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The Federal Democratic Republic of Ethiopia

**HEALTH SECTOR INVESTMENT
PROGRAMME FOR ETHIOPIA**

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HEALTH SECTOR INVESTMENT PROGRAMME FOR ETHIOPIA

EXECUTIVE SUMMARY

The Ethiopian health sector presently faces major challenges. Ethiopia has extremely poor health status relative to other low-income countries, largely attributable to potentially preventable infectious diseases and nutritional deficiencies, and at the same time has a high rate of population growth. Wide spread poverty, along with general low income levels for the vast majority of the population, low education levels, especially among women, inadequate access to clean water and sanitation facilities and poor access to health services have also contributed to the burden of ill-health.

The Ethiopian health system is currently inadequate and inappropriate in relation to the prevailing health needs. It has been highly centralized, services have been delivered in a fragmented way with a reliance on vertical programmes, and there has been little collaboration between the public and private sectors. The publicly operated health facilities have been underutilized, health services have been seriously under-funded, public facility coverage is between 38 and 47 percent of the population, there are too few trained health personnel, staff receive inappropriate training, there is an inadequate mix of personnel, the limited personnel is underutilized and suffers from low productivity, and the availability of essential medicine and other related supplies is variable and often there is stock-outages. The available resources are maldistributed both on a geographic and level of care basis. Resources are heavily concentrated in Addis Ababa and other urban areas, and there continues to be an emphasis on curative, hospital-based care.

Under the Transitional Government of Ethiopia (TGE), a number of health sector policy and strategy documents were developed to address these problems and they are under various stages of implementation. These policy pronouncements emphasized the importance of achieving access to a basic package of quality primary health care services, emphasizing preventive, promotive and basic curative services via a decentralized state system of governance. This first five year phase of the Health Sector Development Programme (a twenty year programme) provides proposals for health service

improvement and the initial expansion of health facilities and programmes to achieve universal access to essential primary health care services within the next two decades.

The main objective of this first phase of the programme, is to develop a financially and managerially sustainable health system which will provide comprehensive and integrated primary care services, based on community-level health facilities and which will be primarily implemented and managed by region, zone and woreda level health officials. The services provided by these facilities will emphasize preventive and promotive aspects of health care, while not neglecting essential curative services. The focus will be on communicable diseases, common nutritional disorders, and on environmental health and hygiene. Improving the quality of reproductive health care, immunization, the treatment and control of basic infectious diseases like upper respiratory tract infections and tuberculosis, the control of epidemic diseases like malaria and diarrhea, and the control of sexually transmitted diseases, including HIV/AIDS, will receive special attention. Information, education and communication (IEC) leading to behavior change about health and nutritional practices will be strengthened.

To achieve the identified objective, nine strategic investment components have been identified for the first five year phase of the health sector investment strategy. It is envisioned that the country by following this strategy will set the direction for achieving the policy objectives elaborated above. These nine components include: a) improving PHC service access to the population; b) improving the technical quality of PHC service delivery; c) improving health sector management; d) strengthening the financial sustainability of the sector; e) encouraging private investment in the health sector; f) focusing major improvements in the pharmaceutical sector; g) implementing a plan to extend PHC messages to the periphery; h) investing in expanding the supply and productivity of health personnel; and i) strengthening the local capacity of evaluation, research and development for Ethiopia's health sector. The government has placed particular emphasis on the components which extend PHC access, expanding the supply of appropriately trained health personnel, and adopting a system of financing to ensure a regular and adequate supply of effective, safe and affordable high quality essential drugs.

The total capital and recurrent budgetary requirements for this first five year phase of the Health Sector Development Programme have been estimated by the government to be 4,995 million Ethiopian Birr (US\$ 792.9 million). The investment component of this phase of the Programme is expected to be 2,150 million Ethiopian Birr (US\$ 341.3 million). If the economy of Ethiopia continues to recover rapidly from the long period of poor economic management of prior governments, it is anticipated that this level of investment can be sustained, with assistance from international partners. While local resources are being mobilized for these proposed health service improvements, extensive and sustained international support is required to ensure the successful implementation of the proposed programme.

HEALTH SECTOR INVESTMENT PROGRAM FOR ETHIOPIA

1. THE STATE OF HEALTH STATUS AND HEALTH CARE DELIVERY IN ETHIOPIA

1. At this time of political transition, the Ethiopian health sector faces extra-ordinary challenges. Substantial restructuring is required to transform the health system from a centralized, hospital-based service to one with strong primary care services managed by local people and which address the priority health needs of the population. A detailed twenty year Health Sector Development Programme has been prepared, to reorient the health system and to improve access to health information, and resources of health care programmes and facilities. The goal of this Programme is to ensure that all Ethiopians have access to essential primary care services by FY 2018.

2. This report presents a brief overview of the current health status of Ethiopians and health service delivery, and proposes the major components of the Health Sector Development Programme to be implemented in the first five years (FY 1997/8-2001/2). It provides a broad estimate of the capital and recurrent budgetary requirements of this programme, and the potential funding sources for this programme.

A. Low Health Status

3. Ethiopians have a very low health status, among the lowest in the world. The crude death rate is estimated by different sources to be between 15 and 18 per 1,000 population, with a life expectancy at birth of 47 for males and 50 for females. The infant mortality rate is estimated to be between 105 and 128 per 1,000 live births while the maternal mortality rate is between 500 and 700 per 100,000 live births ¹/_.

4. The burden of disease (BOD) as measured by premature death from all causes come from ten target preventable causes, is dominated by communicable diseases ²/_. The major causes of morbidity include acute respiratory infections, malaria, skin infections,

¹ MOH, Health and Health Related Indicators, (Addis Ababa: MOH, Planning and Programming Dept., October, 1994), and WHO, Ethiopia: Health Sector Profile, (Addis Ababa: WHO/Ethiopia, 1995).

² Table 1, MOH, Burden of Disease, Ethiopia Social Sector Study Report, (Addis Ababa: Govt of Ethiopia/World Bank, September 1996).

diarrhoeal diseases and intestinal parasitic infestations ³/. There are presently no comprehensive cause-specific mortality data in Ethiopia; such data are only available from health facilities which do not provide information about the health problems not seen at such facilities. The leading causes of death in those who receive in-patient care are tuberculosis and malaria, which account for 30 percent of all in-patient deaths ⁴/. Other important diseases leading to premature death include, perinatal and maternal mortality, AIDS, and nutritional deficiencies. Some of these health problems have become more important over time, most notably, malaria, TB and HIV/AIDS.

In some areas of the country, especially in the lowlands, preventable health problems are even more prevalent than in other regions of the country.

5. The crude birth rate is between 46 and 52 per 1,000 population, while the total fertility rate per woman between 15 and 49 years of age is estimated to be 6.1 ⁵/. There is an extremely low contraceptive prevalence rate of 7 percent, though that share has been rapidly increasing over the last five years from about 3-4 % ⁶/. The natural rate of population increase has been assumed to be 3.1 percent per annum based on the demographic analysis of the 1984 census ⁷/, but more recent population census data from the 1994 census suggests that the population rate may be less than 2.5 % ⁸/, though the final analysis of the growth rate, based on total fertility information requires further analysis. These health status indicators along with those presented in para. 3, above, suggest Ethiopia is below the average for East African countries, where total fertility is estimated to be 6.4 children and IMR is about 100. Similarly, the contraceptive prevalence rate for Tanzania and Kenya is 20 and 33 respectively, suggesting that other low income African countries have made further headway than Ethiopia in using family planning methods leading to a reduction in its birth rate ⁹/>.

B. Causes of Poor Health Status

6. Ethiopia has extremely poor health status relative to other low-income countries, largely due to: (i) potentially preventable infectious diseases and poor nutrition, including micronutrient deficiencies, (ii) low incomes, (iii) low levels of education,

³ MOH, Health and Health Related Indicators, op. cit., October 1994.

⁴ MOH, *ibid.*, October, 1994.

⁵ B & M Development Consultants PVT. LTD. Co., Ethiopia Social Sector Study Report, (Addis Ababa: Govt of Ethiopia/World Bank, September, 1996).

⁶ B & M Development Consultants PVT. LTD. CO., Demographic Analysis and Population Projection, *ibid.*, September, 1996), Table 9, and WHO, Ethiopia Health Sector Profile, op. cit., 1995..

⁷ MOH, Health and Health Related Indicators, op. cit., October, 1994.

⁸ See B & M Development Consultants PVT. LTD. CO., Demographic Analysis and Population Projection, *ibid.*, September, 1996).

⁹ These figures are from Table 6, pg. 198, World Bank, World Development Report, 1996, (Oxford: Oxford Univ. Press, 1996).

especially of women, (iv) inadequate access to clean water and sanitation facilities, and (v) poor access to health services. Para. 4 suggests that a large share of the disease burden which includes nutritional deficiencies can be prevented with cost-effective health interventions ^{10/}.

7. Poor nutrition is an underlying cause of many other health problems contributing to the BOD. Protein-energy malnutrition and micro-nutrient deficiencies, such as iron, iodine and Vitamin A, are prevalent. According to recently completed assessments of these deficiencies Ethiopia is one of a few African countries where these three micronutrient deficiencies are significant public health problems ^{11/}. The average per capita intake of energy is estimated to be 7,330 KJ (1750 Calories), which is approximately 80 percent of the average minimum daily requirement ^{12/}. Nearly 5 percent of children under five show wasting, 47 percent are under-weight (low weight for age), and 64 percent are stunted (low height for age) ^{13/}. Approximately 17 percent of pregnant and lactating mothers have been shown to have anemia. Low agricultural productivity and recurring droughts, along with civil strife have contributed to poor nutritional state found in the country.

8. Low Income. According to World Bank publications, Ethiopia has the third lowest per capita income level in the world, with estimates being around 120 US\$ ^{14/}. Under the former military regime, the Ethiopian economy faced a deepening crisis due to civil strife and several major droughts. There were low or negative growth rates for many years, with a persistent annual decline in Gross Domestic Product (GDP) of 3.7 percent between 1987/88 and 1990/91. In 1990/91, GDP fell by 5.6 percent in real terms, while real per capita GDP fell by 8.5 percent ^{15/}.

9. The Ethiopian government along with the World Bank have been regularly reviewing the potential performance of the Ethiopian economy. The most recent

¹⁰ Over 80 % of the disease burden as measured by estimates of premature death from all causes is largely related to ten preventable communicable diseases. Table 1, MOH, Burden of Disease, op. cit., September, 1996.

¹¹ WHO, "Global Prevalence of Vitamin A Deficiency", Micronutrient Deficiency Information System Paper 2, (Geneva: WHO/NUT, 1995); WHO, "Global Prevalence of Iodine Deficiency Disorders", Micronutrient Deficiency Information System Paper 1, (Geneva: WHO/NUT, 1993); and WHO, "Prevalence of Anemia in Women", Second Ed., (Geneva: WHO/MCH/MSM/92.2, 1992). Uganda, Zaire, Congo, and Guinea are the other countries where these deficiencies comprise national problems.

¹² WHO, Ethiopia: Health Sector Profile, op. cit., 1995.

