

PC-AAA-719

**The Federal Democratic Republic of Ethiopia**

**EDUCATION SECTOR DEVELOPMENT PROGRAMME**

**(1997-2001)**

**Prepared for the Consultative Group Meeting of December 10-12, 1996**

**Addis Ababa**

**November 1996**

## Contents

EXECUTIVE SUMMARY .....	i
BACKGROUND .....	1
THE ETHIOPIAN ECONOMY .....	1
EDUCATION AND ECONOMIC DEVELOPMENT .....	2
STATE OF THE EDUCATION SECTOR.....	2
SYSTEM STRUCTURE.....	2
GENERAL CHARACTERISTICS AND PERFORMANCE.....	3
PRIMARY EDUCATION.....	3
SECONDARY EDUCATION.....	4
TECHNICAL AND VOCATIONAL EDUCATION.....	5
TERTIARY EDUCATION.....	6
TEACHER TRAINING.....	7
SPECIALISED INSTITUTIONS.....	8
ADMINISTRATION AND MANAGEMENT.....	8
FINANCE AND EXPENDITURE.....	9
ISSUES, OBJECTIVES, STRATEGIES.....	10
ISSUES.....	11
ACCESS.....	11
QUALITY.....	11
EQUITY.....	11
EFFICIENCY.....	12
FINANCING.....	12
OBJECTIVES.....	12
STRATEGIES.....	13
CURRICULUM REFORM.....	13
DECENTRALISATION.....	13
SCHOOL CONSTRUCTION, RENOVATION, FURNISHINGS.....	14
PRIVATE FINANCING AND DELIVERY OF EDUCATION.....	14
EDUCATION MATERIALS.....	14
GENDER EQUALITY.....	15
TEACHER TRAINING AND EMPLOYMENT.....	15
RESEARCH AND POLICY DEVELOPMENT.....	15
THE EDUCATION SECTOR DEVELOPMENT PROGRAM.....	16
OVERVIEW.....	16
PRIMARY EDUCATION.....	16
SECONDARY EDUCATION.....	17
TECHNICAL AND VOCATIONAL EDUCATION.....	18
TERTIARY EDUCATION.....	18
SPECIAL EDUCATION FACILITIES FOR UNDERSERVED REGIONS.....	18
DISTANCE EDUCATION.....	19

TEACHERS SALARIES AND OVERHEAD .....	19
COST ESTIMATES, FINANCING AND IMPLEMENTATION STRATEGY .....	20
ESDP BUDGET: 1997-2001 .....	20
FINANCING STRATEGY .....	20
IMPLEMENTATION STRATEGY .....	21
TABLES .....	23
TABLE 1: MAJOR EDUCATION STATISTICS FOR 1995 .....	23
TABLE 2: ENROLMENT BY GENDER FOR 1995 .....	23
TABLE 3: TEACHER TRAINING INSTITUTIONS - 1995 .....	24
TABLE 4: GOVERNMENT AND NON-GOVERNMENT SCHOOLS - 1995 .....	24
TABLE 5: PUBLIC SECTOR EXPENDITURE ON EDUCATION, 1990/91-1994/95 .....	25
TABLE 6: DATA ON GOVERNMENT SCHOOLS, STUDENTS AND TEACHERS IN THE DIFFERENT REGIONS .....	26
TABLE 7: SUMMARY OF EDUCATION INVESTMENT PROGRAM BUDGET: 1997-2001 .....	27
ANNEX A: GOVERNMENT OF ETHIOPIA RECOMMENDATIONS FOR SIP IMPLEMENTATION .....	28

## ETHIOPIA

### EDUCATION SECTOR DEVELOPMENT PROGRAM

#### BACKGROUND

The Education Sector Development (ESD) Program is introduced against the backdrop of Ethiopia's long internal conflict that has led to the deterioration of the education sector and social indicators. It represents a five-year sector strategy and expenditure program for 1997 to 2001. The ESD Program's goal is to expand educational opportunities. It represents the first step in a longer range plan to achieve universal primary education by 2015. Nearly 3.5 million are enrolled in the education system with 3.1 million in primary education and 371,000 in secondary education. Only one in six children of primary school age are enrolled. Less than one out of ten are enrolled in secondary education and one out of a hundred in tertiary education. There are gross disparities in these participation ratios among regions, urban and rural areas, and genders. Rural areas and girls have lower participation ratios.

The present school system is structured with primary education representing grades 1 to 6, junior secondary education grades 7 to 8, and senior secondary grades 9 to 12. Following education reforms in 1994, a new curriculum when fully implemented will offer 10 years of general education with 8 years of primary education and 2 years of general secondary education. There are 10,506 primary schools, including 655 non-governmental schools, and 329 secondary schools with 32 non-governmental schools. There are also 17 technical and vocational schools, 3 of which are non-government. Tertiary institutions include two universities, 12 colleges (including teacher training colleges), and three institutes (polytechnic, health sciences and water technology). Because of long-standing neglect and damage during the internal conflict, many schools throughout the system are dilapidated

Low and declining quality is a problem leading to high dropout and repetition rates, especially for girls. The poor performance of primary schools is linked to the lack of adequate teaching materials, inadequate teacher training and motivation, and a curriculum that fails to distinguish between regional cultural and linguistic diversities. Science, language, and cultural components fail to prepare students for productive life in the community. Teachers are inefficiently utilised in the classroom. At the secondary level, a high proportion of teachers are either untrained or are poorly trained and motivated. Overcrowding of secondary schools in urban areas is a problem. Schools suffer acute shortages of the most basic equipment and teaching materials, including textbooks. Technical and vocational schools are under-utilised due to their low quality

and links to employment. Tertiary education offers limited access, high costs, and a curriculum unsuited to the manpower needs of the largely agrarian economy.

### ISSUES, OBJECTIVES, STRATEGIES

The issues surrounding the education system are summarised by low access and quality, an inequitable distribution of educational opportunities, inefficient administration, and the lack of adequate financing. Rural areas and girls are especially disadvantaged. The ESD Program is introduced against this background with the goal of laying a foundation for achieving universal primary education by 2015. Realising this goal requires a balanced development of the education sector at all levels, but with emphasis on primary education. During the next five years, the ESD Program will emphasise the expansion of primary education, improvements in its quality, and a more equitable distribution of educational opportunities. This will include actions to make the education system perform more efficiently and respond to the needs of the economy. Monitorable targets are as follows:

- expand access by raising primary enrolments from 3.1 to 7 million and achieve an average gross enrolment ratio of 50% for primary education;
- improve quality by extending the new curriculum to all levels of the system, increasing the number of certified primary teachers from 85% to 95%, and lower the textbook ratio at the primary level from 5:1 to 1:1;
- increase efficiency by the more effective utilisation of teachers with an average 50:1 student to teacher ratio and raising from 60% to 80% the education system coefficient of efficiency reflecting a reduction of the number of dropouts and repeaters;
- improve equity by achieving a gross enrolment ratio for primary education of at least 25% in under-served regions, raise the female participation share in primary schools from 38% to 45%, and increase the number of female teacher from 25% to 35%;
- increase financing for education by raising public expenditure on education to 4.6% of GDP, achieve a target of 5% of new school construction owned by non-government institutions, and introduce cost sharing at the tertiary level

Strategies for reaching these targets include: (i) the phasing in of new curricula to improve the quality and relevance of education emphasising the development of basic skills in literacy, numeracy, and communications with use of mother tongue in primary education; (ii) the decentralisation of school control to Regional Education Bureaus to improve responsiveness and efficiency backed by investments in capacity building; (iii) new investments in school construction and classroom renovation with emphasis on rural areas and primary education to improve access and redress regional imbalances; (iv) promotion of an expanded role for the private sector in the financing and delivery of

The five-year expenditure program will include recurrent spending totalling 7,191 million birr (\$US1,151 million). Support for curriculum development and implementation will be provided for primary, secondary, and technical and vocational education. This will include the production and distribution of new text books enabling all students to have access to texts and related educational materials. The curricula and text books will be gender sensitive. During the five-year period, approximately 100,000 primary and secondary teachers will receive pre-service and in-service training to upgrade their skills with emphasis placed on mathematics, science, and English. In addition to the better preparation of teachers, support will be provided for a recently introduced salary reform package to encourage and reward teachers for quality and performance. With expansion of tertiary education to meet immediate manpower needs, 2,000 faculty members will be trained at home and abroad. Non-salary funds for operations and overhead will be increased as a share of recurrent spending.

