7.6.4 Development of YP Staff

The following activities will be undertaken towards the professional development of YP staff:

(a) *Appointment and Staffing Norms.* To assist planning and management by LGAs and BoGs, in collaboration with the Teachers Service Commission MRTTT will develop (i) criteria and procedures for the appointment and professional progression of principals, instructors, and non-teaching staff; (ii) norm-based instructor-to-trainees ratios; and (iii) guidelines for the remuneration of staff. However with regard to iii, LGAs and BoGs will have the option to adopt salary scales that are sustainable within available resources.

(b) *Serving principals will be in-serviced* on management especially with regard to (i) development planning for the institution; (ii) participative management (particularly collegial leadership of staff, trainee involvement and community participation); (iii) leadership in curriculum development and implementation, including income-generation; and (iv) financial management. Avenues will be sought to combine the in-servicing effort with the on-the-job training of secondary school heads.

(c) *Training of Instructors.* MRTIT will develop a programme, based in middle level training institutions such as TTIs and ITs, to continuously in-service YP instructors in trade and pedagogical skills, and to train new instructors as per projected demand.

7.6.5 Quality Assurance and Formative Monitoring

Given a history of benign neglect and the fact that in several ways the YP programme will be breaking new ground, special attention will be given to overall planning so as to assure the programme's success. Towards this end, a three-tiered quality assurance and formative monitoring system will be developed. The overall aim will be to assist LGAs, existing and new YPs, and the communities which support the programme to plan and implement activities aimed at demand-driven training. The composition and functions of the three tiers in the system will be as follows:

(a) *National Core.* At the central government level a national core of experts (size to be dependent on verified need) will be established. This core will consist of highly qualified technologists with interest and experience in the development of skills related to self-employment and small scale enterprises. Its functions will include research; policy development; maintenance of a management information system on VOC-TEC training; liaison with curriculum development and examinations bodies; and giving advice on GoK grants, staff development and management.

(b) *Provincial Team.* Reporting to the national core, the team will be a section of the proposed quality assurance unit overseeing the whole E&T sector at the provincial level. Its officers will be appropriately qualified technologists. Its functions will include systematic data collection to update the MIS at headquarters; action research e.g. in relation to demand for new YPs; guidance of the third tier (see below) in relation to staff training, detailed curriculum development, and institutional management; and monitoring overall progress.

(c) *The third tier will consist of two complimenting parts.* First, within each DETB secretariat a number of officers will have responsibility for YP training. Second, the DETB staff will work with groups of selected TTI/IT tutors involved in the training of YP staff (see 7.6.4) and successful YP heads and instructors doubling as advisors outside their normal institutions. Each of the groups in the third tier will constitute a cell geared to promoting development of a specified number of YPs on a peer advice basis. Each will concentrate on translation of national curriculum guidelines into training courses suitable for the local context; development of income-generating activities, planning and implementation of approaches to launching YP graduates into gainful economic activity; and institutional management including maintenance of financial accounts and audit, staff leadership, trainee participation, and community participation. LGAs will pay suitable incentives to the members of the cells.

7.7 OVERVIEW OF CURRENT STATUS OF VOC-TEC TRAINING IN MIDDLE LEVEL INSTITUTIONS

As stated in Chapter 2, craft and technician/technologist training has been established in middle level institutions designated as TTIs, ITs, and NPs. During the plan period, this training will be built upon in terms of both quantity and quality. Partly recapitulating observations in Chapter 1, measures will be taken to correct current features that inhibit full realisation of desired outcomes of training. Current inhibiting features include the following:

7.7.1 Lack of Coordination

Coordination between the three main approaches to training is lacking. A number of line ministries and the Office of the President undertake training geared to specific jobs in the public sector. At the opposite end, on-the-job training is undertaken by the private sector with the aim of advancing the productivity of specific firms. Between these two approaches, is training for the general market undertaken by MRTTT institutions. The three approaches preclude the advantages which the country could reap through a more integrated training system. An integrated system could (i) raise efficiency through pooling of resources; and (ii) make training more effective by ensuring that all trainees are exposed to well-rounded curricula. Lack of coordination is also illustrated by duplication of management and administration at the field level under several GoK ministries.

7.7.2 Mismatch Between Formal Training and Requirements in the Economy

The MRTTT's training for the general market has increasingly become divorced from the ideal of maintaining a balance between supply of skilled labour and available job opportunities. A major contributing factor is a rising social demand for more opportunities in training (inherent in the foundation of ITs by communities and the opening of NPs to self-sponsored students) in the face of a slow growth of the country's industrial base. The diffuse role of market forces in the development of training is reflected in the tendency whereby institutions concentrate on a few 'popular courses', not necessarily because there is demand in the labour market, but because such courses are deemed to (i) be relatively cheap and easy to master; and (ii) have a proven track record over a period of years. This situation has two untoward consequences: (i) there is overproduction of skilled labour in some trades while demand in others is unmet; and (ii) facilities and equipment provided for the less popular courses are under-utilised. Equally important, there is evidence of a mismatch between what is learned in institutions and the abilities and skills employers expect trainees to bring to the workplace.

7.7.3 Return to Investment in VOC-TEC Training is Perceived as Unsatisfactory

In Kenya society there is a strong belief that, as compared to VOC-TEC E&T, general education (primary school → secondary school → university) is a more promising route to high-salaried formal sector jobs and a high social status. Although as shown in Figure 7i, theoretically a learner can proceed to the university level through middle-level training, the criteria for such progression are not extant and the number of successful cases has been small. Most school leavers seek admission into VOC-TEC training after failing to secure a place at the next level of general education. The lower status accorded to VOC-TEC training has contributed to falling demand for places in some middle-level training institutions.

7.7.4 Inadequate Participation of Stakeholders in Curriculum and Assessment Processes

Major stakeholders are not fully involved in the development and implementation of curricula and their assessment. For instance, it has variously been observed that employers in general and in particular industry play a peripheral role, and that this has exacerbated the mismatch between formal training and requirements of the workplace. Illustrative of the growing mismatch is the number of trainees who are unable to obtain openings for industrial attachment, which in most VOC-TEC courses should be an integral part of satisfactory training.

7.7.5 Weak Financing Base

Constraints in the public budget and increasing household inability to meet their share of training costs have weakened the base for financing middle-level training.

Students at this level have not benefited from loans and bursaries earmarked for higher education, or from the Industrial Training Levy (ITL) which is confined to assisting training outside formal courses in TTIs, ITs, and NPs. Partly because of a lingering perception that GoK should be fully responsible for funding its institutions, income-generation has not developed fast enough to cover a significant proportion of institutional budgets. *Inter alia*, a weak financing base has meant that training facilities and equipment are not keeping pace with technological changes in industry. In most middle-level institutions teaching-learning technology is either obsolete or has broken down.

7.7.6 Weaknesses in Management

Middle-level institutions are beleaguered by a number of management problems, among which three are poignant. First, financial management in most institutions is weak, with a backlog in audit over several years being characteristic. This has had the effect of undermining the institutions' delivery of training in that realistic planning has been rendered difficult. Second, the legal standing in the management of ITs is clouded by clashes between boards of trustees, formed to manage the institutions on behalf of the founding communities, and boards of governors established (under the Education Act) after the institutes were declared to be public institutions. Conflicts have occurred over issues such as ownership of assets, investments and appointment of staff. Third, many of the middle-level institutions lack a clear mission as to their role in VOC-TEC training. As a manifestation of the effect of lack of mission on overall planning, in an attempt to create a unique niche for themselves, several institutions have unilaterally come up with new courses forcing the relevant authorities at headquarters to hurriedly find teachers for the new and unplanned courses, and to develop syllabuses and examination papers.

Partly because of the foregoing complexities in management, clear norms to guide the allocation of resources to VOC-TEC training - in particular with regard to teaching and non-teaching staff, facilities, and equipment - have not been developed. With regard to teaching staff, middle level training institutions are staffed through the TSC and thus, lack the autonomy to offer attractive terms and conditions of service to highly qualified personnel as is the case with universities.

7.8 STRATEGIES IN DEVELOPING MIDDLE-LEVEL VOC-TEC TRAINING

The following three complementary sets of strategies will be adopted in developing training in middle-level institutions.

7.8.1 Access and Participation

(a) raise enrolments largely through course specialisation, and expansion and maximum utilisation of existing institutions;

(b) create opportunities for further professional training and production of more technologists and industrial researchers;

(c) increase opportunities for females, the disabled, and learners from poor households.

7.8.2 Raising Quality and Relevance

To ensure that quality in the provision of training will continuously be improved and maintained, the following strategies will be adopted:

(a) develop and implement more relevant curricula and examinations;

(b) ensure that the skills acquired in the institutions closely approximate the skills required in the economy;

(c) provide institutions with all essential technology and instructional materials;

(d) improve staff material incentives and job satisfaction.

7.8.3 Improving Resource Mobilisation, Allocation and Accountability

(a) establish a rationalised legal framework for the management of education and training;

(b) expand the funding base for middle-level VOC-TEC training;

(c) promote efficient and effective management of financial, physical and human resources.

7.9 PROGRAMMES AND ACTIVITIES IN MIDDLE LEVEL INSTITUTIONS

In pursuit of the foregoing sets of strategies, activities - the combined effect of which is expected to be improved efficiency and effectiveness in the delivery of middle-level E&T - will be carried out under the following interrelated programmes (i) establishing a database for action; (ii) legal and management infrastructure; (iii) staff development; (iv) expanding the financing base and raising efficiency in provision; (v) curriculum development; and (vi) improving assessment and certification.

7.9.1 Establishing a Database for Action

In order to facilitate the detailed planning and implementation of this chapter's proposals for developing middle-level E&T, the following measures will be taken in way of creating a database for action.

(a) *Survey of Institutions.* Under the auspices of MRTTT, a survey will be conducted to, *inter alia* establish the capacity of each institution in terms of student enrolments, staff characteristics, current and projected courses, facilities and equipment, and existing linkages with employers and the economy of local communities.

(b) *Establishing a Management Information System.* Using existing information and the data obtained through the survey in 7.9.1(a), MRTTT will create a computerised MIS on the middle-level VOC-TEC sub-sector.

(c) *Creating a Labour Market Information and Monitoring System* (LMIMS). As indicated in the National Development Plan 1997-2001, GoK will promote the creation of a regularly up-dated LMIMS as a crucial tool in the development of the technical manpower necessary for industrialisation. As a key stakeholder, MRTTT will participate fully in the creation and maintenance of the LMIMS.

7.9.2 Legal and Management Infrastructure

(a) *Education and Training Act.* The management of education and training will be streamlined under one Act of Parliament which will cover all aspects of the sector including those currently placed under the Education Act. Detailed recommendations are in Chapter 10 on sector management).

(b) *Improved Professional Coordination.* The professional coordination of all craft, technician, and technologist training will be the responsibility of the Commission for Higher Education (CHE). The Universities Act will be amended to clearly spell out this responsibility. The basis of CHE's coordination of training will be close collaboration with all stakeholders including MRTTT, other GoK ministries involved in training, universities, and the National Industrial Development Council.

(c) *National Industrial Development Council* (NIDC). As part of the endeavour to secure full participation of the private sector in industrialising the economy, Sessional Paper No. 2 (Republic of Kenya 1996a) proposes the establishment of a NIDC in which private industry and representatives of workers will play a major role. It is planned that the NIDC be a leading actor in the professional development of training as proposed in 7.9.2(b) above. The NIDC will also take over responsibility for the management of the revamped ITL proposed in 7.9.3(a) below.

(d) *Improved Governance of Middle-level Institutions.* Under the new Education and Training Act, autonomous governing councils, will be established to govern TTIs, ITs, and NPs. Taking into account national

guidelines for the development of VOC-TEC training, each of the new councils will be responsible for the institution's budgetary and professional planning. In particular, the council will be responsible for recruiting, remunerating and managing teaching and non-teaching staff. However, in certain matters of teaching staff discipline and grievance final decisions will rest with the Teachers Service Commission (see chapter on sector management). Taking into account the enlarged financing and delivery roles proposed for the non-public sector (see 9.3.1, 9.4.2 and 9.4.4), employers in general and in particular industry will be appropriately represented in the governing councils. The proposed membership and functions of the councils are in Appendix V.

(e) ***Quality Assurance in Professional Issues and Management.*** Through collaboration between MRTTT and CHE, procedures for formative monitoring of training and audit of accounts in middle-level institutions will be developed. Such procedures will specify the role to be played by the quality assurance unit to be set up under the Education and Training Act (see Chapter 10 on sector management).

7.9.2 Staff Development

The following measures will be taken to enhance the professional competence, and thereby increase job satisfaction, of staff in middle-level institutions:

(a) ***Create Opportunities for Further Education and Training.*** Lecturers in middle-level institutions, most of whom are holders of a Higher Diploma, will be encouraged to enroll for masters degree in a public university. Each local public university that offers relevant courses will allocate a proportion of its post graduate places to students selected from among professional staff in VOC-TEC institutions. The proportion of the places so reserved and funding modalities will be arrived at through consultations between the VOC-TEC institutions, MRTTT, the universities, CHE, and HELB.

(b) ***Encouraging Research and Development Among Staff.*** Through consultations with industries, private employers and GoK departments, staff and VOC-TEC institutions will be encouraged to take up technological R&D and relevant consultancy work mutually beneficial to all the parties involved. Such involvement will not only build staff experience but will also generate funds for the institution and individual members of staff involved.

(c) ***Improve and Systematise In-service Training for Staff.*** This will be done through local and overseas courses, and industrial attachment. Funding for overseas courses will be solicited from donors, but consideration will be given to local funding where need for external training has been clearly established. Transparent criteria for awarding

scholarships will be established. Most teachers have very little contact with industry. Attachment will be worked out with industry. The possibility of seconding qualified practitioners in industry as lecturers in VOC-TEC institutions will be explored. The expenses of attachment and secondment will be met through the ITL [see 7.9.3(a) below].

(d) ***Improve Criteria for Recruitment and Promotion.*** In addition to scrutiny of certificates and oral interviews, performance of a practical tasks in candidates' areas of specialisation will be considered in recruiting and promoting staff.

7.9.3 Expanding the Financing Base and Raising Efficiency in Provision

(a) ***Enhanced Financing by Employers.*** The employers of graduates from VOC-TEC training institutions will be encouraged to play a bigger role in funding training. Through consultation between industry and GoK, the operation of the ITL will be reviewed with the objectives of (i) broadening its resource base; and (ii) extending its utilisation to cover training at the craft, technician and technologist levels. Given the enhanced role of industry in both financing and management of the delivery of training, the administration of the revamped ITL will be entrusted to the proposed NIDC [see 7.9.2(c) above], in which representatives of industry will be in the majority.

(b) ***Tapping Funding From HELB.*** As HELB's resource base expands, its loans, scholarships and bursaries will be made available to students in middle-level VOC-TEC institutions. Funding from HELB will be carefully synchronised with contributions from the revamped ITL.

(c) ***Encouraging Private Training Institutions.*** NGOs and private entrepreneurs (including private universities) will be encouraged to continue providing training. Private VOC-TEC institutions which provide tangible evidence that they are training relevantly and effectively will have their students considered for funding from the revamped ITL and HELB.

(d) ***Expanding Income Generation.*** VOC-TEC institutions will be encouraged to expand income generation so as to cover a rising proportion of their budgets. Suitable activities could, *inter alia* include (i) sale of professional services [e.g. participation in the development of YP staff as proposed in 7.6.4(c) and 7.6.5(c) above]; (ii) organising short-term courses to upgrade the technical skills of people already in employment; (iii) contracts to manufacture and supply goods (e.g. arranging to make some of the instructional materials needed by primary and secondary schools); and (iv) hiring out institutional facilities for community functions. VOC-TEC institutions will be required to include income-generation in their budgetary planning. The degree of success in

generating income will be made part of the criteria for promotion of staff including the institutions' principals. Modalities will be worked out for GoK to give financial incentives to encourage income generation.

(e) ***Raising Efficiency in Supply and Maintenance of Facilities and Instructional materials.*** Measures will be taken to ensure that expansion of the funding base is accompanied by increased efficiency in the provision and maintenance. First, early in the plan period, a comprehensive survey of essential instructional materials and equipment, particularly for courses with obvious potential, will be carried out. The aim will be to establish a rationale for special funding to make institutions fully operational. Second, towards promotion of lower production costs, VOC-TEC institutions will be encouraged to make some of the equipment they need in their courses. Where necessary, industry will be encouraged to assist through provision of machine tools and expertise. Third, the supply and maintenance of instructional materials will be improved. VOC-TEC textbooks and equipment are expensive and difficult to acquire. Further, the maintenance of facilities and equipment is a major challenge in all institutions. To ease the situation, MRTTT will organism a system for (i) bulk purchase and distribution of key instructional materials; and (ii) a rotating system, involving both relevantly qualified teaching staff and non-teaching maintenance personnel, of servicing and repairing facilities and equipment in middle-level training institutions. Suitable incentives will be given to the personnel involved.

7.9.4 Curriculum Development

The major thrust in ensuring efficiency and effectiveness of training will be to implement measures aimed at (i) increasing enrolments through expansion, and in some cases upgrading, of existing institutions; (ii) avoiding duplication of courses through development of a mission for each existing institution such that it concentrates on training in specific trades and professions; and (iii) establish a clearing house system, under CHE, to ensure fair play in trainee placement. In developing course specialisation by institutions, the comparative advantage of the existing institutions will be taken into account. More specifically, the following activities will be undertaken:

(a) ***Rationalising the Delivery of Training.*** The provision of training will be rationalised such that the quantitative and qualitative needs of both the public and private sectors are continuously met. Special attention will be given to ensuring that the country develops a labour force commensurate with the needs of industrialising the economy. In the effort to coordinate training [see 7.9.2(b)], reliance will be placed on the labour information and monitoring system proposed in 7.9.1(c) above. Using the LMINS data, current and projected numbers of crafts-persons, technicians and technologists will be worked out. The expansion, upgrading, and specialisation of existing training institutions will be planned and

implemented largely on the basis of this data. Partly to exploit the comparative advantage of NPs in undertaking practically-oriented technologist courses, CHE will develop criteria for the accreditation of NPs to offer degrees as recommended by the Mungai Committee (Republic of Kenya, 1995b). This move will also enhance the status of VOC-TEC training as a route to technical careers at the highest level. Partly to help address the issue of the status of technical careers, and partly to take advantage of specialised facilities and research amenities in universities, public universities will set aside a proportion of places for graduates of middle-level institutions wishing to study for higher qualifications. Modalities, including credit transfer, for such admissions will be worked through collaboration between CHE, NIDC and GoK.

(b) ***Addressing the Expectations of Stakeholders.*** The curriculum development process will be reviewed such that the expectations of key stakeholders are addressed. In addition to the institutions under discussion here, the following are the major stakeholders. First, employers are concerned that what is taught and learned in training institutions closely approximates expectations at the workplace. Second, universities would like to ensure that middle-level trainees proceeding to higher education, as proposed in 9.4.1 above, will have acquired the knowledge and skills which form the foundation for university study. Third, school authorities would like to see a smooth transition between the secondary school and VOC-TEC curricula. Last but not least, GoK, representing Kenya society, is interested in ensuring that middle level training takes into account considerations of equity, self-employment, and a labour market for the future. Early in the plan period, the membership of curriculum development panels will be reviewed so as to establish appropriate representation of key stakeholders. Given the enlarged financing and delivery roles proposed for employers in general and in particular industry [see 7.9.2(c), 7.9.3(a) and 7.9.4(d)], their heavier representation and participation will be treated as prerequisites for the proper functioning of panels.

(c) ***Include General Education and Entrepreneurship in Curricula.*** To promote (i) the development of a widely knowledgeable human resource base; (ii) acquisition of abilities and skills for further E&T; and (iii) self-employment, entrepreneurship and aspects of general education (such as communication skills, applied math, and social studies will be appropriately incorporated into middle-level training curricula.