¹³ MOH, Health and Health Related Indicators, op. cit., October, 1994, and WHO, *ibid.*, 1995.

¹⁴ World Bank, Better Health in Africa: Experience and Lessons Learned, (Washington D.C.: World Bank, 1994); World Bank, World Bank Atlas, 1995, (Washington D.C.: World Bank, 1995); and World Bank, World Development Report, 1996, (Oxford: Oxford Univ. Press, 1996).

¹⁵ Transitional Government of Ethiopia, Ethiopia's Economic Policy During the Transitional Period, (Addis Ababa: Transitional Government of Ethiopia (TGE), 1991).

published estimate of expected sustained GDP growth is estimated to likely be 6% per year into the next millennium^{16/}. It is expected that there will be continued pressure on the value of the birr as the resource balance from trade will continue to be greatly negative, approaching 15% of GDP^{17/}. This will continue to imply that foreign exchange availability for health related initiatives will be scarce, and that items like drugs and other medical supplies will be limited.

10. The economy of Ethiopia is based on the agricultural sector. Agriculture accounts for 40-45 percent of the GDP, 85 percent of exports and nearly 90 percent of the labour force. Small-scale peasant farming is currently the dominant form of agricultural production, contributing about 90 percent of agricultural output. In contrast, the industrial sector accounts for 10 percent of GDP, 15 percent of exports and less than 2 percent of the labour force. Trade and transport contribute 16 percent of GDP. Due to the heavy dependence on the agricultural sector, the Ethiopian economy has been particularly vulnerable to the effects of recurrent droughts and famine. This sector generally has low levels of productivity, largely related to the outdated farming methods practiced and the ecological degradation associated with increased pressure on the land through population growth. Poor policies which promoted state control of the economy and discouraged private investment for many years aggravated the situation. In addition, decades of war have adversely affected the economy with productive manpower, output and the bulk of the national budget being devoted to the war effort. A shortage of foreign exchange also contributed to the rapid decline in the industrial sector.

11. Poverty. Not only is the economic situation measured by aggregate indicators of macro-economic performance, it is also defined by the share of the population estimated to be in a state of poverty, i.e., unable to procure enough items (especially caloric intake) from their incomes to maintain a minimum standard of living. According to surveys in Ethiopia rural poverty was estimated in 1989 to be 63%, whereas more recent estimates in 1994 suggest it is about 48%^{18/}. Including the urban population of Addis Ababa and other cities and towns, the poverty rate was estimated to be 52 in 1993^{19/}. Thus, available evidence shows that while the country has stabilized the extent of poverty and has perhaps improved things from prior to the end of the previous government, about one-half of the public is impoverished.

12. Education Status. In 1990 the literacy rate for men and woman was 41 percent and 21 percent respectively^{20/}. Recent analysis of the education sector data for 1995

¹⁶ World Bank, Country Assistance Strategy for Ethiopia, Report No. 14498-ET, (Washington D.C.: World Bank, May 16, 1995).

¹⁷ As calculated from IMF estimates of the Macro-Economic Performance of the Ethiopian Economy, 1996, PFP exercise. This estimate is based on a 6 % real growth rate of the Ethiopian economy.

¹⁸ pg. v, World Bank, Ethiopia: Toward Poverty Alleviation and a Social Action Program, Report No. 11306-ET, (Washington D.C.: World Bank, June 28, 1993).

¹⁹ World Bank, *ibid.*, 1993.

²⁰ WHO, Ethiopia: Health Sector Profile, *op. cit.*, 1995.

shows the gross primary education enrollment ratio to be about 26.2 %. Given the gender specific primary enrollment for 1995 and age specific data from the 1994 national census, adjusted to 1995, it shows the 1995 gross primary school enrollment ratio is 15.2 % for females and 24.3 % for men ^{21/}. These figures are considerably lower than the situation in 1980 when 23 % of females and 44 % of males were considered enrolled ^{22/}. There are gender disparities at all educational levels, with the ratio of girls to boys in pre-school and primary education being 1:1.5 ^{23/}. Thus, the education status of Ethiopians is among the lowest in the world. This makes it difficult to improve the health status when literacy is often the *sin qua non* for communicating with the public about how individuals can improve their own health status.

13. Water Supply. Ethiopia has poor access to supplies of safe water, particularly in the rural areas. It is estimated that approximately 19 percent of the population has access to a clean water supply for domestic and municipal use. Estimates of the average per capita water consumption vary between 10 and 20 litres per day, with as little as 6 litres a day in some areas ^{24/}. It is estimated that only 7 percent of the population have access to adequate sanitary facilities, and that only 2 percent of the population have access to solid waste disposal facilities ^{25/}. Thus, it is understandable that diarrhoea and other severe water borne health problems comprise such a large share of the existing BOD.

C. The State of Health Care Delivery

14. Finally, there is presently poor access to health services in Ethiopia. The health service coverage level ^{26/} is estimated by different sources to be between 38 and 47 percent ^{27/}. The proportion of pregnant women immunized for tetanus is estimated to be about 20 percent, while about 47 percent of children in 1995 are estimated to have received DPT3 immunizations ^{28/}. It is also estimated that a mere 9 percent of births are attended by trained health personnel ^{29/}. Total outpatient utilization of government health

²¹ See Tables 1 and 2 of the Ministry of Education, Education Sector Development Program, 1997-2001, (Addis Ababa: Ministry of Education, October 1996), and Table 6, B & M Development Consultants PVT LTD. CO., Demographic Analysis and Population Projection, op. cit., September 1996.

²² Table 7, pg. 200, World Bank, World Development Report, 1996, op cit., 1996.

²³ Social and Administrative Affairs, Report of the National Health Policy Task Force, (Addis Ababa: Social and Administrative Affairs, Office of the Council of Ministers, TGE, 1993).

²⁴ MOH, Draft Health Sector Development Programme: A 20 Year Long-Term Plan Framework, (Addis Ababa: MOH, 1995); and WHO, Ethiopia: Health Sector Profile, op. cit., 1995..

²⁵ MOH, *ibid*, 1995.

²⁶ Coverage is defined by the MOH as residing within ten kilometers of a government health facility.

²⁷ MOH, Health and Health Related Indicators, op. cit., 1994, and Social and Administrative Affairs, Report of the National Health Policy Task Force, op. cit., 1993.

²⁸ Table 9, B & M Development Consultants, PVT. LTD. Co., Demographic Analysis and Population Projections, op. cit., September, 1996.

²⁹ World Bank, Better Health in Africa: Experience and Lessons Learned, op. cit., 1994.

facilities in Ethiopia suggests that on average, there is about 0.25 visits per person per year^{30/} whereas, the only nationally available survey of morbidity, conducted in 1982/83, shows that Ethiopians were sick about 7.7 times per person per year. If this indicator of illness is used, less than 10 % of illness episodes are seen in government health facilities, country wide. People go to other care providers such as pharmacists, traditional providers and other, but in 1982/83, most people received no care^{31/}. More recent data also shows a low level of utilization. According to the household survey conducted by the Central Statistics Office in 1995, about 10.2 % of the population who reported an illness episode reported receiving medical treatment^{32/}. The PHRD health demand study, conducted by KUAWAB on the national sample implemented by the Central Statistics Office, showed 55% of all health services were provided by government owned facilities^{33/}. In addition, the findings showed about one third of all visits were to private health service providers, including traditional practitioners and rural drug vendors.

15. It is recognized that the Ethiopian health system is currently inadequate and inappropriate in relation to the above defined health problems, although the effects of the new policies have yet to be realized. The health system is highly centralized, services are delivered in a fragmented way with a reliance on vertical programmes, and there is little collaboration between the public and private sectors. Furthermore, health services have historically been underfunded, there are too few health personnel, staff receive inappropriate training, there is an inadequate mix of personnel, and the limited human resources available are underutilized. The resources that are available are maldistributed both on a geographic and level of care basis. Resources are heavily concentrated in Addis Ababa and other urban areas, and there is a relative emphasis on curative, hospital-based care. In addition, there appears to be a demand gap due to the poor quality of public sector health services.

16. The population to health centre ratio is nearly 314 thousand^{34/}. If the number of health centres and health stations are combined, the ratio is 23,171 people per primary care facility. This is nearly three times higher than the average for Sub-Saharan Africa of 8,046 people per primary care facility^{35/}. Health stations are staffed by health assistants, who receive only 18 months of basic health training. Further, the ratio of the population per hospital bed, including the Ministry of Health and mission hospitals, is nearly six times greater than the average for Sub-Saharan Africa of 1,100 people per hospital bed

³⁰ pg. 111, World Bank, Ethiopia: Public Expenditure Policy for Transition, 3 Vols, Report No. 12992-ET, (Washington D.C.: Country Operations Division, Eastern Africa Department, October 21, 1994).

³¹ pg. 18, Table 3.2, World Bank, *ibid.*, 1987.

³² Table 2.6, KUAWAB, Household Demand for Health, Ethiopia Social Sector Study Report, (Addis Ababa: Govt of Ethiopia/World Bank, September, 1996).

³³ KUAWAB, Household Demand for Health, *ibid.*, September, 1996.

³⁴ MOH, Health and Health Related Indicators, *op. cit.*, 1994.

³⁵ World Bank, Better Health for Africa, *op. cit.*, 1994.

³⁶/. Thus, there is poor access to hospital facilities in Ethiopia. This is particularly the case in terms of the access to general hospital facilities for residents outside of Addis Ababa, given that nearly 17 percent of hospital beds are in specialized hospitals, and that nearly 30 percent of all beds are located in Addis Ababa where about 5 percent of the population live.

17. The health facilities that do exist are in a poor state of repair. Less than a third of most health care facilities are presently in good condition, while nearly 50 percent of hospitals either need major repair or replacement ³⁷/. This state of facility repair has remained in poor shape for nearly 15 years, since E.C. 1976 ³⁸/.

18. Finally, and perhaps most importantly, Ethiopia also has very high population to health personnel ratios. There are 3.2 times more people per doctor in Ethiopia than the average for Sub-Saharan Africa (24,842 people per doctor), and there are 6 times more people per nurse (11,000 people per nurse) ³⁹/. There is also an inappropriate mix of health personnel in that there are only 2 nurses per doctor in Ethiopia compared to the African average of 5 nurses per doctor ⁴⁰/. There is a geographic maldistribution of health personnel with 62 percent of doctors working in Addis Ababa, and 46 percent of nurses ⁴¹/. Thus, for the remaining population of Ethiopia, the population per doctor ratio is over 62 thousand, or less than 2 doctors per average woreda.

19. Finally, the recent Task Force on Human Resources Development for Health indicated that the current training curricula are inappropriate to the health needs of Ethiopia, with an emphasis on theory rather than practice, and a curative hospital-based orientation ⁴²/. In addition, there is no systematic continuing education or in-service refresher training, no performance assessment mechanisms, and no career structure for staff.

³⁶ World Bank, *ibid.*, 1994.

³⁷ Social and Administrative Affairs, Report of the National Health Policy Task Force, *op. cit.*, 1993, and Gebremeskal, Health Facility Survey, 1996, (Addis Ababa: PHRD GOE/World Bank Study No. 17, May 1996).