### **COST ESTIMATES, FINANCING AND IMPLEMENTATION STRATEGY**

The ESD Program, with contingencies included, is 12,251 million birr (\$US1.96 billion), nearly doubling current spending for education. Approximately, 73% of capital expenditures will be for primary education, reflecting the high priority given to the long-term goal of achieving universal primary education. Secondary education, in turn, will account for 6.5%, technical and vocational education for 4%, and tertiary education for 8.7%. The balance will be spent for boarding schools, teacher training institutions, and capacity building. Public expenditures for education over the five-year period will represent 4.6% of GDP. The financing of these expenditures will require a partnership of the public sector, private households and employers, communities, and international financial institutions.

Alone, public revenues will not be able to sustain the doubling of current spending for education to achieve the ambitious enrolment targets of the ESD Program, nor will they be able to sustain the momentum of these gains with further spending to reach the target of universal primary education by 2015. Public revenues committed to education will be 8,877 million birr (\$US1.42 billion). The balance is \$3,374 million birr (\$US540 million) and is expected to be financed through assistance from international financing institutions and bilateral and multilateral sources.

It is envisaged that additional sources of finance may include: (i) accelerated economic growth and expanded fiscal effort by the public sector; (ii) increased private spending on education; (iii) the more efficient use of public expenditures; and (iv) local and international non-government organizations. However, since these sources are difficult to account for at present they will be considered as supplementary. The private sector, in particular, will be encouraged to play a larger role in the financing and delivery of education, including communities and non-governmental organisations. Reaching the goal of universal primary education by 2015 will, of course, require a great deal of international assistance for a sustained period of time.

education to improve efficiency and reduce demands for public expenditure; (v) increase non-salary budgets for educational materials, including text books, to raise the quality of education and assure a competitive supply of these materials.

Joining these strategies are: (vi) steps to promote gender equality that influence both the supply of educational facilities and programs for girls, but also household demand for sending girls to school; (vii) the more efficient utilisation of teachers in the classroom, as measured by student to teacher ratios, and investments in teacher training programs, facilities and mass media to upgrade the quality of instruction, plus support for salary reforms to increase teacher motivation and accountability; and (viii) support of research and development activities within the Ministry of Education and the Regional Education Bureaus to guide policy development and assessment of learning effectiveness and promote innovations in instructional methodology, school management, distance education, budgeting, non-formal modes of educational delivery, and other school-based innovations.

### **THE EDUCATION SECTOR DEVELOPMENT PROGRAM**

The primary school-age population, ages 7 to 14 is expected to increase during the five-year period 2.5% per annum, rising from 12.3 million in 1995 to 13.5 million by the year 2000. Capital expenditures under the ESD Program, with contingencies, will total 5,060 million birr (\$US809 million). At the primary level, 5,000 schools will be upgraded to provide room for two full cycles of primary education, another 5,000 will be renovated, and 2,500 new schools will be constructed, mostly in rural areas. The enrolment capacity will be 4.7 million on a single-shift system and 7 million with half the schools running a multiple-shift system. At the secondary level, 1,500 additional classrooms will be constructed along with 120 new schools. Three hundred secondary schools will be renovated. Enrolment capacity will be 600,000. For pastoral regions, 10 boarding schools will be built. Capacity building for planning, budgeting, and school management will be provided for the Ministry of Education, Regional Education Bureaus, and schools.

To provide training at key exit points from the academic system relevant to the needs of the economy, technical and vocational education capacity will be expanded with five middle-level technical schools joining 25 new middle-level technical schools already funded and being constructed in areas distributed throughout the country. At the tertiary level, immediate manpower needs will be addressed with the upgrading of four engineering colleges, three medical schools, and two education facilities. Facilities will be established for two new health faculties and three education faculties. Management and administrative capacity in the public sector will be strengthened by support for a newly established civil service college. At each level, equipment and furnishings will be included for new and renovated schools. Capital improvements will include additional teacher training capacity providing three new teacher training institutes and the renovation of 10 additional teacher training institutes.

The government proposes to work in a partnership with donors for further development of the ESD Program and its implementation. Implementation arrangements will include a Central Steering Committee to be chaired by the Prime Minister's Office and a Regional Steering Committee in each of the 11 Regions chaired by the Regional Government Social and Economic Affairs Head.

# BACKGROUND

## THE ETHIOPIAN ECONOMY

1. Internal conflicts have disrupted economic activity over the past three decades. Much of this conflict occurred in the rural hinterland. The consequences were particularly severe for the rural population and for agricultural activity and development. The Transitional Government in 1991, as a result, inherited a devastated economy and massive debt from the military regime that ruled Ethiopia for two decades. The new government immediately launched a program of macroeconomic reforms that helped stabilise the economy, dismantle the centrally planned system of the previous regime, and restore Ethiopia's competitive position through a devaluation of the exchange rate and the opening of opportunities for private investment.
2. GDP responded with double digit growth of 12%. A drought that began in 1993 dampened this growth, but only briefly as the economy recovered in 1994/95 and 1995/96 with nominal growth of 18.3% and 8.9% respectively. Inflation was cut from 36% in 1991 to around 13% by mid-decade and the fiscal deficit was reduced from 7% to about 3% of GDP. Ethiopia's population today numbers about 55 million. Its GDP is US\$130 per capita. The economy is heavily dependent on agriculture and the small trade sectors. The agriculture sector supports about 85 percent of the population, but accounts for only 40% of GDP. The industrial sector is small, representing about 10% of GDP. The macroeconomic reforms were accompanied by a substantial restructuring of public expenditures, shifting resources from defence to social services and roads.
3. Ethiopia's infrastructure, already underdeveloped, deteriorated significantly during the internal conflict. There was little expansion of capacity during the conflict, and that which existed, deteriorated for lack of adequate maintenance and upkeep. This had an adverse effect on the access of the population to basic education and health care, particularly in rural areas. As a share of the budget, expenditures for both increased under the new government. Social indicators for Ethiopia are among the lowest in the world. The maintenance of a strong economy is essential to increasing public expenditures on vital social services and improving these indicators. At the same time, investment in basic social services is essential to laying the foundation for economic growth and the reduction of poverty.

## EDUCATION AND ECONOMIC DEVELOPMENT

4. Education influences productivity and economic growth through several channels. International studies have confirmed this. A more educated persons tends to absorb new information faster and applies new technology more effectively. Education facilitates the development of new technologies that are a source of economic growth. The economic returns to investments in primary education are higher than those for secondary and tertiary education, but from the training of teachers to the adaptation of technologies, investments in higher levels of education are essential to realising the economic returns to investments in primary education. The education of females is especially important to poverty reduction through the synergy of education's impact on fertility and health in the family.

5. The Education Sector Development (ESD) Program is being introduced against the backdrop of Ethiopia's long internal conflict and the deterioration of the education sector. The Program is designed to expand educational opportunities and is the first step in a longer range plan to achieve universal primary education by 2015 and the balanced development of the education sector. The Program is set within the educational reforms adopted in 1994, known as the Education Sector Strategy (September 1994). In the section to follow, the state of the education sector is reviewed and its structure, performance, management, and budget highlighted. The sector issues, objectives, and strategies are next summarised. The Program is described along with its costs and financing, and an implementation plan.

## STATE OF THE EDUCATION SECTOR

### System Structure

6. Ethiopia's education system is comprised of formal and non-formal sub-sectors. The formal education sub-sector covers academic and technical training at the primary, secondary, and tertiary levels, while non-formal education includes a range of skills training for school leavers and adults. The ESD Program covers the formal sector, including academic and technical education and teacher training in government and non-government schools. Many non-governmental schools, comprising religious schools and private proprietary institutions, were nationalised beginning in 1976. At the primary education level, enrolment in non-governmental schools fell from 24% of total enrolment in 1975 to 10% in 1994. The percentage of non-governmental primary schools declined from 39% in 1975 to about 6% in 1994.

7. Education reforms, adopted in 1994, are leading to changes in the system structure. Prior to this date, general education was divided into primary (1-6), junior secondary (7-8), and senior secondary (9-12) with national examinations given on completion of each level. This system has been in place since 1962. The new curriculum will offer 10 years of general education consisting of 8 years of primary education and 2 years of general secondary education, grades 9 and 10. Primary education is divided into

two cycles comprising grades 1 through 4 of basic education, and a second cycle of grades 5 through 8 of general primary education. The first cycle of primary education is expected to achieve functional literacy, while the second prepares students for further education. General education is completed at the end of the first cycle of general secondary education.

