ACCELERATED EXPANSION OF PRIMARY HEALTH CARE COVERAGE IN ETHIOPIA

2005 - 2009

Federal Democratic Republic of Ethiopia
Ministry of Health

November 2004
ADDIS ABABA

ACKNOWLEDGMENT

The Federal Ministry of Health would like to thank the Earth Institute of Columbia University for its input in the preparation and printing of this proposal.

TABLE OF CONTENTS

LIST OF TABLES…… iii
ACRONYMS…… iv
EXECUTIVE SUMMARY…… v
1. BACKGROUND…… 1
1.1. General…… 1
1.1.1. Demography…… 1
1.1.2. Socio-Economic…… 1
1.1.3. Health Policy and Governance…… 1
1.2. Health and Health Care…… 3
1.2.1. Health Situation and Delivery System in Ethiopia…… 3
1.2.2. The Health Sector Development Program (HSDP)…… 3
1.2.3. Health System Organization…… 4
1.2.4. Health Service Coverage and Utilization…… 4
1.2.5. Obstacles and Constraints on Providing Adequate and quality Care…… 5
2. THE EXPANSION PROPOSAL…… 6
2.1. Proposal Justification and Rationale…… 6
2.2. The proposal as part of HSDP…… 7
2.3. Health Extension Program…… 7
2.4. Strategic Planning Framework…… 9
2.5. Objectives…… 10
2.6. Strategies…… 10
2.7. Population Projection…… 11
2.8. Proposal Assumptions and Limitations…… 11
2.9. Project Costs and Financing…… 12
2.9.1. Definition of Cost Centers, Unit Cost of Investment (Capital) and Recurrent…… 12
2.10. Inventory of Existing Primary Health facilities and Estimated Number of New and Upgraded Facilities by each category…… 13
2.11. Estimated Investment and Recurrent Cost Implication of the Expansion Program Proposal…… 17
2.12. Sources of Financing…… 19
3. HUMAN RESOURCES REQUIREMENT…… 20
3.1. Human Resources Development…… 20
3.2. Training Needs…… 21
3.2.1. Health Professionals Training…… 21
3.2.2. HSDP II HRD Plans…… 21
3.3. Recurrent Costs Implications of Human Resources Requirements…… 22
4. MANAGEMENT AND IMPLEMENTATION OF THE PROPOSAL…… 22
4.1. Management…… 22
4.1.1. The Federal Ministry of Health (FMOH)…… 22
4.1.2. The Regional Health Bureaus (RHBs)…… 23
4.1.3. The Woreda Health Office (WHO)…… 23
4.2. Implementing Partners…… 24
4.3. Implementation…… 24
5. PROJECT BENEFITS AND RISKS…… 24
5.1. Benefits…… 24
5.2. Risks…… 24

LIST OF TABLES

1. Table 1: Additional HP and HC to be built according to the Original HSDP II Targets and the Acceleration Proposal…….. 7
2. Table 2: Projected Rural Population of Ethiopia by region 2005 – 2009 (in '000)…….. 11
3. Table 3: Unit cost of Investment and Recurrent Cost (USD'000*)……. 13
4. Table 4: Requirement of Primary Health Care Facilities (2005 - 2009)…….. 15
5. Table 5: Construction of Health Posts by Region and by year (2005-2009)…… 16
6. Table 6. Summary of investment (capital and recurrent) cost implication of the proposed expansion of Primary Health Care facilities (2005-2010) in million USD…….. 18
7. Table 7: Additional Human Resources Requirements……..... 20
8. Table 8: Salary Costs of Human Resource Requirement by Category of Health and Administrative Profession……. 26

ACRONYMS

ADLI	Agricultural Development Led Industrialization
ANC	Antenatal Care
EPI	Expanded Program of Immunization
FMOH	Federal Ministry of Health
HC(s)	Health Center(s)
HEP	Health Extension Package/Program
HEW	Health Extension Worker
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
HP(s)	Health Post(s)
HPN	Health, Population and Nutrition (group)
HS	Health Station
HSDP	Health Sector Development Program (I first, II second)
MDGs	Millennium Development Goals
NGO(s)	Non-Government Organization(s)
PHC	Primary Health Care
RHB(s)	Regional Health Bureau(s)
SDPRSP	Sustainable Development and Poverty Reduction Strategic Program
SNNPR	Southern Nations, Nationalities and Peoples Region
TVTES	Technical and Vocational Education Training Centers/Schools
USD	United States Dollar
WHO(s)	Woreda Health Office (s)

EXECUTIVE SUMMARY

Overall potential physical health service coverage in Ethiopia is currently at 61.3 percent. However, the majority of Ethiopians do not have adequate services of almost all of the essential components of PHC services (i.e., EPI, family planning, ANC, attended delivery etc.) due to the limited access of the population to the PHC services. This state of affairs is more serious in rural areas where over 85% of the total population lives.

This proposal aims to address the service coverage problem of the health care system through an accelerated expansion and strengthening of primary health care (PHC) services focusing on both physical availability and accessibility of essential health services by sufficiently reducing physical distance between primary health care facilities and health care users and by making essential health services available in the facilities. The focus of the proposal is also to expand the essential health services to rural Ethiopia and to enhance the health care system inputs towards the achievement of the Millennium Development Goals (MDGs).

The accelerated expansion of PHC facilities requires the construction and equipping of 563 new health centers and upgrading 2167 existing health stations to health center. Thus including the 423 already existing HCs, a total of 3153 health centers will each provide curative services to 25,000 population by the end of 2009. Similarly, the total requirement for health posts is 13,635. Currently 1386 health posts are available; 12249 new health posts will be constructed, each providing mainly preventive and promotive services to 5,000 rural population.

Capital Investment:

The total investment (capital) requirement of the proposed expansion over the five year period is estimated at approximately USD 1.2 Billion. This is broken down into:

The construction and equipping of 12,249 health posts, USD 322.01 million.
The construction and equipping of 563 new HCs, USD 224.84 million.
Upgrading and equipping of 2,167 HSs to a HC level, USD 671.52

Recurrent costs:

The estimated total recurrent cost will be around USD 461.51 million.

The estimated total investment and recurrent cost of the expansion of primary health care facilities to 85% of the rural population with the aim of achieving universal health coverage by 2009 is USD 1.69 billion. Of this total amount, the share of investment cost is 73% while that of recurrent cost is 27%.

The expansion in the number of health facilities calls for significant additions of health professionals and supervisory staff. Based on the current standard staffing pattern, 13 health professionals and 12 administrative and support staff will be required for each health center while health posts require two health extension workers each. Thus a total of 35,490

health professionals and 32,760 support staff totaling 68,250 persons are required for 2730 health centers over the proposed expansion period. The requirement for health posts is 24,498 health extension workers.

Meeting these requirements implies an aggressive development of human resources. Improvements in the following areas are called for:

- Increasing health personnel through expansion and coordination of health provider training. The training of health extension workers to man HPs is already underway with a first intake of 2800 all female trainees and plans for the training of 6000 every year up to 2009.

- Developing appropriate policy for staff retention especially in rural areas

The responsibility of overall management of the development would be shared between the Federal Ministry of Health (FMOH), Regional Health Bureaus (RHBs) and the Woreda Health Office (WHO). FMOH in consultation with the regional health bureaus will be in charge of the planning, coordination and supervision while regions and woredas will handle actual implementation on the site. Participation of all health sector partners, including multilateral and bilateral agencies, the NGOs, the private sector and the community is for the success of this undertaking.