³⁸ See page 13, Table D, MOH, Comprehensive Health Service Directory, 1976 E.C. (1983/84 G.C.), (Addis Ababa: Provisional Military Government of Ethiopia, MOH, Planning and Programming Bureau, January 1986 G.C.).

³⁹ MOH, Health and Health Related Indicators, *op. cit.* 1994, and World Bank, Better Health in Africa, *op. cit.*, 1994.

⁴⁰ World Bank, *ibid.*, 1994.

⁴¹ Social Services and Administration, Ethiopia Human Resources Development Strategy for health. Report of the National Task Force on Human Resources Development for Health, (Addis Ababa: Social Services and Administration, Office of the Prime Minister, TGE, 1994).

⁴² Social Services and Administration, *ibid.*, 1994.

D. Financing Health Care

20. The health sector is financed in a number of different ways in Ethiopia. These ways include: a) general government revenue; b) donor aid/external assistance and foreign loans; c) user fees (for services and drugs); d) various types of health insurance; and e) community contributions. This total level of expenditures represented 3.2 % of GDP for that year. Except for community contributions, estimates of the amount financed from each type of financing option is summarized in Table 1 for FY 1996 in comparison with FY 1986. In 1986⁴³, the government financed about 23 % of the estimated total expenditures for health care (both publicly and privately provided), with external donors contributing about 12 %, but over 85% of total capital expenditures. Local philanthropy, including NGOs and churches and insurance, contributed about 2 % with the rest of the expenditures coming from private (mostly individuals) payments (63.4 %). User charges collected at publicly owned health facilities comprised 16.1 % of total GOE expenditures for that year.

21. In FY 1996, total health sector expenditures represented about 2.7 % of GDP. Further, the financing source shares changed from 1986 (Table 1). The government increased its share by 86 % from 23 to 43 %, and international sources also increased its share by almost 50 % to over 17 % of the total. While individual payments share fell to slightly less than the estimated government share to 39.3 %, it still had the largest share of recurrent expenditures (about 52 % (388.4/750.3 Table 1 figures)). User charges collected at publicly owned facilities grew to 18.3 % of total GOE recurrent expenditures. The public subsidy to the sector also declined from about 67 % in FY 1986 to about 64.5 % in FY 1996⁴⁴.

22. Finally, since the government health sector has not been well organized for some time, it is expected that as this proposed investment programme is implemented, there will be improvements in management and labor productivity in the future such that fewer resources are required to produce a given quantity of services, these efficiency gains can finance additional expansion of health service delivery. Some ways to improve management, labor productivity and resource use, particularly in the area of drugs, are outlined in the proposed investment programme below.

⁴³ Table 2.6, pg. 14, World Bank, Sector Review, Ethiopia: A Study of Health Financing: Issues and Options, Report No. 6624-ET, (Washington D.C.: PHN Department, April 14, 1987).

⁴⁴ The share of the public subsidy to the recurrent expenditures of publicly operated health programs is calculated as follows from the information presented in Table 1. Total recurrent spending in government health facilities and programs is equal to the net amount provided by government to recurrent expenditures in the sector, (in FY 1996 the figure is 281.7 million birr), and is equal to the size of the public subsidy, plus the recurrent expenditures financed by the international community (FY 1996 figure is 75.2 million birr) plus the amount paid by individual private payments to MOH facilities (FY 1996 figure is 79.7 million birr), equaling 436.6 million birr. The amount paid by the government for recurrent expenditures in the sector (281.7) is divided by the total spent in public facilities and programs (436.6) to obtain the share of public subsidy.

23. In 1995, the government has continued to finance a significant share of the recurrent resource requirements of publicly provided health services in Ethiopia, with 81 percent of recurrent health expenditure being funded from this source ⁴⁵/. The government commitment to financially supporting the health sector is high and it is expected that the share of total government spending going to health will continue to rise modestly in the next five to ten years, from around 6% in FY 1996 to perhaps over 7% by 2000 ⁴⁶/. With the government expenditure share of GDP also rising modestly over the next few years to around 18-19%, this implies the share of health expenditures by government will grow slightly faster than the growth of GDP (estimated to be around 6% per year).

24. Donor funding is particularly important for capital projects and approximately 40.3 percent of capital expenditure was funded from this source in 1996 (Table 1). Private health insurance is in its infancy and covers only a small minority of Ethiopians (11 thousand persons in 1996). The groups covered include employees of large public and private sector enterprises, like Ethiopian Airlines, etc. The government civil servants also receive an employment health benefit analogous to a form of health insurance with a 50 % co-insurance rate when they have to pay only 50 % of the fees charged at public facilities. This 50 % subsidy to public employees is a part of the total public subsidy financing public sector recurrent expenditures. The remaining estimated health expenditures by private individuals in total amounted to about 308.7 million birr, and was spent on health services of all types, including pharmaceutical expenditures and other privately provided health services. This figure is greater than recurrent health expenditures paid by government for 1996.

25. Government health care expenditure has remained between US\$ 1 and US\$ 1.10 per capita since the early 1980's (Social and Administrative Affairs 1993), and, according to Table 1, in 1996 it was about US\$ 1.20 per capita. This is significantly lower than the Sub-Saharan African average health expenditure of US\$ 14 per capita, and the amount estimated by the World Bank, to provide an essential package of PHC services (\$12/capita) ⁴⁷/. The health sector's share of the total government budget has remained below 4 percent for most of this period, but has increased to nearly 6.2 percent in FY 1996, since the Transitional Government of Ethiopia (TGE) came to power. The government health budget accounted for only 1 percent of GDP in 1991, but has increased to about 1.8 percent of GDP in 1994/95. Most of these funds (87.9% in FY

⁴⁵ Social and Administrative Affairs, Report of the National Health Policy Task Force, op. cit., 1993.

⁴⁶ Table 6.1, pg. 48, KUAWAB, Cost and Financing of Health Services, Ethiopia Social Sector Study Report, (Addis Ababa: Govt of Ethiopia/World Bank, September, 1996).

⁴⁷ World Bank, Better Health for Africa, op. cit., 1994, and Table 3.2, pg. 66, World Bank, World Development Report, 1993, (Oxford: Oxford Univ. Press, 1993).

1994^{48/}) are now allocated by regional authorities who now have jurisdiction over the operation of virtually all publicly owned health facilities.

E. Health Care Delivery by Non-Government Providers

26. Referring again to Table 1, in FY 1986, about 62.5% of all recurrent expenditures in the health sector was paid to non-government providers of health services, whereas in FY 1996, this share had dropped to 41.1%. The primary recipients of these expenditures included private pharmacies, private physicians, NGO operated clinics, and other private providers^{49/}. In 1996 a PHRD study of the Role of NGOs and the Private Sector in Social Sector Service Delivery, showed there are a number of private clinics, hospitals, pharmacies, drug stores, and rural drug vendors operating throughout the country by NGOs and other private groups. Of the total 1,691 institutions listed, 1,303 (77%) were pharmaceutical sellers of one type or another (pharmacies, drug stores, or rural drug vendors)^{50/}.

F. Health Policy Development in Ethiopia

27. In September 1992, a National Health Policy Task Force was established. It mainly comprised representatives from the Ministry of Health, Addis Ababa University and other specialised institutions. The Task Force was mandated to evaluate the current status of health services, identify the major health problems, and develop a health policy within the framework of the global TGE policy of democratisation and decentralisation. Once the Task Force had prepared a draft report, it was extensively reviewed at a three day workshop with selected professionals. The report was then finalised and submitted to the TGE in February 1993. The Health Policy, based on the Task Force's recommendations, was approved by the Council of Ministers in September 1993^{51/}. The quote in the next paragraph from the document highlights the explicit political commitment to health which the TGE made in this policy document.

a. Main Features of the Health Policy

28. "The Health Policy of the Transitional Government ... proposes realistic goals and the means for attaining them based on the fundamental principles that health, constituting physical, mental and social well-being, is a prerequisite for the enjoyment of life and for

⁴⁸ Table 9.5, pg. 116, World Bank, Ethiopia: Public Expenditure Policy for Transition, Report No. 12992-ET, op. cit. October 21, 1994.

⁴⁹ pg. 14 and Table 2.6, World Bank, Sector Review- Ethiopia: A Study in Health Financing : Issues and Options, Report No. 6624-ET, op. cit., 1987, and Table 3 in text.

⁵⁰ pg. 39, Table 5, Getachew Mekuria and Lulseged Mengiste, The Role of NGOs and the Private Sector in Social Sector Service Delivery, Ethiopia Social Sector Study Report, (Addis Ababa: Govt of Ethiopia/World Bank, September, 1996).

⁵¹ TGE, Health Policy of the Transitional Government of Ethiopia, (Addis Ababa: TGE, 1993).

optimal productivity. The Government therefore accords health a prominent place in its order of priorities and is committed to the attainment of these goals utilising all accessible internal and external resources.”^{52/}.

29. The nine basic principles on which the policy is based are as follows:

- (i) Democratisation and decentralisation of the health system.
- (ii) Development of the preventive and promotive components of health care.
- (iii) Development of an equitable and acceptable standard of health service system that will reach all segments of the population within the limits of resources.
- (iv) Promoting and strengthening of intersectoral activities. Promotion of attitudes and practices conducive to the strengthening of national self-reliance in health development by mobilising and maximally utilising internal and external resources.
- (v) Assurance of accessibility of health care for all segments of the population.
- (vi) Working closely with neighbouring countries, regional and international organisations to share information and strengthen collaboration in all activities contributing to health development, including the control of factors detrimental to health.
- (vii) Development of appropriate capacity, based on assessed needs.
- (viii) Provision of health care for the population on a scheme of payment according to ability, with special assistance mechanisms for those who cannot afford to pay.
- (ix) Promotion of the participation of the private sector and non-governmental organisations in health care.

30. This policy is presently being pursued by the FDRE and to achieve the objectives outlined in this policy, the health care delivery system is being reorganised into a four tier system. This will consist of:

- (i) Primary Health Care Units (PHCUs), each with five satellite Community Health Clinics (CHCs), providing comprehensive primary care services;

⁵² TGE, *ibid.*, 1993.

- (ii) District Hospitals (DHs), each acting as a referral and training centre for ten PHCUs;
- (iii) Zonal Hospitals (ZHs) providing specialist services and training; and
- (iv) Specialized Hospitals (SHs) providing comprehensive specialist services, and in some instances, serving for research and post basic training.

31. A key policy goal is the democratisation and decentralisation of the health system. To this end, Regional, Zonal and District/Woreda Health Departments will be strengthened. At present, although Regional Health Departments are relatively well organised to carry out their functions, District Health Departments are in their rudimentary stage ⁵³/.

32. The organisational structure of the restructured health system is summarised in Table 1. The Central MOH will be responsible for the formulation of national policies and guidelines, and co-ordination of all external assistance. The Regional, Zonal and District/ Woreda Health Departments will be directly responsible for the planning and implementation of health services and programmes, as well as functions such as enforcing health legislation, registering and licensing of health personnel, and collecting and interpreting health information ⁵⁴/.