8. Curriculum changes are accompanying the restructuring along with the use of local languages as mediums of instruction. Students in grades 1, 2, and 3 will automatically be promoted. The system is designed to enable students to leave the formal school system with higher levels of literacy and numeracy and with opportunities for pursuing technical and vocational training at different levels of the education system. The first cycle of secondary education (9-10) is intended to enable students to identify areas of interest for further training. The second cycle of secondary education (11-12) prepares students for continuing to higher education. Technical and vocational training is institutionally separate from the regular education system and runs in parallel with it. Training is offered at the exit points of the academic system, grades 4, 8 and 10.

#### **GENERAL CHARACTERISTICS AND PERFORMANCE**

9. As reasons for reform, the education system exhibited low enrolment rates at all levels. Low standards and quality were reflected in high dropout and repetition rates. Inequities in the distribution of educational opportunities were evident by region, for urban and rural areas, and by gender. High unit costs for education were a measure of the system's inefficiencies. Education indicators in Ethiopia today trail those of other developing countries in Sub-Saharan Africa and outside the region. These outcomes underpin the interest in education reforms and the introduction of the ESD Program in support of the nation's goals for achieving balanced economic development and the reduction of poverty. Problems are evident at each level of the education system.

#### **Primary Education**

10. In their number and enrolment, primary schools account for a major share of the education system's capacity. Some 10,506 primary schools in 1995, including 655 non-governmental schools, enrolled nearly 3.1 million students. See Table 1. The gross enrolment ratio, representing the number enrolled at this level as a percentage of the eligible age cohort, stood at 26%. While substantially higher than the gross enrolment ratio of 11% in 1975, showing the expansion of the system, it is nevertheless well below that of many other Sub-Saharan countries. Late schooling for overage youths and repetition lead to net enrolment ratios that are even lower. Net enrolment in 1995 was 16%. Five out of six children of school age are unenrolled. The average, moreover, fails to reveal substantial variation in access to basic education.

11. In rural areas, students must travel long distances to the nearest school. For the poor, many of whom are concentrated in rural areas, registration fees, examination fees, school supplies, and other charges have been a factor in the family's decision to send

young children to school, especially young girls. Girls of primary school-age constitute 38% of total enrolments in 1995. See Table 2. While representing an increase from the figure of 32% in 1975, it is nevertheless significantly lower than the enrolment of boys. Equality would require a figure closer to 50%. Inequities in access to schooling are also evident among regions. Only 8% of the eligible age group for primary education were enrolled in the Afar region as compared with 85% in the urban Addis region. See Table 6. Rural regions suffer disparities in access to education.

12. The children able to attend school are often confronted by low quality education that contributes to high dropout and repetition rates. The quality of primary education has been declining progressively in recent years. The wastage in the system, produced by dropouts and repetition, in turn leads to high unit costs. Dropout rates are higher in the first grade, 32% in 1994, than in any other grade. Overall repetition rates averaged 11%. Students are often obliged to repeat grades at higher levels of primary education in order to improve their chances of getting better grades to proceed to secondary schools. Students are allowed two chances to repeat grades. The repetition rate for grade 6 in 1994 was 19.8%. Dropout and repetition rates are higher for girls than boys. Against this background of wastage, the cost per student-year was estimated at 161 birr in 1993, an expenditure exceeding that of many other low-income countries in the region.

13. Student to teacher ratios are declining. The ratio dropped from 39:1 in 1975 to 32:1 in 1994. Both ratios are below the regional average of 43:1 in 1993. The variation in this ratio reflects inefficiencies in the utilisation of teachers. The primary student to teacher ratio in 1994 varies from a low of 17:1 in the Harari region where underutilisation is a problem to a high of 53:1 in Addis where overcrowding of classroom space is a serious problem. The poor performance of the primary education system can be linked to the lack of adequate teaching materials with only 40% of schools having textbooks. The average student to book ratio is 5:1. Other problems include inadequate teacher training and a curriculum that fails to distinguish between regional cultural and linguistic diversities. The 1994 educational reforms addressed some of these problems by introducing automatic promotions for grades 1 to 3, the adoption of local languages as a medium of instruction, and the introduction of a new curriculum.

### **Secondary Education**

14. Only one out of ten children who enter primary schools complete the twelfth year of secondary education. The capacity of secondary education is limited. In 1995, there were 329 secondary schools enrolling 370,916 students. The gross enrolment ratio approached 8%. Less than one out of ten in the age cohort were attending a secondary school. Non-government schools accounted for nearly 10% of the total number of schools, but a substantially smaller share of enrolment. See Table 4. Before the nationalisation of most secondary schools in 1975, non-government schools accounted for about 40% of secondary schools. Enrolment in secondary education rose as high as 454,000 in 1991, prior to the break up with Eritrea, before declining. Even with the

decline, access to secondary education expanded rapidly from a level of 64,000 enrolled in 1975.

15. The gender gap in secondary education has narrowed over the past two decades. The number of girls enrolled as a percentage of the total increased from 26% in 1975 to 44% in 1995. See Table 2. Participation in rural areas is low compared with that in urban areas where school overcrowding is a problem. Schools in urban areas that were initially built to accommodate a few hundred students are forced to accommodate three to four times this number. In rural areas, secondary schools are operating under their capacity. The cost of secondary education for the rural poor has become increasingly difficult to bear resulting in a reduction in demand for rural secondary education. Overall, access to secondary education is low in relation to regional standards, but this has to be interpreted against the agrarian nature of the economy and the lower demand for secondary schooling it may create.

16. Quality at the secondary level is a problem as it is at the primary level. The expansion of access has not been matched by improvements in quality. As already described, urban secondary schools are overcrowded resulting in management and disciplinary problems, and low academic achievement. Furniture and facilities have been subjected to excessive wear and tear. Schools suffer acute shortages of the most basic facilities. Laboratories are without chemicals and libraries and workshops are without books and equipment. Student to teacher ratios have risen modestly from 28:1 in 1975 to 33:1 in 1994. Recruitment and retention of qualified teachers has been a problem due to low salaries and other incentives. A high proportion of teachers are either untrained or are poorly trained and have limited opportunities for improving their skills. Many were trained as primary school teachers.

17. The low quality of secondary education is a contributor to high dropout and repetition rates. Repetition rates, for example, averaged 16 percent in 1994, exceeding the 11% average in primary schools. Like the pattern found in primary education, repetition is higher for girls than boys. The repetition rate for girls in 1994 was 20%, while that for boys was 11%. Low quality leads to wastage and inefficiencies in the system. The changes in the system structure in 1995 sought to reduce the focus on preparing youths for tertiary education, when only a few could reach this goal due to the lack of space, and improve opportunities for those seeking vocational training and entry into the labour market. Under the new curriculum, a majority will leave the system after completing the first secondary cycle (9-10) to find work or pursue training and only those expecting to continue to tertiary education will remain to complete the preparatory two-year cycle comprising grades 11 and 12.

### **Technical and Vocational Education**

18. Those leaving general secondary education after completing the first secondary cycle now face limited opportunities for formal pre-employment training. At present, there are 17 technical and vocational schools, 3 of which are private, with a maximum

intake capacity of 6,000 students. However, as an indicator of the quality of and demand for the training offered, the total enrolment in these schools in 1995 was less than 2,700. See Table 1. The existing system of technical and vocational education suffers from numerous shortcomings, the major problems being shortages of qualified teachers, equipment and facilities, poor management, meagre budgetary allocations, inadequate program co-ordination, and poor linkages with the economy. Against this background, admission policies are unrealistic in limiting access to students who rank among the top ten in their class and have outstanding grades in English, mathematics, and the natural sciences.

19. The education reforms in 1994 anticipate an upgraded and more flexible technical and vocational education system, capable of absorbing students at different exit points from the general education system, grades 4, 8, and 10. The curriculum will be closely linked to the academic background of students at each level and designed to meet the needs of the economy. For example, at the lower level, the program will be designed for the over-aged student, many expected from peasant families, and will emphasise short-term training for the agriculture sector. Middle level training will be designed for those leaving after 8 years of schooling and will include training for agriculture, but also construction, industrial technology, and health education. Higher level training will be offered for those leaving after 10 years of general education. The identified weaknesses of the system will be addressed by the reforms.

