Document of
The World Bank

Report No: ICR0000383

# IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IDA-31400 IDA 3140A)

ON A

CREDIT

IN THE AMOUNT OF SDR 75.1 MILLION
(US$ 100.0 MILLION EQUIVALENT)

TO THE

FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

FOR A

HEALTH SECTOR DEVELOPMENT PROGRAM

August 17, 2007

**Human Development 3.**
**Country Department AFCE3.**
**Africa Region**

## CURRENCY EQUIVALENTS

(Exchange Rate Effective February 2007)

Currency Unit = Ethiopian Birr
Birr 1.00 = US$ 0.11
US$ 1.00 = 8.80 Birr

FISCAL YEAR

July 8 – July 7

Ethiopian Fiscal Year / EFY (or Ethiopian Calendar / EC) refers to the Ethiopian Fiscal Year, starting on July 8 in the European calendar. The correspondence between Ethiopian and European fiscal years is given below, based on the Gregorian and Ethiopian Calendars:

| Gregorian | Ethiopian |
|---|---|
| 1997/98 | EFY 1990 |
| 1998/99 | EFY 1991 |
| 1999/00 | EFY 1992 |
| 2000/01 | EFY 1993 |
| 2001/02 | EFY 1994 |
| 2002/03 | EFY 1995 |
| 2003/04 | EFY 1996 |
| 2004/05 | EFY 1997 |
| 2005/06 | EFY 1998 |
| 2006/07 | EFY 1999 |
| 2007/08 | EFY 2000 |

## ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| AIDS | Acquired Immune-deficiency Syndrome |
| ARI | Acute Respiratory Infection |
| ARM | Annual Review Meeting |
| BOD | Burden of Disease |
| CAS | Country Assistance Strategy |
| CJSC | Central Joint Steering Committee |
| DACD | Drug Administration and Control Department |
| DALY | Disability Adjusted Life Year |
| DFID | Department for International Development |
| DHS | Demographic and Health Survey |
| DLY | Discounted Life Years |
| ENDP | Ethiopia National Drugs Program |
| ESDP | Education Sector Development Project |
| FDRE | Federal Democratic Republic of Ethiopia |
| FMOH | Federal Ministry of Health |
| HHRI | Health and Health Related Indicators |
| HMIS | Health and Management Information System |
| HRD | Human Resources Development |
| HSDP | Health Sector Development Program |
| HSEP | Health Services Extension Package |
| HSEW | Health Service Extension Worker |

| | |
|---|---|
| ICB | International Competitive Bidding |
| IEC | Information, Education and Communication |
| JICA | Japan International Cooperation Agency |
| MCH | Maternal and Child Health |
| M&E | Monitoring and Evaluation |
| MEDAC | Ministry of Economic Development and Cooperation |
| MIS | Management Information System |
| MOFED | Ministry of Finance and Economic Development |
| MOH | Ministry of Health |
| NCB | National Competitive Bidding |
| NORAD | Norwegian Aid Agency |
| PAD | Project Appraisal Document |
| PAP | Program Action Plan |
| PBS | Protection of Basic Services |
| PHARMID | Pharmaceuticals and Medical Supplies Import and Wholesale Enterprise |
| PHCU | Primary Health Care Unit |
| PHRD | Policy and Human Resource Development |
| PPD | Planning and Programming Department |
| RHB | Regional Health Bureau |
| RJSC | Regional Joint Steering Committee |
| SDP | Sector Development Program |
| Sida | Swedish International Development Agency |
| SNNPR | Southern Nations, Nationalities and Peoples Region |
| SSA | Sub-Sahara Africa |
| UNAIDS | Joint United Nations Programme on HIV/AIDS |
| UNDP | United Nations Development Program |
| UNFPA | United Nations Fund for Population Activities |
| UNICEF | United Nations Children's Fund |
| WHO | World Health Organization |
| WorHO | Woreda Health Office |
| WOFED | Woreda Office of Finance and Economic Development |

| | |
|---|---|
| Vice President: | Obiageli Katrya Ezekwesili |
| Country Director: | Ishac Diwan |
| Sector Manager: | Laura Frigenti |
| Project Team Leader: | Gebreselassie Okubagzhi |
| ICR Team Leader: | Gebreselassie Okubagzhi |

**ETHIOPIA**
**Health Sector Development Program**

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**Page No.**

## A. Basic Information

| | | | |
|---|---|---|---|
| Country: | Ethiopia | Project Name: | Health Sector Development Program |
| Project ID: | P000756 | L/C/TF Number(s): | IDA-31400,IDA-3140A |
| ICR Date: | 05/16/2007 | ICR Type: | Core ICR |
| Lending Instrument: | SIL | Borrower: | GOVERNMENT |
| Original Total Commitment: | XDR 75.1M | Disbursed Amount: | XDR 71.6M |

**Environmental Category: B**

**Implementing Agencies:**

Ministry of Finance and Economic Development
Ministry of Health

**Cofinanciers and Other External Partners:**

UNFPA
UNICEF
United Nations Development Programme (UNDP)
WHO Africa Region Office
ITALY
JAPAN
Netherlands
NORWAY
SWEDEN
UNITED STATES
IRELAND

## B. Key Dates

| Process | Date | Process | Original Date | Revised / Actual Date(s) |
|---|---|---|---|---|
| Concept Review: | 02/12/1998 | Effectiveness: | 03/11/1999 | 03/11/1999 |
| Appraisal: | 05/18/1998 | Restructuring(s): | | |
| Approval: | 10/27/1998 | Mid-term Review: | | 02/26/2001 |
| | | Closing: | 01/07/2003 | 06/14/2006 |

## C. Ratings Summary

**C.1 Performance Rating by ICR**

| | |
|---|---|
| Outcomes: | Moderately Satisfactory |
| Risk to Development Outcome: | Significant |
| Bank Performance: | Unsatisfactory |
| Borrower Performance: | Moderately Satisfactory |

| C.2 Detailed Ratings of Bank and Borrower Performance (by ICR) | | | |
|---|---|---|---|
| **Bank** | **Ratings** | **Borrower** | **Ratings** |
| Quality at Entry: | Moderately Unsatisfactory | Government: | Moderately Satisfactory |
| Quality of Supervision: | Unsatisfactory | Implementing Agency/Agencies: | Moderately Unsatisfactory |
| **Overall Bank Performance:** | Unsatisfactory | **Overall Borrower Performance:** | Moderately Satisfactory |

| C.3 Quality at Entry and Implementation Performance Indicators | | | |
|---|---|---|---|
| **Implementation Performance** | **Indicators** | **QAG Assessments (if any)** | **Rating** |
| Potential Problem Project at any time (Yes/No): | No | Quality at Entry (QEA): | Moderately Satisfactory |
| Problem Project at any time (Yes/No): | Yes | Quality of Supervision (QSA): | Moderately Satisfactory |
| DO rating before Closing/Inactive status: | Satisfactory | | |

| D. Sector and Theme Codes | | |
|---|---|---|
| | **Original** | **Actual** |
| **Sector Code (as % of total Bank financing)** | | |
| Central government administration | 1 | 1 |
| Compulsory health finance | 1 | 1 |
| Health | 98 | 98 |
| | | |
| **Theme Code (Primary/Secondary)** | | |
| Decentralization | Secondary | Secondary |
| Health system performance | Primary | Primary |
| Nutrition and food security | Secondary | Secondary |
| Other communicable diseases | Primary | Primary |
| Population and reproductive health | Secondary | Secondary |

| E. Bank Staff | | |
|---|---|---|
| **Positions** | **At ICR** | **At Approval** |
| Vice President: | Obiageli Katrya Ezekwesili | Callisto E. Madavo |
| Country Director: | Ishac Diwan | Oey Astra Meesook |
| Sector Manager: | Laura Frigenti | Arvil Van Adams |
| Project Team Leader: | Gebreselassie Okubagzhi | David W. Berk |
| ICR Team Leader: | Gebreselassie Okubagzhi | |
| ICR Primary Author: | Paul Geli | |

## F. Results Framework Analysis

**Project Development Objectives (**from Project Appraisal Document**)**

The main objective of the Health Sector Development Program (HSDP) was to develop a health system which provides comprehensive and integrated primary care services, especially at community health level facilities. HSDP focuses on: communicable diseases, common nutritional disorders, environmental health and hygiene, reproductive health care, immunization, the treatment and control of basic infectious diseases, the control of epidemic diseases like malaria, and the control of sexually transmitted diseases, especially HIV/AIDS.

The IDA Credit of US$100 million financed the first five-year period (July 1997 to June 2002) of the 20-year program.

Key indicators of progress in health status and health services for the first five years included:

A. Health Status:
(a) increase life expectancy at birth from 52 years in 1997 to 55-60 years in 2002;
(b) decrease infant mortality rate from 110-128 per 1,000 live births in 1997 to 90-95 per 1.000 live births in 2002; and
(c) decrease maternal mortality rate from 500-700 per 100,000 live births in 1997 to 450-500 in 2202.

B. Health Services:
(a) expand Potential Health Service Coverage from 45% in 1997 to 55-60% in 2002;
(b) increase health facilities by 2002 in the forms of: (i) construction of new facilities – 216 primary health care units (PHCUs), 12 district hospitals, 5 zonal hospitals, and 2 specialized hospitals; and (ii) renovation of 150 health centers, 50 district hospitals, 10 zonal hospitals, and 5 specialized hospitals;
(c) increase immunization coverage (DPT3) from 67% in 1997 to 70-80% in 2002; and
(d) increase the contraceptive prevalence rate from 8% in 1997 to 15-20% in 2002.

**Revised Project Development Objectives (as approved by original approving authority)**
The Project Development Objectives and key indicators have not been revised.

**(a) PDO Indicator(s)**

| Indicator | Baseline Value | Original Target Values (from approval documents) | Formally Revised Target Values | Actual Value Achieved at Completion or Target Years |
|---|---|---|---|---|
| **Indicator 1 :** | Increase life expectancy at birth: | | | |
| Value quantitative or Qualitative) | 52 years | 55-60 years | | *48 years |
| Date achieved | 12/30/1997 | 01/07/2003 | | 06/30/2005 |
| Comments (incl. % achievement) | According to the HHRI - 1997 EC, the life expectancy at birth was only 48 years in 2004/05 (1997 EC). The reasons for the variations in life expectancy at birth over the last seven years are not clear. | | | |
| **Indicator 2 :** | Decrease infant mortality rate | | | |
| Value quantitative or Qualitative) | 110-128/1000 | 90-95/1000 | | 77/1000 |
| Date achieved | 10/27/1998 | 01/07/2003 | | 06/30/2005 |
| Comments (incl. % achievement) | According to the DHS, the infant mortality rate decreased to 97 in 2000 and 77 in 2005. | | | |
| **Indicator 3 :** | Decrease maternal mortality rate | | | |
| Value quantitative or Qualitative) | 500-700 | 450-500 | | 673 |
| Date achieved | 10/27/1998 | 01/07/2003 | | 06/30/2005 |
| Comments (incl. % achievement) | The baseline value was greatly underestimated in the PAD. According to the DHS, the maternal mortality was 871 in 2000 and decreased to 673 in 2005. | | | |

* While the Life Expectancy (LE) showed increase from 52 to 54 in 2001/02, the LE dropped to 48 in 2005. Available documented evidences indicate decreasing trends in malaria epidemic, Infant and Maternal Mortality rates and undernutrition. It may also be difficult to believe that the drop in LF can be attributed to Ethio-Eritean war which ended in 2000 and increase in LE was noted in 2001/02. Given this situation, a possible explanation may lie with the increasing deaths of the young and productive age groups due to AIDS. Massive Anti-Retro-Viral Treatment was introduced only in late 2005 whose effect could not be felt during the period under consideration. MAP I project was effective in January 2001 and prevention activities were scaled-up but could not have an effect on those already infected and have reached a terminal stage.

**(b) Intermediate Outcome Indicator(s)**

| Indicator | Baseline Value | Original Target Values (from approval documents) | Formally Revised Target Values | Actual Value Achieved at Completion or Target Years |
|---|---|---|---|---|
| **Indicator 1 :** | Expand PHC coverage (through construction and rehabilitation of health facilities) | | | |
| Value (quantitative or Qualitative) | 45% | 55-60% | | 72.1% |
| Date achieved | 12/30/1997 | 01/07/2003 | | 06/30/2005 |
| Comments (incl. % achievement) | The Potential Health Service Coverage is the percentage of population within 10km of a MOH or NGO health facility (health center, health station or health post). At 72.1%, the achievement is above the target. | | | |
| **Indicator 2 :** | Increased immunization coverage (DPT3) of children nation-wide | | | |
| Value (quantitative or Qualitative) | 67% | 70-80% | | 70.1% |
| Date achieved | 12/30/1997 | 01/07/2003 | | 06/30/2005 |
| Comments (incl. % achievement) | | | | |
| **Indicator 3 :** | Improve contraceptive prevalence rate. | | | |
| Value (quantitative or Qualitative) | 8% | 15-20% | | 14.7 % |
| Date achieved | 12/30/1997 | 01/07/2003 | | 06/30/2005 |
| Comments (incl. % achievement) | | | | |

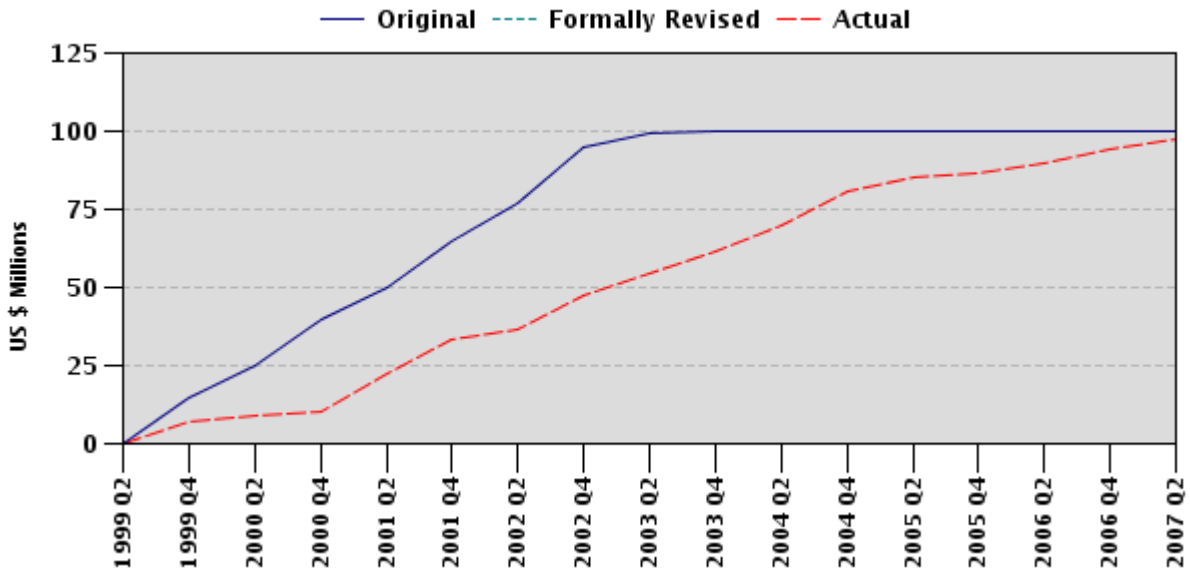
## G. Ratings of Project Performance in ISRs

| No. | Date ISR Archived | DO | IP | Actual Disbursements (USD millions) |
|---|---|---|---|---|
| 1 | 01/22/1999 | Satisfactory | Satisfactory | 0.00 |
| 2 | 12/08/1999 | Satisfactory | Unsatisfactory | 9.18 |
| 3 | 06/29/2000 | Satisfactory | Unsatisfactory | 10.14 |
| 4 | 12/21/2000 | Satisfactory | Unsatisfactory | 21.66 |
| 5 | 06/18/2001 | Satisfactory | Unsatisfactory | 32.76 |
| 6 | 10/10/2001 | Satisfactory | Unsatisfactory | 35.74 |
| 7 | 12/27/2001 | Satisfactory | Unsatisfactory | 36.46 |
| 8 | 06/06/2002 | Satisfactory | Satisfactory | 46.17 |
| 9 | 11/12/2002 | Satisfactory | Satisfactory | 50.59 |
| 10 | 05/15/2003 | Satisfactory | Satisfactory | 61.72 |
| 11 | 12/01/2003 | Satisfactory | Satisfactory | 66.61 |
| 12 | 06/09/2004 | Satisfactory | Satisfactory | 80.71 |
| 13 | 12/02/2004 | Satisfactory | Satisfactory | 85.54 |
| 14 | 05/16/2005 | Satisfactory | Satisfactory | 86.54 |
| 15 | 12/01/2005 | Satisfactory | Satisfactory | 90.08 |
| 16 | 06/29/2006 | Satisfactory | Satisfactory | 94.53 |

## H. Restructuring (if any)

Not Applicable

## I. Disbursement Profile




## 1. Project Context, Development Objectives and Design

### 1.1 Context at Appraisal

The health status of the Ethiopian population was poor, even relative to other low-income countries, including those in Sub-Saharan Africa. Life expectancy at birth estimates by region ranged from 47 to 60 years, with a national average of 52 (males 49, females 52). Infant mortality ranged 110-128 per 1,000 live births in 1997, while the under-5 mortality rate was 161 deaths per 1,000, and maternal mortality 500-700 per 100,000 live births. Largely preventable childhood and maternal illnesses and communicable diseases remained the major causes of death in Ethiopia. When peri-natal and maternal conditions are added, the health problems of mothers and children combined accounted for 50 percent of all deaths and 56 percent of discounted life years (DLYs) lost prematurely.

Coverage of basic health services and infrastructure in Ethiopia was low and inequitable. Only about 45 percent of the population had access to a health facility (access defined as having a health facility at most 10 kilometers away), with a regional variation between 11% and 86%. The child immunization rate in Ethiopia was 67% for DPT3. Only 10 percent of Ethiopians had access to proper sanitation facilities, and 18 to 26 percent to safe water, the availability of both being highly skewed toward urban areas. Only 10 percent of all births in Ethiopia were attended by trained health personnel, compared to approximately 60 percent in Tanzania and 34 percent in Sub-Saharan Africa overall. The contraceptive prevalence rate was only 8%, and population growth was rapid at 2.9% per annum.

Quality of services was also low. Many existing facilities were in an advanced state of disrepair. A survey of facilities found that 47 percent of hospitals, 33 percent of health centers, and 47 percent of health stations require major repair or complete replacement. Only 65 percent of surveyed hospitals, 28 percent of health centers and 57 percent of health stations had at least 75 percent of the recommended supplies of basic drugs on hand. Forty-eight percent of respondents

in a survey stated that they had faced some difficulties while seeking health care, such as inadequate facilities and equipment within the institutions (43 percent of respondents) and the lack of essential drugs (23 percent). In addition, staff was delivering the services in a manner which often left much to be desired technically.

Historically, there had been a number of inefficiencies in the allocation of Government resources in the health sector. Health sector expenditures in Ethiopia have tended to emphasize urban-based, curative services, rather than rural based care, preventive and public health programs. Health facilities in Addis Ababa received a disproportionately large share of resources. There was a similar misallocation of resources across diseases. For the ten diseases that cause 76 percent of DLYs lost in Ethiopia, total spending amounted to only 45 percent of recurrent expenditures. In order to address the above issues, in September 1993 the Council of Ministers approved Ethiopia's National Health Policy. The policy was based on ten principles covering, *inter alia*, the democratization and decentralization of the health service system; the development of the preventive and promotive components of health care and of an equitable and acceptable standard of health service system that would reach all segments of the population within the limits of resources; the promotion of intersectoral activities and of attitudes and practices conducive to the strengthening of national self-reliance in health development; the assurance of accessibility of health care for all segments of the population; the development of appropriate capacity building based on assessed needs; and the promotion of the participation of the private sector and non-governmental organizations in health care.

A sector-wide approach was adopted in order to put these principles into practice. The Government of Ethiopia presented its Health Sector Development Program (HSDP) at the Consultative Group Meeting of Donors in Addis Ababa in December, 1996. This program reflected the strong commitment of the Government to improve social services in Ethiopia and provide primary health care for all Ethiopians within 20 years. The entire program emphasized the preventive and promotive aspects of health care while not neglecting essential curative services.