1. BACKGROUND

1.1. General

Ethiopia is situated in the Horn of Africa covering an area of around 1.1 million square kilometers. It shares borders with Djibouti, Eritrea, Sudan, Kenya and Somalia. Ethiopia is a Federal Democratic Republic with bicameral parliament: the House of Representatives and the House of Federation. Since the mid-1970s, the administrative boundaries within the country have changed three times and currently the country has nine Regional States: Tigray, Afar, Amhara, Oromia, Somali, Benishangul Gumuz, Southern Nations Nationalities and Peoples Region (SNNPR), Gambella and Harrari and two city Administrations (Addis Ababa and Dire Dawa).

The National Regional States and City Administrations are further divided into 551 woredas. The woreda is the basic decentralized administrative unit and has an administrative council composed of elected members. The 551 woredas are further divided into roughly 15,000 rural and urban Kebeles, the smallest administrative unit in the country.

1.1.1. Demography

Based on the Central Statistics Authority (CSA), 1994 Population and Housing Census, the estimated total population of the country for 2004 is 69.1 million. With an average annual growth rate of 2.7%, it is expected to reach 81.2 million by 2009. The overwhelming majority (about 85%) of the total population lives in rural area, making Ethiopia one of the least urbanized countries in the world. The average population density is 52.2 persons per square km with substantial variations among regions. Population densities are highest in the highland regions and lowest in the eastern and southern lowlands.

1.1.2. Socio-Economic

Ethiopia is one of the least developed countries in the world with an estimated per capita income of USD100. Poverty is pervasive with 47% of the total population living below the poverty line. The UNDP's Human Development Index (HDI) for Ethiopia stands at 0.309, and when this index is adjusted for gender differences, it drops to 0.297 reflecting gender inequalities.

Weaknesses in the socio economic development of the country have been exasperated by a combination of rapid population growth, poor economic performance and educational levels which have impacted health status.

Literacy rate is very low (29%). Enrollment at the primary level has increased substantially in the last decade but is still 64% (54% for females).

Economic performance which in the 80s was characterized by low or negative growth rates in real GDP and per capita incomes, reflecting decades of civil war, drought and economic mismanagement under a centrally planned economic was reversed in the 90s.

1.1.3. Health Policy and Governance

Over the last decade, the Government has initiated a comprehensive economic reform program, which has had an important bearing on the developments of the key socio-economic sectors including health. The new economic policy is aimed at establishing a market-based economic transformation and redirecting Government interventions to the development and strengthening of social services such as education, health, investment in roads and water resources.

The policy environment created by the economic reform and macro economic stability helped address poverty in a comprehensive way through the adoption of the Sustainable Development and Poverty Reduction Program (SDPRP), which is now instrumental in prioritizing poverty related health program targets. The government is also committed to meeting targets set by global initiatives notably the Millennium Development Goals (MDG) and the recommendations of the WHO Commission on Macroeconomics and Health (CMH) aimed at strengthening the link between improved health and economic development.

The Government of Ethiopia has issued a health policy based on commitment to democracy and empowerment of the people that emanates from it and to decentralization as an important instrument of the government for the full realization of the rights and powers of the diversified population. Hence, the health policy places strong emphasis to the fulfillment of the needs of the less privileged rural population that constitutes about 85% of the total population in Ethiopia. The rural population is also the major productive force of the nation. The health policy mainly focuses on:

- Democratization and decentralization of the health system;
- Development of the preventive and promotive components of the health service;
- Ensuring accessibility of health care to all population;
- Promoting inter-sectoral collaboration, involvement of the NGOs and the private sector; and
- Promoting and enhancing national self- reliance in health development by mobilizing and efficiently utilizing internal and external resources.

The health policy has also identified the priority intervention areas and strategies to be employed to achieve the health policy issues. Arguably, the most significant policy influencing HSDP design and implementation is the government policy on decentralization. This is well articulated within the constitution and in a number of major and supplementary proclamations, and provides the administrative context in which health sector activities take place.

There is a plan now to expand this governance to the woreda level. Within the health sector, primary responsibility for service delivery and management is devolved to RHBs since the outset of HSDP I and since 2003, to the woreda level. The primary objective of the political, administrative and economic decentralization policy to woreda level is to increase local decision making and participation aimed at strengthening ownership in the planning and management of social services (Health, Education, etc) to improve efficiency in resource allocation, and to improve accountability of local government and the public service to the population.

Important steps have been taken in the decentralization of the health care system. Decision-making processes in the development and implementation of the health system are shared between the federal ministry of health (FMOH) the regional health bureaus (RHBs) and the woreda health offices (WHOs). As a result of recent policy measures taken by the Government the FMOH and the RHBs are made to function more on policy matters and technical support, while the woreda health offices have been made to play the pivotal roles of managing and coordinating the operation of the primary health care facilities at the woreda levels. The administrative structure of the country has been set to comprise of only the federal government, regions, the woredas and the Kebeles. In some regions, zonal levels do temporarily exist but with limited functions such as giving logistics support and overseeing the zonal hospitals. A kebele is the smallest administrative unit at the bottom end of the overall administrative structure next to the woreda level. A kebele has an estimated population of 5000 or about 1000 households.

1.2. Health and Health Care

1.2.1. Health Situation and Delivery System in Ethiopia

Relative to other developing counties, including those in sub-Saharan Africa, Ethiopia has extremely poor health status (largely attributable to potentially preventable infectious diseases and nutritional deficiencies) and a high rate of population growth. Wide spread poverty along with generally low income levels of 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. Remarkable achievements were recorded in major areas such as improvement in health services coverage (61.3%), human resource development and in the availability of essential drugs. However, infant mortality rate at 97/1000, child mortality rate at 166/1000 and maternal mortality rate at 871/100,000 remain unacceptably high.

The health care delivery system of Ethiopia has been historically unable to respond to the health needs of the people. It was highly centralized, and relied on a fragmented vertical programs delivery system with little collaboration between the public and the private sectors. This was restructured following the change in government. The restructuring was a reflection of strong commitment from the government and brought about a shift in the composition of expenditures in favor of social and economic sectors. Resource allocations to the health sector increased from around 3% to 6% from 1991 to 1997 and have reached 7.3% of government expenditure with an average GNP spending of 1.7% in 2001. The share of the health sector out of the total government budget allocations was maintained at around 6% despite major economic difficulties due to recurrent drought and famine. Increased government commitment and spending on health has been complemented by fiscal decentralization and broad reforms in the administration and management of public finance.

1.2.2. The Health Sector Development Program (HSDP)

Following the change of Government in 1991, a number of political and socio economic reform measures had been taken. Two of the important reform measures undertaken were the development and introduction of a new National Health

Policy in 1993, and subsequently, the formulation of a comprehensive Health Sector Development Program (HSDP). Both are the result of the critical assessment and analysis of the nature and causes of the country's health problems.

HSDP is the vehicle by which the national health policy of the government is implemented. It is intimately linked with SDPRSP and its framework impinge to the establishment of an effective and responsive health delivery system that is well synchronized with the overall long-term socio-economic development plan of the government aimed at achieving economic growth and reduction of poverty. The SDPRSP on its part is designed to refocus health activities and resources towards reducing the level of poverty by making health service accessible to the poor and vulnerable population.