### **Tertiary Education**

20. Access to tertiary education is closely screened. On average, 30% of those taking the Ethiopian School Leaving Certificate Examination each year at the conclusion of their secondary schooling pass the exam and only 10% of this number are accepted by tertiary education institutions. Total tertiary enrolments in 1995 numbered 15,820, spread among two universities, 12 colleges (including teacher training colleges), and 3 institutes (polytechnic, health sciences and water technology). This figure compares with 7,000 enrolled in 1975. See Table 1. Tertiary education traces its origins back to 1950 with establishment of the University College, now Addis Ababa University. Addis Ababa University is the largest institution accounting for about 59 percent of total tertiary enrolments. Alamaya University of Agriculture, located in the eastern part of the country, has about 1,000 students. The colleges are small, averaging 362 students.

21. Gender differences in access are larger in the tertiary sector than in the secondary and primary sectors. Women account for only 13% of total enrolments and are concentrated in colleges of social science, business and economics, teacher education, and health education. Enrolments by discipline can hardly be considered appropriate for a country where agriculture constitutes the backbone of the economy. From 1992 to 1994, commercial and social sciences accounted for 25% of total enrolments, engineering 16%, pedagogy and the natural sciences 14%, and medicine 11%. Agriculture represented only 17 percent of total enrolments. Student to teacher ratios are low by international standards at 7:1, indicating inefficiencies in the sector. This average also

hides variation among faculties and colleges which ranges from 2:1 in the School of Pharmacy of Addis Ababa University to 13:1 for the Business College at Mekkele in Tigray Region.

22. The unit cost of tertiary education is high in comparison with primary or even secondary education. The education of a student by a tertiary institution costs on average 4,282 birr in 1993, as compared with 161 birr for primary education. To put this cost into perspective, it is nine times the per capita income of the country. With tertiary enrolment representing less than a half percent of total enrolments in the education system, the tertiary sector consumes over 8% of the public education budget. Given this expenditure, it is noteworthy that no tuition is charged. This policy with its subsidy to the individual inflates the demand for higher education and exacerbates the level of public spending on tertiary education. Steps to improve the efficiency of the tertiary sector are therefore important to improving the quality of tertiary education and releasing resources to be used in other education sectors.

### **Teacher Training**

23. Efforts to expand access to and the quality of education require attention to teacher training. Throughout the education system, over 108,000 teachers are employed, the vast majority in primary education. See Table 1. Teacher training takes place in 13 primary schools teacher training centres, 3 teachers' colleges and an education faculty at the Addis Ababa University. See Table 3. These institutions produced 7,400 teachers in 1995. Teachers already in the system fail to meet the system's minimum standards. The Ministry of Education requires primary school teachers to complete 12 years of schooling, plus one year of teacher training. In 1995, 85% had diplomas from Teacher Training Institutes. Nearly 6% had only a primary level education and 9% had 12 or more years of education.

24. The problem in secondary education is more severe. The expansion of this sector was achieved by employing primary school teachers or teachers with no formal training at all. About 8% of secondary school teachers have 1 to 3 years of university education, while 40% have been trained at primary teacher training institutes. Only 63% hold the requisite certification at the diploma or degree levels. In technical and vocational education, 85% of the instructors do not have the required certification. The shortage of qualified teachers, particularly at the secondary level, results from the limited capacity of teacher training institutions. The equipment of these institutions and the quality of the training provided are also issues of concern. These issues are joined by concerns for the incentive system that surrounds teachers.

25. Teacher salaries account for 93% of the recurrent expenditures of public primary schools. The comparable figure in non-government schools is 62.5%. Important to recruitment, retention, and the motivation of teachers, public salaries are low in both relative and absolute terms and are less attractive than wages offered by the private sector, and even other parts of the public sector. The problem is compounded by poor

working conditions, the absence of opportunities for upward mobility, and career advancement within the profession. The problems with teacher training are therefore twofold. On one side, it is the capacity to provide training of an appropriate quality. On the other, it is the capacity to recruit, retain, and motivate the teacher core. Efforts to expand access to and the quality of education require responses to both problems. Not only will it be necessary to provide appropriate incentives to teachers, it requires setting standards for performance so that rewards are based on merit.

### **Specialised Institutions**

26. A set of specialised institutions under the Ministry of Education supports the education system. Among them is the Educational Materials Production and Distribution Agency producing and distributing educational materials with production facilities for textbooks, school furniture, science kits, etc. The agency is able to meet about two-thirds of the current demand for its products. Expansion versus privatisation is an issue for this agency. Curriculum development and educational research are supported by a specialised institute, the Institute of Curriculum Development and Research. The institute is faced with a need for reorganisation in view of the 1994 educational reforms. Another specialised agency, the Educational Mass Media Agency, provides for distance education. This agency produces visual aids to supplement classroom teaching through radio and television. It operates 10 radio stations, an educational television channel, and recording and transmission studios. The use of mass media has considerable potential, but this potential is limited in rural areas where access to electricity, radio receivers, and television is limited.

## **ADMINISTRATION AND MANAGEMENT**

27. The administration and management of education in its past has been rigidly centralised with the Ministry of Education at the apex of the system. The Ministry has been responsible for all aspects of public education, including educational planning and programming, the formulation of educational policies and strategies, the production and distribution of textbooks and other educational materials, the construction of schools, and budgetary expenditures. Rigid centralisation has resulted in an unequal distribution of educational opportunities and led to the design of a curriculum that disregards the linguistic and cultural diversities of the population. Educational policies and strategies have been designed without due regard to the specific requirements of regions and of the country's diverse nationalities.

28. The change in government in 1993 and the shift to a federal structure of administration has resulted in a devolution of political and economic power to regions. Autonomy and responsibility for the administration of public education at the primary and secondary levels has been decentralised to the newly-established education offices in each of the country's 11 autonomous regions. The Ministry has consequently been downsized and its responsibilities redefined to include: (a) setting national educational policies and strategies and monitoring their implementation; (b) setting educational

standards country-wide and issuing criteria for teacher recruitment; (c) providing training opportunities and support for training programs; (d) producing educational materials and setting standards for national examination; (e) promoting private investment for education; and (f) providing technical support for regional offices.

29. The central aim of the Ministry of Education is to help strengthen the regional offices and concentrate more on fundamental educational policy, broad educational planning and programming, setting standards and procedures for program implementation. The structure of the Ministry of Education has been changed to enable it to discharge these responsibilities. It has four departments covering teacher training, higher education and research, scholarships for students, and teacher affairs. It has retained responsibility for the specialised agencies and universities and colleges. The Ministry is headed by a minister, a vice-minister, and heads of the four departments. The Ministry will continue to have an important role to play in providing technical support to regional offices. Some departments will need strengthening in terms of manpower and equipment to enhance their performance and enable them to perform their new responsibilities.

30. The decentralisation of administration and management for primary and secondary education is based on the rationale that educational services are best managed by agencies located closer to communities. The major tasks of the regional education offices include: (a) formulating regional educational policies and programs; (b) expanding basic education with the goal of achieving universal primary education; (c) organising and administering the regional education system; (d) promoting private investment in education; (e) ensuring an adequate supply of educational facilities; (f) maintaining national education standards and criteria. The success of this decentralisation will depend heavily on equipping the Ministry and the regions, including zone and woreda (district) level governments, with the skills needed to carry out their new responsibilities. A heavy investment with donor support is underway to build this capacity, but more is needed.

#### **FINANCE AND EXPENDITURE**

31. Education is financed by the public sector almost entirely out of general revenues from taxes. Taxes constitute 78% of the government's total revenues. Public expenditure on education is modest by regional standards, but is growing steadily. As a percentage of GDP, total public expenditure on education in 1991 was 2.6%. This percentage as a measure of fiscal effort has since increased steadily. In 1994, projected public expenditures were 4% of GDP. Similarly, spending on education has risen as a share of total public expenditures, rising from 9.6% in 1991 to a projected 13% in 1994. See Table 5. Total spending for education, including recurrent and capital expenditures, has risen from 525 million birr in 1991 to a projected 1,297 million birr in 1994. No firm estimates are available for the level of private spending for education. A 1995 survey indicates that community contributions amount to less than 1% of annual school income

for government and non-government schools. Household contributions average about 7% for government schools and 26% for non-government schools.