**1.2 Original Project Development Objectives (PDO) and Key Indicators (*as approved*)**

The main objective of the Health Sector Development Program (HSDP) was to develop a health system which provides comprehensive and integrated primary care services, especially at community health level facilities. HSDP focuses on: communicable diseases, common nutritional disorders, environmental health and hygiene, reproductive health care, immunization, the treatment and control of basic infectious diseases, the control of epidemic diseases like malaria, and the control of sexually transmitted diseases, especially HIV/AIDS.

The IDA Credit of US$100 million financed the first five-year period (July 1997 to June 2002) of the 20-year program.

Key indicators of progress in health status and health services for the first five years included:

A. *Health Status*:

a) increase life expectancy at birth from 52 years in 1997 to 55-60 years in 2002 (for males from 49.7 years in 1997 to 56.2 years in 2002, and for females from 52.4 years in 1997 to 59.2 years in 2002);
b) decrease infant mortality rate from 110-128 per 1,000 live births in 1997 to 90-95 per 1.000 live births in 2002; and

c) decrease maternal mortality rate from 500-700 per 100,000 live births in 1997 to 450-500 in 2202.

B. *Health Services*:

a) expand PHC coverage from 45% in 1997 to 55-60% in 2002;
b) increase health facilities by 2002 in the forms of: (i) construction of new facilities – 216 primary health care units (PHCUs), 12 district hospitals, 5 zonal hospitals, and 2 specialized hospitals; and (ii) renovation of 150 health centers, 50 district hospitals, 10 zonal hospitals, and 5 specialized hospitals;
c) increase immunization coverage (DPT3) from 67% in 1997 to 70-80% in 2002; and
d) increase the contraceptive prevalence rate from 8% in 1997 to 15-20% in 2002.

**1.3 Revised PDO (as approved by original approving authority) and Key Indicators, and reasons/justification**

The PDO and key indicators have not been revised.

**1.4 Main Beneficiaries,**

The program was of country-wide scope. Although it was expected to improve the health of all Ethiopians, according to the PAD, the target population included:

- mothers and children under five years old, through strengthening of the MCH program and provision of integrated services;
- population in rural and hard-to-reach areas, through facility expansion and deployment of appropriate health manpower; and
- females, through e.g. efforts to increase female enrollment in training institutions and strengthening of maternal health services.

**1.5 Original Components (*as approved*)**

While it had established primary health care services as its main priority, the HSDP's approach was sector-wide in scope. HSDP was divided into the following eight program components for budgeting and implementation purposes (details of each component are given in Annex 10):

1. Expanding Primary Health Care Access - Facility Expansion and Rehabilitation (base costs of US$182.4 million or 27.5 percent of total base costs).
2. Improvements in the Technical Quality of PHC Service Provision (base costs of US$331.7 million or 50.0 percent of total base costs).
3. Expanding the Supply and Productivity of Health Personnel - Human Resource Development (base costs of US$20.0 million or 3.0 percent of total base costs).
4. Improvements in the Pharmaceutical Sector (base costs of US$103.4 million or 15.6 percent of total base costs).
5. Information, Education, and Communication - IEC (base costs of US$8.5 million or 1.3 percent of total base costs).
6. Health Sector Management and Management Information Systems (base costs of US$12.7 million or 1.9 percent of total base costs).
7. Monitoring and Evaluation and Applied Research (base costs of US$3.6 million or 0.6 percent of total base costs).

8. Improvements in the Financial Sustainability of the Health Sector (base costs of US$1.0 million or 0.1 percent of total base costs).

The program was designed in such a way that the financial allocations by component reflected the relative investment priorities and the linkage of each component to the others. Overall, the design was intended to enable the comprehensive program to be well-coordinated during implementation and to result in a fully integrated and appropriately responsive health delivery system. The total cost of HSDP was estimated at Birr 5,002 million or US$737.8 million equivalent, of which 10 percent (US$74.5 million) was reserved for contingencies.

The capital investment (base costs of US$218.2 million) aimed to increase health coverage, equity and efficiency at all levels of the health system, but with a special focus on the expansion of basic health facilities and the development of health manpower. The specific civil works components included the construction and rehabilitation of health facilities (including staff housing in certain cases, training rooms and dormitories for trainees, and rooms for minor surgery); construction and upgrading of training facilities, and construction of zonal and woreda health offices and drug stores. The health manpower development component concentrated on the training of primary health workers. Supportive components such as the development of the health management information system and IEC were also covered by the capital budget.

The recurrent investment budget (base costs of US$445.0 million) aimed to improve efficiency, quality and relevance, but with a particular emphasis on the need to build management capacity at all levels of the health service delivery system and to ensure the sustainability (technical, managerial and financial) of the resulting comprehensive and integrated system. The recurrent budget covered expenses on salaries, drugs and other non personnel expenses.

### 1.6 Revised Components

The components have not been revised.

However, as discussed in the PAD, the project was designed to be flexible, with annual reviews that would allow the work program to be adjusted according to past performance and changing circumstances. In addition to the “unallocated”, the HSDP had one category only and a large share of its credit (65%) was unallocated initially, so that funds could be shifted quickly from activities that are not doing well to others that are. Also, the IDA Credit for HSDP took more than seven years to disburse; therefore, it corresponded to the Government first five-year Health Sector Development Program (HSDP I, which ran from 1997/8 to 2001/02) and the follow-up three-year program (HSDP II, which ran from 2002/03 to 2004/05). The transition from HSDP I to HSDP II provided another opportunity to make significant adjustments to the program. It should be noted that throughout this ICR, “HSDP” followed by a numeral denotes Government’s sector program/s; HSDP without a numeral refers to the IDA Credit.

In view of the MDGs, the Government introduced two flagship programs: (1) the Health Service Extension Program (HSEP) and (2) the Accelerated Expansion of Primary Health Care Coverage (AEPHCC), as well as other plans and strategies. For more details, see Annex 2 on “outputs per component”. Those various programs and plans allowed for a better focus on critical issues, but did not imply a change in the eight components of the HSDP.

### 1.7 Other significant changes

Since the launch of a specific US$59.7 million multisectoral HIV/AIDS project under MAP, support was given to many care and treatment activities such as VCT, PMTCT and care and treatment of opportunistic infections and STDs which helped expand the limited services of the health sector on the above activities.

## 2. Key Factors Affecting Implementation and Outcomes

### 2.1 Project Preparation, Design and Quality at Entry

The preparation and processing of the HSDP was made somewhat easier by the fact that it followed by a few months the preparation of the Education Sector Development Project (ESDP), which was approved in May 1998. The ESDP had already dealt with arrangements covering financial management, procurement, reporting, monitoring and evaluation, and sector program governance. The preparation of the HSDP was supported by a PHRD Grant which financed a number of studies. Project preparation was carried out with considerable consultation between Government and donors, who reviewed the results of the studies and the investment programs prepared by all the Regional Health Bureaus (RHB). The initial recurrent / investment balance of the program was revised substantially (from 50/50 to two-thirds recurrent), in light of concerns about the proper balance between quality of service and expansion of coverage, initial financing and fiscal sustainability, and the capacity to construct and staff so many new facilities in a short time. It was agreed that ESDP and HSDP would use the same standard format for the preparation of the projects and a common Program Implementation Manual (PIM) adjusted to the specific needs of each sector.

The Program was fully consistent with the CAS (Document No. 17009-ET, discussed September 9, 1997). To directly benefit the poor, assistance would be geared towards improving the health status of the population, emphasizing preventive measures while not neglecting curative ones. The Program followed Government's priorities within the health sector, namely integrated primary care services (particularly at the community health level facilities) and the improvement in the quality of services.

The PAD identified properly the high risk areas of implementation, namely: (i) financing available from the different sources would be insufficient; (ii) proposed facility staffing and staff productivity would prove difficult to meet; (iii) implementation of the civil works / equipment program is delayed; (iv) essential drugs and medical supplies are not regularly available; (v) utilization rates do not increase as anticipated; and (vi) donor procedures are administratively burdensome. Appropriate mitigation measures were identified.

One good aspect of the design is that it included a small number of key indicators (three for health status and four for health services), that were for the most part included in demographic and health surveys (DHS) or that are relatively easy to monitor. On the other hand, there were problems with the design of some facilities included in the program. The inclusion of some basic surgical facilities in all primary health care units (PHCU) was controversial at the inception. The Bank team argued that it was not realistic and could not be implemented and sustained during HSDP because it would be costly and require more trained staff. On the other hand, the Government insisted that those basic surgical facilities be included because they were necessary to handle pregnancy and childbirth complications at the new PHCUs. In view of this, an understanding was reached to pilot the approach and assess the outcomes before going nation-wide.. It was noted that nn health centers where such facilities were provided, the facilities have

not been used due to lack of appropriate staff to handle surgery The PAD listed that issue as one that warrants government consideration during HSDP implementation.

The Bank had proposed an Adaptable Program Loan (APL). However, the Government did not accept it, indicating that the arrangement was not flexible enough and that there was a lack of tangible commitment on the part of the Bank to make it sufficiently attractive as an instrument for financing the HSDP.

### 2.2 Implementation

The decentralization of HSDP implementation to the regions was something rather new in Ethiopia. Regional variations in implementation capacity contributed to differences in the utilization of funds. Through offsetting block grants, the Government tried to ensure that the total of donor financing and block grant received by each region corresponded to its fair share of money, based on the government's allocation criteria.

The following factors affected project implementation negatively:

- The war with Eritrea (June 1998 to May 2001) prompted some donors to temporarily suspend their financing. During the war and the demobilization process that followed the end of the war, Government was distracted from the HSDP.
- There was a rapid turn over of staff which affected the performance on procurement and financial management. The lesson learned is that, in such a situation, there is a need to make training a repetitive process.
- The project started late; the mid-term review (MTR) was postponed from March 2000 to February 2001 and in order to utilize the available funds the closing date was extended by three and a half years from January 2003 to June 2006.
- Over the last few years, the health services extension package (HSEP) was introduced but was underfinanced, despite its low implementation cost.
- Although Ethiopia's per capita expenditures for health have increased from US$5.6 in 1999/2000 to US$ 7.14 in 2004/2005, its level is still among the lowest in the world.

The following factors affected project implementation positively:

- There was a very active donor group in Ethiopia, with excellent cooperation among donors, and between donors and Government. The donor group met very frequently, including in joint review missions and joint review meetings (ARM) every year. These arrangements were found ideal to enhance partnerships.
- The MTR was very thorough and helped ensure that project activities were going in the right direction.

### 2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

The Project Appraisal Document (PAD) had identified a small number of essential indicators (three for health status and four for health services) that were quite adequate to monitor progress toward the achievement of the project development objectives (PDO).

Health and Health Related Indicators (HHRI) booklets were regularly published and disseminated every year by the FMOH/PPD. Despite their limitations, the reports provided the information base for a unique trend analysis over the last eight years or so, and contributed important information for planning, monitoring and evaluation purposes.

The Health and Management Information System (HMIS) has improved over time, but the system is fragile and data collection and reporting could be further improved. Figures included in the HMIS has not always been consistent with the results of DHS. There is a need to develop an HMIS system based on a common set of indicators, standardized procedures, and enhanced information use for decision-making. According to the ARM 2006 report, this is precisely the objective of the national HMIS reform that has been launched recently with involvement of multiple donors and technical assistance provided by the Italian Cooperation. An assessment has been conducted and an HMIS strategy is being developed based on selected core indicators for the different levels.

### 2.4 Safeguard and Fiduciary Compliance

At appraisal, the project was rated category "B" by the Bank's Environmental Assessment Group, because of the potential environmental problems associated, *inter alia*, with improper disposal of medical waste and the inappropriate location of latrines. Mitigating measures have been incorporated in the preparation of designs, equipment standards and procedures that health facilities, especially hospitals, have to adhere to. . Initial measures were taken to improvement the procurement and financial management of HSDP. Staff from FMOH and Rebional Health Bureaus were trained to improve the procurement capacity. A new financial management template was introduced and computers were provided to improve the financial management and reporting systems. Many of the initial action were hampered by high turn-over of staff . The Government prepared a document on health institutions waste management, reflecting good environmental practices, which was followed during the implementation of the program.

There were delays in the submission of financial audits. Although this is a systemic problem in Ethiopia, and not an issue specific to HSDP, it seems that the periodic delays in the submission of audit reports were caused primarily by account backlogs in the Regions. There were serious fiduciary problems during the implementation of HSDP. As discussed in Section 5.2 (b) and Section E of Annex 2 on Outputs by Component, both procurement and financial management have been unsatisfactory. Also, there were problems with the follow up by the Bank of the use of funds (Section 5.1.b).

### 2.5 Post-completion Operation/Next Phase

Continuous support for the HSDP (specifically, HSDP III) is being provided by donors, including through the Protection of Basic Services (PBS) Project financed by the Bank and other development partners. The PBS was designed as a multi-sector SWAP. With respect to health, under its main components (sub-programs), it provides resources to regional and local authorities based on agreed plans for delivery of basic services and provides critical inputs for primary health service delivery, while strengthening governance systems on financial transparency and accountability. The PBS supports Ethiopia's progress toward its MDG targets by ensuring that resources for basic service delivery are not reduced, but rather continue to grow steadily as envisaged in Ethiopia's Macroeconomic and Fiscal Framework (MEFF) and in some cases (such as immunization, family planning and malaria control) are accelerated.

## 3. Assessment of Outcomes

### 3.1 Relevance of Objectives, Design and Implementation

The project's original development objective is consistent with current development priorities, country and sectoral strategies as expressed in Ethiopia's recently completed Sustainable and Poverty Reduction Program (SDPRP) and the new five-year Plan for Accelerated and Sustained Development to End Poverty (PASDEP) for 2005/06-2009/10. In all these documents, health is one of the priority sectors. The health component of PASDEP is the continuation of the Government Health Sector Development Program – HSDP I & II, and thus the health component of PASDEP constitutes the HSDP III. The health sector policy gives primary focus to preventive and primary care to reach the neediest segments of the population and to address the predominant public health problems in the country. It is clearly stated in the PASDEP document that the focus of the program's health component would be on poverty related health problems in the country such as communicable diseases like malaria and diarrhea, and those health problems affecting children and mothers. It is further indicated that efforts would be concentrated on rural areas.

### 3.2 Achievement of Project Development Objectives

*Note: The IDA Credit for HSDP became effective in March 1999 and closed in June 2006. It corresponded to the Government first five-year Health Sector Development Program (HSDP I, which ran from 1997/8 to 2001/02) and the follow-up three-year program (HSDP II, which ran from 2002/03 to 2004/05). Throughout this ICR, "HSDP" followed by a numeral denotes Government's sector program/s; HSDP without a numeral refers to the IDA Credit.*

The Ethiopian Health Sector Development Program (HSDP) is a comprehensive national health program that covers all aspects (policy, planning, implementation, management and monitoring) of the provision of health care to Ethiopia's 73 million inhabitants. The evaluation of such a vast and comprehensive program carried out over a little more than 7 years in 9 Regions, 2 city states and the Federal level itself, is a challenging and complex exercise.

The assessment discusses the changes in health status as demonstrated by the key indicators (particularly the mortality declines) and reviews what has changed in the health sector as a result of the program. It will also evaluate the success of the Government program and the World Bank contribution to that program.

*Changes in health status and health services*

It is always difficult to establish a cause / effect relationship between the implementation of a single project or even program and their effect on a sector and the health status of the population. Nevertheless, one can state that HSDP achieved its development objectives, in the sense that HSDP has contributed to the development of the health system providing comprehensive and integrated primary care services, especially at community health level facilities. The population has better access to health facilities, and the health status has improved.

Annex 2 provides an assessment of HSDP output, structured around the main thematic areas. The table below shows the trends during HSDP in the key indicators included in the PAD, comparing the results of HSDP I (1997/98 - 2001/02) and HSDP II (2002/03 - 2004/05) to the HSDP targets (2001/02).

**Trends in the key indicators included in the PAD**

| Indicators | Baseline value (PAD) 1997/98 1990 EC | HSDP targets 2001/02 1994 EC | HSDP I Results 2001/02 1994 EC | HSDP II Results 2004/05 1997 EC |
|---|---|---|---|---|
| **Health Status** | | | | |
| Life expectancy | 52 | 55-60 | 54 | 48 |
| Infant mortality Rate | 110-128 | 90-95 | 97* | 77** |
| Maternal mortality rate | 500-700 | 450-500 | 871* | 673** |
| **Health Services** | | | | |
| Potential Health Service coverage | 45% | 55-60% | 61.0% | 72.1% |
| Increase health facilities | See discussion below | | | |
| % under 1 year immunized for DPT3 | 67% | 70-80% | 51.5% | 70.1% |
| Contraceptive prevalence rate (CPR) | 8% | 15-20% | 8.1%* | 14.7%** |

Sources: Health and Health Related Indicators (HHRI), or DHS if marked with asterisk(s).
* = 2000 DHS and ** = 2005 DHS
The Potential Health Service coverage is the percentage of population within 10 km of a MOH or NGO health facility (Health Center, Health Station or Health Post).

The performance of the Health, Nutrition and Population sector has improved under HSDP, but according to the PAD of the Protection of Basic Services (PBS) Project most of the progress has occurred in urban areas with less marked change in rural, poorer regions. Between 1997/98 and 2004/05, the infant mortality rate has decreased by about 30% from 110 to 77 per thousand live births. Similar progress has been made in reducing the child mortality rate and the under-five mortality rate. Between 2000 and 2005, the child mortality rate has decreased by about 35% from 77 to 50, and the under-five mortality rate has decreased by about 26% from 166 to 123 deaths per thousand live births. These results are quite remarkable. According to the DHS, the maternal mortality rate was 871 in 2000 and it decreased by about 23% to 673 in 2005. The fact that maternal mortality still remains extremely high may be explained in part by the very low percentage of births attended by skilled staff, which has barely improved and is now only 12% (in Ethiopia, pregnant women deliver at home) and low levels of contraceptive prevalence. The contraceptive prevalence rate has increased to a level close to the lower-end of the HSDP target but not good enough to influence the Maternal Mortality rate.

A comparison of the 2000 and 2005 DHS (Annex 11) shows improved nutrition, and slightly improved immunization and birth spacing, all of which must have contributed to the observed improvement in health status. On the other hand, the improvement cannot be explained by the trends in antenatal and postnatal care according to the DHS. The percentage of pregnant women who received ante natal care from health professionals barely increased from 26.7% in 2000 to 27.6% in 2005. The percentage of women who received postnatal care within the crucial first two days of delivery decrease from 7.8% in 2000 to 4.6 % in 2005, and the percentage of women giving birth who received no postnatal health check up increased from 89.5% in 2000 to 93.7% in 2005.

According to the HHRI - 1997 EC, the life expectancy at birth was only 48 years in 2004/05 (1997 EC). The reasons for the variations in life expectancy at birth (an increase from 52 in 1997/98 to 54 in 2001/02 and then a decrease to 48 in 2004/05) over the last seven years are not clear.

It should be noted that in a SWAP it is not possible to attribute the outcomes to any single financing agency, since each agency is responsible for funding certain activities which are expected to contribute to the final outcomes. Outcomes are joint achievements.

*Government program*

As a Government program, the HSDP has been successful. The Government carried out most of the actions listed in the letter of sector policy dated August 10, 1998. The expansion of health facilities providing treatment services, the increases in personnel and the improvements in the pharmaceutical sector have been factors contributing to that success (section B of Annex 2). Under the facility construction and rehabilitation component, construction of new health facilities has progressed extremely well, with increases of 36% in the number of hospitals, 113% for health centers and 425% for health posts (Section B of Annex 2); those achievements are well above targets. Also noteworthy is the substantial increase in the number of private clinics (plus 122%). As a result, the potential health service coverage increased from 45-50% to 72%, an achievement above the target of 55-60% for HSDP (the coverage is 83% if the services provided by private health facilities are included). However, increasing access to health services has not been translated yet into improved outpatient visits. At 0.3, the number of outpatient visits per person per year is very low. The low utilization rate of health facilities is probably due to occasional shortages of drugs or inadequate staffing; it takes some time for new facilities to be fully operational. To increase service delivery, the Government introduced the health services extension program (HSEP), a community based PHC service which includes a package of basic preventive, promotive and curative services. The HSEP targets the households at kebele level and aims to reach mothers and children in particular. The HSEP is making good progress in the majority of regions.

