Federal Democratic Republic of Ethiopia

Ministry of Health

Health Sector Development Programme IV

2010/11 – 2014/15

FINAL DRAFT

[version 19 March]

October 2010

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Acronyms

AIDS..... Acquired Immunodeficiency Syndrome
ANC ..... Ante Natal Care
ARI ..... Acute Respiratory Infection
ARM ..... Annual Review Meeting
ART ..... Anti Retroviral Therapy
ARV ..... Anti-retroviral Drug
BEOC ..... Basic & Emergency Obstetric Care
BPR ..... Business Process Re-engineering
CJSC ..... Central Joint Steering Committee
CSA ..... Central Statistical Authority
CSRP ..... Civil Service Reform Program
DACA ..... Drug Administration & Control Authority
DOTS ..... Directly Observed Treatment Short Course
EC ..... Ethiopian Calendar
EDHS ..... Ethiopian Demographic & Health Survey
EFY ..... Ethiopian Fiscal Year
EHNRI ..... Ethiopian Health & Nutrition Research Institute
ENA ..... Essential Nutrition Actions
EOC ..... Emergency Obstetric Care
EPHA ..... Ethiopian Public Health Association
EPI ..... Expanded Programme of Immunisation
FMoH ..... Federal Ministry of Health
FP ..... Family Planning
FY ..... Financial or Fiscal Year
GAVI ..... Global Alliance for Vaccines & Immunisation
GC ..... Gregorian calendar
GDP ..... Gross Domestic Product
GFATM ..... Global Fund against AIDS, Tuberculosis & Malaria
GMP ..... Good Manufacturing Practices
GNP ..... Gross National Product
GOE ..... Government of Ethiopia
HAPCO ..... HIV/AIDS Prevention & Control Office
HC ..... Health Centre
HCF ..... Health Care Financing
HEP ..... Health Extension Package
HEW ..... Health Extension Workers
HF ..... Health Facility
HIS ..... Health Information System
HIV ..... Human Immunodeficiency Virus
HMIS ..... Health Management Information System
HO ..... Health Officer
HPN ..... Health, Population & Nutrition
HPs ..... Health Posts
HSDP ..... Health Sector Development Programme
ICB ..... International Competitive Bidding
IEC/BCC ..... Information, Education & Communication/Behavioural Change Communication
IMCI ..... Integrated Management of Childhood Illnesses
ITN ..... Insecticide Treated Nets
JCCC ..... Joint Core Coordinating Committee
JCM ..... Joint Consultative Meeting (FMoH & HPN group)
JRM ..... Joint Review Mission
M&E ..... Monitoring & Evaluation
MDGs ..... Millennium Development Goals
MMR ..... Maternal Mortality Ratio
MOF ..... Ministry of Finance
MoFED ..... Ministry of Finance & Economic Development
MPS ..... Making Pregnancy Safer
MTR ..... Mid Term Review
NAC ..... National Advisory Committee
NCB ..... National Competitive Bidding
NCDs ..... Non-communicable diseases
NDL ..... National Drug List
NHA ..... National Health Accounts
NTDs ..... Neglected tropical diseases
PHCU ..... Primary Health Care Unit
PLWHA ..... People Living with HIV/AIDS
PMTCT ..... Prevention of Mother to Child Transmission
PPPH ..... Public-Private Partnership for Health
PRSP ..... Poverty Reduction Strategy Paper
RH ..... Reproductive Health
RHB ..... Regional Health Bureau
RJSC ..... Regional Joint Steering Committee
SAFE ..... Surgery, Antibiotic, Face washing & Environmental Improvement
SNNPR ..... Southern Nations Nationalities & Peoples Region
SSA ..... Sub-Saharan Africa
STIs ..... Sexually Transmitted Infections
TB ..... Tuberculosis
TBAs ..... Traditional Birth Attendants
TFP ..... Therapeutic feeding programme
UNAIDS ..... Joint United Nations Programme on HIV/AIDS
UNDP ..... United Nations Development Programme
UNFPA ..... United Nations Population Fund
UNICEF ..... United Nations Children's Fund
VCT ..... Voluntary Counselling & Testing
WHO ..... World Health Organisation
ZHD ..... Zonal Health Department

Chapter 1. Country profile

This chapter is an overview of Ethiopian geography and climate, demographic situation, education, administrative structure, socioeconomic situation, health status and health system organisation.

1.1 National context

Geography and climate

Ethiopia is Africa's oldest independent country. It is the tenth largest country in Africa, covering 1,104,300 square kilometres (with 1 million sq km land area and 104,300 sq km water) and is the major constituent of the landmass known as the Horn of Africa. It is bordered on the north-northeast by Eritrea, on the east by Djibouti and Somalia, on the south by Kenya, and on the west-southwest by Sudan. Its geographical coordinates are between 8 00 N and 38 00 E.

Ethiopia is a country with great geographical diversity ranging from peaks up to 4,550m above sea level down to a depression of 110m below sea level. More than half of the country lies above 1,500 meters. The predominant climate type is tropical monsoon, with three broad climatic variations: the "Kolla", or hot lowlands, below approximately 1,500 meters, the "Wayna Degas" at 1,500-2,400 meters and the "Dega" or cool temperate highlands above 2,400 meters.

Demographic situation

Projections from the 2007 population and housing census estimate a total population in 2010 of 79.8 million. Ethiopia is a mosaic of nationalities and peoples, varying in size from more than 18 million to less than 1000 and having more than 80 different spoken languages. According to the 2007 census, it is one of the least urbanised countries in the world with about 5/6^{ths} of the population living in rural areas (83.6% rural vs only 16.4% urban). The largest city in the country is the capital, Addis Ababa, with 2.7 million people (about 4% of the total population). Nationally, the average household size is 4.7 persons.

The population age pyramid has remained predominately young: 44% are under 15 years, over half (52%) are between 15 to 65 years, and only 3% of all persons are over the age of 65 years. The sex ratio between male and female is almost equal, and women in the reproductive ages constitute 24% of the population. While the average lifetime fertility has declined in the past 15 years from a 1990 level of 6.4 births per woman down to 5.4 births (DHS 2005)[i], rural women still have an average of three more births per woman compared to women in urban areas. Overall, even with the fertility decline, the population is still growing at an annual rate of 2.6%. The lowest rate of population growth is in the Amhara region, which, at 1.7%, is lower than population replacement.

Government and administration

Under the 1994 constitution, Ethiopia is a Federal Democratic Republic with three branches of governance and administration. The executive branch includes the Prime Minister, Council of Ministers and Council of State. The legislative branch has a bicameral Parliament consisting of the House of

Federation or upper chamber and the House of People's Representatives or lower chamber. The representatives in the lower chamber are elected by popular vote from single-member districts to serve five-year terms. The judicial branch is comprised of federal and regional courts.

The Federal Democratic Republic of Ethiopia has nine Regional States: Tigray, Afar, Amhara, Benishangul-Gumuz, Gambella, Harari, Oromia, Somali, and Southern Nation Nationalities and Peoples Region (SNNPR); and the City Administration Councils of two cities: Dire Dawa and Addis Ababa. The regional states and city administrations are subdivided into 817 administrative Woredas (districts). A Woreda/District is the basic decentralised administrative unit and has an administrative council composed of elected members. The 817 Woredas are further divided into about 16,253 Kebeles, the smallest administrative unit. There are also two zones and seven Woredas designated as "special". These are medium sized towns or traditional sites of various population groups.

Socio-economic situation

The Government of Ethiopia follows a market–based and agriculturally led industrialisation policy for the development and management of the economy. There have been a number of policy initiatives and measures taken in these directions, including privatisation of state enterprises and the rationalisation of government regulations, a process which is still ongoing.

Ethiopia's economy depends heavily on the agricultural sector; agriculture accounts for 83.4% of the labour force, about 43.2% of the Gross Domestic Product (GDP) and 80% of exports[ii]. Regular droughts combined with poor cultivation practices, make Ethiopia's economy vulnerable to climatic changes. Despite such obvious challenges, Ethiopia has shown an impressive economic growth over the last seven years. The Poverty Head Count Index has declined from the 1996 level of 45.5% to 32.7% in 2007/08.[iii] The reduction in poverty has been more pronounced in rural than urban areas. Even with this growth, the annual per capita earnings of 235 USD remain below the Sub-Saharan average. The overall economic dependency ratio for the country is estimated at 93 dependents per 100 persons in the working age group of 15-64 years.

During the SDPRP I period (2002/03 - 2004/05), real GDP grew on average by about 5 percent per annum. However, during the first three years of PASDEP period the country registered an average of double digit economic growth of 11.8% per annum with steady and strong positive performance in real GDP[iv]. This steady growth marks a significant progress, not only compared to the 7% annual growth target required to meet the MDGs, but also to realise Ethiopia's objective to become a middle-income country in the next two decades.

Another important feature of the Ethiopia's economic reforms is greater equalisation of opportunities for women to participate in the economic development. The Ethiopian Constitution recognizes the principle of equality of access to economic opportunities, employment and property ownership for women. Following this principle, the government has formulated a national gender policy, which formally recognizes equality between the sexes and sets up mechanisms for the improvement of women's conditions, such as the establishment of the Ministry of Women's Affairs. The main strategies employed

to implement the national policy include gender mainstreaming in sector and development programmes, advocacy and capacity-building initiatives.

Educational status

The intimate linkage between health and education has been firmly established in a number of studies, which taken collectively, offer some ideas about how education and health could potentially reinforce each other towards the rapid socio-economic development of the country. Epidemiological and health service research in Ethiopia has shown that illiteracy is usually associated with high health risks and low health seeking behaviour. In addition to a wide range of diseases and child mortality associated with illiteracy or under-education, HIV/AIDS infection is also disproportionately high in out of school youth.

Despite major progress in education, national literacy levels are still low. The total adult literacy rate (persons above 15 years who can read and write) is 36% (62% for male and 39% for female). According to the MOE 2010 Progress Report, the Gross Enrolment Ratio (GER) has increased from 2.2% in 2004/05 to 4.2% in 2008/09. The gross enrolment ratio in primary school rose from 32% in 1990/91 to over 91% in 2006/07, with a male to female proportion of 55.9% and 44.1%, respectively. During the past five years, the overall enrolment in the higher education institutions increased significantly from 138,199 to 304,371, resulting in a higher education GER of 4.6% in 2008/09. This figure puts Ethiopia close to the GER average for Africa of 6% in 2007/08.

1.2 National health profile

1.2.1 Health status

Despite major strides to improve the health of the population in the last one and half decades, Ethiopia's population still face a high rate of morbidity and mortality and the health status remains relatively poor. Vital health indicators from the DHS 2005 show a life expectancy of 54 years (53.4 years for male and 55.4 for female), and an IMR of 77/1000. Under-five mortality rate has been reduced to 101/1000 in 2010[v]. Although the rates have declined in the past 15 years, these are still very high levels.

The major health problems of the country are largely preventable communicable diseases and nutritional disorders. More than 90% of child deaths are due to pneumonia, diarrhoea, malaria, neonatal problems, malnutrition and HIV/AIDS, and often as a combination of these conditions.

In terms of women health, the MMR has declined to 590/100,000, but this is still among the world's highest[vi]. The major causes of maternal death are obstructed/prolonged labour (13%), ruptured uterus (12%), severe pre-eclampsia/eclampsia (11%) and malaria (9%)[vii]. Significantly, 6% of all maternal deaths were attributable to complications from abortion. The major supply side constraints affecting maternal health are shortages of skilled midwives, weak referral system at health centre levels, lack of inadequate availability of BEmONC and CEmONC equipment, and under-financing of the service. On the demand side, cultural and societal norms, distances to functioning health centres and financial barriers were the major constraints.

1.2.2 Government health system

Following the change of government in 1991, the new Government of Ethiopia put in place many political and socio-economic transformation measures. Among these, it developed a first national health policy, which was followed by the formulation of four consecutive phases of comprehensive Health Sector Development Plans (HSDPs), starting from 1996/97. The policy and the first HSDP were based on critical reviews of prevailing national health problems and a broader awareness of newly emerging health problems in the country.

At the core of the health policy are democratisation and decentralisation of the health care system; developing preventive, promotive and curative components of health care; assurance of accessibility of health care for all parts of the population; and encouraging private and NGO participation in the health sector.

During the past fifteen years, the Federal Ministry of Health has built an impressive framework for improving the health for all, including maternal and neonatal health. This has included a wide range of strategies such as Making Pregnancy Safer (2000), Reproductive Health Strategy (2006), Adolescent and Youth Reproductive Health Strategy (2006) and the Revised Abortion Law (2005). There are also strategies on free service for key maternal and child health services (Health Care Financing Strategy), the training and deployment of new workforce of female Health Extension Workers (HEWs) for institutionalising community health care with clean and safe delivery at Health Post (HP) level, and deployment of Health Officers (HOs) with MSc training in Integrated Emergency Obstetric and Surgery (IEOS) skills. The Ministry has also established the MDG Performance Package Fund and given priority to maternal health, which is expected to facilitate mobilising additional funding opportunities.

1.2.3 Health system organisation

The recently implemented Business Process Reengineering (BPR) of the health sector has introduced a three-tier health care delivery system: level one is a Woreda/District health system comprised of a primary hospital (to cover 60,000-100,000 people), health centres (1/15,000-25,000 population) and their satellite Health Posts (1/3,000-5,000 population) connected to each other by a referral system. The primary hospital, health centre and health posts form a Primary Health Care Unit (PHCU). Level two is a General Hospital covering a population of 1-1.5 million people; and level three is a Specialised Hospital covering a population of 3.5-5 million people.

The devolution of power to regional governments has resulted in largely shifting the decision making for public service delivery from the centre to being under the authority of the regions and down to the district level. Offices at different levels from the Federal Ministry of Health to Regional Health Bureaus (RHBs) and Woreda Health Offices share in decision making processes, powers, duties and responsibilities. The Ministry and the RHBs focus more on policy matters and technical support while Woreda Health Offices manage and coordinate the operation of the district health system under their jurisdiction.

Rapid expansion of the private for profit and NGO sectors is augmenting the public | private | NGO partnership for health and boosting health service coverage and utilisation.

Chapter 2. Overview of HSDP I, II and III

The three consecutive HSDPs that have been implemented since 1997/98 are reviewed here with respect to achievements, implementation challenges and lesson learned and doable recommendations for further health sector planning.

2.1 Summaries of past HSDP performance

2.1.1 Summary of achievements for HSDP I & II

Records from the implementation of HSDP I and II show that encouraging improvements occurred in health service coverage as well as in the utilisation of services at all levels of the Ethiopian health care system. In terms of physical health facilities, 3,135 new Health Posts were constructed[viii], far exceeding the insubstantial amount of 76 HPs in 1996/97. Health Centres were increased from the number in 1996/07 of 243 to 519 in 2003/04; hospitals were also increased from 87 in 1996/97 to 126 in 2003/04.

There have been also significant increases in the availability of health workers of all professional categories, particularly among of Nurses and Health Officers [see Tables 2 & 3 below in this chapter]. A new Health Extension Package (HEP) was created and tested toward the end of HSDP II aimed at achieving universal PHC coverage and institutionalisation of the community health services at health post level. By the conclusion of HSDP II in 2004/5, there were 2,800 trained and deployed female HEWs with another 7,138 already enrolled for training[ix].

Priority health programmes including prevention and control of infectious communicable diseases such as HIV/AIDS, Malaria and TB, have achieved notable improvements during these periods, especially in family planning. Contraceptive coverage grew dramatically from the low proportion (only 4%) in 1996/97 up to 25% in 2004/05[x].

2.1.2 Summary of achievements for HSDP III

Health service delivery and quality of care

Family Health Service - By 2008/09, antenatal care and FP coverage both rose significantly, and the percentage of deliveries assisted by skilled health personnel reached 18.4%. While EmONC coverage increased, there were critical gaps; almost half of the facilities did not provide newborn resuscitation. IMNCI provision was also short of the planned targets. Before the end of HSDP III, targets had been met for measles immunisation coverage and nearly so for the percentage of fully immunised children.

Prevention and control of communicable diseases – Malaria: The distribution of ITNs reached around 22.2 million in 2008/09; and there has been a greater than 50% reduction in malaria admissions and death compared to the baseline period of 2001-2004. **HIV/AIDS:** Overall, in 2009, the national point prevalence for HIV in 2009 was 2.3% and the adult HIV incidence was 0.28. There have been big increases in numbers of health facilities and sites providing HCT, PMTCT, and ART services. However, PMTCT prophylaxis is only reaching 8.2% of close to 80,000 HIV-positive pregnant mothers within a year. **TB and**

leprosy: National TB cure and treatment success rates are on track toward targets, but case detection rates remain behind plans. While there have been improvements in leprosy case detection and treatment completion, the decline in the proportion of disabilities among new leprosy cases is still far behind the target. **Blindness -** The coverage of Woredas by the SAFE Strategy for trachoma control has increased somewhat, and the cataract surgical rate is close to 60% of the HSDP III target. Ophthalmic human resources and service delivery have also improved over the years.

Onchocerciasis and dracunculiasis: Onchocerciasis therapeutic coverage is now reaching greater than 75%, which is above target. With dracunculiasis, however, there are still indigenous cases being found, making it difficult to progress towards becoming a Dracunculiasis free country.

Prevention and control of non-communicable diseases - In 2007, a study of injuries in Addis Ababa showed that injuries accounted for 27% of all emergency visits, 5% of all hospitalisations, and 3% of deaths.

Integrated Disease Surveillance & Public Health Emergency Management - Integrated Disease Surveillance (IDSR) in health facilities and at the community level observed a remarkable frequency and geographic coverage of acute watery diarrhoea (AWD) in the last five years. Under the BPR, these observations led to identifying Public Health Emergency Management (PHEM) preparedness and response as a core process to be introduced.

Hygiene & environmental health - While progress occurred, achievements in hygiene and environmental health are still well below target levels. Latrine coverage and waste management reached 60%, very far from the HSDP III targets.

Health Extension Programme (HEP) - By the end of HSDP III, a total of 33,819 HEWs were trained and deployed, surpassing the HSDP III target. There has been tremendous progress in the construction of health posts (HPs) for the delivery of HEP at community level, more than doubling in a space of only four years. Even so, it only reached 89% of communities, versus the planned target of 100%. As part of the implementation, 2,566 HEP supervisors were trained and deployed, achieving 80.2% of the target.

Medical services - The total number of hospital beds is 13,922, which mean that there is about 1.9 beds per 10,000 population, which compares to 9 beds per 10,000 population average for Sub-Saharan Africa and 27 beds per 10,000 population globally.

Nutrition - During HSDP III, the FMoH developed and implemented the National Nutrition Strategy and programme. A recent study showed the prevalence of exclusive breast feeding was exceeding target levels in the study regions. The proportion of young children getting vitamin A prophylaxis is far above the target. The Community-Based Nutrition (CBN) roll-out has also surpassed target coverage levels.

Health systems

Health sector reform - health reforms have intensified through the application of Business Process Reengineering (BPR), leading to a set of new approaches

including benchmarking best practices, designing new processes, revising organisational structures and a selection of key processes (8 core and 5 support processes). The BPR has been progressively implemented at all levels followed by changes in staff deployment, specific job assignments and the recruitment of new staff.

Health facility construction and expansion - Progress in facility construction, upgrading and equipping under HSDP III has been remarkable. The numbers have reached 14,416 HPs (88.7% of the target); 2,689 HCs (84% of target); and 111 Public Hospitals (125% of target).

Human resource development - Overall, targets have been met for the community level and most of the MLHPs. However, there are still major gaps for medical doctors, midwives and anaesthesia professionals, especially when considering the long lead time and limited involvement of the private sector in training these professionals.

Pharmaceutical services - In order to improve efficiency in the supply chain of pharmaceuticals and medical supplies, PHARMID has been transformed into the Pharmaceutical Fund and Supply Agency (PFSA) and key measures taken to strengthen the capacity of the new agency. The PFSA has been able to develop a pharmaceutical forecasting plan in consultation with health facilities about what would be required for need-based procurement.

Health and health related services and product regulation - A key principle of the health sector BPR is improving the quality of health services through institutionalising accountability and transparency. As a part of this, the former Drug Administration and Control Agency (DACA) has been transformed into the Health and Health related Services and Product Regulatory Agency with a mandate to undertake inspection and quality control of health and health related products; premises, professionals and health delivery processes in an integrated manner.

Harmonisation and alignment - Under harmonisation and alignment, the major objective is to have the One-Plan, One-Budget and One-Report approach at all levels of the health system. Ethiopia is a signatory of the Global IHP+ Compact and the first to develop and sign a Country-based IHP+ Compact. **One Plan:** The health sector wide strategic plan (HSDP) is the product of substantial consultations between the Ministry of Health and the Health Development Partners. One of the most important refinements in HSDP III was the inclusion of "Woreda-Based Health Sector Planning"; this planning system created a platform for joint planning by all stakeholders at all levels of the health system including health development partners. **One Budget:** Subsequent to signing the IHP+ Compact in 2008, the FMoH and health development partners jointly commissioned an independent health system assessment that led to establishment of the MDG Performance Fund and a Joint Financing Arrangement (JFA) for the Fund that signed by Development Partners, and enabling the FMoH to access and make use of pooled funds. **One Report/One M&E:** As part of the BPR, integrated supportive supervision, operational research, performance reviews and quality assurance and inspections are now complementing M&E to inform strategic planning of the health sector. Joint Performance reviews such as the ARM and JRM are being undertaken according to the plan; the Annual Review Meeting (ARM) has been conducted every year. **Governance of HSDP:**

Key coordinating and steering committees are performing well, including the FMoH-RHBs Joint Steering Committee, FMoH-HPN Joint Consultative Forum and the Joint Core Coordinating Committee. The Joint Consultative Forum and JCCC meetings have also been regularly functional, with the JCCC focusing on technical and operational issues. **Health care financing -** Over the course of the HSDPs, various background studies on health care financing issues have contributed to the design and introduction of health financing reforms. The reform components include: retention and utilisation of revenue, administration of the fee waiver system and establishment of functioning facility governance bodies. Other parts of the reforms have included outsourcing of non-clinical services, establishing private wings in health facilities and the exemption of certain services. **Retention and utilisation of revenue -** The performance report for health care financing up to the end of fiscal year 2008/2009 showed that 73 hospitals and 823 health centres have started retaining revenue. Encouragingly, 95% of these units collecting user fees had used the revenue at their level. **Health insurance:** To date, a draft law and regulation have been revised and presented for policy and technical discussions. A series of consultative discussions have been conducted in Addis Ababa and the regions. The legal framework has been improved and the SHI Proclamation was approved by the Council of Ministers and by Parliament in July 2010. Parallel to the work on social health insurance, various activities have been undertaken to develop and pilot community-based health insurance (CBHI). In summary, the combination of the community-based health insurance and social health insurance will cover about 50% of the population by the end of the HSDP-IV period. **Trend of expenditure in the health sector:** Ethiopia's fourth National Health Accounts study (NHA, 2010) showed that national health expenditures have grown significantly, increasing the per capita health expenditure has increased from USD 7.14 (in 2004/05) to USD 16.09 (in 2007/08).