Table 1: Proposed Structure of the Ethiopian Health System	
Administrative Structure	Service Delivery Structure
Prime Minister's Office	
Ministry of Health	Specialized Hospitals and Research Institutions
Regional Health Bureau	Zonal Hospitals
Zonal Health Department	District Hospitals
Woreda Health Office	Primary Health Care Units

33. In addition to the restructured public sector health services, a greater role is envisaged for the private sector in health service delivery and financing. As has already been described in para. 26 above, missions and other non-governmental organisations play an important role in health service delivery in Ethiopia. In addition, traditional medication is extensively used for both curative and preventive purposes. Private "for-profit" health sector involvement is currently limited, especially in regards to hospital and clinic based care, particularly outside large urban areas. There is some involvement in pharmaceutical procurement and distribution, but the retailing of pharmaceuticals is

⁵³ Social and Administrative Affairs, Report of the National Health Policy Task Force, op. cit., 1993.

⁵⁴ Social and Administrative Affairs, *ibid.*, 1993.

primarily in the hands of private entities. In the context of continued economic growth in Ethiopia, it is likely that there will be a growing demand for privately provided health services. The development of such services will be encouraged, within an appropriate regulatory and monitoring framework to ensure co-ordination of public and private sector activities. The implementation of these mechanisms will constitute an area of capacity building in the near term.

34. In addition to the strengthening of the policy guidance on private sector involvement, the GOE has made progress toward the formulation of health financing policy guidelines. A draft policy document has been developed and is being strengthened in some areas, especially regarding the role of health insurance. It has also been actively involved in formulating policy guidelines on population strategy, essential drugs and other related pharmaceutical issues, and the role of women in development in Ethiopia.

35. Finally, the GOE has formulated a twenty year health development implementation strategy, with a series of five year investment programmes, with the first five year program now under discussion between the government and the international community.

36. The government plan has identified many important gaps, and has maintained PHC access as the highest priority. At this point in time it is through the implementation of these and related plans of action for the next twenty years that the constructive policy framework established by the government will become reality and lead to improvements in the health status of the country.

b. Related Sector and Macro Policies Affecting Health

37. The specific health sector policy outlined above is supported by a range of other sectoral policies developed under the TGE and adopted by the present government. A comprehensive population policy has been developed, including how intersectoral linkages can facilitate population growth rate decline. The Education Sector policy and strategy aims to improve basic literacy and education levels. Particular attention will be paid to improving female education, and the empowerment of women is regarded as a political priority. The level of female education has been shown to have a major impact on health status, particularly that of children. In addition, basic literacy skills increase the potential effectiveness of health education materials.

38. The health status of the Ethiopian population will be significantly influenced by socio-economic improvements fostered through the economic policies developed under the TGE. In 1991 an Economic Reform Programme (ERP) was initiated by the TGE. The primary aim of this programme was the transformation of the command economy imposed by the military regime, to a market-based economy. In 1992, a Structural Adjustment Programme (SAP), supported by the World Bank, IMF and a number of bilateral and multinational donors, was launched. The aims of the SAP, which are consistent with the ERP, were to introduce macroeconomic stability, jump-start the

economy and create a conducive environment for private sector participation, to enable the private sector to become the main actor in the productive sectors of the economy with the public sector concentrating on the social sectors and infrastructural development.

39. Fiscal indicators suggest that the government has managed to stabilise and improve its fiscal receipts. The ERP has already positively impacted on economic growth, with an overall real GDP increase of 12.3 percent between 1991/92 and 1992/93, and a smaller real increase of 1.4 percent between 1992/93 and 1993/94 due to the then drought. The major areas of growth have been the manufacturing sector, and trade, hotels and restaurants. Inflation, as measured by the GDP deflator, has followed a general declining trend from 21 % in 1991/92, to 12 % in 1992/93, 3.9 % in 1993/94, 13.5 % in 1994/95, and 0.9 % in 1995/96. It is expected to remain below 2.5 % per year for the rest of the decade ⁵⁵/.

40. The 1994 Economic Development Strategy ⁵⁶/ indicates that the future development of the economy should be based on Agricultural Development-Led Industrialisation (ADLI). The long term development objective is structural transformation of the economy in which the relative weight of the agricultural, industrial and service sectors shifts towards the latter two. A high rate of agricultural growth, which is superseded by the growth of services and particularly industry, is envisaged.

41. The development of smallholder agriculture will be promoted through improved agricultural practices, the use of better seeds, development of small-scale irrigation, and the introduction of modern inputs such as fertilisers and pesticides. In addition, the expansion of large-scale farms will be encouraged. Agriculture will contribute to overall economic development in two ways: Firstly, it will supply commodities for exports and the domestic food market, as well as raw materials for industry; and secondly it will expand the market for domestic manufactures ⁵⁷/.

42. The industrial sector will be promoted through the use of labour-intensive technology and domestically available raw materials. As there is relatively limited scope for Ethiopia in the international trade arena, exports will play a minor role and the expansion of the domestic market is of critical importance. This will require a shift in production towards commodities appropriate for mass consumption. Industry will contribute to economic development by shifting labour from the agricultural sector and generating wage employment ⁵⁸/.

43. In summary, a number of complimentary sectoral policies have been developed under the Transitional Government. They are being continued and implemented by the

⁵⁵ Information from the Government of Ethiopia and the IMF.

⁵⁶ TGE, *An Economic Development Strategy for Ethiopia*, (Addis Ababa: TGE, 1994).

⁵⁷ TGE, *ibid.*, 1994.

⁵⁸ TGE, *ibid.*, 1994.

present government. These policies are expected to positively impact on the health status of the population and facilitate the successful implementation of the health sector policy.

2. THE ELEMENTS OF A HEALTH SECTOR INVESTMENT STRATEGY

44. There are nine components of Ethiopia's health sector investment strategy. It is envisioned that the country by following this strategy will set the direction for achieving the policy objectives elaborated earlier (paras. 28-42). The most important issue for the future is how can the present low level of coverage and utilization of all types of health services increase so that health status augmenting PHC services can be utilized by a greater share of the population, given the present and future resource endowment of the country? In this section a response to this question is provided via the proposed components. In summary, these components include: a) improve PHC service access to the population; b) improve the technical quality of PHC service provision; c) improve health sector management; d) improve the financial sustainability of the health sector; e) encourage private sector investment in the health sector; f) direct attention to the pharmaceutical sector; g) develop an IEC implementation plan to extend PHC messages to the periphery; h) invest in expanding the supply and productivity of health personnel, and i) strengthen the local capacity of evaluation, research and development for Ethiopia's health sector.

A. Improve PHC Service Access to the Population

45. In order to translate health policy into an implementable plan, a twenty year Health Sector Development Programme has been formulated, with rolling five year programme periods. Goals for improvements in a number of health indicators have been set for the full twenty years of the Development Programme. Table 2 summarizes these goals and compares them with current estimates of the relevant indicators.

Table 2: Health Indicator Goals of the Twenty Year Health Sector Development Programme, FY 1998-2017.		
Indicator	Current Estimate	Goal (2017)
Life expectancy at birth	47-54	60
Infant Mortality Rate per 1,000 live births	105-128	50
Maternal Mortality Rate per 100,000 live births	500-700	300
Immunization coverage (Percentage)	28-44	90
Contraceptive usage (Percentage)	8	40
Population growth rate (Percentage)	2.5	2.0
PHC Service Coverage	35-45	100

Source: MOH (1995)

46. To achieve these goals, the development programme will seek to develop a health system which provides comprehensive and integrated primary health care (PHC) services, based at community-level health facilities. There will be an emphasis on the preventive and promotive aspects of health care, while not neglecting essential curative services. The focus will be on communicable diseases, common nutritional disorders and on environmental health and hygiene. Reproductive health care, immunization, the treatment and control of basic infectious diseases like upper respiratory tract infection and tuberculosis, the control of epidemic diseases like malaria, and the control of sexually transmitted diseases, particularly AIDS, will receive special attention. Information, education and communication (IEC) about health and nutrition will be strengthened. Finally, the programme will be tailored to financially fit into the expected capacity of the government, donors and the people to finance over the twenty year time horizon. Given the intent of the twenty year programme, it is anticipated that for the first five year phase of the 20 year investment, the following targets can be met and are summarized in Table 3.

Table 3: Health Indicator Goals of the First Five Year Phase of the Twenty Year Health Sector Development Programme, FY 1998-2002

Indicator	Current Estimate	Goal (2002)
Life expectancy at birth	47-54	50-55
Infant Mortality Rate per 1,000 live births	105-128	90
PHC Service Coverage	35-45	70
Maternal Mortality Rate per 100,000 live births	500-700	450-500
Immunization coverage (Percentage)	28-44	60
Contraceptive usage (Percentage)	8	25
Population growth rate (Percentage)	2.5	2.3

Estimates Based on Information (especially Table 9) From the PHRD Study, B & M Development Consultants, PVT. LTD. CO., Demographic Analysis and Population Projections. (Addis Ababa: GOE/World Bank, September, 1996).

47. This component seeks to make major improvements towards the twenty year objective of ensuring all Ethiopians access to basic PHC services by 2017, provided through community-based PHC facilities and supported by first-referral and other hospitals. This objective would be achieved via phased health development strategies drawn up for periods of five years. In this approach, access is defined in terms of facility-population coverage, with each health facility expected to ultimately cover an average of:

Facility Type	Administrative Structure	People Covered
Primary Health Care Units	Woreda Health Office	25,000 people
District Hospitals	Zonal Health Department	250,000 people
Zonal Hospitals	Regional Health Bureaus	1,000,000 people
Specialized Hospitals	Ministry of Health	5,000,000 people

48. It is expected that not only public facilities will be included in this assessment of coverage. Non-government facilities will also be included, especially where it is found feasible to contract with private providers to cover a specific population on a pre-paid basis. Such assessments of feasibility will be conducted early during the implementation of this sector investment programme. When geographical, cultural and population density considerations dictate other modalities of PHC service delivery, they will be tested and utilized to achieve coverage, as in the case of pastoral populations of Afar and Somali regions. In this context, the government's policy is to phase out all vertical programs.

(i) Health Facility Expansion

49. The Primary Health Care Unit (PHCU) constitutes a Health Centre (HC) and an average of 5 satellite Community Health Clinics (CHCs), each serving an anticipated population of about 5,000 people^{59/}, or about 25,000 total population, depending on the population density and geography^{60/}. The PHCU and its satellite CHCs will provide comprehensive and integrated health services including health education, prevention and control of common communicable and epidemic diseases. The focus of its activities will be on maternal and child health care, immunization, family planning advice and services, nutritional education and micronutrient supplementation as necessary. Curative services for common ailments such as parasitic infestation, diarrhoeal diseases, acute respiratory infections and tuberculosis will be provided. Minor surgery and life saving emergency operations, such as appendectomies and cesarean sections, will also be performed. Some level of care for the disabled and infirm will also be provided within the family home setting. The PHCU will also provide technical assistance in establishing, instituting and monitoring environmental and occupational health standards within its catchment area. Basic recording of vital statistics and the health status of the community, conducting of epidemiological surveys and disease surveillance, and some information processing, will also be performed at the PHCU. In addition, the PHCU will supervise and monitor the activities of the CHCs under its jurisdiction, and will train the Community Health Agents (CHAs) and Trained Birth Attendants (TBAs) who will staff the CHCs^{61/}. PHCUs will have 8 emergency care beds, 2 post-natal beds, and 3 delivery couches. The HC will have about 13 technical staff and 12 administrative staff, with each CHC having 4 staff each.