There has been a very substantial increase in the number of personnel in the sector: from about 17,000 in 1996/97 to about 37,000 in 2001/02 and about 46,000 in 2004/05. However, the health professionals to population ratios are still among the lowest in the world. In addition, most health care professionals are clustered in major urban areas and for some cadres, such as surgeons and midwives, the shortages are alarmingly high. The migration of higher skilled professionals to the private sector and abroad has enhanced disparities between regions and between urban and rural areas.

Regarding pharmaceuticals, the availability of essential drugs in the public sector has improved, thanks in part to the establishment of special pharmacies and huge procurement of drugs using IDA credit, but shortages are still common due to budgetary, procurement and logistics problems.

*Expenditures and financing*

According to the Ethiopia's Third National Health Accounts, the national health expenditure (including direct health expenditure and health care related services) grew by more than 53% in nominal terms: from 2.9 billion birr (US$ 356 million) in 1999/2000 to 4.5 billion birr (US$ 522 million) in 2004/05, corresponding to US$7.14 per capita. Regarding the sources of finance, with the new initiatives such as the Global Fund, donors and international NGOs have become the leading contributors (US$192 million, or 37% of the total in 2004/05), followed by households (US$160 million, or 31% of the total in 2004/05) and government including public enterprises (US$159 million, or 31% of the total in 2005/05). More detailed information on expenditure and financing is provided in Annexes 2 and 3.

*Bank contribution to the program*

In terms of financing, the Bank contribution has been modest if one compares the IDA credit of US$ 100 million to the resources provided over the years by the Government, other donors and Ethiopian households. The allocations of funds were made annually based on the findings of the Joint Reviews (JRM) and discussions during the Annual Review Meetings (ARM). Based on the information available as of March 2007, about 41 percent of the IDA credit was spent on goods (equipment, vehicles, drugs and medical supplies), 38.3 percent on new constructions and rehabilitation of health facilities, 17.8 percent on management and operating costs and on training. The table below shows the expenditure categories, based on the 2004 audit report.

| | **Period** | | **%** |
|---|---|---|---|
| | **Year ended 7 July 2004 Birr** | **30 October 1998 to 7 July 2004 Birr** | |
| **PROJECT EXPENDITURE** | | | |
| Feasibility supplies and buildings | 56,485,238 | 282,248,964 | (38.3) |
| Vehicles and machinery | 45,974,072 | 136,491,968 | (18.5) |
| Office Supplies | - | 24,278,615 | (3.3) |
| Management and supervision | 6,546 | 2,561,372 | (0.3) |
| Training | - | 7,088,760 | (1.0) |
| Drugs and medical supplies | 53,816,658 | 161,431,495 | (21.9) |
| Financial and operating costs | 28,980,039 | 122,755,795 | (16.5) |
| **TOTAL PROJECT EXPENDITURE** | **185,262,553** | **736,856,969** | **(83)** |

However, the Bank contribution has been very important during the war with Eritrea (June 1998 to May 2001) when many donors suspended their financing and the Government had to sharply reduce public expenditures on health (public health expenditure were cut by almost 50 percent from 1998/1999 to 1999/2000 – see table 4 in Annex 2). During that period, the Bank was not only the lender of last resort, but it was to a great extent the only lender. If the components and activities to be financed by the IDA credit had been identified at the time of appraisal, the Bank supervision would have been easier and some of the fiduciary problems would not have occurred or their intensity would have been reduced. But the central design feature of the operation was its program support character. The advantages of the flexible support provided by the Bank to a much larger sector development program far outweigh the problems that were encountered (and which could have been alleviated if the Project had been restructured).

*Relations between Government and donors.*

HSDP has established a formal co-ordination framework (including joint reviews, joint processes for monitoring and use of common performance monitoring instruments) for aligning donors to the GOE sector policy and strategy and for ensuring better donor coordination in the country.

### 3.3 Efficiency

There are no data available to assess what may have been the returns on investments in the health sector as a result of HSDP. However, Annex 10 of the PAD for the PBS Project includes an analysis of the impact on child (or under-5) mortality of increased public spending on primary and clinical care, with a focus on the impact of reduced child mortality. Three different scenarios were analyzed, each assuming a principal focus on expanding access to HSEP services. The

results show that the rates of return are significant in all three scenarios: from 11.2% to 13.4%. It should be stressed that these are the returns only from reductions in child mortality. They do not include the many other returns from increased public spending on primary and clinical care, such as reduced child morbidity; reduced maternal mortality and morbidity; and reduced mortality and morbidity of other members of the population. If these other benefits were factored in, the rates of return from increased spending on primary and clinical care would be substantially higher. For more details, see Annex 3 on "Economic and Financial Analysis".

### 3.4 Justification of Overall Outcome Rating

Rating: Moderately Satisfactory

In the face of significant obstacles including war, donor withdrawals, low capacity particularly at decentralized level, difficult and sparsely populated terrain and significant health and nutrition problems, implementation of HSDP generally succeeded when it could easily have failed. The country has achieved the majority of the initial targets for outputs and outcomes (see annex 2 - tables 1 & 2) Since there were problems in procurement, slow disbursement and delays in the submission and replenishment requests the outcome could be considered less than satisfactory and hence was rated as " Moderately satisfactory".

### 3.5 Overarching Themes, Other Outcomes and Impacts

#### (a) Poverty Impacts, Gender Aspects, and Social Development

Although the project was not explicitly poverty targeted, it did improve the quality of health care which is delivered to the population, including disadvantaged Ethiopians. By its very nature, this improvement in the health care delivery system benefited many of the country's poor which includes women.

HSDP dealt with many maternal and child health related issues which are of major importance for women.

Both HSDP I and HSDP II planned to mainstream gender activities into the program to create awareness about the gender issues so that these issues are well addressed in management, health planning and decision-making processes. The objectives included the establishment of women's affairs units at the regional, zonal and woreda levels, with adequate trained staff, to enforce gender issues in the design of projects and provide follow-up on implementation; those units have been established, but staffing them with adequate numbers of trained personnel is a problem. Most of the objectives of the Women's Affairs Department (WAD) of MOH could no be realized. Little progress has been made to integrate gender in terms of institutional strengthening and programming at national and regional levels. Much remains to be done to sensitize rural communities on gender issues and to reduce harmful traditional practices.

Regarding the healthcare work force, it has remained male-dominated. Based on 2002/2003 data, only about 12 percent of physicians, 13 percent of health officers, 46 percent of nurses and 58 percent of health workers are female. More recently, a great number of health extension workers (HEW) have been recruited, and most of them are women. There are ongoing efforts to develop gender guidelines and perhaps may lead to to the implementation of a gender quota for admission to nursing training, but it will be difficult to significantly increase the number of females in nursing programs until the number of females completing secondary education have improved.

Another aspect is that most female health workers are located in urban areas. Married women in Ethiopia tend to adapt to their husbands' professional needs rather than taking care of their own, and unmarried women, on the other hand, often face security problems when living and working in rural areas.

**(b) Institutional Change/Strengthening**

As was the case for the ESDP, during the initial two years of program implementation, a considerable amount of on the job training was provided to federal and regional staff on program implementation by Bank staff and consultants. Several formal and informal training programs were conducted to enhance procurement, financial management, planning and implementation capacities of the FMOH and RHBs. During HSDP, the capacity of the Planning and Programming Department of FMOH and of the RHBs has been strengthened.

However, results are modest. In part because of the rapid turn over of staff, the effectiveness of the training has been limited; overall, procurement and financial management have been less than satisfactory. It should be recognized that implementing an ambitious program in the context of decentralization was not an easy task, and was certainly something that required time. Actually, HSDP was designed as the first five years of a 20-year program. On the positive side, HSDP paved the way for the Protection of Basic Services Project, whose development objective is to protect and promote the delivery of basic services by sub-national governments while deepening transparency and local accountability in service delivery.

**(c) Other Unintended Outcomes and Impacts (positive or negative)**

Working with the regions and at the level of the woredas and kebeles under decentralized environment was not easy. But, in the process HSDP made an important contribution to decentralization.

### 3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

As this is a core ICR, there has not been any beneficiary survey or stakeholder workshop to discuss the ICR results. However, the preparation of this ICR made extensive use of the conclusions and recommendations of the reports of the many stakeholder consultations that took place during HSDP implementation, such as the final evaluations of HSDP I & II and the joint annual review meetings (ARM).

## 4. Assessment of Risk to Development Outcome

Rating: Significant

The risk that development outcomes will not be maintained is rated "significant".

Although the absolute levels are still low, the steady increase in public health expenditures is an indication of the Government commitment and ownership for health. Also, the donor community is very much interested in assisting Ethiopia to achieve the MDGs, particularly in health. In the Protection of Basic Services Project, health is one of the sectors to be protected. Under component 1, Government and donors provide financing at woreda level through a block grant mechanism for all basic services including health, whereas under component 2 financing is

provided, through the Health MDG Performance Facility, for critical inputs only for primary health service delivery.

However, given the high dependence on donors and out-of-pocket financing in the sector, the prospects for sustainability of the gains accomplished through the program seem poor as long as there is not a much more substantial increase in the proportion of GDP or government budget allocated to health.

## 5. Assessment of Bank and Borrower Performance

### 5.1 Bank Performance

**(a) Bank Performance in Ensuring Quality at Entry**

Rating: Moderately Unsatisfactory.

The project was reviewed by QAG and was given a rating of "satisfactory" for the overall assessment of quality. The QEA had the following comments on the project and the Bank's internal documents:

a) Linkage of project to achieving a specific CAS benchmark is very well presented in PAD.
b) Objectives are reasonably clear and realistic, with reservations concerning the frame of indicators to monitor progress and assumptions, and the selection of key indicators.
c) There is insufficient emphasis on service quality and related criteria and standards. The project gives too much emphasis to hardware (buildings and equipment) and insufficient to software, especially training, education, staff recruitment and so on. For effective delivery it is much more important to get health care practitioners in the community than to construct buildings. However, it is recognized that consultation with the Bank has led to some considerable improvement compared to the original proposal.
d) The project design was very advanced and politically confirmed at the stage when World Bank and donor community input was formally invited. Scope for consideration of alternatives was limited. Within the "given" frame, alternatives were considered and improvements over the original proposal achieved.
e) Procurement arrangements have been thoroughly elaborated (the "less than satisfactory" rating reflects the lack of risk analysis concerning corruption prevention).
f) Regarding possible contamination of the environment, mitigation measures have been identified, and the Government has prepared a draft document on Health Institutions Waste Management.
g) There was no social assessment undertaken for this project. There was extensive consultation with other donors and Ethiopian health officials. However, the primary beneficiaries, the people of Ethiopia, were not a significant part of the process. The project gives some consideration to disaggregating social impacts (by region, between urban and rural areas and between males and females). NGOs views do not appear to have been sought; however, the central government met with key NGOs in the later stages of project preparation; there has been more interaction at the regional level.
h) The project is not explicitly poverty targeted, but does seek to improve the quality of health care which is delivered to, particularly, disadvantaged Ethiopians. By its very nature, this improvement in the health care delivery system would benefit many of the poor of the country.

i) Overall monitoring and evaluation is based largely on changes in basic health indicators. There is little social impact monitoring per se, and no indication of any participatory monitoring or evaluation methodologies.
j) The project is complex and the investment program ambitious; the financial management arrangements are equally complicated. The use of decentralized accounting and disbursement in the regional health and finance bureau and zonal health and finance units represents a higher risk to the Bank of ensuring that funds are kept track of, and are used for the purpose intended. This risk is marginally mitigated by audit arrangements.
k) MOH has weak implementation capacity, but demonstrated commitment and steps to build it up. Still, the risk of overstraining the evolving capacities remains extremely high.
l) Bank's internal documents were very well structured, candid and thoughtfully put together.

Some of the potential problems identified by the QAG (such as the reference to the complicated financial management arrangements, the weak implementation capacity, etc.) did materialize during implementation of the HSDP. Since there were marked shortcomings during identification, preparation and appraisal, the Bank performance in ensuring quality at entry is rated moderately unsatisfactory.

**(b) Quality of Supervision**
(including of fiduciary and safeguards policies)

Rating: Unsatisfactory.

The quality of supervision has been mixed. On the one hand, there has been an adequate focus on development impact. The Bank has been very responsive to the Government's priorities and has done its best to work within Government's systems and procedures; it has also played its part to ensure that there was an excellent cooperation among development partners and between development partners and Government, particularly during the joint review missions and meetings. Technical supervision of the program was carried out by all development partners as a group and has been relatively satisfactory. On the other hand, there have been major shortcomings in the supervision of fiduciary aspects (procurement and financial management) in spite of early measures to train FMOH and Regional Health Bureau staff in procurement and attempts to install a computerized financial management syste. Restructuring of the project following the Mid-term Review have not been considered although the situation demanded such an action In view of this the Supervision quality is rated as Unsatisfactory.

As discussed in Section 5.2 (b) below and in Section E of Annex 2 on "Outputs by Component", procurement by the Government has been unsatisfactory. For both HSDP and ESDP, the Bank trained about 320 people from the Ministry of Health (MOH) and the Ministry of Education (MOE), in 10-day programs on procurement provided bt Arusha based procurement training institution. Retaining the trained staff was a major impediment to maintain a functional procurement at various levels of health management units.which resulted in the inability of the Government to carry out efficient procurement in the context of the decentralization. There were also problems with the management of the Special Account for the IDA Credit. The lesson learned is that, in a situation where implementation is decentralized to the level of the regions and below, the capacity of the different actors must be taken into account when designing and agreeing upon the procurement and financial management arrangements.

The QAG had highlighted the fact that "the use of decentralized accounting and disbursement in the regional health and finance bureau and zonal health and finance units represents a higher risk to the Bank of ensuring that funds are kept track of, and are used for the purpose intended. This risk is marginally mitigated by audit arrangements". The IDA Credit included a condition of disbursement that would have reduced the risk, but it turned out to be difficult to implement. Unfortunately, the financial audits are always considerably delayed. As of March 2007, the audit reports that have been received account for the funds disbursed up to July 2004 only corresponding to 83 percent of total disbursements. In view of the problems with procurement and finances which became apparent early on, it would have been better to restructure the project and amend the Development Credit Agreement (DCA) accordingly at the time of the mid-term review. Apparently, restructuring was not considered. inspite of compelling reason for seriously considering restructuring. Since there were major shortcomings in the quality of supervision, the Bank performance is rated unsatisfactory.

**(c) Justification of Rating for Overall Bank Performance**

Rating: Unsatisfactory

Athough the rating for the Bank performance in ensuring quality at entry is moderately unsatisfactory, the rating for the quality of supervision is unsatisfactory. Hence, the overall Bank performance is rated unsatisfactory.

**5.2 Borrower Performance**
**(a) Government Performance**

Rating: Moderately Satisfactory

Government has displayed strong ownership and commitment to achieving the development objectives by inacting appropriate policies and guidelines and developing strategies to lead the health sector development program . Also, the relationships and coordination with development partners have been very good.

Health expenditure, both in absolute magnitude and in per capita terms, has increased overtime (per capita expenditures for health were US$5.6 in 1999/2000 and US$ 7.14 in 2004/2005). However, the overall per capita level of health spending in Ethiopia is still among the lowest in the world. It is less than half the average for SSA countries. About 50 percent of those amounts are out-of-pocket payments and contributions from the private sector. Public spending accounted for only US$2.8 per person per year in 1999/2000 and US$3.5 per person per year in 2004/2005 (Source: JBAR – October 2006). As a proportion of GDP, public spending has stalled in the last five years (at about 2.75 percent). At US$7.14, the level of per capita expenditure is far below the US$34 recommended by the Commission for Macroeconomics and Health of WHO to deliver essential health services in developing countries. At 5.6%, Ethiopia's share of total government expenditures that go to health is also among the lowest in SSA. However, the project appraisal document (PAD), which acknowledged the high government commitment to support the health sector financially, anticipated that there would be fiscal constraints and that the share of total government spending allocated to health would rise only modestly in the medium term (from around 6 percent in 1996 to perhaps over 7 percent in 2000). The fact that the health status of the population improved despite the low level of financing is quite remarkable. Actually, Ethiopia has done much better than many other low income countries that are spending more on health.

Since there were shortcomings in Government performance in the areas of procurement and and disbursement, it is rated a moderately satisfactory.

**(b) Implementing Agency or Agencies Performance**

Rating: Moderately Unsatisfactory

The Ministry of Health (MOH) has done a lot, particularly in the last two to three years, to implement HSDP and ensure that the development objectives are achieved. MOH deserves credit for the improvement in the performance of the Health, Nutrition and Population sector. However, as discussed above, the urban population has benefited most, and there has not been progress in all areas.

Project preparation was good since it was based on the results of a number of key studies and wide consultations with donors and other stakeholders. This was a borrower-owned program although it was prepared with considerable technical advice and input from many donors, including the World Bank. The low implementation rate during the initial years was due primarily to the unfamiliarity of Regional Health Bureau staff with the operational manuals and procedures of the Bank and Government and interruptions caused by the war with Eritrea. The implementation rate improved somewhat as a number of regions strengthened their implementation capacities and gained experience in and familiarity with program management. However, in order to utilize the available funds, the closing date had to be extended by three and a half years. In addition, during the implementation of HSDP there were serious fiduciary problems on procurement and financial management, which concerned both the Ministry of Health (MOH) and the Ministry of Finance and Economic Development (MOFED).

As discussed in Section E of Annex 2, an independent procurement review (IPR) by a consulting firm was carried out in October 2005, towards the end of the HSDP. The overall assessment is that in HSDP procurement was unsatisfactory. The following were among the findings of the IPR: procurement responsibility in FMOH is split between many departments; the record keeping and filing are unacceptable; individual procurement notices for ICB procurement were published only locally; only the department handling drugs and goods has dedicated, reasonably competent staff; there is no established contract management; contract performances are considerably delayed; and many of the supplies are either delivered late by the suppliers, or are kept for unacceptable long periods of time at the ports of arrival.

Financial management, particularly the management of the Special Account for the IDA Credit, has also been unsatisfactory (Section E of Annex 2). There were delays in the submission of SOE reports by regional states, and in the submission of monthly financial reports from the regional finance bureaus to MOFED for consolidation and audit. Most of the time, the SOEs reaching MOFED contained many errors, and correcting them required several correspondences with regions, which in turn lengthened the replenishment time by the Bank. There was always a delay in audited financial reports, which was caused primarily by account backlogs in the Regions. The main causes of the problems were: (i) lack of familiarity with the Bank's procedures by regional states; (ii) a shortage of skilled manpower in the regions to process SOEs; and (iii) insufficient training on the Bank's procedures, especially in light of the high staff turnover.

Since there were significant shortcomings in implementing agencies' performance, the rating is moderately unsatisfactory.

**(c) Justification of Rating for Overall Borrower Performance**

Rating: Moderately Satisfactory

Considering the rating for the government performance as moderately satisfactory and that of implementing agencies' performance as moderately unsatisfactory, the overall Borrower performance is rated moderately satisfactory.

## 6. Lessons Learned

A number of lessons have been learned from the design and implementation of the HSDP. Most of those lessons have been taken into account in the design of the Protection of Basic Services Project.

Service Delivery and Quality of Care

- There is a need for FMOH and RHBs to synchronize the infrastructure, human resource and support systems within the accelerated expansion of Primary Health Care (PHC), paying due attention to *all* components of the Health Services Extension Program (HSEP). This requires improved planning, supervision and resource allocations at national and regional levels (paragraph 6 of Annex 2).

Support Systems

*Facility Construction and Rehabilitation*

- Regions should prioritize making existing health facilities (hospitals, health centers and health posts) fully operational through rehabilitation and provision of appropriately trained health workers, equipment and medicines (paragraph 14 of Annex 2).
- FMOH and RHBs should ensure the functioning of a sustainable system for preventive maintenance and repair for the infrastructure network and medical equipment (paragraph 15 of Annex 2).