32. Capital and recurrent expenditures have each increased with capital expenditures rising faster than recurrent expenditures, a reflection of the need for extensive renovation and improvement in the infrastructure of education following the war. Capital expenditures rose from 26 million birr in 1991 to 412 million birr in 1994, while recurrent expenditures increased from 499 million birr to 885 million birr in this period. See Table 5. Expanding access to education will require substantial capital expenditure, but the opening of new schools and renovation of existing ones will also require additional recurrent spending for teachers and educational materials. The share of the recurrent budget now spent on teacher salaries is estimated to be 93%. This raises concerns for the adequacy of the recurrent spending available for educational materials and other non-salary expenses which are important to the quality of education.

33. About half of total public recurrent expenditure on education is for primary education. This percentage has remained fairly stable since 1975. The share spent on secondary education has been approximately 25%. The recurrent budget for higher education, however, has risen five-fold since 1975, rising from 17 million birr to 84 million birr in 1994. The latter figure accounts for 8% of the recurrent budget. About 64% of the higher education recurrent budget is allocated to the Addis Ababa University, which in turn has 59% of total higher education enrolments. A balanced development of the education sector is important to economic development, spanning primary, secondary, and tertiary education. However, the high unit cost of tertiary education, mentioned earlier, and the disproportionate spending on this sector in relation to enrolments raises some fundamental questions about further public investment in tertiary education and the possible encouragement of private spending through the introduction of cost recovery policies. How to expand private financing for education, including that of community contributions, is a question of general importance.

## **ISSUES, OBJECTIVES, STRATEGIES**

### **ISSUES**

34. The internal conflict of the past three decades and its economic cost has impeded development of the education sector and weakened its infrastructure. Broadening access to education in a balanced fashion is central to the goals of promoting economic growth and the reduction of poverty. The public sector has an important role to play in making education accessible to all. Recognition of this can be seen in the higher priority being

given education in public expenditure. The task at hand requires attention to the following issues: access, quality, equity, efficiency, and financing.

### **Access**

35. About one out of four primary school-age youths now attends a primary school. Secondary education is accessible to less than one out of ten youths, while tertiary education is open to only a small fraction of those completing a secondary education. Schools have been destroyed in the war or are in need of substantial renovation. The need for additional construction and furnishing of schools and classrooms as issues is evident in both urban and rural areas, but especially the latter. The cost of schooling to households in rural areas met through the collection of various fees has been a barrier to access where schools do exist, particularly for the poor.

### **Quality**

36. The building and the renovation of classrooms is not sufficient to ensure access to schooling of acceptable quality to promote learning. The state of the education sector reveals deficiencies in primary and secondary education that diminish the quality of education and the incentive for parents to send children to school. The deficiencies include as issues: the lack of adequate teaching materials, equipment, and texts; inadequately trained and motivated teachers; a curriculum that has been focused on the needs of the few attending tertiary education at the expense of the masses entering the labour market; and proper tools for the assessment of learning. Technical and vocational education has been neglected for those who are unable or do not wish to continue to tertiary education.

### **Equity**

37. Access to schooling is uneven by region, for rural and urban areas, and by gender. The internal struggles of the past 30 years have had their most destructive effect in rural areas, leading to the absence of primary schools within walking distance of many communities and the destruction and deterioration of existing schools. The education of girls lags behind boys. Gains have been registered for girls at the primary level and significant gains have been achieved at the secondary level. The most serious disadvantage remains at the tertiary level. Gender inequities can be linked to issues involved with the supply of schooling and its cost, but also the household demand for education and the cultural role of women and girls. Decentralisation is highlighting new inequities in administrative capacity by region.

### **Efficiency**

38. Indicators of the inefficient use of resources in education are evident throughout the system. Internal inefficiencies are observed in high unit costs, wastage through

dropouts and repetition, underutilisation of facilities and teachers, and the absence of appropriate teaching materials and equipment at all levels of education. Indicators of wastage are particularly severe at the secondary level. External inefficiencies are also observed with the failure of schools, colleges, and universities to prepare youths who are appropriately trained for the market. These inefficiencies are linked to issues of unsuitable curricula, lack of adequate management capacity, and insufficient accountability for performance. Potentially important sources of accountability, communities and the private sector, now play only a limited role in the delivery and financing of education.

### **Financing**

39. Ethiopia's per capita income of US\$130 is among the lowest in the world. Even though the government is expanding the share of public expenditure on education and the commitment is high, there is little chance the public sector can afford in the near term the goal of universal primary education and the corollary expansion of secondary and tertiary education. Maintaining a strong economy is essential to increasing public expenditure, but alongside this, is the need to improve the efficiency with which the education system now operates and to re-engage the private sector in financing and delivery of education. The absence of cost recovery in tertiary education is important as an issue as is the attraction of private capital to the delivery of primary and secondary education. Adequate financing for education, however, requires the sustained commitment of external donors to the ESD Program.

### **OBJECTIVES**

40. The overall objectives of the ESD Program are based on the country's socio-economic needs for development. The new education policy, adopted in 1994, focuses on the development of education over a 20-year period. During the next five years, 1997 to 2001, the ESD Program will emphasise the expansion of primary education, improvements in its quality, and a more equitable distribution of educational opportunities. It will, also address high priority needs in secondary and tertiary education, and in technical and vocational education, in recognition of the inter-dependence of these sectors with primary education, but will defer major investments in secondary and tertiary education beyond the initial five-year Program. Monitorable objectives are as follows:

- expand access by raising primary enrolments from 3.1 to 7 million and achieve an average gross enrolment ratio of 50% for primary education;
- improve quality by extending the new curriculum to all levels of the system, increasing the number of certified primary teachers from 85% to 95%, and lower the textbook ratio at the primary level from 5:1 to 1:1;

- increase efficiency by the more effective utilisation of teachers with an average 50:1 student to teacher ratio and raising from 60% to 80% the system coefficient of efficiency reflecting a reduction of the number of dropouts and repeaters;
- improve equity by achieving a gross enrolment ratio for primary education of at least 25% in under-served regions, raise the female participation share in primary schools from 38% to 45%, and increase the number of female teacher from 25% to 35%;
- increase financing for education by raising public expenditure on education to 4.6% of GDP, achieve a target of 5% of new school construction owned by non-government institutions, and introduce cost sharing at the tertiary level

### **STRATEGIES**

41. The ESD Program lays the foundation for the medium and long-term goals of the new education policy that will make education more efficient as well as relevant to the needs of the economy. The program will take the first steps toward achieving universal primary education. The strategies used to realise the objectives include policy and institutional reforms and specific investments.

#### **Curriculum Reform**

42. To improve quality and enhance the relevance of education to students for participation in economic development, curriculum reforms are being introduced to emphasise the development of basic skills in literacy, numeracy, and communications; reduce emphasis on rote learning; promote learning through use of mother tongue in primary education; provide alternative options to that of preparation for tertiary education, and develop a gender-sensitive learning environment. Curriculum development will include preparation of instructional materials, teacher training and retraining. Implementation of the new curriculum, now underway, will be fully phased in over the five-year Program and evaluated at the conclusion.

#### **Decentralisation**

43. The devolution of powers to 11 regions to improve responsiveness and efficiency will be supported through capacity building initiatives, both at the Ministry level to uphold its general policy development role and for the Regional Education Bureaus (REB) to enable these Bureaus to assume their new responsibilities for the delivery of education. Decentralisation is underway through the transfer of Central Ministry personnel to the REBs along with systems for information, research, examinations, plus related equipment. This has been accompanied by donor-supported training and capacity building for school management, planning and budgeting, learning assessment, instructional methodology, and curriculum development. Further capacity building will

be undertaken to strengthen the Central Ministry, REBs, and school-level management and teaching personnel in performance of their duties. Institutional strengthening is also planned for systems that have been transferred to REBs.

### **School Construction, Renovation, Furnishings**

44. To attain the projected primary enrolment and redress regional imbalances, schools need to be constructed where they presently do not exist, upgraded or renovated where they do exist, and in all cases, properly furnished and equipped. Financing will be included for some boarding schools (grades 5-10) in two regions with significant pastoralist communities. Additional capital expenditures for construction, renovation, and furnishings will be introduced for secondary schools, higher education, and teacher training. Upgrading of technical and vocational education facilities is planned to support alternative education options for youths not planning to enter higher levels of education. However, priority will be given to expansion of enrolments in primary schools by committing three-quarters of all capital expenditures to this sub-sector with a majority of expenditures in rural areas to promote equality of access to educational opportunities. Double shifting will be retained and expanded to achieve access goals.