50. District hospitals will serve as the first level of referral for PHCUs. A district hospital will provide comprehensive out-patient and in-patient services. It will have a minimum of 50 bed capacity catering for medical, surgical, gynecological and pediatric cases. It will provide support for PHCUs in its catchment area, and will act as a centre for the training of front-line health workers for the PHCUs, such as primary nurses and primary midwives. It will also provide support for the public health activities of the district^{62/}.

51. Regional hospitals will provide care falling within the parameters of the four basic specialties, while specialized hospitals will provide sub-specialist care. They will provide support for and accept referrals from the respective hospitals under them. Zonal hospitals will provide clinical training for nurses, health officers and paramedics, while specialized

⁵⁹ MOH, Draft Health Sector Development Programme: A 20 Year Long-Term Plan Framework, op. cit., 1995.

⁶⁰ Reconstituted Health Stations will become Community Health Clinics (CHCs) in this new strategy.

⁶¹ MOH, Draft Health Sector Development Programme: A 20 Year Long-Term Plan Framework, op. cit., 1995.

⁶² MOH, *ibid.*, 1995.

hospitals will provide clinical training for health officers, generalist and specialist doctors.

52. As the main goals of the Health Sector Development Programme are the building of basic infrastructure, the provision of standard facilities and supplies, and the development and deployment of appropriate health manpower for a realistic and equitable *primary health care system at the grass-root level*, the emphasis is on the construction, equipping and staffing of PHCUs and District Hospitals, particularly in the first five years of the programme (1996-2000), and ensuring that these facilities will provide quality services and will be managed and financially sustained. As from 2001, the construction of Zonal and additional Specialized hospitals will be gradually phased in.

53. The government has proposed 100 new PHCUs, 500 associated satellite CHCs, 10 new district and 1 zonal hospitals will be constructed every year of the five year investment programme. In total 500 new PHCUs, 2,500 CHCs, 50 district, 5 regional and 2 specialized hospitals, are planned to become operational during this period. The federal government will make an allocation for new facility construction to each region, based on the existing population-facility ratio in that region. Each region will then identify the areas with the greatest need as sites for the construction of additional facilities. To ensure that the full referral network is in place, a district hospital, and related PHCUs and CHCs will be constructed within each selected geographic area. It has also been proposed that the first district hospitals and PHCUs will be built on sites identified for the training of front-line health personnel within each region. In this way students will be trained under the same conditions and in the same facilities as those in which they will ultimately work.

54. In addition to the building of new facilities, existing facilities require refurbishment. As indicated in para. 17, the majority of health facilities require structural repairs. Facilities are also inadequately equipped at present. It is thus proposed that 30 PHCUs and 10 District, 2 regional and 1 specialized hospital will be refurbished each year of the first five year investment programme. In total, 150 PHCUs, 50 District, 10 Regional and 5 Specialized Hospitals will be upgraded during this period.

(ii) PHC Services for Pastoral Populations

55. Some of the regions in Ethiopia, such as Afar and Somali, have a significant number of pastoralist communities who are actively mobile and seasonally change their residence. They also invariably cover a wide geographical area with relatively sparse population density. Providing social services to such a community would require special arrangements. In the health service, an additional form of basic health care delivery is possible through a system either of mobile clinics alongside the traditional health care delivery system or migratory health personnel who live within the mobile populations and which are in contact with regional, zonal and woreda health staff via modern communications. The experience of other countries is varied in terms of the modality of delivery and the success and acceptance of these service delivery options and they each

warrant experimentation in the Ethiopian context in terms of service delivery, quality of care, and management feasibility.

56. The above interventions are expected to be complementary to the normal development of the health care delivery system in urban and semi-urban areas where there are permanently settled communities. However, special consideration shall be given to the regions in terms of training of local health workers at different levels. To this end some of the hospitals and health centres in addition to providing teaching facilities need to provide boarding facilities for the trainees, with their attendant additional costs.

B. Improve the Technical Quality of PHC Service Provision

57. Besides expanding and upgrading the physical infrastructure of the health care delivery system, it is vital to invest in the improvement of the service quality of all health care providers, including non-governmental providers. There are at least three areas of quality improvement which require immediate work during this five year period. These include: a) improve the technical training of all personnel, especially those based in rural facilities; b) provide the necessary medical equipment appropriate to the role and responsibility of the facility; and c) improve the use and management of medical supplies, especially drugs at the facility level. The areas of technical training requiring special attention at this time, given the BOD of the country, include: reproductive health, family planning, integrated management of the sick child, malaria prevention, community mobilization, nutrition, HIV/AIDS, and drug prescribing. This training will be incorporated into the curriculum for the anticipated training of new staff required to provide services in the new facilities as outlined above in paras. 50-57, as well as on an in service basis for those staff already working. Further, training will be made available for those who provide services on a private or non-profit basis. Obtaining this training will be encouraged by regular licensing and certification of staff based on continuing education requirements managed at the regional or woreda level. It is anticipated that it will lead to more incentives and a greater sense of professionalism among staff.

58. Besides improving the human resources capacity to improve service quality, it is important to also upgrade the available medical and administrative staff with additional equipment and furniture and provide training on how to use and maintain the new items. Options for maintaining the equipment and managing the required spare parts will also be addressed through various mechanisms which include both public options and contracting with private entities.

59. Third, it will be vital to improve the use of drugs and medical supplies. As many studies have documented, including several PHRD studies⁶³, the availability of scarce essential drugs are vital for improving the quality of care as well as increasing the

⁶³ See the set of PHRD Social Sector Studies in health and education conducted by local and international consultants on behalf of the Government of Ethiopia and the World Bank, September, 1996.

demand for services. One option to enhance service quality in this area is the use of community owned revolving drug funds. This type of retailing has been found to be financially sustainable in Ethiopia in the past and could become a major source of resource mobilization for the sector if designed and implemented appropriately ⁶⁴/. Further, the work of the MOH, WHO and consultant from the Netherlands have identified a number of specific areas for drug use improvement and they are included in Section F below, paras. 74-81. These proposed activities and others will be included to improve service quality in this vital area.

60. Finally, in section C below regarding improving management of the health sector, issues of quality are included in order to increase coverage of PHC, improve efficiency and quality.

C. Restructuring and Improving Health Sector Management

61. The objective of this component is to transform the existing highly centralized health system into a four tiered system which has appropriate functional linkages, which is equitably distributed, and which is managed in a decentralized, participatory and efficient manner (The proposed four tiered system is described in paras 32 and Figure 1, above). It is envisaged that comprehensive, integrated health services will be provided within the four levels of health facilities, and that vertical programmes will be phased out.

62. An important aspect of this initiative is the policy decision to devolve power and decision making and service delivery to the regions and below. The management capacity, related information systems for both service and financial resources use, and planning capacity of the regions and districts will require strengthening to assume these responsibilities and take on these additional tasks. Where feasible, some additional reallocation of personnel from the central health department may be undertaken for these purposes. The major additional inputs required are the accelerated training of regional and district health managers, and the rehabilitation, building and equipping of offices at the Regional, Zonal and Woreda levels.

63. In addition to generalized management training, the programme will support the further evolution of devolving management authority and responsibility to the local level in hospitals, PHCUs, and other health programs. In the case of hospitals, it is anticipated that locally created hospital management boards will be introduced. As has been demonstrated in a number of other international settings, the decentralization of

⁶⁴ See pgs 48-53 of World Bank, Sector Review, Ethiopia: A Study of Health Financing: Issues and Options, op. cit., 1987, and World Bank, Pharmaceutical Expenditures and Cost Recovery Schemes in Sub-Saharan Africa, Technical Working Paper No. 4, (Washington D.C.: PHN Division of Africa Technical Department, June 1992).

management authority and responsibility has achieved considerable efficiency gains⁶⁵/. These types of gains can also be expected in Ethiopia.

64. One of the most important management tasks which has been receiving increased attention globally, especially in the health sector, is that of focusing on improving the quality of the services provided. Given the low level of facility use in Ethiopia is partly due to the lack of quality service provision (refer to paras. 14-19, and 56-59 above), this issue has become increasingly important to address at this time through investments in management improvement. The essential concept required for quality improvement is that it is a daily process of improvement, not one which occurs to "pass" a regulatory hurdle established by the government. The government must be involved in periodic reviews of progress made and provide assistance to the individual facilities in devising a process which can be implemented at the facility level, but the individual facility must buy into the process and do the daily work required to make improvements continuously happen. The responsibility for management is to work with facility staff to establish this process and to manage continual review of the improvements set at the facility level.

65. There is a management capacity gap in the health sector, not only at the regional, zonal or woreda level, but also at the facility level where health services are provided to individual patients. To address this gap, systematic investments are required to strengthen the management capacity throughout the entire health sector, operated by both the government as well as by private providers. A bold initiative of developing a program of excellence in management training is required. Investments in a educational institution to house this training and in the curriculum of the program must be made now, at the start of an initiative to extend PHC services throughout the country. Modern communications methods will be used to further strengthen educational programs and institutions.

66. Health information and documentation. Perhaps one of the most important areas where this process of quality improvement can be initiated in Ethiopia is for improving the quality of PHC program performance. To what extent can individual regions reduce the cost per life year saved from the various PHC services by improving the management of their programs? It will be necessary to engage in management training to make headway in this area, and it will also be necessary to establish a monitoring system for documenting continual improvements in PHC service provision and in the increased coverage achieved. This will need to be established within a framework of monitoring BOD improvements and the related resources used to achieve them, i.e., the continual updating of cost-effectiveness analysis of PHC and related health programs⁶⁶/.

⁶⁵ Hop Holmberg, Options for Strengthening the Management of Eritrea's Health Services, January, 1996, for examples in Jamaica and Kenya. Hop has also experienced a recent example in Philippines, September, 1996 memo.

⁶⁶ See recommendations from the PHRD study on the Cost-Effectiveness of Health Services, (Addis Ababa: Govt of Ethiopia/World Bank, September, 1996).

67. In order for any of the above management strengthening improvements to achieve its intended objectives, improved health information system functioning is required. There is currently a dearth of accurate demographic, vital event, and health status information in Ethiopia. Some of these information gaps can be addressed via special studies, as in the case of the PHRD studies. However, in order to continuously monitor improvements in performance from either a financial or services provision perspective, including monitoring for service quality, regular information gathering and processing must occur as a part of daily work routines. Such data are essential for adequate planning, resource allocation, effective service delivery and efficient management. The objective of this programme component is to establish information units at the Woreda, Zonal and Regional levels, with a separate institution at the central level responsible for collecting and assessing information about program impact, effectiveness and cost-effectiveness. The major inputs required are equipment for operating these information units, modern means of communicating information from one level of the system to another, as well as training of personnel in data processing and methods of utilising the information.