The Ethiopian HSDP is essentially based on the basic principles and concepts guiding the Sector – Wide Approach (Swap). It is a long-term strategic framework built upon the partnership of the Federal Government and the Regional States as well as between the Government, the health sector donors, NGOs and the private sector in the planning, implementation, monitoring and evaluation of the Program. HSDP has two levels of governance: the Central Joint Steering Committee (CJSC) and the Regional Joint Steering Committee (RJSC) with a Program Implementation Manual (PIM) that was jointly approved by the Government and the health donor communities.

The first HSDP phase has been completed with encouraging results and learning experience that provided useful inputs to the formulation of HSDP II, which is now under implementation since 2002. HSDP II takes stock of the experience from the implementation of HSDP I and further aims to enhance the delivery of cost-effective preventive and promotive health care services through an integrated and articulated plan of Health Extension Program with the aim of reaching the rural population where health improvement matters most.

1.2.3. Health System Organization

The health policy emphasizes the importance of achieving access, for all segments of the population, to a basic package of quality primary health care service, via the decentralized state system of governance. The service package should include preventive, promotive and basic curative services. In order to attain this goal, HSDP I introduced a four-tier health delivery system. It is characterized by the primary health care units (PHCU) comprising health posts (HPs) and Health Centers (HCs) at the base and followed by district hospital as second level referral, zonal hospital and specialized referral hospital.

HPs and HCs are planned to serve 5,000 and 25,000 population, respectively while district and zonal hospitals are each expected to serve 250,000 and 1,000,000 people respectively.

1.2.4. Health Service Coverage and Utilization

The overall potential health service coverage now stands at 61.3 percent. Coverage by essential services targeted at child survival and reduction of maternal morality is much lower. EPI coverage at 51%, family planning services at 18.7%,

ANC at 35% and institutional delivery at 10% are much lower compared to the general health service coverage figure.

Utilization of health services is likewise very low at 27% per capita. Geographical distance from a health facility and socio economic factors are the major obstacle for the bulk of the Ethiopian population.

1.2.5. Obstacles and Constraints on Providing Adequate and Quality Care

Access of the population to a basic package of quality primary health care services has been limited. The recent evaluation of HSDP I and annual reviews on the implementation of HSDP II highlight the major problems and constraints.

These include very low health service coverage with a wide range of disparities between regions, inadequate availability of primary health care services to reach the general population. In addition the following have been reported as major constraints on service expansion:

- Shortage and quality of skilled human resource at all levels
- Financial constraints for capital investment and to meet recurrent costs

2. THE EXPANSION PROPOSAL

This proposal is designed to address the primary health care facilities portion of the national health care system of Ethiopia. It aims at accelerating the physical infrastructure as a base for improving and expanding primary health care services to rural Ethiopia to enhance the health care system inputs towards the achievement of the MDGs. The proposal aims to provide a framework that will allow relatively faster but sustainable improvements towards universal health coverage as an important leap forward for the provision of cost effective and efficient preventive and curative services.

2.1. Proposal Justification and Rationale

Like most developing countries, the disease burden of the majority of the people is dominated by infectious diseases. Morbidity data from health service units indicate that about 75% of the health problems are attributable to communicable diseases and malnutrition. Morbidity is further expected to rise unless present HIV/AIDS infection rates are controlled. The result of many scattered studies at various times suggested that an estimated 70-80% of all health problems in Ethiopia fall under the category of preventable communicable and nutritional illnesses. Infectious diseases in the country constitute a long list of health problems caused by a variety of parasitic, bacterial, rickettsial, and viral and fungus agents. The people of Ethiopia suffer from very high levels of disease morbidity and morality, reflecting the inadequate availability and accessibility of modern preventive and curative services.

This situation as substantiated by the findings of HSDP I Evaluation Report, clearly indicates that most Ethiopians still live beyond the coverage of PHC services and will continue to do so for several years at the pace of present implementation. There exists a very high unmet need for health care in the rural Ethiopia where over 85% of the total population lives. This formidable supply problem of the health care system can only be addressed by expanding more rapidly primary health care services to increase both physical availability and accessibility of modern health care in a way that sufficiently reduce physical distance and other factors that affect access between primary health care facilities and health care users.

Considerations of the investment and current cost implications including the human resource requirement for the operation of these health facilities in a sustainable manner on the one hand and the major diseases pattern on the other hand leads to the conclusion that the bulk of the health care needs of the rural people in Ethiopia can be met through primary health care facilities. The services thus provided will be socially and epidemiologically relevant, affordable and accessible. But, unless implementation is accelerated, the goals of health improvement set by national and international instruments will not be met. Only 18% of the required HCs and 12% of HPs were available in 2003 and the situation will not be substantially improved in the following years unless accelerated considerably.

Achievement of the development goals set by the economic policy and strategy of the country and the SDPRSP requires a much faster development in the health sector. Better health should be achieved in rural/agricultural areas in particular if the goals of Agricultural Development Led Industrialization (ADLI) are to be achieved. At the international level,

there are concerns that MDGs, to which Ethiopia is part, could not be achieved unless implementation is accelerated. The cost of delay will be very high as shown by the most recent episode of the recurrent drought and famine.

2.2. The proposal as part of HSDP

The focus of this proposal is limited to quantifying the number of additional primary health care facilities (HPs and HCs) required, and the investment and basic recurrent costs to provide a framework that will allow relatively faster but sustainable improvements towards universal health coverage as an important leap forward for the provision of cost effective and efficient preventive and curative services.

This proposal is part of the HSDP of the country. It proposes to accelerate the expansion of PHC facilities in order to attain universal coverage, as defined in the Health Policy and Strategy, by 2008. Having considered the gains and challenges in implementing HSDP I, and realizing that essential health services have not reached people at the grassroots level, HSDP II introduced the Health Extension Programme (HEP) as an innovative community based approach.

HEP implementation in HSDP II was predicated on the pace adapted on the basis of the 20-years rolling plan framework i.e. it was planned to reach full coverage by 2017. However, internal considerations related to high level of poverty, recurrent drought and famine and very slow development rate coupled with the requirements of SDPRSP and MDGs has led the government to accelerate the pace of development particularly of PHC facilities and services. Thus while HSDP II planned about 500 HPs and 77 HCs per year, the acceleration proposal more than doubles or triples these outputs (Table 1).

Table 1: Additional HP and HC to be built according to the Original HSDP II Targets and the Acceleration Proposal

Facility		Original Plan				Acceleration Proposal			
		2002/3	**2003/4**	**2004/5**	**Total**	**2005**	**2006**	**2007**	**Total**
HP	Total	**489**	**523**	**526**	**1538**	**1225**	**2450**	**3063**	**6738**
	New	472	495	493	1460	1225	2450	3063	6738
HC	Total	**55**	**60**	**57**	**172**	523	547	559	1629
	New	45	51	47	143	89	114	124	327
	Upgraded HS	10	9	10	29	434	433	435	1302

Other activities of HSDP II will be carried out as previously planned with the necessary adjustments being made on annual basis. The acceleration proposal will form an integral part of HSDP III in which, during its planning, the full implications of the acceleration will be articulated and addressed.

2.3. Health Extension Program

In spite of the past remarkable efforts made and gains registered by the health sector, it is realized that essential health services have not reached the people at the grass

root/kebele level as stipulated in the health sector policy. As a result, the burden of preventable infectious diseases, the coverage of the essential health care components of primary health care are still of serious concern as indicated in the reports of the FMOH.