*Human Resource Development*

- Central HRD must be strengthened, particularly in its strategic and stewardship capacity, and it is urgent to establish incentive schemes (in addition to the standard civil-service provisions) to retain staff, especially at outlying stations, and to ensure continuing service delivery for disadvantaged populations (paragraph 22 of Annex 2

*Pharmaceuticals*

- Efforts are still needed in the area of procurement and distribution, human resource availability, rational drug use, budget allocation and logistics to ensure regular supply of quality and affordable drug supply to all levels (paragraph 30 of Annex 2).

*Health and Management Information System (HMIS)*

- There is a need to develop an HMIS system based on a common set of indicators, standardized procedures, and enhanced information use for decision-making (Section 2.3 and paragraph 33 of Annex 2).

Financing and Management of the Sector

- There is a need to allocate more of available resources to the health sector and to improve the use of these resources (paragraph 36 of Annex 2 and paragraph 22 of Annex 3).
- There is a need to build sufficient flexibility into a sector program so that the efficacy of investment is not contingent upon the involvement of other donors (Section 2.2).

- There is a need to strengthen planning and management capacity at all levels (paragraph 42 of Annex 2).
- Donors should be encouraged to change their current practices and align their support as much as possible to the government budget process (paragraph 43 of Annex 2).
- In a situation where there is a rapid turn over of staff, there is a need to make training a repetitive process (Section 2.2 & paragraph 44 of Annex 2).
- In a situation where implementation is decentralized to the level of the regions or even below, the capacity of the different actors must be taken into account when designing and agreeing upon the procurement and financial management arrangements (Section 5.1.b and paragraph 55 of Annex 2).

## 7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners

**(a) Borrower/implementing agencies**

**(b) Cofinanciers**

**(c) Other partners and stakeholders**
*(e.g. NGOs/private sector/civil society)*

## Annex 1. Project Costs and Financing

**(a) Project Cost by Component (in USD Million equivalent) – IDA credit only.**

| Components | Appraisal Estimate (USD millions) | Actual/Latest Estimate (USD millions) | Percentage of Appraisal |
|---|---|---|---|
| HEALTH FACILITY REHAB/EXPANSION | TBD | Not available | |
| SERVICE DELIVERY | TBD | Not available | |
| HUMAN RESOURCE DEVELOPMENT | TBD | Not available | |
| PHARMACEUTICAL SERVICES | TBD | Not available | |
| INFORMATION/EDUCATION/COMMUNICATION | TBD | Not available | |
| HEALTH SECTOR MIS | TBD | Not available | |
| MONITORIND & EVALUATION | TBD | Not available | |
| HEALTH CARE FINANCING | TBD | Not available | |
| | | | |
| **Total Baseline Cost** | 0.00 | Not available | |
| Physical Contingencies | 0.00 | 0.00 | |
| Price Contingencies | 0.00 | 0.00 | |
| **Total Project Costs** | 100.00 | 97.45 | |
| Project Preparation Fund | 0.00 | 0.00 | 0.00 |
| Front-end fee IBRD | 0.00 | 0.00 | 0.00 |
| **Total Financing Required** | 100.00 | 97.45 | |
| | | | |

**(b) Financing**

| Source of Funds | Type of Cofinancing | Appraisal Estimate (USD millions) | Actual/Latest Estimate (USD millions) | Percentage of Appraisal |
|---|---|---|---|---|
| INTERNATIONAL DEVELOPMENT ASSOCIATION (historical disbursed) | | 100.00 | 97.45 | 97.5% |

## Annex 2. Outputs by Component

*Note: the IDA Credit for HSDP became effective in March 1999 and closed in June 2006. It corresponded to the Government first five-year Health Sector Development Program (HSDP I, which ran from 1997/8 to 2001/02) and the follow-up three-year program (HSDP II, which ran from 2002/03 to 2004/05). Throughout this ICR, "HSDP" followed by a numeral denotes Government's sector program/s; HSDP without a numeral refers to the IDA Credit.*

1. The Ethiopian Health Sector Development Program (HSDP) is a comprehensive national health program that covers all aspects (policy, planning, implementation, management and monitoring) of the provision of health care to Ethiopia's 73 million inhabitants. The evaluation of such a vast and comprehensive program carried out over a little more than 7 years in 9 Regions, 2 city states and the Federal level itself, is a challenging and complex exercise.

2. The ICR assessment of outputs by component is based on the Annual Review Meetings (ARM) and the joint evaluations carried out by Government and Donors for HSDP I and HSDP II (and to some extent HSDP III), the Ethiopia Country Status Report on Health and Poverty of July 2005, the Project Appraisal Document of May 2006 for the Protection of Basic Services Project, and the Health JBARs. It makes an extensive use of the data included in the annual booklets on Health and Health Related Indicators (HHRI) published by FMOH, as well as the 2000 and 2005 DHS. Rather than discussing the outputs component by component, the ICR's assessment is structured around the four main thematic areas (Service Delivery and Quality of Care, Support Systems, Finance and Governance) as was done for the joint evaluation of HSDP II, and it includes a section on procurement and management of the Special Account for the IDA Credit for HSDP.

### A. Service Delivery and Quality of Care

3. Table 1 below shows the trends during HSDP in the key indicators included in the PAD, comparing the results of HSDP I (1997/98 - 2001/02) and HSDP II (2002/03 - 2004/05) to the HSDP targets (2001/02). In terms of indicators, having "ranges" rather than specific targets complicates the analysis of the results at the end of the program.

4. The performance of the Health, Nutrition and Population sector has improved under HSDP. Between 1997/98 and 2004/05, the infant mortality rate has decreased by about 30% from 110 to 77 per thousand live births. Similar progress has been made in reducing the child mortality rate and the under-five mortality rate. Between 2000 and 2005, the child mortality rate has decreased by about 35% from 77 to 50, and the under-five mortality rate has decreased by about 26% from 166 to 123 deaths per thousand live births. These results are quite remarkable. Regarding the maternal mortality rate, a comparison with the PAD baseline value is not possible, because the baseline value was greatly underestimated in the PAD. According to the DHS, the maternal mortality rate was 871 in 2000 and it decreased by about 23% to 673 in 2005. The fact that maternal mortality still remains extremely high may be explained in part by the very low percentage of births attended by skilled staff, which has barely improved and is now only 12% (in Ethiopia, pregnant women deliver at home).

5. According to the project appraisal document (PAD) of May 2006 for the Protection of Basic Services (PBS) Project, this progress can be partially attributed to improved nutrition, slightly improved immunization and increased birth spacing. Most of this progress has, however,

occurred in urban areas with less marked change in rural, poorer regions. Increase in immunization rates occurred mainly in urban areas. Immunization coverage remains low in all regions except Addis Ababa, Tigray and Harari. Little progress has been made in the control of malaria; recently, huge numbers of Insecticide Treated Bed Net (ITN) have been distributed, but the actual utilization rate of those ITNs is an open question. Home treatment of diarrhea (Oral Rehydration Therapy), one of the cheapest and most cost effective ways to reduce Under Five mortality has also not increased. Finally, in 2005, 63% percent of women demand family planning, yet are unable to obtain contraceptives, one of the highest levels of unmet need for family planning observed worldwide.

**Table 1. Trends in the key indicators included in the PAD**

| **Indicators** | **Baseline value (PAD) 1997/98 1990 EC** | **HSDP targets 2001/02 1994 EC** | **HSDP I Results 2001/02 1994 EC** | **HSDP II Results 2004/05 1997 EC** |
|---|---|---|---|---|
| **Health Status** | | | | |
| Life expectancy | 52 | 55-60 | 54 | 48 |
| Infant mortality Rate | 110-128 | 90-95 | 97* | 77** |
| Maternal mortality rate | 500-700 | 450-500 | 871* | 673** |
| **Health Services** | | | | |
| Potential Health Service coverage | 45% | 55-60% | 61.0% | 72.1% |
| Increase health facilities | See Support Systems below | | | |
| % under 1 year immunized for DPT3 | 67% | 70-80% | 51.5% | 70.1% |
| Contraceptive prevalence rate (CPR) | 8% | 15-20% | 8.1%* | 14.7%** |

Sources: Health and Health Related Indicators (HHRI), or DHS if marked with asterisk(s).
* = 2000 DHS and ** = 2005 DHS
The Potential Health Service coverage is the percentage of population within 10 km of a MOH or NGO health facility (Health Center, Health Station or Health Post).

6. According to the HHRI - 1997 EC, the life expectancy at birth was only 48 in 2004/05 (1997 EC). The reasons for the decrease in the life expectancy at birth from 54 to 48 over the last three years are not clear but may be related to the increased mortality among the young due to AIDS. Also, increasing access to health services has not been translated into improved outpatient visits, TB case detection rates and supervised deliveries (the percentage of births attended by skilled staff is only 12%). At 0.3, the number of outpatient visits per person per year is very low; the 2005 Citizen Report card surveys identified the lack of medicines as the single most important reason why health services were not used. It is likely that improvements would depend on general system support through the strengthening of systems like human resources (increase in quantity and quality of health staff), pharmaceutical supplies, and improved management and supervision at Regional and Woreda levels. The lesson learned is that there is a need for FMOH and RHBs to synchronize the infrastructure, human resource and support systems within the accelerated expansion of Primary Health Care (PHC), paying due attention to *all* components of the Health Services Extension Program (HSEP). This requires improved planning, supervision and resource allocations at national and regional levels.

7. In view of the MDGs, the Government introduced a flagship program, the Health Services Extension Program (HSEP). The HSEP is a community based PHC service which includes a package of *basic* preventive, promotive and curative services. The HSEP targets the households at Kebele level (average 5000 people) and aims in particular to reach mothers and children. The

HSEP services are provided by two female Health Extension Workers (HEWs) per Kebele. This is a new cadre of health workers who are formally employed and salaried by the respective Woredas. The HEWs undergo one-year training in selected Technical and Vocational Educational Training Centers (TVETC) and operate from a Health Post with technical support from a Health Centre and under supervision of the WorHO. Since 2002, the HSEP has evolved during its development phase and pilot phase in a number of Regions (Tigray, Oromiya, Amhara, SNNPR and Dire Dawa) and is now being implemented in an accelerated mode in most of the Regions. The flagship Health Services Extension Program (HSEP) has made good progress in the majority of regions. It has been well received and supported by communities. There is general consensus among regional staff that HSEP is the best program that Ethiopia has undertaken in recent years; however, there is a need to address the curative elements of the package. There are also concerns regarding the training and supervision and the expected attrition of health extension workers (HEWs), which would require a strategic approach at national and regional levels.

8. The Letter of Sector Policy stated that, in order to promote a comprehensive and nationally uniform improvements in service delivery and quality of care, MOH will (a) develop minimum packages of essential services for all four levels with due emphasis on the critical district level care (2000/2001); (b) develop and/or revise service standards for NGOs and the private sector; and (c) develop mechanisms for the transition towards the 4 tier health care delivery system. MOH has developed the minimum packages of essential services for all four levels and has moved to the 4-tier health care delivery system (but without a clear transitional strategy). The revision of service standards for NGOs and the private sector is in the process of being done.

9. Regarding IEC, the Letter of Sector Policy stated that, in order to enhance the promotive and preventive aspect of health services, MOH will: (a) develop a national strategic framework of information, education and communication (IEC) and other implementation guidelines; and (b) complete and use manuals on communicable diseases control. While progress has been made in IEC, much still needs to be done to reach especially the rural areas with appropriate messages in support of the health program.

**B. Support Systems**

*Facility construction and rehabilitation*

10. The Letter of Sector Policy stated that, in order to ensure development of appropriate health infrastructure: (a) MOH will refine and issue the already prepared minimum standards of health posts, health centers and district hospitals, and would also prepare standards for zonal and specialized hospitals (1998/99) - (2001/2); and (b) the Government will deepen the decentralization process through effective capacity building efforts to ensure sustainability of development programs and regional balance. MOH has prepared / refined the standards for health facilities. Regarding capacity building, MOH has been implementing a special program for four emerging regions which need special support.

11. In the PAD, the increase in the number of health facilities by 2002 was one of the key indicators of health services. The targets were as follows:

(i) construction of new facilities – 216 primary health care units (PHCUs), 12 district hospitals, 5 zonal hospitals, and 2 specialized hospitals; and
(ii) renovation of 150 health centers, 50 district hospitals, 10 zonal hospitals, and 5 specialized hospitals.

12. Table 2 below shows the changes in the number of health facilities over the seven-year project period (from 1997/98 to 2004/05).

**Table 2. Number of health facilities**

| | **1997/98 1990 EC** | **2004/05 1997 EC** | **Increase** | **% change** |
|---|---|---|---|---|
| Hospitals | 96 | 131 | 35 | + 36% |
| Health Centers | 282 | 600 | 318 | + 113% |
| Health Stations | 2,331 | 1,662 | (669) | - 29% |
| Health posts | 802 | 4,211 | 3,409 | + 425% |
| Private Clinics | 712 | 1,578 | 866 | + 122% |

Source: Health and Health Related Indicators (1990 EC to 1997 EC)

13. Under the facility construction and rehabilitation component, construction of new health facilities has progressed extremely well, with increases of 36% for hospitals and 113% for health centers; those achievements are well above targets. The increase in the number of health posts has been tremendous (plus 425%), with a marked acceleration in the last two years (the decrease in the number of health stations is the consequence of the transformation from a 6-tier to a 4-tier health care delivery system). Also noteworthy is the substantial increase in the number of private clinics (plus 122%). As a result, the potential health service coverage increased from 45-50% to 72%, an achievement above the target of 55-60% for HSDP (the coverage is 83% if the services provided by private health facilities are included).

14. However, synchronization between construction of new facilities, supply of equipment and deployment of health staff is still an unresolved issue in some regions, with facilities being completed without timely arrangements for the provision of staff, furniture, medical equipment or water supply. The lesson learned is that regions should prioritize, making existing health facilities (hospitals, health centers and health posts) fully operational through rehabilitation and provision of appropriately trained health workers, equipment and medicines.

15. Although various surveys underscored the need to improve the condition and maintenance of health facilities, FMOH and RHBs have not been able to define and ensure the functioning of a sustainable system for preventive maintenance and repair for the infrastructure network and medical equipment.

*Human Resource Development*

16. The human resource development component of HSDP mainly aims at training and supplying relevant and qualified health workers of different categories. The specific objectives were to (i) supply skilled human resources in adequate number to new health facilities; (ii) improve the capacity of the existing health human resources working at various levels; (iii) initiate and strengthen continuing education and in-service training; (iv) review and improve the curricula of some categories of health workers and (v) rationalize the categories of personnel.

17. The Letter of Sector Policy stated that, in order to assist professional growth and job satisfaction, to encourage good performance and to minimize attrition, the Government has issued guidelines on career structure and human resource management and appropriate incentive. The implementation of the actions taken would be regularly reviewed.

18. During the implementation of the HSDP some important policy documents were developed. MOH issued the National Human Resource Transfer and Placement Directives; the Health Sector Human Resource Development Framework (2006-2010) was finalized in September 2005 and the Essential Health Services Package was published in August 2005. Another recent achievement was the restructuring of the Health Services and Training Department with the ensuing establishment of the Human Resources Development Department.

19. Table 3 below shows the trend in the actual number of personnel for the health sector. Under HSDP, the training capacity was increased and there has been a very substantial increase in the total human resources available for both public and private sector. However, some of those personnel received only one year training and are ill prepared for practical work. The composition of the workforce shows a considerable proportion (44%) of low trained staff, represented by the FLHW (24%), HA (14%) and HEW (6%); better skilled cadres, medical doctors and Health Officers are only 5% and 2%, respectively.

**Table 3. Human resources by category**

| | **1996/97 1989 EC** | **2001/02 1994 EC** | **2004/05 1997 EC** |
|---|---|---|---|
| Specialists | 271 | 652 | 1,067 |
| GP's | 1,169 | 1,236 | 1,386 |
| Health Officers | 30 | 484 | 776 |
| Pharmacists | 156 | 118 | 191 |
| Midwife Nurses | 250 | 862 | 1509 |
| Other Nurses | 2,864 | 11,976 | 17,299 |
| Pharmacy Technicians | - | 793 | 1428 |
| Laboratory Technicians | 621 | 1,695 | 2,837 |
| Radiographers | 139 | 247 | 491 |
| Sanitarians | 657 | 971 | 1,312 |
| Health Assistants (HA) | 10,625 | 8,149 | 6,363 |
| Front Line Health Workers (FLHW) | - | 10,050 | 11,200 |
| Health Extension Workers (HEW) | - | - | 2,737 |
| **TOTAL** | **16,782** | **37,233** | **45,859** |

Source: Health and Health Related Indicators (HHRI)

20. In any event, the available numbers of professionals remain insufficient to serve a population as large as the population of Ethiopia. The health professionals to population ratios are among the lowest in the world. The limitations in human resource deployment, management and retention have resulted in uneven distribution of the available resources. Most health care professionals are clustered in major urban areas, which are the better endowed with health infrastructure. In rural areas, health facilities remain un-staffed or under-staffed for considerable period of time after their construction. For some cadres, such as surgeons and midwives, the shortages are alarmingly high. The shortage of midwives is exacerbated by the fact that about half are male and in certain regions there is even a male predominance; women might refrain from using health facilities staffed only by male professionals. Furthermore, there is an acute shortage of emergency obstetric skills among General Practitioners.

21. The private sector – that is rapidly expanding - has increasingly attracted higher skilled professionals. The proportion of medical doctors employed in public sector institutions went down from 73% in 2001/02 (1994 EC) to 44% in 2004/05 (1997 EC). Given that private

providers are predominantly present in urban settings, migration of human resources to the private sector and outside Ethiopia's borders greatly enhanced disparities between regions and between urban and rural areas.

22. The lesson learned is that Central HRD Department must be strengthened, particularly in its strategic and stewardship capacity, and that it is urgent to establish incentive schemes (in addition to the standard civil-service provisions) to retain staff, especially at outlying stations, and to ensure continuing service delivery for disadvantaged populations. MOH is in the process of developing an HRH comprehensive strategy that would include monetary and non-monetary incentives.

*Pharmaceuticals*

23. The goal of the Ethiopian pharmaceutical sector is to ensure the regular availability and rational use of safe, effective quality drugs at an affordable price. The strategies and the specific objectives related to this goal are described in the National Drugs Policy (NDP, MOH 1993GC).

24. The Letter of sector Policy stated that, in order to ensure a regular and adequate supply of effective and affordable essential drugs: (a) MOH will revise and update the existing drug policy and put it into practice (2000/1); (b) lists of recommended drugs at National and Regional States level will be formulated and regularly updated (1998/99); (c) modernization of legal and regulatory framework governing drug law and regulations will be acted on (1998/1999); (d) training of health personnel in drug supply management will be conducted; (e) further actions in restructuring PHARMID will be taken; and (f) adequate recurrent budget for drugs will be allocated.

25. A number of major legislative and organizational reforms have taken place based on the Proclamation to Provide for Drug Administration Control 176/1999. The List of Drugs for Ethiopia (LIDE 2002) and its sub-lists have been distributed. This list records the drugs that can be legally registered and marketed in Ethiopia, which are then categorized by lists by level of healthcare facility (i.e. by zonal and district hospital, HC, HS, HP, and drug retail outlet). A list containing priority drugs that should be available at all times in adequate quantities, especially in the public sector, has been developed as part of the Basic Health Care Package and is used as the basis for procurement. The Essential Drug List (1987EC) has been revised. A policy on supply and use of anti-retroviral drugs has been developed and distributed throughout the country. The related Treatment Guidelines have been prepared and printed. Guidelines for ARV Procurement, Storage, Distribution and Use have also been prepared.

26. Improving drug availability is important not only to facilitate better treatment, but also because the unavailability of drugs is a major factor causing low utilization rates of lower tier facilities. Since the majority of household health expenditures are spent on pharmaceuticals (about 60 percent), improvements in drug availability and affordability would contribute to household welfare.

27. There are significant differences between various mission reports and evaluations regarding the status of drug supply in the public sector. There is general agreement that: (i) storage and inventory control was poor; and (ii) availability in the Ethiopia Red Cross pharmacies, Special Pharmacies (SP) and private pharmacies was adequate during the whole of HSDP. In general, it appears that availability of essential drugs has improved, but that shortages of drugs in public facilities are still common due to budgetary, procurement and logistics problems. Also, the

availability of cold chain equipment and supplies has increased in most regions, but their functionality has been affected by the availability of spare parts.