(d) ***Systematise Industrial Attachment.*** Because industrial attachment gives trainees 'real life' hands-on experience, thus minimising the mismatch between formal learning and the demands of the workplace, it is an essential part of VOC-TEC training. Five measures will be taken to systematise industrial attachment (IA). First, following appropriate consultations with the NIDC, employers will be legally obliged to take on trainees for IA. Second, ITL funding will be used to provide

insurance cover for both trainees and firms against either injury or damage to equipment during IA. Third, the curriculum development and examinations authorities will institutionalise IA as a requirement for final certification and, for various trades and professions, develop norms on the nature of IA, its duration, and methods of recording and reporting it. Fourth, training institutions will be charged with the duty of ensuring that all their students, including self-sponsored students, undergo IA. Towards this end, some income-generating activities will be developed with a view to providing trainees with IA. Fifth, vacation time for middle-level students seeking IA from the same set of firms will be rationalised so as not to flood the attachment market.

(e) ***Develop Flexibility in Curricula.*** To ensure that institution operate at full capacity throughout the year, patterns of attendance will be made flexible Partly to generate income and partly to offer opportunity to people who cannot afford the costs of full time courses, institutions will be encouraged to develop need-based courses for people in salaried employment, the self-employed, and people wishing to acquire new skills.

7.9.5 Improving Assessment and Certification

The following measures will be taken to improve VOC-TEC examinations and certification:

(a) ***Introduction of Examination Through Accreditation.*** In order to raise efficiency in the conduct of examinations, where small candidatures most likely confined to a few institutions are involved, procedures for examination through accreditation by CHE or KNEC will be developed and implemented.

(b) ***Improve Centrally-conducted Examinations.*** Four measures will taken. First, the capacity of KNEC to conduct VOC-TEC exams will be improved. Adequate personnel to undertake R&D and to administer the exams will be provided. Second, KNEC will review the recruitment of test-developers and examiners. In particular, KNEC will seek to involve qualified practitioners in industry, especially in setting and marking practical papers. Third, VOC-TEC examinations will give emphasis to performance tasks. Performance tasks will be conducted on real life situations, and will involve the formal and *Jua Kali* sectors in the use of necessary facilities and equipment. A performance task will be based on a topic directly relevant to a specific skill which a trainee is expected to use after training. KNEC and the curriculum body will specify the scope and duration of performance tasks. Each task will be graded by at least three assessors of whom one should be a practitioner in the relevant industry or trade.

(c) ***Harmonisation of the Conduct of Examinations and Equation of Certificates.*** The conduct of VOC-TEC examinations will be harmonised such that complimentarity is established between the roles of DIT, KNEC and KASNEB. GoK, through CHE, will investigate and take appropriate measures on (i) examinations and certification undertaken by non-public training institutions; and (ii) equation of VOC-TEC certificates issued in Kenya and in other countries.

CHAPTER 8

ADULT AND CONTINUING EDUCATION

8.1 INTRODUCTION

Adult and continuing education (ACE) is a heterogenous sub-sector which groups together diverse areas of learning, each with its unique objectives. This heterogeneity contributes to ambiguity in establishing the sector's constituency. Terms such as *out-of-school education, non-formal education* and *adult literacy* are sometimes used inter-changeably to refer to ACE. In spite of the multiplicity of programmes that constitute it, ACE is also often narrowly conceptualised as literacy education. This MPET adopts the UNESCO definition of ACE as the *entire body of organised educational process whereby persons regarded as adults by the society to which they belong develop their abilities, enrich their knowledge, improve their technical and professional qualifications and bring about changes in their attitudes and behaviour in the two-fold perspective of full personal development and participation in balanced and independent social, economic and cultural development.*

Currently, in Kenya ACE takes at least four forms: (i) extension education and training in areas such as agriculture, cooperatives, health, nutrition, family life, business, environmental education, and general public education; (ii) continuing education for adults wishing to further their qualifications; (iii) adult literacy; and (iv) basic education for out-of-school youth.

As indicated in Chapter 1, several GoK ministries, NGOs, and donor organisations are involved in the delivery of ACE. This factor further compounds the heterogeneity of the sub-sector and tends to render the sub-sector's contribution to human resource development less than efficient and effective.

8.2 OBJECTIVES

To enable ACE play its role in the human resource development and particularly to facilitate the realisation of a NIC status for Kenya, during the plan period ACE will have the following objectives:

8.2.1 To help eradicate illiteracy by providing the basic skills of reading, writing, communication skills, and facility in number;

8.2.2 To sustain literacy through post-literacy and continuing education;

8.2.3 To provide opportunities for further education and to promote the concept and practice of life-long education;

8.2.4 To promote the acquisition of relevant knowledge, attitudes and skills among workers and to facilitate the workers' adaptation of new technologies and production skills;

8.2.5 To facilitate the development of economic opportunities through improved entrepreneurship and production skills;

8.2.6 To provide education to disadvantaged groups;

8.2.7 To promote self-confidence, values and positive behaviour towards society;

8.2.8 To promote awareness amoug individuals and communities with regard to their rights and civic duties.

8.3 POLICIES

The principal thrust in GoK policy on ACE will be to raise the status of the sub-sector as an important part of the national human resource development effort. This will entail increasing efficiency and effectiveness through development of a legal and management infrastructure that (i) enhances coordination between ACE and other E&T sub-sectors; and (ii) institutionalises decentralisation of power and authority through devolution of professional management and financing to stakeholder institutions which, as compared to central government ministries, are better placed to be accountable for the quality of outputs and outcomes. Development of ACE will be guided by the following specific policies:

8.3.1 The legal infrastructure for the management of E&T, including all aspects of ACE, will be streamlined so as to ensure balance in the public budgeting process, and to enhance coordination and monitoring.

8.3.2 The Board of Adult Education will have responsibility for overall coordination of extension education and training.

8.3.3 The development, management, financing, and accountability for continuing education will be the responsibility of middle-level VOC-TEC training institutions and universities.

8.3.4 Management and financing of adult literacy and education for out-of-school youth programmes will be decentralised to LGAs and local communities. Delivery will be planned such that efficiency is enhanced through use of primary and secondary school resources.

8.3.5 At all levels, emphasis will be placed on raising the relevance and quality of ACE so that the sub-sector serves the needs of the economy more effectively.

8.4 STREAMLINING THE LEGAL AND MANAGEMENT INFRASTRUCTURE

8.4.1 Management and Financing of ACE in a Nationally-coordinated System

As in other sub-sectors, improvements in ACE will be based on the development of systematic coordination of the whole sector, and devolution of responsibilities aimed at empowering all stakeholders through their active involvement in management and provision of the resources needed to improve E&T. The following measures will be taken to improve sector coordination while effecting devolution.

(a) *Education and Training Act* (ETA). The management of E&T will be streamlined under one Act of Parliament which will cover all aspects of the sector including those currently placed under the Education Act and Board of Adult Education (BAE) Act. Detailed recommendations on the proposed ETA are in Chapter 10 on sector management. Under the proposed ETA, a National Education and Training Commission (NETC) will be set up. Reporting to the Office of the president, NETC will have responsibility for advising GoK on macro-economic policy and planning as they relate to the development of the country's human resource. Particular concerns of NETC will include drawing priorities in public budgetary allocations to all sectors involved in E&T, harmonisation of E&T programmes, and quality assurance.

(b) *New Role for the Board of Adult Education.* Under ETA, the BAE will be entrusted with the responsibility of coordinating the development of policy and planning in the areas of adult literacy and special adult education programmes under MCSS, and extension E&T under other line ministries. Through NETC, the BAE will be the link between E&T among adults and the overall human resource development effort.

8.4.2 Decentralisation and Devolution

In implementing current GoK policy on the need to decentralise the delivery of services (Republic of Kenya, 1986; 1994b; and 1996c), in E&T the following measures will taken to improve the relevance and quality of ACE.

(a) *Institutionalised continuing education* will be entrusted to middle-level VOC-TEC institutions and universities, all managed by autonomous councils.

(b) *The management and financing of YP training, extension E&T, and adult literacy and education programmes* (currently under MCSS), will be decentralised to LGAs. The Local Government Act will be suitably

amended. To enhance coordination between various E&T functions at the local level, under each LGA a DETB will be set up with responsibility for professional planning and management, *inter alia* covering ACE. In the decentralised system:

(i) The central government will be responsible for developing broad policy guidelines to assist in detailed planning by LGAs; teacher education; provision of feedback on the quality of programmes and their output and outcomes; and assisting the local budgetary planning effort through grants tied to efficient financial management and evidence of satisfactory outputs from programmes.

(ii) Each LGA will be accountable for the outcomes of the E&T programmes, including those in the ACE sphere, entrusted to it. To satisfactorily meet this challenge, LGAs will cultivate the active participation of communities at the grass-root level with regard to identification of needs, local development of curricula, management of programmes including teacher supervision, and mobilisation of resources in ways that are sensitive to equity; plan the mobilisation and allocation of resources so as to meet the requirements of programmes; and ensure efficient and effective professional and financial management of programmes at both the district / municipal and institutional level.

8.5 CONTINUING EDUCATION

Continuing education for adults, which constitutes an important part of the development of the country's human resource, falls into two categories: (i) academic education, and (ii) improvement of skills. These two aspects are appropriately covered in the chapters on vocational and technical, and university E&T. In these chapters, proposals are made as to how adults will be catered for through both formal programmes and short courses which aim at skill acquisition and improvement among people who are already involved in production activities and potential workers. The proposals place emphasis on (i) the need to systematically relate E&T to the country's human resource needs, and (ii) the potential of planning some of the continuing education courses as a strategy in the generation of income by E&T institutions.

8.6 EXTENSION EDUCATION AND TRAINING (EET)

EET is crucial in helping people to develop themselves through acquisition of new kinds of skills, knowledge, attitudes and aspirations. EET is especially important in areas such as agriculture and the cooperative movement, health and nutrition, shelter, water, and conservation of environment which constitute

the base for individual, household and community welfare. While a great deal has been achieved through EET, it is recognised that efficiency and effectiveness will need to be raised along the following lines.

8.6.1 EET at the Local Level

With regard to provision through public funds, EET is currently the responsibility of a number GoK ministries operating through field offices, whose areas of operation are the same as or approximate the spatial domains of the provincial administration system. Within a district, some coordination takes place through the DDC but it does not sufficiently address key issues such as (i) integrated budgetary planning, for instance, with regard to increased efficiency in resource utilisation through programmes which address the needs of more than one ministry, (ii) need to encourage grass-root communities to conceptualise their development as an integrated activity in which they ought to be actively involved. As stated in 8.4.2(b) above, as GoK decentralises the delivery of services, ***responsibility for EET will be devolved to LGAs. The LGAs' mode of operation will be structured to facilitate the systematic involvement of communities at the village level in planning and implementation of decisions on education and training in general, and in particular EET.***

8.6.2 Coordination at the National Level

Although MPND and the Treasury provide a measure of coordination of EET at the national level, the emphasis is on broad macro-planning approaches. Such approaches would seem to be largely concerned with maintenance of balance in budgetary allocation between inherently competing public sectors. Because the case for EET's share of the budget is independently made by several ministries, the totality of the potential impact of the sphere receives less than sufficient attention. Issues such as research, integration of common aspects of curriculum, equity in resource allocation, and the evaluation of process and outcomes across the whole EET sphere tend to receive insufficient attention. Moreover, national coordination is weakened by the mode of application of non-public assistance, in particular grants from NGOs, to EET. While GoK encourages NGOs to integrate their assistance into DDC planning, there is no system for drawing a national picture to guide NGO investments. Partly as a result, some areas are well-served by NGOs while others are neglected. As indicated in 4.1.2 above, during the plan period, ***the Board of Adult Education will be legally empowered to take responsibility for coordinating the professional aspects and the investment of non-public funds in EET, and linking them with both macro-planning and detailed planning and implementation at the local level. In collaboration with all interested parties, the revamped BAE will develop the detailed procedures.***

8.6.3 Approaches to Key Aspects

The development and coordination of EET at the local and national levels will pay attention to the following four key aspects:

(a) *Improving Access and Participation.* Expansion of extension services will give more attention to marginalised groups. Most extension services have tended to disproportionately benefit individuals, groups and areas who are already relatively better off. The most disadvantaged tend to be ignored. For instance, in agriculture extension staff tend to concentrate their advice on those areas and farmers most likely to respond rapidly to new credit and inputs in order to increase production. Men receive more attention than women who, although they constitute the majority of workers and producers in rural areas, are often offered cosmetic courses such as home management and kitchen gardening. To improve on the situation, expansion of EET will be geared to:

(i) sensitising and giving material incentives to enable the poor to develop themselves; and

(ii) increasing enrolments of the poor and women (e.g. through special quotas) in training institutions such as farmer training centres, and cooperative and business training institutes.

(b) *Developing and Implementing Curricula*

(i) Concerted efforts will be made to translate national guidelines on EET curricula into detailed approaches which fully take into account the local context including existing production bases and practices.

(ii) EET curricula will be geared to giving adequate attention to production skills and technologies, as well as entrepreneurial skills such as how to access credit, production design and marketing, accounting and business management.

(iii) Aspects of EET will be integrated into adult literacy and education programmes (see 8.6 above).

(v) The use of various media to sensitise communities and to deliver relevant knowledge will be fully exploited: (i) stimulating radio programmes on topics such as development that is sensitive to preservation of the environment, promotion of health, and managing population growth will be developed and systematically broadcast; and (ii) written material will be widely used in disseminating knowledge through newspapers, magazines, posters, and textbooks earmarked for adult literacy and post-literacy programmes.

(c) *Developing Extension Personnel.* The effectiveness of EET hinges critically on the recruitment and retention of qualified staff. Measures will be taken to

(i) improve professional and career development of extension staff;

(ii) conduct special training for volunteers involved in extension on a part-time basis; and

(iii) increase the number of female extension staff so as to create role models for women in various communities.

(d) *Increasing Efficiency.* To avoid duplication of efforts and maximise returns from scarce resources:

(i) training programmes for extension staff in different but related spheres will be harmonised such that core areas of curricula, e.g. entrepreneurship in agro-based development, are covered as common units;

(ii) EET training centres will be developed as multi-purpose institutions capable of producing personnel in a variety of disciplines;

(iii) development and production of written materials will be integrated so that some of the materials cater for a variety of EET spheres, adult literacy and education programmes, as well as some aspects of school curricula; and

(iv) systematic and regular assessment and evaluation of the output and outcomes of EET will be instituted as a major development approach.

8.7 ADULT LITERACY AND BASIC EDUCATION FOR OUT-OF-SCHOOL YOUTH

8.7.1 Current Status

It is recognised that a functionally literate population is an important factor in a society's efforts to sustain socioeconomic advance. In particular, a developing country in which the great majority of the population possess basic learning competencies at least at the primary school level is a necessary condition for industrialising the economy. In her efforts to attain this basic level of education, Kenya faces two major challenges. First, a significant proportion of the adult population missed out on formal education and thus, it is still illiterate. Second, with a declining enrolment rate, a growing proportion of children is not enrolled in primary school and is thus growing into adulthood as illiterate. Further, many primary school pupils drop out before attaining a sustainable literacy level. According to the annual issues of the Kenya Economic Survey, in the early 1990s about a quarter of pupils enrolled in the first year of primary school dropped out before reaching the fourth year.

In addition to the publicly-supported adult literacy programme (ALP), education programmes for out-of-school youth (EPOSY) have emerged. EPOSY takes the form of community-based learning centres which offer basic education (in some cases economic production skills are included) to children and youth who have not enrolled in or have dropped out of formal primary school. The major reason for EPOSY learners' failure to enrol in or continue with formal school is that the formal system is too expensive in terms of both financial and opportunity costs (CESA Team, 1994; Republic of Kenya and UNICEF, 1992). The following issues illustrate the problems that need to be addressed with regard to ALP and EPOSY.

(a) *Access and Participation.* Although remarkable progress in increasing literacy has been made, illiteracy remains a major problem:

(i) High dropout rates in adult literacy classes means that for many, initial enrolment does not lead to literacy.

(ii) The overall literacy rate remains low and is characterised by regional and gender disparities. The 1988 Rural Literacy Survey (RLS) by the Central Bureau of Statistics reported a national literacy rate of 54% (male = 63, female = 47) among the population aged 15 and above. The survey also revealed large disparities between districts.

(iii) EPOSY is reaching only a small proportion of children. The CESA Team (1994) reported research findings to the effect that in the three largest urban areas of Nairobi, Mombasa and Kisumu, between 40 and 60 per cent of children living in the slums did not go to school. The CESA Team noted that the problem of out-of-school children was not confined to the large urban areas, however, the dearth of systematic information defied a comprehensive description:

> Comprehensive data on the [educational status] of vulnerable groups are almost non-existent. The little that is available is incomplete and unreliable because it is focused almost exclusively on the urban child in major towns; neglected are the children of nomadic parents, displaced and refugee children, children in difficult circumstances in secondary and small towns and the rural areas.

(b) *Relevance and Quality of ALP and EPOSY* is characterised by the following shortcomings:

(i) Doubt exists as to the exact meaning of the published literacy rates. The 1989 population census reported a literacy rate of 73% for the population aged ten years and above. This rate cannot be compared to the 54% reported by the 1988 RLS because the two estimates were based on different age group

ranges. Further, although impressive, the validity of the 1989 rate is questionable in that it was not based on actual literacy tests. The discrepancy between the two rates underscores the fact that Kenya has yet to develop a comprehensive criteria for assessing literacy with an agreed age group range and common competencies that should characterise a literate person. Currently, within ALP, unstandardised literacy proficiency tests are developed, administered, and marked at the district level.

(ii) There is evidence that the ideal of ALP relevance based on a close relationship between the acquisition of literacy and functionality is only partially realised. The majority of learners served by the programme are from poor economic backgrounds. They spend most of their time struggling to earn a living and cannot spare time to attend literacy classes unless they can see immediate benefits or clear prospects from the programme. A number of studies associate the high dropout and low completion rates in the ALP with learner perceptions of low functionality of the programme (see for example, Carron et al. 1989). To an extent, this situation has arisen because the ALP curriculum, hurriedly developed in 1979 at the on-set of the programme, has not been constantly reviewed and adjusted to the socioeconomic needs of the target group. Moreover, the involvement of the ALP clientele in determining its learning needs and managing the programme - a variable considered central to the programme's success - remains patchy and superficial. Finally, slow development of post-literacy programmes has been a demotivating factor among neo-literates.

(iii) The issue of the relevance of ALP is compounded by the academic aspirations of the clientele, a factor brought into sharp focus by the emergence of EPOSY. The motivation of most adults who enrol in ALP classes is to achieve literacy and numeracy as a step in the pursuit of the social status associated with the possession of an academic certificate such as the KCPE or higher (Carron et al., 1989). Responding to the prevailing social psyche which associates high socioeconomic status with high academic qualifications, EPOSY learners - naturally emulating their peers in formal education - have similar academic aspirations. It is within the rights of ALP and EPOSY learners to aspire for certificated qualifications. However, this aspirations could jeopardise the acquisition of economic production skills envisaged for most of these programmes. Acceding to pressure for ALP and EPOSY to increasingly take the form of preparation for the school-based certification examinations risks diversion of time and resources away from the economic production orientation of

these programmes. In spite of the fact that only a small proportion of ALP and EPOSY learners do well in the school-based examinations, the latter have a strong 'magnetic' pull which exerts untoward influence on the curricula of the programmes. Thus, a major challenge, to be addressed during the plan period, is how to assess the outcomes of the programmes in a manner that offers the learners formal certification and openings for re-entry into formal education without sacrificing the objective of inculcating economic production skills.