Pastoralist health service - Pastoralist peoples in Ethiopia constitute about 10% of the national population, and they have many special health needs that are not completely met by the largely static facility-based health system present in the rest of the country. This gap prompted FMoH to adapt the 16 HEP packages to pastoralists' needs and translate them into local languages. There is also now a Pastoralist Health Promotion and Disease Prevention Directorate to focus attention on health of the pastoralist populations.

Operational research - In HSDP III, the BPR resulted in redesigning Research and Technology Transfer as a core process of the FMoH. There was a surge in the number of operational studies during HSDP III that covered a wide range of areas: Child health, Communicable diseases, Public health, Reproductive health, and health services.

Cross cutting issues

Gender - Gender has remained a crucial cross cutting concern that has prompted the FMoH to set clear objectives for gender mainstreaming at all levels of the health system. Toward this end, government has developed an analytic framework on gender and health, including compilation and analysis of data on female workers to be used for advocacy purposes. There has been also a rapid assessment aimed at the prevention of physical abuse to women and ensuring the provision of adequate health services for the victims of abuse.

2.2 Detailed account of HSDP II performance

The following sections provide detailed account of performance of HSDP III in priority programmes and health system issues.

2.2.1 Health service delivery & quality of care in HSDP III

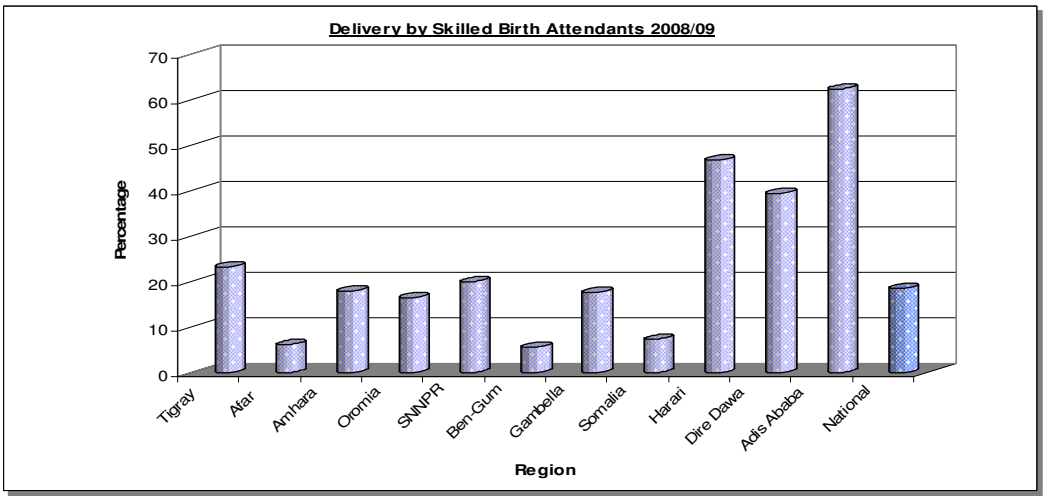
2.1.1.1 Family Health Service

The major targets for family health services under HSDP III were:

- To increase family planning service coverage (CPR) from 25% to 60%;
- To increase institutional deliveries attended by skilled health workers from 12% to 32%;
- To ensure provision of BEmONC in 100% of HCs, CEmONC in 87% of the hospitals and 20% of the HCs;
- To increase DPT3/Penta3 coverage from 70% to 85%,
- To increase the proportion of fully immunised children from 45% to 80%,
- To expand IMNCI implementation from 36% to 90% of Health Facilities, and CIMNCI implementation from 12% to 80% of the districts in the country.

In order to achieve these targets, FMoH made substantial investments in procuring equipment for clean delivery and B/CEmONC services. Accelerated training of health officers was initiated and around 5,000 were enrolled, of which about 70% were graduated and deployed. A masters level programme in Emergency Surgery and Obstetrics for health officers was introduced; the first cohort has already graduated and been deployed. Inadequacies in the pre-service training of HEWs in MCH were recognised, and a one month in-service training was designed and implemented for HEWs in all regions. Key pilot initiatives such as Making Pregnancy Safer have been evaluated.

Figure 1. Delivery by skilled birth attendants in regions, 2008/09



By 2008/09, antenatal care coverage had reached 68%, postnatal care 34% and family planning coverage was 56.2%, as measured by CPRs[xi]. Clean and safe delivery by HEWs increased to 10.8%. The percentage of deliveries assisted by

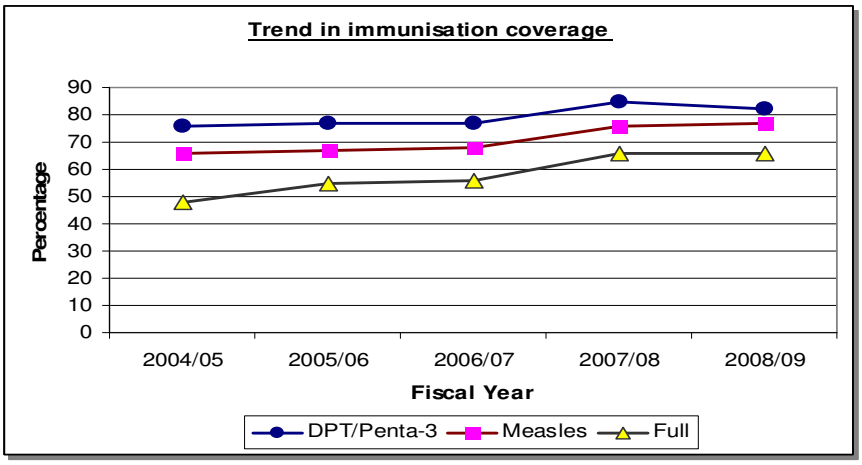
skilled health personnel rose to 18.4% from the baseline of 12%, although there was a wide variation among regions. Regional disaggregation showed levels of delivery with a skilled worker ranging from 5.6% in Benishangul-Gumuz region to 62.5% in Addis Ababa; five regions (Tigray, SNNPR, Harari, Addis Ababa, and Dire Dawa) performed above the national average[xii].

An EmONC assessment was conducted in 2007 on a total of 111 hospitals; of these, 51% provided comprehensive EmONC, 14% had basic emergency obstetric services, and 34% of hospitals had a partially functioning EmONC[xiii]. In the same assessment, a total of 684 health centres provided some obstetric and neonatal services, but only one health centre provided comprehensive EmONC, nine had Basic EmONC, and 674 provided just partial EmONC services, which is far behind the targets set in HSDP III.

The EmONC Assessment Report documented some critical gaps; almost half of the facilities did not provide newborn resuscitation and only 80% provided parenteral antibiotics. Lack of essential equipment, such as "Ambu-bags" and masks, and shortages of skilled workers were the major constraints causing such low performance.

According to the FMoH 2008/09 administrative report, IMNCI provision was also short of the planned targets. Only 930 health centres (68.2%) and 81 hospitals (72.9%) were providing IMNCI, and just 215 Woredas in ten regions were providing Community IMNCI interventions.

Figure 2. Trend in immunisation coverage, EFY 1997-2001

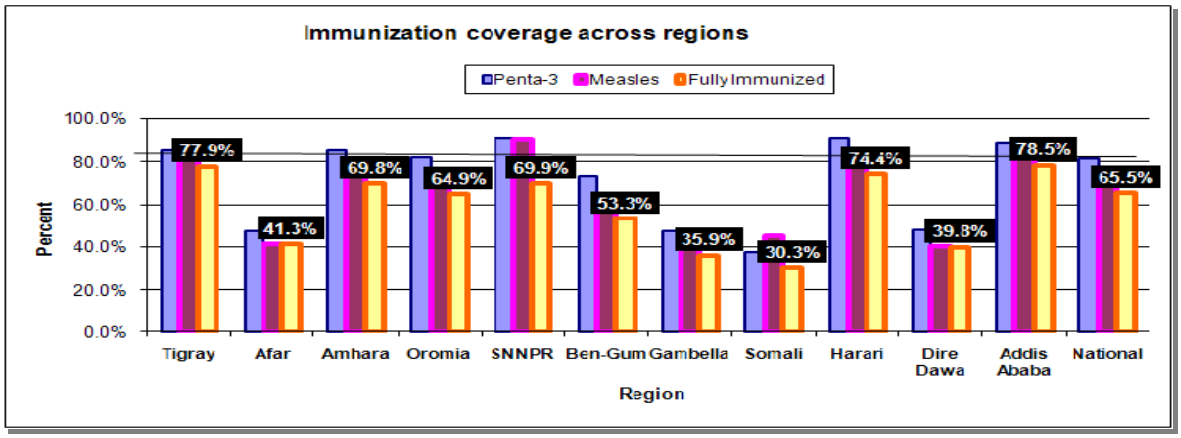


Meanwhile, encouraging progress was made in developing strategies, guidelines, and standards for adolescent and youth reproductive health. Minimum service delivery packages for youth friendly reproductive health service were prepared and health care providers were trained on areas of youth friendly services.

One year before the termination of HSDP III, Pentavalent immunisation coverage had reached 82%, measles immunisation coverage was 76.6%, and the percentage of fully immunised children was 65.5%[xiv]. These results indicate that the HSDP III target was met for measles immunisation coverage and nearly so for the percentage of fully immunised children. Five regions (Addis Ababa, Harari, Amhara, Tigray, and SNNP) have persistently attained immunisation

levels above the national average for the last three consecutive years, while levels in Gambella, Afar and Somali regions are the farthest below the targets.

Figure 3. Immunisation coverage across regions, 2008/09



2.2.1.2 Prevention and control of communicable diseases

Malaria and other vector born diseases prevention and control

Malaria prevention and control has enjoyed the utmost government commitment and considerable attention from the health policy makers since the beginning of HSDP I. Strategies to reduce the overall burden of morbidity and case fatality rates have substantially remained the same: comprehensive approach to vector control; early diagnosis and prompt treatment; and surveillance, prevention and rapid management of malaria epidemics when and where they occur. The major targets for HSDP III in malaria prevention and control were:

- to distribute 20 million ITNs to households in malarious areas;
- to increase the proportion of ITN usage, especially for under 5 children from 2% to 63%, and for pregnant women from 2% to 49%;
- to reduce malaria morbidity from 22% to 10%; and
- to reduce the malaria case fatality rate in age groups of 5 years and above from 4.5% to 2% and in the under 5 children from 5% to 2%.

The distribution of ITNs successfully reached around 22.2 million in 2008/09, making Ethiopia the third highest bed net coverage achiever in Sub-Saharan Africa after Togo and Sierra Leone[xv]. The majority of the ITNs are long lasting insecticide treated nets (LLITN). They have been distributed to communities, including those in hard-to-reach areas, through health facilities, enhanced outreaches, and special community campaigns. The most effective anti-malarial drug, artemether-lumefantrine (Coartem), was introduced nationwide as the first line treatment for Plasmodium falciparum malaria. Access to parasitological diagnosis of malaria has been extended to the peripheral health facilities, including HPs, through the introduction of rapid diagnostic tests (RDTs). Indoor residual spraying (IRS) has been continued as a vector control measure for prevention of malaria epidemics. Much of the scaling-up in malaria prevention and control has been community-based, including basic diagnosis and treatment being carried out by HEWs at health posts or during house-to-house visits.

A recent national malaria assessment has shown a 54% and 55% reduction in malaria admission and death, respectively, as compared to baseline period of 2001-2004.[xvi] The in-patient case fatality rate of malaria in age group >5 years is 3.3%, while the case fatality rate of malaria in age group <5 is 4.5%[xvii]. The prevalence of household ownership of at least one ITN in areas below 2,000m was 65.6% and at least one LLITN was 65.3%[xviii]. In malarious areas, ITN use by children under five years and pregnant women has remarkably leapt from 2.8% and 1.6% to 41.2% and 42.5%, respectively[xix].

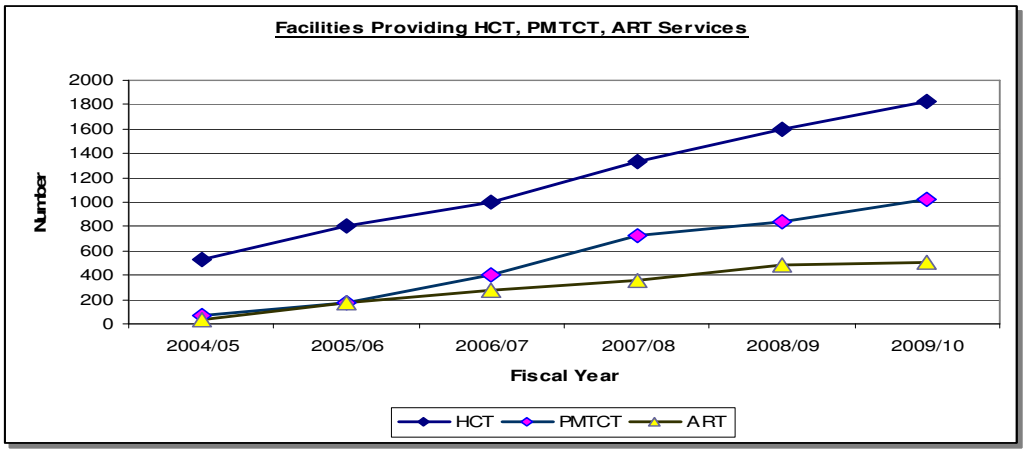
HIV/AIDS prevention and control program

HIV/AIDS prevention and control was recognised as a top priority health intervention from the start of HSDP I. The national HIV/AIDS policy was issued in 1998, and in subsequent years, it was followed by the establishment of a National AIDS Council, National AIDS Secretariat, and other relevant bodies. Notwithstanding these efforts, Ethiopia has continued to face a mixed HIV/AIDS epidemic amongst the sub-populations and geographic areas.

The plan under HSDP III was to achieve provision of VCT/HCT services in 100% of hospitals and HCs, PMTCT services in 100% of hospitals and 70% of HCs and increase the number of PLHIV on ART from 13,000 to 263,000. These targets were set to achieve a reduction in the adult incidence of HIV from 0.68% to 0.65% and also maintain the prevalence of HIV at the existing state.

Recent reports and assessments showed there have been marked increases in the number of health facilities and sites providing HCT, PMTCT, and ART services during the HSDP III period. According to FMoH 2008/09 Administrative report, there has been an increase in health facilities providing HIV services rising from 801 to 1823 for (VCT) HCT, from 93 to 1023 for PMTCT and from 168 to 511 for ART. The number of clients using (VCT) HCT services has gone up to a record of 8,295,483 persons as compared to the 564, 321 in 1998. Meanwhile, only 6,466 HIV-positive mothers received PMTCT prophylaxis at the end of the fourth year of HSDP III, a performance that just reached 8.2% of an estimated 79,184 HIV-positive pregnant mothers and 14,148 HIV-infected births within a year.

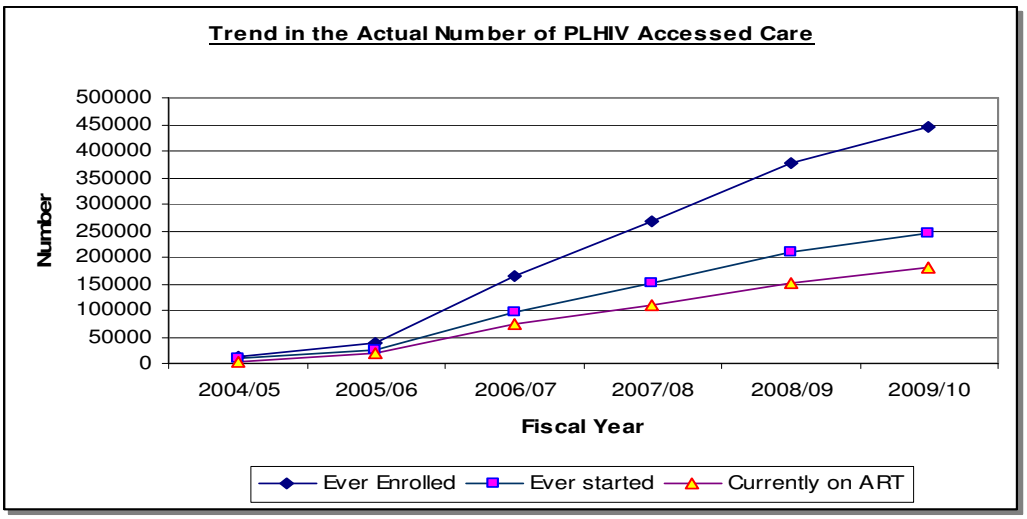
Figure 4. Facilities providing HCT/VCT, PMTCT, and ART services, 2009/10



By 2009, the estimated HIV prevalence rates for male and female were 1.8% and 2.8%, respectively. Overall, the national point prevalence for 2009 was 2.3%[xx]. During the same year, adult HIV incidence was 0.28 resulting in total

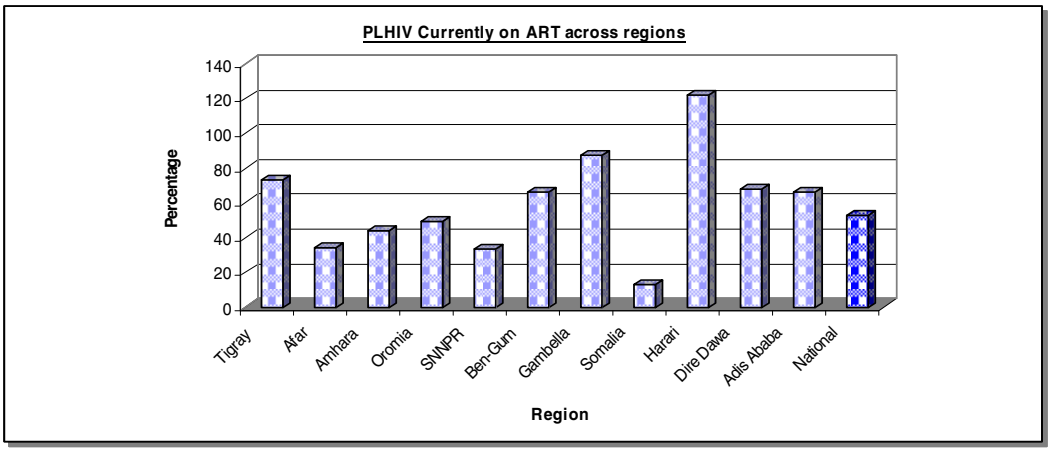
AIDS related deaths of 44,751[xxi]. Urban HIV prevalence was 7.7% in 2008 with an estimated 62% of total PLHIV in the country residing in urban areas. Rural HIV prevalence was 0.9%, and accounted for 38% of total PLHIV. In urban settings, the epidemic varies from 2.4% in the Somali region to 9.9% in Tigray, 10.7% in Amhara and 10.8% in Afar. The rural HIV epidemic also varies among regions, ranging from 0.4% prevalence in Somali region to 1.5% in Amhara region[xxii]. It is still a challenge to describe the true national trend in HIV incidence and prevalence due to the varying methodologies in different surveys. In 2009, the HIV/AIDS Prevention and Control Office (HAPCO) estimated that there were around 1,116,216 people living with HIV and of these 336,160 needed ART. There were also a total 855,720 AIDS orphans in the country.

Figure 5. Trend in actual numbers of PLHIV accessed care, 1998-2002[xxiii]



Recent Service delivery reports from HAPCO (Feb. 2010) indicate that the number of PLHIV ever enrolled in an ART programme has increased to 443,964, while those ever started on ART increased to 246,347 and the number of PLHIV on ART reached to 179,183. Thus ART coverage reached 53% (percentage of PLHIV currently on ART out of the total eligible), which showed significant progress compared to the baseline of 13,000 in 2005/06.

Figure 6. PLHIV Currently on ART across regions, 2009/10

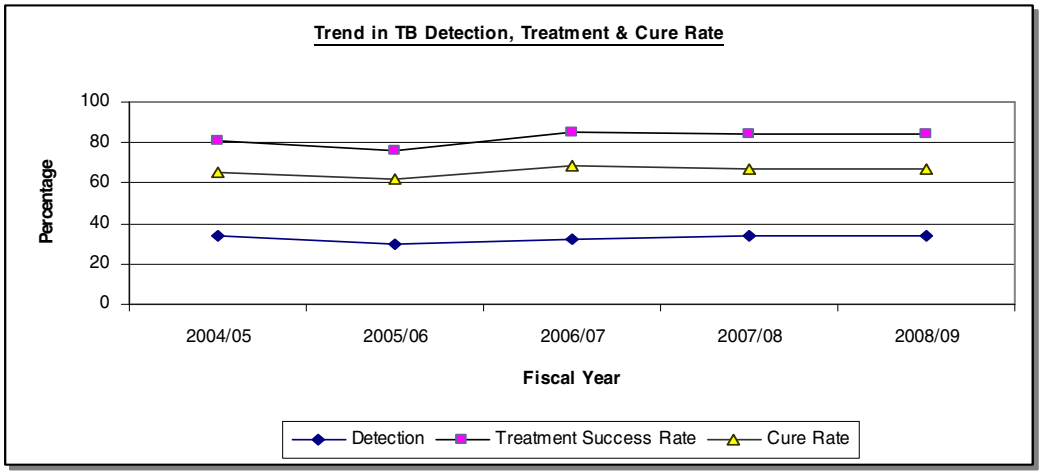


Among regions, the highest proportion of PLHIV enrolled in HIV care is seen in Amhara, Oromia and Addis Ababa. Harari region manages to enrol far more than the target (122%), but Somali region only reaches 13% of the eligible target. The Beneshangul-Gumuz, Dire Dawa, Addis Ababa, and Tigray regions also performed well, enrolling 66%, 66%, 68% and 73% of the targeted eligible persons respectively.