28. About 450 Special Pharmacies (SPs) have been established all over the country. The concept behind SPs is to allow patients to obtain drugs when they are not available in the budget pharmacies. SPs add a markup of about 20-30 percent to the cost of drugs but they are still a lower cost alternative relative to private pharmacies and drug stores. They also raise funds for health institutions. SPs are often staffed by at least some health workers. A crude comparison of surplus generated by SPs to a hospital's operational budget suggests that surplus from SPs could cover close to 30 percent of a hospital's operational budget (HCF/MOH 2001). Efforts to expand the number of special pharmacies are faced with many challenges: a retention arrangement problem, shortage of pharmacy professionals, a lack of storage space, limited financial management capacity, particularly in the rural areas and at lower health service levels.

29. In summary, the pharmaceutical sector has improved during the implementation of HSDP, especially due to the establishment of Special Pharmacies (SP) which has resulted in better drug availability and increased ability to cover recurrent costs. However, the retention program is not yet widely introduced within the Regions, while the two systems (Special Pharmacies and Budget Pharmacies) are still operating as parallel systems. The accessibility and affordability of basic drugs for the poor are not ensured.

30. The lesson learned is that efforts are still needed in the area of procurement and distribution, human resource availability, rational drug use, budget allocation and logistics to ensure regular supply of quality and affordable drug supply to all levels. According to the ARM 2006 Report, FMOH has conducted an assessment of the Health Commodities Supply System (HCSS), and has developed a Master Plan (MP) for HCSS. A "Drug Revolving Fund" has been selected as the best option, and design of the system is under way.

*Health and Management Information System (HMIS) & Monitoring and Evaluation (M&E)*

31. The objective of the HMIS is to produce timely health information for planning, management and decision-making. It is strictly linked to the Monitoring and Evaluation (M&E), although they are two separate components of the HSDP (components 6 & 7).

32. Health and Health Related Indicators (HHRI) booklets have been published and disseminated every year by the FMOH/PPD. Despite their limitations, the reports have provided the information base for a unique trend analysis over the last eight years or so, being important for planning and evaluation purposes.

33. HMIS has improved over time, but the system is fragile and data collection and reporting could be improved. There is a need to develop an HMIS system based on a common set of indicators, standardized procedures, and enhanced information use for decision-making. According to the ARM 2006 report, this is precisely the objective of the national HMIS reform that has been launched recently. An assessment has been conducted and an HMIS strategy is being developed based on selected core indicators for the different levels.

## C. Financing of the Sector

34. The Letter of sector Policy stated that, in order to improve efficiency in the use of available resources, alleviate the under-financing of the sector and ensure sustainability of the development program, the Government will increase the health budget each year subject to fiscal sustainability, and would implement a health care financing strategy.

35. Table 4 below shows that, apart from a temporary set back in 1999/2000, there has been a steady increase in public health expenditures from 1990 EC (1997/98) to 1997 EC (2004/05). In 1999/2000, public health expenditures sharply declined while total public expenditures increased significantly, possibly because of non-health related expenditures incurred in response to the Ethiopia-Eritrea Border Conflict.

**Table 4. Public Health Expenditures**

| Year | Capital Expenditure | Recurrent Expenditure | Total Expenditure | Per Capita |
|---|---|---|---|---|
| | ---------- In million Birr ---------- | | | In Birr |
| 1990 EC (1997/1998) | 277 | 394 | 671 | 11.2 |
| 1991 EC (1998/1999) | 648 | 456 | 1,104 | 17.9 |
| 1992 EC (1999/2000) | 177 | 398 | 575 | 9.1 |
| 1993 EC (2000/2001) | 305 | 445 | 750 | 11.5 |
| 1994 EC (2001/2002) | 235 | 522 | 757 | 11.3 |
| 1995 EC (2002/2003) | 298 | 526 | 824 | 11.9 |
| 1996 EC (2003/2004) | 379 | 532 | 911 | 13.2 |
| 1997 EC (2004/2005) | 356 | 874 | 1,230 | 16.8 |

Source: Health and Health Related Indicators – Ministry of Finance and Economic Development

36. A Health Care Financing Strategy was developed by the Federal Ministry of Health (FMOH) and endorsed by the Council of Ministers in 1998 E.C (2005/06 G.C). The strategy aims to increase resources to the health sector, improve efficiency in resource allocation and utilization, ensure sustainability of financing as well as improve quality and equity in delivery of health care services. Some of the reform measures suggested by the strategy are user fees revision, revenue retention, and waiver and exemption systems. The Government with the support and collaboration from its development partners has been engaged in introducing various health care financing reforms. Among other things, the Federal and Regional Governments undertook relevant studies and capacity building measures following which legal frameworks have been developed and ratified by a good number of the regions. Implementation of different reform components such as revenue retention by health facilities and systematizing and rationalizing the fee waiver system have also commenced in some of the Regions. Also, private sector provision of health services has increased. Those results are extremely modest; therefore, the main focus should continue to be on how to allocate more of available resources to the health sector and how to improve the use of these resources.

37. There has been a steady increase of health expenditures over the last 10 years; however, Ethiopia is still among the lowest spenders on health in the world. As a share of GDP, public spending has stagnated between 1999/00 and 2004/05 at about 2.75%, with a slight increase from US$2.8 to US$3.5 in public spending per capita (Source: Health JBAR – October 2006). The increase in per capita public health expenditure is to a large extent attributable to the inflow of funds for vertical programs and much less to the health sector service delivery system in general.

38. Annex 3 on "Economic and Financial Analysis" provides more detailed information on expenditures on health services.

**D. Management of the Sector and Governance**

39. According to the PAD, the institutional and implementation arrangements for HSDP included a Central Joint Steering Committee (CJSC) responsible for the overall management of the program (and the parallel program in education) and Regional Joint Steering Committees (RJSC). MOH, and especially its Planning and Projects Department (PPD), would be responsible for the central component of HSDP, the organization of all international procurement for regions and all procurement for MOH, serving as secretariat to the CJSC, and coordinating overall HSDP implementation. For most of HSDP expenditures, implementation responsibility would be with the regions and their lower units (zones and woredas, as well as individual health institutions). Regions would be responsible for most of the procurement and supervision of construction under HSDP.

40. The Letter of sector Policy stated that, in order to guarantee adequate program management, administration and financial management as well as the availability of information for decision-making at all levels, MOH will strengthen the capacity of PPD. A detailed plan of action has already been prepared, and implementation will be initiated in 1998/99. Regional capacities would also be strengthened. During HSDP, the capacity of PPD and the regions has indeed been strengthened.

41. The different and complementary roles of FMOH, RHBs and WorHOs were clearly specified in the HSDP and the decentralization policy. At the Federal level, the Central Joint Steering Committee (CJSC), HPN-donor group, and Joint Core Coordinating Committee (JCCC) were established and functioned. The committees provided the forum for policy dialogue, strategic thinking and donor harmonization. The proposed Regional Joint Steering Committees were established but did not really function.

42. The decentralization policy created opportunities for local Governments to be responsive to local challenges; it also created a major challenge of ensuring that national priorities are adequately funded in the Regional and Woreda plans. Weak management capacity in particular at the Woreda level stood out as a key constraint to governance in the sector. The lesson learned is that there is a need to strengthen planning and management capacity at all levels.

43. Particularly noteworthy are the strong commitment of the Government and the strong ownership of the sector. Also, HSDP has served as a framework for aligning donors to the GOE sector policy and strategy. It has established a formal co-ordination framework including joint reviews, joint processes for monitoring and use of common performance monitoring instruments. However, aid to the sector remained fragmented with a large number of donors and project-tied interventions that were guided by multiple procedures, targeting different regions and/or inputs to HSDP, contributing to a high overall transaction cost for FMOH/GOE. Large and unpredictable inflows of external funding for vertical programs have had limited impact on resource availability to strengthen general comprehensive service delivery, which remains the core issue to address. The lesson learned is that donors should be encouraged to change their current practices and align their support as much as possible to the government budget process.

**E. Procurement and Management of the Special Account for the IDA Credit**

Procurement

44. Procurement capacity varied from one region to another, but generally procurement capacity was weak in the whole country. Procurement officers from the regions were trained before the start of project implementation, but after three months close to fifty percent of those trained were no longer on the job. The lesson learned is that, in a situation where there is a rapid turn over of staff, there is a need to make training a repetitive process. Improvements in the procurement situation were initiated only towards the end of HSDP. It is worth noting also that the thresholds for prior review (US$2,000,000 per contract for works and US$200,000 per contract for goods) were very high for HSDP, compared to any other Bank-financed project.

45. In HSDP, procurement has been unsatisfactory. An independent procurement review (IPR) by a consulting firm was carried out in October 2005, towards the end of the Bank HSDP; the report is dated February 2006. The consultant selected six contracts for the IPR: one contract for works (rehabilitation of St. Paul Hospital) awarded through NCB; three contracts for goods awarded through ICB (one for ambulances, one for medical equipment, and one for drugs and medical supplies); and two contracts for training awarded through IS.

46. The consultant's report notes that procurement responsibility in FMOH is split between many departments; the procurement of drugs (and goods to some extent) lies with Pharmaceutical Supply and Administration Service; the procurement of works lies with a sub-section of PPD, and the procurement of training lies with another sub-section of PPD. Those departments only file procurement related documents from the award of contracts (including the Bank's no objection, where applicable) until acceptance of goods or works, whereas the tendering process is filed separately with the tender committee and the legal department (which both were not accessible during the review), and all payments related documents are filed only with the administration & finance service; to make matters worse, any procurement for services and training, which benefits a region, is only filed with the respective regional government, with no copies (except some payment requests to the local banks) filed at FMOH level.

47. The consultant could not review the two selected contracts for training, as all documents were said to be filed in the regions. During the physical inspection of works at St. Paul Hospital, some of the line items selected by the consultant to be looked at, either could not be shown by the responsible staff at the hospital, or did not fit the specifications given in the contract. At the end of the audit, the FMOH advised that payments for this contract were not / will not be claimed for disbursement from the Bank. Not all bidding documents or documents related to bid opening and bid evaluation could be verified. However, the bidding documents for ambulances and medical equipment did comply with the relevant standard bidding documents of the Bank, and the document related to bid opening / bid evaluation for the ambulances did comply with the Bank's requirements. It should be noted that contracts for ambulances and medical equipment were subject to prior review.

48. The overall assessment of the audit is that procurement is not satisfactory. The consultant's conclusions were as follows:

- The record keeping and filing are unacceptable (the project could not provide a single complete file).
- Individual procurement notices for ICB procurement were published only locally (Ethiopian Herald), and not internationally (such as through the UN Development

Business). Since two of those contracts were subject to prior review, it is not clear why the Bank staff did not request FMOH to place procurement notices internationally.

- Only the department handling drugs and goods has dedicated, reasonably competent staff; all other donor-funded procurement (services, training and works) is handled by staff not primarily concerned with procurement. High staff turnover over the project duration is a problem.
- There is no established contract management. Contract performances are considerably delayed, because of big delays in the evaluation process, in the establishment of letters of credit or in the provision of special commitment applications. Many of the supplies are either delivered late by the suppliers, or are kept for unacceptable long periods of time at the ports of arrival.

Management of the Special Account for the IDA Credit

49. As was the case for the ESDP, there were problems with the management of the Special Account for the IDA Credit for HSDP. The following paragraphs are taken from the ICR for ESDP, with very few changes.

50. The special account opened at the National Bank of Ethiopia for HSDP is administered by the Counterpart Fund Unit in the Ministry of Finance and Economic Development (MOFED). The fund flows through Channel 1. That is the system where funds flow from the Federal MOFED down the line in the Government finance structure where the implementing agencies (MOH, RHB, Zones and Woredas) obtain the funds from the corresponding finance organs at the different tiers. Channel 1 was the modality preferred by the Government when HSDP I was launched. In conformity to this, the World Bank took the lead to use this Channel. The advantage of this channel is that although donor requirements are taken into account and funds may be earmarked, the channel enables resources to flow to the sector directly from the budget and it enables integrated planning, budgeting and accounting.
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51. The duties performed by the Counterpart Fund Unit in managing the special account through this channel include the following:

- Transferring funds from the special account to regions. Bureaus of Finance and Economic Development (BOFED) at the regional level are responsible for managing the transferred funds and for the consolidation of Statement of Expenditures (SOEs).
- Receiving the SOEs from the Regions and Federal Ministry of Health, which justify the use of funds.
- Preparing consolidated statements and sending an application for withdrawal to the World Bank for the replenishment of the special account.

52. The main problems encountered in the implementation of the system in terms of special account management are the following:

1) Delays in the submission of SOE reports by regional states. Most of the time, the SOEs reaching MOFED contained many errors, and correcting them required several correspondences with regions, which in turn lengthened the replenishment time by the Bank. The major errors committed in preparing SOEs were:

- Submission of SOEs without supporting documents such as contractual agreement for contracts above the threshold, lacking Bank's prior approval, and Bank guarantee for advances, payment certificate, invoices;
- Percentage of expenditure to be financed under the credit were not indicated on the SOEs and checked properly (100% of foreign expenditures and 90% of expenditures for works, drugs, medical supplies, vaccines, furniture, vehicles, materials and equipment and other goods, and 100% for consultants' services, training and incremental operating costs);
- Each category of expenditures was not listed separately on SOE;
- Issuance of one invoice for different contracts done by one contractor.

(2) Lack of adequate familiarity with the Bank's procedures by regional states.

(3) Lack of coordination among different concerned departments of MOFED, Federal MOH, and World Bank country office.

(4) Delays in the submission of monthly financial reports from the regional finance bureaus for consolidation and audit. As a result, there was always a delay in audited financial reports. MOFED is responsible for closing the accounts and getting the audit reports. The experience-to-date with this program suggests that periodic delays in the submission of audit reports were caused primarily by account backlogs in the Regions.

53. The main causes of the problems in the area of special account management were: (i) lack of familiarity with the Bank's procedures by regional states; (ii) a shortage of skilled manpower in the regions to process SOEs; and (iii) insufficient training on the Bank's procedures, especially in light of the high staff turnover.

54. The transfers of funds from the special account are based on the sub-programs prepared by the Regional Health Bureaus (RHBs). However, every year the submission of the sub program by the RHBs is late. As a result, the available time left in the FY is insufficient for full implementation and part of the budget expires without being used. The cumulative effect of this is to cause delays in the implementation of the credit on the one hand, and, on the other, the weaker regions get less from the credit since the better performing regions are getting more every year.

Lesson Learned

55. The lesson learned is that, in a situation where implementation is decentralized to the level of the regions or even below, the capacity of the different actors must be taken into account when designing and agreeing upon the procurement and financial management arrangements.

## Annex 3. Economic and Financial Analysis

1. The economic analysis included in Annex 4 of the PAD concluded that the focus of the HSDP on increasing access to primary health care (including health promotion and prevention, and basic curative care) amongst the rural poor population would bring significant physical and economic benefits to the population. Recent positive trends in both the financing and provision of public health services confirmed the FDRE's commitment to the sector. If fully implemented, the allocation of recurrent funds to the primary level would increase from 38% in the years previous to 1997/8, to around 45% of recurrent funding over the five years. Recurrent funding constituted around 67% of the total budget, with capital investments scaled down from about 50% originally. This balance was considered more sustainable financially. The proposed peak in capital expenditures in year 2 might need to be adjusted in the future in order to match implementation capacity. The FDRE could afford its share of the HSDP given the projections for economic growth. There was concern that in the event of budget shortfalls, the funding of PHC services could come under pressure, given parallel investment in hospital facilities. However, the policy framework clearly prioritized more and improved primary health services and recurrent funding to this level, and the Government's Letter of Sector Policy dated August 10, 1998 reiterated that in the event of budget shortfalls priority will be given to primary health care in lieu of tertiary health facilities.

2. This Annex 3 on economic and financial analysis provides some information on possible returns to investments in the health sector and on expenditures on health services. It is based on the Public Expenditures Review (PER) conducted in 2003; the National Health Account (NHA) exercises undertaken in 1995/96, 1999/2000 and 2004/05; the Household Income Consumption Expenditure Survey (HICES) and Welfare Monitoring Survey (WMS); the country Status Report on Health and Poverty of July 2005; the Project Appraisal Document (PAD) for the Protection of Basic Services (PBS) Project; the Health JBAR of October 2006; and on information derived from the HSDP joint reviews as well as other documents from the MOH and GOE.

**Returns to Investments in the Health Sector**

3. There are no data available to assess what has happened as a result of HSDP. However, Annex 10 of the PAD for the PBS Project includes the following paragraphs on returns to investments in the health sector.

4. Most primary and clinical health care in Ethiopia **is** provided by sub-national governments. The third Health Sector Development Plan III (HSDP III) calls for a significant scaling up of spending on this category of care, with a particular focus on increasing spending on the Health Services Extension Package (HSEP). Additionally, Component 2 of the PBS will significantly increase financing made available for critical health commodities.

5. An analysis was conducted on the impact on child (or under-5) mortality of increased public spending on primary and clinical care, with a focus on the impact of reduced child mortality, although increased spending of this nature has many other benefits. Three different scenarios were analyzed, each assuming a principal focus on expanding access to HSEP services. In Scenario 1, seventy percent of the increased spending was assumed to go towards HSEP services, with the rest going to clinical individual-oriented care. In Scenarios 2 and 3, the percentage of the increased spending going to HSEP services was assumed to be eighty percent and ninety percent, respectively.

6. The analysis drew on calculations from the in-depth World Bank sector report "Ethiopia: A Country Status Report on Health and Poverty" (July 2005). The value of each child's life was assumed to be equal to the national real per-capita GDP in each productive year of the child. All children were assumed to start being productive from the age of 20 onwards. Real per-capita GDP was assumed to grow at the rate of 2.5% per year, and a real discount rate of 5% was used for the calculations. The results are provided in the table 1 below.

**Table 1: Returns to increasing spending on primary and clinical health care**

| Scenario | Description of scenario | Reduction in under-5 mortality per $ spent per capita | Cost per death averted (in $) | Annual rate of return of investment (reduction in child mortality only) |
|---|---|---|---|---|
| 1 | 70% of increase in public health spending going to HSEP, and the rest to clinical individual-oriented care | 36.8 | 704 | 11.2% |
| 2 | 80% of increase in public health spending going to HSEP, and the rest to clinical individual-oriented care | 40.3 | 640 | 12.3% |
| 3 | 90% of increase in public health spending going to HSEP, and the rest to clinical individual-oriented care | 44.5 | 582 | 13.4 |

7. The results show that the rates of return are significant in all three scenarios. It should be stressed that these are the returns ***only from reductions in child mortality.*** They do not include the many other returns from increased public spending on primary and clinical care, such as reduced child morbidity; reduced maternal mortality and morbidity; and reduced mortality and morbidity of other members of the population. If these other benefits were factored in, the rates of return from increased spending on primary and clinical care would be substantially higher.

**Expenditures on Health Services**

8. This section examines trends in total spending (including public and private) and in spending per capita for health services; levels of expenditures on health services in Ethiopia vis-à-vis current international experience; financing of health expenditures; expenditure by provider and by function; decentralization; spending rates and budget execution; and cost recovery. The analysis is based primarily on information provided in the Health JBARs and the NHAs.

Spending on Health Services

9. According to Ethiopia's Third National Health Accounts (NHA), the national health expenditure has reached 4.5 billion Birr (US$522 million**)** in 1997 EFY (2004/05) from its level of 2.9 billion Birr (US$ 356 million) in 1992 EFY (1999/00). During the same period, per capita health expenditure has increased to US$7.1 in 2004/05 from its level of US$ 5.6 in 1999/2000.

10. Table 2 below shows the increases in per capita expenditures on health over the last 10 years: from US$4.1 in 1995/1996 to US$5.6 in 1990/2000 (+37%), and from US$5.6 in 1999/2000 to US$7.1 in 2004/2005 (+27%).