### **Private Financing and Delivery of Education**

45. To lower the demand for public financing of school construction and improvements at primary and secondary levels and to promote competition and efficiency, new regulations have been introduced (No. 206/1995) to liberalise the licensing and supervision of private schools. Further study of the barriers to private investment in education will be undertaken to identify and assist in removing arbitrary and capricious bureaucratic obstacles to this investment. Studies of household and community financing will be undertaken with the objective of searching for ways to expand this financing without limiting access of the poor to education. To reduce demands for public financing of tertiary education and provide additional resources for quality improvements, support will be provided for testing the introduction of cost recovery measures and development of institutional capacity for administering student loans and grants.

### **Education Materials**

46. The share of recurrent expenditure for non-salary items will be increased as a means to raise the quality of education, while also encouraging community and private household financing for this purpose. To improve quality and support the expansion of access to education, options will be explored for assuring a dependable supply of affordable textbooks and other schooling supplies, including actions that would place the Educational Materials Production and Distribution Agency on a competitive basis and help build private capacity. Donor support would be requested for providing consumer subsidies to help develop a textbook market.

## **Gender Equality**

47. Steps to promote gender equality include interventions that improve access to education facilities and programs for girls and lower barriers to the demand for their education. At the primary level, construction of new schools will broaden access for all, particularly in rural areas. The introduction of private lavatories in new and renovated schools is intended to encourage girls attendance as is a program to expand the number of women teaching and the development of texts that portray women in positive roles. Corollary investments in safe water and provision of grinding mills close to communities will free girls from household chores to attend school. At the secondary level, guidance and counselling is being strengthened and spaces for girls in non-traditional technical fields are being provided. At the tertiary level, where the problem for women is severe, admission priority is given to women where academic qualifications match those of men. Special counselling and training is offered to help women assimilate.

## **Teacher Training and Employment**

48. Improvements in quality at the primary and secondary education levels will be supported by developing a well-trained and motivated teaching staff. The effective and efficient utilisation of this staff will include seeking a better balance of student-teacher ratios across regions, zones, and woredas, and a general increase in the average of this ratio to 50:1. Investments will be made in teacher training programs and facilities, greater use of in-service training and teachers' guides, and the use of mass media programs to upgrade instruction in the classroom. The recent teacher salary reform package will be supported along with performance standards and increased accountability. The package provides salary scales and career development for primary and secondary school teachers, and also instructors in higher education, taking into account qualifications and experience.

## **Research and Policy Development**

49. Strengthening the capacity of the Ministry of Education to carry out its role of research and policy development will lead to improvements in the effectiveness of the education system and the efficiency of its operation. Decentralisation as a strategy for improving the relevance of education and the efficiency of its delivery also demands the development of analytic capacity for Regional Education Bureaus, local governments, and schools. Investments to improve the flow of information through the education system will be made along with investments in training, equipment, and other facilities needed to strengthen the capacity for conducting education research and policy development and using their results. Funds will be provided for pilot testing innovations in instructional methodology, school management, distance education, budgeting, non-formal modes of education delivery, and other school-based innovations.

# THE EDUCATION SECTOR DEVELOPMENT PROGRAM

## OVERVIEW

50. The ESD Program is formulated within the framework of the 1994 education sector strategy and accompanying education and training policy, which are designed to guide the development of education for the next two decades. The sector investment priority is set by the higher economic returns from investing in primary education, particularly in a predominantly agrarian economy, and the beneficial impact it would have on growth through increases in output and productivity. The primary school-age population, ages 7 to 14, is expected to increase during the five-year period 2.5% per annum, rising from 12.3 million in 1995 to 13.5 million by the year 2000. The principal objective is an ambitious doubling of the gross primary enrolment ratio in this period along with improvements in the quality of education.

51. At the primary school level, existing schools will be upgraded and re-equipped. Nine out of ten new schools will be located in rural areas to redress past inequities. In addition to the expansion and upgrading of school capacity, spending will be increased for educational materials, teacher training will be improved, a new curriculum linking education more closely with economic development will be phased in, and management capacity will be strengthened in a decentralised system. The program for secondary education includes improvements in quality along with a modest expansion of the school system. Investments in technical and vocational training will focus on quality improvements and expanding basic skill training centres. Investments in tertiary education will be directed to institutions that supply relevant manpower, including qualified teachers, health and engineering personnel.

## PRIMARY EDUCATION

52. Five thousand schools will be upgraded to provide room for two full cycles of primary education. Another 5,000 will be renovated and 2,500 new primary schools will be constructed. See Table 6. Five hundred schools require no changes. At the end of the five-year period, there will be 13,000 primary schools with capacity to accommodate a student population of 4.7 million on a single-shift system and about 7 million with half these schools operating on a multiple-shift system. The total estimated cost of construction, upgrading and renovation of schools comes to 1.75 billion birr. Local materials and construction methods will be used and community contributions and standardised designs will help reduce unit costs. Community participation will be engaged in planning, including location, and construction. Furnishings and equipment will add 1.6 billion birr bringing combined capital expenditures on primary education over the five-year period to 3.35 billion birr.

53. An additional 60,000 or so primary school teachers will be recruited during the programme period to accommodate enrolment growth and quality improvement.

Qualifications for teachers will be upgraded and training for implementation of the new curriculum will be required. Three new teacher training institutes will be constructed in regions by the year 2000 that now have limited capacity, and 10 of the existing 13 institutions will be upgraded and renovated to accommodate more trainees and to train teachers at the diploma level for grades 5 through 8. The estimated cost of construction, renovation, and equipping the 10 teacher training institutes is 100 million birr. Existing teachers, primary and secondary, will be retrained to upgrade and enhance their professional skills and commitment. During the five-year period, approximately 100,000 teachers will receive pre-service and in-service training. Emphasis will be placed on training in mathematics, science, and English. The total cost is estimated at 160 million birr.

54. In addition to the better preparation of teachers, emphasis will be placed on implementing the recently introduced salary reform package to encourage and reward teachers for quality and performance. The introduction of the new curriculum will also place new demands on teachers. Development of the new curriculum for primary schools is underway and being tested in selected schools for grades 1, 2, 5 and 6. Further development and implementation will proceed sequentially with grades 3 and 7 and conclude with grades 4 and 8 in the final program year. Development of the new curriculum together with the orientation of teacher training instructors, the preparation of course outlines and syllabi, and the writing of texts will be 10 million birr. Textbook production and distribution, with all primary students receiving texts, will add 505 million birr to the program recurrent costs. Additional operating costs for primary schools, not including salaries and administrative overhead is estimated at 174 million birr.

## SECONDARY EDUCATION

55. By the conclusion of the five-year ESD Program, secondary enrolment is expected to rise from 371,000 to 600,000. The program provides a modest increase in the number of schools and classrooms to accommodate growth and improvements that would enhance the quality of secondary education. Major expansion is deferred until the outflow from primary education begins generating demand for secondary education. Quality will be enhanced by introduction of a new curriculum, teacher training, and access to more educational materials and equipment. Teacher training would be improved by investments in tertiary education upgrading two education faculties to give degree programs and opening three new faculties in appropriate locations, as explained below for tertiary education. Double-shifts are expected to continue in secondary education, but efforts to reduce over-crowding and improve access to secondary schooling will be undertaken through the building of 1,500 additional classrooms. The goal is to reduce class sizes to 50. In addition, 120 new secondary schools will be constructed and 300 schools will be renovated. The total capital expenditure would be 300 million birr, plus 10 million birr for curriculum development and 45 million birr for operations, excluding salaries and administrative overhead.

### TECHNICAL AND VOCATIONAL EDUCATION

56. Technical and vocational education will operate separately from the education system and will be structured to receive school leavers at key exit points, grades 4, 8, and 10. The program will focus on access and quality improvements for technical and vocational education. Twenty-five new middle-level technical schools have been funded and are being constructed in areas spread throughout the country. Five additional middle-level technical schools will be built during the next five years. Ten existing technical and vocational training centres will be upgraded. The teaching staff of these centres will be upgraded through in-service training. "Trade Institutes" to train skilled manpower for industries such as leather manufacturing will be opened, linked to production factories, as part of the government's efforts to promote export. The additional investment for this portion of the ESD Program will be 190 million birr, including 35 million birr for the construction of the 5 new technical schools, 30 million for the upgrading of the technical and vocational training centres and 125 million for the trade institutes. An additional 10 million birr will be required for curriculum development and staff training.