Consequently, the Government of Ethiopia decided to start the development and implementation of an innovative community – based approach directed at creating healthy environment as well as healthful living by introducing a health extension service as a sub-component of health service delivery and quality of care. Two female health extension workers (HEWs) will be trained and assigned to a health post providing outreach services to households in their respective rural kebeles. Sixteen training health extension packages (i.e. nutrition, personal hygiene, adolescent reproductive heath, disease prevention and control and health education extension package etc.) were developed and are being used to train the first group of HEW trainees selected from the regions. Their training will last for one year and is divided into theoretical and practical classes. Unlike previous community health workers who were supposed to be compensated by the community, the HEWs will be formally employed and salaried by the government and their service is part and parcel of the health system. This approach will have immediate impact on the issues of sustainability and retention of the workers.

It is planned to train about 25,000 health extension workers over the five years program period and place them in about 13,000 rural Kebeles. Implementation of HEP has started in EFY 1995 in 50 Kebeles in Tigray and Oromia and in 17, 24 and 3 Kebeles in Amhara, SNNPR and Dire Dawa respectively, on pilot basis, using 194 existing health workers.

Currently Technical and Vocational Training Centers (TVETs) in selected regions are being used to train the health extension workers. These are two in Tigray Regional State (Axum, Mekele), two in Amhara Regional State Dessie, Debremarkos,), five in Oromia Regional State (Goba, Shashemen, Assela, Mettu, Fitche,) two in SNNPR Regional State (Dilla, Butajira,) one each in Harrari Regional State (Harar Medhane Alem), Benishangul Gumuz (Metekel), and Dire Dawa Administrative Council (Dire Dawa) making a total of 14 TVETs. The number of TVETs has now reached 20. Benishangul Gumuz and Gambella have not as yet begun to train Health Extension workers although Benishangul Gumuz has made arrangements to begin the training of health extension workers as of this year (2004).

Regions have, through Regional Health and Education Bureaus and Technical and Vocational Training Commissions, jointly recruited the required trainers. Their distribution has been as follow:

• Tigray Regional State	10
• Amhara Regional State	26
• Oromia Regional State	25
• SNNPR Regional State	14
• Harari Regional State	3
• Dire Dawa Administrative Council	4
• Benishangul Gumuz Regional State	2
TOTAL	**84**

The eighty-four trainers which comprise public health nurses, sanitarians, health officers and home economists were locally recruited and given one-month training on methodology course in Addis Ababa from November 17, 2003 to December 18, 2003. In addition, arrangements are being made to recruit 14 Indian health teachers for the 14 TVETs.

Two thousand eight hundred female students who completed grade ten, from six regional states have enrolled into the fourteen technical and vocational training centers beginning January 19, 2004 for one year training. Adequate textbooks, lecture notes, modules and reference texts have been dispatched to the schools. It is also anticipated that further logistics and appropriate reference texts will be provided by the Regional Health Bureaus to facilitate the teaching and learning process. The plan is to train about 6,000 a year to meet the requirements of HPs over the coming 5 years.

Implementation guideline is being developed by the Health Extension Coordinating Office of the Federal Ministry of Health. The draft guideline was earlier distributed to different departments of the Federal Ministry of Health and to appropriate donor agencies and non government organizations for enrichment.

The Health Extension Package Curriculum was developed jointly by FMOH and the Ministry of Education. The curriculum has two parts - a main package of core courses and common supportive courses. Its major areas of focus are environmental health, personal hygiene, HIV/AIDS, malaria, TB, child health and maternal health. The curriculum produced has been distributed to the fourteen TVET Centers selected to train the health extension workers, regional health and education bureaus and TVET commissions.

2.4. Strategic Planning Framework

The FMOH has just adopted its strategic planning management (SPM) framework. It provides the overall strategic framework for implementation of the proposal.

VISION

The FMOH national vision is a healthy population capable of making prime and active contribution to the development of the country.

MISSION

The mission of the FMOH is to address the high unmet demand for health care services through the accelerated construction of standardized primary health care facilities with appropriate medical equipments and that are accessible to the majority of Ethiopians in terms of providing equitable, quality and acceptable preventive and basic curative health care services.

VALUES AND PRINCIPLES

For the effective realization of the vision and mission of the FMOH as it relates to this proposal, the management and staff at all levels of the health system will individually and collectively promote the following values:

- Provide efficient, quality and equitable service
- Adhere to standards of professional ethics and discipline

2.5. Objectives

Major Objective:

The major objective of the proposal is to expand and achieve universal health coverage by the end 2008 aimed at improving the delivery of primary health care service to the most neglected rural population of Ethiopia.

Specific Objectives:

- Construction and equipping additional 12,249 health posts each providing mainly preventive and promotive services to 5,000 rural population;
- Training and deployment of 24,498 paid female health extension workers to man the health posts and the required health staff for the HCs;
- Construction and equipping of additional 2730 health centers so that each HC will provide curative services to 25,000 population and provide technical assistance to 5 health posts;
- Preparation of standard guidelines for planning, implementation, monitoring and evaluation.

2.6. Strategies

- Ensuring universal health coverage in a period of five years by institutionalizing the rural kebele health service through the establishment of increased numbers of HPs manned by paid health extension workers.
- Ensuring that standard minimum health care services are provided at HP and clearly defining the roles of HPs and HCs in the delivery of health care.
- Enhancing the capacity of district health offices in the expansion PHC facilities and services[1].
- Improving the capacity of the FMOH in organization, skilled manpower, budget to enhance its planning, follow up of projects and technical support to regions in project implementation.
- Improving the capacity of the RHBs and Woredas in terms of skilled human resources and budget to enhance their construction, design, supervision and overall project implementation and reporting.

[1] The decentralization process towards the woreda levels was launched in 2002/3. While it promises a lot in terms of advancing the democratization process, bringing power closer to the grassroots level and ensuring better context-related, responsive and equitious development, it must be nurtured by all appropriately at its growing stage. An important prerequisite is empowerment with the necessary human, material and financial resources.
The acceleration proposal means that, in less than 5 years, most woredas (over 350 with population of over 100,000) will have to administer over 4 HC and over 20 HP in addition to other health services often scattered over large areas.
Most WHOs are currently understaffed with often less than half the required staff complement. Most of the existing staffs are health workers taken from SDP. They have little training and experience in health care services management. In terms of HR, therefore, these offices will have to be strengthened without undue depletion of health care services. In-service/skill upgrading training will have to be provided on regular basis. The implications for supervision and technical and logistics support for such an accelerated growth are very high. Measures should, therefore, be taken to strengthen the WHOs with communication, transport and other requirements for this purpose. Budgetary and other financial allocations to WHOs would have to be increased.

- Developing systems for training and retention of health professionals at all levels
- Mobilizing the community to actively participate in decision making on important health issues at kebele level

2.7. Population Projection

Population projection by region has been made to estimate the numbers and cost implications of the proposal. This is presented in table 2. The projection is based on CSA's population and housing survey of 1994. The natural population growth rate of each region ranges from 1.5% per year in Addis Ababa to as high as 2.9% in Oromia and SNNPR Regional States. The table provides population projection for the rural Ethiopia by region from 2004–2009. Overall, for all regions, the population projection for rural Ethiopia shows that starting with 59.9 million in 2004 it reaches 67.6 million by the 2009.