**Table 2: National Health Accounts--Evolution of Total, Public and Private Spending 1995/1996 to 2004/2005**

| | **NHA 1: 1995-1996 1988 EC** | **NHA 2: 1999-2000 1992 EC** | **NHA 3: 2004-2005 1997 EC** |
|---|---|---|---|
| Total spending as a share of GDP | 4.1% | 5.5% | 5.6% |
| Total spending in US$ per capita | 4.1 | 5.6 | 7.1 |
| Public spending as a share of GDP | 1.7% | 2.7% | 2.8% |
| Public spending in US$ per capita | 1.7 | 2.8 | 3.5 |
| Private spending as a share of GDP | 2.4% | 2.8% | 2.8% |
| Private spending in US$ per capita | 2.4 | 2.8 | 3.6 |

Source: FMOH, NHAs

11. At US$7.1 in 2004-2005, per capita health expenditures represent about 5.6% of GDP. Public spending, both from domestic and external sources, is about equal to private spending, a large share of which is private consumption through out-of-pocket spending. In the last five years, both public spending and private spending have been stalling as a percentage of GDP (at about 2.8%).

12. Ethiopia is still among the lowest spenders on health in the world. Per capita total health spending is also significantly lower than the SSA average of US$42. Spending on health in Ethiopia has been dramatically lower than in Uganda (US$18), Kenya (US$31) and even Tanzania (US$8). The recent increase over the last few years has only slightly narrowed the gap. The low level of spending mainly reflects a very low resource base or GDP per capita. The achieved rate of growth in per capita health expenditure (average annual growth of 10.6% over the last five years) is significant and encouraging, However, with this rate of growth in the next 10 years, the per capita expenditure would only be US$ 19.44 by 2015, which is much lower than the US$ 34 recommended by the Commission for Macroeconomics and Health of WHO to deliver essential health services in developing countries.

Financing of Health Expenditures

13. Table 3 below shows the trend over the last three years (2001/02 to 2004/05) in the shares of government, donors, household, NGOs and private sector in the financing of health expenditures: the share of donors and NGOs has increased while the share of Government and household has decreased.

**Table 3: Financing of Health Expenditures**

| Source | Percentage | |
|---|---|---|
| | 2001-2002 | 2004-2005 |
| Government, including public enterprises | 33 | 31 |
| Households | 36 | 31 |
| Rest of the World – donors (public) | 16 | 18 |
| NGOs (international & local) | 11 | 19 |
| Private (employers & others) | 04 | 01 |
| Total | 100 | 100 |

Source: Health JBAR (October 2006) and National Health Accounts (NHAs)

14. In 2004/05, Government and household each financed about 31% of health expenditures. Household is out-of-pocket spending by individuals, including direct payment to private practitioners, traditional healers, private pharmacies and government facilities in the form of user charges. Out of pocket expenditure still accounts for a significant proportion of health expenditure in Ethiopia imposing heavy financial burden and risk of catastrophic expenses on users, particularly the poor. This calls for the need to design and implement appropriate and efficient health insurance mechanisms that would pool risks among the healthier and the sick as well as the poor and the better off. The recent decrease in the government's share of total health expenditures is the continuation of an older trend, since the government's share decreased from 41 percent in 1995/96, to 33 percent in 2001/02, and then to 31 percent in 2004/05. Donors (public) and NGOs (international & local) each contribute a lower, but significant amount, their contribution reaching eighteen and nineteen percent, respectively, of all health spending (however, donor assistance to Ethiopia still appears to be considerably lower than the average donor assistance received by other least developed countries). On the other hand, the contribution of private enterprises has decreased from a marginal amount of four percent of total health spending to an insignificant amount of one percent.

Health Expenditures versus Public expenditures in Ethiopia

15. In general, public expenditures have been increasing steadily in Ethiopia over the last few years. Public spending on health has also increased, albeit at a slower pace than total public expenditures. At 5.6%, Ethiopia's share of total government expenditures that go to health is among the lowest in SSA and is below the pledge made by African leaders (in the 2001 Abuja declaration) to increase health spending to 15% of public expenditures. Malawi, Tanzania, South Africa and Zambia allocated closer to ten percent of their public spending to health, a proportion twice as large as Ethiopia's allocation (PER 2003).

Expenditure by Provider

16. According to the NHA 3, in 2004/05 the majority (30%) of the resources were spent on providers of ambulatory care which includes primary health care units (PHCUs) and clinics, while 18% was spent on hospitals. By comparison, in 1999/00, 27% and 12 % was spent on hospitals and ambulatory care providers, respectively. This shows the increase in expenditure on ambulatory care providers (PHCUs), from 12% to 30%, which is in line with the government effort to spend less on hospitals and more on PHCUs.

17. If one looks at expenditure by provider ownership, in 2004/05 the majority (54%) of the total health expenditures are spent in public health facilities, while 38 % is spent in private providers (29 % on private for profit facilities and 9% on NGO facilities), and the remaining 8% is spent on

rest of the world providers and providers not specified. The health expenditure on private providers has increased from 20% in 1999/2000 to 29% in 2004/2005, while the share of government providers has declined from 68% to 54% during the same period. This shows that the role of the private sector in the provision of services is gradually increasing, while the government's role in the provision of services is declining. The gradual increase in the share of for profit private providers is expected to inject efficiency in the sector. While the increased role of the private sector should continue to be encouraged, the government needs to build its capacity in terms of regulating and improving access to health services for the rural population and the poor.

Expenditure by Function

18. There has been a considerable shift of resources from curative care to preventive care over the last five years. Comparison of the findings of NHA 2 and NHA 3 in terms of the functional breakdown of health expenditure shows that the expenditure on preventive and public health services increased from 17% to 24% of the total expenditure, while the expenditure on curative care including pharmaceuticals decreased from 57% to 45% of total expenditure. This resource shift is further evidenced when one considers the resources flowing through FMOH and RHBs/WorHOs; it shows that the share of expenditure on prevention and public health has increased from 16% in 1999/00 to 44% in 2004/05, while the share of expenditure on curative services has only increased from 11% to 20%. The share of administration remains at 7% which is considered reasonable, according to the generally accepted rule of thumb of 10%.

19. Although it is difficult to judge the optimal curative-preventive combination, the move towards prevention from curative services is in line with the government's health sector policy and health care financing strategy. Increasing allocation to preventative / promotive services would enhance efficiency of resource utilization by allowing the introduction or expansion of inexpensive interventions as well as allowing greater emphasis on household care and community-based services.

20. According to NHA 3, donors (the rest of the world) contribute the lion share (80%) of the total expenditure on prevention and public health services, while the Government contributes 19%. On the other hand, curative care expenditure is mainly financed by the Government (58%), followed by the private sector (39%). The private sector (which consists of households / out-of-pocket, private for profit and private for non-profit organizations) is the single most financer of Pharmaceuticals (98%). With regard to capital formation, as it is the case in prevention and public health service, the rest of the world is the major contributor (67%) followed by government (32%). It is in the interest of government that the rest of the world (donors) is contributing to the capital formation which has an impact in strengthening the health system. As expected the government took the burden of health administrative cost covering 83% of it.

21. The distribution of funds to functions by source also shades light on the priorities given by each financer. In this regard, Government expended 41% of its resources on curative services while it allocated 20%, 16%, 15% and 5% to health administration, capital formation, prevention and public health and other health related services, respectively. On the other hand, the private sector allocated all its resources to curative and pharmaceuticals. The rest of the world (donors) significantly allocated its resources to prevention and public health (52%), followed by capital formation (27%).

Lesson Learned

22. The lesson learned is that there is a need to allocate more of available resources to the health sector and to improve the use of these resources.

**Decentralization, Spending Rates and Budget Execution**

23. During HSDP, decentralization to the regions has deepened, but challenges remain regarding budget execution and improvement of health outputs and outcomes. The share of public funds spent in the regions has increased over time relative to the share at central level.

24. Expenditures varied widely from region to region. Spending rates have been low in all regions, which may explain the reluctance of the government to increase public funding for health. Budget execution has been very much a problem. Generally, compared to the capital budget, a significantly larger percentage of the recurrent budget has been spent. This could mean that capital needs relative to implementation capacity tend to be overestimated, and/or there could be factors such as donor processes which impede faster execution of capital budgets. The other potential causes of general under spending include inadequate capacity for program planning/budgeting and management at the regional, zonal and woreda levels. The problem of underreporting could also be a contributing factor. The PER (2003) mentions that donor inflows tend to be overestimated in the budget at the beginning of the year and underreported when it comes to actual expenditures. Thus the gap between budget estimates and actual expenditures seems larger than it actually is. There is also the need to adequately orient zonal and woreda stakeholders to health sector development goals (particularly in terms of reaching the MDGs) and to motivate them to give priority to improving the implementation of health interventions.

**Cost Recovery**

25. Cost recovery does not represent a large share of public health system revenues. Cost recovery has been part of the Ethiopia's health system since the early 1950s. At both government and non-government facilities, users pay for registration, medical certificates, diagnosis, dental and ophthalmologic services. Nominal amounts are charged, ranging from small fees for outpatient registrations, consultations, laboratory tests, and other routine diagnostic procedures, as well as inpatient beds; to higher fees for prescription drugs and inpatient surgical procedures.

26. Patients can be exempted if they obtain a free paper from their kebele certifying that they are too poor to pay. Certain services are also free, including treatment of tuberculosis, family planning, and childhood immunizations. Criteria for granting free healthcare services are principally based on the direct monthly income of the individual (however, this criterion has changed over time). Currently, there are many exemptions so that the majority of patients visiting government facilities pay nothing. Nevertheless, some poor people may still be dissuaded from using services because they have to pay a token amount for services and/or must invest time in obtaining the exemption. When originally introduced, fees recovered a substantial portion of the total costs of providing the services. However, the level of fees remained unchanged for almost 50 years, and today it has become almost symbolic. In addition, the small fee amounts are not usually reinvested to improve services at point of delivery because the fees are not held at the facility level. With few exceptions (such as the Special Pharmacies), all fees collected are remitted to Regional Finance Bureaus, then forwarded to the MOF, which accounts for them as general government revenues.

## Annex 4. Bank Lending and Implementation Support/Supervision Processes

**(a) Task Team members**

| Names | Title | Unit | Responsibility/ Specialty |
|---|---|---|---|
| **Lending** | | | |
| David Berk | Lead Operations Specialist | AFTH4 | Team Leader |
| Christine Pena | Human Resources Economist | AFTH4 | Economics |
| Gebreselassie Okubagzhi | Social Sector Specialist | AFMET | Health |
| Francesco Sarno | Procurement Specialist | AFTS1 | Procurement |
| Iraj Talai | Financial Management Specialist | AFTS1 | Finance |
| Richard James | Financial Analyst | ECSIN | Finance |
| Sidi Boubacar | Counsel | LEGAF | Lawyer |
| Paul Vandenheede | Disbursement Specialist | LOAAF | Disbursement |
| Michael Porter | Public Health Specialist | Consultant | Public Health |
| Carin Lenngren | Health Facilities Architect | Consultant | Facilities |
| Paul Davis | Equipment Specialist | Consultant | Equipment |
| **Supervision/ICR** | | | |
| Nicholas Bennett | Principal Human Development Specialist | AFTH2 | Mission Leader |
| Jean-Pierre Manshande | Sr. Health Specialist | AFTH3 | Task Team Leader |
| Anwar Bach-Baouab | Lead Operation Specialist | AFTH3 | Task Team Leader |
| Gebreselassie Okubagzhi | Sr. Health Specialist | AFTH3 | Task Team Leader |
| Samuel Haile Selassie | Sr. Procurement Specialist | AFTPC | Procurement |
| Julie McLaughlin | Lead Health Specialist | AFTH1 | Health |
| Agnes L.B. Soucat | Lead Health Specialist | AFTHD | Health |
| Eshetu Yimer | Sr. Financial Management Specialist | AFTFM | Health |
| Bassam Ramadan | Lead Operations Officer | AFTH3 | Operations |
| Rajat Narula | Sr. Finance Officer | LOAG2 | Finance |
| Simon Ochieng Lang'o | Finance Analyst | LOAG2 | Disbursement |
| Peter Bachrach | Management Specialist | Consultant | Implementation |
| Jerker Liljestrand | Reproductive Health Specialist | Consultant | Reproductive health |
| Krihna Pidatala | HMIS Specialist | AFT | HMIS |
| Dick Coppinger | Engineer | Consultant | Facilities |
| Eleni Albejo | Team Assistant | AFC06 | Assistant |
| Anne Anglio | Sr. Program Assistant | AFTH3 | Assistant |

**(b) Staff Time and Cost**

| Stage of Project Cycle | Staff Time and Cost (Bank Budget Only) | |
|---|---|---|
| | No. of staff weeks | USD Thousands (including travel and consultant costs) |
| **Lending** | | |
| FY95 | | 78.63 |
| FY96 | | 57.69 |
| FY97 | | 158.23 |
| FY98 | | 311.96 |
| FY99 | | 138.22 |
| FY00 | 1 | 7.73 |
| FY02 | | 0.00 |
| FY03 | | 0.00 |
| FY04 | | 0.00 |
| FY05 | | 0.00 |
| FY06 | | 0.00 |
| FY07 | | 0.00 |
| **Total:** | 1 | 752.46 |
| **Supervision/ICR** | | |
| FY95 | | 0.00 |
| FY96 | | 0.61 |
| FY97 | | 0.00 |
| FY98 | | 3.11 |
| FY99 | | 166.03 |
| FY00 | 59 | 91.84 |
| FY01 | 30 | 143.46 |
| FY02 | 43 | 198.05 |
| FY03 | 46 | 115.62 |
| FY04 | 42 | 134.51 |
| FY05 | 33 | 99.25 |
| FY06 | 28 | 25.12 |
| FY07 | 6 | 5.77 |
| **Total:** | 172 | 983.37 |

## Annex 5. Beneficiary Survey Results

Not applicable

## Annex 6. Stakeholder Workshop Report and Results

Not applicable

## Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR

*Federal Democratic Republic of Ethiopia*

*Ministry of Health*

*Health Sector Development Program*

*IDA-Credit No. ET-3140*

*Implementation Completion Report (ICR)*

*March 2007*

***Health Sector Development Program***
***IDA-Credit No. ET-3140***
***Implementation Completion Report (ICR)***

## *1 Background*

***Program Objective:*** The Health Sector Development Program Project for Ethiopia aims to develop a health system that provides comprehensive and integrated primary care services, primarily based at community health level facilities. It focuses on communicable diseases, common nutritional disorders, environmental health and hygiene, reproductive health care, immunization, the treatment and control of basic infectious diseases like upper respiratory tract infections, the control of epidemic diseases like malaria, and the control of sexually transmitted diseases especially HIV/AIDS.

***Program component:*** The project has eight components. They 1) expand primary health care access; 2) improve the technical quality of primary health care service provision; 3) expand the supply and productivity of health personnel; 4) ensure a regular and safe supply of effective, safe, and affordable high quality drugs while improving prescribing behavior by health providers; 5) improve awareness about personal and environmental hygiene and basic knowledge of common diseases and their causes as well as promote political and community support for health services; 6) transform the health system into a four-tiered system that is linked, equitably distributed, and managed in a decentralized, participatory, and efficient manner; 7) monitor improvements in service delivery, quality, and financial performance and evaluate the impact, effectiveness, and cost-effectiveness of the project's components; and 8) improve financial sustainability.

***Implementation Period:*** The initial implementation period of the program was July 1997-june 2002 but latter on extended to June 2006

***Program cost and financing:*** The program was estimated to cost 737.8 million US$ of which government, other donors, IDA user fee, are expected to finance 55.3%, 28.9%, 13.6% and 2.1% respectively. The amount of loan from IDA was US$100 million.

***Key Indicators***

***Health Status***

- Increase life expectancy at birth from 52 years in 1997 to 55-60 years in 2002; for males from 49.7 years in 1997 to 56.2 years in 2002 and for females from 52.4 years in 1997 to 59.2 years in 2002.
- Decrease the infant mortality rate from 110-128 per 1,000 live births in 1997 to 90-95 in 2002 and 50 in 2017
- Decrease maternal mortality rates from 500-700 per 100,000 live births in 1997 to 450-500 in 2002 and 300 in 2017

***Health Services***

- Expand PHC coverage from 45% in 1997 to 55-60% in 2002 and 90% in 2017.
- Increase health facilities by 2002 in the forms of: (a) construction of new facilities - 216 primary health care units (PHCUs), 12 district hospitals, 5 zonal hospitals, and 2 specialized hospitals; and (b) renovation of 150 health centers, 50 district hospitals, 10 zonal hospitals, and 5 specialized hospitals
    - Increase immunization coverage (DPT3) from 67% in 1997 to 70-80% in 2002 and 90% in 2017
    - Increase the contraceptive prevalence rate from 8% in 1997 to 15-20% in 2002 and 40% in 2017.

## *2 Performance and major achievements*

### *2.1 Support for Heath Facility Expansion and Rehabilitation:*

One of the basic objectives of HSDP is to increase access to and improve the quality of heath services through the construction of new heath facilities and the rehabilitation/expansion of existing ones.

During the program period the Federal Ministry and the Regional Heath Bureaus have undertaken extensive work in the expansion and rehabilitation of health infrastructure. The number of hospitals has increased from 87 in EFY 1989 to 139 in EFY 1998. The number of health centers has grown from 257 to 635, while a total of 5943 heath posts have been constructed. Potential health coverage has grown from 48% to 76.8% during the same period.

The share of IDA credit in financing these civil work activities is quite considerable. During the period EFY 1991 –1994, a total of ETB 281,781,205.44 has been utilized by FMOH and RHBs to finance 325 civil works contracts (NCB) from IDA credit. (See Annex 1)

### *2.2 Support for Other Component Activities:*

IDA credit has also been utilized to support various activities aimed at improving service delivery and quality of care, pharmaceutical supplies and management, human resources development and capacity building as well as monitoring and evaluation.

Accordingly, during the period EFY1991-1994, FMOH and RHBs have utilized a total of ETB 44,165,012.72 from the credit to finance 49 NCB contracts for the supply medical equipment, furniture and office equipment, drugs and medical supplies, vehicles and motorcycles (see annex 1).

Similarly, in EFY 1992 – 1997 the Federal MOH, authorized by the Regional Health Bureaus, has executed ICB contracts with a total value of ETB 215,752,265.04 for the supply of drugs and medical supplies, medical equipment, generators, vehicles and motorcycles (See Annex 2).

In the area of capacity building (Human Resources Development) during EFY 1992 –1994, the FMOH and RHBs have utilized more than US$923,700.27 (ETB 7,906,874.30) to finance the short and long term training abroad of 48 professionals (See Annex 3).

### *2.3 The Health Service Extension Programme (HSEP)*

HSEP is a new initiative included in HSDP-II. It is an innovative community based health care delivery system aimed at creating healthy environment as well as healthful living. Pilot implementation was launched in 5 regions in 2002/03 and encouraging results were seen in terms of community's acceptance and demand for services provided through HSEP. Improvements were seen in construction and utilization of latrines, utilization rate of contraceptives and vaccination services in areas where the programme has been implemented so far. Furthermore, the HSEP has been modified to suit to the life style of the pastoralist population. In 2004/05, the total number of institutions selected and made available for training of HEWs has increased to 24. In the same year, the total number of students admitted for training is 7,138.

In order to expand and achieve universal health coverage and improve the delivery of primary health care service to the most neglected rural population, the Accelerated Expansion of Primary Health Service Coverage Strategy has been prepared and launched.

### *2.4 Health service delivery*

One of the objectives was to improve the quality of health service and utilization by the population through reorganizing the health service delivery system into four-tier system; to implement decentralized management to ensure full community participation; to develop and implement essential health service package and referral system; and to develop health facility standards and staff and equip the health facilities accordingly.

Inline with this, there has been significant transformation of the old six-tier health delivery system into the new four-tier system spearheaded by the establishment of PHCUs. A complete set of national standards for health posts, health centers and district hospitals have been prepared, endorsed, published and distributed to regions[i]. These standards contain specifications for the building design, lists of equipment and furniture, the scope of service, detailed information on the cadres of staff required, and drug lists for each level. Comprehensive and ambitious Essential Health Service Package to be implemented at all levels (HP, HC, Hospitals) been defined and many components of the proposed package are being implemented.