TB and leprosy control programme (TLCP)

Tuberculosis has remained a major global public health problem. Ethiopia ranks seventh among the world's 22 high-burden tuberculosis (TB) countries[xxiv]. Prevention and control of TB has created additional challenge and a major strain to health care systems in many of developing countries including Ethiopia due its linkage with HIV/AIDS. WHO recommends a focus on the Three 'I's, isoniazid preventive treatment, intensified case finding for active TB, and TB infection control, to be the key public health strategies to decrease the impact of TB on people living with HIV.

Figure 7. Trend in TB Detection, Treatment & Cure Rate, EFY 1997-2001[xxv]

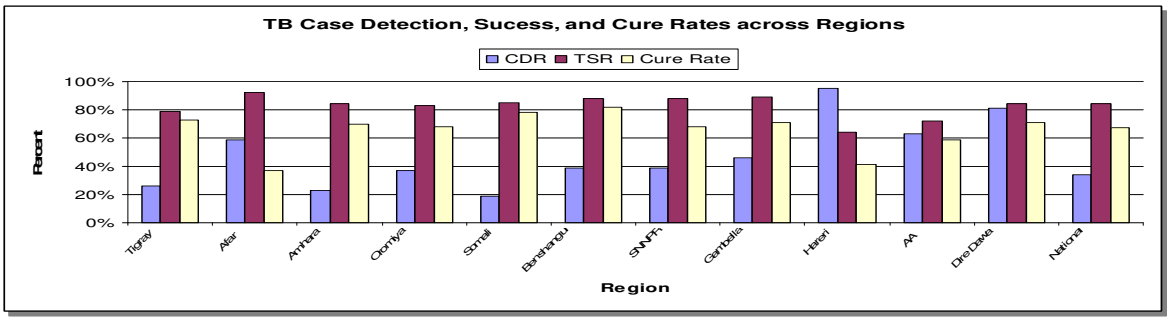


Ethiopia has run an integrated TLCP health care intervention since the beginning of HSDP I. The general objective of the TLCP is to reduce the incidence and prevalence of TB and Leprosy as well as the occurrence of disability and psychological suffering related to both diseases; and to reduce mortality resulting from TB to such an extent that both diseases are no longer public health problems. HSDP III mainly focused on enhancing the detection rate and completion of regularly provided treatment as the main strategy for the prevention and control of TB. The target set in HSDP III for the prevention and control of TB was to achieve 85% treatment success rate and a detection rate of 70% of new sputum +ve TB cases.

The national cure and treatment success rates are 67% and 84%, which is on track towards the HSDP III target, while the case detection rate remains at 34%, far less than what was planned for HSDP III. Regional disaggregation showed highest Case Detection Rate in urban administrations (Harari 95%, Dire Dawa 81% and Addis Ababa 63%). The Somali, Amhara and Tigray regions performed lowest at 19%, 23%, and 26% respectively. With reference to Treatment Success Rate, all but three regions (Tigray 79%, Addis Ababa 72%, and Harari

64%) were above the national average; the highest performances were in Afar (92%) and Gambella (89%).

Figure 8. TB Case detection, treatment success and cure rates, 2008/09



In 2009/10, 3,465 (35.4%) health facilities out of the 14,329 health facilities (hospitals, health centres, clinics, nucleus health centres and health posts) were providing TB-DOTs service and 879 (7%) health facilities were implementing TB/HIV collaborative activities[xxvi]. According to WHO estimates in 2009, the incidence ratio of all forms of TB in Ethiopia was 379 per 100,000; in the same year, the prevalence of TB Infections was 579/100,000 and the mortality rate due to TB was 92/100,000.

In terms of leprosy control, WHO figures show that the prevalence of leprosy in Ethiopia is estimated at 6 per 100,000 in 2005/2006 with an estimated 4,000-5,000 cases detected every year. Like Tuberculosis control, leprosy control is based on enhancing the detection rate and completion of regularly provided treatment. There have been improvements in the detection rate and treatment of leprosy. The treatment completion rate for Leprosy cases has reached 89% from the baseline of 82% in 2004/05[xxvii]. More effort is required, however, to reduce the prevalence of grade 2 disability from 12% to less than 10% as targeted in HSDP III. There were 3,878 new cases detected in 2008/2009. Reports have also shown that there has been a decline in proportion of grade 2 disabilities among new leprosy cases from 9% in 2007/2008 to 7% in 2008/2009. These figures are still far behind the target of 2% in HSDP III.

Blindness prevention and control programme

The prevalence of blindness in Ethiopia is 1.6%; there are 1.2 million people with blindness of all causes and 2.8 million people with low vision. Cataract, trachoma, glaucoma and childhood blindness are the major causes of blindness in Ethiopia. Cataract and trachoma account for more than 60% of all blindness[xxviii].

Prior to HSDP III, the FMoH launched the Global Initiative on blindness prevention and control, VISION 2020; established a National Eye Bank and developed a standardised cataract surgeons' training curriculum. Under HSDP III, the plan was to reduce active trachoma in 80 targeted Woredas by 80% and increase the Cataract Surgical Rate (CSR) from 350 to 600 per million population per year.

The main strategy in place for trachoma control is "SAFE", i.e., Surgery, Antibiotics, Facial cleanliness and Environmental Sanitation, including preventive

measures. The HSDP III performance report showed that the number of Woredas implementing SAFE Strategy for trachoma reached 124 and about 37,000 cataract surgeries were performed in 2008/2009, making a cataract surgical rate of 460 /million/year for an achievement rate of close to 60% of the HSDP III target.

Ophthalmic human resources and service delivery has improved over the years. The number of ophthalmologists increased from 63 to 76 and primary eye care units from 46 to 54 [dates?]; and the number of cataract surgeries increased from around 20,000 in 2002 to 25,000 in 2004 and 37,000 in 2008/09.

Onchocerciasis control and dracunculiasis eradication

Concerning onchocerciasis control, the plan was to expand the programme to all highly affected districts by 2005 and eliminate the disease by 2020. The evaluation of the past performance indicated that the programme has been successfully expanded to all the affected districts during HSDP II period. The target under HSDP III has been to achieve a 65% onchocerciasis control in all Community-Directed Treatment with Ivermectin (CDTI) areas and ensure the progress and sustainability of the programme. The HSDP III performance reports shows that therapeutic coverage for 2008 and 2009 has reached 75% and 77%, respectively.

Ethiopia is one of 12 dracunculiasis endemic countries that agreed to take concerted actions to interrupt local transmission of the disease by 2009. Nonetheless, 23 indigenous cases were reported in 2009 from Gambella Regional state making it difficult to make progress towards a Dracunculiasis free country.

It is imperative for FMoH, RHBs and development partners to revitalise and strengthen their involvement in the control and prevention of onchocerciasis and dracunculiasis, which are among the important but neglected tropical diseases.

2.2.1.3 Prevention and control of non-communicable diseases

The largest proportion of serious injuries in Ethiopia comes from road traffic accidents; they have become one of the major national health burdens. The health sector recognizes that injuries have multiple causes that necessitate a multi-sectoral approach towards effective prevention and rapid responses when they occur, including efforts to strengthen the quality and availability of emergency medical services. The target under HSDP III was to improve the proportion of people seeking formal health care in the case of serious illness or injury from 41% to 55%.

An assessment report by the FMoH in 2008 has shown that non-communicable diseases such as cardiovascular diseases, diabetes mellitus and cancers along with injuries are amongst the major contributors to the high level of mortality and morbidity in Ethiopia. In 2007, researchers looking at the pattern of injuries in Addis Ababa found that injuries accounted for 27% of all emergency visits, 5% of all hospitalisations, and 3% of deaths. The findings from a community-based survey in Jimma Zone in 2007 showed that prevalence rate [incidence rate?] of injury (serious enough to stop daily living or to need care or that was taken for care?) was 8.9% per year; out of the 304 individuals studied (who had injuries? Who came to a health unit with injuries?), 83.5% had received health

care at different levels of health facilities and 5.2% were admitted for inpatient care[xxix].

2.2.1.4 Integrated Disease Surveillance & Public Health Emergency Management

HSDP-II planned to establish and strengthen Integrated Disease Surveillance (IDSR) in health facilities and at the community level in order to bring a significant reduction in the incidence of epidemics and outbreaks. This surveillance observed a remarkable frequency and geographic coverage of acute watery diarrhoea (AWD) in the last five years. In addition to their impact on human health, the outbreaks also put significant pressure on other programmes by diverting attention and resources.

Under the BPR, these observations led to identifying Public Health Emergency Management (PHEM) preparedness and response as a core process to be introduced. In order to establish PHEM teams at FMoH and RHBs, 13 epidemic intelligence service officers are being trained at Masters Degree level in Addis Ababa University. Twenty diseases have been selected for surveillance and detection and a new forecasting, early warning, response and record system has been designed.

2.2.1.5 Hygiene & environmental health

The objective of this section is to increase the coverage and access to hygiene and environmental health services for the rural and urban populations of the country. During HSDP I and II, the FMoH developed a National Sanitation Strategy and instituted measures for strengthening water quality monitoring by the public sector. Access to sanitation facilities improved from 12.5% to 17% in 2002/2003; and access to toilet facilities increased from 10% to 29% in 2003/2004. During these periods, it also became possible to open two additional International Vaccination Centres at St. Paul and St. Peter TB Specialised Hospitals. However, the services for hygiene and environmental health have not sufficiently reached the majority of rural population and have been limited largely to urban areas, particularly in some regions of the country. The country is also prone to climatic changes resulting in recurrent drought in different parts with potential impact on health of the population and health services infrastructure.

HSDP III had specific targets for hygiene and environmental health. Some of these are increasing the latrine coverage from 20% to 80% and to reach 100% in the medical and other waste management system in public and private health institutions.

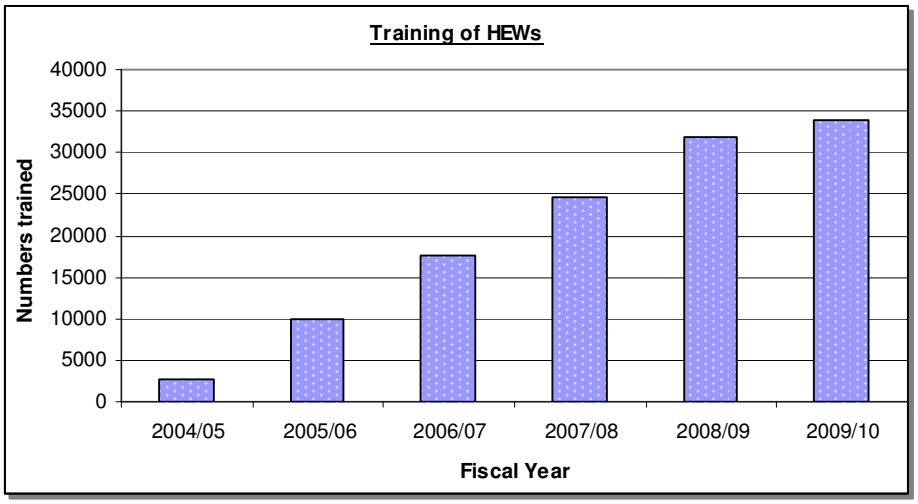
During HSDP III, the Ministry developed a National Hygiene and Sanitation Strategy and a National Protocol for Hygiene. In this period the FMoH commenced implementation of Community Led Total Sanitation (CLTS). They also started a National Millennium Hygiene and Sanitation Movement with the development of a mass mobilisation and communication strategy. Four regional towns have been selected for the Healthy Cities Programme. The work also included the development of Urban Health Service Package with five manuals for the delivery of urban health services.

While significant progress has been made, it seems the achievements in hygiene and environmental health are still well below target levels. Latrine coverage has reached 60%, which falls short of meeting the target[xxx]. Waste management has reached 60%, again very far from the HSDP III target. The level of handling and utilisation status of existing latrines is not known and is expected to be extracted from the WASH Inventory that has been in progress since 2009. Other important activities included the establishment of a committee for infection prevention in public hospitals.

2.2.1.6 Health Extension Programme (HEP)

Under HSDP II, the Health Extension Programme was introduced in 2002/03 with a fundamental philosophy that if the right health knowledge and skill is transferred, households can take responsibility for producing and maintaining their own health. Substantial investments in human resources, health infrastructure, pharmaceutical supplies and operational costs have been made for the successful implementation of the program.

Figure 9. Trends in the training of HEWs, EFY 1997-2002

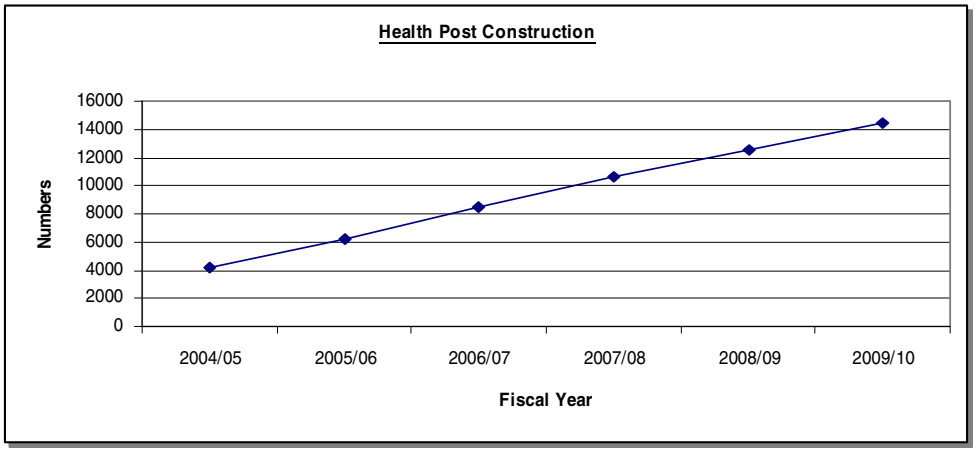


Under HSDP III it was planned to cover all rural Kebeles with the HEP, aiming to achieve universal PHC coverage by 2008 through vigorous and incremental implementation of the programme nationwide. From the very start HEP was supported with the development of 16 different health intervention packages to be delivered by HEWs at community level. These packages along with implementation guidelines were made available to implementers as well as to technical and vocational training institutions. In pastoral areas, the packages have been subjected to modification commensurate to the life style of the pastoralist population. The training of all female HEWs has been progressing well, leading to community acceptance and encouraging signs of demand for HEP services.

By the end of HSDP III, a total of 33,819 HEWs were trained and deployed, surpassing the HSDP III target of 33,033 HEWs[xxxi]. Meanwhile, the model households that had been trained and graduated only reached a cumulative total of 4,061,532 from an eligible total of 15,850,457 households. Thus, coverage only reached 26%, leaving a huge gap of more than 11 million households to be

trained and graduated. This will require progressive and sustained efforts at all regions and levels of the health care system.

Figure 10. Trends of construction of Health Posts, EFY 1997-2002



There has been tremendous progress in the construction of health posts (HPs) for the delivery of HEP at community level. The total number of HPs has increased from the baseline of 6,191 in 2004/05 to 14,416 in 2009/10, more than doubling in a space of only four years. Even so, this number only reached 89% of communities, versus the planned target of 100% under HSDP III[xxxii]. Equipping HPs with medical kits remain a major challenge during HSDP III; only 83.1% or 13,510 HPs out the planned target of 16,253 HPs were fully equipped.

As part of the implementation, 2,566 HEP supervisors were trained and deployed, thus achieving 80.2% coverage against the plan of 3,200. The FMoH prepared technical guidelines for HEP supportive supervision together with other technical reference books for rural HEP and manuals for school health program; these have been as part of the BPR. In addition, the implementation manual for pastoralist and semi-pastoralist areas was finalised and distributed to respective regions. Other major activities in support of HEP included establishing HEP departments at regional levels and respective structures at zonal and Woreda levels to strengthen the management support to HEP.

In order to expand urban HEP in seven regions of the country, 15 HEP packages along with a manual were developed and distributed for implementation. Training and deployment of urban HEWs is already in progress in Tigray, Amhara, Oromiya; SNNP, Harari, Dire Dawa; and Addis Ababa. Accordingly, these regions have trained and deployed a total of 2,319 Urban Health Extension workers achieving 42% of the targeted number.

2.2.1.7 Medical services

In addition to constructing and expanding health facilities, during HSDP III, the FMoH focused on strengthening management of health facilities to enable delivery of effective, efficient and quality medical services. The FMoH launched the *Ethiopian Hospital Reform Implementation Guidelines* to provide guidance for hospital managers about how to improve nursing care, facilities and equipment management, human resource management, infection prevention and quality management. Similar guidelines are also being developed for Health Centres.

An assessment done in 47 selected hospitals on their performance for the year 2009 showed 50.8% bed occupancy rate (BOR), 27.8% patients per bed per year as bed turn-over rate (BTR), and 6.7 days of average length of stay (ALOS). The same revealed that average cost per patient–day equivalent (PDE) of 196 ETB[xxxiii].

With respect to per capita attendance rate, it is difficult to measure progress due to erratic implementation of the new HMIS in regions. Yet an increasing number of indigenous and international NGOs are currently involved in various aspects of service delivery, and there are currently [date?] 277 private clinics not for profit and 1,788 private clinics for profit in the country. The total number of hospital beds is 13,922, which mean that there is about 1.9 beds per 10,000 population, which compares to 9 beds per 10,000 population average for Sub-Saharan Africa and 27 beds per 10,000 population globally[xxxiv].

2.2.1.8 Nutrition

Nutritional disorders are among the main causes of morbidity and mortality. The major problems are protein-energy malnutrition and micronutrient deficiencies such as vitamin A, iron, and iodine. In addition to the efforts by Agricultural and Rural Development Sector, which is responsible for making adequate nutrition available to the population, during HSDP I & II the Health Sector supported good nutritional practice in homes. Specifically, the FMoH provided health education, treatment of severely malnourished children and prevented nutritional problems through provision of micronutrients to vulnerable populations (mothers and children). Nutrition was also made part of the HEP packages.

During HSDP III, the FMoH developed and implemented the National Nutrition Strategy and programme. This plan included a target of creating access for 90% of children 6-59 months to nutritional screening. To this end, nutritional screening was done every three months at HP level, aiming to screen more than 95% of the 6-59 month old children. The plan also targeted increasing the proportion of infants 0-5 months exclusively breast fed from 38% to 63%. A recent study in four regions (Amhara, Oromiya, SNNP and Tigray) showed that the prevalence of exclusive breast feeding had reached 76% by 2008/09[xxxv].

The proportion of children aged 6-59 months getting vitamin A prophylaxis through two rounds of Vitamin A supplementation per year reached 95% in 2008/09, far above HSDP III target of increasing from 38% to 54%. Transition from the Enhanced Outreach Strategy (EOS) into the Health Extension Package (HEP) started in 39 districts in conjunction with the Community-Based Nutrition (CBN) roll-out. The core package of CBN interventions was implemented in 849 sub-districts of Amhara, Oromia, SNNP and Tigray Regions (surpassing the target of 60% coverage).

2.2.2 Health systems

The following sections summarize progress made in the area of health systems in Ethiopia.

2.2.2.1 Health sector reform

Health sector reform in Ethiopia is part of the ongoing socio-economic reforms that started with Civil Service Reform and is now covering the entire public

sector of the country. The health reforms have been intensified through the application of a new concept known as Business Process Reengineering (BPR), which is a tool for comprehensive analysis, redesign and revamping of the sector. The BPR is a country led, multi-sectoral undertaking implemented within the government's civil service reform.

The BPR process informs a fundamental rethinking and requires a purposeful and radical redesign of health business processes to achieve dramatic improvements in critical, contemporary measures of performance such as cost, quality, service and speed. The purpose of the BPR in the health sector is to establish customer focused institutions, rapid scaling up of health services and enhancing the quality of care, thereby improving the health status of the Ethiopian people as desired in the mission of the health sector.

Following a deep and systematic analysis of the "as is" situation at all levels of the health system, including health facilities, the sector has introduced a number of innovative approaches. These new approaches include benchmarking best practices, designing new processes, revising organisational structures and a selection of key processes (8 core and 5 support processes). The new core processes are:

- Health & Health-Related Services & Product Regulation;
- Health Care Delivery;
- Health Infrastructure Expansion & Rehabilitation;
- Pharmaceutical Supply;
- Policy, Planning, Monitoring & Evaluation;
- Public Health Emergency Management;
- Research & Technology Transfer,
- Resource Mobilisation & Health Insurance.

The support processes are:

- Human Resources Development /Management
- Legal Services;
- Procurement, Finance and General Service;
- Program-Based Audit;
- Public Relations.

The BPR has been progressively implemented through a series of training sessions for managers and technicians at all levels followed by changes in staff deployment, specific job assignments and the recruitment of new staff. All of these reforms are being done under the close oversight of the top health leadership.

2.2.2.2 Health facility construction and expansion

Since HSDP I, health facility construction, expansion, rehabilitation, furnishing and equipping has mainly focused on PHC facilities: HPs and HCs and to a certain extent hospitals. By the end of HSDP II, the number of public HCs had increased by 70% from 412 in 1996/97 to 519 in 2003/04. In the same period, the number of HPs increased from 76 in 1996/97 to 2,899. The number of hospitals (both public and private) also increased from 87 in 1996/97 to 126 in 2003/04. There was also a considerable health facility rehabilitation programme and furnishing during HSDP I and HSDP II, including improvements in support facilities. As a result, the potential health service coverage increased from 45% in 1996/97 to 64.02% by 2003/04.