(iv) The ALP is characterised by inadequacies in the programme's human and material resources and this has negative effects on relevance and quality:

- Recruitment into the teaching force is characterised by harmful variety, with some teachers serving on temporary terms or as part-time workers.
- The majority of teachers are untrained or have received limited training through short courses, and school teachers serving on part-time basis have received no training in pedagogy for adults.
- Teacher morale is low, to a considerable extent, because of perceptions that remuneration is lower than that of primary schools teachers.
- Hampered by a low establishment or lack of qualified professionals to fill posts and inadequacies in essential requirements such as means of transport, the monitoring and formative guidance system for ALP has limited positive impact on the programme.
- The development, production, and distribution of instructional materials and written materials to continuously serve neo-literates are hindered by constraints in the public budget, the linguistic diversity that characterises Kenya society, and the limited ability of the ALP clientele to spend money on materials.

(v) While a few EPOSY centres, particularly those supported by well-established NGOs, have achieved a considerable measure of success in providing quality education and training, and welfare to their clientele, most of the centres have been unable to surmount the problems facing them and are thus, low quality institutions. Most EPOSY lack a clear vision with regard to curricula that takes into account the special needs of

their clientele. Regarding essential inputs, with reference to findings from a number of research studies, the CESA Team (1994) described the situation in most EPOSY centres as follows:

> Non-formal schools are over-crowded and very disadvantaged in terms of learning materials and physical facilities. [They] lack qualified teachers since their management cannot afford [to pay high salaries]. As the schools do not enjoy legal status, they are excluded from opportunities and services available to children in formal schools, including material and supervisory support.

(c) *Management and Financing.* As part and parcel of the idealogy of the nationalist movement which ushered in independence, the provision of E&T to as many Kenyans as possible is a fundament of public policy. However, the push for expansion has had to contend with fiscal resource constraints. The state's responses to these constraints have included (i) drawing priorities in the budgetary allocation to E&T sub-sectors; and (ii) encouraging provision through mobilisation of resources from non-public sources - mainly households, communities, and NGOs. Largely reflecting a widely held belief that a successful future depends on the proper grooming of the current young generation, both budgetary allocation and mobilisation of non-public resources are skewed in favour of formal E&T in general, and in particular general education. As a consequence, the basic education of adults who missed out on formal education during their youth suffers from relative neglect.

Bearing in mind the positive relationship between a literate population and development, since the late 1970s, the state has attempted to give more priority to adult literacy. Between 1963 and 1979 adult education was one of the responsibilities of MoE, an arrangement that meant relegation of the sub-sector to a lowly position particularly with regard to budgetary allocation and the size and seniority of the relevant staff establishment. In 1979 the sub-sector was moved to MCSS to be managed by a well-established Department of Adult Education (DAE). Under the DAE, a massive adult education campaign was launched with the electronic and print media, public rallies, and special sensitisation seminars and workshops being fully utilised. A curriculum was put together, instructional materials developed and distributed, and field officers and teachers recruited. By 1986 the ALP enrolment had risen to 222,142 (male = 49,910 or 22%, female = 172,232 or 78%). However, by 1993 the enrolment had declined to 107,298 (male = 26,027 or 24%, female = 81,271 or 76%). This decline was associated with the down-turn in the macro-economy and decreasing budgetary support for E&T arising from exacerbation of fiscal constraints.

Some of the problems that beleaguer the ALP arise from inadequate coordination in the human resource development effort. Although the transfer of adult education from MoE to MCSS has had advantages, it has resulted in loss of potential benefits to ALP, such as integrated planning and implementation reflected in officially sanctioned sharing of resources between the programme and the school system. Although at the local level use of school buildings by ALP has continued to be organised and some school teachers serve as part-time instructors in the programme, the MoE's well-established professional staff in the field (including the teaching force) has not been officially geared to assisting ALP. This has helped perpetuate the mistaken perception that basic education for adults is unimportant. Donor and NGO involvement in adult education has helped keep the flag flying. But this involvement has not sufficiently dispelled the negative perception. The dangers posed by increasing illiteracy arising from a combination of high dropout rates and decline in school enrolment rates would need to register as an important variable in planning if advance is to be made.

The emergence of EPOSY underscores the need for a national strategy in which all components of the human resource development effort are coordinated. In addition to ALP for which MCSS is responsible, the ministry assists EPOSY, which receives material and professional support from some LGAs, NGOs (including religious bodies), and donors such as UNICEF. MoE gives EPOSY support in way of curriculum development and secondment of a few teachers to some centres, but the EPOSY 'schools' - often defined as 'informal schools' and 'schools for slum children' - are not officially recognised for purposes of the KCPE examination and are not registered under the Education Act. Thus, the location of accountability for the programmes within GoK and the society is unclear. Urging for a comprehensive public policy on human resource development, Ryan (1971:13) observes that in many developing countries *out-of-school education has many supporters, but it is the exclusive charge of none of them.*

8.7.2 Strategies on ALP and EPOSY

The following three complementary sets of strategies will be adopted in order to improve on the current status of ALP and EPOSY.

(a) To improve access and participation:

(i) systematically define the demand and supply factors in the programmes and coordinate expansion with the school system;

(ii) raise the completion rate in adult literacy classes;

(iii) develop the post-literacy programme in order to facilitate consolidation of skills by neo-literates;

(iv) involve local communities in the development of ALP and EPOSY.

(b) To raise relevance and quality:

(i) estimate the outcomes of the programmes as a basis for planning improvements;

(ii) strengthen the functional aspect of the programmes through appropriate curriculum development and implementation;

(iii) develop comprehensive criteria for assessing proficiency in literacy;

(iv) improve the extrinsic and intrinsic rewards for teaching staff in the programmes;

(v) improve the quality and quantity of instructional and reading materials;

(vi) develop certificated assessment of learning by adults and EPOSY learners.

(c) To improve resource mobilisation, allocation, application and to enhance accountability:

(i) decentralise management and financing to LGAs;

(ii) develop optimal unit costs for the programmes;

(iii) increase efficiency in resource application by developing linkages with other sub-sectors;

(iv) regularise the legal standing of EPOSY.

8.7.3 Programmes and Activities in ALP and EPOSY

In pursuit of the foregoing sets of strategies, activities - the combined effect of which is expected to be improved efficiency and effectiveness in ALP and EPOSY - will be carried out under the following interrelated programmes (i) management and financing, (ii) studies on ALP and EPOSY, (iii) linking ALP to the school education system, and (iv) curriculum and assessment.

(a) *Management and Financing.* In order to improve management and financing, the following approaches will be adopted:

(i) The proposed activities in the management and financing of ACE, including ALP and EPOSY, are described in 8.4.1(a) and 8.4.2(b) above. The emphasis put on a decentralised approach to management and financing does not aim at absolving the central government from overall responsibility for the country's human resource development. Decentralisation, backed up by budgetary support from the Treasury, is aimed at devolving certain functions that should be more efficiently and effectively carried out by institutions which are closer to and are representative of local communities and beneficiaries. Thus, decentralisation aims at empowering the populace to take charge of its own development.

(ii) With regard to the central government's responsibility, both ALP and EPOSY will be placed under one ministry. Equally important, the professional planning and financial support aspects of these programmes will be closely coordinated with their equivalents in general education and in the training sub-sector.

(iii) Measures will be taken to explore the desirability and possibility of separating the two roles played by EPOSY, i.e. provision of primary school education on one hand and on the other, skilled training geared to entry into the economy. As implied in the discussion of the current status, an EPOSY learner is in danger of falling between two stools: the time and resources necessary for mastering both the academic and practical skills aspects of the curriculum is inadequate. The key to separation would seem to be a decision on the age range which forms the divide between suitability for entry into primary school and enrolment in a basic education institution oriented to post-course entry into the economy. Because, in a society where belief in the merits of formal general education reigns supreme, the issue is sensitive. A research study that will, *inter alia* take into account the views of all stakeholders will be undertaken as the basis of decision-making and detailed planning.

(iv) Whether or not the two roles of EPOSY are reorganised into two sets of institutions, measures will be taken to improve the quality of learning in these institutions. While preserving the informality and flexibility which make them cheaper than formal schools, the centres operating as primary schools will be legally registered and support from public resources increased. In the long run, the aim of policy will be to incorporate the informality and flexibility of EPOSY into planning in order to develop a quality primary school system which caters for all eligible children.

(b) *Studies on ALP and EPOSY.* To improve on the current situation in which lack comprehensive data and information constitutes a major hindrance to systematic decision-making, planning, and implementation, early in the plan period a study covering both ALP and EPOSY will be carried out. The studies will be geared to:

(i) developing criteria for assessing quality;

(ii) establishing reliable rates of literacy at local and national levels as a basis for planning the eradication of illiteracy;

(iii) determining the causes of under-enrolment and wastage through dropping out in ALP classes as the starting point for planning effective intervention measures;

(iv) assessing and evaluating the outcomes of ALP and EPOSY through tracing of samples of graduates of the two programmes;

(v) estimating the current costs of the two programmes, and recommending optimal unit costs for each;

(vi) making recommendations on the desirability and possibility of separating the two roles of EPOSY.

(c) *Linking ALP to the School Education System.* To ensure efficient and effective utilisation of available resources, the duplication of implementation approaches between ALP and the school system at both the national and local levels will be eliminated. Towards this end, the following measures will be taken:

(i) In addition to using other community buildings, LGAs will plan to utilise the premises of primary schools as adult literacy centres.

(ii) With appropriate incentives being given, a head of a primary school doubling up as an ALP centre will, in collaboration with a committee representing the adult learners, take responsibility for organising and ensuring success of the programme.

(iii) With the necessary adjustment to the establishment and/or appropriate incentives, serving primary school teachers will double up as adult literacy teachers.

(iv) The current ALP teachers who are not already part of the

primary school establishment will

- either, with appropriate in-service training, be absorbed into the primary teaching force;
- or, if not academically qualified or are retired people, be retrenched.

(v) Building on the current post-literacy project in nine districts, LGAs will develop post-literacy classes to enable neo-literates stabilise their newly acquired skills and give them opportunities for continuing education.

(vi) Pedagogy for adults will be introduced in pre-service training of teachers. Serving teachers with no experience in teaching adults will be given appropriate on-the-job training.

(vii) Each LGA will ensure that the secretariat of its DETB has professional capacity for quality assurance in ALP and EPOSY. As will be the case with school education, the provincial quality assurance unit reporting to NETC will have responsibility for quality of the two programmes.

(d) *Curriculum and Assessment.* The following measures will be taken to improve the ALP and EPOSY curriculum development and implementation, and assessment:

(i) The ACE section at the Kenya Institute of Education will be strengthened, *inter alia* through recruitment of staff who are relevantly qualified, and establishment of curriculum panels which include members drawn from among ACE specialists in providing agencies and institutions of higher learning.

(ii) The thrust in curriculum development will be to link the acquisition of literacy to development activities. Integrated approaches that are responsive to the needs and aspirations of learners will be developed. This is expected to enable learners to apply literacy directly or indirectly in improving their productive skills.

(iii) As will be the case in school education, detailed curriculum development will be decentralised to the local level. Local communities and learners will be fully involved in identifying the needs to be addressed by the programmes.

(iv) To enhance relevance, reading materials will be continuously reviewed so that they address evolving community needs. As part of this endeavour, graduates of the programmes will be

encouraged to participate in the development of materials, and the possibilities of developing some materials that serve ALP, EPOSY, and extension education and training programmes will be explored.

(v) In collaboration with the Kenya National Library Services, all LGAs will be encouraged to develop libraries located close to communities. *Inter alia*, these libraries are expected to provide reading materials that enable neo-literates make use of their newly acquired skills.

(vi) To improve assessment and certification, the following three measures will be taken:

- National criteria for assessing proficiency in literacy and numeracy and other basic skills expected of ALP and EPOSY learners will be developed.

- A certification test nationally recognised as equivalent to the KCPE examination will be developed to cater for ALP and EPOSY learners. Other things being equal, candidates performing as well as those entered for the KCPE will be considered for selection into secondary school.

- While priority will be given to the development of assessment at the basic education level, adults will be encouraged to study for qualifications at the secondary school level. In the proposed era of close coordination in the human resource development endeavour, the relevant authorities will organise for private KCSE candidates to make use of the facilities of neighbourhood secondary schools in preparing and sitting for the examination, particularly in science subjects where practical papers are compulsory.

CHAPTER 9

RESOURCE ALLOCATION IN THE EDUCATION AND TRAINING SECTOR

9.1 INTRODUCTION

This chapter analyses the main resource issues facing the education and training sector. Resource management issues - that is, how the goals set out in this chapter will be achieved - are dealt with in Chapter 10 on management of the E&T sector. This chapter is not concerned with the costing of projects. During the plan period, there will be a move away from project aid to programme aid, which implies that within the process of annual and multi-annual programming of sectoral policy implementation targets, fiscal gaps will be identified and programme aid sought to fill them. Programme aid depends on good sectoral management and control, and the MPET gives those objectives strong emphasis, so that donors and lenders will feel increasingly confident in moving away from parallel systems of project implementation towards full integration into government structures and systems.

The MPET is not a central plan. It recognises the concepts of community participation and the involvement of all stakeholders in the development of their parts of the sector. The role of government is to set policy targets, and the role of managers is to seek ways of achieving those targets. Those processes involve consultation, because there will be different ways of achieving identical objectives. Local ownership is important. Thus, the first steps in the implementation of the Plan will include the development of local plans at district and institutional levels, and those plans will in due course be aggregated into national resource requirements, forming the base for a sectoral budget model.

The policy goals and strategies set out in the MPET require strengthened and reorganised sectoral management to attain them. In order to improve the quality of the system and increase enrolments, particularly among the more disadvantaged groups, significant changes in the way that resources are managed are envisaged in this Plan.

In particular, the potentially incompatible goals of overall government expenditure reduction, increased participation in the education and training system, and limiting the financial burden on families, will need careful management. In general, the resource allocation policy of the sector may be summarised thus:

(i) maintain total sectoral spending within the current GDP;
(ii) reduce the average real unit cost across the country to parents
(iii) maintain constant or reduce real unit costs per pupil to government;
(iv) rebalance unit costs per pupil to allow a greater share of non-salary costs.

The chapter is structured as follows. The next two sections analyse government education and training expenditures, and the fourth section presents a brief analysis of private expenditures. The fifth section describes the institutional framework of education and training finance, including the budget system. Next, the chapter sets out a simple fiscal model in order to give some indication of the future capacity of the state to finance expanded education and training services, while the final part of the chapter considers how the goals of greater efficiency and effectiveness of resource allocation to education and training in Kenya can be achieved within the constraints imposed.

The quality of many of the data, particularly financial data, requires that caution is exercised when interpreting data for policy purposes. The GDP deflator, the base year of which is 1982, may not provide the best estimates of real values; GDP itself is likely to be underestimated; and there are discrepancies between Economic Survey data and Appropriation Account data for education and training. One component in the MPET will be the strengthening of sectoral data systems.

9.2 EDUCATION AND TRAINING EXPENDITURE AND THE MACRO ECONOMIC FRAMEWORK

Total education and training expenditures have risen as a percentage of GDP over the last four years. Including foreign aid they have risen from 6.7 per cent to 7.3 per cent of GDP, while recurrent expenditures have risen from 6.1 per cent to 6.6 per cent. The data are shown in Tables 9b and 9c and the trends illustrated in Figure 9i.

Comparisons with other countries are difficult to make because of the difficulty in standardising what is included in education and training expenditure. One comparison (in which the Kenyan data are difficult to reconcile with those presented in this report) is given in a recent World Bank publication, shown in Table 9a.

Table 9a. SHARE OF EDUCATION IN PUBLIC EXPENDITURE (mean shares, 1990-94)

COUNTRY	% SHARE
Kenya	23.2
Ghana	23.6
Cameroon	21.9
South Africa	21.2
Botswana	20.6
Zimbabwe	19.8
Mauritius	14.9
Zambia	11.8
Ethiopia	11.4

Source: The World Bank (1996). African Development Indicators

Table 9b: GDP, GOVERNMENT EXPENDITURE AND EDUCATION AND TRAINING BUDGETS

Kenya Pounds '000,000

Item	1992/93 Actual	1993/94 Actual	1994/95 Actual	1995/96 Approved	1996/97 Printed
Gross Domestic Product (GDP)	12,807.0	16,007.0	19,684.0	23,040.0	
Total Government Expenditure	6,166.9	9,007.7	8,236.7	9,549.6	9,786.9
Total Government Expenditure as % of GDP	48.2%	56.3%	41.8%	41.4%	
Total Government Recurrent Expenditure	5,315.5	7,981.1	6,933.9	7,577.9	7,616.6
Total Government Recurrent Expenditure as % GDP	41.5%	49.9%	35.2%	32.9%	
Consolidated Fund Services (CFS)	3,123.2	5,274.9	3,447.3	3,157.1	3,078.3
CFS as % total recurrent expenditure	58.8%	66.1%	49.7%	41.7%	40.4%
Total Discretionary Recurrent Expenditure	2,192.3	2,706.2	3,486.6	4,420.8	4,538.3
Total Discretionary Recurrent Expenditure as % GDP	17.1%	16.9%	17.7%	19.2%	
as % Total GOK Recurrent Expenditure	41.2%	33.9%	50.3%	58.3%	59.6%
as % Total GOK Expenditure	35.5%	30.0%	42.3%	46.3%	46.4%
Total Education	855.0	1,069.7	1,387.5	1,680.2	1,654.5
as % GDP	6.7	6.7	7.0	7.3	
Total Education & Training Recurrent Expenditure	783.8	1,004.3	1,299.1	1,523.3	1,566.1
as % GDP	6.1%	6.3%	6.6%	6.6%	
as % total recurrent expenditure	14.7%	12.6%	18.7%	20.1%	20.6%
as % discretionary recurrent expenditure	35.8%	37.1%	37.3%	34.5%	34.5%
Ministry of Education Recurrent Expenditure	720	928	1,197.8	1,406.0	1,535.7
as % GDP	5.6%	5.8%	6.1%	6.1%	
as % total recurrent expenditure	13.5%	11.6%	17.3%	18.6%	20.2%
as % discretionary recurrent expenditure	32.8%	34.3%	34.4%	31.8%	33.8%
Vocational and Technical Training Recurrent Expenditure	11.2	16.4	38.1	22.6	30.5
as % discretionary recurrent expenditure	0.5%	0.6%	1.1%	0.5%	0.7%
Other Education and Training Recurrent Expenditure	52.9	60.3	63.2	94.7	
% Total GOK Recurrent (excl. CFS)	2.4%	2.2%	1.8%	2.1%	
Development Expenditures					
Total GOK Development Expenditure	851.4	1,026.6	1,302.8	1,971.7	2,170.3
as % GDP	6.6%	6.4%	6.6%	8.6%	
as % total government expenditure	13.8%	11.4%	15.8%	20.6%	22.2%
Total Education & Training Development Expenditure	71.0	65.3	88.4	156.9	88.4
as % Total Development	8.3	6.4	6.8	8.0	4.1
as % total education expenditure	8.3	6.1	6.4	9.3	5.3
Ministry of Education Development Expenditure	35.7	37.2	32.8	50.0	72.4
as % Total Development	4.2%	3.6%	2.5%	2.5%	3.3%
of which domestic revenues					
Vocational/Technical Training Development Expenditure	0.7	1.8	1.4	14.8	46.5
as % Total Development	0.1%	0.2%	0.1%	0.7%	
Other Education and Training Development Expenditure	34.6	26.3	54.2	92.1	16.0
as % Total Development	4.1%	2.6%	4.2%	4.7%	0.7%
memo items					
GDP deflator (1982=1) (2)	2.8	3.4	3.9	4.5	
CPI (1982=100) (2)	306	415	466	512	
In constant 1992/93 prices					
Gross Domestic Product (GDP)	12,807.0	13,152.2	14,249.6	14,503.6	
Total Government Recurrent Expenditure	5,315.5	6,557.7	5,019.6	4,770.3	
Total Discretionary Recurrent Expenditure	2,192.3	2,223.6	2,524.0	2,782.9	
Total Education	854.8	878.9	1,004.4	1,057.7	
Education Recurrent	783.8	825.2	940.4	959.0	
Education Development	71.0	53.7	64.0	98.8	
Ministry of Education Expenditure	785.6	811.1	921.3	952.7	
Vocational/Technical Training	11.7	13.6	29.2	27.3	
Recurrent Expenditure	11.2	13.5	27.6	14.2	
Development Expenditure	0.5	0.1	1.7	13.0	
Other Education and Training	57.5	54.3	53.9	77.7	

Source: GOK Economic Survey, Appropriation Accounts and Budget Estimates

Notes: (1) deflators for 95/96 estimates of 15 per cent on previous year: other deflators calculated from Economic Survey Table 2.1

Kenya has one of the highest ratios in Africa of education and training expenditure to national income and to public expenditure, and has sustained such a spending effort for some time. The nearest comparator country in the table, Ghana, has also maintained a high share of expenditure in public spending, but the share of national income allocated to education and training is half that of Kenya, reflecting relative public spending efforts.

