- the community should play a greater role in the life of the school; and
- the school should prepare its pupils to live a rewarding and satisfying life in the community.

Policies proposed elsewhere in this document, such as the establishment of Education Boards, the school as a health -affirming and health-promoting institution, the inclusion in the curriculum of topics relevant to the local economy, and the more extensive use of local languages for teaching initial literacy, should serve to strengthen the bonds between schools and their communities. In particular, the establishment of Education Boards should underline the facts that sole responsibility for education does not lie with the Government and that communities, being the custodians of the schools, must care for and maintain them.

The Ministry recognizes that there are a number of constraints that currently hinder the effective involvement of communities in education.. These include factors like: poverty, restrictive education legislation, lack of communication between education authorities and communities, and unhelpful attitudes of teachers and education authorities to community efforts. Since the aim of the Ministry is to encourage and facilitate the full participation of communities in educational provision, it will take action to mitigate the negative effects of these constraints.

Grant-Aided Institutions

Voluntary agencies, mostly religious bodies, make a significant contribution to educational provision in Zambia through their grant-aided schools and colleges. A grant-aided institution is one that receives from government a grant of 75% of the capital costs of approved projects and an annual grant in aid of running costs. The Government also pays the salaries of teachers and approved personnel at these institutions.

The participation of the voluntary agencies is greatest at the secondary level, where there are 44 schools catering for over 26,000 pupils, that is, for some 13% of the total secondary enrollment. In addition, the agencies own and operate four primary teacher training colleges. Involvement at the primary level is less substantial, partly because in the 1960s and 1970s government assumed most of the responsibility for primary school provision. An important aspect of the relatively small involvement at the primary level, however, is that much of it is devoted to the special educational needs of disabled and handicapped children.

In 1993, following extensive consultations with the voluntary agencies, the regulations governing grant-aided institutions were updated. The new regulations provide for the establishment at each aided institution of virtually autonomous Boards of Management which exercise extensive control over every aspect of educational provision at the school or college. A further significant feature of the new regulations is that they empower the Boards of Management to protect the particular ethos of each institution, through control over the appointment and retention of staff.

The substantially independent Boards of Management in grant-aided institutions are concrete evidence of the Ministry's intention to establish new and revitalized partnerships with non-governmental providers of education. The Ministry continues to appreciate the important role played by the voluntary agencies and will welcome and facilitate any extension of their activities. Subject to satisfying itself that proper arrangements are being made for educational provision of good quality, it will award grant-aided status to schools and colleges established by the voluntary agencies to meet the educational needs of the people.

Role of the Private Sector

The establishment and running of private schools by individuals and organizations is a growing mode of community participation in education. Private institutions which currently provide educational facilities include the following:

1. institutions run on a profit basis:
 - schools established for profit purposes, by individuals or companies, and charging market value fees;

2. institutions run on a non-profit basis:
 - religious agency schools and colleges, some of which charge fees, while others do not;
 - schools established and operated by local or international companies; some of these charge fees, while others do not;
 - communal schools run by local communities and non-governmental organizations;
 - trust schools established for the children of miners, but open to others who can afford the economic fees charged.

The diversity in the types of private schools implies that the sector caters for different types of children. Some private primary schools serve very needy children from poor homes. Other schools cater for children from privileged families. Still others serve children whose parents prefer an education that is different to that offered in a government school and are able to pay the fees. It is this diversity of private schools that makes the sector unique, interesting and enriching to the educational environment in the country. The diversity of the private education sector also draws attention to their development and relationship with Government.

Hitherto, policy and practice in Zambia has not been very supportive of private schools:

1. the Government provided no support or encouragement to private investors in education and did not facilitate their access to financial or other resources;
2. all private schools were treated in the same fashion, as if all had been established for the sake of profit;
3. private schools were denied access to educational resources mobilized from within or outside the country;
4. private school proprietors were not permitted to recruit teachers directly from the training institutions;
5. private entrepreneurs were given no special access to land or plots for educational purposes;
6. teachers in private schools lacked opportunities for professional improvement and were not accorded opportunities to participate in Ministry of Education in-service courses;
7. clear channels of communication and relationship between the Ministry of Education and private providers of education were never established;
8. rules and regulations for the establishment and registration of private schools, arising from the 1966 Education Act, were severely restrictive and inhibited the development of the sector.

This lack of support for the private sector in education has slowed its growth. As a result, private provision accounts for less than 1% of those enrolled in primary schools. At the secondary level, there is more extensive involvement, reaching out to about 7% of current secondary school enrollments, but this would seem to be well below the sector's potential to provide.

Framework for Policy Towards Private Schools

Private schools should be seen from a broad perspective which encompasses a number of considerations:

1. The provision of education is a responsibility that cannot be discharged by any single agency, but necessarily involves a plurality of providers. While the Government has the, obligation to ensure that every person can have access to education, it cannot be expected to supply every human, financial or organizational requirement for this task. It must work in partnership with other agencies, the private sector among them.
2. Regardless of who provides it, education is an investment in the development of people. While it begins as a private good for those who actually receive it, it ends as a public good which brings benefits to the whole of society.
3. Democratic principles and values entail that individuals should be able to exercise their rights - parents the right to choose schools, be these public or private, for their children, and individuals the right to establish and run educational institutions.
4. Because of their greater accountability to parents and responsiveness to market forces, private schools tend to be more cost-effective and efficient than public schools.
5. The development of education, like that of society, does not have to be homogeneous. Private sector involvement in education creates a diverse and rich environment which promotes the well-being of the entire educational system.
6. Constraints on Government's financial resources and increases in population necessitate extensive private sector involvement if needs are to be met.

Acknowledging that as participants in their own right, the proprietors of private schools make their own unique contribution to educational provision, the Ministry of Education will create conditions for their more effective participation. It will establish a policy framework that will lay out the ground rules for private sector involvement in educational provision and that will formally recognize the proprietors of private and other types of schools as partners in the task of providing and improving education. The basis for this policy will be enshrined in legislation that will replace the existing restrictive Education Act of 1966. As indicated in other parts of this National Policy on Education, the Ministry will also facilitate the access of private school proprietors to finance, tax exemptions, land allocation, educational materials, and training for their teaching staff.

Responsibilities of the Private Sector

The private sector in education has responsibilities as well as rights. These responsibilities include:

- ensuring that the education provided responds to the real needs of the country;
- establishing good relationships with national, regional and district education officials;

- establishing good relationships with neighbouring schools of all types and providing for inter-school activities;
- playing a full role in curriculum development, assessment and evaluation, the production of books and materials, examination supervision and marking, and similar activities;
- disseminating good practice and participating in running in-service courses and programmes;
- developing community assistance and service programmes, particularly in schools that cater for children from privileged families.

Partnerships in Educational Provision

Inter-Ministry Collaboration in Education

Policy

1. In order to promote the effective coordination of the education and training provided by various government ministries, the Government will develop a coordinated policy that covers the entire education sector.
2. The integrated sector policy will:
 - promote the rational and coordinated mobilization and use of resources for the sector;
 - stimulate the rational development of human resources in the sector;
 - ensure the provision of quality education to all children, youths and adults;
 - respond to skills training needs of the formal and non-formal sectors of the economy; and
 - integrate in one policy framework the various elements of education and training that are dispersed across the education sector line ministries and the activities of non-governmental organizations and private voluntary organizations.

Strategies

1. The Government will prepare legislation to cover the entire education sector.
2. Within this legal framework, the Government will:
 - facilitate the development of a coherent integrated education system;
 - create a coordinating secretariat to oversee and administer the process of forming the integrated education sector; and
 - establish an inter-ministerial committee to guide the secretariat in the implementation process.

Communities

Policy

- 1. Guided by the principle that communities have a basic right to provide education at all levels, the Ministry will encourage and facilitate full participation of communities in educational provision.**

Strategies

1. The Ministry of Education will:
 - review existing legislation and its effect on community participation, particularly as this relates to the establishment and running of schools;
 - review the existing pattern and organization of community participation;
 - monitor the working of community participation to ensure that it involves the entire community, including women, the unemployed, and those without children in schools;
 - find ways of improving the attitudes of teachers and education authorities to community participation in education;
 - evaluate the effectiveness of existing school-community linkages;
 - monitor the impact of community participation in education on the access, participation, retention, and achievement levels of girls and other groups of disadvantaged children;
 - monitor the effect of community participation on the attitudes of the beneficiaries to schools;
 - support NGOs and others who provide education and training for vulnerable groups like orphans, street children, girls and persons with impairments.