The HSDP III plan was to further expand these and other services by the end of 2008 with the aims of achieving universal health service coverage and improving the delivery of primary health care services to the most neglected rural populations. This was an extension of the Accelerated Expansion of Primary Health Service Coverage that was launched at the midterm of HSDP II. The HSDP III target in this component has been to attain a 100% general potential health service coverage by reaching the level of 3200 functioning HCs. This was to be done through construction, equipping and furnishing of 253 new HCs; upgrading 1,457 HSs to HC level; and upgrading 30% of HCs to enable them to perform EmONC services.

Table 1. Trends of health facility construction

Facility	HSDP I (1996/7)	HSDP II (2003/2004)	HSDP III (2010)
HP	76	2,899	14,416
HC	412	519	2689
Hospitals	87	126	195

Health sector progress in facility construction, upgrading and equipping under HSDP III has been remarkable. The number of HPs has now reached 14,416, achieving 88.7% of the target by 2009/10. There are now 2,689 HCs, which is 84% of the 3,200 HCs targeted by the end of HSDP-III. An additional 511 HCs are currently under construction to reach the 100% target. Of the health posts, 12,292 HPs have been equipped, representing 75.6% of the target, which was to equip 16,253 health posts. Among HCs, 2,299 HCs were equipped and an additional 390 HCs are underway. The other 511 new HCs under construction will be equipped following their completion.

At the beginning of HSDP III, there were 82 hospitals of all types (37 District, 39 Zonal and 6 Specialised Hospitals). The planned target under HSDP III was just a small increase in the number of hospitals for a total of 89 (42 district, 41 zonal, and 6 specialised). However, the 2008/09 report showed that the target has been surpassed to reach a current total of 111 Public Hospitals (nearly a 25% increase)[xxxvi].

Construction of support facilities is also moving ahead; 21 blood banks are in progress in six regions with 95% of the construction completed in 2009. A National Laboratory Master Plan has also been completed.

2.2.2.3 Human resource development

Human Resource Development (HRD) has been a key component in the successive HSDPs. In HSDP III, the main HRD objective was improving the staffing level at various levels as well as establishing implementation of transparent and accountable Human Resource Management (HRM) at all levels. It was envisaged that this would be made possible through increasing the number and capacity of training institutions; using health institutions as training centres; establishing a platform for the effective implementation of CSRP; and introducing incentive packages.

With the aim of improving services, the government initiated the BPR process that thoroughly analysed the HRH situation in the country. Based on this a comprehensive HRH strategic plan was developed through the involvement of relevant stakeholders, development partners and international consultants. The

resulting plan details the HRH planning, management, education, training and skill development, legal framework and financing mechanism.

Considering the HRH staffing numbers and composition required to achieve universal Primary Health Care (PHC) coverage by the end of HSDP III, the FMoH focussed on scaling up training of community and Mid-Level Health Professionals (MLHPs). To meet the needs for the community level HEP, a total of 31,831 HEWs were trained and deployed. For MLHPs, an Accelerated Health Officer Training Programme (AHOTP) was launched in 2005 to address the clinical service and public health sector management needs at district level. So far, more than 5,000 health officer trainees (generic and upgrade) have been enrolled with 3,573 Health officers graduated and deployed. To address the HRH need for Comprehensive Emergency Obstetric Care (CEmONC) and other emergency surgical services at PHC level, a masters' level curriculum on Emergency Surgery was developed and training started in five universities. To address critical shortages and the maldistribution of doctors, a new medical school was opened in St. Paul's Hospital, the Millennium Medical School. This school has an innovative curriculum that integrates clinical skills and social accountability.

Overall, comparing the available professionals at the end of HSDP III with the targets for the period shows targets have been met for the community level and most of the MLHPs. However, there are still major gaps for medical doctors, midwives and anaesthesia professionals (See Table below), especially when considering the long lead time and limited involvement of the private sector in training these professionals.

Table 2. Total number of available human resources during successive HSDP phases

	End HSDP I - 1994		HSDP II - End 1997		HSDP III (data from 2009)		
HR Category	Total No	Ratio to population	Total No	Ratio to population	Total No	Ratio to Population	Target
All physicians	1,888	1:35,603	1,996	1:35,604	2152	1: 36,158	1:14,662
Specialist	652	1:103,098	775	1:91,698	1151	1:67,604	
General practitioners	1,236	1: 54,385	1221	1:58,203	1001	1:77,735	
Public health officers	484	1:138,884	683	1:104,050	1,606	1: 48,451	1:63,785
Nurses BSc, & Diploma (except midwifes)	11,976	1:5,613	14,270	1: 4,980	20,109	1: 3,870	1:4725
Midwifes (Senior)	862	1:77,981	1,274	1: 55,782	1,379	1: 13,204	1:6,759
Pharmacists	118	1:569,661	172	1:413,174	661	1: 117,397	
Pharmacy Tech.	793	1: 84,767	1171	1: 60,688	3,013	1: 25,755	
Environmental HW	971	1: 69,228	1169	1: 60,792	1,819	1: 42,660	
Laboratory technicians & technologists	1,695	1:39,657	2,403	1: 29,574	2,989	1: 25,961	
Health Extension Workers	-	-	2,737	1: 23,775	30,578	1: 2,544	1:2,500

Table 3. Total number of available human resources for health by region, 2009

Region	Physician (GP, specialist)	Physician : Population Ratio	Health Officer	HO : Population Ratio	All Nurses	Nurse : Population Ratio	Mid-wives	Midwife: Population Ratio	HEW*	HEW : Population Ratio
Tigray	101	1:44,880	188	1:24,111	2,332	1:1,944	185	1:24,502	1,433	1:3,163
Afar	15	1:98,258	29	1:50,823	185	1:7,967	–	–	572	1:2,577
Amhara	304	1:58,567	434	1:41,024	3,790	1:4,698	212	1:83,983	7,471	1:2,383
Oromia	378	1:76,075	448	1:64,189	5,040	1:5,706	287	1:100,197	13856	1:2,075
Somalia	71	1:65,817	12	1:389,415	314	1:14,882	45	1:103,844	1,427	1:3,275
Ben-Gumuz	12	1:59,309	42	1:16,945	452	1:1,575	37	1:19,235	499	1:1,426
SNNPR	242	1:65,817	220	1:72,398	3,980	1:4,002	316	1:50,404	7,915	1:2,012

Gambella	13	1:25,585	13	1:25,585	91	1:3,655	4	1:83,150	457	1:728
Harari	29	1:6,655	31	1:6,226	276	1:699	29	1:6,655	47	1:4,106
Addis Ababa	934	1:3,056	170	1:16,791	3,377	1:845	244	1:11,699	NA	-
Dire Dawa	53	1:6,796	19	1:18,957	272	1:1,324	20	1:18,009	142	1:2,537
National	2,152	1:36,158	1,606	1:48,451	20,109	1:3,870	1,379	1:56,427	33,819	1:2,301

The above table shows the health professional to population ratio in selected key categories of health professionals across regions. As of 2009, the numbers of health professionals in different parts of the country were still lower than the targets that had been set. The inequity is particularly evident in rural agrarian and pastoralist regions.

2.2.2.4 Pharmaceutical services

Since HSDP I, the government has been committed to ensuring community access to essential medicines that are safe, effective and of assured quality as well as supporting rational drug prescription and use. In the ongoing health sector reform, ensuring a regular and adequate supply of pharmaceuticals has been considered as one of the core processes in the BPR and the following have been implemented so far.

In order to improve efficiency in the supply chain of pharmaceuticals and medical supplies, PHARMID has been transformed into the Pharmaceutical Fund and Supply Agency (PFSA) with several measures taken to strengthen the capacity of the new agency.

These measures include:

- Deployment of more regular staff and mobilisation of TAs.
- Design of the LMIS
- Selecting 18 sites for warehouses and hubs, and beginning construction.
- Overhauling and strengthening transport capacity of the Agency through procurement of 92 trucks.
- Improvement in Revolving Drug Fund (RDF) volume by making available additional funding.
- Building cold rooms that increased national capacity five-fold.

PFSA has developed a national list for procurement of Essential Pharmaceuticals. It has been able to develop a pharmaceutical forecasting plan in consultation with health facilities about what would be required for need-based procurement. The Agency has undertaken capacity building activities in the areas of drug supply management and also engaged in the establishment and strengthening of Drug and Therapeutic Committees (DTC) in health facilities to improve the supply and rational use of pharmaceuticals. The new Agency has already started handling bulk procurement, storage and distribution of pharmaceuticals.

2.2.2.5 Health and health related services and product regulation

A key principle underpinning the health sector BPR was improving the quality of health services through institutionalising accountability and transparency. One mechanism of achieving this was to seriously consider the separation of purchaser, provider and regulator in the health system. As part of this important endeavour, the former Drug Administration and Control Agency (DACA) has undergone an institutional transformation into a new group called the Health and Health related Services and Product Regulatory Agency. The

mandate of the new agency is to undertake inspection and quality control of health and health related products; premises, professionals and health delivery processes in an integrated manner. The Agency is being strengthened through the construction of a new building at the federal level. New branch offices at regional levels have helped the Agency to expand the drug administration and control system throughout the country. The agency now has five branch offices enabling delegation on drug administration and control to RHBs. The agency is working closely with RHBs on drug quality and rational use through the process of reviewing drug documents, physical and laboratory quality assurance checks. The Agency works collaboratively with other relevant government offices on prevention and control for the use of narcotic drugs, including tobacco. The agency has also recently procured and installed modern equipment for the safe disposal of expired drugs.

2.2.2.6 Harmonisation and alignment

Under harmonisation and alignment, the major objective is to have the One-Plan, One-Budget and One-Report approach at all levels of the health system. In this approach, all actors in the sector should work together to harmonise and align their actions and procedures with the country's systems. A Code of Conduct instrument between the FMoH and its major Health Development Partners was signed in 2005 to guide everyone's actions in support of HSDP. Afterwards, an operational manual entitled "HSDP Harmonisation Manual" was prepared in 2007 and subsequently endorsed by all stakeholders to support the one-plan, one-budget and one-report at all levels of the health system. Ethiopia has been one of the signatories of the Global IHP+ Compact and a first country to develop and sign a Country-based IHP+ Compact.

One Plan

The Government has been implementing a comprehensive national socio-economic development plan called, "the Plan for Accelerated and Sustained Development to End Poverty-SDPRP". This is a single national plan that guides all other sectoral plans, including health, for the years covering 2005/06-2009/10. The health sector wide strategic plan (HSDP) is the product of substantial consultations between the Ministry of Health and the Health Development Partners. In 2005, the FMoH and its partners developed the HSDP III as a single programme framework, i.e., 'one plan', for coordinating health interventions aligned with the SDPRP. The goals, targets and costing of HSDP-III are also aligned with the health MDGs.

One of the most important refinements in HSDP III was the inclusion of "Woreda-Based Health Sector Planning", which was a breakthrough in the health planning system that helped ensure vertical and horizontal alignments in the health intervention priorities of the sector. In the four consecutive years from 2006, Woreda-based health sector plans have been prepared in line with the principle of "one plan, one budget, and one report" of the HSDP Harmonisation Manual (HHM) based on agreed priorities and targets. This planning system created a platform for joint planning by all stakeholders at all levels of the health system including health development partners. This exercise also improved the capacities of Woreda health offices in conducting evidence-based planning, which has returned remarkable results.

One Budget

In HSDP terms, the principle of "One budget" means that all available funding for health activities (government and donor sources) are effectively pooled and should flow through government channels. Another important issue is that all funds for health activities should be reflected in just one plan and one documented budget, although actual funding disbursements may flow through separate channels.

Subsequent to signing the IHP+ Compact in 2008, the FMoH and health development partners jointly commissioned an independent health system assessment to examine its financial administration, procurement, equity and social inclusion with the intention of filling the prevailing resource gaps. The assessment identified critical capacity limitations at PPFGD, Finance and Audit section of the FMoH, and PFSA that were impeding efforts to enhance performance in accord with the reform design. Another finding was the slow pace in the scaling up of HMIS and M&E. The assessment report made relevant recommendations for mitigating these challenges, which were documented as part of POA of FMoH. This assessment led to establishment of the MDG Performance Fund as an important step toward agreement on a one-budget framework in the health sector of Ethiopia. FMoH and Development Partners developed a Joint Financing Arrangement (JFA) for the MDG Performance Fund that has been signed by seven Development Partners, thereby enabling the FMoH to access and make use of pooled funds.

In addition, the FMoH and development partners have begun formulation of an MTEF. The main purpose of the MTEF is to help the health sector at all levels in determining and allocating available domestic and external resources for HSDP-IV priorities. It is also seen as a useful instrument for negotiations with the Ministry of Finance and Economic Development (MoFED), as well as being a tool for advocacy in mobilising additional external resources. A coordinating committee has been established for the MTEF and a continuous process of communication and coordination is ongoing across the various institutions at the federal and regional levels including MoFED. Some milestone activities have been completed, including resource mapping and gap analysis at the federal level. Many development partners, though not yet all of them, have disclosed their three-year resource commitments to the health sector. Similar activities are in progress at Woreda level where resources from local governments, NGOs and other organisations are expected to be captured in the one plan framework. It is expected that the process will be completed soon and available as an important input for developing the HSDP-IV.

One Report/One M&E

One of the major targets of HSDP II was to establish the HMIS throughout the health delivery system, with functioning HMIS units at all levels. The aim was to ensure information availability for evidence-based health planning and decision-making. The multi-stakeholder HMIS National Advisory Committee (NAC) was established during HSDP II and facilitated the design and pilot testing of the new HMIS during HSDP III. Scaling up the new HMIS to all regions began with a regional readiness assessment, after which the RHBs developed detailed implementation plans. The FMoH then printed and distributed HMIS tools to regions. HMIS Resident Mentors have been deployed to implementing regions.

More recently, a system of Electronic Medical Records (EMR) has been pilot tested in a hospital setting and is now ready for scaling up at the national level.

As part of the BPR, integrated supportive supervision, operational research, performance reviews and quality assurance and inspections are now complementing M&E to inform strategic planning of the health sector. The FMoH has finalised implementation manuals, tools and system requirements for the implementation of these approaches. Joint Performance reviews such as the ARM and JRM are being undertaken according to the plan; the Annual Review Meeting (ARM) has been conducted every year. The level of Completeness in the annual HSDP report has also shown significant improvement over the HSDP III period.

Governance of HSDP

Key coordinating and steering committees are performing well, including the FMoH-RHBs Joint Steering Committee, FMoH-HPN Joint Consultative Forum and the Joint Core Coordinating Committee. The FMoH-RHBs Joint Steering Committee is chaired by the Minister and meets every two months. It promotes and monitors implementation of HSDP Harmonisation Manual and Civil Service Reform agendas (BPR), as well as the other strategic objectives of the HSDP. The Joint Consultative Forum and JCCC meetings have also been regularly functional, with the JCCC focusing on technical and operational issues. Meanwhile, the Central Joint Steering Committee (CJSC), which is the top policy decision-making and governance body of the sector, meets far less often.

2.2.2.7 Health care financing

As clearly indicated in the 4th National Health Accounts (2010), health services in Ethiopia are primarily financed from four sources: a) the federal and regional governments; b) grants and loans from bilateral and multilateral donors; c) non-governmental organisations; and d) private contributions. Although health financing has improved significantly over the years, it remains a major challenge for the health system of Ethiopia. Since HSDP III, a health care financing strategy was adopted by FMoH, mainly focusing on improving the efficiency of allocation and utilisation of public sector health resources. It has also dealt with mobilising additional resources from international donors and health development partners, retention and utilisation of user fee revenues at health facility level, introducing private wings in the public hospitals and, perhaps most importantly, the initiation and development of risk sharing mechanisms such as public and community-based health insurance schemes.

The objectives of the health care financing component of HSDP are aimed at achieving a sustainable health care financing system. More specifically, the objectives call for mobilisation of increased resources to the health sector, promoting efficient allocation, effective expenditure management for allocative equity, and better utilisation of available health resources.

Over the course of the HSDPs, various background studies on health care financing issues have contributed to the design and introduction of health financing reforms. Since the first HSDP, there have been four National Health Accounts (NHA) studies conducted. A Proclamation on Health Service Delivery, Administration and Management, including regulations on all the five components of the reform was drafted and endorsed. RHBs of Tigray, Amhara,

Oromiya, Benishangul-Gumuz, SNNPR, and Addis Ababa translated most of the reforms into action. The reform components include: retention and utilisation of revenue, administration of the fee waiver system and establishment of functioning facility governance bodies. Other parts of the reforms have included outsourcing of non-clinical services, establishing private wings in health facilities and the exemption of certain services.

Retention and utilisation of revenue

Ratification of the Health Care Financing Reform proclamation and regulation by the regional governments and City Councils will be the initial steps to commence user fee revenue retention and use at health facility level. The FMoH has prepared a number of generic operational manuals to be used, if needed with modifications, for the implementation of the reforms adapted to local conditions. The manuals describe in detail the processes of user fee revenue collection, financial administration, accounting, auditing and procurement of goods and services. The processes are expected to be steered by a functional health facility governance board with key representatives from health, finance, community and other relevant sectors. The facility board will meet on a regular basis and decide on the use of the retained revenue for the eligible expenditure areas, as broadly described in the operational manual.

The performance report for health care financing up to the end of fiscal year 2008/2009 showed that 73 hospitals and 823 health centres have started retaining revenue. Encouragingly, 95% of these units collecting user fees had used the revenue at their level. Regarding the target of retention and use of 100% of revenue generated at hospitals and HCs, the same report showed that out of 172 potential hospitals, 73 of 172 hospitals (42.4%) and 823 of 2,193 health centres (37.5%) were able to collect user fee revenue in 2008/09. Of these, 66 (38.4%) and 782 (35.6%), respectively, utilised their collected revenue.

Health insurance

Looking at the health care financing mechanism in Ethiopia, one can easily observe the significant contribution of out of pocket payment by households. As per the fourth National Health Account study conducted in 2009/10, which was based on 2007/08 data, household out of pocket payments constituted about 37% of the total health expenditure. Such financing is regressive & impedes access to health services. In order to address this problem & create equitable financing mechanism, the government of Ethiopia is currently undertaking a number of activities to introduce health insurance with the overall objective of achieving universal access.

The process of establishing and institutionalisation of an insurance system in Ethiopia was started by various studies and experience sharing visits to several African, Latin American and Asian countries. The FMoH built on this work to develop a national health insurance strategy. According to the strategy, two types of health insurance, i.e., social health insurance and community-based health insurance will be implemented to cover the population. Social health insurance will cover employees in the formal sector, which is mainly payroll-based while community-based health insurance will cover the rural population and the informal sector in urban areas.

The preliminary work on health insurance led to a background document on Social Health Insurance (SHI) that proposed key policy and technical recommendations, e.g., detailing eligibility for membership, premium levels, benefits packages and an institutional structure for the Federal Social Health Insurance Agency (FSHIA). To date, a draft law and regulation have been revised and presented for policy and technical discussions. A series of consultative discussions have been conducted in Addis Ababa and the regions. The legal framework has been improved based on the inputs from the various stakeholders and then submitted a second time to the Council of Ministers for endorsement and the subsequent ratification by the Federal Parliament. The SHI Proclamation was finally been approved by the Council of Ministers and approved by Parliament in July 2010.

Other activities are now underway to start its implementation in July 2011. The regulation which contains the detailed features of the health insurance scheme including membership, benefit package, institutional arrangement, etc. has been prepared and is ready for public consultation. Once this consultation has been carried out and feedback incorporated, it will be submitted again to the Council of Ministers for approval. During the initial three years starting from 2011/12, the SHI scheme is expected to cover about 7.77% of the population (6.36 million). With the inclusion of the private sector, it is expected that by the end of HSDP-IV, the social insurance will cover 10.46% (9.24 million) of the population and the resources generated will reach USD 77.058 million per annum[xxxvii].

Parallel to the work on social health insurance, various activities have been undertaken to develop and pilot community-based health insurance (CBHI). The CBHI, which aims to cover more than 83.6% of the population, is planned to be implemented in two stages. After piloting, it will be scaled up throughout the country drawing on lessons from the pilot phase. Thirteen Woredas (covering 1.45 million people) in four pilot regions (Tigray, Amhara, Oromiya and SNNPR) have been selected to pilot the CBHI. To ensure the acceptability and sustainability of the CBHI, feasibility studies have been made in the four pilot regions and the reports of the studies have served as inputs to the design of the scheme. Preparations for the Woreda level piloting, including detailed implementation plans, have been finalised and the schemes are expected to provide services to their members by early 2011. A Regional Steering Committee has already been established in three of the four pilot regions, and one is being developed in Amhara Region.

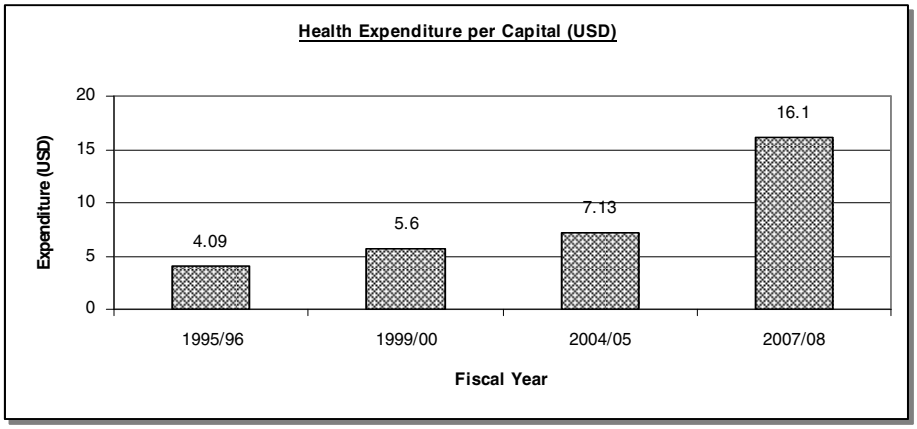
After the pilot implementation has been reviewed, the CBHI will be scaled-up beginning in 2013/14. It is expected to cover about 40% of the population (35.32 million) by the end of the HSDP-IV period in 2014/15. At that point, it is targeted that the premium revenues from members, excluding subsidies from government, will reach USD 73.68 million per annum[xxxviii].