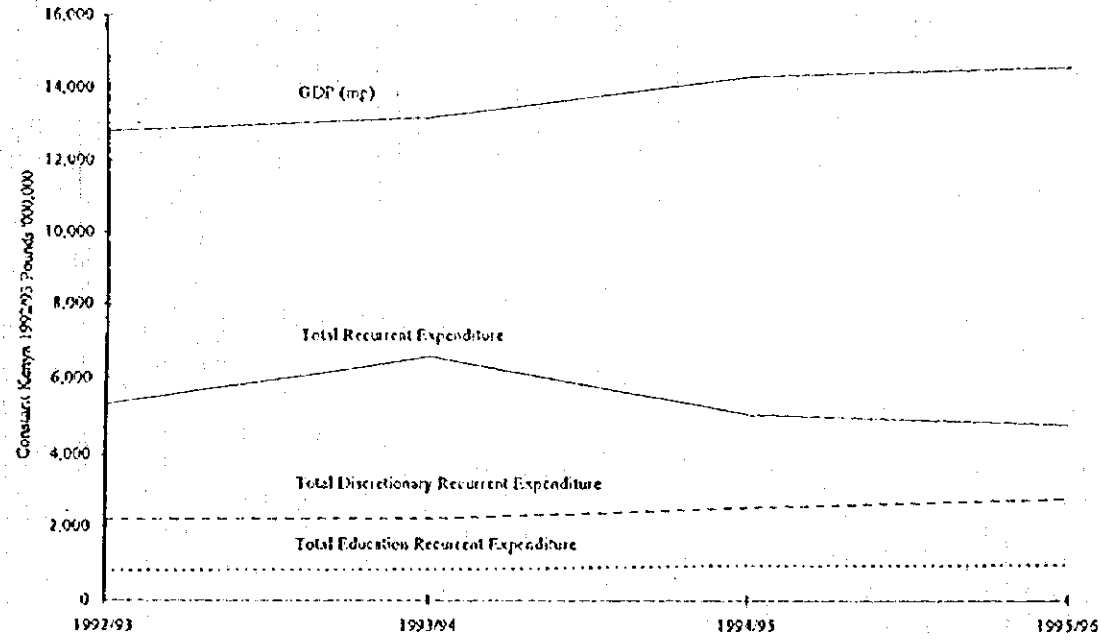
Table 9c. GDP AND GOVERNMENT EXPENDITURE
Constant 1992/93 Kenyan Pounds '000,000

Item	1992/93 Actual	1993/94 Actual	1994/95 Actual	1995/96 Approved	Average Annual Growth
Gross Domestic Product (GDP)	12,807.0	13,152.2	14,249.6	14,503.6	4.2%
Total Government Recurrent Expenditure	5,315.5	6,557.7	5,019.6	4,770.3	-3.5%
Total Discretionary Recurrent Expenditure	2,192.3	2,223.6	2,524.0	2,782.9	8.3%
Total Education	854.8	878.9	1,004.4	1,057.7	7.4%
Education-Recurrent	783.8	825.2	940.4	959.0	7.0%
Education-Development	71.0	53.7	64.0	98.8	11.6%
Ministry of Education Expenditure	785.6	811.1	921.3	952.7	6.6%
Vocational/Technical Training	11.7	13.6	29.2	27.3	32.6%
Recurrent Expenditure	11.2	13.5	27.6	14.2	8.3%
Development Expenditure	0.5	0.1	1.7	13.0	196.5%
Other Education and Training	57.5	54.3	53.9	77.7	10.6%

Source: GOK Economic Survey, Appropriation Accounts and Budget Estimates

Notes: (1) deflators for 95/96 estimates of 15 per cent on previous year: other deflators calculated from Economic Survey Table 2.1

Figure 1: Trends in Government Expenditure



Total recurrent expenditures on education and training account for about 35 per cent of government discretionary recurrent expenditures, that is, not including CFS which is mainly composed of debt interest payments, which have first claim on resources. As the table and figure show, Kenya spent nearly 60 per cent of its recurrent budget on debt costs in 1992/93, falling to a budgeted 40 per cent by 1996/97. At the same time, total government expenditure has been falling as a percentage of GDP in line with government policy. While total government expenditure has been between 40 and 50 per cent of GDP over the period from 1992, the level of recurrent expenditures over which government has some discretion has been much lower, being the equivalent of 17 per cent of GDP rising to 19 per cent by 1995/96.

Using the GDP deflator, which is also a crude tool and which should be treated with caution, government real expenditures (that is, allowing for inflation) have actually fallen overall, while discretionary expenditure has risen very slightly reflecting the decline in annual debt costs. Education and training recurrent expenditures have risen over the period at an average annual rate of 7 per cent, over 1 per cent less than total discretionary expenditures, implying a reallocation out of education and training to other expenditures (had education and training expenditures kept pace with the real rate of growth of discretionary expenditures the education and training budget would have been about £40 million higher in 1995/96)

There are three points of note which can be drawn from these data. First, Kenya spends more than most other African countries in education, expressed as a percentage of GDP, but experience in other countries suggests that this ratio is a difficult one on which to base policy because of the uncertainty surrounding the accuracy of the GDP data. Nevertheless, it is likely that Kenya's expenditures are relatively high. On the other hand, the proportion of total expenditure allocated to education and training is comparable to other countries, having risen from about 15 to 21 per cent. The reasons for this apparent paradox relate to the high levels of debt cost in the budget. Were the level of annual debt costs to be reduced, the proportion of expenditures on education and training in total government expenditure would be higher, reflecting the GDP ratio. In terms of expenditure excluding CFS (discretionary expenditures), Kenyan expenditures on education and training, which account for about 35 per cent of discretionary expenditures, are somewhat higher than comparable countries, but not unique: Ghana for example as a similar ratio (though a much lower GDP ratio).

Second, although debt costs will remain significant over the near future, education and training expenditure must be seen in the context of affordability to government and hence to taxpayers. As debt costs can be reduced, Government has the choice of allocating the 'savings' to tax reductions, other government expenditures, and increasing education and training expenditures. Up to now government has reduced expenditures as debt costs have been reduced, and maintained real growth in the discretionary budget.

Third, total government expenditures continue to decline as government continues to reduce the share of government expenditure in GDP, and there will be pressures on real education and training expenditures. This will have implications for the domestically financed development budget, and for foreign aid. At present the composition of education and training expenditures between development and recurrent expenditures is heavily weighted in favour of the latter when domestic revenues only are considered. GOK total development expenditures are about 8 per cent of GDP. As total expenditures fall there will be an inevitable pressure to reduce GOK development expenditures, especially in the case where civil service reform measures to reduce wage costs in the recurrent budget do not achieve rapid enough results. Already Government has a reduced role in physical investment in the education and training sector, and private contributions have not filled the gap.

In summary, government faces a difficult set of choices in the education and training sector. On the one hand there will be no real additional resources allocated to education and training, and on the other hand government is committed to increasing access to education and training opportunities and setting more manageable costs to households. At the same time, given continuing real growth in GDP, and assuming that efforts to control debt commitments are sustained, there may in the medium term be more flexibility in the budget than at present.

9.3 TRENDS IN EDUCATION AND TRAINING EXPENDITURES

As Table 9c shows, real (adjusted for inflation) expenditures on E&T have experienced an averaged annual rate of growth over the last few years of about 7 per cent per year. This increase is reflected in intrasectoral expenditures, as is shown in Table 9d and Figure 9ii.

Figure 9ii shows a levelling off of the real rates of subsectoral growth of recurrent expenditures. Averaged over the period, secondary education has seen the highest real growth rate at 15 per cent per year, while primary education grew at a little over 5 per cent, slightly faster than higher education.

Table 9d. SUB-SECTORAL RECURRENT EXPENDITURE IN THE E&T SECTOR

Constant 1992/93 Kenyan Pounds '000,000

	Expenditures					Shares of Expenditures			
	1992/93 Actual	1993/94 Actual	1994/95 Actual	1995/96 Approved	Rate of Growth	1992/93 Actual	1993/94 Actual	1994/95 Actual	1995/96 Approved
General Administration & Planning	37.3	36.4	43.6	43.3	5.0%	5.1%	4.7%	4.8%	4.8%
Pre-primary Education	0.7	0.6	0.1	0.2	-34.8%	0.1%	0.1%	0.0%	0.0%
Primary Education	413.5	453.0	488.9	484.2	5.4%	56.4%	58.4%	54.2%	53.9%
Secondary Education	122.1	129.2	183.5	187.5	15.4%	16.6%	16.7%	20.3%	20.9%
Technical Education	14.4	13.8	15.5	14.2	-0.4%	2.0%	1.8%	1.7%	1.6%
Teacher Training	14.6	12.5	5.2	3.3	-38.9%	2.0%	1.6%	0.6%	0.4%
Special Education	2.7	6.6	1.3	1.6	-16.5%	0.4%	0.8%	0.1%	0.2%
Polytechnic Education	4.4	4.8	4.6	4.3	-0.4%	0.6%	0.6%	0.5%	0.5%
University Education	126.3	118.8	147.5	146.0	4.9%	17.2%	15.3%	16.3%	16.2%
Miscellaneous	1.6	2.4	2.3	2.3	14.4%	0.2%	0.3%	0.3%	0.3%
TOTAL	733.8	775.4	902.1	898.9	7.0%	100.0%	100.0%	100.0%	100.0%

Notes & Sources. As previous tables

Figure 9ii. TRENDS IN SUB-SECTORAL EDUCATION RECURRENT EXPENDITURE

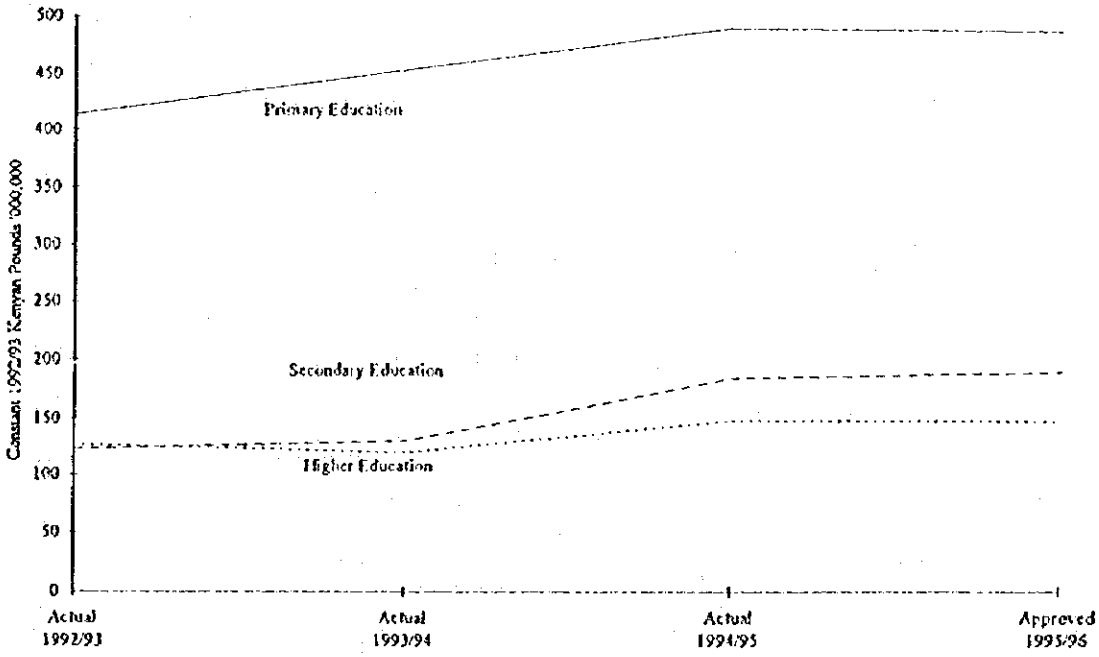
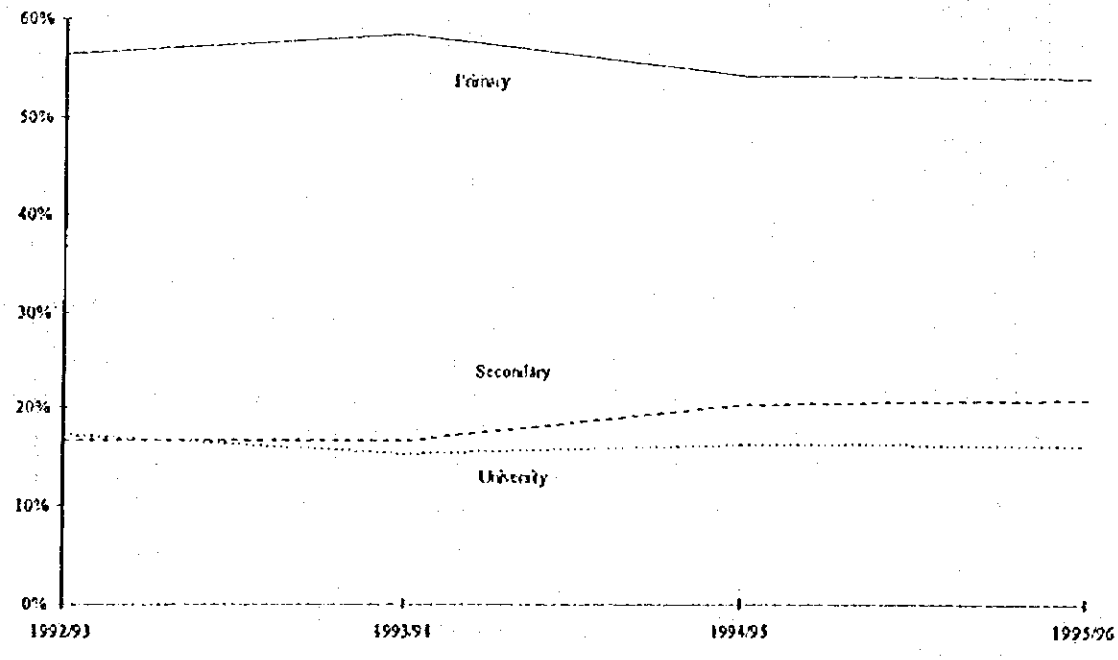


Figure 9iii shows the trends in the shares of the major spending subsectors, derived from Table 9d. The share of secondary education in the budget has risen, from 16 per cent to 21 per cent, while the primary share peaked at 58 per cent in 1993/94 and has since declined. University education shares have also declined. Total expenditures on training by the MRTTT fell slightly, and expenditures by the MCSS also fell by an average of over 4 per cent per year over the period.

Figure 9iii. TRENDS OF SHARES IN SECTORAL EXPENDITURES



Average Expenditures

The relation between expenditures and enrolments is captured in per pupil expenditure data. These are shown in Table 5. Expenditure on each primary child has grown in real terms at 5.5 per cent per year, at a slower rate than expenditure on secondary and university students, which grew at 15 and 6 per cent respectively. Primary enrolments fell over the period, as did university enrolments, while secondary enrolments rose slightly. In the technical and vocational institutions, expenditures per student rose substantially in the Institutes of Technology.

Table 9e. AVERAGE RECURRENT EXPENDITURES PER STODENT ON E&T
Constant 1992/93 Kenyan Pounds

	1992/93		1993/94		1994/95		1995/96		Average
	Actual	Ratio / Primary	Actual	Ratio / Primary	Actual	Ratio / Primary	Approved	Ratio / Primary	Annual Growth
Average Exp / Primary Pupil	74	1.0	83	1.0	88	1.0	87	1.0	5.5%
Average Teacher Exp / Pupil	70		83		86		85		6.6%
Average Exp / Primary Teacher	2,345		2,615		2,745		2,661		4.3%
Average Exp / Sec Pupil	194	2.6	243	2.9	296	3.4	296	3.4	15.1%
Average Sec Teacher Exp / Pupil	184		224		277		280		15.1%
Average Exp / Sec Teacher	3,361		4,083		4,789		4,519		10.4%
Average Exp Teacher Trainee	720	9.7	719	8.6	299	3.4	198	2.3	-35.0%
Average Exp / University Student	3,045	41.0	3,003	36.0	3,748	42.6	3,645	41.7	6.2%
Average Loan / University Student	964		772		939		773		-7.1%
Average KISE Expenditure / trainee	13,253	178.3	10,889	130.5	6,367	72.4	8,343	95.5	-14.3%
Technical and Vocational		Ratio/IT		Ratio/IT		Ratio/IT		Ratio/IT	
Average Exp IT	302	1.0	513	1.0	605	1.0	569	1.0	23.6%
Average Exp Polytechnic	487	1.6	527	1.0	428	0.7	548	1.0	4.0%
Average Exp TTI	666	2.2	562	1.1	657	1.1	666	1.2	0.0%
Average Exp KTTC	3,261	10.8	3,259	6.3	4,109	6.8	3,320	5.8	0.6%

Notes and Sources: Calculated from MOE, MRTT statistics and Appropriation Accounts. Note that salary data for 1994 onwards are estimated, as they ceased to be disaggregated in the accounts. Deflator as previous tables.

The table also shows the relative growth of the salary component of average expenditures on school education. It can be seen that the source of real growth in average expenditures was the growth of salaries. This means that although average expenditures have increased in real terms, the increase does not reflect improvements in the financing of teaching and learning inputs apart from the teacher. Over the period the PTR dropped by 1 pupil per teacher, as shown in Table 9F, indicating that the rise in expenditure per pupil was generated by an increasing inefficiency in the use of resources. Similarly, the rise in per secondary student expenditure is entirely due to the teacher salary component, in turn a result of a decline in the PTR from 17.3 to 15.2, in spite of virtually stagnant enrolments. In other words, more teachers were recruited to teach the same number of pupils.

Table 9f: **Pupil Teacher Ratios**

PTR	1992/93	1993/94	1994/95	1995/96
Primary	31.5	31.3	31.2	30.5
Secondary	17.3	16.8	16.2	15.2

The third component of Table 9e is the ratio of average expenditures relative to the lowest average in the category. Thus, in 1992/93, the expenditure on every 100 secondary students would have financed 260 primary children, while 100 university students cost the state the equivalent of 4,100 primary pupils. The table shows those ratios to have risen over the period. The costs of the Kenya Institute of Special Education are of interest. They have fallen steeply, but in 1995/96 were budgeted still at twice the cost of a university student and 95 times the cost of a primary pupil. In 1992/93 the expenditures on KISE were equivalent to the cost of nearly 15,000 primary students.

Table 9e compares the average recurrent cost per trainee in the technical and vocational system to that of trainees in Institutes of Technology (the previous Harambee Institutes). Polytechnics have achieved very low average costs per student, less than twice those of secondary schools, and the lowest in the technical system. TTIs are more expensive per student than ITs, and the KTTC average costs are similar to those of universities.