D. Improve the Financial Sustainability of the Health Sector.

68. Even if management is improved and facilities are extended, it will be continually important to find ways to pay for the health services people will increasingly demand from both government as well as non-government facilities. The government will be extending its financial resources through the regional and local governments to provide more health services through an expanded health care system, but that will still not raise the funding levels to the point where both increased use of health care facilities will occur along with extending coverage. Thus, additional modalities for financing health care services will be required. The government has been developing a health financing policy and revisions to a draft policy document are under development. While it still may require additional work prior to its finalization, some features of it can now be implemented.

69. The government will assess the experience of the 1980s with the success of public pharmacies and extend the Bamako initiative of community managed drug revolving funds (DRFs). This initiative would be highly complementary to the initiative regarding pharmaceuticals (see section F below). Funds from the sector investment programme could be utilized to provide the startup capital for these revolving funds.

70. Various forms of community-initiated health insurance will be reviewed for possible implementation during this five year period, with the anticipation that after review and modification, they might be further extended in the next five year period. The PHRD studies high-lighted the possibility of developing community insurance funds via the "edir" system, and via co-operative based schemes⁶⁷. Similar mechanisms were

⁶⁷ See pgs 36-39, KUAWAB, Cost and Financing of Health Services, op cit, September, 1996.

discussed in some detail in a World Bank health financing study of Ethiopia in 1987^{68/}. These and other options for developing health insurance will receive considerable discussion and development during this sector investment program (SIP). In addition, it is hoped that the health financing policy framework document will address how the various levels of government in Ethiopia will be involved in the long term development of health insurance in Ethiopia^{69/}.

E. Encourage Private Sector Investment in Health Sector

71. As has been stated in para. 33, ..." a greater role is envisaged for the private sector in health service delivery and financing." It further notes the present important role of mission and NGO groups in providing health services to selected segments of the population.

72. In addition to the encouraging government's health policy, pragmatic steps will be taken by the government of Ethiopia to encourage greater non-governmental (both NGO and private, for profit sector) participation in the health sector. First, the central and regional government will more aggressively seek private and/or NGO investments in health facilities. The government will also work with the international donor community to find other potential sources of private financial support for health sector initiatives, including for example, in the pharmaceutical or medical supplies area. The same guidelines for private sector development and rules which govern investments in other sectors will also be followed in the health sector.

73. It will also revisit the regulatory processes for issuing private sector clinic licenses. It will also seek to establish clear guidelines, with input from the private and NGO sector, how to obtain the necessary government clearances to operate in Ethiopia.

74. Finally, for pharmaceutical retailing, the government will conduct a special study with particular reference to reviewing options to improve and strengthen this component of the delivery system. Clear governmental guidelines will be established to improve the performance of this segment of the delivery system to achieve the dual social objectives of quality and fairness to the consumer and provider.

⁶⁸ See pgs. 59-63 in World Bank, Sector Review. Ethiopia: A Study of Health Financing: Issues and Options, op. cit., April 14, 1987.

⁶⁹ Guidance for the development of health insurance will be sought from a number of sources, including the following two sources: Lynne Katzmann, The German Sickness Insurance Programme 1883-1911: Its Relevance for Contemporary American Health Policy, Unpublished PH.D. Dissertation, London University, 1992, and David W. Dunlop and Jo Martins eds., An International Assessment of Health Care Financing: Lessons for Developing Countries, (Washington D.C.: EDI of the World Bank, 1995).

F. Direct Attention to the Pharmaceutical Sector

75. As a result of poor procurement, storage, distribution systems and prescription management, there is presently inadequate access to drugs and medical supplies, particularly for those which are imported. In addition, drugs are becoming increasingly unaffordable to the majority of the population. This was particularly true right after the devaluation of the Birr in 1993, when the retail price of pharmaceutical items increased by over 300 percent in Addis Ababa between January 1991 and August 1993, whereas for the price index as a whole, it increased only 4 % over the same period ⁷⁰/. Drug shortages adversely affect the population's perception of the quality of health services. The objective of this component is thus to ensure a regular and adequate supply of effective, safe and affordable essential drugs of high quality. To improve prescribing behavior by health providers, authorities from the MOH and regional departments will require prescriptions to be issued on standard forms provided by the government.

76. One priority is the development of an essential drugs list for all levels of the health service. Thereafter, the system of procurement, distribution, storage and utilization requires improvement.

77. Progress has already been made in this programme component in that the National Drug Policy was approved in November 1993 ⁷¹/ and the "Masterplan for the Ethiopian National Drugs Programme" (ENDP) was completed in February 1994 ⁷²/. The latter was a joint initiative of representatives of the Ministry of Health's Pharmacy Department, consultants from the World Health Organisation's Action Programme on Essential Drugs (WHO/DAP), and consultants from the Directorate General of International Co-operation (DGIS) in the Netherlands. The principal elements of this proposed program include: a) strengthening the policy and regulatory framework for the management of a national drugs programme; b) improving the supply and logistics systems for essential drugs, c) developing a program for rationalizing the use of drugs, and d) strengthening the quality assurance programme re: drug registration, inspection, quality control, control of narcotic and psychotropic substances. The document contains a comprehensive, costed plan for the implementation of the ENDP⁷³/. It specifies the objectives of each ENDP component, the expected outputs, the tasks required to produce these outputs, the inputs required, the institution(s) responsible for each activity, and indicators to evaluate whether the objectives have been achieved. In addition, existing and potential ENDP donors have been identified.

⁷⁰ Data are from the Central Statistical Authority, Government of Ethiopia.

⁷¹ TGE, National Drug Policy of the Transitional Government of Ethiopia, (Addis Ababa: TGE, 1993).

⁷² MOH, Masterplan for the Ethiopian National Drugs programme, 1994-1998, (Addis Ababa: MOH, 1994).

⁷³ See Annex B for a summary of the proposed components for the Ethiopian National Drugs Programme.

78. In addition to the above set of proposed activities, there are at least four additional items in the pharmaceutical domain which require strengthening during this time frame. They include: a) reviewing local production and procurement of essential drugs, b) assessing the importance and role of retail pharmacies and rural drug sellers in the provision of health services, including pharmaceutical services, c) encouraging the expansion of community pharmacies and drug revolving fund programs, and d) planning how the country will ensure the steady supply of essential pharmaceutical items for PHC programs now and into the next century primarily from its own resources, but also with assistance from the international community where necessary.

79. After the change of government in 1991, the local parastatal pharmaceutical production plant owned by EPHARMECOR was unable to produce sufficient output due to the lack of maintenance and raw materials. The present status of that and other firms' production capability need review to ascertain the extent to which local essential drug needs can be met from local sources, and how much is required from international suppliers. The relative prices for essential items of local vs. international sources also needs to be investigated, as does the possibility of packing drug kits for distribution rather than procuring kits internationally.

80. The PHRD studies highlighted the fact that pharmacies of all types, and especially rural drug vendors comprise an important source of health care provision. It is vital to learn what these providers are providing and how PHC objectives might be attained by incorporating these providers in the formal health system. Further, it will be useful to learn what types of continuing education programs and professional organization might be possible to strengthen the services provided by these providers.

81. In the section addressing financing issues (section D, para. 68), the importance of drug revolving funds (DRFs) was reviewed. This mechanism already has a track record of success in Ethiopia, and it needs to be extended. If special attention is paid to this scheme and the right type of training were provided to the employees, a considerable extension of the present level of service could be realized.

82. Finally, a plan is required for moving the country into a more self-sufficient mode to provide a regular and steady supply of essential drugs. An attempt has been made to delineate a strategy for ensuring greater local financing of pharmaceuticals and related medical supplies and it would be further worked out and developed during the life of this programme. The main elements of the scheme are shown in the table below (Table 4).

Source	1997	1998	1999	2000	2001	Total
Government	70 (33)	80 (38)	90 (41)	100 (43)	120 (48)	460 (41)
Cost Recovery	10 (5)	20 (10)	30 (14)	40 (17)	50 (20)	150 (14)
Donors	120 (62)	110 (52)	100 (45)	90 (40)	80 (32)	500 (55)
Total	200	210	220	230	250	1,110 (100)
Drugs and Medical Supplies*	150	180	200	220	240	990 (89)

* This is the component out of the total budget projected for purchase of drugs and medical supplies.

G. Information, Education and Communication (IEC)

83. As indicated in the introductory section (para. 3-5) the majority of health problems are attributable to potentially preventable infectious diseases and nutritional deficiencies. Health services would be more cost-effective if the current curative bias were overcome through improving and expanding promotive and preventive services. The goal would be to improve awareness about personal and environmental hygiene and basic knowledge of common illnesses and their causes. A national IEC plan and strategy for implementation is now required. The priority areas for IEC messages would be determined by periodic reviews of the prevailing BOD. Those health problems which most contribute to the disease burden would be targeted for inclusion in the national IEC program for the coming year. Included in the strategy document, would be options for extending coverage of PHC service messages to the most remote villages of the country. The MOH would take the lead in developing a national IEC strategy, which would include an important role for the regional authorities in localizing national guidelines and establishing the agreed upon messages in the appropriate local languages. They would also work closely with the local radio stations in strengthening the health educational message component of their programming transmitted in each region of the country.

84. To initiate an IEC program, it is also proposed that a full inventory of IEC materials for health education available from all public and private sources be amassed. The MOH could be the lead repository institution of IEC materials, but all NGOs and private entities would be included in the list of source material. IEC materials would be developed by any entity working to improve the health status of Ethiopians.

85. Also, it is important for local and regional health departments to become more involved in planning the design and options for implementing non-health investments with potential adverse health impacts. This is particularly true for investments made in microdams, industry, other water supply improvements, and in irrigation, all of which

have supported the expansion of the vectors of such diseases as malaria, and shistosomiasis, as well as other diseases.

86. The MOH would be involved in coordinating IEC strategies for any particular IEC campaign or message, but all health organizations could prepare and distribute health education materials, based on the MOH guidelines for that health education program. It would be necessary for the MOH to be very proactive in order to continue in a leadership position on IEC when the modality of the program was collaboration rather than regulation. The MOH would require support to assume this role. MOH inputs required to improve health information, education and communication include facilities, equipment and the training of appropriate personnel.

87. In addition, funds would be required to monitor the performance of each IEC program. The performance would at least be monitored and evaluated in terms of penetration of the messages, as well as the extent to which behavior change had occurred due to the IEC program. The goal would be to improve awareness about personal and environmental hygiene and basic knowledge of common illnesses and their causes.

88. Finally, agreements will be secured from public and private media such as radio to have enough "air time" as might be required to create awareness.