Grant Aided Institutions

Policy

1. Recognizing the significant contribution that the voluntary agencies have made to primary, secondary and teacher education, the Ministry of Education will welcome and facilitate the establishment of further grant-aided institutions.

Strategies

1. Legislation to replace the 1966 Education Act will take into account the substance of the 1993 regulations for grant-aided institutions.

The Role of the Private Sector

Policy

- 1. The Ministry of Education recognizes that the proprietors of private and other types of schools are partners in their own right in the provision of education.**
- 2. The Ministry will create conditions for the more effective participation of the private sector in educational provision.**

Strategies

1. The Ministry of Education will replace the Education Act of 1966 with legislation that protects and promotes the rightful participation of the non-governmental and private sector in the provision of education.
2. The Inspectorate will provide private schools with professional support in the form of advisory, training and evaluation services.
3. The Ministry will facilitate the access of private schools to concessionary loans, land for school development, tax concessions, educational materials, training courses, and donor funds.
4. Private schools that admit pupils from poor or vulnerable groups will be eligible to receive bursary assistance on behalf of such pupils.
5. The Ministry will ensure that the proprietors of private schools are suitably represented on appropriate education committees and that staff from such schools are involved in various educational activities.

Chapter 14

Capacity Building

Background

From independence in 1964 to the end of the 1970s, education policy was directed towards steady expansion of education facilities and improvements in quality. Significant achievements were made in increasing school enrollments, training teachers, producing and supplying textbooks and other education materials, developing school libraries, and maintaining quality in the educational system.

However, the economic decline experienced throughout the 1980s led to a slowing down, and in several cases to a reversal, of earlier progress in educational development. By the early 1990s, poor funding of the system had resulted in a general deterioration of standards. The quality of teaching and learning had been compromised by the scarcity of teaching and learning materials. Infrastructure and equipment were run down due to misuse and lack of maintenance, as well as to vandalism. Additionally, the capacity to manage the system had deteriorated as rapid expansion went hand in hand with lack of investment in management training and lack of resources for effective educational supervision. The inadequacy of transport and communication systems impeded data collection, in-service training and a wide range of normal day-to-day activities. Poor conditions of service demoralized teachers and resulted in low levels of performance. Overall, by the beginning of the 1990s the system was so run down in all areas that the first need was for its resuscitation.

Against this background, the Ministry of Education recognizes that the efficiency and effectiveness of the educational system depend to a large extent on enhancing its capacity in various areas. In particular there is need to build capacity for the management of the system and for research and development on educational issues. There is also need for the development of an effective transport and communication system that will facilitate the various operations of the Ministry.

Training in Educational Management

Effectiveness in the delivery of education depends heavily on the quality of educational administration. School heads, education officers, and inspectors need

training in educational management and supervision. Educational planners and similar officers need special skills in data generation, analysis and interpretation, planning, resource management, monitoring and evaluation. However, the majority of those occupying supervisory and management positions in the sector have not received relevant training for their posts. Neither has the Ministry had any facility or mechanism for ensuring that those appointed to managerial or supervisory positions could receive relevant training. The few managers who have been trained received their training either abroad or from local institutions that offer general programmes not specifically directed towards educational management.

This state of affairs has led to inefficiencies and poor performance in the management and supervision of the system. Educational managers at all levels need training in various skills, both technical and social. Both types of skills are important in the execution of their work. The required skills include management functions of organizing, staffing and leading; human resource development or staff training; completion of confidential and statistical reports; computer skills; managing change; research skills and writing up project proposals; control of physical resources and assets; industrial law; visionary leadership and the ability to communicate the vision to staff, decision making; organizing and chairing meetings; and personnel management skills, including record keeping and staff appraisal.

To improve on this situation, the Ministry of Education will train its educational managers and supervisors to enable them to carry out their functions effectively. The first requirement is the development by the Ministry of a strategic framework for management training for the sector. The framework will give explicit, achievable objectives together with criteria for evaluating the effectiveness of the training. Education management training will be linked to the needs of the sector, as identified periodically through needs assessment studies. The strategic framework will also include broad guidelines on how the training will be delivered and its role in career development. Specifically, the Ministry will make appropriate training a pre-condition for appointment or promotion to managerial and supervisory positions.

National Institute of Education

In order to address the deficiency in training facilities for educational managers the Ministry, in liaison with relevant higher institutions and universities, will establish a National Institute of Education. The need for such an institute arises because institutions which currently offer some form of education management training either do so only as a segment of more broadly based training or can accommodate only small numbers. No institution is wholeheartedly in the field of training for educational managers, offering practical programmes of the kind required by the Ministry. Neither can any of the existing institutions make a meaningful impact on the large number of serving and new officers who stand in need of this training.

In addition to initial training, the National Institute of Education would provide regular in-service training to serving officers and would coordinate all management training in the Ministry of Education. Other key functions of the Institute would be to coordinate the work of the primary Teacher Training Colleges and to provide in their regard for quality assurance, and to conduct research.

Programmes at the University of Zambia would complement the work of the National Institute of Education. The university programmes would be of longer duration and of a more academic nature, leading to the award of degrees and diplomas. Such programmes would meet the staff development needs of the National Institute while at the same time they would cater for senior level managers and supervisors, educational planners, and Ministry research personnel. The Ministry will explore with the University the possibility of offering such programmes through distance education.

The Ministry's strategic framework for training in educational management will also provide for short-duration courses, workshops and seminars, targeted at specific needs, and will encourage alternative training approaches such as peer tutoring, self study, and the informal exchange of experiences at the local level.

Training in Educational Management

Policy

- 1. In order to improve the management capacity of managerial and supervisory personnel, the Ministry of Education will train or re-train educational managers to enable them to discharge their functions effectively.**
- 2. The Ministry will develop a strategic framework for management training for the education sector.**

Strategies

1. In liaison with relevant higher institutions and universities, the Ministry will establish a National Institute of Education to provide training in educational management.
2. Appropriate training will be a pre-condition for appointment or promotion to a professional post as an inspector of schools or educational manager.
3. The Ministry will take whatever steps are needed to provide regular in-service training to educational managers.
4. The Ministry will establish a mechanism for coordinating educational management training throughout the entire sector.

Research and Development

Research is important in the operation and development of the educational system. The isolation of successful strategies and interventions, the identification of problems affecting the system or any of its parts, the analysis of policy options that could make the delivery of education more effective and efficient, and the evaluation of policy effectiveness, all require the information and insights that come from well-designed research.

Currently, there is inadequate information on the physical facilities of educational institutions, on the constraints experienced by partners in educational delivery, on the impact of policy, macro-economic, social and political changes on educational access and participation, on various aspects of educational management and financial accountability, and on the actual teaching-learning process within schools and colleges. Thus, there is need for systematic programmes of research to investigate these issues at national and local levels.

Research is also crucially important in the areas of policy formulation, strategic planning and system evaluation. In the process of decentralization, these key responsibilities will remain at Ministry headquarters. The Ministry will support and inform its decision-making in these and similar areas by a more systematic use of research. Some of this research will be conducted by the Ministry itself, some of it by the universities and other research partners.

At the local level, Education Boards will be expected to generate information on educational provision within their areas of responsibility. They can do so by encouraging teachers and teacher trainers to participate effectively in research, consultancy and evaluation work.

Systematic investigations into the many aspects of the educational system necessitate a clearly articulated and well coordinated research programme. The development of such a programme will be undertaken by the Planning Unit and, when it is established, the National Institute of Education. The research wings of these units will identify research priorities that relate to major policy objectives. In other words, the research undertaken is expected to make a difference to the efficiency, effectiveness, and equity of educational delivery at both local and national levels. These units will establish close linkages with the universities and other research agencies, with the objective of ensuring that research is undertaken in priority areas. They will also be responsible for establishing a comprehensive and accessible data base on Zambia's educational system and for the dissemination of research findings to interested parties.

Research and Development

Policy

1. **The Ministry of Education will establish a more systematic approach to the use of research in support of its key activities of policy formulation and evaluation of policy**

Strategies

1. At the central level, the National Institute of Education, in cooperation with the Planning Unit, will be responsible for the development of research by or on behalf of the Ministry's.
2. At the local level, Education Boards will facilitate teachers and others in undertaking research, evaluation and consultancy work on relevant educational matters.
3. In discharging their research responsibilities, the National Institute of Education and the Planning Unit will
 - identify research priorities in areas related to major policy objectives,
 - establish a comprehensive data base on educational provision in Zambia,

- develop close linkages with the research community in Zambia and abroad, and
- arrange for the timely dissemination of research findings to interested parties.