The foregoing paragraphs suggest the need for more analysis of institutional budgets, and the Master Plan period will see a sustained effort to improve the accuracy of budget estimation as part of the programme to improve the efficiency of education and training institutions.

9.4 COST SHARING

In the cost-sharing strategy, the government committed itself to reducing the share of its budget to education and training by shifting to parents and communities recurrent costs such as purchase of books, fees, uniforms, and other private costs such as transport and meals.

Table 9g. HOUSEHOLD PER-PUPIL EXPENDITURES ON EDUCATION, 1994
Ksh per pupil

Province	Pre-Primary	Primary	Secondary	Post-School Vocational	University
Nairobi	2,510	3,854	14,584	10,831	36,150
Central	788	947	10,625	7,903	16,751
Coast	1,050	804	8,124	6,007	29,786
Eastern	401	718	8,278	5,143	5,804
North Eastern	582	1,011	8,821	890	15,700
Nyanza	221	534	7,877	8,317	36,955
Rift Valley	391	815	10,576	6,817	13,537
Western	243	598	10,498	7,170	11,625
Rural	332	652	9,368	6,875	20,340
Urban	1,895	2,506	12,117	9,786	29,003
Total	599	856	10,095	7,661	22,565

Notes & Sources: WMS II, Table 4.11

Table 9f shows the per-pupil expenditures by households in 1994 on all levels of education. The average household expenditure on primary education in 1994 was Ksh 856 across the country, compared with per-pupil average government expenditure of about Ksh 2,430: households spent about one third as much per pupil as did the government, with urban households spending more. However, the respective figures for secondary education were average household expenditure per pupil of Ksh 10,095, while the government spent about Ksh 8,000 per pupil, households on average spending 25 per cent more per pupil than government.

Most households enrol more than one child in school, so the per pupil effort does not properly reflect the burden of costs on households. Table 9h shows the annual average expenditures on schooling by households (not per enrolled child). About half of total expenditures are for fees, and more is spent on uniforms than books. Outside the urban areas families paid between Ksh 3,000 and 5,500 per year in total on education.

Table 9h. AVERAGE ANNUAL HOUSEHOLD EXPENDITURES ON EDUCATION, 1994
(households with enrolled children, Ksh)

Province	Fees	Uniform	Books	Travel	Boarding	Tuition	Harambee	Total
Nairobi	8,967	1,282	1,196	741	1,142	393	310	14,031
Central	1,611	745	634	71	115	122	473	3,772
Coast	2,137	614	575	213	315	141	296	4,290
Eastern	1,280	891	497	48	158	115	308	3,296
North Eastern	1,452	986	500	112	147	119	287	3,603
Nyanza	1,772	530	589	78	107	123	251	3,450
Rift Valley	2,099	767	705	141	246	196	407	4,356
Western	2,450	730	709	155	562	195	612	5,414
Rural	1,657	685	579	84	210	139	376	3,728
Urban	6,137	1,187	1,118	519	732	324	397	10,415
Total	2,328	760	660	150	288	166	379	4,730

Notes & Sources: WMS II page 83

Schools depend almost entirely on parental contributions for non-staff costs. Table 9j shows how the revenues were constructed for a sample of secondary schools in 1994. Comparing the salary cost per student (financed by the government) to school revenue from the government shows that nearly all government expenditures are on salaries. Overall, parents spend as much as the total direct school costs per student, and twice as much as the government on secondary education. The Plan period will therefore see a determined effort to raise the efficiency of the school system in aggregate.

Table 9j. SOURSES OF REVENUE FOR SELECTED SECONDARY SCHOOLS, 1994 KSH

	Expenditure	Revenue				
Type of School	Salary Cost per Student	GOK	Households	Other	Total	Percentage Households
Day	5,868	5,359	4,646	51	10,056	46.2%
Boarding	6,478	6,621	12,161	279	19,061	63.8%
Day + Boarding	6,813	6,851	9,317	297	16,465	56.6%

Source: Karani A *et al*, *Cost and Financing of Education in Kenya: Study 2, Access, Quality and Equity in Secondary Education*, MOE December 1995, Table 8, p 44, Table 9, p 47

There is strong evidence which suggests that the objectives of the cost-sharing strategy are not being met. First, enrolments have not been rising with population, and historical enrolment data show that enrolments are sensitive to the financial demands on parents. Secondly, schools lack essential facilities and materials in spite of the relatively larger levels of household expenditure. It is widely accepted that a significant factor is the inability of parents and communities to meet the charges required of them, particularly in view of the fact that E&T costs are not the only costs they have to meet. For example, Table 9k shows the share of average monthly non-food expenditures on education and health by province[1].

[1] It is most appropriate to use non-food expenditures as the denominator as for most people food is a non-discretionary expense.

Table 9k. EDUCATION & HEALTH SHARES OF NON-FOOD EXPENDITURES, 1994

Province	Education	Health	Non-food % Total
Nairobi	6.4%	12.4%	55.8%
Central	10.6%	9.6%	28.5%
Coast	8.9%	13.0%	26.6%
Eastern	11.5%	12.5%	30.7%
North Eastern	4.6%	7.3%	29.1%
Nyanza	12.6%	21.7%	27.2%
Rift Valley	11.6%	14.8%	27.8%
Western	24.0%	20.2%	25.3%
Rural	13.3%	15.4%	25.5%
Urban	7.2%	12.7%	50.2%
Total	10.4%	14.1%	33.3%

Notes & Sources: WMS II, Tables 6.7 & 6.8

Non-food expenditures constitute low percentages of total expenditures among the poor who have to spend higher proportions of their incomes on food, partly because of larger families but mainly because of lower incomes. Richer households tend to spend more on health because they are able to afford higher cost health care. Poor households have little choice but to spend on health, leaving education as a residual, albeit a very important one. In all provinces education accounts for a significant proportion of household expenditure, and the Table 10 suggests that little more can be afforded without raising household incomes or reducing the costs of other services such as health.

Private Schools. Government policy has been to encourage the growth of private schools. The Cost and Financing Study cited above indicates that private schools may achieve on average a slightly but not significantly higher PTR than state secondary schools, and a much lower cost per student. This is achieved through the employment of untrained teachers, with very high trained teacher / student ratios of well over 50, and up to 200. Although textbook provision appeared to be better in private schools, performance in examinations was considerably worse. This in itself is not necessarily significant without standardising for other factors. During the plan period consultations will take place with private school proprietors on how they might raise standards.

It must be concluded that the policy of cost-sharing has been a contributory factor to falling enrolments as well as failing schools. This poses a critical problem for government, which must contain the costs of the system within what is affordable, and at the same time reduce the burden on parents.

9.5 THE CURRENT SYSTEM OF RESOURCE ALLOCATION

At present the sector's resource allocation system is characterised by institutional diversity, and is based upon a line item incrementalist system of budgeting. The diversity of institutions in the sector mean that policies relating to the balance of expenditures between technical, vocational, adult and non-formal education are not considered within the same resource envelope, but are considered separately within different organisational frameworks. Added to this diversity of Ministries is the Teachers Service Commission and the current method of budgeting for teachers. Finally, the current system of budgeting divides recurrent and capital expenditures into different processes.

Budget preparation is principally concerned with adding to the previous year's estimates involving incremental increases to each line item. This results in a lack of scrutiny of the purposes of each expenditure, and lays more emphasis on inputs as opposed to outcomes. Furthermore, the system means that unit costs per pupil / student tend be residual: they are not planned, but merely happen, because budgets are not made with them in mind.

The main driver of the budget is salaries. Although there are supposed to be norms which are based on PTRs for primary education and on the Curriculum Based Establishment (CBE) for other levels, those norms are not adhered to for various reasons.

9.6 IMPLICATIONS OF EDUCATION POLICIES FOR GOVERNMENT SPENDING

Government is committed to a policy of containing E&T expenditures broadly within the current GDP share of about 7 per cent, 6.5 per cent excluding foreign aid. Additional real resources for the sector will therefore depend on growth in the government's discretionary budget. This in turn will depend on the level of non-discretionary expenditures - particularly interest costs - sustained by government, and the elasticity of government spending with respect to GDP. In other words, if public expenditure policies combine a falling share of GDP allocated to public spending *and* if that falling share translates into real reductions in spending, then the E&T sector, assuming a constant share, will also experience real declines in total spending. This will in turn translate into even greater declines in spending per pupil.

The Plan has implications for public spending. Those implications derive mainly from the need to reduce the cost burden on households, because reliance on household finance through the cost-sharing policy has resulted in serious underfunding of non-salary costs which has had a negative impact on the quality of education and training offered. Thus, the policy of the sector is to maintain a constant share in public spending, and that per pupil resources contributed by parents will not rise. Non-payment of dues is now so chronic that there has been a *de facto* change in cost-sharing policy which needs to be recognised and rationalised.

At the same time, it is the duty of government to ensure as efficient a provision as possible, because it is not appropriate to ask parents to contribute to an inefficiently managed system. From a resource point of view, therefore, the Plan strategies are:

(a) to use public resources more efficiently;

(b) to make structural changes to the system (such as curriculum changes) which reduce the demand of the system for resources;

(c) to make institutional changes to the system which allow more local choice in the application of resources (such as decentralised funding).

A Fiscal Model

In order to achieve the stated objectives, the expenditures per pupil / student by government and parents will have to be carefully managed. The simple model in the MPET relates unit costs to enrolment capacity. This is because if the central element of finance policy in the sector is the control of unit costs, budgets must be built up on a unit cost basis. Decentralisation makes this possible. Accountability for finances and for outcomes will be decentralised as local management capacity grows. The allocative role of the centre will be to set performance targets and to deliver financial grants to the decentralised institutions (LGAs, schools, colleges, universities) in exchange for performance. The clearest way to define allocations is via a capitation grant, an allocation per capita based on existing and desired (norm) costs. The model, summarised in the Annex, takes a scenario approach to analysing the critical resource issues in the sector.

In some respects enrolment is outside the control of system managers. However, it is assumed that reduced private costs and better quality will positively influence enrolments, while increased private costs and poor quality will reduce them. The precise effect of improving quality and reducing private costs cannot be measured *ex ante*. The critical issue will be the relation between enrolment increases and the number of teachers and, to a lesser extent, the scale of the additional costs to government proposed in this Plan.

To reduce private costs and improve quality of teaching and learning will require a number of different actions, which are set out in the appropriate chapters of the Plan. These actions are

(a) reducing the level of inputs required from parents, such as the number of books; other materials; non-learning costs such as uniforms; travel costs;

(b) increasing the efficiency of government expenditures so that the composition of unit costs has a higher non-salary component earmarked for expenditures which improve learning and reduce costs to households;

(c) giving greater flexibility to schools, LGAs and other decentralised bodies to choose the appropriate mix of inputs to achieve the objectives of increasing enrolments, raising quality and containing costs to government and households, so that greater incentives to perform are introduced into the system. This set of actions is described in Chapter 10 on sector management.

The model permits changes in one variable at a time in order to see the effects of each change. Obviously any number of scenarios is possible, and none of them are necessarily a reflection of reality. In addition, the aggregate data used are not 'exact', and the absolute magnitudes are thus indicative. Therefore *operational* actions must be distinguished from policy and planning actions, but of course the latter guide the former.

The basic variables in the model are

(a) the PTR
(b) the average salary per teacher
(c) the average non-salary costs per pupil
(d) average household costs per pupil
(e) GDP
(f) population growth

The PTR

E&T finances are characterised by one key variable, the PTR, and the unit cost per student is a function of three variables, the PTR, the average salary of a teacher, and the average expenditure per pupil on non-salary items (equation 1 in the model in the Annex). The PTR is itself a function of class size, and can be changed through interventions which increase enrolments and / or reduce the number of teachers in a school. Those interventions form central parts of the strategies in the subsectoral chapters.

There are two issues surrounding the PTR, the absolute level of the average (Table 9f) and the variations around the average by school, district and institution. Policy on PTRs may not rely in the first instance on raising the average, but on reducing the variations around the average across the country, resulting in a more equitable distribution of unit costs on which the per capita grant system can then be based. The per capita grant system will then start to drive up the average. In reality, both processes will happen at the same time.

Average Salary per Teacher

The model assumes a constant real (adjusted for inflation) average salary per teacher, which is a reasonable assumption given that the inflation rate in Kenya is becoming under control. A constant real average salary implies a rising nominal (expressed in current prices terms) salary. Average teachers' salaries of course vary by district and by institution, and are influenced by the qualifications and experience of teachers. As the proportion of qualified teachers in the teaching force rises there will be an upward movement in the national average. However, with a reducing PTR at all levels there will be space in the budget for that movement.

Average Non-Salary Costs Per Pupil

The level of the non-salary unit cost per pupil is a critical variable in the Plan. The scenarios show that the space for increasing the level of this unit cost is constrained. Within that cost are to be found the implications for cost sharing. The Plan has recognised the lack of learning materials, the frail state of much of the school infrastructure and the failure of parental contributions to improve and maintain it. Similarly, other non-salary costs have been identified. It is clear that over the near term there will insufficient space in the budget to fund as much as would be desired, and that the government will have to set priorities for non-salary funding. Those priorities will relate to the overall target of enrolment and quality increases. The marginal impact of increased non-salary allocations will be greater in some places than in others. Under the decentralised allocation system priority areas will be identified and their budgets allocated accordingly.

The data used in the analysis in this chapter for non-salary unit costs are strictly speaking a mixture of non-salary and non-teaching staff costs, particularly for secondary education. However, the critical issue is the level and composition of non-teaching costs, so for the purposes of the analysis it is sufficient to aggregate non-teaching staff and other costs together. In the more detailed calculation of unit costs, the data will need to be more disaggregated.

Average Household Costs Per Pupil

The data in the Plan are derived from the Welfare Monitoring Survey, and it is well understood that data gathered from specific school surveys will vary from the national WMS averages. Again, it is not possible, nor is it productive, to seek for exact numbers, but rather to concentrate on trends in the orders of magnitude.

There are a number of aspects of household expenditures which need to be distinguished for policy purposes. First, the extent to which reductions in household costs and improved school quality will stimulate enrolment increases cannot be predicted. Second, households spend money on direct learning inputs and inputs not directly contributing to learning. This means that while it is intended that there will be a rebalancing of expenditures between households and government in respect of learning inputs, other regulatory measures will be required to reduce the burden on parents of the other costs.

Government policy therefore is to make space in the budget for the government to increase direct expenditures on learning inputs, and for a regulatory framework reinforced by guidelines and scrutiny systems to control the extent to which schools demand other charges.

In the scenarios developed from the model the main determinant of enrolment capacity is the unit cost to government, while the impact of household costs on enrolment demand is assumed. In other words, if government wishes to finance each child or student at a level which ensures good quality, there is a limit to the number of students than can be enrolled for a given budget ceiling. In order to absorb greater enrolments and to spend less on salaries, the budget ceiling must be raised at a faster rate than enrolment growth or the unit cost per student must be lowered, or a combination of both. If enrolments grow faster than available resources, the system experiences explosive growth in a cobweb cycle: enrolments

increase; expenditures per pupil decline; quality declines; costs to households rise; and enrolments decrease, until the cycle starts again, never stabilising.

Thus the rate at which costs of direct learning inputs can be transferred from households to government will depend, within the hard budget constraint, on the relative rates of growth of enrolments and budget. In a decentralised system these rates can be monitored more easily than in a centralised system, particularly as it becomes more possible to target priorities. By attempting to maintain a balance between household and government costs in principle both quality and demand can be satisfied.

GDP

The rate of growth of national income is obviously a key variable, and it is outside the control of the E&T sector policy makers.

The policy set out in the MPET is that government will try to maintain at least a constant relationship between sectoral expenditures and national income, currently running at a little over 7 per cent, with recurrent expenditures at about 6.5 per cent (details in Table 9b). Given therefore a norm unit cost, itself based on a norm PTR, a norm average teachers' salary and a norm average other costs, as GDP rises the capacity of the budget to sustain rises in enrolments is increased (equation 2 in the model). However, the relation between national income and public expenditures may not in reality be fixed, though Table 9b shows a fairly stable relation between national income and *discretionary* expenditure. There is a practical importance to this relationship, in that the sector will need to be able to define with reasonable security its resource envelope for the short term. This is necessary in order to accomplish a rebalancing of expenditures so that more space is made in the budget for non-salary expenditures. Under the present system there is automatic clawback if salary budget is unspent, and hence an unstable budget ceiling because it is incrementally derived and not based on rational criteria.

If education and training expenditures are assumed to take a constant proportion of GDP, and if enrolments do not rise, then by definition expenditure per pupil will rise, but without achieving the objective of increasing access. Where expenditure is a determined percentage of GDP (and therefore of the budget) the capacity of the system to finance each pupil will depend on how far unit costs are maintained. Thus enrolment capacity for a given unit cost is determined by dividing total expenditures by the unit cost, because total expenditure and unit costs are given. Total expenditure is per pupil expenditure multiplied by enrolment. Therefore, if there is no policy on the overall government resource envelope allocated to education and training, the unit cost is made up of teachers' salaries, non-salary expenditures and the PTR, while enrolments are given. Total expenditures may therefore rise or fall, depending on the movement of those variables.

Population Growth

The final variable is population growth and the ratio of school age population to total population. The relative rates of increase of GDP and population determine the rate of growth of per capita GDP. If education and training expenditure remains at least a constant proportion of GDP, then an increase in per capita GDP will mean more resources available per pupil. If GDP grows more slowly than the population, then either the share of education and training expenditures will have to rise, or fewer resources allocated to each pupil, all other things remaining the same.

The ratio of the school age population to total population remains fairly constant over the short term.

Some Results for Policy from the Model

Tables 9l and 9m summarise the outcomes of the budget model for primary and secondary education, while Table 9n, from which Tables 9l and 9m are derived, gives more detail. The purpose of the tables is to show the interaction of key variables as they respond to growth in enrolments, increased PTRs and increased non-salary unit costs. The tables show a range of scenarios (A-F) between which all variables are held constant while one or two change. The effects of the change can thus be seen. It should be remembered that the data do not need to be precise: it is the direction and order of magnitude that are of interest. They show the relationship between policy variables, and thus what managers need to target.

Table 9l. FISCAL IMPLICATIONS OF INCREASING ENROLMENTS AND UNIT COSTS - PRIMARY EDUCATION

	Assumptions				Outcomes	
			Enrolments (mn)	Non-Salary Unit Cost	Total Recurrent Expenditure as % GDP	GER PTR = 35
A	Present situation	PTR=30.5	5.5	71	3.8	79
	then add cumulatively to the present situation					
B		raise PTR to 35	5.5	71	3.3	79
C		raise non-salary unit cost	5.6	400	3.8	80
D	at the end of five years	4% pa GDP growth 3.0% pa population growth	6.8	400	4.4	86
E		raise non-salary unit cost	6.8	750	4.3	86
F		2% pa growth of average teacher salary	6.8	750	4.7	86

The present primary GER is about 79 per cent. The PTR is a little over 30 pupils to one teacher, and the average non-salary cost per pupil is about Ksh 70, probably little of which is spent on learning inputs. Total recurrent expenditure as a percentage of GDP is about 3.8 per cent.

Scenario B in Table 9l shows the simple fiscal effect of what could have been the present case had the PTR been 35. Fewer teachers would have been required and the total primary recurrent budget as a percentage of GDP would have been around 0.5 per cent less, a considerable 'saving'. Alternatively, more enrolments could have been financed for the same budget: in fact the budget could have supported a GER of 90 per cent.

A central policy objective is to raise non-salary expenditures so that government can finance directly learning inputs. The most critical costs are those for teaching and learning materials. A primary school textbook cost about Ksh 300. Thus, a five or sixfold increase in the average unit non-salary cost, assuming that it was all spent on books, would buy 1.4 books. The introduction of a loan/rental scheme with a book life of 3 years would mean that 4 books could be made available for each child, with replacement of one third of the total stock each year. Scenario C shows that with the current overall recurrent budget constraint enrolments could be increased very slightly and sustain the non-salary unit cost increase provided that the PTR averaged around 35. There is thus at the moment only a limited scope for increasing non-salary expenditures without raising overall expenditures.