Table 2: Projected Rural Population of Ethiopia by region 2005 – 2009 (in '000)

Region	2004	2005	2006	2007	2008	2009
Tigray	3,367	3,443	3,519	3,595	3,673	3,750
Afar	1,213	1,237	1,263	1,286	1,312	1,336
Amhara	16,138	16,529	19,925	17,325	17,728	18,136
Oromia	21,891	22,456	23,030	23,613	24,202	24,794
Somalia	3,438	3,515	3,594	3,676	3,756	3,839
Benishangul-Gumuz	538	551	563	576	589	603
SNNPR	12,922	13,271	13,625	13,983	14,344	14,706
Gambella	191	195	200	204	204	212
Harari	71	72	74	76	78	79
Dire Dawa	98	100	102	104	104	108
Total	**59,867**	**61,369**	**62,895**	**64,438**	**65,990**	**67,563**

2.8. Proposal Assumptions and Limitations

The expansion proposal assumes an accelerated and ambitious universal primary health care coverage within five years covering 2005 – 2009. It takes into full consideration the National Health Coverage Standard that assume the establishment of one health post for every rural kebele for the service of an average population of 5,000 staffed by two health extension workers, and one health center for a population of 25,000.

Another important assumption is that all existing health stations (HSs) will be phased out with a decision either to upgrade them to HCs or downgrading them to HPs. The expansion proposal focuses on rural areas where 85% of the population lives in approximately 13,000 kebeles. Therefore, population and physical facility forecast is made on the assumption that 85% of the total population living in 13,000 kebeles is the major beneficiaries of this initiative and both (population and kebeles) are expected to increase over the five – year projection period from 2005 – 2009.

In this proposal, no attempt has been made to quantify the number of additional hospitals that might be required for expanding the hospital based services and the recurrent cost implication of various other programs and services that are expected to follow the proposed expansion of primary health care facilities. It does not also estimate the training needs and costs

(except the HEWs) of various health workers who should be available to work in the new and upgraded health facilities.

Finally, the major emphasis of this proposal is equitable geographical location and allocation of primary health care resources within the framework of the decentralization of health care administration system. With this principal aim, this proposal is developed to serve as a framework for forecasting the future expansion of primary health care services and the cost implication of this undertaking in the country.

2.9. Project Costs and Financing

2.9.1. Definition of Cost Centers, Unit Cost of Investment (Capital) and Recurrent

The investment cost for the primary health care expansion proposal is defined as expenditure incurred at interval of greater than one year and includes the following costs:

- Construction cost of new HCs and HPs;
- Construction cost for upgrading HSs to HCs;
- Cost of health facility equipment and furniture for new HPs and HCs and for upgraded HSs; and
- Training of HEWs.

The unit cost of investment has been developed using FMOH recent estimate and is being allowed to grow at an annual rate of 5% up to 2009.

Recurrent costs are defined as those costs, which occur with greater than annual frequency. The types of costs, which are the major concern of this proposal, are:

- Salary of health professionals and support staff;
- Cost of drugs and medical supplies;
- Other operational costs; and
- Preventive maintenance costs for buildings.

Recurrent costs in this proposal are fixed throughout to the 2004 prices because of less reliability in the annual growth rate pattern of the health recurrent cost.

Table 3 below summarizes the unit cost of investment and recurrent cost by type of health facility and by cost centre for the years 2005 - 20010.

Table 3: Unit cost of Investment and Recurrent Cost (USD'000*)

Health posts: **Capital:**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
New HP	18.62	19.55	20.53	21.55	22.63	
Med. Equip HP	3.84	4.04	4.24	4.45	4.47	
Furniture HP	1.16	1.22	1.27	1.34	1.35	
Training of HEW		0.80	0.80	0.80	0.80	
Recurrent;						
Salary HEW		1.06	1.06	1.06	1.06	1.06
Operational HP[2]		0.67	0.67	0.67	0.67	0.67
Preventive Maint.		0.29	0.29	0.29	0.29	0.29
Health Centers: **Capital:**						
New HC	318.45	334.37	351.09	368.65	387.08	
Med. Equip, New HC		30.00	31.50	33.08	34.73	36.47
Furniture, New HC		11.60	12.18	12.79	13.43	14.10
Upgrading HS to HC	238.84	250.78	263.32	276.48	290.31	
Med. Equip. for Upgraded HC		30.00	31.50	33.08	34.73	36.47
Furniture for Upgraded HC		11.60	12.18	12.79	13.43	14.10
Recurrent:						
Salary HCs		16.14	16.14	16.14	16.14	16.14
Drug & Med. Supp. HC		13.70	14.39	15.10	15.86	16.65
Operational HC		15.19	15.19	15.19	15.19	15.19
Preventive Maint. HC		1.16	1.16	1.16	1.16	1.16

* Based on the average exchange rate of USD $1=Birr 8.6356 in mid June 2004

2.10. Inventory of Existing Primary Health facilities and Estimated Number of New and Upgraded Facilities by each Category

The official report of the FMOH which provides an updated inventory of primary health care facilities shows the number of existing facilities in the country, excluding Addis Ababa, for the year 2004 to be as follows:

- 423 Health Centers,
- 2,248 Health Stations and
- 1,386 Health posts

[2] The budgetary operational expenditure allotted per kebele is about US$ 0.13 per capita. This is an important venture as it is the 1st direct community-level government allocation. This will be supplemented by community contribution (for water provision, waste and excreta disposal etc) and by direct project -based funds to be developed at the community level through support from woredas and regions. Guidelines and manuals for developing such projects will be prepared at the appropriate levels.

This number is too small and inadequate considering the size of the rural population to be served. In addition, their distribution is uneven with extended pockets remaining unserved.

The construction of additional facilities and rehabilitation and or upgrading of existing facilities are thus a major component of the government's plan, expressed in HSDP II, to increasing the coverage of health services. The recent review of the implementation of HSDP I, while noting improvements in the expansion of health infrastructure and coverage of health services at the peripheral areas, expressed concerns over the speed of the expansion.

Increasing the coverage of health service through the construction of new facilities and upgrading of existing facilities and equipping and furnishing of primary health care service are thus major targets of the ongoing HSDP and will continue to be so in forthcoming plans.

This proposal is aimed at achieving universal health coverage through the construction and upgrading of primary health care service in underserved areas. It lays down the facility requirements, the manpower and equipment needs and the investment and operational cost implications.

Tables 4 and 5 show the required number of new HCs, upgrading plan of HSs to HCs and construction of new HPs by region in 2005 – 2009. As shown in the two tables, the plan for new construction and upgrading starts at 10% for 2005 and progressively increase at the rate of 20% in the year 2006, 25% in year 2007, 30% in year 2008 and 15% by 2009.