In summary, the combination of the community-based health insurance and social health insurance will cover about 50% of the population by the end of the HSDP-IV period. This will definitely reduce financial barriers and improve access to health services by reducing the out of pocket expenditure share from its high level of 37% in 2007/8.

Trend of expenditure in the health sector

Ethiopia's fourth National Health Accounts study (NHA, 2010) showed that national health expenditures have grown significantly from the 2004/05 level of 4.5 Billion Birr (USD 522 million) up to Birr 11.1 billion (USD 1.2 billion) in 2007/08. In the same time period, the per capita health expenditure (as USD) has increased from USD 7.14 (in 2004/05) to USD 16.09 (in 2007/08).

Figure 11. Trends of health expenditure in USD/capita



The NHA report also identified proportions of health expenditure by source of financing. In rank order, these were 40% by development partners, 37% by household out-of-pocket expenditure, 21% by Government (central and regional) and the rest by a combination of employer insurance schemes and other private sources. Official government reports monitoring health expenditure over the PASDEP period show that the health budget share of the total government budget has been increasing. In 2008/09, for example, the health budget allocation was 10.1% of the received regional public block grant from the federal government. Meanwhile, Ethiopia's health system is challenged by the need to mobilise sufficient health funding for the continuous improvements necessary to reach its stated mission and vision. This gap drives an on-going inward and outward search for additional health resources, such as community and social insurance schemes, enhancing user fee revenues and increased mobilisation of funding from external sources, such as global and health development partners.

2.2.2.8 Pastoralist health service

Pastoralist peoples in Ethiopia constitute about 10% of the national population. As part of government's broader effort to integrate technical assistance and other support to the Newly Emerging Regions, an inter-ministerial board with members from six ministries was established under the Ministry of Federal Affairs.

Nomadic and pastoral communities have many special health needs that are not completely met by the largely static facility-based health system that has been established for the rest of the country. This gap prompted FMoH to establish two core objectives under HSDP-II regarding Pastoralist health services and systems. These were: a) to establish an appropriate health service delivery for the pastoralist population and; b) to increase coverage and utilisation of health

services in pastoralist population. Working toward these aims, the FMoH developed a concept paper, "Health Service Delivery to Pastoralists". The 16 HEP packages were adapted to pastoralists' needs and translated into local languages. Following the redesign and implementation of CSRP and the BPR in HSDP III, one of the major organisational transformations in the FMoH was creating the Pastoralist Health Promotion and Disease Prevention Directorate to focus attention on health of the pastoralist populations.

2.2.2.9 Operational research

Operational research in health is essential to identify critical operational and systems problems and to produce evidence for planning and decision making to improve services. Although it is a crucial part of M&E, operational research has not been conducted in a coordinated manner during the HSDP I and II periods. In HSDP III, the BPR resulted in redesigning Research and Technology Transfer as a core process of the FMoH. There was a surge in the number of operational studies during HSDP III that covered a wide range of areas, e.g.:

- Child health - coverage of child and TT immunisation, coverage and impact of the expanded programme of immunisation, EPI coverage survey; nutritional surveillance, national nutrition baseline survey.
- Communicable diseases - HIV/AIDS, TB; malaria, effectiveness of Coartem, effectiveness of residual DDT spray.
- Public health - surveillance of major public health problems.
- Reproductive health - causes of maternal mortality (Maternal death audit); prevalence of cervical cancer; effect of Misoprostol; choice of family planning.
- Services - traditional medicine; EOS coverage validation survey; health commodity tracking; cost of health services.

2.2.3 Cross cutting issues

Gender

Gender has remained a crucial cross cutting concern that has prompted the FMoH to set clear objectives for gender mainstreaming at all levels of the health system. Toward this end, government has developed an analytic framework on gender and health, including compilation and analysis of data on female workers to be used for advocacy purposes. The final version of this document is yet to be published and distributed to stakeholders. There has been also a rapid assessment aimed at the prevention of physical abuse to women and ensuring the provision of adequate health services for the victims of abuse. Based on the results of the assessment and the identified gaps, the FMoH has prepared a draft training manual for use by health workers. This training manual has been further refined through a consultative workshop attended by all concerned stakeholders.

Chapter 3. Health Sector Development Programme IV

3.1 HSDP-IV planning process, methodology & principles

Preparation of HSDP-IV has been guided by a concept note and a TOR developed jointly and agreed collectively by the Government and Health Development Partners. The Executive Committee of the FMoH and the Joint FMoH and RHB Steering Committee led the process at the highest levels. These Committees have selected the strategic themes and objectives to be used as a framework for development of the HSDP-IV. Subsequently, multidisciplinary teams were established to prepare the draft document based on the guiding framework. The first draft produced by the multidisciplinary team was discussed by the Executive Committee of FMoH and the Joint FMoH and RHB Steering Committee, after which it was shared with all stakeholders for their feedback. It has now been subjected to two rounds of Joint Assessment for National Strategies (JANS).

At the onset, Government made a decision to develop the HSPD IV strategic plan by using the Balanced Scorecard (BSC) approach, and arranged appropriate BSC training for the leadership and team members [see Annex 1 for a summary of the BSC process]. Participants saw the BSC as a strategic planning and management system designed to help everyone in the organisation understand and work towards a shared vision and strategy. The FMoH expected the completed scorecard system to enable alignment of the organisation's shared vision with its business strategy, desired employee behaviours, and the day-to-day operations. With the BSC approach, strategic performance measures can be used to better inform decision making and show progress toward desired results. The organisation can then focus on the most important things that are needed to achieve its vision and satisfy community, stakeholders, and its employees. Other potential benefits include identification of more efficient processes focused on stakeholder needs, improved initiative prioritisation, better internal and external communications and stronger linkages between budgeting and cost control processes and strategy.

The basic steps that FMoH has used to prepare HSDP-IV with the BSC include: a) Conducting an organisational assessment, b) Setting strategic elements, c) Setting strategic objectives, d) Preparing a strategic map of the objectives, e) Indicating performance measures & targets of the strategic plan, and f) Preparing strategic initiatives expected to achieve the overall strategic plan.

The other main methodology used has been the Marginal Budgeting for Bottleneck (MBB) approach. UNICEF and World Bank have provided technical support on this. Planners are able to use the MBB to systematically look into the health system bottlenecks, high impact interventions, different scenarios and associated costs of achieving results that have been planned under the HSDP-IV. The final draft HSDP-IV document will be presented to the Government (Council of Ministers and Parliament) for review and endorsement. Upon approval by the highest body of the government, HSDP-IV will become an official document and an important input to the Development and Transformation Plan (DTP).

HSDP-IV is a policy level strategic document that will guide the development of sub-national plans and set the rules of engagement in the health sector for the next five years. In order to realise this, the following principles have been applied in the development of HSDP-IV:

- Government leadership;
- Enhanced responsiveness to community health needs;
- Extensive consultation & consensus with stakeholders;
- Comprehensive coverage of priority health sector issues; &
- Linkage between HSDP-IV with sub-national HSDPs & strategies/programmes on health priorities & targets.

3.2 The policy framework

Health care is one of the crucial components of basic social services that has direct links to national growth and development and to social welfare.

3.2.1 National policies and strategies

The National Health Policy has been a fundamental influence on the design of the HSDP-IV. The National Health Policy gives strong emphasis to fulfilling the needs of the less privileged rural population that constitutes about 83% of Ethiopia's total population. The National Health Policy is an overarching policy document, which outlines:

- Democratisation & decentralisation of the health system;
- Development of preventive & promotive components of the health service;
- Ensuring accessibility of health care by all the population;
- Promoting inter-sectoral collaboration, involvement of the NGOs & the private sector;
- Promoting & enhancing national self-reliance in health development by mobilising & efficiently utilising internal & external resources.

While the National Health Policy has been the umbrella for the development of HSDP-IV, other health and health related policies and strategies have also been considered. These include:

- Policy & Strategy for Prevention & Control of HIV/AIDS;
- National Drug Policy;
- National Population Policy;
- National Policy on Women;
- Child Survival Strategy;
- National Nutrition Program;
- National Strategy for the prevention, control & elimination of malaria;
- National TB prevention & control strategy;
- Development & Transformation Plan (DTP);
- Rural Development Policy & Strategy;
- Reproductive Health Strategy;
- Health Extension programme; &
- Capacity Building Strategy & Programme.

3.2.2 International policies and goals

The most influential international commitments that have providing direction to the HSDP-IV are the global declaration of MDGs, the African Health Strategy 2007-2015, Paris Declaration on Aid Harmonisation (20050, Accra Accord on Aid Effectiveness (2008) and Abuja Declaration on Health Care Financing in Africa.

HSDP-IV is the expression of the GoE's renewed commitment to the achievement of MDGS as a top Global Policy influencing national development policies and strategies. MDGs that are relevant and directly linked to the health

sector include goals 1, 4, 5, 6, 7 & 8. Of these goals, three of them particularly fall under the domain of the health sector with specific targets calling for accelerated health interventions. The design and content of HSDP-IV specifically takes stock of the health MDGs by giving utmost attention to the prevention and control of poverty related diseases.

3.3 Health sector strategic assessment

3.3.1 Mandate analysis

The mandate of an organisation is usually codified in laws, regulations, decrees, or characters. Mandates are formally defined in the Ethiopian laws and regulations for public organisations such as the FMoH and RHB by the legislative body. As the health sector is a collection of organisations, mandates are rather defined for specific organisations than for the whole sector. Therefore, the following topics describe the formal mandates of these organisations. On top these, additional recommended mandates have been identified from the Federal and Regional Strategic plans which are briefly pointed out as they apply.

Roles of federal and local governments

Mandates of the Federal Ministry of Health

Proclamation No. 475/1995 of the Federal Democratic Republic of Ethiopia defines the Powers and Duties of the Executive Organs. This proclamation, in part 3 No. 10, states the common Powers and Duties as follows:

- Initiate policies & laws, prepare plans & budget, & upon approval, implement same;
- Ensure the enforcement of laws, regulations & directives of the Federal Government;
- Undertake studies & researches;
- Enter into contracts & international agreements in accordance with the law;
- Give assistance & advice as necessary to Regional executive organs.

Specific duties and responsibilities bestowed upon the Federal Ministry of Health include:

- Cause the expansion of health services;
- Establish & administer referral hospitals as well as study & research centres;
- Determine standards to be maintained by health services, except where such power is expressly given by law to another organ;
- Issue licenses to & supervise hospitals & health services established by foreign organisations & investors;
- Determine required qualifications of professionals engaged in public health services at various levels, & provide certificates of competence for same;
- Cause the study of traditional medicines, organise research & experimental centres for same;
- Devise strategies, means & ways for implementing prevention, control & eradication of communicable diseases;
- Undertake necessary quarantine control to protect public health; &
- Undertake studies with a view to determine the nutritional value of food.

In addition to the mandates of the FMoH, there are four authorized Agencies under the FMoH that have specific mandates. These mandates focus mainly on a) ensuring safety, efficacy, quality and proper use of drugs; b) improving the knowledge, attitude, behaviour and practice of the population on prevention and control of disease and healthy life style; c) conducting public health and nutrition researches and other studies that will contribute to the improvement of the

health of the population. The autonomous health institutions report both to FMoH and to MoFED.

Mandates of the Regional Health Bureaus

Regional Health Bureaus have the powers and duties to:

- Prepare, based on national health policy, health care plan & programme for people of the region, & to implement same when approved;
- Ensure adherence to health laws, regulations & directives related to public health in the region;
- Organise & administer hospitals, health centres, Health Posts, research & training institutions that are established by the regional government;
- Issue license to health centres, clinics, laboratories & pharmacies to be established by NGOs, OGAs & private investors; supervise same to ensure that they maintain the national standards;
- Ensure that professionals engaged in public health services in the region operate within the prescribed standards & supervise same;
- Ensure adequate & regular supply of effective, safe & affordable essential drugs, medical supplies & equipment in the region;
- Cause the application, together with modern medicine, of traditional medicines & treatment methods whose efficiency is ascertained;
- Cause the provision of vaccinations, & take other measures, to prevent & eradicate communicable diseases;
- Participate in quarantine control for the protection of public health; and
- Ascertain the nutritional value of foods.

Mandates of Woreda Health Offices

Woreda Health Offices are mandated to manage and coordinate the operation of primary health care services at Woreda levels. They are responsible for planning, financing, monitoring and evaluating of all health programmes and service deliveries in the Woreda.

Division of labour

The division of duties and responsibilities between federal, regional and Woreda levels in the management of and control of health providers includes:

- FMoH is responsible for referral hospitals & the national level study & research centres;
- RHBs are responsible for all types of hospitals, health centres & health clinics in the region; also for health professional training institutions as established by the regional government;
- WHO are responsible for primary health care services: Health Centres, Health Posts.

The role of Administrative Councils

In addition to FMoH, and the line institutions at sub-national level, the Administrative Councils at regional, zonal and district levels will play crucial roles in the implementation of HSDP-IV. Some of these include:

- Provide political leadership for health;
- Ensure community demand for health care is properly addressed;
- Plan, mobilise & allocate resources, monitor & evaluate health programmes & delivery of health services;
- Facilitating inter-sectoral collaboration; &
- Provide guidance to enhance the partnerships for health with NGOs, CSOs, private sector, etc.

3.3.2 Mission, vision and core values of the Ethiopian health sector

Mission of the health sector

To reduce morbidity, mortality and disability and improve the health status of the Ethiopian people through providing and regulating a comprehensive package of promotive, preventive, curative and rehabilitative health services via a decentralised and democratised health system.

Vision of the health sector

To see healthy, productive, and prosperous Ethiopians

Core values of the health sector

Community first

- We are here for nothing but to serve and satisfy our community.
- We treat them as we would like to be treated.
- We have three priorities: Community, Community, and Community.

Collaboration

- We work together in a spirit of mutual support and understanding to achieve our collective goals.

Commitments

- No matter what challenges we face and discomforts we feel, we stand firm, be patient and exert our utmost and sustained effort to achieve our goals.

Change

- We innovate new ways of doing things and are open minded to reforms.

Trust

- We ensure maximum vulnerability and integrity to each other.

Continued Professional Development

- Education, professional behaviour and ethics, competence and performance in work duties

3.3.4 SWOT analysis

One of the crucial steps in the planning process is an analysis of strengths, weaknesses, opportunities and threats. Prior identification of weaknesses and threats helps to identify relevant strategies for internal improvement and for the mitigation of factors that may result in adverse impacts beyond the control of the health sector. Recognition of strengths and opportunities facilitates reaping the maximum benefits from internal and external environments toward achieving the goals and targets set in the HSDP-IV. See below for a summary of key strengths, weaknesses, opportunities and threats in the health sector.

Table 4. SWOT analysis of the health sector

Enablers	
Strengths	
• High coverage of Health Extension Programme • Adoption of cost effective strategies (RBM, MPS, IMCI, DOTS, etc) • Successes in malaria prevention & control • Increased coverage of ART • Sustained high coverage of EPI • Accelerated training of health professionals • Rapid expansion of health centres & health posts • Finalisation of BPR in the sector	• Commencing use of IT for telemedicine, tele-education, electronic medical records etc. • Increased supply of medical equipment • Increased allocation & expenditure on health • Improvement in harmonisation & alignment • One plan streamlined in the sector • MDG Fund established to enforce one budget • Progress in scaling up national HMIS as part of one M&E framework • Well defined HSDP Governance (CJSC, RJSC, etc)
Opportunities	
• Availability of coherent & pro-poor development policy including health • Democratisation & decentralisation of the health system • Availability of sound health policy • Increasing community participation • Increasing national income; • Health is accorded priority by the Government	• Increasing human resource output via the capacity Building Programme • Increasing domestic manufacturing capacity of drugs; • Increasing education of girls • Emerging global health initiatives • Expansion of the private sector • Increasing external resources & TA • Expansion of infrastructure (road, ICT, electricity
Pains	
Weaknesses	
• Inadequate capacity to implement decentralised health system • Inadequate follow-up on implementation of policies, guidelines, standards & protocols • Low utilisation of health services • Weak referral system; • Slow & erratic implementation of BPR • Outdated health facility standards & low health service quality • Low coverage of Skilled delivery & Newborn care, TB case detection, PMTCT • Inadequate attention to NCDs & NTDs • Inadequate management & support to PMTCT services, TB-Leprosy control at sub-national levels. • Inadequate water supply & WASH to Health facilities, schools, & communities • Inadequate capacity of preparedness to efficiently respond to threats of epidemics such as Malaria. • Lack of Health infrastructure maintenance capacity (Building, Medical equipment, IT) • Shortage of drugs, medical supplies, equipment, & commodities & Slow implementation of Health Commodities Supply System (HCSS) • Weak regulatory system of pharmaceuticals & medical supplies	• Inadequate coordination mechanism for public private partnership in health • Weak implementation of HSDP governance (such as the CJSC) • Inadequate quality of trainings & Low performance in training & deployment of model families; • Lack of HR motivation & retention strategy & absence of standardised CPD programmes • Shortage & attrition of highly skilled professionals • Lack of carrier development for HEWs & Poor coordination in the in-service trainings to HEWs by various partners. • Weak M&E & use of information for evidence-based decision making at lower levels • Persistently inadequate & inequitable distribution of resources compared to needs & priorities (E.g., Health system, MNCH, & Health Infrastructure Expansion) • Weak financial management in the health sector including inadequate capacity for fund liquidation, reporting & auditing (Prominent on HIV/AIDS funding). • Poor progress in adopting common budgetary framework & reporting format by DPs • Slow response of many DPs to join IHP Compact & JFA • Poor predictability & disbursement of committed funds (55.4% in 2009) by DPs
Threats	
• Poverty & high level of population growth • Instability of neighbouring countries- • Newly emerging pandemics • Manmade & natural disasters • Adult illiteracy	• Global financial crisis (rising cost of pharmaceuticals, supplies etc) • Poor aid effectiveness • Brain drain, high turnover of health staff, especially medical doctors

3.3.5 Stakeholder analysis

Stakeholders are individuals, organisations or agencies that could influence or be influenced positively or negatively during the implementation of HSDP-IV. It is important to conduct a stakeholder analysis as part of the planning process; this involves scrutinizing the essence, interests, behaviours, and the nature and level of impact that could potentially be brought about by these stakeholders. The degree of influence from stakeholders varies depending on their span of control over the generation and allocation of resources; level of political power; scope of participation in the sector; and usage of services provided by the sector.

The attainment of missions and objectives of HSDP- IV is largely dependent on the collective efforts and roles played by the different stakeholders. As such, the stakeholder analysis in HSDP-IV is a critical step in defining the boundaries and strengths of all actors in the health system. It will help to clarify contributions expected from each actor; and to describe possible areas of collaboration that would create synergy toward the strategic objectives of HSDP-IV.

Table 5. Stakeholders analysis

Stakeholders	Behaviours we desire	Their needs	Resistance issues	Their influence	Institutional response
Community	Ownership Healthy life style	Empowerment, Information Access to quality of health care Stewardship	Dissatisfaction Opting for unsafe alternatives Underutilisation	High	Community mobilisation, ensure participation Strengthen Health committee Quality, equitable service
Parliaments, Prime Minister's Office, Council of Ministers, Regional Governments	Ratification of proclamations, policies, etc Resources allocation	Implementation of proclamations, policy, etc Equity & quality Plans & Reports	Organisational restructuring	High	Put in place strong M&E system & comprehensive capacity building mechanisms
Line Ministries (Education, Finance, Water, Labour, Women's Affairs, Agriculture, etc)	Intersectoral collaboration	Evidence-based plans; Reports Effective & efficient use of resources & coordination Technical support	Fragmentation Dissatisfaction Considering health as low priority	Medium	Collaboration Transparency Advocacy
Development Partners	Harmonisation & alignment Participation Additional financing Technical support	Financial system accountable & transparent Involvement in planning, implementation & M&E	Fragmentation High transaction cost Inefficiency & ineffective	Medium	Government leadership Transparency Efficient resource use Build financial management capacity
CSOs, NGOs, Diaspora, Professional Associations	Harmonisation & alignment Participation, resource & TA	Involvement in planning, implementation & M&E	Dissatisfaction Fragmentation	Medium	Transparency, Advocacy Capacity building
Private for profit	Quality	Partnership, Rules & regulations	Low quality	Medium	Transparency, collaboration Advocacy,
Civil servants	Commitment, Participation	Conducive environment Transparency	Dissatisfaction Unproductive Attrition	Medium	Motivation, Involvement

3.4 Strategy of the HSDP-IV

HSDP-IV is situated within and supports the government's overall vision for Ethiopia to become a middle-income country soon after the MDG target date of 2015. To do so, the health sector of Ethiopia will have to stretch to attain its objectives of reaching every section of the population with effective health interventions. One of the unique features of a sound health strategy will be the extent builds linkages between health system challenges and the proposed strategic solutions/interventions, including resources and the level of results expected to be achieved. Some important processes will include defining customer value proposition, strategic themes, strategic results, and perspectives.

3.4.1 Customer value proposition of HSDP-IV

In the context of HSDP-IV, customer value proposition is the attributes that define services that the health sector should provide, the principles underpinning its relationship with the community and how the health sector wishes to be perceived. This is a critical factor in developing, deepening and retaining the sector's relationship with the community towards the achievement of the mission.