Scenario D supposes that over the next five years real GDP grows at 4 per cent annually, while overall population growth averages 2.5 per cent, with a fixed percentage of the population in the primary school age group. The same PTR of 35 is assumed. Teachers' salaries are assumed to have stayed constant in real terms (that is, a teacher's salary can buy the same basket of goods it bought five years previously). This is a reasonable assumption because in fact it is more likely that salaries will tend to slip in real terms. Under those assumptions, a GER of 86 per cent would absorb as much of GDP as it does today, and permit the increased non-salary allocation. Scenarios E and F show the effect of increasing the non-salary cost still further and increasing teachers' real salaries (assumed to have risen at a rate of 2 per cent per year above inflation over the five years). Were the PTR to be 40 by then, Scenario D would sustain for the same share of GDP a GER of 90 per cent, while Scenarios E and F would imply a raised share of GDP to 4.2 and 4.5 per cent of GDP respectively.

Given that reallocations from higher education may be made towards primary education once efficiency measures in the primary sector have been made, and that the rate of growth of enrolments may not result in such a high level of enrolment, and given also the modesty of the PTR target set, it is realistic to suppose that the budget will be able to make room for a better funded primary sector.

Furthermore, the model in Table 9n plots the movement in household costs as a percentage of per capita income and it can be seen to have declined, because it is assumed that total household spending remains a constant proportion of GDP as cost reduction measures to households take place. In reality, if government finances an element of learning input costs and the cost of the system to households is reduced in other ways, the percentage of household unit costs to per capital income will fall even further.

Table 9m sets out the results of an identical exercise for the secondary subsector. It can be seen that with very modest assumptions the GER could move to 35 per cent, teachers' real salaries be increased, and non-salary unit costs be quadrupled, within the same broad budgetary framework. It will be seen that the directions of change in the secondary education scenarios sometimes differ from those in the primary education scenarios: this is because of the different relative percentage changes.

Table 9m. FISCAL IMPLICATIONS OF INCREASING ENROLMENTS AND UMIT COSTS - SECONDARY EDUCATION

	Assumptions				Outcomes	
			Enrolments (mln)	Non-Salary Unit Cost	Total Expenditure as % GDP	GER
A	Present situation	PTR = 15.2	0.6	509	1.5	27
	then add cumulatively to the present situation					
B		raise PTR to 20	0.6	509	1.2	27
C		raise non-salary unit cost	0.8	1,000	1.5	33
D	at the end of five years	4% pa GDP growth 3.0% pa population growth	1.0	1,000	1.6	35
E		raise non-salary unit cost	1.0	2,000	1.8	35
F		2% pa growth of average teacher salary	1.0	2,000	1.6	35

As far as household expenditures are concerned, it is assumed that they affect enrolment demand. However, it is also likely that quality affects demand. In other words, if parents thought that they were getting better value, they would still try to maintain a level of cost-sharing. The intention behind government assuming more responsibility for non-salary learning input costs is to raise quality. This may attract more enrolments, with parents in many cases still willing to pay. Added to that policy is the reduction in inessential costs to parents, costs not associated with learning. Many parents may well choose to use the money 'saved' to spend further on learning inputs.

It is thus not possible to predict with certainty the reactions of parents to cost changes. In areas where very poor people predominate, more emphasis will be given to transferring costs from parents to governments than in other areas, and this policy will be reflected in the unit cost grant. The priority will be to seek enrolment increases in very under-enrolled areas.

In conclusion, however the policy of unit cost management is explored, it is possible with good sectoral management to use resources more effectively and effectively, and to apply more resources to learning inputs. In contrast to present cost-sharing policy, where the emphasis of government spending is on salaries, which have only an indirect relation with learning outcomes, the new policy will place a priority on government expenditures to be directed to learning outcomes,

rather than leave those costs to the unstable source of household finance. Cost-sharing is still an impoitant policy, but it will be contained within limits manageable to parents, and applied in a more targeted way.

9.7 INTRASECTORAL ALLOCATIONS

As was seen in Table 9d and in Figure 9iii, primary, secondary and university education receive the major shares of education and training expenditures. Technical education in total, including Polytechnics, receives 2 per cent of total expenditures. At the same time, trends in average expenditures show an imbalance between trends in subsectoral shares and shares of average expenditures: for example, although the share of university expenditures is declining slightly, expenditures per student are rising.

Some reallocations between subsectors are planned. However, the priority is to increase efficiency within the current allocations before shifting resources. It makes no sense to reallocate to subsectors which use resources inefficiently, because that would merely worsen the problem. It is recognised that all the subsectors have a claim on additional resources, but, as the analysis of this chapter shows, no subsector at present uses resources to a sufficient degree of efficiency to merit additional allocations.

Instead, the sectoral policy will be to maintain within the present bounds the subsectoral shares. Where additional resources can be freed, they will used in a discretionary way to provide incentives and flexible grants to parts of the system with particular needs. For example, system managers who achieve rapid efficiency gains will have the opportunity of claiming additional resources. Similarly, pockets of poverty and areas of special need will receive special treatment. This policy will become slowly more possible to implement as the district, institutional and higher education grant allocation systems begin to work over the next five years.

Government policy is to ensure a balanced development in the sector. School education is a priority for allocations from the budget. Primary education receives around 55 per cent of the sectoral recurrent budget which is around 3.8 per cent of GDP. The share for primary education will be maintained at about that level as the subsector undertakes efficiency measures. Similarly, the recurrent share of secondary education will also be maintained within current limits. The secondary share has risen sharply in the last few years and will not be permitted to rise further. Increased enrolments in both subsectors will be achieved through efficiency gains, particularly through increases in the PTR. Subsectors to which greater allocations will be made for selected programmes will be in the technical / vocational and non-formal areas. At present these areas receive low shares in the budget, and small additional finance will have a significant impact at the margin.

In the technical and vocational subsector a critical issue is that of reinvestment in capital equipment. At the same time the sector is not as efficient in the utilisation of staff as it might be. While there is no up to date analysis of the data, the 1994 Public Expenditure Review showed low staff student ratios and wide variations in

Public Expenditure Review showed low staff student ratios and wide variations in unit costs between institutions. The Review also recommended that institutions be funded by capitation grants. As with the other subsectors, the Master Plan will first concentrate on efficiency measures, promoted through a grant system to institutions. The Ministry will also seek ways of providing finance for reinvestment for those institutions which become efficient and responsive to their markets. Once the subsector is operating efficiently and demand for training is clearly identified, it will be able to make stronger claims for additional resources.

The Commission for Higher Education will intensify its implementation of efficiency measures in the university system. This will be achieved through a grant system based on per student norms, and the norms will be developed by the end of 1997 in order to feed into the 1998/99 budget. Over time university expenditures will become more efficient, and there may be room to transfer resources to primary education. Further policy work is required to define the government's fiscal stance to public universities as private universities develop.

9.8 THE GRANTS-BASED SYSTEM AND KEY POLICY TARGETS

The decentralisation of management responsibility to districts and institutions implies a different way of budgeting. The details of the system will be worked out early in the implementation stage of the Master Plan, and the management chapter sets out the approaches to making the system work. Implementation would take place over several years as suitable controls are put in place and management capacity enhanced. Consultations with the key ministries concerned with decentralisation, particularly Finance and Local Government, will start immediately. This section gives an overview of what a grants-based system essentially means and how it relates to the key policy targets in the MPET.

The basic principle of the system is that budget allocations will be based on unit costs per pupil / student / trainee. The calculation method of unit costs will vary by type of education and training. Primary education unit costs are fairly simply calculated, while secondary, university and technical education unit costs will be more complicated, according to the mix of different types of courses, some of which are more expensive than others. Primary unit costs can be calculated on the basis of overall average costs, while technical and university unit costs will be subject based. One way, for example, of calculating unit costs for technical and vocational institutions is to analyse requirements across all institutions by subject, and develop from there. Once the unit cost is determined, budgeting becomes a matter of multiplying the unit cost by the unit (ie the enrolment) to arrive at the base, or core budget.

The next step is to decide what adjustments need to be made. Adjustments would be in the form of *transitional adjustments*, *programme adjustments*, and *incentive adjustments*. Transitional adjustments would apply where the district or institution needs time to meet the requirements of the new budget system. Programme adjustments would apply where priority needs are targeted through special programmes. Incentive adjustments would apply where government provides additional incentives to achieve given targets, such as matching grants.

The key idea behind the grant system is the managers will be made accountable for performance. In order to be made accountable, they must have some freedom in deciding on the allocation of resources. A grant is an *entitlement*, based on transparent and fair criteria. At the local level, however, there will always be choices to make, whatever the criteria. The main choices are the choice between whether to spend on salaries or on non-salary items, and the choice between non-salary items, for example, between books and other materials and equipment. The notion of entitlement and local choice means that control of the system cannot happen through centralised planning, although some central planning is essential, but that a system of regulation, guidelines, scrutiny and performance accountability will supplement the disciplines imposed through the unit cost based allocation.

The grant allocation will be made up from salaries and non-salaries, although in the introductory stages the two components might be shown separately. Once decentralised organisations are deemed capable of proper control procedures, they will be permitted within limits agreed with the Treasury to apply savings made on salary budgets to non-salary items. This process may take several years to achieve, and will be carefully piloted.

Another feature of the system is that all resources will be kept in *one basket*, whether they are from GOK funds, foreign aid, or from parents and the private sector. For example, a district grant would show clearly its entitlement to foreign aid as well as to GOK funds, and this would ensure that the district and schools participates in the design of development projects as well as recurrent expenditure programmes.

The system would make other demands on management improvements. If budget is based on enrolment, a system of reasonable assessment of next years' enrolment would be needed, and controls against deliberate falsification of data to achieve higher grants. DETBs would need simple information systems, while scrutiny systems would need to have enough force so that there are few rewards to falsifying data.

Key targets and how the system might help to achieve them

Three key resource targets have been set out in the Plan:

(a) efficiency measures, in particular raising average pupil teacher / staff student ratios;

(b) the transfer of resources from salaries to learning inputs;

(c) reduce the resource demands of the education and training system through measures which impact on the system costs, particularly the curriculum.

There are two ways in which the PTR can be raised - enrolments can be increased and teacher numbers can be reduced for a given number of pupils. In some parts of the country and in some institutions the ratios of teachers / lecturers /

instructors to pupils / students is very low indeed, and the reasons include administrative reasons (such as the Curriculum Based Establishment (CBE) formula and failure to adhere to norms) and demand reasons (insufficient demand for courses). Under the decentralised approach to sectoral management, managers (MoE managers, DEOs, heads of institutions) will be asked for their plans on how to achieve the PTR objectives, and to specify the resources they need. Thus, districts with low primary enrolments will have the task of increasing them, and they may request subsidies for pupils, school feeding, flexible school days and other measures set out in the Primary Education chapter. Post secondary institutions will need to plan rationalisation of staffing. Secondary schools will tackle the issue through curriculum reform and administrative measures.

One critical innovation will be to give more discretion to managers over hiring staff, and teachers will not be recruited and posted if to do so will act negatively on the PTR. In order to achieve this aim, reduction in the PTR must not be automatically associated with loss of budget, although in some cases it will be. The overall objective is to shift expenditures more in favour of non-salary items directly contributing to teaching and learning improvements.

The base primary school grant would be based on a norm, or standard PTR, average teacher salary and per pupil non-salary costs. Some districts will be above the norm and some below. The transition period to the new system might be characterised by using the existing national averages as the first year norms. Thus, those districts with low PTRs would probably receive a unit cost based grant which could not cover the costs of their present commitments. For example, if a district has a PTR of 15:1 and the grant formula is based on a PTR of 35:1, it would not be reasonable to expect all the adjustment to be made at once. A transitional adjustment would be made by which the base grant would be supplemented by, say 80 per cent of the difference between the district's actual expenditures and their grant. In the opposite case, districts with very high PTRs which may result from difficulties in retaining teachers could not be expected to handle sharply increased budgets, and would want to make expenditures, such as perhaps teachers' housing, which would enable them to reduce their PTRs. Over a period of, say, five years, the budget could begin to drive up the average.

A slightly different approach might be taken with middle level technical institutions. The total budget would be built up on the same formula shown as equation (1) in the Annex, but it would be an aggregation of many different unit costs according to subjects. Where, for example, a TTI wished to offer a carpentry course, the budget would include a per capita grant for carpentry. The only way the instructor's costs could be fully covered would be if he or she had 20 trainees, which might be the norm. The case might arise, however, where, say, electrical installation had more trainees enrolled than the norm. The TTI could then subsidise the carpentry course. This does not matter, because *overall* the staff-student ratio would be within norms, and there would be no fiscal consequences arising from the transfer. There may, of course, be non-financial reasons why such a transfer of resources might not be desirable. However, in the case of technical and vocational institutions there are less compelling reasons to have an extended transition period.

Another feature of the system would be that institutions could make budgetary savings with which to pay off debts. Also, if the TTI made budgetary savings and wished to reinvest in capital equipment, it might be able to apply for a matching grant. This would provide an incentive to be even more efficient with staff. All such freedoms, though, would have to be subject to strong audit and scrutiny systems being in place.

At the level of university and polytechnic education unit cost budgets linked to programmes would also form the basis of financial allocations. In those cases, a block grant would be given by the MoE to the CHE, according to the fiscal situation and the financing of MoE priorities. CHE would receive through the forward planning system a stable resource envelope which would allow it to plan, and which would avoid sudden changes in budget from year to year. Again, such a projection would be based on GDP ratios, growth predictions and the anticipated levels of discretionary expenditures. The CHE would make allocations within the budget ceiling to universities, on the basis of unit cost, programme-linked budgets. The unit costs would be based on efficient use of teaching and non-teaching staff, take into account fee, loan and other revenues, and promote a better balance between salary and non-salary expenditures.

ANNEX

Box 1: A Simple Model

There are two sets of relations which are relevant to making practical policy judgements about future expenditure policies in the education sector. The first describes the composition of unit costs per pupil:

$$UC_i = \frac{AvTSal_i}{PTR_i} + AOC_i \qquad (1)$$

Where

Uc_i = unit cost per pupil at the i^{th} level
$AvTSal_i$ = average teacher's salary at the i^{th} level
PTR_i = pupil teacher ratio for the i^{th} level
AOC_i = average per pupil other (non salary) costs at the i^{th} level

Thus, where the average teacher's salary is held constant, the unit cost per pupil is a function of the PTR and of the per pupil non-salary costs.

The second relationship describes the relation between education costs, the national income and education participation rates.

(i) $$GER_i = \frac{E_i}{P_i}$$

(ii) $$= \frac{GDP_x}{UC_i} \Omega \frac{1}{a_i} \qquad (2)$$

(iii) $$GER_i = \frac{x_{ig} + x_{ih}}{\alpha(c_{ig} + c_{ih})} \qquad (3)$$

Where

GER_i = gross enrolment ratio at the i^{th} level
E_i = enrolments at the i^{th} level
P_i = population of school age at the i^{th} level
GDP = gross domestic product
x = percent expenditure on education (at the i^{th} level) of GDP
a_i = percent population of school age at the i^{th} level
x_{ig} = percent total government expenditure of GDP on the i^{th} level
x_{ih} = percent total household expenditure of GDP on the i^{th} level
c_{ig} = unit cost to government as a % of per capita GDP on the i^{th} level
c_{ih} = unit cost to households as a % of per capita GDP on the i^{th} level

The first equation in the model is the most important for the unit cost management policy. It shows the relation between average salaries, average non-salaries and the PTR. It is the basic equation on which a unit cost system is based.

The second equation is an identity equation, and shows how the GER is equivalent to a combination of a given unit cost, population and GDP. Its significance is that for any given unit cost, assuming GDP to be exogenous, the enrolments supported by the budget are constrained and thus affect the GER.

The third equation takes into account *total* spending on education and training, household plus government (although of course households pay taxes as well). This relationship is important because of the policy requirement to reduce *both* real unit costs to government *and* real unit costs to households: both c_h (ie by cost reductions or simply by holding costs constant while the economy grows) and c_g must fall. However, the rate of increase in enrolments would determine the government's total expenditure requirement, while the relative rates of increase of the proportion of school age children in the population, a_i, and of GDP would determine the movement of the GER, assuming a constant unit cost under reasonably efficient assumptions, particularly relating to the PTR.

The use of the per capita GDP measure in the equation enables a view to be taken of the costs of education and training in relation to average imputed income. Where the unit cost to household falls as a proportion of per capita national income it may be interpreted as a decline in education and training costs per student to households relative to household income, although there are many other considerations which would need to be taken into account in a more sophisticated model. For example, per capita national income is simply the national income divided by the total population, which includes school age children, so the figure should not be taken to signify average earnings of individuals who work. Nevertheless, the use of average income in a fiscal model can give a benchmark against which to measure the relative trends in income and expenditure growth.