Transport and Communication

Adequate and reliable transport and communication are of particular importance in expanding educational provision and improving its quality. An efficient transport system is needed for the following purposes:

- enabling inspectors, education officers, planning officers, and guidance personnel to visit schools regularly;
- ensuring the movement and timely delivery of books, teaching materials, boarding school requisites, and examination supplies;
- bringing teachers to resource centres and other central points for in-service education courses, educational seminars and workshops;
- carrying building teams to school sites for development or maintenance work;
- enabling teacher training institutions to supervise student teaching practice;
- facilitating desirable inter-school relationships and the promotion of sport and other activities, especially in rural areas.

Transport is also important in the daily movement of pupils and teachers to and from schools in urban areas and in the periodic movement of large numbers of boarding pupils. Late-coming to school of both pupils and teachers, which disturbs the smooth running of the educational programmes, can frequently be attributed to transport problems.

At the level of school management and administration, efficient transport and communication are needed to ensure rapid communication between and among Ministry headquarters, provincial and district offices, and all schools and colleges.

These various needs require an adequate fleet of vehicles allocated to and administered by the Ministry of Education, an efficient public transport system, and an adequate and properly functioning telecommunication system.

Current Situation

The Ministry experiences an acute shortage of transport at all levels. Many of the vehicles that it operates have been provided by donors, principally for use in donor supported projects. Local resources have been insufficient for the purchase of the large fleet of vehicles the Ministry requires in serving more than 4,300 educational institutions spread across the country, with almost 50,000 educational personnel and

two million pupils. Almost no primary schools have vehicles, although many are very remotely located and a number provide for children with special educational needs. It was estimated in 1994 that only about a quarter of the secondary schools had any form of institutional transport.

With the help of donor assistance, the situation is better at teacher training institutions, though the need for additional vehicles remains pressing in most colleges.

Compounding the problem of inadequate transport is the fact that transport sections at all levels are poorly staffed and managed. Few of the transport officers, mechanics and drivers employed by the Ministry are suitably qualified. This contributes to rapid deterioration of vehicles and the need for more frequent maintenance. Since maintenance is carried out at private sector garages, which are expensive, the Ministry is frequently unable to meet maintenance costs. Moreover, the monitoring systems that are in place are not always sufficient to prevent irresponsible use of vehicles or their being appropriated wrongfully for non-educational purposes.

The communication system serving the Ministry and its institutions is likewise poor. Communication with schools and colleges is hampered by unreliable and expensive postal facilities and by a severely restricted and ill-functioning telephone system.

Education's Public Transport Needs

Although the transport problems of pupils and teachers may seem peripheral to the central concerns of the Ministry of Education, they greatly affect the activities of schools and colleges. Because of poor transport, children and teachers in urban schools arrive late, while boarding schools must sometimes open late and close early. Furthermore, the unsatisfactory routing, and sometimes the inadequacy, of public transport in urban areas make it necessary for many children to walk long distances to school, leaving them so tired that they are not able to learn properly. Long walking distances to school also adversely affect girls' participation and increase the risks that they will be sexually harassed. The proximity of a school is, in fact, a major factor in determining whether parents are likely to choose it for their children, especially their girl children.

Recent research on the transport needs of school pupils indicates that they depend very heavily on public transport, but find it expensive, unreliable, inadequate and unsafe. This finding applies in rural and urban areas. A factor contributing to the high level of pupil mobility in urban areas is the location of schools, many of which are not sited close to where the majority of children live. This calls for better planning in the location of urban schools and for clearer delineation of catchment areas. A related issue, which is also of concern to the Ministry, is the need for road safety education, particularly when children have to travel so extensively.

Transport and Communications

Policy

- 1. The Ministry of Education will improve the transport and communication systems that serve it and its institutions.**
- 2. The safety of school children and the transport needs of pupils and teachers are legitimate concerns of the Ministry.**

Strategies

1. In the area of transport, the Ministry will:
 - provide appropriate transport for educational institutions and departments;
 - employ suitably qualified transport officers, mechanics and drivers;
 - make adequate budgetary provision for fuel procurement and vehicle maintenance;
 - strengthen the monitoring and supervisory systems to prevent irresponsible or improper use of ministry vehicles; and
 - negotiate with donors for more flexible allocation and use of vehicles.
2. Education Boards and communities will be encouraged
 - to provide for the transport needs of individual schools, and
 - to arrange with operators of public transport for the transport of school children.
3. The Ministry will negotiate with local government authorities and private operators for the establishment and rationalization of intra-city commuter transport routes.
4. In order to reduce children's long walking distances to school, the Ministry will
 - give priority in school rehabilitation to badly deteriorated schools, so that parents do not abandon them and send their children to schools farther away from where they live;
 - clearly demarcate catchment areas for existing urban schools and require school heads to take them into account; and
 - site new schools strategically so that children in the catchment area do not have to travel far to school.

- 5 In order to promote road safety the Ministry will
 - include road safety education in the social studies syllabus for lower and middle basic education;
 - arrange for the re-introduction of traffic wardens; and
 - negotiate with local government authorities about creating walking and cycle tracks, and other safety precautions, in the vicinity of schools.
6. The Ministry will seek to link schools and districts to ministry headquarters and to each other through appropriate communications systems.

Chapter 15

Quality Assurance

The Inspectorate

The inspectorate is an important sub-sector within the Ministry of Education for ensuring the quality of education in primary and secondary schools. Inspectors have a variety of professional responsibilities that relate quite clearly to the quality and effectiveness of school education. In addition, they are frequently entrusted with other tasks that are more of an administrative nature and that are not so closely related to actual school work.

Advisory and Evaluation Functions

Essentially, inspectors have an advisory and an evaluation function in relation to educational provision. Their advisory function is performed through school inspections. On such visits, their principal concern is with improving teacher effectiveness and school organization. As disseminators of good practice, they stimulate teachers to examine their lesson preparation and follow-through; their teaching strategies, the way they are developing or using curriculum materials, how they evaluate pupils, and how they organize the teaching session. They also advise school heads on such issues as time-tabling, the effective use of teachers, and providing good leadership to all in the school.

The evaluation function of the inspectorate is concerned with assessing the quality and effectiveness of actual educational provision in individual schools and in the system as a whole, and reporting on this to the appropriate authority. At the school level, this involves developing a set of achievable indicators in the various areas of school operation and evaluating schools and individual teachers on performance in relation to these indicators. The purpose of such evaluation is to determine how successful schools and teachers are in working towards prescribed educational objectives. The inspector's evaluation also provides occasion for taking any necessary corrective measures.

At the system level the evaluation function requires the examination of major curriculum areas and materials, school resources and staffing levels, examination and assessment impacts, pre-service and in-service training programmes, and important organizational features. The purpose is to provide information, principally at national level, on factors that are crucial to good quality education, to evaluate whether these

factors are in fact conducive to the quality of the education being provided throughout the country, and to assess what improvements could be made in their contribution. This information will either provide the basis for immediate adjustments or will form part of the information base needed for the ongoing development of policy in education.

Other Functions of Inspectors

Because of the nature of their responsibilities, school inspectors are expected to have an intimate knowledge of the working, problems and successes of schools, of the education system as a whole, and of its personnel. They are regularly called upon to draw upon this knowledge in advising on staff matters - postings, promotions, discipline. They are also called upon to advise on the material needs of the schools, especially in relation to curriculum materials and educational equipment. Because of their comprehensive knowledge of what promotes effective classroom teaching and good school performance, they are in strong demand as resource persons for curriculum development activities, inservice training programmes, and donor-funded activities directed towards school improvements. They are also required to participate in the preparation of syllabuses for the national examinations, to help in setting questions and, frequently, to participate in the marking. Other calls are Made on their time by professional subject associations, and by commitments to seminars and workshops.

In addition to these very wide responsibilities, all of them connected to a greater or lesser degree with the quality of education, many inspectors find themselves burdened with less pertinent administrative tasks. These include organizing and attending meetings and writing up the minutes and, in the districts, standing in for the District Education Officer during his or her absence.

Decentralization and Quality Assurance

The role of the inspectorate will increase in importance with increasing decentralization. The establishment of Education Boards diffuses responsibility for the provision of education. This makes it of even greater importance that there be effective promotion of standards and monitoring of quality, at district and national levels. Quality assurance through the inspectorate will be the key to the professional success of decentralization. Its role in the new system will be to establish, evaluate and promote the highest standards of quality in educational provision throughout the country.