Table 6. The Ethiopian health sector customer value proposition

Product or service attributes	Image	Relationship
The products & services that the Ethiopian Health Sector provides have the following characteristics: • Accessibility–information, physical, financial, etc • Timeliness of services • Quality of health care services & information, • Safety & healthy environment • Empowering community & employees • Conducive environment	The image that Ethiopian Health Sector wants to portray has the following characteristics: • Transparent • Supportive • Trustworthy • Professional • Customer-Friendly/Oriented • Committed	The relationship that Ethiopian Health Sector wants to have with its community could be described as: • Complementary • Cooperative (participatory) • Respectful & ethical • Harmonious (Mutual Understanding) • Transparent relationship • Dependable (Stewardship) • Responsive • Equitable

3.4.2 Strategic themes and strategic results

Strategic themes are the main focus areas of the sector strategy, and form the key areas in which the Health Sector must excel to achieve its mission, vision and strategy. Strategic themes are the sector's "Pillars of Excellence". For each theme, an explicit Strategic Result, or a description of the desired outcome is articulated. The strategic themes of the HSDP-IV are the focus areas where the health sector should excel to achieve its objectives and targets.

Strategic themes of the health sector:

- Excellence in health service delivery and quality of care
- Excellence in leadership and governance
- Excellence in health infrastructure and resources

Strategic Theme 1: Excellence in health service delivery

This theme refers to the provision and management of curative, preventive, rehabilitative and emergency health services, and the promotion of good health practices (personal hygiene, nutrition, environmental health) at individual, family and societal level. It includes provision of maternal, neonatal, child, youth and adolescent health services and public health emergency services.

Strategic Result 1: A community that practices and produces good health, protected from emergency health hazards and has access to quality health care at all levels and at all times

Key concepts:

- Health promotion;
- Disease prevention;
- Curative & rehabilitative service;
- Public Health Emergency Management;
- Emergency Medical (system) service;
- Health service delivery at household, community & facility level.

These concepts are mainly to improve maternal, neonatal, child, adolescent and youth health, nutrition, hygiene and environmental health (WASH) and to reduce/combat HIV/AIDS, TB and Malaria and other communicable and non communicable diseases.

How will successes be measured?

- Increased Knowledge, Attitude & Practice of the community
- Reduction of maternal, neonatal & child morbidity & mortality
- Reduction of malnutrition, wasting & stunting
- Reduction in incidence & prevalence of communicable &non-communicable diseases
- Controlling & reduction of medical & epidemic emergency

How will these help to move to the higher level of success?

- Ensuring an effective & timely delivery of quality health care
- Ensuring quality & provision of services as per the standard,
- Accessibility of services (physical, financial, information & cultural)
- Enhancing behavioural change communication

Strategic Theme 2: Excellence in leadership and governance;

This theme refers to planning, monitoring, evaluation, policy formulation and implementation that is evidence-based. It also includes the development and implementation of a regulatory framework. It incorporates the equitable and effective resource allocation and leadership development within the sector and the community.

Strategic Result 2: Communities are served by accountable and transparent institutions and their safety is ensured. Decision making in the sector is evidence-based and promotes equitable and effective allocation and/or application of health resources

Key concepts:

- Evidence-based policy formulation & implementation;
- Planning, monitoring & evaluation;
- Ensuring equitable & effective resource allocation (finance, human capital & infrastructure);
- Leadership & community development;
- Regulatory framework;

- Accountability & transparency;
- Harmonisation & alignment.

How will successes be measured?

- Use of research & health information outcomes for evidence-based decision making (including planning, policy formulation & developing regulatory frameworks)
- Improved partnerships
- Timely decision
- Equitable resource allocation (finance, human capital & infrastructure) on evidence-based need
- Empowerment of employees at every level
- Enhancement in the public safety

How will these help to move to the higher level of success?

- Policy will define priorities
- Public-Private partnership will be enhanced
- Efficient use of resources
- Enhanced community participation (planning, M&E, regulation enforcement, policy formulation) & ownership, satisfaction

Strategic Theme 3: Excellence in health infrastructure and resources;

This theme refers to the development, rehabilitation and maintenance of health facilities and medical equipment that meet standards and are accessible to communities being served by qualified and motivated health professionals.

Strategic Result 3: Ensuring communities have access to health facilities that are well equipped, supplied, maintained and ICT networked as per the standards and are well staffed with qualified and motivated employees.

Key Concepts:

- Expansion of new health facilities & other health infrastructure,
- Expansion, rehabilitation & maintenance of existing infrastructure.
- Health care financing - resource mobilisation & risk pooling
- Health workforce – training, deployment, career development & improved HRH management
- Pharmaceutical supply - planning, quantification, selection, procurement storage & distribution
- Technology transfer – adoption of new technology & practices for the production & utilisation of health care products.
- Effective medical equipment management
- Enhanced Information Communication Technology for health

How will successes be measured?

- The extent that communities are accessing standardised health facilities
- No stock-outs of essential drugs at all health facilities
- Improved functionality of medical equipment
- Enhanced retention for qualified work force
- Ensuring community's enrolment in health insurance schemes.
- Development of critical work force skills
- Improved access & quality of health services via use of ICT

How will these help to move to the higher level of success?

- Ensuring community access to standardised health facilities, with services delivered by qualified & motivated health professionals.
- Health facilities will have better communication & data exchange to improve the quality of reporting & service provision

3.4.3 Strategic perspectives

Table 7. Perspectives of HSDP-IV

Perspective	Key Concepts	Key Questions
Community	'Empowerment', 'Engagement', 'Ownership'	How can we enable the community to produce & own its health?
Financial	'Effectiveness'	How do we mobilise & utilise more resources effectively & efficiently?
Integration & responsiveness (Internal process)	'Quality'	How can we enhance our integration & responsiveness in order to improve quality, timeliness, & functionality?
Capacity building (Learning & growth)	'Capacity'	To excel in our processes, what capacities must the health sector & the community has & should improve?

3.5 Strategic objectives & map for Ethiopian health sector

This strategy document uses strategic objectives to break strategic themes into more actionable activities that lead to strategic results. Strategic initiatives are long term or short term projects or programmes that should be implemented to ensure success of the strategy. They are selected in terms of their potential to bring significant impact in the sector's strategy.

3.5.1 The ten strategic objectives (SOs)

SO - C1: Improve access to health services

This strategic objective is meant to improve accessibility of health services of all kinds, including emergency and referral services, and thereby ensure service utilisation. It is expected that better accessibility will then lead to improvements in the health of mothers, neonates, children, adolescent and youth. It is seen as an important strategy to improve nutrition status; improve hygiene and environmental health; and reduce the incidence and prevalence of HIV/AIDS, TB, malaria and other communicable and non-communicable diseases.

The expected outcome will be to increase the confidence of citizens in the health system so that they will proactively seek prevention and treatment services from health facilities. They have to believe and develop confidence that they will be able to receive the best medical care when they are in need; that they can reduce their risk of contracting diseases; and ultimately, that they have a better health status.

In order to achieve these desired results, the Health Extension Programme will serve as a primary vehicle for prevention, health promotion, behavioural change communication and basic curative care. It will do this through effective implementation of the already defined 16 essential packages. Health centres will serve as a first curative referral centre for Health Posts and will provide health care that will not be available at the HPs through ambulatory and some cases of inpatient admissions. Health centres, primary hospitals and general hospitals will be the main hubs for the reduction of maternal mortality by providing BEmONC and CEmONC. Referral and specialised hospitals are meant for the handling of more complicated and sophisticated health care, including the clinical management of non-communicable diseases.

The health system will be mobilised to give enhanced attention to attendance of delivery by skilled health workers, PMTCT, TB case detection, environmental management of malaria, and prevention and detection of non-communicable diseases. The family planning programme will focus on ensuring contraceptive security and provision of long lasting and permanent contraception. Focused antenatal care with four visits per pregnancy will be mainstreamed at all service delivery levels. WASH will be integrated with other service delivery modalities and will be implemented at all levels of the health care system.

SO – C2: Improve community ownership

This strategic objective aims to create awareness and change behaviour of the community to ensure their full participation in health policy formulation, planning, implementation, M&E; as well as regulation of health services and resource mobilisation for the health sector.

The expected outcome of the strategic objective is community empowerment for continuity and sustainability of health programmes. This will be implemented through community involvement in the administration and regulation of their respective local health facilities and community health interventions. HSDP-IV will promote community ownership and empowerment through effective social mobilisation, enhanced and sustained awareness creation, and creating an enabling environment, and supporting community organisations. Communities will be represented on governance boards of all public sector health facilities. Moreover, local government councils, HEWs and Community Health Promoters will have extensive responsibilities for social mobilisation, increasing the community's awareness of their rights and responsibilities, and for creating an enabling environment.

Women from graduated model households will be recruited as voluntary Community Health Promoters (CHPs). These CHPs will be responsible for the improvement of community ownership. They will be engaged in the promotion and prevention activities at household and community level, including the regular coordination of structured Community Dialogue Sessions, with the guidance of the HEWs.

SO - F1: Maximise resource mobilisation and utilisation

This strategic objective sets out a proactive approach to the mobilisation of resources from domestic and international sources. It includes enhancing pool funding; addressing collection and use of revenues by health institutions; and establishing a risk pooling mechanism. It also includes attention to effective and efficient use of resources; sound financial management and performance-based financing; as well as equitable and evidence-based allocation of resources to priority interventions and programmes in the health sector.

The ultimate outcomes of this strategic objective will be:

- Ensuring that adequate resources are mobilised & available for financing the health sector;
- There is equitable resource allocation;
- Significant improvements in resource absorptive capacity & decreased wastage of resources;,
- Ensuring financial protection of the citizens.

Health administrations at all levels will undergo capacity building to enhance their competence at evidence-based planning and using evidence for active negotiation with administrative councils to increase government allocations to

health. Technical support will be given to sub-national levels to enable facility-based revenue generation and use, as well as proper implementation of the exemption and waiver system. Facility governance will be strengthened to ensure accountability for the use of funds, and for the accessibility and quality of health services.

The FMoH will mobilise Technical and financial resources for appropriate piloting, evaluation and scaling up of community-based health insurance (CBHI). The necessary institutional framework will be established and extensive promotion conducted for rapid scaling up of social health insurance (SHI). Networking and experience sharing will be promoted among health facilities for implementing comprehensive health financing reforms. Government, in collaboration with development partners, will ensure financial protection for the poor by allocating funds and by improving effectiveness and transparency of the exemption and waiver system. Government and development partners will dialogue extensively to enhance aid effectiveness. FMoH and sub-national health administrations will improve their capacities for mobilising resources and managing aid, including for reducing fiduciary risks, and for better accounting and liquidating of donor funds.

HSDP-IV will achieve these outcomes through strengthening existing linkages with MoFED, BOFED and WOFED; enhancing evidence-based planning and relating resource allocation to evidence of local needs; building human resource capacity numbers and skills for better programme implementation and resource absorption; simplifying the disbursement and accounting for funds; and establishing sound procurement procedures and systems.

Development partners will be urged to reduce tying aid and to simplify fund management; this will help to reduce transaction costs and improve budget absorption as agreed in the IHP+ Compact. The Integrated Financial Management Information System (IFMIS) will be designed, pilot tested and implemented at all levels of the health system in collaboration with MoFED, BOFED and WOFED. The IFIMS will improve the use of funds for planned activities, and provide timely and complete physical and financial reports on the use of funds to all stakeholders.

Results-based financing will be pilot tested and then rolled out as a strategy to increase motivation for resource use while ensuring value for money. A guideline that is currently under development will be finalised and applied to enhance accountability in resource use, liquidation and accounting at all levels of the health system.

SO - P1: Improve quality of health services

By this objective, the FMoH aims to ensure that health services at all levels are being provided according to quality standards. These standards address:

- Speed of delivery,
- Harmonise at service delivery point by integrating vertical programmes
- A holistic approach to avoid missed opportunities in service delivery,
- Effectiveness of the services
- Patient safety, ethical and professionalism in service delivery, and
- Availability of the required inputs (hr, finance, pharmaceuticals ...)

The expected outcome is a health system that satisfies the community's health care needs through the delivery of relevant, safe and optimum quality health services in an integrated and user-friendly manner.

SO – P2: Improve public health emergency preparedness & response

This strategic objective aims for improvements in how the health system copes with existing and emerging disease epidemics, acute malnutrition, and natural disasters of national and international concern. The desired coping responses include improved health risk identification, early warning, response and recovery from the disasters. The expected outcome of the strategic objective is early verification, rapid response and containment of public health emergencies.

The specific strategies that will be put in place include:

- Community involvement;
- Resource mobilisation;
- Integrated communications & information systems across multiple sectors;
- Multi-sectoral coordination for emergency preparedness & response;
- Advanced operational readiness assessment;
- Comprehensive training & evaluation to all involved; &
- Application of proper ICT.

These strategies will contribute towards an effective early warning, preparedness, response, recovery and rehabilitation system, as it has been elaborated in the Public Health Emergency Core Process.

SO – P3: Improve pharmaceutical supply and services

This objective is designed to increase the availability of pharmaceuticals (medical equipment and products for prevention, diagnosis and treatment) at an affordable price and in usable condition, ensuring an uninterrupted and adequate supply to health facilities. It also aims to achieve improved rational drug use and a significant reduction in pharmaceutical wastage. The intended outcome will be adequate availability of the right pharmaceuticals at the right place and at the right time in the right condition and used properly by patients and clients.

The FMoH will provide for capacity building activities at all levels to enhance management quality and effectiveness of the Revolving Drug Fund (RDF). More resources will be mobilised to improve the per capita expenditure on drugs.

Pharmaceuticals will be procured in bulk and will be delivered directly to service delivery points by PFSA. Pharmaceutical hubs and warehouses will be constructed and will be strategically located to improve proximity and efficiency in distribution. Alternative approaches, including outsourcing, will be used to ensure cost effectiveness in the transportation of pharmaceuticals to service delivery points while maintaining quality of the products.

The LMIS will be improved and integrated with the HMIS and stock management of health facilities to improve forecasting and quantification of pharmaceuticals. Regular operational research will be conducted to improve efficiency of the supply chain management on a continuous basis. Patients and health workers will be involved in improving the rational use of drugs.

SO – P4: Improve regulatory system

This strategic objective is about ensuring safety in the delivery of health services, products and practices. It has several specific critical elements, including:

- Prevention of professional malpractice;
- Strengthening quarantine services;
- Enhancing environmental health activities;
- Enforcing regulations & prevention of drug abuse;
- Controlling institutional solid & liquid waste disposal.

The expected outcome is compliance with the health law and regulatory standards leading to community safety, healthy environment, and increased community confidence in the safe delivery of health services. HSDP-IV aims to achieve this outcome through effective implementation of the Health and Health Related Regulatory Core Process. The design of the core process has included development of comprehensive standards for all levels of health institutions along with standard operating procedures for premises, practices, products and personnel. The design stage also defined the required system inputs for the implementation of the core process at all levels of the health system. As this is a new core process, there will be extensive capacity building under HSDP-IV towards realizing effective regulation in the sector.

The implementation of this strategic objective will include the following key activities:

- Enhancing community involvement in health & health related services & products regulation;
- Promoting health regulatory laws;
- Issuing special permits for import, export, manufacturing, distribution, wholesale & storage of substances;
- Undertaking demand reduction & supply management activities for drugs prone to abuse;
- Improving efficiency of hygiene & environmental health control activities;
- Post-marketing surveillance; &
- Comprehensive capacity building.

SO – P5: Improve evidence-based decision making by harmonisation and alignment

This strategic objective will support improved evidence-based decision making through enhanced partnership, harmonisation and alignment, including integration of projects and programmes at the point of health service delivery. It will comprehensively address identification of health system bottlenecks; research; HMIS; performance monitoring; quality improvement; surveillance; use of information for policy formulation, planning, and resource allocation. The expected outcomes of the strategic objective are proper generation and use of evidence at all levels of the health system to respond to critical health problems of the community; to realise the one-plan, one-budget and one-report approach; and to effectively integrate and align health programmes and projects.

A mechanism will be put in place to prioritise research according to public health importance. All research studies in the health sector will conform to the Algiers Declaration to improve efficiency and effectiveness in the use of evidence from the research. To improve financing for M&E, a minimum of 15% of vertical funds will be allocated to scaling up an integrated M&E system; resources for scaling up the HMIS will also be leveraged from partners implementing projects / programmes at facility levels. Commitment of the government will be secured through institutionalising and sustaining M&E at facilities, and at the sub-national health administrations by increasing resource allocation. FMoH will provide start up support to regions for scaling up the HMIS (tools, training, etc).

M&E units at all levels will promote and monitor the use of information for decision making and service quality improvement. Data from different sources will be triangulated to validate incoming information and enhance accuracy and credibility. FMoH will support the dissemination of best practices toward

enhancing the use of evidence for decision making. Technology will be implemented after pilot testing and in-depth evaluation for appropriateness and sustainability. FMoH will work very closely with Ministry of Education, universities and partners in accelerating pre-service trainings for health information technicians (HITs) and epidemic intelligence officers. At Woreda level, evidence-based planning will be undertaken annually to improve decision making, particularly for continuously improving health programmes and health care delivery.

HSDP-IV will build on these efforts to achieve the "one" principles of harmonisation and alignment at national and sub-national levels. Government leadership will take forward the agenda of harmonisation and alignment by improving the transparent, accountable and socially equitable use of donor funds. Development partners are expected to develop strategies to ensure the predictability of funding; delegate decision-making power to country offices; and to make effective use of the government systems and processes for planning, implementation, monitoring and evaluation. Both government and development partners will make every effort to achieve value for money by improving resource allocation for priority health interventions; to avoid creating gaps and overlaps in financing; and to conduct regular independent evaluations. Both will make a commitment and adhere to principles of harmonisation and alignment and use the lessons learnt from such processes for continuous improvement.

SO – CB 1: Improve health infrastructure

This strategic objective covers many technical issues, consisting of:

- Expanding, equipping, furnishing, maintaining and managing health and health related facilities;
- Expanding use of relevant technologies including health information technology;
- Development of infrastructure for pharmaceutical supplies;
- Technology transfer; and
- Vaccine production.

The anticipated outcome of this strategic objective will be health and health related facilities that are well built, maintained, equipped, furnished, using appropriate technologies and located within a reasonable distance from the intended beneficiary population.

Capacity will be built in the health sector to conduct preventive maintenance, outsource and manage contracts. FMoH will be in charge of the Federal Hospitals, and regions will be responsible for facilities accountable to RHBs. Zonal health departments will manage the building work, maintenance and equipment for facilities that are accountable to Zonal health departments and Woreda health offices will manage health facilities under their jurisdictions.

The cost of maintenance will be covered by the respective level of health administration and health facility. The FMoH will mobilise resources to support sub-national levels in equipping health facilities as per the standard. Health facilities are expected to cover the costs for some equipment and maintenance.

SO – CB 2: Improve human capital and leadership

This strategic objective entails: leadership development; human resource planning, development and management including recruitment, retention and performance management; community capacity development; and technical assistance management.

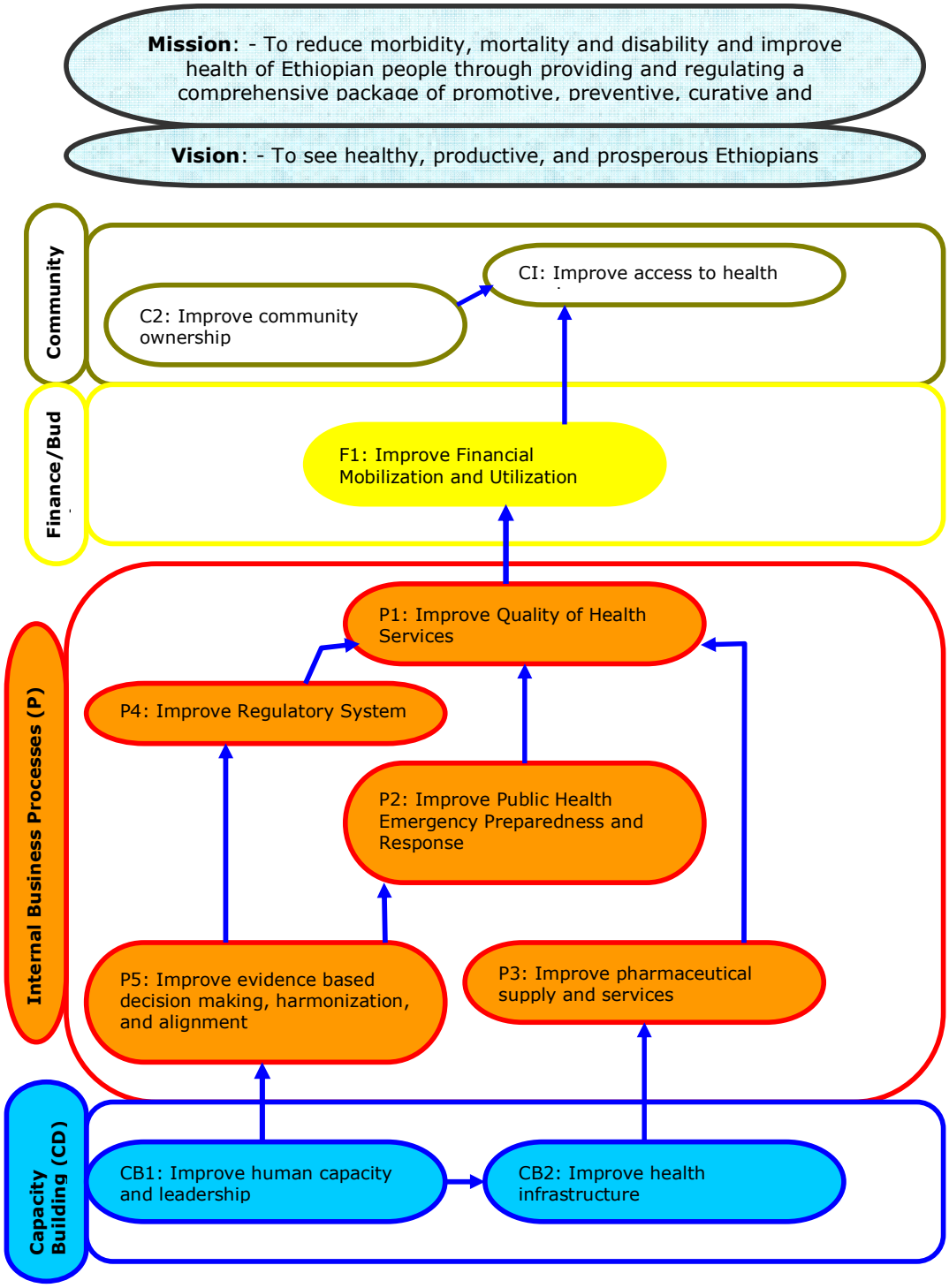
The desired outcome of the strategic objective is adequate availability of skilled and motivated health staff committed to work and stay in a well managed sector.