Table 9n

PRIMARY

Expenditures for each level	Primary=p	A Current situation	B From A change: PTR		C From A change: PTR; raise AvOE		D From A change: raise AvOE; raise GDP ed exp same share; population growth, school age; raise PTR	
Average salary / teacher	AvSalp	82,363	82,363		82,363		82,363	
Average non-salary other expenditures / pupil	AvOEp	71	71		400	raise AvOE	400	
Number of Teachers	Tp=Tp*Ep/PTRp	181,975	182,857	teachers reduced	160,000		200,000	
Enrolments	Ep (mn)=Tp*PTRp	5.5	6.4	same enrolment	5.6	raise enrolments	7.0	
Pupil Teacher Ratio	PTRp	30.5	35.0	raise PTR	35.0		35.0	
Total population	P	27.5	27.5		27.5		31.9	3.0% per annu
Population of school age	PA	7.0	7.0		7.0		8.1	constant share
Government recurrent expenditure as share GDP		15,384	15,384	constant share 3.8% GDP	15,384	constant share 3.8% GDP	18,717	constant share
as function of unit cost	Xpg (KSh mn)=(GUCp*Ep)+(AVOEp*Ep)	15,384	15,518	3.8% share falls	15,418	3.8% share same	19,273	3.9% share sam
Household recurrent expenditure (total)	Xph (KSh mn)	5,856	6,758		5,856	constant GDP share of 1.4%	7,124	constant GDP s
Total expenditure (gov + household)	TXp	36,624	37,660		36,658		45,114	
Household (hh) unit cost	HHUCp	1,056	1,056		1,046	falls	1,018	falls
Government unit cost	GUCp=(AvSAL*T/P)+(AvOEp)	2,774	2,425	falls	2,753	falls	2,753	falls
Average total unit cost	TUCp=GUCp+HHUCp	3,830	3,481	falls	3,799	falls	3,771	
GDP	Y (KSh mn)	407,500	407,500		407,500		495,786	GDP by 4% pa
GDP per capita	PCY (KSh)	14,818	14,818		14,818		15,552	rises
Share of gov recurrent expenditure in GDP	xpg=Xpg/Y	3.8%	3.8%		3.8%		3.8%	
Share of household recurrent expenditure in GDP	xph=Xph/Y	1.4%	1.7%		1.4%		1.4%	
Gov unit cost as proportion of per capita GDP	cpg=GUCp/PCY	18.7%	16.4%	falls	18.6%	rises	17.7%	falls
Hh unit cost as proportion of per capita GDP	cph=HHUCp/PCY	7.1%	7.1%		7.1%		6.5%	falls
Proportion of school age pop in total population	ap=PAp/P	25.5%	25.5%		25.5%		25.5%	
Enrolments as functions of gov unit cost	Xp/GUCp	5.5	6.4		5.6		7.0	
GER	Ep/Pap	79.2%	91.4%		80.0%		86.3%	

GER as function of government unit costs	GERp=xpg/(ap*cpg)	79.2%	90.6%		79.8%		83.8%	
SECONDARY		A Current situation	B From A change: PTR		C From A change: PTR; raise AvOE		D From A change: raise AvOE; raise GDP ed exp same share; population growth, school age; raise PTR	
Expenditures for each level	secondary=							
Average salary / teacher	AvSals	135,811	135,811		135,811		135,811	
Average non-salary other expenditures / pupil	AvOEs	509	509		1,000	raise AvOE	1,000	
Number of Teachers	Ts=Ts*Es/PTRs	41,484	32,248	teachers fall	40,000		50,000	
Enrolments	Es (mn)=Ts*PTRs	0.6	0.6	same enrolment	0.8	raise enrolment	1.0	raise enrolment
Pupil Teacher Ratio	PTRs	15.2	20.0	PTR rises	20.0	raise PTR	20.0	
Total population	P	27.5	27.5		27.5		31.9	3.0% per annu
Population of school age	PA	2.4	2.4		2.4		2.8	constant share
Government recurrent expenditure	as share GDP	5,962	5,962	constant share 1.2% GDP	5,962	constant share 1.2% GDP	7,254	constant share 1
as function of unit cost	Xpg (KSh mn)=(GUCp*Ep)+(AVOEp*Ep)	5,962	4,708	1.2% share same	6,232	1.5% share rises	7,791	1.6% rises
Household recurrent expenditure (total)	Xsh (KSh mn)	8,032	8,032		8,032		9,773	constant share 1
Total expenditure (gov + household)	TXs	19,957	18,703	falls	20,227	falls	24,817	rises
Household (hh) unit cost	HHUCs	12,454	12,454		10,041	falls	9,773	falls
Government unit cost	GUCs=(AvSAL*T/P)+(AvOEs)	9,244	7,300	gov unit cost falls	7,791	falls	7,791	falls
Average total unit cost	TUCp=GUCp+HHUCp	21,698	19,754	falls	17,831	falls	17,563	falls
GDP	Y (KSh mn)	407,500	407,500		407,500		495,786	
GDP per capita	PCY (KSh)	14,818	14,818		14,818		15,552	rises
Share of gov recurrent expenditure in GDP	xsg=Xsg/Y	1.5%	1.5%		1.5%		1.5%	
Share of household recurrent expenditure in GDP	xsh=Xsh/Y	2.0%	2.0%		2.0%		2.0%	
Gov unit cost as proportion of per capita GDP	csg=GUCs/PCY	62.4%	49.3%	falls	52.6%	falls	50.1%	falls
Hh unit cost as proportion of per capita GDP	csh=HHUCs/PCY	84.0%	84.0%		67.8%	falls	62.8%	falls
Proportion of school age pop in total population	as=PAs/P	8.9%	8.9%		8.9%		8.9%	
Enrolments as functions of gov unit cost	Xs/GUCs	0.6	0.6		0.8		1.0	
GER	Es/Pas	26.5%	26.5%		32.8%		35.4%	

GER as function of government unit costs	GERp=xpg/(as*cpg)	26.5%	33.5%		31.4%		32.9%	
GER as function of unit costs	GERp=(xpg+xph)/(a(cpg+cph))	79.2%	90.9%	GERp rises	79.9%	GERp falls	84.4%	GERp rises
Enrolments as functions of gov + hh unit cost	Ep=(xpg+xph)*(P/(cpg+cph))	5.5	6.4	enrolments rise	5.6		6.9	
Enrolments as functions of gov unit cost	Ep=Xpg/GUCpg=x*(Y/c) / PCY	5.5	6.3		5.6		6.8	
Enrolments as functions of gov + hh unit cost	Ep=((xpg+xph)*Y/(cpg+cph))/PCY	5.5	6.4		5.6		6.9	
Enrolments as functions of gov + hh unit cost	Ep=(xsg+xsh)*(P/(csp+csh))	0.6	0.7	enrolments rise	0.8		1.0	
GER as function of unit costs	GERp=(xsg+xsh)/(a(csg+csh))	26.5%	29.1%	GERs rises	32.2%	GERs the same	34.3%	GERs rise
Enrolments as functions of gov unit cost	Es=Xsg/GUCs=x*(Y/c) / PCY	0.6	0.8		0.8		0.9	
Enrolments as functions of gov + hh unit cost	Es=((xsg+xsh)*Y/(csg+csh))/PCY	0.6	0.7		0.8		1.0	

CHAPTER 10

MANAGEMENT OF THE EDUCATION AND TRAINING SECTOR

10.1 INTRODUCTION

Resource Allocation

This chapter complements the resource policies, defined in the cost and financing chapter, which will guide sectoral development. The GoK is committed to reversing the current trend of declining enrolment rates in schools, and increasing participation especially in basic education. This policy is to be implemented within the constraints of limited additional resources from the exchequer and at a time when it is evident that if enrolments rates have to increase, the cost of education to households has to be reduced. To accomplish this successfully, this MPET proposes measures aimed at better sectoral management with clear systems of accountability for resources. Management of E&T will be concerned with the key questions of how to deliver the services and how to measure whether the services have been delivered efficiently and effectively.

An efficient and effective management system in E&T is a basic prerequisite in addressing these challenges. New approaches to management are necessary if E&T are to adequately respond to the needs of an industrialised country. Management that involves stakeholders at all levels, without rigid bureaucracy, and allows for local response to local needs are expected to be more sensitive to the local realities while maintaining a national outlook. Such management will lay greater emphasis on accountability, have a clear reporting system with clear norms for self regulatory processes. This will ensure efficiency in allocation, administration and utilisation of resources as well greater effectiveness which can be measured through performance-based indicators. The implementation of the MPET will involve major changes in the sector and this will call for good management of change.

A key aspect of the changes envisaged in the MPET is the rationalisation and clarification of responsibilities and a better and clearer location of accountability for the performance of the system at all levels, within a decentralised structure. However, successful decentralisation will require capacity building at both the centre and local levels and the MPET sets out how the system will progress towards this goal. The first strategy will be to strengthen the central and local arms of government, while in the longer term the capacity of LGAs will be strengthened to take responsibility for a devolved management and financing of basic education including adult education and youth polytechnics.

10.2 OBJECTIVES

10.2.1 To achieve greater efficiency in the management of education and training.

10.2.2 To enhance effectiveness in the provision of education and training.

10.2.3 To ensure accountability in the management of the sector.

10.3 POLICIES

The principal thrust in GoK policy will be to develop a sector management system which facilitates efficiency and effectiveness in the delivery of E&T. This is planned to be achieved through (i) improved coordination of providers; (ii) decentralisation of management and financing, and accountability to local level and institutions of learning; and (iii) development of management capacity at all levels. The development of management will be guided by the following specific policies:

10.3.1 Management of E&T will be decentralised to the local level and institutions. This is expected to ensure greater participation of stakeholders in management and delivery.

10.3.2 Government will ensure coordination of the provision of education, for efficient delivery of services, between sectors and between GoK, donor agencies and NGOs.

10.3.3 Government will provide a conducive environment for private sector participation in the provision of education and training with clear norms and benchmarks for accountability.

10.4 OVERVIEW OF THE CURRENT STATUS OF SECTOR MANAGEMENT

10.4.1 Legal and Management Framework

Management of E&T is guided by several Acts of Parliament. School education comes under the Education Act which gives guidelines on the establishment and development of schools, their management and administration, development of curricula, and teacher education. The Teachers Service Commission (TSC) Act - beamed on public schools, teachers colleges and middle-level VOC-TEC institutions - provides for teacher registration, recruitment, deployment, remuneration and discipline. The KNEC Act provides for the conduct of public examinations and certification in schools and institutions outside the university. Universities are governed under the CHE Act and separate Acts for each of the public universities. Other Acts govern the provision of specialised aspects of E&T. For instance, (i) the Board of Adult Education Act provides for some coordination of adult education; (ii) the Industrial Training Act contains provisions for the training and certification of artisans under the DIT; (iii) the KSNEB Act empowers the board to conduct examinations and certification in some business

spheres; and (iv) as indicated in Chapter 2, the Acts governing several GoK ministries whose main concern is provision of services, as opposed to general E&T, make provisions for within-house training and in some cases, examination and certification. Considerable complexity emerges from the foregoing description of the legal infrastructure for the sub-sector.

The complexity in the legal infrastructure, the fact that several ministries are involved in provision of E&T (see Chapter 2), and actual practices in managing the sub-sector have resulted in a number of problems for which the MPET proposes solutions. Although most of the issues are discussed and solutions proposed in the sub-sector chapters, in the following pages key features that cut across sub-sectors are highlighted.

A major problematic feature of the legal and management framework for E&T is that, while growth of the system has resulted in situations which require either elaboration and amendment of the original management approaches or promulgation of new ones, the policy-making process has not kept pace in-so-far as law making is concerned. Further, as opposed to regular comprehensive review and revision of E&T laws, there has been a tendency for law making to concentrate on piece-meal solutions to new situations and needs. The slow pace of change is particularly noticeable with regard to the Education Act and the TSC Act.

(a) ***Education Act.*** **Enacted into law in 1968 and revised in 1970 and 1980, this Act does not cover all management aspects of the E&T sector and, within its limited purview, it is outdated. The Act concentrates on governance of primary and secondary education and related but limited training. It does not provide for coordination of a growing and increasingly complex E&T sector involving several GoK ministries and a variety of non-public providers. For instance, the Act does not satisfactorily provide for the governance of**

(i) **the ECCDE sub-sector and education of the handicapped, both based on a partnership between GoK ministries, households, communities, NGOs and donor agencies, and the private sector;**

(ii) the community-based vocational and technical training initiatives exemplified by the emergence of youth polytechnics and *Harambee* institutes of technology (HIT), covered in detail in Chapter 7; and

(iii) adult and continuing education (ACE).

With regard to ACE, some attempt to fill the gap left by the Education Act is made through the Board of Adult Education Act (1966 and revised in 1967), but the provisions of the latter are sketchy and do not address the potential

benefits which could be reaped through closer coordination between ACE and the formal school system.

There are problems in the field administration of services provided by MRTTT. As a ministry in its own right but with a management structure based on the Education Act, MRTTT has set up provincial and district offices. But, due to budgetary constraints, the personnel establishment and operating resources in these offices remain inadequate. As a consequence, the MoE's more established field infrastructure is called upon to undertake some of MRTTT's field activities such as the disbursement of salaries of teachers in VOC-TEC training institutions and administration of examinations. Unanticipated by the Education Act, this makeshift arrangement would seem to call for the following new directions:

(i) a situation in which MoE field officers are responsible for the activities of a different ministry should be avoided because accountability for such responsibility, which is open to neglect by the officers, may not be tenable in law; and

(ii) in the interest of efficiency in the utilisation of resources, duplication of field administration by ministries with similar functions should be avoided.

Within the formal school system, the Education Act is inadequate with regard to the roles of and relationships between MoE, provincial administration, and LGAs. The major issues are as follows:

(i) The role of LGAs in the provision of school education has declined from the dominant position it played until the end of the 1960s, and yet the Act continues to highlight them as key actors in financing and management. The responsibility for primary education currently lies with the central government which pays teachers' salaries and manages the schools through the MoE's chain of field offices. In only seven municipalities (Nairobi, Mombasa, Nakuru, Kisumu, Eldoret, Thika, and Kitale) do LGAs play a role in the form of provision of physical facilities, professional advice to schools and teachers, and deployment of teachers seconded by TSC. In spite of provisions in the Act, partly due to their weak revenue base, LGAs (county councils in particular) no longer cover the development of physical facilities and instructional materials in schools. The costs have been passed on to communities and households.

(ii) The Education Act makes provision for the establishment of bodies to advise the Minister for Education. Three such bodies have been established namely, the National Education Advisory Board - NEAB - (chaired by the minister), Provincial Education Boards - PEABs - (chaired by the relevant Provincial Commissioner - PC), and District Education Boards - DEBs - (chaired by the relevant District Commissioner - DC). The Provincial Director of Education (PDE) and the District Education Officer (DEO) are the ex-officio secretaries of the PEAB and the DEB respectively. In performing their normal duties, the DC answers to the PC who is answerable to the Office of the President. The DEO is answerable to the PDE who is responsible to MoE. These two chains of command involving the key officials in the PEAB and DEB tend to blur the location of accountability for education at the provincial and district levels. This is particularly so at the district level, where the DEB is more than an advisory body to the Minister for Education. Under the policy of district focus for rural development, which is not addressed by the Education Act, the DEB is a sub-committee of the DDC which is charged with coordination of overall development in the district. The Education Act stipulates that the Minister for Education should nominate the chairperson of the DEB from among its members, with the DEO playing the role of secretary and executive officer of the board. The current setting where, by virtue of position as head of district, the DC is the chairperson of the DEB creates a situation where there could be conflict between the law and practice. According to the Education Act, the DEO as the executive officer of the DEB is accountable to the Minister for Education for development of education within the district. In the current setting the reporting system for the DEO is unclear since (s)he is also answerable to the DC, not only as the district head but also as the chairperson of both the DDC and DEB.

(iii) According to the Education Act, at the institutional level management is vested in school committees and boards of governors (BoGs). In line with the cost-sharing strategy, households and communities are playing a bigger role in providing and maintaining physical facilities, and instructional materials and equipment. This development calls for changes in the legal framework. First, while parents have organised themselves into PTAs in order to better address the financial needs of institutions, the Education Act is silent on their existence. Second, the exact role of the PTA vis-a-vis that of the BoG is unclear and there is potential for conflict between these two bodies, especially because the PTA has no

legal status under the Act. Third, the participation of PTAs and communities continues to be confined to the provision of resources. Participation in the management of the institutions (including a role in curriculum especially the monitoring of learning), which ought to be a *sine qua non* of funding responsibility is not catered for in the law. Fourth, the relationship between management bodies at the institutional level and the DEB is blurred, especially as the institutional bodies are not directly represented at the district body.

(b) ***Teachers Service Commission Act.*** The TSC Act, enacted in 1967, streamlined the management of the school education teaching force by centralising it in the commission. The main objectives were to provide teachers with uniform terms and conditions of service, and to ensure that schools and colleges are adequately staffed. So long as the number of schools and teachers was manageable, centralisation achieved a large measure of success. However, since 1967 the numbers have greatly increased, rendering centralised management ineffective. Between 1967 and 1996 the number of public schools grew from 6,501 (5,959 primary and 542 secondary) to 19,556 (16,552 primary and 3,004 secondary), while the teaching force grew from 39,725 (35,672 in primary and 4,053 in secondary schools) to 225,673 (184,393 in primary and 41,280 in secondary schools). Through designation of PDEs and DEOs as TSC agents undertaking aspects of teacher management (in particular deployment) on behalf of the commission, some pressure on the centralised system has been relieved. But a number of issues are still problematic as follows.

First, the TSC secretariat, whose staff establishment has not kept pace with the growth of the numbers of institutions and teachers, is no longer able to speedily attend to the demands made on it by institutions and teachers.

Second, because the location of accountability for the teacher establishment is blurred, serious inefficiencies have developed. For instance,

(i) irrespective of vacancies in schools, the TSC is obliged to employ all trainees who successfully graduate from public primary teachers colleges;

(ii) due to political and social pressures, the TSC does not have a free hand in deploying teachers, with the result that some areas and schools are grossly overstaffed while others are seriously understaffed;

(iii) partly due to the factors in (i) and (ii) above, the budgeting process which requires the TSC to submit to MoE less than a detailed estimate of teacher remuneration, does not seem to be geared to relating the public allocation to the real demand in institutions; and

(iv) even though teacher remuneration threatens to emasculate operation and management (O&M) resources in institutions, the local level (e.g. DEOs and BoGs) are not allowed and thus have no incentive to increase O&M by making savings from the teacher salary allocation without sacrificing the quality of learning.

Third, the TSC Act is not specific on the role which local stakeholders (such as BoGs, PTAs and school committees) should play in monitoring teacher performance. With increasing reliance on non-public funding of schools, particularly by households, the local level is asking for participation in managing the teaching force, e.g. with regard to appointments and accountability for performance. There is an increase in incidents of parents taking the law into their hands and physically barring from schools teachers deemed to have failed in their professional duties.

10.4.2 Resource Planning and Allocation

Currently, both planning and allocation of public funds are not satisfactorily prioritised and coordinated across sub-sectors particularly where a number of ministries are involved. Equally important, within a single ministry the two functions are fragmented. For instance, in MOE, the Planning and Development Department (PDD) is responsible for statistics and the preparation of the development budget (predominantly comprising donor-funded projects), while the recurrent budget is prepared by the Finance Division (FD). Further, official consultation channels at appropriate levels between PDD and FD on one hand and on the other, the departments which, under the Director of Education, are responsible for professional programmes seem to be either weak or not fully exploited. Some overlap between MoE's professional departments is also noticeable, as manifested by school improvement projects managed by the Inspectorate with only peripheral participation by the primary and secondary departments. As a consequence, there is no overall resource allocation responsibility and accountability for programme outputs and outcomes is difficult to locate.

10.4.3 Accountability and Control

Currently, accounting and monitoring systems in ministries such as MoE are not integrated. Planning and management information is largely a question of education data, while accounting information is collected and analysed separately. It is difficult, for example, to analyse unit costs per student by district because the

information is found in different offices and in forms which are difficult to aggregate. This fragmentation seriously weakens the control structure, and some parts of the system lack basic controls. For example, controls around funds raised by institutions of learning are particularly weak.

Financial scrutiny is also weak, and the audit system is at present largely confined to *ex post* checking.

The current system of accountability norms for outcomes has not worked particularly well, especially where control over staffing is concerned, owing mainly, to the fragmentation of accountability.

10.4.4 Staff and Management Infrastructure

(a) ***Inadequacies in Schemes of Service.*** While schemes of service for personnel in the E&T sector exist, discussions with field officers pointed to confusion and ambiguity created by lack of a clear career progression and guidelines on the qualifications and experience required for appointment and promotion to different levels of authority. This state of affairs is to an extent attributable to conflict between staffing norms in the schemes of service and the sociopolitical realities of the system.

Sociopolitical considerations notwithstanding, there would seem to be a strong case for more explicit elaboration of schemes of service. E&T managers and professionals, including inspectors of schools, are usually recruited from serving teachers with no prior training or experience in planning and management. Discussions with MoE officers, and careful examination of the scheme of service, suggest that there is no clear career path with stipulated training requirements for progressing from one stage to the next. Even though a post-graduate qualification is a requirement for promotion to the level of senior education officer, this is not rigorously enforced.

(b) ***Imbalance Between Senior and Junior Staff.*** Partly because of imperfections in current schemes of service and less than diligent implementation, the E&T bureaucracy particularly in MoE headquarters is top heavy and there does not seem to be a set ratio of junior to senior officers. This situation has been exacerbated by a perception that responsibility at headquarters is superior to a parallel position in the field. This perception has affected deployment: some headquarters officers promoted against field posts have successfully canvassed for retention at headquarters. As a consequence, departments have had to fragment functions to accommodate such officers, thus distorting the senior to junior staff balance. The criteria and rationale for establishing posts need to be reviewed, especially at a time when GoK is trying to improve efficiency in its operations.

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(c) *Management Information Systems (MISs).* MISs, some more developed than others, have been established in ministries and institutions. However, the systems are characterised by a number of problems, among which the most serious are:

(i) MISs at headquarters, e.g. in MoE, are highly centralised with the centre demanding for information from districts and institutions for various uses at various times. The local level provides the data and information but there is no incentive for efficient handling of data since there is hardly any feedback on the use of information collected.

(ii) There is lack of coordination and exchange of information between sub-sectors and departments. For instance, in MoE the main emphasis is on school statistics on enrolments, but there is no linkage in the MIS between enrolment, teachers and other resource including financing. This results in haphazard collection of data, poor storage and lack of proper analysis and feedback to the data sources.