Constraints on the Inspector's Role

As presently constituted, the inspectorate is not sufficiently well equipped for its grave responsibilities. Inspectors are too few in number for the many tasks entrusted to them, and many have had very little or no specialized training. Districts may have only one primary school inspector, whose responsibility, in consequence, extends to a large number of widely dispersed schools and to a large number of teachers. The situation is equally serious at secondary level, where there may be only one inspector for an entire province. With such numbers, it is not possible for inspectors to visit schools frequently in order to monitor the quality of the teaching and learning. Inspectors' contacts with schools are further curtailed by lack of transport and shortage of funds for the necessary

visits. A recent survey established that on average more than three years may elapse between visits of inspectors to primary schools.

The Central Importance of Contact with Schools

Clearly, little of sustainable value can be accomplished with such intermittent visits. The strength and value of the inspectorate should lie in its closeness to the schools and in its intimate knowledge of all that is going on there. But because of the constraints of numbers and resources, many inspectors have been obliged to replace their rightful contacts with schools by office tasks and duties.

The Ministry wishes to re-affirm that the key role of the inspectorate lies in its maintaining contact with schools and supporting school heads and teachers. It will therefore seek to increase the number of inspectors, and to provide them with the necessary resources, so that they may be able to visit schools regularly and frequently. It will also decentralize the inspectorate and allocate more school inspectors to districts where they can be closer to their proper sphere of work.

Professional Training and Qualifications

The Ministry also acknowledges how important it is that members of the inspectorate be not only well experienced and suitably qualified, but also have some training directed to their professional needs. The Ministry of Education, in collaboration with the university School of Education, is responding to this latter aspect, through a three-month upgrading programme for district inspectors. When the new degree programme in primary education is underway, it will include a special track for school inspectors and counsellors. Participation in this programme would stand inspectors in good stead. It is important, therefore, that it should be enabled to take off, particularly in view of the enhanced importance of the inspectorate in the decentralized education system.

The Inspectorate

Policy

- 1. The role of the Inspectorate is to establish, evaluate and promote the highest standards of quality in educational provision.**
- 2. The Ministry will entrust to the Inspectorate its responsibility for quality assurance in the decentralized system "of education.**
- 3. The Ministry will decentralize the Inspectorate and will allocate more inspectors to work at district level.**

Strategies

1. The Inspectorate will an advisory and training function at school level, supporting teachers and disseminating good educational practices.
2. The Inspectorate will have an evaluative function at school and national levels assessing the quality of educational provision and the steps needed for its improvement at both levels
3. The Ministry will increase the Inspectorate to a size commensurate with its responsibilities, and in particular will bring the teacher-to-inspector ratio up to internationally accepted standards.
4. Emphasis in the work of the Inspectorate will be placed on its contact with teachers and schools.
5. The Ministry will ensure the resources needed for frequent school visits by inspectors.
6. The Ministry will continue to support the professional upgrading of members of the Inspectorate, particularly through their participation in local university level courses and programmes directed to their needs.

Creating Effective Schools

Quality in education would be better assured if schools were dynamic in their pursuit of excellence. There is a clearer understanding today than in the past as to what makes for a really excellent school. Parents have contributed significantly to this clarification. When questioned about decisions to place their children in certain schools, parents say they are influenced by such factors as a wide range of subject offerings, clear focus on the importance of teaching and learning acquisition, possibilities for many kinds of extra-curricular activities, stability in staffing, orderliness, sense of purpose and sensible discipline, emphasis on moral standards, and personal formation of pupils through the whole climate and value system of the school.

Characteristics of Effective Schools

More formal observations of schools that were considered to be really effective have identified five indispensable characteristics of such institutions:

- They have a strong leader who pays unremitting attention to the quality of teaching.
- They have high expectations for the performance of every pupil. No pupil is written off. Standards that are both challenging and attainable by all are set and maintained.
- They have a clear focus on learning, with school time being productively used in a systematic approach to teaching and learning. The school's instructional tasks take precedence over all other activities.
- They have an orderly, controlled atmosphere, with a clear set of general rules. School discipline, which is definite but not rigid, establishes a predictable framework within which the essential teaching and learning tasks of the school can be carried on.
- Evaluation and assessment are used systematically. Learning is monitored closely so that teachers and the school head are constantly aware of pupil progress in relation to established goals.

The Role of the School Head

Two points emerge from these indicators of excellence within a school. One is the vital role that the school head must play. Excellence is not something that happens to a school. It is something that must be deliberately and painstakingly created and maintained. The person with the major responsibility for this is the school head. Before everything else, the head should be an instructional leader who can enthuse teachers and pupils, who can fire them with interest and satisfaction in their teaching and learning tasks, and who can establish an atmosphere that is conducive to the whole purpose of the school.

Good leadership is basic to excellence in schools. However, the current system of appointment does not always ensure that schools get the quality of head they need. Moreover, appointment as a head is permanent, with almost no provision for removal if performance is not satisfactory. This system will be changed, with school heads being appointed on secondment or contract for a specified period of time (an arrangement that will also apply to other education managers). Those who prove their worth during such period may have their contracts renewed. The criterion that will be used to decide on this will be actual performance and success in leading the school forward on the road to excellence. The deciding authority will be the relevant Education Board which is close to the scene of operations and which includes parents with a vital interest in the effectiveness of the school.

The Notion of School Culture

The second point to emerge from an examination of what are considered to be excellent schools is that they have a clear vision of what they are supposed to be doing. They have developed a coherent set of attitudes, values, beliefs, expectations and goals. There is a clearly determined school culture which influences the entire in-school life and activities of all members of the school community, above all, the pupils. Every school develops its own culture, since every school is unique. But the situation in effective schools is that the school vision, and the entire culture and ethos which derive from the vision, sub-serve the primary functions of the school to promote the intellectual and personal development of its pupils.

Such a culture can be consciously developed. Based on the school's vision of its mission, it finds expression in the actual practices carried on at the school on a regular basis. The values, aspirations and traditions of the school provide a justification for everything else it does. It manifests these through the aims it formulates, stories about it; history and its past pupils, its rules and regulations and the way it is organized, the environment it creates for teaching and learning, its assemblies, routine rituals and special ceremonies, the upkeep and appearance of its buildings and surroundings, its distinguishing symbols (colours, mottoes, crest, uniform, etc.). All of these, and other factors, contribute to the corporate culture and identity of the school. All of them can be harnessed to creating a really effective school.

Mission Statement and School Plan

Tools that help schools to become more explicit about what they are striving to accomplish are a mission statement and a school plan. A mission statement is a brief statement of the school's vision for itself in the short-term future. It sets out clearly what the school will attempt to do. It is reasonably broad, without being vague, and is reasonably specific, without being detailed. It is a statement that captures what the school is trying to accomplish in its own particular circumstances. It is a guiding principle with implications for the daily activities of teachers and pupils.

A school plan is a more extended statement of features of school policy and practices. Deriving from the mission statement, it would cover such elements as the school's aims and objectives, clear specifications of learning goals and targets, the pedagogical approaches favoured by the school, the use of available books and educational materials, school policies on assessment and homework, approaches to late-coming, absenteeism and indiscipline, school reports and record cards, and links with parents and the community. A school plan is developed collaboratively by the school staff under the leadership of the head and, where possible, with the participation of the Parent-Teacher Association.

The Ministry believes that it is highly desirable that every school produces a mission statement and a school plan. Through the Inspectorate it will produce guidelines for the formulation and development of these. It recognizes that, since this will be a new concept for many school heads and teachers, the first productions may be very simple. But the very activity of trying to formulate for themselves mission statements and school plans that are relevant to their own immediate circumstances should help school personnel to have a greater sense of purpose and a clearer recognition of what it is they are striving for. Planning for themselves in this way should also give school staff a deeper understanding of the meaning of democracy and decentralization, and should promote their awareness of the extent to which the whole enterprise of education rests in their hands.

The relevant Education Boards will ensure that eventually all schools have mission statements and school plans. Inspectors on school visits will discuss the contents of these with school staff, and will advise both on how they could be used to further the purposes of the school and how they could be developed. They will not, however, use the mission statement or school plan as accountability documents for evaluating the effectiveness of the school.

Creating Effective Schools

Policy

- 1. Every school is expected to be characterized by the pursuit of excellence in the intellectual and personal development of its pupils.**
- 2. Every school should have a clear vision of its role and purpose.**

Strategies

1. Since excellent schools are largely the product of good school management, school heads will be accountable to the relevant Education Board and will be appointed on a contract basis.
2. In collaboration with the school staff and the Parent-Teacher Association, school heads will be expected to promote the cultural and corporate identity of their schools in ways that point always to excellence and effectiveness.
3. Education Boards will ensure that every school has formulated for itself a mission statement and school plan.
4. The Ministry of Education will formulate guidelines to help schools develop their mission statements and school plans.