HSDP-IV will use of a mix of strategies to achieve these outcomes, including:

- Ensuring demand driven production of human resources;
- Maximising use of available resources in producing key categories of health workers for which there is scarce supply;
- Improving inter-sectoral collaboration in HRD;
- Enhancing private sector involvement in HRH development;
- Enhancing quality assurance in the training of health professionals;
- Using appropriate ICT to enhance quality & efficiency of medical education;
- Improving geographic distribution of HRH;
- Strengthening the regulatory system; &
- Enhancing cost-effectiveness in staff retention & motivation schemes.

3.5.2 Health sector strategy map

Figure 12. Health Sector Strategy Map



The figure above is a strategic map that illustrates the cause and effect relationship of strategic objectives described above for the health sector. The map provides an insight how the health sector plans to contribute added value to

the community and how the intended outcome and customer value proposition will be achieved.

3.6 Performance indicators, targets & strategic initiatives

3.6.1 Sector core performance indicators & targets

Sector core performance indicators and targets are listed in the table below. Next are the strategic initiatives of the HSDP-IV, followed by the performance indicators, targets and initiative for each strategic objective for the next five years of HSDP-IV.

Table 8. Summarised priorities and targets of HSDP-IV

Priority Areas	Impact	Outcome	Coverage	Linkages
Maternal & Newborn Health	MMR 267/100,000	CPR= 66% Deliveries attended by skilled birth attendants= 62%	Health Post 1:5,000 population Health Centre 1:25,000 pop'n Primary Hospital 1: 100,000 pop'n General Hospital 1: 1,000,000 pop'n Specialised Hospital 1: 5,000,000 pop'n	Health Extension Program Supply chain management Regulatory system Harmonisation & Alignment Health Care Financing Human Resource Development Health Information System Continuous quality improvement program Referral system
Child Health	U5MR 68/1000 IMR 31/1000	Fully Immunised= 90% Pneumonia treatment 81%		
HIV/AIDS	HIV incidence 0.14	ART =484,966 PMTCT= 77%		
TB	Mortality from all forms of TB = 20/100,000	TB case detection 75%		
Malaria	Lab confirmed Malaria incidence <5 per 1000	LLITN=39 million IRS=77% of targeted households		
Nutrition	Wasting prevalence 3%			

3.6.2 Strategic initiatives of HSDP-IV

Many of the listed initiatives and programmatic interventions were under implementation before HSDP-IV. The majority of these activities will continue to be implemented as per the agreed strategic directions. This section, however, outlines new strategic directions or focal areas that will attract more attention.

Health Extension Programme

HSDP III registered remarkable achievements in scaling up rural HEP coverage, particularly through putting in place the necessary infrastructure, i.e., HPs, equipment, and staff like HEWs and Health Extension Supervisors. Hence, HSDP-IV will focus on the following aspects of HEP:

- Scaling up Urban & Pastoralist HEP;
- Maintaining coverage;
- Improving quality of HEP in rural areas.

Quality of health care

'Quality of Health Care' is a measure of the degree to which health services for individuals and populations increase the likelihood of the desired health outcomes consistent with current professional knowledge. The delivery of quality health services is central to improving the health status of the population. In addition, satisfying patients and clients is the primary goal of the Government's reform programme, including the BPR.

HSDP-IV will focus on a comprehensive and continuous quality monitoring mechanism that will enable all levels of the health system (including both management and service delivery) to look at all aspects of performance and quality of services. Inputs, processes and outcomes of the health care system will be monitored for quality, and the mechanism will also seek to involve all managers and every health care worker in the ongoing processes of quality improvement at all levels of the health system.

Improving the quality of services will be realised through scrupulous implementation of tools, manuals and standards that have been developed as part of BPR. BPR already defined quality structures, quality planning, quality performance measurement, quality improvement activities, and mechanisms for involving actors, evaluation of quality on programmes, service delivery and health management at all levels of the health system. Almost all of the core and support processes have a quality component in them. However, rigorous implementation of the Performance Monitoring and Quality Improvement Standard Operating Procedure, and the Health Regulatory Core Processes will be crucial to ensure adherence to standards by all actors in the sector.

The Quality of Health service applies a three-pronged approach to improving quality of health services. These are supply side interventions, demand side interventions and regulatory aspect. The supply side interventions include providing adequate numbers of skilled and motivated professionals; strengthening the supply chain management system to ensure an adequate and uninterrupted supply of pharmaceuticals at the point of service delivery. It also includes improving the fiscal health of service institutions through implementing HCF reforms. The relevant reforms are those regarding allocation of adequate resources for procuring commodities, maintaining infrastructure, creating conducive environment for patients/clients and motivating health human resources. An internal quality assurance mechanism will be established through effectively implementing the Performance Monitoring and Quality Improvement Standards and Tools at all levels of the health system.

Demand side interventions will promote active and inclusive participation of the community. Community participation works to improve the quality of services by guaranteeing that patients' and clients' opinions are heard and their satisfaction with services is optimised. Community members will therefore be included in health facility governance boards; a patients' rights charter will be developed; and regular surveys on client satisfaction will be conducted. Community involvement in planning, implementation, monitoring and evaluation of health interventions will be enhanced. The quality of curative and rehabilitative services will be addressed at each level and point of service delivery. All facilities will organise service delivery into inpatient services, outpatient services and emergency medical care. All patients will pass through screening/triage for prioritisation. In the case of health emergencies, the patient will be referred directly to emergency medical care and will be able to receive immediate attention and treatment.

The Health and Health-Related Regulatory Core Process is designed to effectively monitor the adherence to quality standards by all health service providers. It focuses on professional practice, quality of both products and the premises of service delivery. Regulation of health services will be enhanced by also putting in place an independent inspection arrangement. This role will facilitate

implementation of the Health Service Regulatory Core Process for properly regulating health services and taking any necessary corrective measures. The inspections will include regular monitoring of premises, personnel, practices and products to ensure adherence to agreed standards.

Scaling up of civil service reform

As part of the ongoing Civil Service Reform, eight Core Processes and five support processes have been designed with BPR and implementation, which has started since HSDP III. However, the pace and quality of implementation has not been moving as expected due to various factors. HSDP-IV will therefore focus on the following aspects of the BPR:

- Enhancing commitment of leadership at all levels of the system;
- Building implementation capacity;
- Continuous improvement of BPR processes;
- Scaling up best practices.

Special attention to critical programmes

Despite high expectations, the intervention performance of HSDP III regarding some programmatic targets remained unsatisfactory. Some of these weaker areas included having skilled attendants at delivery, PMTCT and TB case detection rate. In consequence, HSDP-IV will increase attention to these programmes, with the intention of achieving greater political commitment, better allocation of resources and closer follow up.

Human Resources Development

HSDP-IV will accord due attention to:

- Reinforcing & institutionalising HRH legal frameworks aligned to the overall health policy & the decentralised health system of the country;
- Achieving a positive balance between production versus loss of health staff in order to attain the right numbers & skills mix of health workers;
- Improving availability of key HRH categories at all levels through scaling up pre-service training of professionals in scarce supply (current & projected), e.g., medical doctors, IESOs & midwives;
- Developing & institutionalising human resource management systems at all levels of the decentralised health system;
- Improving motivation & retention of HRH through implementing evidence-based financial & non-financial incentives;
- Ensuring that in-service trainings are standardised & support the health & management workforce career progression & skill development.

Health Infrastructure (Construction and ICT)

The construction of additional facilities was a major focus of HSDP III. HSDP-IV will introduce a shift in the infrastructure focus as follows:

- Expansion & conversion of selected HCs to become primary hospitals, enabling them to provide emergency surgical services including Comprehensive Emergency Obstetric Care;
- Preventive maintenance & rehabilitation of existing health facilities (HPs, HCs, & hospitals);
- Completing construction of 16 blood banks, thereby meeting facility needs & contributing to achieving MDG5 for availability of adequate & safe blood supply;
- Prioritising construction of logistic hubs to ensure effective storage & distribution of pharmaceuticals.

Ethiopia is one of the top-ranked countries for national investment in ICT infrastructure. HSDP-IV will focus on making good use of this opportunity to enhance accessibility and quality of care. The use of ICT for health will focus on three main areas:

- Support tele-education to assist hospitals & newly established universities engaged in accelerated training of health professionals; this will help fill gaps in capacity to handle expanded training.
- Scale up tele-medicine to more universities & hospitals based on lessons learnt from the Jimma network (Jimma University, Nekmte, Metu, & Woliso Hospitals). This will enable patients to get specialised services in areas where there are scarcities of specialists.
- The other crucial ICT application is e-HMIS, which will include appropriate ICT at HEP level, electronic health information transfer, & electronic medical records (EMR). Scale up EMR to referral hospitals based on lessons learnt from Dill Chorra Hospital.

Special support to emerging regions

The four Emerging Regions, i.e., Afar, Somali, Beneshangul-Gumuz and Gambella, present unique challenges for health service delivery and health system development. These regions are characterized by poor infrastructure, hardship environmental conditions, and pastoral or semi-pastoral populations. HSDP I, II and III have emphasized the need for regionally tailored approaches and support to bring them to equal footing with the rest of the country.

Accordingly, HSDP-IV will continue and further strengthen the special support provided to these regions through various mechanisms already in place. These avenues include:

- Participate in multi-sectoral planning under the coordination of the Ministry of Federal Affairs;
- Provide special support for health planning, budgeting, implementation, monitoring & evaluation of health programmes;
- Provide needs-based capacity building to ensure sustainability;
- Develop & implement a contextualised health service standard including pastoralist HEP, HC relevant to population ratio, staffing pattern & hardship allowances.

The Pastoralist Health Promotion and Disease Prevention Directorate in the FMoH is given responsibility for coordinating special support to the Emerging Regions.

Climate changes and health:

Global warming and climate change have emerged as major international issues in the past two decades. Climate change could jeopardise achievements of the MDGs, including the health-related goals, and undermine efforts of the health sector to improve public health and reduce health inequalities. Among the potential health effects of climate change are heat stress and heat stroke; trauma; respiratory diseases from air pollution; vector-borne and zoonotic diseases, water- and food-borne diseases, mental distress and illness, and others. To address these likely effects, the FMoH will raise community awareness, initiate trainings to health professionals and researchers on the health effects of climate change, ensure that systems are in place to detect and track climate change induced health problems, make the necessary preparations to respond to, and manage climate change associated risks. The FMoH will be engaged in these activities in collaboration with the Environmental Protection Authority.

Gender mainstreaming

Gender mainstreaming is a strong focus of the government to be addressed in all political, economic and societal spheres so that women and men participate and benefit equally from all aspects of development. It expects gender-aware

planning, i.e., assessments and reflections on the implications of plans and actions for women and men in all areas and at all levels. It is a strategy for incorporating the concerns and experiences of both women and men as integral dimensions in the design, implementation, monitoring and evaluation of the Health Sector programmes. These dimensions should be mainly addressed through:

- Promoting gender equality & empowerment of women;
- Increasing use of health services by women;
- Enhancing equal opportunities in the participation of economic and social development including health.

The ultimate goal of gender mainstreaming in all sectoral planning and concerted actions is to achieve gender equality.

3.6.3 Performance indicators, targets & initiative by strategic objective

SO C1: Improve access to health services

SO C.1.1: Maternal, neonatal, child & adolescent health

Targets:

Access

- Roll out community case management for common childhood illnesses in all health posts & increase proportion of health centres & hospitals that implement IMNCI to 100% from 52% & 62% respectively.
- Increase availability of adolescent & youth friendly RH services to 100% of hospitals & health centres.

Outcomes

- Decrease maternal mortality ratio from 590/100,000 live births to 267/100,000
- Decrease institutional maternal mortality rate to <1
- Increase FP use (CPR) from 32% to 66%
- Decrease unmet need for FP from 34% to10%
- Reduce teenage pregnancy from 17% to 5%
- Increase focused ANC 1+ from 71.4% to 90% & ANC 4+ from 31% to 86%
- Increase deliveries attended by skilled birth attendants from 15.7 to 62%
- Increase postnatal care coverage from 36.2% to 78%.
- Increase proportion of deliveries of HIV+ women that receive full course of ARV prophylaxis from 8.3% to 77%
- Decrease under-five mortality rate from 101/1000 live births to 68/1000
- Decrease infant mortality rate from 77/1000 live births to 31/1000
- Increase Protection at Birth (PAB) against neonatal tetanus from 42% to 86%
- Increase Pentavalent 3, Measles, Full immunisation, Rotavirus & Pneumococcal immunisation coverage from 86%, 82.4%, 67.9%, 0%, & 0%, to 96%, 90%, 90%, 96% & 96% respectively.
- Increase proportion of asphyxiated newborns that are resuscitated from 7% to 75%, & newborns with neonatal sepsis who get treatment from 22% to 74%, respectively.

Initiatives:

- Strengthen & expand community- & facility-based maternal, newborn, child & adolescent health services.
- Scale up FP programme (community-based FP services, social marketing, facility-based & outreach for long acting & permanent FP service provision)
- Scale up midwife training.
- Scale up BEmONC, CEmONC.
- Conduct maternal death auditing
- Service integration, emphasis on RH-HIV integration, (esp., link FP-HIV prevention via common messages & dual protection) & harmonised approach among all partners.
- Referral system including paediatric referral system.
- Routine immunisation & wild polio eradication.
- Expand community & facility IMNCI.
- Enhanced Youth Friendly services.
- Capacity building on programme management for maternal & child health services.
- Health Extension Programme
- Special, locally relevant & effective maternal & child health intervention to pastoralist areas

SO C.1.2: Nutrition

Targets

Output

- Increase proportion of severely malnourished under-5 children that are adequately managed from 23% to 91%.
- Achieving malnutrition cure rate > 75%, defaulter rate < 15% & mortality rate < 5% in TFPs (inpatient & OTP).
- Increase proportion of children 6-59 months old given Vit-A supplements every 6 months from 83% to 96%

- Increase proportion children 2-5 years receiving de-worming every 6 months from 93% to 96%
- Increase proportion of pregnant women supplemented with iron during their pregnancy from 10% to 86%

Outcome

- Decrease wasting prevalence among children under-5 from 11% to 3%; & stunting prevalence from 46% to 37%
- Increase proportion of newborns breastfed within one hour of birth from 69% to 92%
- Increase proportion of 0-6 month old infants on exclusive breast feeding from 49% to 70%
- Increase % of 6-9 month old infants on complementary food & continued breastfeeding from 54% to 65%
- Reduce prevalence of anaemia in women of childbearing age (15-49) from 27% to 12%
- Increase households using iodised salt from 4% to 95%

Initiatives

- Sustain Enhanced Outreach Strategy (EOS) with Targeted Supplementary Food (TSF) & transition EOS into HEP
- Health facility nutrition services
- Community-Based Nutrition (CBN).
- Micronutrient interventions
- Essential Nutrition Actions/Integrated Infant & Young Feeding counselling services
- Institutional strengthening for nutrition policy & programme implementation & monitoring.
- Health Extension Programme

SO C.1.3: Hygiene & environmental health

Targets:

- Increase % of households using latrine from 74% to 82%
- Increase proportion of villages (Kebeles) free of open defecation from 15% to 80%
- Increase proportion of households using household water treatment & safe storage practices from 7% to 77%

Initiatives:

- Proper & safe excreta disposal system
- Proper & safe solid & liquid waste management
- Water supply safety measures
- Food & hygiene safety measures
- Healthy home environment
- Arthropod & rodent control
- Personal hygiene
- Community Led Total Sanitation
- Health Extension Programme

SO C.1.4: Prevention & control of major communicable diseases

Reduce incidence & prevalence of HIV/AIDS

Targets:

Outputs

- Provide HCT (VCT+PITC) to 9.2 million people (annually)
- Increase percent of people aged 15-24 using condom consistently with non-regular partners from 59% to 95%
- Increase proportion of eligible children who are receiving ART to 95%
- Increase proportion of eligible pregnant women receiving ART to 95%
- Increase proportion of eligible adults receiving ART from 53% to 95%
- Increase number of patients ever started on ART from 246,347 to 484,966
- Increase number of STI cases treated from 39267 to 60,000.

Outcomes

- Reduce incidence of HIV in adults from 0.28% to 0.14%
- Increase proportion of population aged 15-49 years with comprehensive knowledge of HIV/AIDS from 22.6% to 80%

Initiatives

Strengthen HIV prevention, which includes:

- Intensify implementation of HIV/AIDS programmes (community conversation, school-based & out-of-school interventions, addressing most at risk population, strengthened prevention with HIV positives & in development schemes & corridors)
- Reduce vulnerability to HIV among vulnerable & risk groups (address gender inequality, income generation, girls education, harmful traditional practices, stigma & discrimination, & integrate safety net programmes)
- Increase access & utilisation of services (HCT, STI, condoms, universal precaution & blood safety, circumcision & post exposure)

Strengthen care & support to mitigate impact of AIDS:

- Enhance provision of standardised care & support to OVC & PLHIV
- Create access & quality of chronic care & treatment (through enhancing service integration, laboratory, referral, availability of essential commodities OI, ARV drugs & reagents, strengthen public private partnership & addressing human resource issue) .
- Strengthen involvement of local communities in care & support of HIV/AIDs
- Strengthen income generation activities to sustain the program
- Health Extension Programme

Strengthen enabling environment:

- Focus on capacity building, community empowerment, leadership & governance, mainstreaming, coordination & partnership

Reduce incidence & prevalence of TB & leprosy

Targets:

Outputs

- Increase TB case detection rate from 36% to 75%
- Increase TB treatment success rate from 84% to 90%
- Increase proportion of MDR TB cases treated with second line drugs from 2% to 55%
- Increase proportion of PLHIVs screened for TB from 15% to 80%

Outcomes

- Increase Tuberculosis Cure Rate from 67% to 85%
- Reduce mortality from all forms of TB from 64/100,000 to 20/100,000
- Reduce proportion of registered TB patients who are HIV positive 24% to 10%

Initiatives

- Expand Community DOTS through maximum use of HEP
- Strengthen case detection & management:
- Ensure early case detection, & diagnosis through quality-assured bacteriological diagnosis.
- Provide standardised treatment with supervision, & patient support.
- Ensure effective drug supply & management.
- Address TB/HIV, MDR-TB & Leprosy;
- Scale-up collaborative TB/HIV activities.
- Scale-up prevention & management of multidrug-resistant TB (MDR-TB).
- Address needs of TB contacts, poor & vulnerable groups.
- Strengthen early detection of leprosy at community & facility level
- Engage all care providers,
- Involve all public, voluntary, corporate & private health care providers.
- Promote use of International Standards for Tuberculosis Care (ISTC).
- Enable & promote research.
- Implement operational research on effectiveness of DOTS expansion & TB/HIV collaborative strategies
- Health Extension Programme

Reduce incidence & prevalence of malaria

Targets:

Outputs

- Increase proportion of households in IRS targeted areas that were sprayed in last 12 months from 55% to 77%.
- 100% of suspected malaria cases are diagnosed using RDTs & or microscopy within 24 hours of onset of fever.
- Reduce lab confirmed (RDT/Microscopy) malaria case fatality ratio among under-5 children & adults to less than 2%
- Reduce lab confirmed (RDT/Microscopy) malaria incidence per year, among under-5 children & adults to less than 5 per 1000 population per year
- Increase proportion of pregnant women who slept under LLITN the previous night from 42.5% to 86%.
- Increase proportion of U5 children who slept under LLITN the previous night from 41.2% to 86%.
- No monthly malaria cases report for 24 months from previously malarious Kebeles of targeted Woredas for elimination of malaria.

Outcomes

- Increase proportion of households in malarious areas who own at least one LLITN from 65.6% to 90%.

Initiatives

- Early diagnosis & treatment of cases
- Improve capacity of health workers in diagnosis & case management of malaria at health post level according to national guidelines.
- Improve capacity of health workers in management & diagnosis of severe malaria at health centre & hospital levels according to national guidelines.
- Ensure availability of essential commodities for diagnosis & treatment of malaria
- Geographic targeting & flexible distribution for LLITN
- Selective vector control (LLITN, IRS, Environmental management)
- Procurement, distribution & storage of insecticide & spray materials & implementation of IRS through HEP as well as ensure public acceptance, practice, & participation in IRS programmes
- Environmental compliance
- Health Extension Programme

Reduce Incidence & prevalence of other communicable disease

Targets

- Decrease prevalence of leishmaniasis from 9.7% to 7% in males & from 4.5% to 2% in females.
- Decrease prevalence of lymphatic filariasis from 23.7% to 16% in males & from 18.5% to 11% in females.

Initiatives

- Advocacy, social mobilisation & sensitisation for NTDs programme implementation
- Develop & sustain partnership & collaboration for integrated NTDs control
- Enhance integrated supportive supervision, research, monitoring & evaluation of NTDs programmes.
- Integrated approach & co-implementation of intervention packages
- Design & develop nationally appropriate guideline on prevention, early detection, diagnosis & registry for cancers.
- Develop programme management & coordination guideline for NTDs.
- Complete mapping distribution of all NTDs (leishmaniasis, L.filariasis, schistosomiasis, soil transmitted helminthiasis).