10.5 STRATEGIES

The following complementary sets of strategies will be adopted in order to improve on the current status of the management of the E&T sector:

10.5.1 Develop a legal framework that provides for comprehensive coordination of the sub-sector;

10.5.2 Devolve appropriate management and financing responsibilities to LGAs and institutions in order to make E&T more responsive to local needs and to enhance ownership by stakeholders;

10.5.3 Develop measures for accountability, based on clear norms and mechanisms for monitoring and evaluation, so as to ensure efficiency and effectiveness in the utilisation of resources;

10.5.4 Establish clear linkages and reporting mechanisms and improved governance at the local and institutional level;

10.5.5 Rationalise schemes of service in the sector and institute efficient and effective approaches in developing the human resource for the management of E&T;

10.5.6 Develop an effective management infrastructure characterised by an MIS that integrates key functions in managing the sector and serves the needs of actors at all levels.

10.6 PROGRAMMES AND ACTIVITIES

In pursuit of the foregoing sets of strategies, activities - the combined effect of which is expected to be improved efficiency and effectiveness in the management of E&T - will be carried out under the following interrelated programmes (a) legal framework, (b) institutional change, (c) development of resource planning and allocation systems, (d) development of accountability and control systems, and (e) staff and management infrastructure development.

10.6.1 The Legal Framework

The Acts of Parliament under which the E&T is governed will be reviewed and a comprehensive legal framework developed as follows.

(a) *Education and Training Act.* The management of E&T will be streamlined under a new law, the Education and Training Act (ETA), which will cover all aspects of the sector including those currently placed under the Education Act and the Board of Adult Education Act. ETA will provide for the creation of a National Education and Training Commission (NETC) under the Office of the President. NETC will have overall responsibility for coordination of E&T and assurance of quality in the sector. The specific responsibilities of NETC will be:

(i) To ensure coordinated E&T policy development and planning (including research, and collation and sharing of information), devoid of overlaps and duplication in the functions of the various sub-sectors. Through committees - with representatives from the Ministry of Finance, MPND, ministries with responsibility for E&T and the private sector - NETC will receive, consider and harmonise proposals on policy and planning prepared by the various sectors involved in human resource development.

(ii) To advise GoK on macro-economic policy and planning as they relate to the development of the country's human resource. This will include drawing priorities in public budgetary allocations to all E&T programmes.

(iii) To assure efficiency and effectiveness with regard to application of resources, outputs, and outcomes of E&T programmes [see 10.6.2 (b) below]. NETC will need to review quality of output and outcomes in terms of the hidden curriculum including discipline, especially norms for developing positive values and attitudes.

For the composition of the NETC see Appendix VI.

(b) ***Legal Framework for Examinations and Certification.*** The laws that currently govern the conduct of public examinations and certification - i.e. the KNEC Act, KASNEB Act, and the Industrial Training Act - will be reviewed and the functions harmonised through appropriate amendments by Parliament.

(c) ***Local Government Act.*** As part of GoK policy to devolve responsibility for delivery of services to the local level, the Local Government Act will be amended to provide for the decentralisation of the management of school, youth, and adult E&T to local government authorities (i.e. county and municipal councils). Towards this end, the following activities will be undertaken:

(i) To facilitate comprehensive amendment to the Local Government Act, GoK will set up a commission of inquiry to investigate and make recommendations on all aspects of decentralisation.

(ii) In addition to making recommendations on the relationship between the central government and local government authorities (LGAs), the commission of inquiry will give attention to the need for new structures in the form of popularly elected councils (e.g. at the ward or location/sub-location/village levels) which closely link LGAs with grass root communities. A major objective of creation of grass root councils will be promotion of active participation by communities in their own development, *inter alia* through positive influence on E&T management.

(iii) In the decentralised system, each LGA will set up a District Education and Training Board (DETB) as its education committee. An appropriate DETB secretariat will be established. The LGA, working through the DETB, will be charged with the responsibility of detailed planning, financing and management of pre-primary, primary and secondary education; informal programmes for youth who are not in formal schools; youth polytechnics; and adult literacy programmes. The DETB secretariat will replace the current field offices of central government ministries involved in E&T (such as the office of the DEO). The professional and administrative tasks of current field offices of central government ministries will be incorporated into the duties of the DETB secretariat.

(iv) Detailed recommendations on the membership and functions of school committees, BoGs and PTAs are stated in the relevant sub-sector chapters of the MPET. In general, the recommendations emphasize need for

- appropriate representation of parents on school committees and BoGs;
- clear definition of the functions of PTAs on one hand and on the other, school committees and BoGs;
- development of school committees and BoGs as the main management bodies in institutions with clear mandates over utilisation of resources and professional aspects.

(d) ***Teachers Commission Act.*** The TSC Act will be amended to provide for a more efficient and effective management of the teaching force as follows:

(i) The TSC will continue to undertake functions which require national approaches, such as

- *Registration of teachers and maintenance of the teachers' register.* This will empower the TSC to play the role of final arbiter in matters of teacher discipline which could lead to termination of employment. Deregistration, signified by removal of a teacher's name from the teachers' register, will automatically lead to termination of employment.
- *Development of terms and conditions of service for teachers* in collaboration with central GoK ministries and the teachers' union. As part of this function, TSC will develop and regularly up-date regulations to guide LGAs on teacher management (recruitment, deployment, professional development, promotion, discipline and grievance procedures, and remuneration). Included in this function will be development of procedures for appointment of managers such as school heads, deputy heads, and heads of department.
- *Responses to issues of teacher demand and supply,* e.g. with regard to PTRs, training projections, establishment and maintenance of a comprehensive MIS on the teaching force.

Facilitating transfer of service by teachers from one LGA to another or from the teaching profession to other public service jobs.

(ii) In collaboration with school committees and BoGs, LGAs will be responsible for teacher recruitment, deployment, professional development, promotion, discipline and grievance procedures, and remuneration.

(iii) Applicants for teaching jobs, including all trainees successfully graduating from teachers colleges, will be considered for employment only against existing vacancies in institutions.

(e) ***Post-Secondary E&T Legal Framework.*** As recommended in Chapters 6 and 7, the CHE Act and the Acts governing public universities will be reviewed and harmonised in order to improve efficiency and effectiveness at the post-secondary level. The thrust of the recommendations is for GoK to give the bodies governing the institutions clear planning, financing and management autonomy in return for accountability in relation to both efficient resource application and course outputs.

10.6.2 Institutional Change

At the central and provincial levels, major institutional changes are expected to accompany the development of a decentralised E&T management system. Changes will be made as follows:

(a) ***Role of Line Ministries.*** The functions and personnel establishments of central ministries responsible for E&T will be streamlined to reflect decentralisation of detailed delivery processes. Ministries will be expected to play a role that combines coordination, facilitation, and monitoring and evaluating outputs and outcomes. The following will be specific key functions of line ministries:

(i) collaborating with NETC in policy-making and planning for human resource development [see 10.6.2 (a) above];

(ii) coordinating the budgeting processes for sub-sectors and participating in harmonising allocations at the NETC level;

(iii) developing professional guidelines, e.g. on curricula and instructional materials, to assist detailed development and implementation at the local level;

(iv) in collaboration with examining bodies, e.g. KNEC, conduct sample-based national assessments to evaluate the system in relation to inputs, process, outputs and outcomes;

(v) carry out or commission policy-related research in E&T.

(b) ***Quality Assurance.*** The formative and summative monitoring of the teaching-learning transaction, and maintenance of E&T standards - currently carried by the inspectorates of the relevant ministries - will be reorganised as follows:

(i) In the decentralised system, each LGA will set up within its DETB secretariat a unit to take over the formative and summative monitoring duties, currently carried out by field offices of ministries, which form part of the local development and implementation of curricula, and management of the teaching force.

(ii) At the national level, the maintenance of standards will be transferred from line ministries, such as MoE and MRTTT, to NETC. This move is expected to facilitate maintenance of standards across sub-sectors. Within the NETC secretariat, a core unit with the professional capacity to oversee and guide standards in all E&T spheres will be established. The current provincial E&T offices will be transferred to NETC, with their major new role being centred on providing the main link (with regard to standards) between the national level and the local bodies to whom the management of E&T will be devolved. As part of its duties in maintaining standards, NETC will give due attention to equity issues in participation (e.g. with regard to disparities between regions and the sexes, and the handicapped); guidance and counselling (including development of psychological services to serve special cases in learning institutions); and increasing efficiency and effectiveness in the utilisation of resources. NETC's *modus operandi* in maintaining standards will include

- regular inspection of DETBs and learning institutions, and preparation of written reports on the inspections;
- commissioning and/or carrying out in-house research on relationships between variables in E&T standards;
- incorporating recommendations from inspection reports and research findings into E&T policy development and planning, and the budgeting process;

disseminating recommendations from inspection reports and research findings to stakeholders such as line ministries, DETBs and learning institutions.

(c) *Sequencing and Pacing Decentralisation.* Decentralisation is a multi-faceted process which, because to an extent it is a new approach in the delivery of services in Kenya, will need to be carefully sequenced and paced. The process can be defined in several different ways. The following two definitions underscore the need for sequencing and pacing.

First, decentralisation could be conceptualised as a socioeconomic process in which the state actively involves communities in (i) the identification of their development needs; (ii) mobilisation of a proportion of the resources to be invested towards realisation of the identified needs; and (iii) participation in the planning and implementation of necessary approaches. Second, decentralisation could be conceptualised as the state's deliberate devolution to local operational managers (e.g. LGA officials and heads of schools) discretion over the management of public and community resources on the basis of clearly defined and understood criteria for allocation.

In spite of different emphases in the two definitions, both point to the need for a clear elaboration of the implications of decentralisation for efficient and effective service delivery. Decentralisation ought to encourage local managers to optimise the use of resources in both quantitative and qualitative terms. Further, decentralisation, which ought to enhance transparency, should be seen by managers and local populations as fair and reasonable with obvious benefits. Similarly, from the central government point of view, the process ought to result in more effective use of resources, with better control and accountability. These considerations call for delicate choices in the implementation process. Among options to be explored in the Kenya case are:

- to what levels to decentralise (e.g. LGA, location/ward, village, schools);
- what resource management responsibilities to decentralise;
- what allocation criteria to use in decentralised budgetary allocations;
- what budgetary freedoms to allow to decentralised managers;
- what would be a reasonable and manageable pace of change.

It will also be necessary to take into account that, in addition to E&T, GoK policy aims at the decentralisation of service delivery in other spheres of development. In particular policy aims at the creation of a new governance structure at the local level. Successful implementation of this aspect, which may initially involve

deconcentration of financial management authority to field offices of line ministries, will be a necessary condition for the decentralisation of E&T.

Bearing in mind the foregoing, a gradual approach will be taken in decentralising E&T as follows:

(i) The necessary legal framework - enactment of the new Education and Training Act and amendment to the Local Government Act - will be established between late 1997 and the first quarter of 1998.

(ii) Work will begin in September 1997 on defining the nature and scope of decentralisation in the sector.

(iii) As soon as the legal framework has been put in place, decentralisation will be piloted in 15 LGAs selected on the basis of current performance and available infrastructure. As part of the pilot arrangements will be made for smooth transition from the current management set up to a totally decentralised management structure.

(iv) Following evaluation of the pilots in (iii) above, decentralisation will be extended to the rest of the country over a period of five years beginning 2000.

In order to improve the management of the sector in general and in particular, make decentralisation a success, it is proposed that measures be taken with regard to the development of resource planning and allocation systems, accountability and control systems, and the human resource and managerial infrastructure for E&T. The rest of this chapter describes and discusses these measures.

10.6.3 Development of Resource Planning and Allocation Systems

Programme analysis and provision of appropriate incentives will be adopted as key variables in the development of resource planning and allocation systems.

(a) *Programme Analysis.* Central government ministries, such as MoE, will link their budgetary allocations to managers at all levels (e.g. LGAs, universities, institutions, ministry headquarters) to an analysis of programmes. Programme analysis is the process by which plans, budgets and expenditures are expressed in terms of the objective to which they contribute rather than the nature of the inputs (e.g. finance, materials, and teachers). By defining more clearly the objectives of the expenditures in the budget, it will be possible to introduce more performance based management and control approaches.

Each sub-sector chapter set out programmes, for example, increasing participation, and improving quality and efficiency. The budgetary system needs to have a way of expressing those programmes, defining them and attaching resources to them. The introduction of programme analysis need not affect the normal line item analysis of the budget. The largest part of the budget of the sector will be concerned with maintaining the existing system, the core budget. Specific programmes like increasing access (initiative-based expenditures) can also be incorporated into the line item system, but can be prepared at district level on a programme basis. The options to be explored in developing programme analysis include:

- the form of programme based analysis;
- how transactions will be recorded;
- the level of technology required; and
- what expenditures can be analyses in programme terms.

(b) ***Building Incentives into Allocation Systems.*** Within the decentralised management structure, it will be necessary to build into the resource management system measures that will harness the interest of staff at all levels in achieving the objectives of the MPET, which include increasing participation, making resource utilisation more efficient, and improving the standards of teaching and learning. The achievement of better results for the set goals will create motivation in the budget holders. Options for budget management which need to be explored include:

- identification of management freedoms (such as virement freedoms) to be given to managers;
- personal incentives; and
- incentives such as matching grants or performance based incentives.

10.6.4 Development of Accountability and Control Systems

Accountability is the process by which a budget holder is made responsible both for what is done with the money and what is achieved with it, while control signifies a system of regulation, checks and balances to ensure proper use of public monies. Decentralisation of resource management cannot be viable without strong financial control and accountability for finances and for outcomes. It is planned that an immediate start be made on systems development work on improved control and accountability systems.

(a) ***Control.*** The options for improving control will depend on developments in the GoK accounting systems as a whole, particularly with respect to decentralisation. The type of improvement will depend on the level of technology employed

which will affect the speed at which management information will be made available. The development of improved control systems will therefore be a priority and care will be taken that they are practical and manageable.

However, a single control structure is important in a decentralised system. Accounting and monitoring systems will therefore be integrated.

Financial scrutiny and audit system will be expanded and strengthened to take a more comprehensive review. The quality assurance units to be established under NETC and LGAs will be suitably organised and trained such that they are able to play a role in the scrutiny process, and give accountability a performance focus.

An early activity in the MPET will be to undertake a financial management health check of district education management. This will involve a standard checklist of financial management and control procedures which should be applied to all districts, and include a scrutiny of staff qualifications and capacity as well as how well the systems work.

(b) ***Accountability.*** Improved control systems will make financial accountability stronger. Equally important will be to strengthen accountability for outcomes. For example, the achievement of each implementation target set by GoK should be linked to the name of a budget holder and to the resources needed.

Under a decentralised system, in principle, it is easier to locate accountability more clearly. For example, if a district has a particularly low PTR, currently there is no clear responsibility for rectifying that problem. One option would be that the central government does not allocate teachers above a certain number. But in low enrolment areas that policy could create problems, and therefore compensatory measures may be necessary. The other set of options hinges around the district s own planning process.

Under that set of options, districts might be given targets and asked to present the budgets required to achieve those targets. The DEO / DETB would therefore be obliged to agree its targets, and, having received the resources requested, be accountable for them. The process would thus require consultation with schools and communities: schools, for example, might have to agree targets with districts in turn. In this way the budget can drive the system along a path of improved efficiency and quality, and also towards more participation in development at all levels.

Work will start immediately on defining a system, which will then be subject to consultation and discussion, and piloted in time for the 1998/99 budget.

10.6.5 Staff and Management Infrastructure Development

In order to introduce change and make it sustainable, the E&T system will require competent managers and professional staff, as well as an efficient management infrastructure. Towards meeting these needs, the following measures will be taken:

(a) ***Schemes of Service.*** In line with current GoK policy on improving productivity in the public service, plans will be developed and implemented to provide the system with competent and motivated managers and professional staff. At all levels, the activity will be centred on the development and diligent implementation of detailed schemes of service. A scheme of service is a personnel tool which (i) describes an organisation, its function and its staffing; (ii) provides a clear mission statement, objectives, functions, organisation charts, job descriptions and job specifications for each organisational component; (iii) enables an organisation to clearly define lines of responsibility; and (iv) facilitates organisational analysis, human resource planning, recruitment, promotions, salary reviews and other personnel needs of the organisation (Russell, 1984).

(b) ***Restructuring Central Government Line Ministries.*** The headquarters of ministries with responsibility for E&T will be streamlined to reflect the management reality arising from the development of a decentralised system. The key will be to raise efficiency by relating personnel establishments in departments and sections to clearly stated levels of responsibilities and duties. On the professional side four programmes under which departments, each managed by a senior officer, could be organised are identifiable as (i) school education, i.e. ECCDE, primary and secondary education; (ii) higher education, i.e. VOC-TEC training and university education; (iii) adult and continuing education; and (iv) professional staff development (including teachers, LGA and central government staff).

(c) ***Professional Development.*** This will be carried out as follows:

(i) The development of professional staff in institutions of learning will be carried out as recommended in the sub-sector chapters.

(ii) The training of staff within the E&T management infrastructure (NETC, ministries, and LGAs) will be developed as a continuous feature of the system. Departure

will be made from the practice, implicit in some promotions, that experience as teacher or head of an institution of learning or as a relatively junior manager - coupled with appropriate on-the-job learning - are sufficient conditions for success in next professional management and leadership position in the bureaucratic ladder. Criteria defining the qualifications (particularly of a formal nature at the masters and doctorate level) required for senior appointments will be developed and strictly adhered to. Officers performing duties for which they are not qualified will hold such promotions on a probationary basis and will be given a stated period of time within which to obtain the required qualifications or be eased out of the positions.

(iii) Training programmes will be developed to cover all cadre of key staff including policy developers and planners, financial accounting staff and auditors, information managers, quality assurance and monitoring staff, and researchers.

(iv) While in a limited number of cases formal training outside the country may be necessary, emphasis will be placed on developing appropriate training within the country. In collaboration with existing institutions - such as universities and middle-level VOC-TEC institutions - formal courses specifically geared to development of E&T will be developed. In this regard, the experience of the Kenya Education Staff Institute and university faculties of education will be built upon to create a university department(s) specialising in degree courses for senior professionals in E&T. The courses will be organised to allow for part-time study by serving officers.

(v) Special attention will be given to the development of quality assurance and advisory staff in NETC and LGAs, as follows:

- Quality assurance personnel in the NETC headquarters and provincial units, and secondary school advisors in LGAs will be recruited from among professionally trained and successful teachers who possess good first degrees. Their scheme of service will require possession of relevant post-graduate qualifications, which may be obtained through part-time study [see (iv) above], as a condition for confirmation on permanent terms of employment. Promotion will be based on professional competence which will include explicit success in carrying out relevant research, assessment, and evaluation.

- Quality assurance personnel for ECCDE and primary schools [e.g. Teacher Advisory Centre (TAC) tutors and DICECE staff] to work under LGAs will be recruited from among qualified exemplary teachers. Their career development programme will require part-time study for at least a first university degree in a relevant sphere of study.

Professional Staff

(vi) *Teacher Scheme of Service and Development.* Teachers will a have a common scheme of service that will indicate the salary scales from the lowest and highest with varying entry points for certificate, diploma and degree levels. The scheme of service will stipulate the criteria for moving from one level to the next, with the additional academic and professional training required being specified.

(d) Management Information System (MIS)

To ensure sustainability of the management of the E&T system proposed in the MPET, an effective MIS will be developed. The MIS will provide data and information for supporting policy development and planning, monitoring and evaluation of policy implementation, ensuring efficiency in resource allocation and utilisation as well as accountability.

A net-worked computerised MIS will be established at all levels of the proposed E&T structure, with every level taking responsibility for collection of data, processing and analysis as well as utilisation of information.