Table 4: Requirement of Primary Health Care Facilities (2005 - 2009)

Regions	New Health Centers and Upgraded Health Stations to Health Centers by Region and by Year														
	Existing HCs 2004	New Health Centers to be Constructed						Existing HSs	Health Stations to be Upgraded						Total HCs Required by 2009
		2005	2006	2007	2008	2009	Total		2005	2006	2007	2008	2009	Total	
Tigray	**35**	0	0	0	0	0	**-**	182	32	32	32	32	32	**160**	**195**
Afar	**8**	0	1	0	0	0	**1**	50	10	10	10	10	10	**50**	**59**
Amhara	**81**	22	44	55	66	33	**220**	527	105	105	106	106	105	**527**	**828**
Oromia	**141**	17	18	18	18	17	**88**	952	190	190	191	191	190	**952**	**1,181**
Somali	**20**	15	15	15	15	15	**75**	95	19	19	19	19	19	**95**	**190**
Benishangul-G	**7**	0	0	0	0	0	**-**	74	4	4	4	4	4	**20**	**27**
SNNPR	**118**	35	36	36	36	36	**179**	357	71	71	72	72	71	**357**	**654**
Gambella	**8**	0	0	0	0	0	**-**	33	1	1	1			**3**	**11**
Harari	**2**	0	0	0	0	0	**-**	10	1	1				**2**	**4**
Dire Dawa	**3**	0	0	0	0	0	**-**	22	1					**1**	**4**
Total	**423**	89	114	124	135	101	**563**	2,302	434	433	435	434	431	**2,167**	**3,153**

The total physical facility requirement to reach universal coverage by 2009 will be 3,153 Health Centers and 13,635 HPs. by the end of 2009. These requirements are expected to be accomplished through the construction of new facilities by each category (563 new HCs, upgrading of 2,167 Health stations to HCs and 12,249 new HPs).

Table 5: Construction of Health Posts by Region and by year (2005-2009)

Region	Existing HPs 2004	New Health Posts to be Constructed					Total	Total HPs Required by 2009
		2005	**2006**	**2007**	**2008**	**2009**		
Tigray	**121**	64	128	160	191	96	**639**	**760**
Afar	**56**	22	44	55	65	33	**219**	**275**
Amhara	**410**	324	648	811	973	486	**3,242**	**3,652**
Oromia	**326**	471	943	1,179	1,414	707	**4,714**	**5,040**
Somali	**54**	69	137	1371	206	103	**686**	**740**
Benishangul-G	**44**	8	15	19	23	11	**76**	**120**
SNNPR	**306**	264	527	659	791	395	**2,636**	**2,942**
Gambella	**42**	2	5	6	7	4	**24**	**66**
Harari	**7**	1	2	2	3	1	**9**	**16**
Dire Dawa	**20**	0	1	1	1	1	**4**	**24**
Total	**1,386**	1,225	2,450	3,063	3,674	1,837	**12,249**	**13,635**

2.11. Estimated Investment and Recurrent Cost Implication of the Expansion Program Proposal

The investment and recurrent cost implications of the expansion program by region and by each year for 2005 - 2009 is summarized in Table 6 below.

The total investment (Capital) cost of establishing the additional 12,249 Health Posts over a period of five years will be approximately USD 322.22 million (using the average exchange rate of Birr 8.6356 to 1 USD in Mid June 2004). This will involve the construction and procurement plans for equipment and basic furniture for new HPs at the rate of 10% (1,225) of the total requirement of 12,249 in 2005, 20% (2,450) in 2006, 25% (3,062) in 2007, 30% (3,675) in 2008 and 15% (1,837) in 2009.

The upgrading investment cost of the existing HSs to HCs will be approximately USD671.52 million for 2005 – 2009. This will require a yearly allocation of about USD 134.2 million per year for five years up to 2009. The upgrading construction plan for 2,167 HSs will be spread over five years at an average of 433 per year starting 2005. The investment cost for the construction of 563 new HCs (over and above the existing 423) over the five – year period will be approximately USD 224.84 million. The construction plan and provision of equipment and furniture could start by the year 2005 at the rate of 10% (89) of the total requirement, 20% (114) in 2006, 25% (124) in 2007, 30% (135) in 2008, and 15% (101) in 2009).

In summary, the estimated total investment and recurrent cost implication of the expansion of primary health care facilities to the rural population (85% of the total population) with the aim of achieving universal health coverage by 2010 will be USD 1.69 billion over the five year period covering 2005 – 2010. Of this total amount, the share of investment cost is 73% while the share of recurrent cost is 27%. The yearly allocation of the total budget (investment and recurrent costs) has been estimated at approximately USD 1.69 billion over the five year period requiring a yearly allocation of USD 160.93 million in 2005, around USD 258.82 million in year 2006, USD 321.75 in 2007, USD 389.94, USD 372.64 million in year 2009.

As shown in Table 6, the estimated total recurrent cost implication of the expansion program for both additional HPs and HCs including upgraded HSs to HCs is around USD 461.51 million over five years (2005 – 2010). This would require a yearly allocation of starting with around USD 26.63 million in 2006, USD 57.57 million in 2007, USD 91.13 million in 2008, USD 127.29 million in 2009 and USD 158.88 million by 2010.

Table 6. Summary of investment (capital and recurrent) cost implication of the proposed expansion of Primary Health Care facilities (2005-2010) in million USD

Cost Center	2005	2006	2007	2008	2009	2010	TOTAL
Capital cost	**160,932.03**	**232,189.68**	**264,178.22**	**298,803.96**	**245,356.53**	**26,900.61**	**1,228,361.03**
Health post	**28,934.50**	**63,726.95**	**82,206.48**	**103,404.65**	**53,737.26**		**332,009.83**
New HP	22,809.50	47,899.95	62,878.95	79,192.99	41,576.32	-	254,357.70
Med. Equip HP	4,704.00	9,898.00	12,987.12	16,349.30	8,211.39	-	52,149.81
Furniture HP	1,421.00	2,989.00	3,890.01	4,923.16	2,479.95	-	15,703.12
Training of HEW		2,940.00	2,450.40	2,939.20	1,469.60		9,799.20
Health Center	**131,997.53**	**168,462.73**	**181,971.74**	**195,399.31**	**191,619.27**	**26,900.61**	**896,351.20**
New HC	28,342.05	38,118.47	43,535.30	49,767.17	39,094.87		198,857.86
Med. Equip. New HC		2,670.00	3,591.00	4,101.30	4,688.38	3,682.98	18,733.67
Furniture New HC		1,032.40	1,388.52	1,585.84	1,812.84	1,424.09	7,243.68
Upgrading HS to HC	103,655.48	108,587.47	114,543.48	119,994.17	125,122.95	-	571,903.55
Med. Equip. Upgraded		13,020.00	13,639.50	14,387.63	15,072.28	15,716.50	71,835.90
Furniture Upgraded		5,034.40	5,273.94	5,563.22	5,827.95	6,077.05	27,776.55
Recurrent		**26,630.47**	**57,574.54**	**91,131.58**	**127,287.93**	**158,882.79**	**461,507.30**
Health post		**2,472.05**	**7,416.15**	**14,310.16**	**22,113.01**	**27,439.96**	**73,751.33**
Salary HEW		1,296.05	3,888.15	7,128.80	11,015.90	12,959.44	36.288.34
Operational HP		820.75	2,462.25	4,514.46	6,976.04	8,206.83	22,980.33
Prev. Maint.		355.25	1,065.75	1,954.02	3,019.48	3,552.21	9,946.71
Health Center		**24,158.42**	**50,158.39**	**77,534.29**	**106,276.51**	**134,164.31**	**392,291.92**
Salary HCs		8,442.27	17,271.94	26,295.32	35,380.12	44,067.66	131,557.30
Drug & Med. Supp. HC		7,165.10	15,391.95	24,604.82	34,859.10	45,461.15	127,482.12
Operational HC		7,944.37	16,253.30	24,744.51	33,387.62	41,468.70	115,854.13
Prev. Maint. HC		606.68	1,241.20	1,889.64	2,549.68	3,166.80	8,847.32
GRAND TOTAL	**160,932.03**	**258,820.15**	**321,752.76**	**389,935.53**	**372,644.53**	**185,783.40**	**1,689,868.33**

2.12. Sources of Financing:

Seventy three percent of total financing requirement, USD 1.23 billion, is investment costs requiring financing from external sources. The remaining balance of 479.48 million (27% of the total) is recurrent costs that has to be covered by the government.