Chapter 16

Financing The Education System

The fundamental goal of the Ministry of Education is to ensure that every eligible individual can have access to education of good quality. To achieve this goal the education system requires adequate human, material and financial resources. While considerable progress has been made in ensuring the human and material resources required, the Ministry's efforts to reach its goal have been inhibited for several years by the inadequacy of funds.

Since the early 1980s the education sector has suffered from insufficient and declining levels of public funding. Massive reductions occurred in the real public expenditure on the system between 1982 and 1991, at a time when enrollments at all levels continued to grow. During the period 1987-1991 real public spending on the sector fell to less than half of what it had been in 1981-1985, while in 1994 real spending per primary pupil was less than 60% of what it had been in 1985.

There has been no major or sustained recovery from this drop. Since 1989 annual real spending on the sector has been in the range of K35-K40 billion kwacha (1994 values), or US\$70-US\$75 million, for a system which has some 1.5 million students in primary schools, 200,000 in secondary schools, and 12,000 in third-level institutions. Barely 3% of the 1994 GDP arose from public expenditure on education; to this could be added a further 1.5%-2% arising from direct private spending in educated-related areas. Though this was some improvement on the even lower ratios of previous years, it still manifests the inadequacy of Zambia's effort in favour of education. The sector accounts for only 9% of the total public budget, although the Government has made a commitment to raise this substantially. As a proportion of the GDP and of the total public budget, public educational spending in Zambia ranks among the lowest in Africa and in the world.

Efficiency and Cost-Effectiveness

Because education is such a highly labour-intensive industry a large proportion of its spending is non-discretionary. From the outset, funds are committed to personal emoluments, for teachers and others in the system, and cannot be deviated to other educational purposes. In the period 1988-1992 some 83% of the recurrent spending by the Ministry of Education (exclusive of payments for secondary school boarding and grants for the universities) went on personal emoluments. Of the small proportion that

remained, a considerable part had to be reserved for such inescapable overheads as lighting, water and communications.

The end result was that very little of a seemingly large budget was available for spending on such directly educational areas as school materials and equipment, in-service training, or inspectors' visits. The outcome was that schools were relatively well-staffed, but without the resources needed for their operations. In these circumstances teachers could not work effectively; inspectors could not visit schools; donor-supplied books and other materials that were 'dropped' into schools did not have the desired effects because teachers were given no guidance or training on how to use them. This use of funds in ways that did not lead to the accomplishment of goals shows that they were being used inefficiently.

This inefficiency also manifested itself in the large proportion of the education budget that was transferred to students, in the form of bursary and boarding payments, for their personal welfare. These transfers have regularly accounted for more than 10% of the total recurrent budget for education. At the secondary school level, government provision for the direct costs of boarding (exclusive of salaries for cooks and kitchen hands) absorbs between a quarter and a half of total spending. Underlining the inefficiency involved is the fact that resources of this magnitude are committed to transfers whilst laboratories do not have science apparatus or supplies, classrooms are inadequately furnished, and buildings are allowed to deteriorate.

The failure to provide adequately in the education budget for capital developments and the maintenance of infrastructure provides further instances of not using available resources to the best purpose. An aspect of this that recurs annually is the inadequacy of counterpart funds for donor-assisted undertakings. The non-availability of local funds frequently slows down the implementation of projects, with consequential adverse-effects on their overall cost.

Addressing these issues requires a number of interrelated measures. One is to improve efficiency through better management, with particular attention being paid to the management of the costly human resources. This implies more strict adherence to staffing norms, better deployment of teachers, ensuring that every teacher on the payroll teaches for the equivalent of a full working week, and the removal of non-existent teachers from the payroll. It also implies strict financial discipline and accounting, with the proper maintenance of commitment registers and the strict observance of budgetary limits on expenditure. While progress must be maintained towards broadening the curriculum, especially in secondary schools, care must also be taken to eliminate superfluous or unnecessarily costly items.

Better budgeting would also enhance efficiency. In order to achieve this, the Ministry will move gradually towards the introduction of programme budgeting. This will result- in Ministry funds being allocated and disbursed more in accordance with actual programmes and projects, and less in accordance with an incrementally designed annual budget.

Transfer payments will be reduced, as a proportion of the total budget and of the budgets for the different levels-of education. While it will still be necessary to maintain and even to enlarge bursary schemes, more direct control will be exercised over this large area of expenditure. Direct government provision for institutional boarding costs will be progressively reduced, while third-level students will be awarded bursaries on a loan instead of on a grant basis.

At the level of the capital budget, the Ministry will provide each year for local funds for the maintenance of infrastructure, judicious developments necessitated by the increase in population, and the purchase of equipment and furniture for schools and colleges. It proposes also to service both donor and counterpart funds from a common account base within the Ministry, based on common principles and regulations. This should lead to more efficient use of donor funds and should accelerate the implementation of projects. It would also help to build up the Ministry's capacity to manage resources and to facilitate the smooth integration of donor-funded projects into its programmes.

Equity

For a long time, the Ministry of Education has been concerned that its resources are not used in ways that promote equity, giving each pupil just and fair treatment, irrespective of age, sex, place of residence or socio-economic status. Many studies have shown that boys draw proportionately more benefit from education than girls, that urban residents are favoured more than the rural population, and that the better-off in society can appropriate to themselves a greater share than the poor of the finances deployed in education. A striking example is the large discrepancy between public expenditure per student at primary school and university levels. In 1993, for every kwacha spent on a primary school pupil, the Government spent K164 on a university student. This greatly exceeds what occurs throughout Africa, where public expenditure per university student might be fifty times that per primary pupil, and is totally at variance with the situation in developed countries where public spending per university student may be no more than five or six times the spending on a primary school pupil.

This large disproportion arises partly because so much is paid by way of grant for the personal support of university students, and partly because of the low levels of expenditure on primary education. It arises only indirectly from the public subsidies provided for the universities. Though generous in relation to available national resources, these latter are barely adequate for the effective functioning of the university system. Hence, the strategy for reducing the existing disparity in per capita spending at the two levels does not require that university subventions be reduced. It does, however, necessitate that less be paid by way of grant for student support and that a larger volume of recurrent funds be spent on the primary schools.

Cost Sharing

Given the limited extent of public resources and the legitimate competing demands of other sectors of the economy, it is clear that government budgetary allocations alone will not be sufficient to ensure quality education for every eligible person. Hence, there is immediate need to extend arrangements for both the financing and provision of education. This will involve strengthening partnerships with other government ministries and building alliances with district councils, communities, private providers of education, voluntary organizations, and beneficiaries.

However, increased participation by communities in payments or provision for education must take account of what they are already paying, their ability to pay even more, and the quality of service they are receiving. It is estimated that in 1993, private expenditures by parents and beneficiaries accounted for 44% of gross national expenditure on education, government financing accounted for 50%, and donor aid for 6%. Private expenditure includes spending on items such as school uniforms and transport that would not appear in national accounts, but does not include community labour costs in self-help activities (or the free child labour that schools use extensively in their production units).

The ability of families and communities to contribute more than at present to the costs of education is limited by the widespread poverty in the country. The Ministry, therefore, will ensure that whatever measures it introduces will be such that they will not make the participation of the poor, the handicapped, girls, or other vulnerable groups more difficult. This applies above all at the foundation level of the system, in Grades 1-9.

Hence, as noted earlier, District Education Boards will not be authorized to require the payment of tuition fees in basic schools. Moreover, the Ministry will issue guidelines to the Boards on operating textbook cost-sharing schemes (and decentralized procurements), with provisos that the ability of rural and poor families to pay should override other considerations. However, high school and college Boards may impose appropriate tuition and boarding fees, but a safety net of bursaries and scholarships will protect the access of the poor and disadvantaged to these institutions. Further, all Boards will be required to generate income for the maintenance of infrastructure and plant.

Some municipal councils already have the administrative and financial capacity to raise additional resources for education, through local forms of taxation. With the devolution of increased responsibility to councils across the country, others should be able gradually to assume more financial responsibility for educational provision and financing in their areas. The representation of councils on Education Boards will alert the local authorities to the educational needs in their districts and prompt them to

respond. Councils should clearly expend some of their locally generated revenues on school rehabilitation and on student support. The revival of locally financed bursary schemes would be a step in this direction.