H. Expand the Supply and Productivity of Health Personnel

89. There are three options for improving the present staffing situation in publicly operated health facilities. These options include: a) expanding and rationalizing the set of health care worker cadres in the country, and b) increasing the productivity of existing staff via the introduction of new technology and by changing the terms of reference for those workers who use the new technology, and c) contracting with private providers for certain types of health care services, e.g., maintenance.

a. Expanding the Supply

90. Regarding the first option, as indicated in paras. 20 and 21, there is a limited supply of trained health personnel. If any additional expansion of health facilities are envisioned, there will be an additional demand for such personnel. In addition, there is: a) an inappropriate personnel mix, b) a geographic maldistribution of personnel, with many highly skilled personnel located in urban settings, c) no career structure for health personnel, and d) staff morale and performance is low, in part due to poor remuneration. One objective of this programme component is to develop an acceptable number and mix of health personnel who are properly trained, deployed and managed.

91. To achieve this objective, an assessment of the health personnel needs, both in terms of categories and numbers of staff, has been undertaken. Existing training capacity has been evaluated, and the need for additional facilities and trainers quantified. The development of new curricula and the reorientation of trainers is also being undertaken

and requires further strengthening. The emphasis is being placed on the training of community oriented front-line and middle-level health personnel. In addition, the training of district and regional level health managers along with a selected set of facility managers of hospitals and PHCUs will be undertaken. An attractive career structure, incentive system and continuing education programme is also being developed, and will be implemented during the initial years of this proposed investment plan⁷⁴.

92. There has already been progress on this programme component in that the National Task Force on Human Resources Development for Health submitted its report in October 1994⁷⁵. The Task Force was required to recommend mechanisms for achieving the three objectives:

- (i) development of a team approach to health care;
- (ii) training of task-orientated health workers with the appropriate professional standards and attitudes; and,
- (iii) development of an appropriate career structure, incentives, supervision and monitoring systems, and continuing education for improving standards.

93. The Task Force Report contains recommendations on the staffing patterns at each type of health facility⁷⁶ as well as curricula and job descriptions for each category of staff. They recommend the following four changes in personnel categories:

- (i) phase out of health assistants (HAs), with existing HAs receiving training to upgrade them to clinical or public health nurses.
- (ii) Introduce a new category of primary health workers (PHWs), with educational requirement of 8 years of primary education, to replace HAs. The curriculum focus of the new cadre (PHW) would be on primary care rather than the clinical orientation provided to HAs.
- (iii) Introduce a new junior midwife (JM) cadre, with 8 years of primary education.
- (iv) Reintroduce the cadres of public health officer (PHO) and Public health nurse (PHN) who would have had at least 10 years of education. PHOs would obtain an additional 3 years of training, with existing nurses requiring only 2 years of additional training.

⁷⁴ Social Services and Administration, Ethiopia: Human Resources Development Strategy for Health. Report of the National Task Force on Human Resource Development for Health, op. cit., 1994, and WHO, Ethiopia: Annual Report, 1994, (Addis Ababa: WHO/Ethiopia, 1995).

⁷⁵ Social Services and Administration, *ibid.*, 1994.

⁷⁶ See Annex C for the recommended staffing levels for PHCUs and district hospitals.

94. An important prerequisite for recruitment for PHW and JM training is that of being a resident of the geographic area in which they will work. Priority will be given to applicants from rural areas. Training will be provided locally (in local health facilities), and it is hoped that these conditions will encourage graduates to remain in rural areas and small towns. Other incentive issues to reduce the movement of trained local staff to urban settings will also be reviewed during the programme period. While the training will be conducted on a local level, national curriculum standards will be devised and use of multimedia methods will be used, and distance educational approaches will augment local teachers and preceptors.

95. The other personnel categories would remain, but their training programme would be revised to include strong elements of social science and medicine, and environmental health⁷⁷. A balance is sought between preventive and curative aspects of health care, and an equal weighting is given to theoretical and practical exposures. The curriculum changes proposed are motivated by the desire for training to be relevant to the country's health needs, community-orientated, and task-based.

96. In addition, the literacy and numeracy skills of Community Health Agents (CHAs) and Trained Birth Attendants (TBAs) will be improved to enable them to read continuing education materials and to report births, deaths and basic health statistics. In the future, CHAs and TBAs would require at least Grade 4 schooling to ensure literacy.

97. Regarding training institutions, it is planned that the twelve existing Health Assistant Schools be converted into Primary Schools of Health. Since most of the thought underlying the new curriculum has been to make training of such staff more relevant to the health needs of the country, be community-oriented, and task based, most of the training of this level of staff, including the clinical experience, would occur in appropriate District Hospitals, not necessarily in regional capitals. The existing Nursing Schools will be converted into Secondary Schools of Health to train the full range of nursing staff at the diploma level. The Paramedical Schools are intended to be attached to one of the Medical Schools and continue to train at different levels in their respective areas. The three existing medical schools will form Tertiary Schools of Health, and will continue to train Medical Doctors, as well as Health Officers, Nurses and paramedics at the diploma and degree levels. Another 2 Health Faculties have started to cater for the training of HOs, the associated nurses and paramedics. The Medical Faculty at AAU, will, in addition, continue to train the 6 required basic specialities (i.e., Surgery, Gynaecology & Obstetrics, Paediatrics, Medicine, Anaesthesia and Radiology), and provide the postgraduate course in Public Health (Social Services and Administration 1994).

98. Subsequent to the submission of the Task Force's report, another ministerial committee was established, consisting of members from the MOH, training institutions

⁷⁷ Social Services and Administration, Ethiopia: Human Resources Development Strategy for Health. Report of the National Task Force on Human Resources Development for Health, op. cit., 1994.

and research institutes. Their brief was to examine the Task Force's proposals, and specifically to focus on devising appropriate curriculum and implementation plans. They developed a five-year investment plan (1996-2000) which has the following components:

- (i) upgrading and reorientation of the training programmes at the three existing medical schools;
- (ii) upgrading of facilities and improvement of staffing at 5 nursing and 8 health assistants schools, and construction of 2 additional schools;
- (iii) construction of 5 facilities for training mid- to lower-level health workers; and,
- (iv) training of teaching staff and provision of appropriate educational facilities to all training institutions.

99. An analysis has been conducted of the anticipated training output of these institutions over the first five years of the twenty year programme relative to the human resource requirements for staffing an expanded set of community-based primary care facilities available by that time. It showed a large share of the additional human resource requirements could be met through the training of additional health personnel. An aggregate rate of 10 % attrition from the newly trained staff over the life of the programme was assumed. It is thought that to overcome the relative undersupply of some staff, certain categories of personnel can be substituted for others, e.g., doctors may temporarily fill health officer posts until sufficient health officers can be trained.

b. Invest in Personnel Productivity Enhancement

100. Productivity of existing personnel can also be increased, thereby reducing the number of people required to provide the same set of health services or accomplish the same set of managerial tasks. By changing the terms of reference of higher level staff to include responsibilities for education and training as well as supervision of lower level staff, personnel productivity may be enhanced, especially if there is an incentive of increased chances for advancement or increased prestige attached to these responsibilities. The re-establishment of regular meetings of the woreda level health staff for continuing education purposes, would also help to improve service quality and reduce the need for skilled staff to help manage complicated clinical cases. If these investments were made, training new staff and the continuing education of existing staff could be greatly enhanced.

101. While it would be difficult to rapidly introduce modern communications into the Ethiopia's health care system, the use of radio communications will be expanded. Radio communication linkages between health facilities would lead to improvements in the quality of health care provision and health service management.

c. Experiment With Contracting With Private Providers of Care

102. As the health sector in Ethiopia grows, groups of health care providers will increasingly operate outside the government delivery system. To some extent this has already happened in Addis Ababa. This must be further encouraged and a conducive environment created so as to increase the supply of services and a healthy competitive atmosphere. As a first step towards contracting out, the government will encourage contracting to private entities for building, vehicle maintenance and repair, and the maintenance of non-technical equipment and furniture.

I. Evaluation, Research and Development

103. Given there is a need to develop relevant research capacity within the Ethiopian health sector, the Development Programme also recommends devoting a sum for this purpose during the first five year period. These resources will be made available through the existing research funding institutions such as the Science and Technology Commission, and research projects will be evaluated based on their relevance to addressing the needs of the Ethiopian health sector.

3. HOW TO FINANCE THE PROGRAMME OF PROPOSED INVESTMENT?

104. Cost of the first five year proposed investment programme has been tentatively estimated to be about 5.0 billion birr. This figure includes both the capital cost of the programme as well as the recurrent cost for the new facilities and programmes during the life of this five year period. While this figure represents a sizable investment, it fits within the general guidelines of the World Bank's estimates for the macro-economic performance of the Ethiopian economy during the life of this proposed programme. As such, it is anticipated that the government will be able to finance from its own resources about one third of the total capital component of the programme, estimated to be about 2.1 billion, assuming that resource mobilization by the government meets its targets and the macro-economic growth of the country continues to be robust, at around 6% per year in real terms. The bulk of the remaining capital investment requirements and some of the recurrent costs associated with drugs, will be sought from the international community. this share is expected to comprise between 35 and 40 % of the total.

105. The government has estimated the cost of each programme component over this first five year phase of the 20 year long-term investment programme (see Table 5). A considerable thought has been taken in the development of the programme component costs and further elaboration could be provided, as desired. A wide range of potential non-governmental sources of finance for the health sector are also being considered, especially for financing the recurrent costs of non-governmental components of the programme.

106. Health insurance will be extended both for civil servants and private sector employees. The Health Policy states that legislative requirements for a contributory

health fund for employees of the private sector will be enacted ⁷⁸. Increased insurance coverage will serve two main purposes. Firstly, it will reduce the burden of patients dependent on state services. Secondly, when insured patients do use public sector health services, the facilities and the government will be reimbursed based on services rendered. In addition, user fees will continue to be a source of financing health care.

107. Community contributions to health services will also take other forms. In particular, it is anticipated that labour and material contributions by local communities will play a significant role in the facility construction programme, perhaps as much as 10 percent of the total cost. Such contributions will be maximised through increased community participation in the planning and implementation of health projects. In addition, during this investment programme period pilot tests of alternative forms of rural health insurance will be conducted, to be further developed during the second phase of the health development programme.

108. As has been indicated in Table 1, international donors have been, and will continue to be an important source of health care financing in Ethiopia. Through the World Bank's Family Health Project a number of facilities were constructed or rehabilitated. Also through Bank's ESRDF project, about 28 million US\$ are available for the health sector. Additional and sustained donor support will be essential if the Health Sector Development Programme is to be successfully implemented. Each of the programme components will require significant donor contributions. Total additional international financing requirements may be in the order of 350 million US\$ over the life of the programme.

⁷⁸ TGE, Health Policy of the Transitional Government of Ethiopia, op. cit., 1993.