### *2.5 Overall Disbursement Status of Credit Funds*

The original principal amount of the credit was US$100,000,000.00 (in March 1999). As of June 5, 2006, 96% of the total amount of the credit is disbursed. The total amount disbursed from the loan through the special account and through direct payment (special commitment) by the bank is US$96,373,589.54 (ETB 838,450,229 at a rate of 1US$=8.7 ETB), while the undisbursed balance at the project closing time is US$ 3,626,410 (ETB 31,549,771).

## *3 Assessment of outcomes*

Basic maternal and child health indicators have shown improvement over the program period. The Under Five Mortality Rate has decreased by about 25% from 166 to 123 deaths per thousand live births between 2000 and 2005. Infant mortality has decreased from 97 to 77 per thousand live births and child mortality (mortality 1-5) decreased from 84 to 56.5. These results are quite remarkable. The maternal mortality rate has also improved from 871 to 673, but remains still high. Many factors including improvements in the health sector as well as in the other sector like education, water and sanitation etc may account for the progress made.

***Maternal and Child Health***: With respect to maternal and child health services, the targets set during HSDP-I were to increase contraceptive prevalence rate from 9.8% to 15-20%; DPT3 coverage from 59.3 to 70-80%. By 1998 CPR has increased to 36.4%, ANC coverage increased to 53%; proportion of deliveries assisted by trained health workers has increased to 16%; and postnatal care attendance increased to 15.84% (from 3.5% in 1989). With regard to child health, DPT3 coverage has reached 79% and proportion of fully immunized children has reached 36.95%.

***Utilization of Health Facilities:*** Furthermore, health service utilization rate has increased from 0.25 in 1996/97 to 0.27 in 2000/01 and subsequently to 0.36 in EFY 2003/04. Opportunities and options for curative services including inpatient care have also improved with the increasing number of private clinics and hospitals especially in urban areas.

***Hygiene and Environmental Health:*** Regarding hygiene and environmental health services to the population, access to toilet facilities has increased from 10 % to 17%, for which the achievement was 29 % in 2003/04. Access to safe water has also improved from 23.1% in 1997/98 to 28.4% in 2002/03; while access to sanitation increased from 12.5% to 17%

***Drug Availability***: The national availability of essential key drugs, based on a survey result published in 2003, was 75%, 85% and 95% for public health facilities, regional drug stores, and private retail drug outlets, respectively. On the other hand, the general average for presence of expired drugs by year 2003 was 8%, 2% and 3% in health facilities, regional drug stores and private retail drug outlets, respectively.

***Communicable disease:*** progress was made in the control of key communicable diseases such as Tuberculosis, malaria and HIV/AIDS. The National Adult HIV Prevalence estimated in 2003 is 4.4%. There seems to be a genuine and significant reduction in the rate of new infection between EFY 1991 and EFY 1997 in urban areas and the rate of progression of the epidemic in the urban and rural areas in the last 5-7 and 3-5 years, respectively. TB/HIV collaborative activities were carried out in 280 sites.

***Human resource:*** The number of graduating health human resource and availability of all categories of health professionals has also improved over the program period, the most remarkable improvement being in health officers and nurses. The number of health officers has increased from 30 in EFY 1989 to 683 in EFY 1996. Similarly during the same period the number of nurses has increased from 3864 to 14,270, and the number of all physicians from 1483 to 1996. The capacity of training health professionals has increased significantly for physicians 37%, public health officers 79%, and nurses 49% etc

### *4 Major problems encountered*

The following are the major challenges encountered during the implementation of HSDP and areas which needs improvement in future endeavors

- Understaffing and high turnover of both technical and managerial staff at all levels,
- Inadequate follow-up and supportive supervision,
- Inadequate community participation
- Prolonged process of international procurements and the recruitment of consultants,
- Poor program coordination, especially at regional and woreda level as well as in coordinating the activities of various development partners, and
- Inadequate implementation capacity in undertaking civil works
- Weak Planning and late information from regions on procurement list and specification
- Lack of detailed information at regional level on WB procurement procedure for civil works (bulk bidding document and English language for NCB and lack of training)
- Budget for sub-program could not be approved before the beginning of the physical year at regional level
- Late payment and late submission of SOE
- Delay in replenishing special accounts
- Delay in special commitment

## *5 Lessons learned*

- Proper planning for goods and civil work procurement
- Need for timely supervision
- Training on procurement and disbursement for civil works mainly for regions

## Annex 1: Disbursement Status of NCB Contracts Financed under IDA Credit for HSDP (EFY 1991 – Ginbot, 1994)

| Goods | | Civil Works | | Total | | | |
|---|---|---|---|---|---|---|---|
| Total No of Contracts | Total contract Value in ETB | Total No of Contracts | Total contract Value in ETB | Total No of Contracts | **Grand total in ETB** | Total amount Disbursed in ETB | Undisbursed * Balance in ETB |
| 19 | 14,610,768.30 | 8 | 15,128,437.22 | 27 | **29,739,205.52** | 16,267,752.73 | 13,471,452.79 |
| 3 | 1,408,337.35 | | | 3 | **1,408,337.35** | 1,408,335.84 | 1.51 |
| 3 | 5,999,516.04 | 35 | 10,205,689.58 | 38 | **16,205,205.62** | 12,397,878.52 | 3,807,327.10 |
| 4 | 2,167,700.09 | 6 | 10,910,675.30 | 10 | **13,078,375.39** | 6,519,711.60 | 6,558,663.79 |
| | | 4 | 4,984,849.13 | 4 | **4,984,849.13** | 2,580,283.52 | 2,404,565.61 |
| | | | | 0 | **-** | | - |
| | | | | 0 | **-** | | - |
| 1 | | 6 | 25,403,959.12 | 7 | **25,403,959.12** | 18,021,220.27 | 7,382,738.85 |
| | | 222 | 190,682,742.02 | 222 | **190,682,742.02** | 67,020,889.76 | 123,661,852.26 |
| 8 | 12,564,475.94 | 31 | 7,580,221.40 | 39 | **20,144,697.34** | 19,385,464.14 | 759,233.20 |
| 11 | 7,414,215.00 | 13 | 16,884,631.67 | 24 | **24,298,846.67** | 10,122,860.63 | 14,175,986.04 |
| 49 | **44,165,012.72** | **325** | **281,781,205.44** | **374** | **325,946,218.16** | **153,724,397.01** | **172,221,821.15** |

* This includes disbursed amounts for which SOEs have not yet been submitted.

# Annex 2: Disbursement Status of ICB Contracts Financed under IDA Credit No. ET 3140-ET
## E.F.Y. 1992-93 Procurement Packages
## Status of Disbursement

| Sr. No | Description of Item | Letter of Credit Number | L/C Amount | Estimated Value in Birr | Amount Disbursed | Amount Disbursed in Birr | Undisbursed Balance | Undisbursed Amount in Birr |
|---|---|---|---|---|---|---|---|---|
| 1 | Motorcycles | 2000.NM.00000119 | Yen 18, 785,319.00 | 1,207,896.03 | Yen 18, 785,319.00 | 1,207,896.03 | 0 | |
| 2 | Drugs and Medical Supplies | 2000.NM.00000116 | USD 1,666,299.94 | 14,423,492.28 | USD 1,666,299.94 | 14,423,492.28 | 0 | |
| 3 | Drugs and Medical Supplies | 2000.NM.00000115 | USD 328,574.82 | 2,844,143.64 | USD 328,574.82 | 2,844,143.64 | 0 | |
| 4 | Generators | 2000.NM.00000114 | EURO 245,351.00 | 2,082,048.59 | EURO 220,815.90 | **1,873,843.73** | EURO 24,535.10 | 208,204.86 |
| 5 | Medical Equipment | 2000.NM.00000108 | USD 351,174.34 | 3,039,765.09 | USD 316,056.91 | **2,735,788.61** | USD 31,605.69 | 273,578.85 |
| 6 | Medical Equipment | 2000.NM.00000109 | USD 1,100,028.34 | 9,521,845.31 | USD 990,015.51 | **8,569,574.26** | USD 110,002.83 | 952,184.50 |
| 7 | Drugs and Medical Supplies | 2000.NM.00000113 | USD 4.422,338.19 | 38,279,759.37 | USD 4.422,338.19 | 38,279,759.37 | 0 | |
| 8 | Vehicles | 2000.NM.00000123 | Yen 121,452,800.00 | 7,809,415.04 | Yen 121,452,800.00 | 7,809,415.04 | 0 | |
| 9 | Vehicles | 2000.NM.00000120 | Yen 120,074,600.00 | 7,720,796.78 | Yen 120,074,600.00 | 7,720,796.78 | 0 | |
| 10 | Drugs and Medical Supplies | 22051 | USD 167,334.00 | 1,448,443.10 | USD 167,334.00 | 1,448,443.10 | 0 | |
| **Sub-Total in Birr** | | | | **88,377,605.23** | | **86,913,152.84** | | **1,433,968.21** |

**1993-94 Procurement Packages**

| Sr. No | Description of Item | Letter of Credit Number | L/C Amount | Estimated Value in Birr | Amount Disbursed | Amount Disbursed in Birr | Undisbursed Balance | Undisbursed Amount in Birr |
|---|---|---|---|---|---|---|---|---|
| 2 | Motorcycles | 2001.NM.00000181 | Yen 19,337438.00 | 1,243,397.26 | Yen 17,403,694.0 | 1,243,397.26 | Yen 1,740,369.40 | 111,905.75 |
| 3 | Vehicles | 2001.NM.00000182 | Lit 831,806. 296.00 | 3,199,127.02 | Lit 784,625,666.40 | 3,017,670.30 | Lit 83,180,629,60 | 181,456.71 |
| 4 | Vehicles | 2001.NM.00000180 | Yen 34,926,400.00 | 2,245,767.52 | Yen 31,433,760.00 | 2,245,767.52 | Yen 3,492,640.00 | 224,576.75 |
| 5 | Vehicles | 2001.NM.00000178 | Yen 53,189,220.00 | 3,420,066.85 | Yen 47,870,298.00 | 3,420,066.85 | Yen 5,318,922.00 | 342,006.69 |
| 6 | Vehicles | 2001.NM.00000179 | Yen 117,417,500.00 | 7,549,945.25 | Yen 105,675,750.00 | 7,549,945.25 | Yen 11,741,750.00 | 754,994.53 |
| 7 | Drugs and Medical Supplies | 2001.NM.00000184 | USD 318,183.28 | 3,754,194.47 | USD 286,364,95 | 3,754,194.47 | USD 31,818.33 | 275,419.47 |
| 8 | Drugs and Medical Supplies | 2001.NM.00000183 | USD 5,007,874.31 | 43,348,160.03 | USD 5,007,874.31 | 43,348,160.03 | 0 | |
| **Sub-Total in Birr** | | | | **64,760,658.40** | | **64,579,201.68** | | **1,890,359.90** |

**1996-97 Procurement Packages**

| Sr. No | Description of Item | Letter of Credit Number | L/C Amount USD | Estimated Value in Birr | Amount Disbursed | Amount Disbursed in Birr | Undisbursed Balance | Undisbursed Amount in Birr |
|---|---|---|---|---|---|---|---|---|
| 1 | Medical Equipment | CBBMBLC/018/06 | 851,385.90 | 7,369,596.35 | | 618,915.09 | | |
| 2 | Lab Equipment | CBBMBLC/011/06 | 142,351.60 | 1,232,195.45 | | 223,998.54 | | |
| 3 | Sterilizer | CBBMBLC/012/06 | 506,151.95 | 4,381,251.28 | | 216,504.99 | | |
| 4 | Strecher | CBBMBLC/039/06 | 76,293.42 | 660,395.84 | | 47,465.46 | | |
| 5 | Medicsal Refrigerator | CBBMBLC/032/06 | 2,656,774.56 | 22,997,040.59 | | | | |
| 6 | TBA, Cold Box & Vaccine carrier | CBBMBLC/033/06 | 507,086.04 | 4,389,336.76 | | 1,087,115.14 | | |
| 7 | Medical Equipment | CBBMBLC/013/06 | 1,089,464.55 | 9,430,405.14 | | 1,600,112.66 | | |
| 8 | DDT | | | 12,153,780.00 | | | | |
| **Sub-Total in Birr** | | | | **62,614,001.41** | | **3,794,111.88** | | |
| **Grand Total in Birr** | | | | **215,752,265.04** | | | | |
| **Grand Total in USD** | | | | **24,925,169.25** | | | | |

Yen- 0.0643
USD- 8.656
EORO- 8,486
Lit- .003846

## Annex 3: Human Resource Development Long and Short Term Training Abroad as per IDA 1992-1993, 1994 EFY Sub-Program under HSDP – Credit No. 3140-ET

| No. | Region | Name of the Trainee | Address of Training Site | Field of Training | Duration of Training | Total Cost USD | Elig. % |
|---|---|---|---|---|---|---|---|
| 1 | Tigray R/H/B | Ato Aregawy G/Michael | London Institute of Child Health | MSC in Mother and Child Care | 25 Sept.2000-25Sept.2001 | 29,403.83 | 100% |
| 2 | Tigray R/H/B | Dr. Israel Tareke | London School of Hygiene and T.M | Master of Public Health | 26 Sept. 2000-21 Sept. 2001 | 34,171.62 | 100% |
| 3 | Tigray R/H/B | Dr. Atakilt Berhe | London School of Hygiene and T.M. | Master of Public Health | 26 Sept. 2000-21 Sept. 2001 | 34,171.62 | 100% |
| 4 | Tigray R/H/B | Dr. Bereket Amare | Lond School of Hygiene and T.M. | Master of Public Health | 27 Sept. 2000-21 Sept. 2001 | 33,603.87 | 100% |
| 5 | Tigray R/H/B | Ato Kahsu Bekretsion | UMEA University Birgitta Astrom, Sweden | M. Public Health Epidemiology | 27 Aug, 2001 to 30 June 2002 | 8,734.28 | 100% |
| 6 | Tigray R/H/B | Ato Abdulkadir Maeruf | Boston Univ. USA | Master of Public Health | Fall. 2001-Spring 2002 | 38,186.00 | 100% |
| 7 | Tigray R/H/B | Dr. Mekonnen Hagos | Sheffield Teaching Hospital | Nurology and G. Surgery | 1 Oct.2001-1Oct 2002 | 12,804.05 | 100% |
| 8 | Tigray R/H/B | Dr. Atakilti G/Kidan | University of Sheffield | M. Medicine in Endocinology | 1 October 2001-1 October 2002 | 27,956.83 | 100% |
| 9 | Tigray R/H/B | Dr. Teklay Kidane | UMEA University, Sweden | MMP Epidemiology | 27 Aug. 2001 to 30 June 2002 | 8,734.28 | 100% |
| 10 | Tigray RHB | Dr. Mengiste Mesfin | University of Nottinghum | PHD H.Science | March2001 to March 2002 | 23,058.21 | 100% |
| 11 | Tigray RHB | D/r Mengistie Mesfin | University of Nottingham | Epid. of Commun. Diseases | March 2002-March 2003 | 23,373.43 | 100% |
| 12 | Tigray RHB | Ato Tesfay Gebregziabher | University of UMEA,Sweden | Master of Public Health | Master of Public Health | 11,030.00 | 100% |
| 13 | Tigray RHB | Ato Samuel Zemariam | University of UMEA,Sweden | Master of Public Health | Master of Public Health | 11,030.00 | 100% |
| 14 | Tigray RHB | Ato Awala Equar | University of UMEA,Sweden | Master of Public Health | Master of Public Health | 11,030.00 | 100% |
| 15 | Somali RHB | Dr.Fathi Sadhik Sheik Ada | Johns Hopkins University,USA | Master of Public Health | March 2000 - March 1,2001 | 51,940.00 | 100% |
| 16 | Somali RHB | Ato Zeyad Ahmed | University of New England, Austruia | Master of Economics | 30 February 2001-12 February 2002 | 37,101.50 | 100% |
| 17 | Somaly RHB | D/r Abdiaziz Mohamed | Wageningen University | MSC Nutrition and Health | Sept2002-Feb2003 | 19,029.36 | 100% |
| 18 | Somaly RHB | Ato Ahmed Abdi Absiye | Robert Gordon University(u.k) | MSC Financial Management | Sept2002-Dec2003 | 21,323.68 | 100% |
| 19 | Benishangul RHB | Dr. Abeje Zegye Jebno | University of Maastricht, Netherlands | Master of Public Health | Sept. 2001 - Sep. 2002 | 17,308.96 | 100% |
| 20 | Benishangul RHB | Ato Abate Ayana | University of Wales Swan Sea | Development Management | 23 Sep2002-23 Sep 2003 | 21,914.56 | 100% |
| 21 | Benishangul RHB | D/r Diriba Agegnhu | Royal Tropical Institiute,Netherlands | Health Development | Sept 2002 - June 2003 | 26,760.98 | 100% |
| | | | | | **Sub total** | **502,667.06** | |

**Note: Total cost in USD includes perdiem, tution fee and bank service charges.**
**The cost covered in ETB for international travel,Local transportation and local perdiem is not included.**

| No. | Region | Name of the Traine | Address of Training Site | Field of Training | Duration of Training | Total Cost USD | Elig.% |
|---|---|---|---|---|---|---|---|
| 22 | FMOH | Dr. Mitekie Tafere | Tulane University USA | Nutrition | Aug.2000-July2001 | 39,360.29 | 100% |
| 23 | FMOH | Ato Gadissa Lemecha | University of East Anglia | Master of Information System | 8 weeks | 15,405.93 | 100% |
| 24 | FMOH | Dr. Teklu Belay | University of Nairobi, Kenya | Applied Epidemiology (S/C) | June 19 Oct. 18/2000 | 12,224.22 | 100% |
| 25 | FMOH | Ato Muche Kidanu | University of Connecticut, USA | Env. Health Planning | June 4-July 28,2001 | 13,520.35 | 100% |
| 26 | FMOH | Sr. Atsede Kebede | University of SouthAmpton, England | Health Education | 4 Oct. 2001-30Sept 2002 | 24,882.94 | 100% |
| 27 | FMOH | Ato Demissie Tassew | University of Leeds, England | Health Mgt. Planning | 26 Sept. 2001 to Sept 26,2002 | 30,731.91 | 100% |
| 28 | FMOH | Ato Amanuel Estifanos | University of Tulane, USA | Bio-statistics | 01 Jan. 2001-30 June 2002 | 49,408.96 | 100% |
| 29 | FMOH | Ato Dereje Yoseph | Center for African Family Studies, Kenya | Interpersonal Communication and counselling | July 9-20,2001 | 2,981.39 | 100% |
| 30 | FMOH | Ato Abebe Shume | Tulane University, USA | Master of Public Health | 27 Aug. 2001-15 Aug. 2002 | 41,378.98 | 100% |
| 31 | FMOH | Ato Girma Aman | Tulane University, USA | Tropical Medicine | 28 Aug. 2001-15 Aug. 2002 | 41,378.98 | 100% |
| 32 | FMOH | Sr. Almaz Siraj | University of Connecticut, USA | Strategic Human Resource Managment | 4 Feb. - 2 March, 2002 | 7,864.00 | 100% |
| 33 | FMOH | Ato Michael Miraw | University of Connecticut, USA | Public Finance Management | Jan.7-March2,2002 | 13,388.00 | 100% |
| 34 | FMOH | Ato Wondwossen Ayele | University of Connecticut, USA | Logistic and Procurement Management | Jan.7-March2,2002 | 12,988.00 | 100% |
| 35 | FMOH | Ato Assefa Berihun | LSB College, IRELAND | MA in Addiction Studies | 1999/2000 Academic Year | 20,354.66 | 100% |
| 36 | FMOH | Ato Gebeyehu Demecha | Toronto Institute of Pharmaceutical Technology | Drug Quality Analysis | March 27/2000-July 5/2000 | 6,258.07 | 100% |
| 37 | FMOH | Dr. Kassahun Abate | Ghana (Study Tour) | Health Service Management | February 20-26/2000 | 1,690.85 | 100% |
| 38 | FMOH | Dr. Mengistu Hiletework | Ghana (Study Tour) | Health Service Management | February 20-26/2001 | 1,185.85 | 100% |
| 39 | FMOH | Ato Mesfin Girma | Ghana (Study Tour) | Health Service Management | February 20-26/2002 | 1,185.85 | 100% |
| 40 | FMOH | Ato Salihune Kefyalew | Katholieke Universiteit LEUVEN (Belgium) | Master of Architect in Human Settlements | 1999/2000 Academic Year | 7,319.49 | 100% |
| 41 | FMOH | Ato Teketel Tegegn | Ghana (Study Tour) | Health Service Management | February 20-26/2000 | 1,180.00 | 100% |
| 42 | FMOH | Ato Teshome Regassa | University of Southampton (England) | Health Education | 1999/2000 Academic Year | 21,705.34 | 100% |
| 43 | FMOH | Ato Wondafrash Abera | EMORY University Atlanta, Georgia | Applied Epidemiology | October 4-29/1999 | 4,147.99 | 100% |
| 44 | FMOH | Ato Abate Benty | University of Leeds, England | Health Promotion | April 4-30,June,2002 | 10,298.96 | 100% |
| 45 | FMOH | Ato Zewdu Yared | Unversity of Leeds,England | Health Promotion | April 4-30,June,2002 | 10,298.96 | 100% |
| 46 | FMOH | Ato Mulu Areaya | Unversity of Leeds,England | Health Promotion | April 4-30,June,2002 | 10,298.96 | 100% |
| 47 | FMOH | Ato Million Admassie | University of York | Health Economics | 13 May-2July | 11,666.10 | 100% |
| 48 | FMOH | Ato Ahmed Emano | Ripa International | Public Relation | July 22,2002-August9,2002 | 7,928.18 | 100% |
| | | | | | **Sub total** | **421,033.21** | |
| | | | | | **G.Total** | **923,700.27** | |

Note: Total cost in USD includes perdiem, tution fee and bank service charges.