Up until some years ago, industries were required to pay an educational levy that was destined as a contribution to the costs of educating and training future personnel. The yield from the levy in its final years was the equivalent of more than 10% of the total budget for education. This is a substantial amount which, if it were available, would greatly enhance the capacity of the Ministry to respond to critical needs in the education sector. The Ministry will seek to have such a levy re-established, for payment by industries and business houses, with the funds realized being remitted to a trust fund established by the Ministry.

To promote private sector participation in the provision of education, the Ministry will provide incentives by way of access to curricula, educational materials, and training of personnel. In cooperation with the relevant ministries and authorities, it will also seek to provide incentives for the establishment of private educational institutions, in the form of land allocation, tax rebates, exemptions from rates, and guarantees that would facilitate the access of private entrepreneurs to capital for investment in education and training.

There has been growth in recent years in the contribution of the private sector to human resource development, outside the framework of either of the two ministries with responsibility for education and outside the public sector framework as a whole. Instances are correspondence colleges and numerous commercial, accountancy and secretarial colleges. The Ministry of Education supports these initiatives. Once it has satisfied itself as to the academic quality and integrity of the programmes on offer, it will accord due recognition to the qualifications obtained. The Ministry also welcomes private initiatives by the publishing and other industries to respond to the needs of the sector.

Accountability

The three principal suppliers of finance for education are private households, public and private enterprises, and the donor community. These suppliers allocate their resources to education either directly by paying fees to the end users, that is, the schools and other educational institutions, or indirectly by transferring their funds, principally in the form of taxes and donor aid, to the Government which in turn makes allocations to the various public sectors, including education.

When the suppliers of finance pay directly for educational services, they maintain strong interest in and concern for the way their funds are used. This implies the direct accountability of educational institutions or authorities that receive these funds to parents and other providers. When the funds pass to education authorities

through the channels of Government, the accountability is more to public authorities than to parents or other suppliers of finance. Donors usually require that their funds be accounted for either directly by the Ministry of Education as such, or by the projects, activities and institutions supported by such funds

Past accountability systems and procedures have not been fully satisfactory. Public funds have been misspent in the Ministry and its institutions; donor funds have been mis-applied; private funds raised by Parent-Teacher Associations and in other ways have been misused by school authorities. No matter what the circumstances, this is quite unacceptable. But it is even more unacceptable given the circumstances of national financial stringency and the deep and widespread poverty of families, the principal providers of finance for education. The democratic principle of accountability is one of the pillars on which Zambia's educational policy rests. Hence, the Ministry of Education will institute whatever measures are necessary to ensure that all government, donor and community funds for education are properly utilized and accounted for.

The establishment of Education Boards will accentuate the need for greater accountability. One purpose of this decentralization process is to enable districts, schools and colleges to respond flexibly and speedily to perceived needs. The current economic stringency necessitates a high level of efficiency in the re-deployment of limited educational resources, but the existing administrative machinery may constitute a serious obstacle to this. The autonomy over funds that decentralization will permit should conduce to their being used in a more efficient manner. The price that must be paid for this increased autonomy is greater accountability.

To ensure the best possible use of available resources and to allow for full public accountability, the Ministry of Education will establish effective systems at central, district and institutional levels for safeguarding the transparency, effectiveness and efficiency with which resources are used. It will do this by the dissemination of suitable financial guidelines, strengthening internal controls, instituting supervisory checks, and providing for audits of the accounts and procedures of Boards. The essence will be to ensure that funds from whatever source have been properly accounted for and have been used for the intended purpose, that measures are in place to prevent (or promptly detect and deal with) fraud and losses, and that good educational value is being obtained for the moneys being expended.

Income-Generation

Various units within the Ministry of Education have potential for generating direct revenues for the education sector. At the very least, such units should be self-sustaining, generating sufficient income to meet their personnel and running costs. At present, this potential is largely untapped. Instead, a substantial volume of scarce public resources is directed towards meeting the costs of these units. The Ministry will change

this practice by establishing suitable units as cost centres which will be required to sustain themselves from their operations and to contribute to the general expenses of the Ministry.

Donor Support for Education

More than twenty bilateral and multilateral donors provide aid for education and training in Zambia. The estimated total disbursement in 1992 amounted to \$30.3 million and in 1993 to \$32.1 million. Recent years have seen some major changes in the donor financing of the sector. One is an increase in the number of donors. Arising from this, assistance for the sector in the 1990s is more than double that provided in the 1980s. In addition, the focus of attention has changed. In the 1980s donors gave strong support to secondary and higher education, but relatively little to primary. A significant number of donors now provide aid for primary education, while support for other levels has been somewhat reduced.

The increase in the number of donors has brought a welcome increase in the resource flows for education and has resulted in significant improvements in educational provision throughout the country. Without donor assistance, schools would be more bereft than they are of books and learning materials, the infrastructure would be more decayed, Ministry officials would be less mobile, teachers would receive less professional development, information on the system would be scarcer, and hopes for substantial improvement would be more remote.

The increase has not been without its problems. One is the sheer scale of dealing with so many different donors, each with its own legitimate need for access to hard-pressed administrators, its own data and information requirements, and its own monitoring and evaluation procedures. A further problem lies in generating a sense of Ministry ownership for projects and activities that may respond more strongly to donor perceptions than to perceived needs within the Ministry. In the process, the local vision for educational development may give way to donor-driven initiatives.

As noted already, the Ministry has had difficulty in ensuring the availability of the counterpart funds without which donor-funded activities may not be able to proceed. At the management level, projects have tended to develop a life of their own and to subsist on the fringe of the Ministry, without being thoroughly integrated into its programmes. Accentuating this problem is the fact that projects or activities which run in parallel with the Ministry's activities provide little opportunity or challenge for the development of the Ministry's own resource-management capacity. There has also been an absence of an effective coordinating mechanism to establish clear priorities, be well informed on all aspects of donor involvement at every level of education, and determine agreed standards and implementation procedures.

Financing the Education System

Policy

1. The Ministry recognizes that enabling every qualified individual to have access to relevant education of good quality necessitates adequate public financing for the recurrent and capital needs of the education sector.
2. The principles of efficiency, equity, cost sharing and accountability will be the guiding principles for the Ministry in the financing of education.
3. The Ministry will institute whatever measures are necessary to ensure that all government, donor and community funds for education are effectively and properly utilized and accounted for.
4. Those who are to profit from education will pay a proportion of the costs, appropriate to the level of education and subject to the ability to pay.
5. Cost sharing measures that the Ministry may introduce will take special account of the situation of the poor and vulnerable and will be such that they will not make their participation more difficult.
6. The Ministry will commercialize those of its units which have potential for income-generation.

Strategies

Efficiency and Budgeting

1. Efficiency in the use of resources for education will be improved through better management, increased accountability, and better budgeting. The Ministry will pay particular attention to efficiency in the management of human resources and the deployment of teachers.
2. The Ministry will provide in its annual capital budget for funds for infrastructure maintenance, the purchase of educational equipment, and judicious school expansions.

3. Ministry of Education funds will be allocated and disbursed in accordance with actual programmes and projects rather than in accordance with an incrementally designed annual budget.
4. Transfer payments to students, in the form of grants, will be reduced as a proportion of the total budget and of the budgets for the different levels of education.

Cost Sharing

1. Education Boards will be empowered to charge fees to meet some of the costs of the education provided.
2. Guidelines to Education Boards will specify that in all financial measures they adopt, an over-riding consideration should be the ability of the poor and vulnerable to pay. While Boards may impose tuition fees at high school level, they will not be authorized to do so for basic schools
3. District councils will be encouraged to devote some of their resources to educational provision within their districts, and in particular to contribute to school rehabilitation and student support.
4. The Ministry will seek to institute an educational levy, to be paid by industry and business houses, the funds being remitted to a Ministry-established trust fund.
5. The Ministry of Education will promote private sector participation in education by providing incentives that are within its power to grant, such as access to educational materials or training, and in cooperation with relevant ministries and other authorities it will seek to provide other incentives, such as land allocation, tax rebates, and guaranteed access to capital.

Accountability

1. The Ministry of Education will establish effective systems at central, district and institutional levels for safeguarding the transparency, effectiveness and efficiency with which funds are used. To this end, it will disseminate financial guidelines, strengthen internal controls, institute supervisory checks, and provide for the necessary audits.