### TERTIARY EDUCATION

57. Tertiary education suffers from deterioration in its quality and a curriculum that is not relevant to the manpower needs of the economy. The ESD Program will address these problems by upgrading programs in education, health, and engineering that respond to immediate manpower needs. Four engineering colleges, three medical schools, and two education faculties will be upgraded, plus two new health faculties and three education faculties will be established. Management and administration in the public sector will be strengthened by support for a newly established civil service college. Short-run needs for faculty members will be met with ex-patriates, while local capacity is developed with training at home and abroad. A five-year investment program in tertiary education, including expenditures for the upgrading and training of instructors, will be 500 million birr.

### SPECIAL EDUCATION FACILITIES FOR UNDERSERVED REGIONS

58. Regions like Afar and Somali have significant pastoralist communities that seasonally change their residence. These regions cover a wide geographic area with a relatively sparse population density. Providing social services to such a community requires special arrangements. These populations in the past have been neglected. The ESD Program has declined using mobile schools for reasons of logistical complexity and cost and will support the building of 10 boarding schools for grades 5 through 10 spread among 5 regions: Afar, Somali, Benshangul-Gumuz, Gambella, and SNNP. Some boarding schools will include grades 11 and 12 to prepare students for tertiary education. In addition, the programme will build one specialised Teacher Training Institute in each of these regions to overcome the shortage of local teachers. Students will be taken in these Institutes after grade 8 and given up to 3 additional years training in academic subjects and pedagogy enabling them to receive their secondary school leaving certificate

and to qualify as teachers. The total cost of these interventions over the five-year period will be 200 million birr, including recurrent costs.

#### **DISTANCE EDUCATION**

59. Distance education covers primary and secondary education, but also reaches a wider audience including graduates who are working and those unable to attend formal schooling. It can enrich the quality of education for those currently attending school and provide access to continuing education for those who are no longer enrolled. The Mass Media Agency under the Ministry of Education will produce and broadcast media packages for these diverse audiences. For primary schools, educational programs will be broadcast by radio and television in local languages. Distance education will also be used as a tool for teacher training in primary and secondary schools. At the secondary level, the broadcast of standardised learning materials will reduce regional disparities in educational quality. The cost of distance education includes the production, recording and broadcasting of programs; upgrading of broadcast facilities and equipment; printing and distribution of teacher guides; distribution of course materials to students and some monitors, such as radios & televisions to schools; tutorial support; and regional training and workshops. The projected cost is 50 million birr.

#### **TEACHERS SALARIES AND OVERHEAD**

60. The ESD Program summarised above excludes outlays for teachers' salaries, administrative overhead and maintenance expenses. The costs summarised are capital expenditures and other recurrent costs. Teacher salaries, however, are estimated to be 4.65 billion birr over the five-year program period. Other expenses for administrative overhead, maintenance, and various incidental expenses will be 873 million birr. When combined, the projected capital and recurrent expenditures of the ESD Program, together with a contingency allowance, represent the sum of education expenditures planned for 1997 to 2001. The financing of these expenditures and achievement of the ESD Program's ambitious goals for improving access to basic education and its quality will require a partnership of the public sector, private households and employers, communities, and international donors.

## **COST ESTIMATES, FINANCING AND IMPLEMENTATION STRATEGY**

### **ESDP BUDGET: 1997-2001**

61. The five-year ESD Program, with contingencies, is 12,251 million birr (US\$ 1.96 billion) nearly doubling current spending for education. See Table 7. The budget covers a five-year sector expenditure program. Capital spending will rise from a 1995 level of 32% of total public expenditure to an average level of 41%, reflecting the additional investment in school construction and renovation needed to achieve the ambitious target of doubling the gross primary enrolment ratio. Approximately 73% of capital expenditures will be for primary education. Secondary education, in turn, will account for 6.5%, technical and vocational education for 4%, and tertiary education for 8.7%. The balance, 7.8%, will be spent for boarding schools, teacher training institutions, and capacity building. Non-salary expenditures for education will be assured with spending for teacher salaries representing just 81% of the funds set aside for salaries, textbooks, and operating costs or about 71% of the overall recurrent budget.

### **FINANCING STRATEGY**

62. The ESD Program requires the mobilisation of additional funding to cover expenditures planned for the different components of the program. Public revenues would cover 8,877 million birr of the 12,251 million birr planned for the program. The balance of 3,374 million birr is expected to be financed through assistance from international finance institutions and bilateral and multilateral sources. Additional sources of finance may include (i) accelerated economic growth and expanded fiscal effort by the public sector, (ii) increased private spending on education, (iii) the more efficient use of public expenditures, and (iv) assistance from local and international non-government organizations, but since these are difficult to account for at present, they will be considered as positive gains above and beyond the planned expenditure. The government is committing itself to a nominal GDP growth target of 10% in the current estimates of financing. It has already included in its budget estimates the efficiency gains from standardising student to teacher ratios to 50:1. Further, the government is committing itself to enlarging the role of the private sector in the financing and delivery of education.

63. An enlarged role for the private sector in the delivery of education, including communities and non-governmental organisations, would supplement public investment by increasing private expenditures for school construction and renovation. The estimated

target of 5% for new school construction by the private sector will enhance and accelerate the government's efforts for achieving the goal of universal primary education by the year 2015. The introduction of cost recovery in tertiary education and increased community financing for primary and secondary education would also enable the government to divert funds for financing unmet demands, particularly of under-served populations. Regulations opening the market to the private sector for the delivery of education are in place and will be closely monitored for their results and need for amendment. Efforts to develop a private market for textbooks and other school equipment are included in the ESD Program along with steps to implement cost recovery measures in tertiary education.

64. On its own, public expenditure will not be able to sustain the doubling of current spending for education to achieve the ambitious enrolment targets of the ESD Program, nor will it likely be able to sustain the momentum of these gains with further spending growth to reach the target of universal primary education by 2015. An enlarged role for households and communities in the delivery and financing of education will be essential to sustaining these expenditures along with sound policies promoting the efficient use of education resources, public and private. The ESD Program will adopt and promote both strategies. Maintaining sound macroeconomic policies to promote rapid economic expansion will likewise be important to sustaining higher levels of public and private spending on education. The new government's record of economic reforms has shown a commitment to these policies.

65. The ESD Program lays a foundation for achieving universal primary education, but its acceleration of this goal will require international assistance for a sustained period of time. External assistance sought during the five-year ESD Program is 3,374 million birr. The government is offering the ESD Program as a sector strategy and expenditure program and proposes a partnership with international finance institutions, bilateral and multilateral sources, to realise the objectives of the program. Ethiopia is adopting the goal of realising universal primary education within the framework of the UN System-wide Initiative on Africa and its Basic Education for All African Children component. The government proposes to lead its development partners in realising the objectives of this Initiative.

#### **IMPLEMENTATION STRATEGY**

66. The successful implementation of the Education Sector Development Program requires an effective administrative structure and appropriately trained manpower. Substantial capacity building of government planning, budgeting, and management capacity is already underway at the central and regional levels of government with support from the donor community. Additional capacity building initiatives, representing 10 million birr, will be completed under the ESD Program. The government proposes to work in a partnership with donors for further planning and implementation of the ESD Program. A Central Steering Committee would be established to make decisions involving resource mobilisation and utilisation, approve work plans, and monitor progress (Annex 1). It would be chaired by the Prime Minister's Office and include the

Minister of Finance, the Minister of Economic Development and Co-operation, Minister of Education, and donor representatives.

67. The Central Steering Committee (CSC) would be supported by a secretariat or program co-ordination office in the Ministry of Education. The CSC through its secretariat would be responsible for co-ordination of education donor missions and activities; establishment of a shared information base for education finance and delivery; working with donors to standardise procurement and reporting mechanisms; and establish program monitoring and evaluation procedures. The CSC and its program co-ordination office in the Ministry of Education would work with regional counterparts forming a Regional Steering Committee (RSC) in each of the 11 Regions. The RSCs, supported by the Regional Education Bureaus, would make decisions involving regional resource mobilisation and utilisation, approve regional work plans, and monitor progress. The RSCs would be chaired by the Regional Government Social and Economic Affairs Head with a membership including Regional Heads of the Education, Planning, Finance, and Regional Works and Urban Development Bureaus.