Table 5: Summary of Health Investment Programme, FY 1998-2002 (cost in million Birr)			
Programme Component	Total Recurrent Cost	Total Capital Cost	Total Rec and Capital
1. Health Infrastructure			
A. PHCUs	612	1,150	1,762
B. District Hospitals	245	350	595
C. Zonal Hospitals	67	80	147
D. Specialized Hospitals	265	60	325
Subtotal	1,189	1,640	2,829
2. Restructuring the Health Service		50	50
3. Health Education		50	50
4. Health Information		10	10
5. Pharmaceuticals	959	55	1,014
6. Human Resource Development	20	100	120
7. Research and Development		50	50
8. Administrative and Other Expenses	418	418	
Subtotals (1+(2-8))	2,586	1,955	4,541
Contingency (10%)	259	195	454
Totals	2,845	2,150	4,995

109. Finally, the government will also seek ways to utilize existing general tax and other government revenues more efficiently. In particular, redistribution of public sector resources from tertiary to primary care services are being further explored. The commitment to redirecting resources to primary care services has already been demonstrated through the recent budget reprioritisation. The proportion of the budget going to primary level facilities and centres outside of Addis Ababa increased from 20% in 1991/2 to more than 80% in 1994/95. Further, it is anticipated that there will be associated efficiency gains from treating patients at the appropriate level of care. There will also be efforts to improve the efficiency of human resource and drug utilisation at all levels of the health service. Some of the ways this can be accomplished have already been included throughout this document. Finally, while the proportion of the government budget devoted to health care was less than 4% under the former military regime, it has increased to about 6% at present. There is potential for further increase and it is envisaged that the health sector's share of the global budget could rise to 8-9%. With a relatively high real economic growth rate, perhaps as high as 6% per year, there will be increased public funds available.

4. HOW TO MANAGE AND IMPLEMENT THIS SIP?

110. The implementation of the Health sector investment programme will require major investment from government, international agencies, the community and non-government organisations. It is critical that vast and varied sources of investment have an efficient implementation, coordinating and monitoring mechanism. The existing system, however, is full of bottlenecks and inundated with bureaucratic red tape. Amongst the many impediments which hamper, delay and frustrate implementation are:

- (i) lengthy process of approval of projects by funding agencies;
- (ii) delay in processing of payment requests;
- (iii) cumbersome, complicated and unrealistic reporting mechanisms; contractors who are not interested in peripheral civil work projects; and low capacity within regional government department's of health to manage the processes of procurement, tendering, review of proposed bids, and disbursement;

Thus, resolving these problems would lead to more efficient administration of the projects and effective utilisation of resources. To this end, it would be important to design an implementation strategy which is acceptable to all parties, that ensures simplicity, flexibility, transparency and accountability and that delineates clearly the responsibilities of implementing bodies and monitoring mechanisms.

111. In order to create the above environment for efficient implementation and decentralised decision making, it is necessary to establish structures at different levels that would provide policy guidelines, scrutinise projects, approve the finance and monitor the implementation. It is proposed that three committees are formed, namely a Central Steering Committee (CSC), a Regional Steering Committee (RSC) and a Donors Committee (DC), with appropriate representation, mandate and secretariat. The details of how this proposed work structure will be organised and what the terms of reference of each component would be, will be addressed by an appropriately constituted group from the government of Ethiopia at the central, regional and woreda levels as well as from the international community which will be a part of this endeavour. The terms of reference for this group should at least address the following issues:

- (i) review the strengths and problems faced by others involved with implementing SIPS in the HNP sector;
- (ii) develop a process of regular review and continuous managerial improvement of program implementation;
- (iii) how to involve the donors and the regional health authorities in both policy and implementation discussions.

- (iv) assess how each international participant will manage the additional workload required to implement the SIP;
- (v) The role of the MOH and the PM's office in health sector, as well as the role of other key stakeholders such as the regional governments; in terms of,
 - a. regulatory guidelines and oversight of performance, and
 - b. information regarding service provision, health status improvement and finance.

112. After working with the international community for the last five years, the GOE has views about how several of the technical issues of implementation might best be implemented. These areas include: a) the approval of tender results; b) fund administration and payment for works done; c) reporting project progress, and project monitoring. The details are found in Technical Annex D.

5. CONCLUSION

113. Substantial restructuring of the Ethiopian health system is required to address the burden of ill health, which is largely attributable to potentially preventable infectious diseases and nutritional deficiencies. Detailed plans are being developed to address the backlog of health care facilities, human and other health sector resources required to achieve universal access to essential primary care services. Services will be reoriented to emphasise preventive and promotive services, and there will be a focus on communicable diseases and common nutritional disorders.

114. Substantial financial resources will be required for this investment programme. While the Health Sector Development Programme is a comprehensive initiative, the government has prioritised international assistance to focus on developing health facilities and human resources, though other proposed components of the proposed SIP will also require international support. It is also cognizent of the importance that the programme be financially sustainable and fit within the macro-economic framework of the country.

115. Careful consideration has been given to mechanisms for mobilising local resources to develop and sustain health services. However, given the extent of the backlog in health sector resources, the successful implementation of the Health Sector Development Programme is reliant on extensive and sustained international support of these development initiatives. The first five years of the Development Programme are particularly crucial in that it is during this period that: a) training institutions must be expanded to ensure the long term sustainability of the expanded health services' human resource requirements, b) adequate drug and medical supply procurement and distribution mechanisms must be established, c) health information systems must be implemented,

and d) facilities for the production and distribution of health education materials must be developed. In addition, it is vital that the construction of new health facilities and the refurbishment of existing ones be initiated as soon as possible to begin to address the inadequate population coverage of health services. The Health Sector Development Programme is an investment in the future health and productivity of the population, and it is only with the successful implementation of this Programme that the excessive burden of ill health in Ethiopia can be reduced. The Government of Ethiopia wants to take all the steps necessary to realize and implement this investment programme.

ANNEX A

HEALTH SECTOR RESOURCE ALLOCATION ACROSS REGIONS

There appears to be considerable variation in the level of resources allocated to health by the various regional governments. These data are presented in Table A.1 and show up to a ten fold difference in per capita spending, from a low of 3.3 birr per capita in Somali region in 1996 to 36 birr per capita in Harar. The data generally show higher per capita budgeted allocations for the larger towns of Addis Ababa, Harar, and Dire Dawa, where there are relatively many hospitals, but in the two regions with the highest population, Amhara and Oromia, where there are also sizeable towns, the per capita spending also is low, and less than the national average of 5.4 birr per capita, largely due to large population base used as the denominator. Finally, in both Benishangul and Gambella regions, the relatively high per capita health spending figures is largely due to the fact of low population in both regions and the relatively high unit cost of the few publicly owned health facilities in each region.

Annex Table A.1: Estimated Regional Per Capita Health Expenditure in Ethiopia, FY 1994 and FY 1996.						
Region	Est. Recurrent Health Budgeted Expenditure		Regional Population		Est. Per Capita Recurrent Health Expenditure	
	FY 1994	FY 1996	1994 Census	1996 Est.	FY 1994	FY 1996
	Million Birr		Millions		in Birr	
Tigray	28.9	31.2	3.2	3.4	9.0	9.3
Afar	5.9	6.5	0.8	0.8	7.6	8.0
Amhara	53.9	73.1	14.1	14.8	3.8	4.9
Oromia	68.3	81.4	19.1	20.0	3.6	4.1
Somali	10.3	8.3	2.4	2.5	4.4	3.3
Benishangul/G	7.2	8.1	0.5	0.5	15.4	16.4
SNNP	34.2	44.2	10.6	11.1	3.2	4.0
Gambella	5.4	6.5	0.2	0.2	29.0	33.4
Harar	4.7	5.1	0.1	0.1	35.0	36.0
Addis Ababa	28.6	35.9	2.2	2.3	13.2	15.7
Dire Dawa	3.6	4.3	0.3	0.3	14.1	15.9
Regional Total	251.2	304.6	53.3	56.0	4.7	5.4

Notes: Data on budgeted recurrent health expenditure for 1994 comes from Table 9.6, pg.121 World Bank, Report No. 12992, 1994.

Data for FY 1996 comes from Table 6.8, pg. 55, KUAWAB, Cost and Financing of Health Services (Addis Ababa: Govt. of Ethiopia/World Bank, September 1996).

Data on Population comes from B & M Development Consultants PLC, Demographic Analysis and Population Projections (Addis Ababa: Govt. of Ethiopia/World Bank, September, 1996).

ANNEX B			
COMPONENTS AND ESTIMATED COST OF ETHIOPIAN NATIONAL DRUGS PROGRAMME, 1994-1998			
Activities by area of technical intervention		Resources required US\$	Percent
A.	POLICY AND MANAGEMENT		
A.1	National Drug Policy	91,500	1.0
A.2	Drug Legislation	95,000	1.1
A.3	Essential Drug List and NALIDE	298,000	3.4
A.4	Financing, Cost Recovery, Pricing	448,500	5.1
A.5	Institutional Support	2,130,200	24.3
A.6	Regional and International Co-operation	60,900	0.7
A.7	Traditional Medicine	---	---
A.8	Monitoring and Evaluation	168,500	1.9
		3,292,600	37.6
B.	SUPPLY AND LOGISTIC		
B.1	Quantification	110,000	1.3
B.2	Drug Procurement	138,000	1.6
B.3	Local Production	67,000	0.8
B.4	Drug Storage and Distribution	897,000	10.2
		1,212,000	13.8
C.	RATIONAL USE		
C.1	Rational Use	737,197	8.4
C.2	Drug Information	574,050	6.5
C.3	Information, Education, Communication	216,650	2.5
		1,527,897	17.4
D.	DUALITY ASSURANCE		
D.1	Drug Registration	239,100	2.7
D.2	Drug Inspection	971,870	.
D.3	Quality Control	1,187,000	13.5
D.4	Control of Narcotic & Psychotropic Substances	335,000	3.8
		2,732,970	31.2
TOTAL		8,765,467	100

Source: MOH (1994b)

ANNEX C		
STAFFING COMPLEMENT FOR PRIMARY HEALTH CARE UNITS AND DISTRICT HOSPITALS		
Post Category	PHCU and CHCs	District Hospitals
A. CLINICAL STAFF		
Medical Doctor	-	4
Public Health Officer	1	1
Senior Public Health Nurse	1	1
Junior Public Health Nurse	1	-
Nurse Anesthetist	-	2
Senior Clinical Nurse	1	5
Junior Clinical Nurse	3	10
Senior Mid-wife	-	3
Junior Mid-wife	1	2
Primary Mid-wife	2	-
Senior Environmental H.W.	-	1
Junior Environmental H.W.	1	-
Senior Pharmacy Technician	-	1
Junior Pharmacy Technician	1	2
Senior Laboratory Technician	-	1
Junior Laboratory Technician	1	2
Senior Radiographer	-	1
Junior Radiographer	-	2
Primary Health Workers(CHCs)	5	-
CHAs (CHCs)	5	-
TABs (CHCs)	5	-
TOTAL	28	38
B. ADMINISTRATION AND SUPPORT STAFF		
Personnel Administrator	-	1
Administration Assistant	1	-
Book Keeper/Accountant/Auditor	1	2
Registrars. Cashiers. Clerks	2	4
Record Keeper, archive officers	-	2
Purchase officer	-	1
Typist	1	1
Cleaners, Laundry staff. Gardeners. Cooks	3	10
Guards	7	4
Drivers	1	2
General Technicians	1	1
Porters, messengers	-	3
General Storeman	-	1
TOTAL	12	32
OVERALL TOTAL	45	70

ANNEX D**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 of 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 un 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 RHB will be allowed to use "Force Accounts" or

other arrangements.

B. Fund Administration and Payment for Works Done

1. All financial resources for the Health 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 health 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 Health 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.