Donor-Aided Activities

1. The Ministry of Education will coordinate all donor-aided activities through the Aid-Donor Coordinating Committee, under the auspices of the Planning Unit at Ministry Headquarters.
2. In the long-term, the Ministry will establish a special account for all donor and counterpart funds for the servicing of donor-funded projects and activities.

APPENDIX I

**ENROLMENT PROJECTIONS AND MINIMUM FINANCIAL REQUIREMENTS FOR
ACHIEVING AND SUSTAINING 100% UNIVERSAL BASIC EDUCATION AND 50% HIGH
SCHOOL EDUCATION BY 2015**

Additional to existing provision as at 1994

SUMMARY

- ☐ Over the 20 year Plan period it will cost a minimum of US\$ 193 million to achieve and sustain 100% Universal Lower and Middle Basic Education (grades 1 to 7)
- ☐ Over the 20 year Plan period it will cost a minimum of US\$ 331 million to achieve and sustain 100% Universal Lower and Middle Basic Education (grades 8 and 9)
- ☐ Over the 20 year Plan period it will cost a minimum of US\$ 524 million to achieve and sustain 100% Universal Lower and Middle Basic Education (grades 8 to 9)
- ☐ Over the 20 year Plan period it will cost a minimum of US\$ 204 million to achieve and sustain 50% progression rate to High School (grades 10 to 12)
- ☐ **The total minimum capital investment cost of implementing the National Policy on Education, (excluding other costs involved in restructuring and decentralisation), is US\$ 728 million over the 20 year Plan period at 1996 prices.**

Note	1	:	Costs given do not include current planned or necessary additions/rehabilitations to maintain existing stock of buildings, furniture or textbooks.
Note	2	:	Costs given do not include an annual provision for routine maintenance or rehabilitation.
Note	3	:	Estimates of building costs are for classrooms and a minimum of sanitary facilities only. They do not include costs of specialist facilities such as libraries, science laboratories, vocational workshops, administration blocks, auditoriums or sports facilities, all of which may be considered necessary for upper basic and high schools.
Note	4	:	Estimates given for the capital and recurrent costs of acquiring and maintaining transport refer to the needs of provinces, districts and zones only and exclude individual school and college boards. It is assumed that the transport fleet would need to be replaced every five years.
Note	5	:	An average projected annual capital cost of approximately US\$40 million implies a rise in Education's share of the National Budget to 25%. This proportion would put Zambia on a par with other countries in the region which give high priority to Education

Table 1: Enrolment Projections for School Age Population, 1995 to 2015

Targets: 100% 7 year olds in grade 1 by 2000
100% grade 1 to 7 enrolment by 2005
100% grade 1 to 9 enrolment by 2015
50% grade 10 to 12 enrolment by 2015

YEAR	Lower Basic <i>Grade 1-4</i>	Middle Basic <i>Grade 5-7</i>	Upper Basic <i>Grade 8-9</i>	High School <i>Grade 10-12</i>	<i>Total</i>	Enrolment <i>P/A</i>	Increase <i>Cumulative</i>
1994	930466	575810	130775	68506	1705557	59728	
1995	952491	613420	132493	66881	1765285	55380	
1996	965432	651402	143565	60266	1820665	61319	115100
1997	988389	678616	160927	54052	1881984	48401	176419
1998	1001662	692697	185693	50333	1930385	47110	224820
1999	1007773	708476	204842	56404	1977495	61915	271930
2000	1024384	718875	224716	71435	2039410	45551	333845
2001	1011961	735529	247827	89644	2084961	45256	379396
2002	1009736	741075	266710	112696	2130217	61516	424652
2003	1013796	750036	289095	138806	2191733	56947	486168
2004	1017234	754343	311150	165953	2248680	61884	543115
2005	1044222	745676	326571	194095	2310564	61884	604999
2006	1071822	743031	349649	216416	2380618	70054	675053
2007	1100160	739756	359808	235921	2435645	55027	730080
2008	1129158	759341	369917	250356	2508772	73127	803207
2009	1158845	779446	397105	259890	2595286	86514	889721
2010	1189337	799986	425342	271632	2686297	91011	980732
2011	1220612	821233	454802	283493	2780140	93843	1074575
2012	1252707	842795	485569	303956	2885027	104887	1179467
2013	1285604	864949	517655	325308	2993516	108489	1287951
2014	1318887	887605	550951	347534	3104977	111461	1399412
2015	1352826	911087	576737	370781	3211431	106454	1505866

Assumptions:

1. Population Growth rate = 3.2%
2. Lower and Middle Basic mortality/dropout rate = 0.5% p.a
3. Upper Basic and High School dropout/mortality rate = 1% p.a
4. Projection assumptions:

[illegible]

Table 2: Summary of Annual Investment Requirements for Implementing 100% Universal Basic Education and 50% High School Education as proposed by the National Policy on Education

(additional to provision in 1994)

Targets: 100% 7 year olds in grade 1 by 2000
 100% Lower and Middle Basic (grade I to 7) enrolment by 2005
 100% Upper Basic (grade I to 9) enrolment by 2015

All prices in 1996 US\$ where US\$1 = 1100 Kwacha

Year	Lower & Mid. Basic	Upper Basic	High School	Total \$
1996	14173389	7756470	0	21929859
1997	13411921	12168661	0	25580582
1998	7605544	17373558	0	24979102
1999	7008535	13552786	3931085	24492406
2000	7030054	14592190	9717850	31340094
2001	4377947	17210360	11755635	33343942
2002	2554613	14662960	12476925	29594498
2003	4549535	16809867	14219465	35578867
2004	2785832	16630736	14623365	34039933
2005	2578566	12158225	14362340	29099131
Sub Total	81380580	144119.368	81086665	306586613
2006	4525863	17073167	17089380	38688410
2007	4313044	8621955	15531015	28466014
2008	11834563	8328535	12386505	32549603
2009	12107818	19935985	6150170	38193973
2010	12372269	21076828	7593325	41042422
2011	12721272	21285583	7662520	41669375
2012	12953024	22184860	13222545	48360429
2013	13268420	24051733	13789280	51109433
2014	13488817	24960872	14354405	52804094
2015	13855667	19769772	15010525	48635964
Sub Total	111440757	187289290	122789670	42151917
Total	192821337	331408658	203876335	728106330

Year	Increase	Extra Classrooms			Extra Teachers			Extra Desks			Extra Textbooks etc	Transport	Totals \$
		No.	Cost \$	No.	Houses	Costs \$	No.	Costs \$	No.	Cost \$	Cost \$	Cost \$	
1995	59632	1216	10334633	1216	304	2735638	24317	1337423	24317	1337423	996940	1013000	15404634
1996	50821	1108	9420571	1108	277	2493681	22166	1219133	22166	1219133	1040004	1013000	14173389
1997	50215	968	8225707	968	242	2177393	19355	1064503	19355	1064503	931318	1013000	13411921
1998	27326	517	4396583	517	129	1163801	10345	568970	10345	568970	463200	1013000	7605554
1999	21927	472	4010186	472	118	1031520	9436	518965	9436	518965	404864	1013000	7008535
2000	27062	469	3985746	469	117	1055050	9378	515802	9378	515802	460456	1013000	7030054
2001	4232	261	2219242	261	65	587446	5222	287196	5222	287196	271063	1013000	4377947
2002	3320	111	941876	111	28	249320	2216	121890	2216	121890	128527	1013000	2454613
2003	13022	275	2335770	275	69	618292	5496	302276	5496	302276	280197	1013000	4549535
2004	7745	151	1280520	151	38	338961	3013	165714	3013	165714	12363	1013000	2785832
2005	18321	121	1025848	121	30	271548	2414	132757	2414	132757	135413	1013000	2578566
<i>S'Tot</i>	<i>283623</i>	<i>5668</i>	<i>48176681</i>	<i>5668</i>	<i>1417</i>	<i>12752651</i>	<i>113357</i>	<i>6234629</i>	<i>113357</i>	<i>6234629</i>	<i>5099620</i>	<i>9117000</i>	<i>81380580</i>
2006	24954	279	2370091	279	70	627377	5577	306716	5577	306716	208679	1013000	4525863
2007	25064	272	2315074	272	68	612814	5447	299598	5447	299598	72558	1013000	4313044
2008	48584	852	7243047	852	213	1917277	17042	937336	17042	937336	723903	1013000	11834563
2009	49792	874	7426581	874	218	1965860	17474	961087	17474	961087	741290	1013000	12107818
2010	51030	895	7604131	895	224	2012858	17892	984064	17892	984064	758216	1013000	12372269
2011	52522	922	7837965	922	231	2074756	18442	1014325	18442	1014325	781226	1013000	12721272
2012	53658	940	7992096	940	235	2115555	18805	1034271	18805	1034271	798102	1013000	12953024
2013	55052	965	8203208	965	241	2171437	19302	1061592	19302	1061592	819183	1013000	13268420
2014	55938	982	8350636	982	246	2210462	19649	1080670	19649	1080670	834049	1013000	13488817
2015	57422	1011	8595971	1011	253	2275404	20226	1112420	20226	1112420	858872	1013000	13855667
<i>Su'Tot</i>	<i>474014</i>	<i>7993</i>	<i>67938800</i>	<i>7993</i>	<i>1998</i>	<i>17983800</i>	<i>159836</i>	<i>8792080</i>	<i>159836</i>	<i>8792080</i>	<i>6596078</i>	<i>10130000</i>	<i>111440757</i>
Total	757637	13661	116115481	13661	3415	30736451	273213	15026709	273213	15026709	11695078	19247000	192821337

**Table 4 : Resource Requirements for proposed Expansion of Upper Basic Schools
(Grades 8 and 9), 1995 to 2015**

Target = 100% by 2015.