## TABLES

TABLE 1: Major Education Statistics for 1995

Education Level	Enrolment	Teachers	Schools	Ratios	
				Enrolment (Gross)	Student/ Teacher
Primary	3098422	94657	10503	26.2	33.0
Secondary	370916	11235	327	7.4	33.0
Tertiary	15820	1937	*	0.5	8.2
Tech/Vocational	2634	454	17	-	-
<b>Total</b>	<b>3487792</b>	<b>108561</b>	<b>10847</b>	<b>-</b>	<b>-</b>

Source: Ministry of Education

\* 2 universities, 13 colleges and 3 institutes

TABLE 2: Enrolment by Gender for 1995

Level/Enrolment	Male	Female	Total	% Female
Primary	1923775	1174647	3098422	37.9
Secondary	209568	161348	370916	43.5
Tertiary	13915	2060	15975	12.9
Technical/Vocational	2210	424	2634	16.1
<b>Total</b>	<b>2149468</b>	<b>1338479</b>	<b>3487947</b>	<b>38.4</b>

Source: Ministry of Education

TABLE 3: Teacher Training Institutions - 1995

Institutions/Training Level	Level of Training	Students	
		Enrolment	Graduates
Teacher Training Institutes (13)	Certificate	6469	6450
Kotebe Teacher Education College	Diploma	984	400
Bahir Dar Teacher Education College	Diploma	371	200
Ambo College of Agriculture	Diploma	189	100
Faculty of Education	Degree	607	250
<b>Total</b>	-	<b>8620</b>	<b>7400</b>

Source: Ministry of Education

TABLE 4: Government and Non-government Schools - 1995

Schools/ Level	Schools			% Non-government
	Government	Non-government	Total	
Primary	9851	655	10506	6.2
Secondary	297	32	329	9.7
Tech/Voc	14	3	17	17.6
<b>Total</b>	<b>10162</b>	<b>690</b>	<b>10852</b>	<b>6.4</b>

Source: Ministry of Education

TABLE 5: Public Sector Expenditure on Education, 1990/91-1994/95

(In Million Birr)

Item/Year	1990/91	1991/92	1992/93	1993/94	1994/95*
Recurrent Expenditure	446.7	499.0	613.6	768.2	885.3
Capital Expenditure	21.9	26.2	86.8	248.3	411.6
<b>Total</b>	<b>468.6</b>	<b>525.2</b>	<b>700.4</b>	<b>1016.5</b>	<b>1296.9</b>
As %age of Total Expenditure	9.6	10.5	9.3	15.3	13.0
As %age of GDP	2.4	2.6	2.7	3.7	4.0

Source: Ministry of Education

\* budgeted for the year, not expenditure

**TABLE 6: Data on Government Schools, Students and Teachers  
in the Different Regions**

REGION	Schools Available (1994/95)			Total Student	Part Rate	No. of	Schools Req by 2000		Part Rate
	(1-6)	(7-8)	Total				(1-4)	(1-8) Upgr	
TIGRAI	581	46	627	303600	44	6295	381	627	39*
AFAR	68	12	80	14792	8	662	90	80	25
AMHARA	2503	299	2732	559220	18	20091	594	2732	33
OROMIA	3601	468	4069	959299	21	34345	390	4069	34
SOMALI	160	7	167	61837	11	3053	420	167	25
BEN-GUMZ	195	14	209	38229	35	1089	50	209	60
SNNP	1823	256	2079	747979	29	20121	276	2079	33
GAMBELA	67	5	72	20319	53	442	-	72	60
HARARI	33	12	45	15422	51	780	20	45	60
ADDIS	219	169	388	355489	85	7187	253	388	34*
DIRE-DAWA	26	12	38	22236	40	601	26	38	29*
TOTAL	9276	1230	10506	3098422	26	94657	2500	10506	35

**NB.**

	<u>1994/1995</u>	<u>1999/2000</u>
1. Population Projection	52.98	59.73
2. Specific Age Group Population (7-14)	12.26	13.53
3. Teachers with Certificates	83%	95%

**Assumptions:**

1. Schools to be built in blocks of 4 classrooms, i.e
  - a) all new schools to be built are 1-4 Schools
  - b) all schools available 1994/5 will be upgraded to 1-8 schools.
2. Projection of participation rate for 2000 is calculated on the basis of :-
  - a) All old primary schools will have been upgraded to 1-8
  - b) All 1-8 schools will have a minimum of 8 classrooms (\* have more)
  - c) All new 1-4 schools will have a minimum of 4 classrooms
  - d) All classrooms are at full occupancy with 50 students/class
  - c) All schools presumed to run on a single-shift system (\*do not)

**TABLE 7: Summary of Education Investment Program Budget: 1997-2001**

	Number	Unit Cost (000)	Total Cost (Millions)
<b>Capital Expenditure</b>			<b>4,600</b>
PRIMARY EDUCATION	2,500		<b>3,350</b>
New Construction	5,000	300	750
Upgrading	5,000	150	750
Renovation	12,500	50	250
Furniture	12,500	100	1,000
Equipment		60	600
SECONDARY EDUCATION	120		<b>300</b>
New Construction	1,500	1,500	180
New Classrooms	300	40	60
Renovation		200	60
TECHNICAL EDUCATION	5		<b>190</b>
New Medium Level Schools	10	7,000	35
Upgrading of Higher Level Schools		3,000	30
Trade Institutions			125
TERTIARY EDUCATION	10		
Upgrading		40,000	400
SPECIAL EDUCATION	10		<b>250</b>
TEACHER TRAINING INST. CAPACITY BUILDING		10,000	<b>100</b>
			<b>10</b>
<b>Recurrent Expenditures</b>			<b>6,537</b>
TEACHER SALARIES			<b>4,650</b>
TEXTBOOKS	3.9 MS		<b>505</b>
Primary 1-4	3.1 MS	50 B/S	195
Primary 5-8	3	100 B/S	310
CURRICULUM DEVELOPMENT		10,000	30
TEACHER TRAINING	60,000		<b>260</b>
Pre-service	40,000	2	120
In-service	2,000	1	40
Higher Education		50	100
OPERATING COSTS	3.9 MS		<b>692</b>
Primary 1-4	3.1 MS	6 B/S	82
Primary 5-8	0.5 MS	9 B/S	92
Secondary		20 B/S	45
OTHER (adm. overhead, maintenance, etc.)			<b>873</b>
<b>Total</b>			<b>11,137</b>
<b>Contingency (10%)</b>			<b>1,114</b>
<b>Grand Total</b>			<b>12,251</b>

Source: Ministry of Education

**GOVERNMENT OF ETHIOPIA RECOMMENDATIONS FOR SIP IMPLEMENTATION****A. Approval of tender results**

1. All civil works and purchases are done through appropriate tender procedures as set out by the Ministry of Finance;
2. All tenders with value below ETB 2.5 million (USD 400,000) to be approved by Regional Bureaus;
3. All tenders with value above ETB 2.5 million and up to ETB 16 million (USD 2.4 million) to be approved by the secretariat of the Donors Committee.
4. All tenders with value above ETB 16 million (USD 2.5 million) to be processed according to the normal regulations, and procedures of the respective funding agency.
5. Where no contractor is willing to bid for work the Secretariat of the Regional Steering Committee, i.e., the REB will be allowed to use "Force Accounts" or other arrangements.

**B. Fund Administration and Payment for Works Done**

1. All financial resources for the Education Sector Programme will be put in one pool, with a special account to be administered jointly by the secretariats of the DC and CSC.
2. Each region will have a revolving fund in local currency from which they make payments for works done and/or purchase performed and which will be reimbursed by the central body on a regular basis.
3. If the implementing body completes civil works to the satisfaction of the funding agency and at less cost than budgeted, the remaining balance could be used for the execution of other education projects.

**C. Reporting of Project Progress and Project Monitoring**

1. A simplified and standard reporting format will be worked out jointly by the CSC and the DC and brought to force.
2. The Regional Education Bureaus will submit a quarterly and annual report to the Regional Steering Committee (RSC).
3. The RSC after reviewing and approving the report will submit to the CSC.

4. The CSC secretariat shall compile the regional reports and after incorporating information from the centre, if any, will submit semi-annual reports to funding agencies.
5. The CSC and RSC will set their mechanism of monitoring the projects.
6. The DC will also be expected to set their own mechanisms of monitoring the progress of projects, including periodic site visits.
7. Additional mechanism for monitoring by funding agencies is during the annual project review meetings, through their representation in the CSC.