The cost covered in ETB for international travel,local transportation and local perdiem is not included.

## Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

There seems to be a consensus among development partners about the positive aspects of HSDP regarding the health status of the population, coordination and harmonization, and decentralization.

(1) Basic indicators show that there have been improvements in the health status of the population, with significant decreases in Under Five mortality, infant mortality and child mortality. The maternal mortality rate has also improved, but still remains very high. Those are significant achievements, despite the fact that the baseline indicators were very bad to start with and that the levels reached still compare very unfavorably with the standards for Sub-Sahara Africa.
(2) Tremendous efforts have been made by Government and development partners to improve coordination and harmonization. Working towards an alignment to the procedures of Government is very important in the case of Ethiopia where there is a very strong government commitment and a very strong ownership of the sector. Relations between FMOH and HPN Donors are good. While it is recognized that harmonization is a process that requires time, development partners are serious about their commitment to harmonization. HPN Donors appreciate FMOH's openness with respect to this issue.
(3) The decentralized system is working reasonably well at the regional level, but there are still many weaknesses at the level of the woredas.

On the negative side, development partners are concerned about the very low share of the government budget allocated to health, which is well below the average for Sub-Sahara Africa. If that trend continues, most of the MDGs would not be reached.

Another area of concern is procurement, where there have been many problems. Different arrangements had to be agreed for the implementation of the Protection of Basic Services (PBS) Project. HPN Donors appreciate the fact that FMOH has prepared a Master Plan for the Health Commodities Supply System and has begun to implement it.

## Annex 9. List of Supporting Documents

World Bank - Aide-memoire of Preparation Mission – Oct/Nov 1997
World Bank - Project Appraisal Document (PAD) for the Health Sector Development - Program – Report No.: 18366- ET, dated September 24, 1998
World Bank – Project Information Document (PID), dated August 13, 1998
World Bank - Agreed Minutes of Negotiations, dated July 30, 1998
Development Credit Agreement (DCA) for the Health Sector Development Program Support Project – Credit Number 3140-ET, dated October 30, 1998
Credit Number 3140-ET – Supplemental Letter 2 – Performance Indicators , dated October 30, 1998
World Bank – HSDP – IDA Credit 3140-ET – Disbursement Letter , dated December 7, 1998
World Bank - Aide-Memoires of supervision missions
World Bank - Project Status Reports (PSR) and Implementation Status Results and Reports (ISR) – Project ID: P000756 – Credit No.: 3140-ET
FMOH/PPD – Health and Health Related Indicators – 1992 EC / 1994 EC / 1995 EC / 1996 EC / 1997 EC
HSDP - 1997/98-2001/02 – Report of the Mid Term Review Mission – Feb 7 to Mar 8, 2001
MOH – Proposal for extending the closing date of IDA – Cr. No. 3140 to finance the Health Sector Development Program (HSDP) – September 2002
Independent Procurement Review – Volume 2 – Health Projects – IPR Report – Feb 2006 (Carl Bro Intelligent Solutions)
HSDP – 1997/98 - 2001/02 - Report of the Final Evaluation of HSDP I – Jan 30 to Mar 3, 2003 – Volume I
HSDP II (2002/03 – 2004/05) – Report on the Fourth Joint Review Mission (JRM4) – May 27 to June 18, 2004 – Report dated June 18, 2004
HSDP – Consolidated Implementation Report for the EFY 1996 – MOH – September 2004
Audit Service Corporation – Independent Auditor's Report on the Financial Statements of MOFED and the Special Account – HSDP – for 2002/2003, dated March 17, 2005
Implementation Completion Report (IDA-30770) for an Education Sector Development Project (ESDP) – Report No.:30706, dated June 9, 2005
Ethiopia – A Country Status Report on Health and Poverty – Report No. 28963-ET, dated July 2005 – Volumes I & II
Demographic and Health Survey (DHS) – 2005
HSDP – 2002/03 – 2004/05 – Report of the Final Evaluation of HSDP II – Jan 31 to Mar 6, 2006 – Volume 1 – Report dated May 1, 2006
Project Appraisal Document (PAD) for the Protection of Basic Services Project – Report No.: 35121-ET, dated May2, 2006
Audit Service Corporation – Independent Auditor's Report on the Financial Statements of MOFED and the Special Account – HSDP – for 2003/2004, dated May 12, 2006
FMOH/PPD – Ethiopia Third National Health Accounts (NHA), prepared by Health Care Financing Team (September 2006)

FMOH/PPD – Reaching the Health MDGs in Ethiopia – Financing Challenges and Prospects – Health JBAR – Addis Ababa – October 25, 2006
HSDP Secretariat – Ministry of Health – Report on the proceedings and results of the Eight Annual Review Meeting of HSDP (October 2-6, 2006) – ARM 2006 Report, dated November 2006

## Annex 10. Original Components (as Approved)

While it had established primary health care services as its main priority, the HSDP's approach was sector-wide in scope. HSDP was divided into eight program components for budgeting and implementation purposes. It was also designed in such a way that the financial allocations by component reflected the relative investment priorities and the linkage of each component to the others. Overall, the design was intended to enable the comprehensive program to be well-coordinated during implementation and to result in a fully integrated and appropriately responsive health delivery system. The total cost of HSDP was estimated at Birr 5,002 million or US$737.8 million equivalent, of which 10 percent (US$74.5 million) was reserved for contingencies.

The capital investment (base costs of US$218.2 million) aimed to increase health coverage, equity and efficiency at all levels of the health system, but with a special focus on the expansion of basic health facilities and the development of health manpower. The specific civil works components included the construction and rehabilitation of health facilities (including staff housing in certain cases, training rooms and dormitories for trainees, and rooms for minor surgery); construction and upgrading of training facilities, and construction of zonal and woreda health offices and drug stores. The health manpower development component concentrated on the training of primary health workers. Supportive components such as the development of the health management information system and IEC were also covered by the capital budget.

The recurrent investment budget (base costs of US$445 million) aimed to improve efficiency, quality and relevance, but with a particular emphasis on the need to build management capacity at all levels of the health service delivery system and to ensure the sustainability (technical, managerial and financial) of the resulting comprehensive and integrated system. The recurrent budget covered expenses on salaries, drugs and other non personnel expenses.

1. Expanding Primary Health Care Access - Facility Expansion and Rehabilitation (base costs of US$182.4 million or 27.5 percent of total base costs).

This component sought to ensure access to basic PHC services for all Ethiopians by 2017, with the first five-year phase of HSDP increasing coverage from 45 percent in 1995/96 to 55-60 percent by 2002. The health system would be re-organized into a more practical and functional one, serving more realistic population catchments areas, with decentralized management and active participation of both staff and community. Health services would be delivered through a four-tier system (as opposed to the existing six-tier system), including Primary Health Care Units (each consisting of a health center and its five satellite community clinics), District Hospitals, Zonal Hospitals and Specialized Hospitals. The facility expansion and rehabilitation component emphasized construction and equipping of PHCUs and district hospitals. The government planned to build 216 PHCUs, 12 district hospitals, 5 zonal hospitals, and 2 specialized hospitals, and to rehabilitate and refurbish 150 health centers, 50 district hospitals, 10 zonal hospitals, and 5 specialized hospitals by 2002. In addition 58 other new buildings (stores, training schools and administrative buildings) would be constructed over the five years.

Management of medical equipment would be improved by the establishment of national and regional standards, the identification and registration of local service agents and the organization of training programs.

2. Improvements in the Technical Quality of PHC Service Provision (base costs ofUS$331.7 million or 50.0 percent of total base costs).
The objective of the health service delivery and quality of care component was to increase the coverage and quality of promotive, preventive and curative activities. The health system would provide a comprehensive MCH package, including child health services such as Expanded Program of Immunization and Integrated Management of Childhood Illness (ARI, diarrheas, measles, malaria and malnutrition). Reproductive health activities would include traditional maternal health services, such as ante- and post-natal care, and safe and clean delivery services, as well as family planning services. New emphasis would be given to prevention and management of sexually transmitted infections/HIV/AIDS and prevention of teenage pregnancy, abortion and substance abuse. Given the priority areas of HSDP, technical training would, in turn, focus special attention on the existing burden of disease (BOD) in Ethiopia. Trained medical staff would be provided with the necessary equipment and furniture to perform their duties effectively. PHC services would also be delivered in a gender-sensitive manner. To ensure comprehensive and nationally uniform improvements in service delivery and quality of care, MOH would: (a) develop minimum packages of essential services for all four levels with due emphasis on the critical district level care in the year 1998/99; and (b) develop and/or revise service standards for NGOs and the private sector in the year 1998/99.

3. Expanding the Supply and Productivity of Health Personnel - Human Resource Development (base costs of US$20.0 million or 3.0 percent of total base costs).
The human resource development strategy addressed the issues of selection, training, deployment and management of an adequate number of motivated staff able to provide quality care. This component would improve the staffing situation in publicly operated health facilities in three ways: (a) expanding supply, (b) increasing productivity, and (c) contracting out to the private sector. Additional training facilities and trainers would be organized to provide the training, based on the development of new curricula and the reorientation of trainers. Training would focus on community-oriented front-line and middle-level health personnel. In terms of staffing, the National Task Force on Human Resources Development for Health had proposed changes in staffing patterns at each type of health facility. To ensure an adequate number and an appropriate deployment of properly trained and managed health personnel, MOH would issue the National Human Resource Transfer and Placement directives by the end of 1998/99.

4. Improvements in the Pharmaceutical Sector (base costs of US$103.4 million or 15.6 percent of total base costs).
This component aimed to: (a) ensure a regular and adequate supply of effective, safe, and affordable high quality drugs and (b) improve prescribing behavior by health providers through the use of standard forms and the development of essential drugs lists for all health service levels. Progress had already been made, with the approval in November

1993 of the National Drug Policy (NDP) and the completion in February 1994 of the Master Plan for the Ethiopian National Drugs Program (ENDP). Legislation on the pharmaceutical sector was expected to be approved by the Council of Ministers and Parliament by the end of 1998. To ensure a regular and adequate supply of effective and affordable essential drugs, MOH would revise and update the existing drug policy, issue and implement the drug law, and update the Essential Drug List at national and regional levels.

5. Information, Education, and Communication - IEC (base costs of US$8.5 million or 1.3 percent of total base costs).
A significant portion of Ethiopia's burden of disease can be attributed to preventable diseases and nutritional deficiencies. Thus, the goals of this component were to (a) improve awareness about personal and environmental hygiene and basic knowledge of common diseases and their causes; and (b) promote political and community support for health services through educating and influencing planners, policy makers, managers, women's groups, and potential collaborators. The MOH would take the lead in developing a national IEC plan and strategy for implementation based on Ethiopia's prevailing burden of disease, a strategy that would allow enough flexibility to regional governments to adapt these guidelines to their local situation using their own local languages. MOH would also provide technical support and guidance to the Regions to improve their ability to plan, implement, monitor and evaluate (including operational research). Media such as radios and other means of communicating messages would be explored. Skills and knowledge of Central and Regional IEC coordinators would be upgraded to improve and expand IEC functions at all levels. Funds would also be allocated to monitor the performance of the IEC component in terms of how well the messages have increased awareness and caused behavioral changes.

6. Health Sector Management and Management Information Systems (base costs of US$12.7 million or 1.9 percent of total base costs).
This component sought to transform the highly centralized health system into a four tier system that would be appropriately linked, equitably distributed, and managed in a decentralized, participatory, and efficient manner. Important measures to realize this component's goals were (a) decentralization or the devolution of power, decision-making and services to the regions and (b) capacity building. This component aimed to improve skills in the areas of policy formulation, planning and budgeting, financial management, program implementation, and monitoring and evaluation for staff of the MOH and the regions. To enable managers at regional, zonal and woreda levels to execute their mandates, HSDP envisioned adequate staffing, accelerated training of managers and the rehabilitation or construction and equipment of offices. HSDP would support improvements in management information systems in order: (a) to document disease patterns, increases in PHC service provision and coverage, and improvements in health status; and (b) to improve decision-making at the regional, zonal and woreda levels. HSDP would focus initially on the regional and zonal levels. At the same time, the responsibilities for health facility supervision among regional health bureaus (RHBs), zonal health departments (ZHDs) and woreda health offices (WorHOs) would be better defined and reinforced. The Central Joint Steering Committee (CJSC) of HSDP would

oversee progress and make strategic decisions; MOH would strengthen the capacity of the Planning and Project Department (PPD) to support the CJSC.

7. Monitoring and Evaluation and Applied Research (base costs of US$3.6 million or 0.6 percent of total base costs).
The objectives of this component were: (a) to monitor improvements in service delivery, quality and financial performance; and (b) to evaluate the impact, effectiveness and cost-effectiveness of HSDP's components. HSDP would support the design of an integrated monitoring and evaluation system for each of the individual components of HSDP and the implementation of the overall M&E system at all levels of the health service delivery system, including the center, the regions/zones/woredas and the service providing health facilities. Guidelines would be developed which would outline the necessary knowledge, skills and procedures for the potential users. Facilities, equipment, materials and training would be upgraded, and periodic reviews would be held to strengthen the Regions' and the Ministry's capacity in monitoring and evaluation. The capacity of the different administrative levels to do applied research that helps facilitate monitoring and evaluation (for example, impact assessments measuring beneficiary satisfaction) would be developed.

8. Improvements in the Financial Sustainability of the Health Sector (base costs of US$1.0 million or 0.1 percent of total base costs)
The objectives of this component were to improve public health sector efficiency and to generate additional and new sources of revenue. Efficiency gains would result from improvements in the allocation of resources, in the management of resources and in the rationalization of curative care. Regarding the mobilization of additional resources, the Government intended to enforce firmly a ceiling of Br. 5 billion (about US$738 million) for implementation of the first phase of HSDP and expected to finance this amount through a combination of its own revenues, proceeds from user fees and external assistance. While Government commitment to support the health sector financially was high, the share of total government spending allocated to health was expected to rise only modestly in the medium term (from around 6 percent in FY1996 to perhaps over 7 percent in the year 2000). The Government would take steps to stimulate non-governmental participation in the health sector, such as actively seeking private and/or NGO investments in health facilities. In addition, health facilities would strengthen the management of their cost recovery systems.

## Annex 11. DHS Surveys – 2000 and 2005

| | | 2000 | 2005 |
|---|---|---|---|
| I. | **Fertility rate** | 5.9 | 5.4 |
| | • Urban | 3.3 | 2.4 |
| | • Rural | 6.4 | 6.0 |
| II. a | Median **birth interval** | 34 months | 34 months |
| II. b | % of births within 24 months of a previous births | 19.7 | 21.3 |
| III. | **Contraceptive prevalence rate** (current use – married women) | 8.1 % | 14.7% |
| IV. | **Infant mortality** rate (per 1,000 live births) | 97 | 77 |
| V. | **Under-five mortality** rate (per 1,000 live births) | 166 | 123 |
| VI. | **Maternal Mortality** Ratio – MMR (per 100,000 live births) | 871 | 673 |
| VII. | % of pregnant women who received **antenatal care** from health professionals (in the five years preceding the survey) | 26.7 | 27.6 |
| VIII. a | % of **births delivered** by a trained health professional (doctor, nurse, midwife) | 5.6 | 5.7 |
| VIII. b | % of births delivered by: | | |
| | A trained TBA | 4.1 | n.a. |
| | An untrained TBA | 26.4 | n.a. |
| | All TBA | 30.5 | 28.1 |
| IX. a | % of women who received **postnatal care** within the crucial first two days of delivery | 7.8 | 4.6 |
| IX. b | % of women who received postnatal care three to seven days after delivery | 1.2 | 1.3 (3 to 41 days) |
| IX. c | % of women giving birth who received no postnatal health check up | 89.5 | 93.7 |
| X. a | % of children under 5 who are **stunted** | 52 | 47 |
| X. b | % of children under 5 who are severely stunted | 26 | 24 |
| X. c | % of children under 5 who are **wasted** | 11 | 11 |
| X. d | % of children under 5 who are severely wasted | 1 | 2 |
| X. e | % of children under 5 who are **underweight** | 47 | 38 |
| X. f | % of children under 5 who are severely underweight | 16 | 11 |
| XI. | **HIV prevalence** in adults (age 15-49) | | 1.4 |
| • | • Men | | 0.9 |
| • | • Women | | 1.9 |

**Trends in vaccination coverage**

According to the 2000 and 2005 DHS, vaccination coverage has improved over the past five years. The percentage of children age 12-23 months fully vaccinated at the time of the survey increased by 43 percent from 14 percent in 2000 to 20 percent in 2005. However, the percentage who had received none of the six basic vaccinations increased from 17 percent in 2000 to 24 percent in 2005. With the exception of polio 1, the percentage of children who received all the other vaccinations has increased in the past five years, with the largest increase seen in the percentage of children under five who received DPT 3 by 12 months of age.


ETHIOPIA
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SELECTED CITIES AND TOWNS
REGION CAPITALS
NATIONAL CAPITAL
RIVERS
MAIN ROADS
RAILROADS
REGION BOUNDARIES
INTERNATIONAL BOUNDARIES
ERITREA
REP. OF YEMEN
SUDAN
DJIBOUTI
SOMALIA
UGANDA
KENYA
Red Sea
Gulf of Aden
INDIAN OCEAN
Lake Turkana
Lake Tana
Blue Nile
Abay
Atbara
Tekeze
Dinder
Baro
Akobo
Gibe
Omo
Ramis
Wabe Shebele
Wabe Gestro
Genale
Dawa
Awash
Hanger
Denakil Desert
Ethiopian Plateau
Great Rift Valley
Ogaden
TIGRAY
AFAR
AMHARA
BENSHANGUL
DIRE DAWA
HARARI
ADDIS ABABA
OROMIYA
SOMALI
GAMBELA
SOUTHERN NATIONS NATIONALITES AND PEOPLES
Humera
Adigrat
Axum
Mekele
Ras Dashen Terara (4620 m)
Gonder
Debra Tabor
Weldiya
Bahir Dar
Dese
Asayita
Asosa
Debre Markos
Gimbi
Nekemte
ADDIS ABABA
Nazret
Awash
Dire Dawa
Harer
Jijiga
Welkite
Gambela
Gore
Jima
Bonga
Asela
Hosaina
Shashemene
Dodola
Goba
Sodo
Awasa
Wendo
Negele
Yavello
Mega
Moyale
Degeh Bur
Aware
Domo
Kebri Dehar
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Imi
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To Hargeysa
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12°N
10°N
8°N
6°N
4°N
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