Upper Basic (Grades 8 and 9)

Year	Increased Enrolment	Extra Classrooms		Extra Teachers		Extra Desks		Extra Textbooks etc	
		No.	Costs S	No.	Houses	Costs S	No.	Costs\$	Total \$
1995	1718	49	417209	49	49	589001	884	53040	1203SSS
1996	11072	316	2688825	316	316	3795988	5694	341640	7756470
1997	17363	496	4216657	496	496	5952927	8929	535740	12168661
1998	24766	708	6014480	708	708	8491030	12737	2103828	17373558
1999	19149	547	4650468	547	547	6565366	9848	1746072	13552786
2000	19874	568	4826571	568	568	6813982	10221	23383177	14592190
2001	23111	660	5612778	660	660	7923922	11886	2960500	17210360
2002	18882	539	4585729	539	539	6473971	9711	3020600	14662960
2003	22386	640	5436525	640	640	7675094	11513	690780	16809867
2004	22054	630	5356027	630	630	7561450	11342	680520	16630736
2005	15421	441	3745195	441	441	5287333	7931	475860	12158225
Sub Total	195796	5594	47550463	5594	5594	67130064	100696	6041760	144119367
2006	22778	651	5531851	651	651	7809672	11715	702900	17073167
2007	10459	299	2540024	299	299	3585917	5379	322740	8621955
2008	10109	289	2455081	289	289	3465997	5199	311940	8328535
2009	28187	777	6602654	777	777	9321394	13982	838920	19935985
2010	28238	807	6857728	807	807	9681499	14522	871320	21076828
2011	29460	842	7154527	842	842	10100509	15151	909060	21285583
2012	30766	879	7471857	879	879	10548504	15823	949380	22184860
2013	32086	917	7792357	917	917	11000975	16501	990060	24051733
2014	33296	951	8086239	951	951	11415867	17124	1027440	24960872
2015	25786	937	6262372	937	937	8840996	13261	795660	19769772
Sub-total	250166	7148	60754692	7148	7148	85771330	128657	7719420	187289293
Total	445962	12742	108305155	12742	12742	152901394	229353	13761180	331408660

Project based upon:-

1. Enrolment data in table 1(from grade 7 output)

2. Classroom occupation for Upper Basic (grades 8 and 9)

3. Pupils per Class

4. Pupils per teacher

5. Classroom per teacher for Upper Basic

6. Classroom size

7. Cost per square metres

8. VIP latrine, 1 per class

9. 3 bedroomed teacher's house

10. One teachers house per classroom

11. 18 double seater desks per classroom.

12. Unit costs for textbooks and pupils requisites :

a) Pupils per book

b) Book life

c) Annual book loss

d) Textbooks and other requirements :

= 1 Class per room
 = 35
 = 35
 = 1
 = 55 square metres
 = \$140
 = \$800 for a double
 = \$9,000

= 1
 = 4 Years
 = 5%

<i>Item</i>	<i>Grades 8-9</i>	<i>Unit cost \$</i>	<i>Total cost \$</i>
<i>Textbooks Titles</i>	<i>11</i>	<i>5</i>	<i>55</i>
<i>Exercise Books</i>	<i>15</i>	<i>0.75</i>	<i>11.75</i>
<i>Other materials</i>	<i>1</i>	<i>15</i>	<i>15</i>
			<i>81.25</i>

Table 5: Resource Requirements for Proposed Expansion of High Schools (Grades 10 to 12),
1995 to 2015
Target = 50% by 2005

Year	Projected Enrolment	Increase G9 to G10	Extra Classrooms		Extra Teachers		Extra Desks		Textbooks & Requisites	Totals \$
			No.	Costs\$	No.	Houses	Costs\$	No.	Costs\$	
1995	61723	-6611	0		0	0	0	0		0
1996	70063	-6210	0		0	0	0	0		0
1997	72767	-3306	0		0	0	0	0		0
1998	87279									
1999	97430	6071	174	1479000	174	174	1566000	3132	187920	3931085
2000	106338	15030	430	3655000	430	430	3870000	7740	464400	9717850
2001	117194	18209	520	4420000	520	520	4680000	9360	561600	11755635
2002	129327	19311	552	4692000	552	552	4968000	9936	596160	12476925
2003	136009	22023	629	5346500	629	629	5661000	11322	679320	14219465
2004	151555	22627	647	5499500	647	647	5823000	11646	698760	14623365
2005	157998	27063	773	6570500	773	773	6957000	13914	834840	14362340
Sub Total		114207	3263	27735500	3263	3263	29367000	58734	3524040	81086665
2006	166887	26460	756	6426000	756	756	6804000	13608	816480	17089180
2007	180638	24057	687	5839500	687	687	6183000	12366	741960	15531015
2008	177379	19171	548	4658000	548	548	4932000	9864	591840	12386505
2009	190613	9534	272	2312000	272	272	2448000	4896	291760	6150170
2010	204427	11743	336	2856000	336	336	3024000	6048	362880	7593325
2011	218707	11860	339	2881500	339	339	3051000	6102	366120	7662520
2012	233735	20463	585	4972500	585	585	5265000	10530	631800	13222545
2013	249316	21352	610	5185000	610	610	5490000	10980	658800	13789280
2014	265656	22227	365	5397500	635	635	5715000	11430	685800	14354405
2015	282442	23247	664	5644000	664	664	5976000	11952	717120	15010525
Sub Total		235025	6715	57077500	6715	6715	60435000	120870	7252200	122789670
Total		349232	9978	84813000	9978	9978	89802000	179604	10776240	203876335

Projections based upon:

1. Enrolment data in table 1 (from Grade 9
2. Classroom occupation for High School
3. Pupils per class = 35
4. Pupils per teacher = 35
5. Classrooms per teacher for High School = 1
6. Classroom size = 55 square metres
7. Cost per square metre = \$140
8. VIP latrine, 1 per class = \$800 for a double
9. 3 bedroom teacher's house = \$9,000
10. 1 teacher's house per 1 classroom
11. 18 double seater desks per classroom
12. Unit costs for textbooks and pupil

- a) Pupils per book = 1
- b) Book Life = 4 years
- c) Annual Book Loss = 5%
- d) Textbooks and other requirements:

<i>Item</i>	<i>Grades 8 to 9</i>	<i>Unit cost \$</i>	<i>Total cost \$</i>
<i>Textbooks Titles</i>	14	5	70
<i>Exercise Books</i>	20	0.75	15
<i>Other Materials</i>	2	15	30
			115

Note 1: *Negative projections for 1996 to 1999 are the result of a low progression rate of 18.1 % from grade 9 to 10 in 1995 (actual).*

Appendix II

List of Acronyms

AIDS	Acquired Immuno-Deficiency Syndrome
CDC	Curriculum Development Centre
DEO	District Education Officer
ESIP	Integrated Education Sector Investment Programme
GDP	Gross Domestic Product
HIV	Human Immuno-Deficiency Virus
MCDSS	Ministry of Community Development and Social Services
MSTVT	Ministry of Science, Technology and Vocational Training
MSYCD	Ministry of Sport, Youth and Child Development
NESIS	National Educational Statistics and Information System
NGO	Non-Governmental Organization
NISTCOL	National In-service Teachers' College
NRDC	Natural Resources Development College
PTA	Parent-Teacher Association
TTC	Teacher Training College
ZERP	Zambia Education Rehabilitation Project
ZLS	Zambia Library Service