3. HUMAN RESOURCES REQUIREMENT

3.1. Human Resources Development

The proposal plans to expand the number of health facilities to 3153 HCs and 13,365 HPs. The expansion calls for significant additions of health professionals and supervisory staff. Based on the current standard staffing pattern 13 health professionals (including one each of health officer, senior midwife, public health nurse, clinical nurse, assistant public health nurse, assistant environmental health technician, assistant lab technician, two junior midwives and three assistant clinical nurses) and 12 administrative and support staff will be required for each health center. The requirement of health posts is two health extension workers each.

Table 7 below summarizes the total yearly human resources requirement projections for the years 2005 - 2009

Table 7: Additional Human Resources Requirements

Category of Health Professionals	No. Required per HCs	Salary Start (Birr)	No. of Health staff Required					
			2005	2006	2007	2008	2009	Total
No of Health Professionals HC								
H. Officers	1	805	523	547	559	569	532	2730
Senior midwife	1	850	523	547	559	569	532	2730
Junior midwife	2	595	1046	1094	1118	1138	1064	5460
Public Health Nurse	1	595	523	547	559	569	532	2730
Clinical Nurse	1	595	523	547	559	569	532	2730
Ass. Clinic Nurse	3	426	1569	1641	1677	1707	1596	8190
Ass. Public Health Nurse	1	426	523	547	559	569	532	2730
Ass. Env. Health tech.	1	426	523	547	559	569	532	2730
Ass. Lab. Technicians,	1	426	523	547	559	569	532	2730
Ass. Pharmacy Technician,	1	426	523	547	559	569	532	2730
Sub Total	**13**		**6799**	**7111**	**7267**	**7397**	**6916**	**35490**
No of Administrative and Supportive Staff HC								
Administrative Assistant	1	500	523	547	559	569	532	2730
Registrar (Property Manager)	1	450	523	547	559	569	532	2730
Cashier	1	530	523	547	559	569	532	2730
Typist	1	530	523	547	559	569	532	2730
Clerk	1	380	523	547	559	569	532	2730
Cleaners and Laundry	3	248	1569	1641	1677	1707	1596	8190
Guards and Gardeners	2	277	1046	1094	1118	1138	1064	5460
Driver	1	381	523	547	559	569	532	2730
General Technician	1	530	523	547	559	569	532	2730
Sub Total	**12**		**6276**	**6564**	**6708**	**6828**	**6384**	**32760**
TOTAL STAFF HC			**13075**	**13675**	**13975**	**14225**	**13300**	**68250**
Health Posts	**2**	**380**	**2450**	**4900**	**6126**	**7348**	**3674**	**24498**

Table 7 shows that a total of 35,490 health professional and 32,760 support staff will be required giving a total requirement of 68,250 persons for health centers over the proposed expansion period. The requirement for health posts is 24,498 health workers.

Meeting these requirements implies an aggressive development of Ethiopia's health human resources. Improvements in the following areas are called for:

- Increase health personnel through expansion and coordination of health provider training
- Develop appropriate policy for staff retention especially in rural areas

3.2. Training Needs

At present various programs notably the Health Extension Program and the Civil Service Program aim to address these issues.

3.2.1. Health Professionals Training

Various health professional training schools and training centers have programs geared towards meeting the requirements of the health sector. In 2002/03 (EFY1995) the FMOH bulletin reported 2520 different kinds of health professionals graduated from institutions of higher learning, senior health training schools, junior health training schools and a few private schools. The list of graduated included:

- 182 Doctors
- 181 Health Officers
- 50 Pharmacists
- 1238 Nurses
- 368 Laboratory technicians
- 226 Environmental health technicians
- 29 Radiography technicians

Out of the 2520 health professionals graduated 1732 (68%) are produced by the 5 Universities as follows:

- Addis Ababa University 408
- Gondar University 470
- Jimma University 432
- Alemaya University 195
- Debub University 227

Senior health training schools produced 671 while junior health training schools 673 mostly mid level health professionals. A few private schools have come into the field of training with 54 nurses graduating in 2002/03 (EFY 1995).

3.2.2. HSDP II HRD Plans

HSDP II's human resources development plans aim to train and supply relevant and qualified health workers of different categories. More specifically it is planned to supply skilled manpower in adequate numbers to new facilities. The following targets were set for the plan period:

- Train and deploy 1436 high level professionals
- Train and deploy 4823 mid level health workers of different categories
- Train and deploy 5684 lower level health workers of different categories
- Train and deploy 10,869 frontline health workers 2400 of which will be HEWs
- Upgrade 2160 health workers
- Provide other trainings to 11,119 health workers and administrative staff

The plan now is to triple the above number for the next intake with more schools and TVETS being established as training centers.

3.3. Recurrent Costs Implications of Human Resources Requirements

Projected increases in human resources requirements would have significant bearings on recurrent costs in terms of salary payments.

The total number of HCs to be constructed by 2008 is 2730 with an average of 520 centers coming into operation each year. This requires a total staff of 68250 over the project period broken down into:

- 35490 health professionals of different categories
- 32760 administrative and support staff

The cost of engaging this size of staff is calculated at USD 131.65 million implying an average outlay of USD 26.33 million per annum.

The projection for HPs is constructing 12,249 with an average of 2041 posts per annum. This requires a total staff of 24, 498 HEWs over the project period. That is an outlay of USD 36.29 million over the project period or USD 7.26 million per annum (Table 8).

4. MANAGEMENT AND IMPLEMENTATION OF THE PROPOSAL

4.1. Management

The responsibility of overall management of the proposal will be shared between the FMOH, RHBs and the Woreda Health Office in line with the established system for the management of HSDP. At all levels, special attention will be given to the implementation of this proposal. FMOH in consultation with the regional health bureaus will be in charge of the planning, coordination and supervision whilst regions will handle actual implementation on the site.

Health sector partners, including NGOs and the community will also be involved. Responsibilities for the management of this proposal will be on the basis of the duties and responsibilities given in the relevant official documents. The primary responsibility of each actor specifically for the management of this proposal is as follows:

4.1.1. The Federal Ministry of Health (FMOH)

FMOH will have prime responsibility to oversee the proposal and coordinate its implementation. It will be responsible for:

- Formulation of health sector policies, plans and health care standards;
- Provision of technical assistance and advice to RHBs;
- Promotion of the expansion of equitable health service throughout the country
- Provision of logistical support to RHBs;
- Setting minimum standards for the construction of HCs and HPs;
- Determining the qualifications and licensing of health professionals to be engaged in the delivery of health care at each level of the health care system;
- Engagement in the international procurement of drugs, medical equipment and supplies to RHBs;
- Conducting and coordinating monitoring and evaluation activities;
- Facilitating collaboration amongst the public, donors, NGOs and the private sector in the delivery of health care;
- Coordination of foreign assistance and other resources to health sector; and
- Collaboration with appropriate institutions in the development of policy guidelines and standards for the training of health workers.

4.1.2. The Regional Health Bureaus (RHBs)

RHBs will be responsible for:

- Formulation of regional health care plans and programs based on national health policies and health development program;
- The establishment and management of the health facilities (health center, health posts) and training institutions;
- Recruitment, training and administration of mid level health professionals including health extension workers;
- The procurement and distribution of drugs, equipment and other medical supplies;
- Invitation for bid, evaluating contract award, and supervision of construction of health facilities (HPs and HCs);
- Monitoring and evaluation of the implementation of the proposal; and
- Making progress report on the implementation to FMOH;

4.1.3. The Woreda Health Office (WHO)

WHOs will be responsible for:

- District level health planning, resource allocation, implementation monitoring and evaluation;
- Implementation of health programs including the construction of health facilities;
- Management of district health facilities (district hospitals, HCs and HPs), including human resources; and
- The selection of sites for the construction of health facilities including the supervision of construction.

4.2. Implementing Partners

Partners involved in implementation of this proposed expansion PHC service include government departments and the HPN donor group and development partners. The Ministry of Finance and Economic Development (MOFED), Ministry of Capacity Building (MCB) and the Ministry of Education (MOE) have important bearing on overall implementation of the proposal.

- MOFED has an overall responsibility for the central allocation of health resources and for negotiation of external assistance funds.

- MOCB oversees Strategic Planning and Management and Civil Service Reform Program activities at all levels.

- MOE is responsible for health training institutions and closely works with the FMOH in the development and revision of curriculums for health professional training at higher levels and for HEWs.

- The HPN donor group and other health development partners are expected to continue supporting the health sectors development programs. These include funding, technical support and joint participation in the monitoring and evaluation of the Health Sector Development Program.

4.3. Implementation

The time schedule for implementation of the project is the five year period 2005 - 2009.
The construction of additional HPs primary health care facilities and upgrading of HS to HCs begins in 2005 and annual construction proceeds as indicated in the construction plan.

Identification and training of health professionals has began and 2800 HEWs are undergoing training; it is planned to train about 6000 each year over the remaining project years. The provision of medical equipment and supplies to HPs and HCs starts in the second year of the construction of a health facility.

5. PROJECT BENEFITS AND RISKS

5.1. Benefits

The major benefits of the proposal are improvement of the health coverage (universal accessibility) by institutionalizing the kebele health delivery system and expansion of the PHC services to achieve MDGs.

5.2. Risks

The following risks are associated with the implementation of the project:

- Inability to raise sufficient financial resources to meet the investment and recurrent cost requirements of the accelerated expansion program;
- Delays in implementation of construction civil works and equipment installation; and
- Insufficient partner and community support in the facility expansion project;

- Inability to train and deploy the required health workers in the newly established HPs and HCs;
- High turnover of the Health Extension workers leaving rural communities seeking employment in urban areas

Table 8: Salary Costs of Human Resource Requirement by Category of Health and Administrative Profession

Category of Health Professionals	No. per HCS	Salary Start	Months	2005	2006	2007	2008	2009	TOTAL
Number of Health Centers				**523**	**1,070**	**1,629**	**2,198**	**2,730**	
Health Professionals				**6,799**	**13,910**	**21,177**	**28,574**	**35,490**	
H. Officers		93.22	12	585,048.72	1,196,944.80	1,924,109.64	2,458,770.72	3,053,887.20	**9,218,761.08**
Senior midwife		98.43	12	617,746.68	1,263,841.20	1,924,109.64	2,596,189.68	3,224,566.80	**9,626,454.00**
Junior midwife		68.90	12	864,832.80	1,769,352.00	2,693,714.40	3,634,612.80	4,514,328.00	**13,476,840.00**
Public Health Nurse		68.90	12	432,416.40	884,676.00	1,346,857.20	1,817,306.40	2,257,164.00	**6,738,420.00**
Clinical Nurse		68.90	12	432,416.40	884,676.00	1,346,857.20	1,817,306.40	2,257,164.00	**6,738,420.00**
Ass. Clinical Nurse		49.33	12	928,785.24	1,900,191.60	2,892,908.52	3,903,384.24	4,848,152.40	**14,473,422.00**
Ass. Public Health		49.33	12	309,595.08	633,397.20	964,302.84	1,301,128.08	1,616,050.80	**4,824,474.00**
Ass. Env. Health Tech		49.33	12	309,595.08	633,397.20	964,302.84	1,301,128.08	1,616,050.80	**4,824,474.00**
Asst. lab. Technicians		49.33	12	309,595.08	633,397.20	964,302.84	1,301,128.08	1,616,050.80	**4,824,474.00**
Ass. Pharmacy		49.33	12	309,595.08	633,397.20	964,302.84	1,301,128.08	1,616,050.80	**4,824,474.00**
Sub Total				**5,099,626.56**	**10,433,270.40**	**15,985,767.96**	**21,432,082.56**	**26,619,465.60**	**79,570,213.08**
Administrative and Supportive Staff									
Administrative		57.90	12	363,380.40	743,436.00	1,131,829.20	1,527,170.40	1,896,804.00	**5,662,620.00**
Registrar		52.11	12	327,042.36	669,092.40	1,018,646.28	1,374,453.36	1,707,123.60	**5,096,358.00**
Cashier		61.37	12	385,158.12	787,990.80	1,199,660.76	1,618,695.12	2,010,481.20	**6,001,986.00**
Typist		61.37	12	385,158.12	787,990.80	1,199,660.76	1,618,695.12	2,010,481.20	**6,001,986.00**
Clerk		44.00	12	276,144.00	564,960.00	860,112.00	1,160,544.00	1,441,440.00	**4,303,200.00**
Cleaners and Laundry		28.72	12	540,740.16	1,106,294.40	1,684,255.68	2,272,556.16	2,822,601.60	**8,426,448.00**
Guards and Gardeners		32.08	12	402,668.16	823,814.40	1,254,199.68	1,692,284.16	2,101,881.60	**6,274,848.00**
Driver		44.12	12	276,897.12	566,500.80	862,457.76	1,163,709.12	1,445,371.20	**4,314,936.00**
General Technician		61.37	12	385,158.12	787,990.80	1,199,660.76	1,618,695.12	2,010,481.20	**6,001,986.00**
Sub Total				**3,342,346.56**	**6,838,070.40**	**10,410,482.88**	**14,046,802.56**	**17,446,665.60**	**52,084,368.00**
Total Staff Salary HC				**8,441,973.12**	**17,271,340.80**	**26,396,250.84**	**35,478,885.12**	**44,066,131.20**	**131,654,581.08**
HPs (cumulative)				**1,225**	**3,675**	**6,738**	**10,412**	**12,249**	
HEWs (cumulative)				**2,450**	**7,350**	**13,476**	**20,824**	**24,498**	
HEW Salary		**44.09**	**12.00**	**1,296,099.00**	**3,888,297.00**	**7,129,073.52**	**11,016,312.48**	**12,959,931.96**	**36,289,713.96**
Grand Total				**9,738,072.12**	**21,159,637.80**	**33,525,324.36**	**46,495,197.60**	**57,026,063.16**	**167,944,295.04**