SO C.1.5: Prevention & control of non-communicable diseases

Targets:

- Increase cataract surgical rate (CSR) from 460 to 1,000 per 1,000,000 per year
- Decrease national blindness prevalence from 1.6% to 1%.
- Halt the incremental change in prevalence of high blood pressure among adults at 31% in urban & 10% in rural
- Halt the incremental change in prevalence of type 2 diabetes mellitus at 1-3%
- Increase proportion of health facilities providing integrated mental health services from 10% to 50%

Initiatives

- Integrated & co-implemented intervention packages
- Develop programme management & coordination guideline for NCDs.
- Design & develop nationally appropriate guideline on prevention, early detection, diagnosis & registry for cancers.
- Advocacy, social mobilisation & sensitisation for NCDs programme implementation with emphasis on major risk factors (Alcohol, smoking, diet & exercise) using existing health extension program
- Develop & sustain partnership & collaboration for integrated NCDs control
- Enhance integrated supportive supervision, research, monitoring & evaluation of NCDs programmes.
- Mental health service integration into all routine health service delivery system
- Strengthen routine & outreach cataract surgery with emphasis to reaching inaccessible areas

SO C2: Improve community ownership

Targets

- Increase proportion of model households graduated by HEP from 25.6% to 85%
- Increase proportion health facilities with boards where communities are represented to 100%.
- Increase proportion of Community Health Promoters in relation to need (2 for every 50 Households) from 42% to 88%.

Initiatives

- Include information, education & communication component in all Woreda-Based plans & budgets
- Strengthen governance & leadership of public health facilities
- Strengthen Health Extension Program
- Strengthen community empowerment/conversation & social mobilisation programme through focused training & supervision of Community Health Promoters to facilitate Integrated Community Dialogue. (with emphasis of HIV/AIDS, Malaria, TB, Maternal & child, Nutrition & Environmental health)
- Implementation of standardised package of Behavioural Change Communication tools addressing all HEP packages.
- Regulatory information delivery
- Pursue communication & social mobilisation to be gender sensitive, empower women development army & advocate for women-led Kebele health committee/health promoters

SO F1: Improve resource mobilisation & utilisation

Targets

- Increase per capita public expenditure on health from 16.1 USD to 32.2 USD.
- Increase share of health budget as a proportion of total budget from 5.6% to 15%
- Increase proportion of public health facilities retaining & using their revenue from 20% to 100%
- Increase proportion of people enrolled in health insurance from 1% to 50%
- Increase ratio of health budget utilisation to allocation to 90%

Initiatives

- Establish Community-based & Social Health Insurance.
- Strengthen facility revenue retention & utilisation.
- Enhance waiver & exemption system
- Proactive resource mobilisation
- Establish private wings in public hospitals
- Establish integrated financial management information system
- Financial accountability & management program
- Result-based financing schemes.
- Strengthen resource mapping

SO P1: Improve quality of health services

Targets

- Increase customer satisfaction index from 50% to 100%
- Increase bed occupancy rate from 50.8% to 85%
- Decrease average length of stay from 6.7 days to 5 days.
- Increase outpatient attendance per capita from 0.2 to 0.7
- Increase proportion of referred patients completing referral successfully (from beginning to feedback) to 80%.
- Increase % of emergency patient receiving emergency care in less than 5 minutes from 50% to 100%.

Initiatives

- Strengthen emergency management system.
- Provision of safe & adequate blood for transfusion
- Implement quality management, e.g., standards for nursing, laboratory, Infection prevention, medical records, etc.
- Establishing a well functional referral system
- Regulatory service to public & private sector institutions
- Performance monitoring & quality standard operational procedures process
- Integrate related health programmes at management & service delivery levels

SO P2: Improve public health emergency preparedness & responses

Targets

- Increase proportion of epidemics averted to 75%.
- Improve proportion of epidemics controlled with zero mortality to 50%.

Initiatives

- Active surveillance & epidemic control
- Capacity building – (intelligence officers. national stockpile system etc)
- Vulnerability assessment & risk analysis;
- Response & recovery operations (including emergency nutrition response)

SO P3: Pharmaceutical supply & services

Targets

- Decrease procurement lead time (average time between order & delivery from supplier) from 240 days to 120 days
- Decrease proportion of health facilities with stock-out for essential drugs from 35% to 0%.
- Increase proportion of patients with adequate information on dispensed drugs from 68% to 100%.
- Reduce percentage of stock wasted due to expiry from 8.24% to 2%.
- Decrease percentage of prescriptions containing antibiotics from 58% to 25%
- Increase percentage of dispensed drugs adequately labelled from 43% to 90%

Initiatives

- Quantification/forecasting & procurement system
- Pharmaceutical storage & inventory control system
- Pharmaceutical hubs & transport system.
- Revolving drug fund management system
- Integrated Pharmaceuticals Fund & Supply Management Information System (IPFSMIS)
- Strengthen rational drug use.

SO P4: Improve regulatory system

Targets

- Increase proportion of health institutions complying with service standard to 100%
- Increase proportion of licensed/certified health institutions & food establishments to 100%, respectively
- Increase quarantine coverage to100%
- Increase proportion of registered & licensed traditional medicine providers to 80%.
- Increase proportion of registered & licensed professionals (modern, alternative & traditional) to 100%

Initiatives

- Inspection & licensing
- Product quality assessment & registration
- Strengthen quality quarantine service
- Medico-legal service

SO P5: Improve evidence-based decision making by enhanced harmonisation & alignment

Targets

- Reach 100% in facilities & by programme managers using HMIS data for decision-making.
- Increase timeliness & completeness of HMIS reports from 57% to 90%.
- Improve correspondence between data reported & recorded from 15% to 90%.
- Maintain proportion of Woredas with evidence-based plan aligned vertically & horizontally at 100%
- Increase proportion of partners implementing "one-plan" to 100%
- Increase proportion of Health Development Partners providing funds through MDG PF to 75%
- Increase proportion of partners using one report/HMIS to 100%.
- Proportion of research studies being conducted that focus on priority public health problems reaches 95%

Initiatives

- Advocacy on harmonisation & alignment
- Regular short & medium term resource mapping
- Regular evaluation of adherence to the principles of harmonisation & alignment
- Integrate related health programmes at management & service delivery levels
- Institutionalise M&E of health programmes
- Conduct research for programme improvement
- Strengthen district heath management system to institutionalise evidence-based planning
- Strengthen generation & use of strategic information within the context of health system strengthening.
- Evidence-based problem solving comprehensive support to pastoralist areas.
- Respond to health impacts of climate change through up-to-date information tracking.

SO CB1: Improve health infrastructure

Targets

- Maintain health post to population ratio at 1:5,000
- Maintain health centre to population ratio at 1:25,000
- Increase primary hospital to population ratio to 1:100,000
- Increase general hospital to pop'n ratio to 1: 1,000,000
- Increase specialised hospital to population ratio to 1: 5,000,000 population
- 100% of health facilities fully equipped & furnished as per the standard
- 10 new vaccines adopted & used
- Implement EMR in all health centres & hospitals
- Implement e-HMIS in all Woredas

Initiatives

- Health facility construction program
- Health facility rehabilitation & upgrade projects
- Health facility maintenance program
- Cold chain management & medical equipment maintenance
- EMR, e-HMIS, networking, telemedicine & tele-education programmes.
- Technology transfer & dissemination
- Technical & financial support for pastoralist area focused health facility expansion

SO CB2: Improve human capital & leadership

Targets

- Improve health workforce ratio from 0.7 per 1,000 to 1.7 per 1,000 population
- Improve physician to population ratio from 1:37,996 to 1:5,500
- Increase proportion of PHCUs staffed as per standard in all geographic areas to 100%
- Increase proportion of PHCUs that use workload-based staffing standard to 100%
- Increase implementation of e-HRIS at regions to 100%
- Increase proportion of HRH departments at various levels with at least 1 professional trained on HRM to 100%
- Increase competency level for essential knowledge & skill (disaggregated by category) to 100%
- 80% of identified gaps filled by TA. [direction of change?]

Initiatives

- Scale up training & development in line with staffing requirements with focus on medical doctors, IESO, anaesthesia professionals, midwives & HIT.

Major initiatives with this regard include

- Establish/expand innovative, technology assisted medical & health science training programme
- Transforming selected hospitals with potential into medical & health science training college
- Team-based training of midwives, anaesthetists & IESO to address BEONC & CEONC at PHCU level
- Enhance the availability of HIT through generic & work integrated training programmes
- Effective coordination mechanism of service sector (employer) with education sector & training centres

- Effective & targeted staff retention mechanisms developed & implemented
- Development, scale up & implementation follow up of web-based HRIS
- Establish an HRH leadership & management development centre with training & operational research
- Regular review of HRH plan in view of unforeseeable changes as well as wider political & economic changes
- Establish Continuous Professional Development programme (CPD)
- Regular update of curricula for competence-based programmes in pre-service education
- Implement the agreed TA guideline

Chapter 4. Costing and financing HSDP-IV

The Government of Ethiopia and its development partners have made considerable progress toward achieving the MDGs. The health sector of Ethiopia has introduced and is vigorously pursuing the implementation of evidence-based high-impact intervention packages at all levels of the health care system. These include HEP packages at the family and community level, and expansion of outreach services and medium to high level clinical care which are known to have positive impacts on the population by improving the coverage for health care.

However, there are still major bottlenecks remaining that need to be tackled in the next five years of HSDP-IV implementation. There is strong evidence that the primary obstacles blocking fast and sustainable targeted health gains are lack of resources and weak implementation capacity. There are also low levels community utilisation for some existing interventions despite their proven effectiveness, which implies the need for more work with communities to increase demand and timely utilisation of available services at each level of the health care system.

During implementation of the previous health sector strategic plan, the Total Health Expenditure (THE)[xxxix] more than doubled between 2004/05 and 2007/08, as documented in the fourth round of National Health Accounts (NHA). The nominal total health sector spending increased from Birr 4.5 billion (US$522 million) in 2004/05 to more than Birr 11.12 billion (US$1.2 billion) in 2007/08. The per capita THE also grew, rising from US$7.1 per capita per annum in 2004/05 to US$16.1 in 2007/08[xl]. It is anticipated that reaching the MDGs in the coming five year period will require further increases in health expenditure; and the HSDP-IV costing is taking this into consideration.

4.1 Costing methodology

The costing exercise considers the Government's firm commitment to reach the MDGs. Costing for the HSDP-IV has been conducted using the Marginal Budgeting for Bottlenecks (MBB) tool, which is an evidence-based result-oriented planning and budgeting tool that utilises knowledge about the impact of existing interventions on health in a country. MBB is a powerful analytical tool that aims to set interventions and their targets by assessing the health sector impediments to faster progress, identifying ways of removing them, and estimating both the costs of removing them and the likely effects of their removal on MDG outcomes and impacts, such as child and maternal mortality. The MBB focuses on the marginal costs and impacts in mortality reduction, which makes it a helpful tool to estimate the extra efforts and resources needed to reach the MDGs.

The MBB includes a generic list of health interventions[xli] that are known to have a high impact on child mortality or maternal mortality. Based on this generic list of interventions, country-specific interventions were selected in the country's intervention packages. A bottleneck analysis has been undertaken using the six coverage determinants of the representative tracer interventions out of the twelve sub-packages, focusing on those which can be delivered via the three

service delivery modes: a) family/community-based, b) population-oriented that are schedulable, and c) individual clinical care.

The bottleneck analysis helps in identification of system-wide supply and demand side bottlenecks and obstacles that would potentially impede the progress towards achieving adequate and effective coverage in the application of high-impact intervention packages in each of the main service delivery modes. Adequate coverage in this sense includes such factors as the availability of essential drugs and supplies, access to health services and health workers, first time and continued use of health-care services. Subsequent examination of the underlying causes of bottlenecks and the development of promising strategies for overcoming them allows the setting of "frontiers". The bottleneck analysis was conducted as part of the SWOT and Stakeholder analysis to set national coverage targets for interventions to be reached by 2014/15. A summary of the bottleneck analysis is included in Annex 3.

4.2 Costing scenarios and assumptions for HSDP-IV

As mentioned above, Ethiopia has made significant progress in expanding health services and improving health outcomes over the years through the HSDPs. At the time of creating this plan, however, the analysis of progress toward MDG 1, 4, 5, 6 & 7 shows that further strengthening is needed for health systems and more improvements in quality of health care. In response, government and partners are planning to continue and expand the range of high impact interventions to be provided to Ethiopians at community, outreach and clinical service delivery levels.

The costing estimate is based on two scenarios and provides a detailed costing analysis and results for both of them. Each scenario calls for a certain level of reinforcement of the cornerstones of the health system or the coverage determinants. A proportion of bottleneck reduction is considered to formulate the two scenarios with separate set of coverage targets as detailed in Table 4.2a – 4.2c, many of the interventions exhibit low coverage levels. The assumptions implied in defining the scenarios are:

Base-case scenario:

this scenario includes strategies to enhance performance of the health extension programme through skills upgrading of health extension workers, model family graduation, supportive supervision, and introduction of community-based pneumonia treatment, as well further improving the quality of health services given at community level. It would also strengthen the pastoral and urban health extension programme. This scenario anticipates reaching a high level of coverage with an ambitious reduction in existing bottlenecks of up to 80% over the coming five years. The expected results include achievement of:

- 65% Model House old graduation,
- 46% Latrine Utilisation,
- 38% Delivery by HEWs, and
- 100% & 65% ITN ownership and utilisation by households.

The base-case scenario also assumes that there would be no compromising of the plan to achieve the MDGs by the year 2015.

This scenario considers universal access to health centre, staffing, equipping and availing drugs and supplies to HCs as per the standard. There would be strengthening for supply chain management system to make HCs fully functional and provision of Basic Emergency Obstetric Care and essential newborn care. In addition, selected HCs would be upgraded to primary hospitals to provide ambulatory and inpatient services, including emergency surgery, caesarean section and blood transfusion services. Existing general and specialised hospitals would also be strengthened.

This scenario considers the already achieved targets for infrastructure and HRH and uses them as a springboard for facilitating further health gains. These include the already achieved universal PHC coverage through rapid development of HPs at the community level, Health centres and the planned expansion and scale up of primary hospitals. It also considers the rapid development and deployment of more than 30,000 HEWs at the community level and over 5000 health officers at health centre and hospital levels. For services, the base-case scenario aims at reaching:

- BEmONC and CEmONC services in 100% of HCs & hospitals,
- 85% ART treatment,
- full immunisation 90%;
- 38% coverage in clean and safe delivery by HEWs
- 62% coverage of deliveries by skilled attendants.

This scenario is projected to achieve the MDG target in maternal health through a 54.8% reduction in MMR from the current levels. This scenario is also projected to achieve the MDG target in child health through reduction of under-five mortality by 33.8% from the current levels.

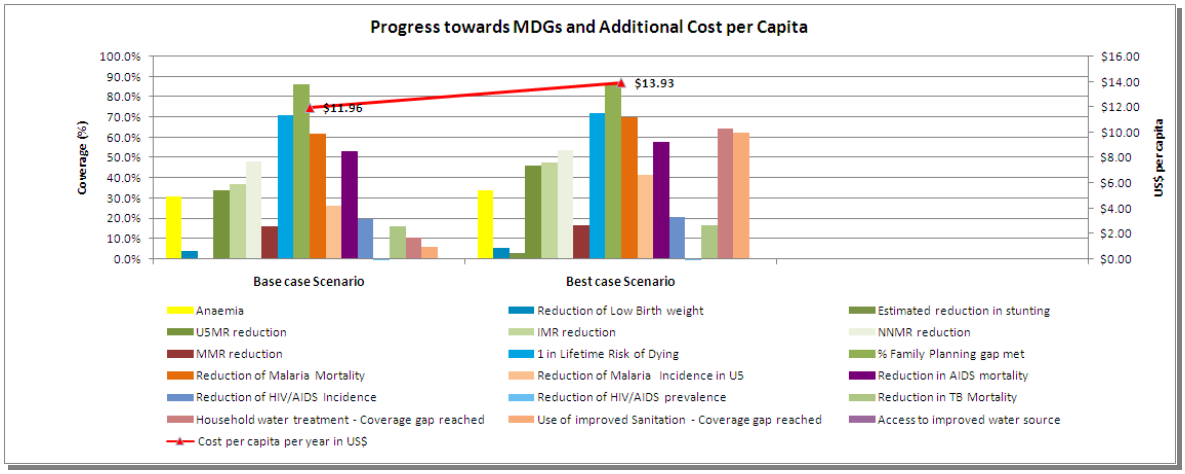
Best-case scenario:

this scenario follows the *MDGs Needs Assessment (2005)* that assumes a condition of no financial constraint. It projects fulfilling the commitment of the health sector to improve and sustain quality of health service delivery, embracing prevention and control of communicable diseases, and improving the quality of clinical care for acute and chronic health problems. It also assumes ensuring universal access to quality clinical care, with access to advanced treatment at all levels of the health care delivery system. The best-case scenario focuses mainly on evidence-based high level clinical care and the protection of patient rights in accessing the needed health care services.

4.3 Cost and impact of scaling-up

Figure 4.1 (below) presents the anticipated additional costs and mortality reduction impacts for the two scenarios. Base-case scenario stipulates the need to mobilise an additional US$ 11.96 per capita per year on average over the five years. The investment is estimated to reduce under-five mortality by 31.8% and maternal mortality by 54.8%. Ethiopia would be able to achieve the health MDGs with the implementation of the base-case Scenario.

Figure 13. Progress towards MDGs and additional cost per capita



The best-case scenario calls for a higher supplemental investment of US$ 13.96 per capita per year, but it would result in much higher reductions in mortality – bringing down under-five mortality by 46% and maternal mortality by 56.6%. In terms of resource mobilisation, however, the best-case scenario calls for almost doubling the current Total Health Expenditure by the end of HSDP-IV.

Table 9. Additional cost and mortality reduction estimates 2010/11 – 2014/15

Base-case Scenario		Best-case Scenario	
Under five mortality reduction	33.8%	Under five mortality reduction	46%
Maternal mortality reduction	54.8%	Maternal mortality reduction	56.6%
Cost per capita per year in US$	11.96	Cost per capita per year in US$	13.96

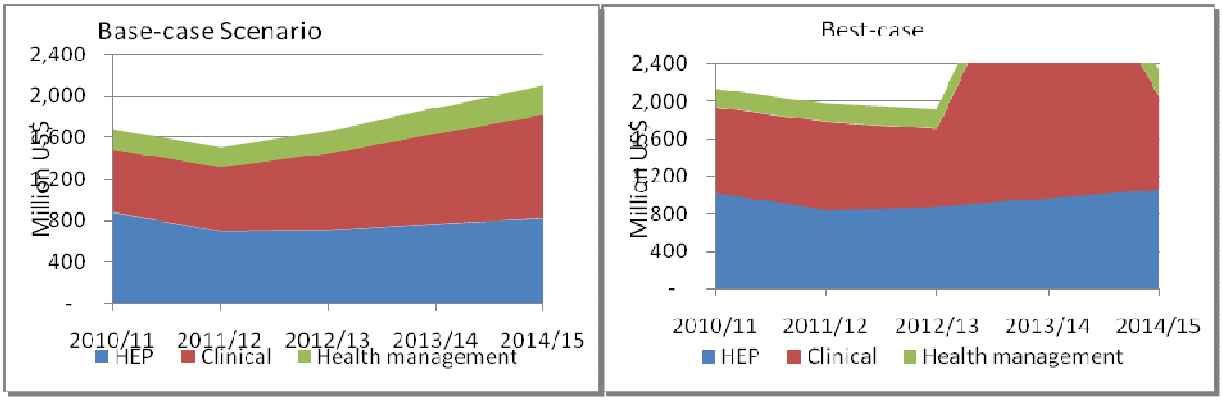
The additional cost estimate has been translated into total budget estimates for the five years. In calculating the total budget estimates, the additional cost estimates are added to the baseline health sector spending for FY 2009/10. The health spending for 2009/10 was consolidated from resource mapping that gathered data about all resources from Government and development partners, both on- and off-budget. The FY 2009/10 total health spending from Government and development partners was estimated at US$ 883.06 million. The summation of additional cost plus FY 2009/10 spending was done only for the recurrent portion, so as not to double count capital costs incurred in the past. The results are presented by level of service delivery, recurrent capital investment distributions, and HSDP-IV programme areas.

Total budget for the five years is estimated at US$ 8.83 billion under the base-case scenario and US$ 10.828 billion for the best-case scenario. This represents an average annual increase of public health spending by 9% over the coming five years from the current base of US$ 883.06 million in the base-case scenario, and 13.5% increase under the best-case scenario.

Level of service delivery: A substantial proportion of the total budget estimate is allocated to make existing health facilities fully functional and improve quality of care at all levels of service delivery points. In both the base-case and best-case scenarios about 43% of the total budget is allocated to strengthen services at clinical level, including health centres, district and general hospitals. The investment is intended to enhance obstetric services with appropriate equipment, supplies and skills of the health workers. It also targets

improvement in the quality of services available for maternal-newborn health, child health, nutrition, malaria, HIV/TB and non-communicable diseases. Over 45% of the total investment is aimed at sustaining and strengthening the Health Extension Programme including the outreach services from health centres for immunisation and family planning. About 15% of the total investment envisaged is to further strengthen the health management and administrative capacity from Woreda Health Office, Regional Health Bureaus, to Federal Ministry of Health. (See Figure 4.2, below also Annex 6).

Figure 14. Allocation of total budget estimates by level of service delivery



Recurrent and capital investment allocations: In line with the decision to shift focus from expansion to service delivery and quality of care, a substantial proportion of the total budget estimate over the five years periods, 78% in the base-case and 55% in the best-case Scenarios, is allocated to recurrent costs for covering salary, skill upgrading, supportive supervision, maintenance, and monitoring and evaluation. Only 22% in the base-case and 45% in the best-case scenario of the total budget estimate is for capital investment, mainly to strengthen infrastructure capabilities for obstetric care. (See table 10)

Table 10. Budget est. by scenario, service delivery, investment & recurrent costs (US$ mill)

Service delivery	Baseline	2010/11	2011/12	2012/13	2013/14	2014/15	Total	%
Base-case Scenario								
Population oriented schedulable services	63.39	351.06	125.27	137.31	152.49	167.51	933.64	33
District, provincial, national governance & management	119.78	195.03	193.87	215.70	247.68	279.45	1,131.73	11
Family oriented community-based services	181.76	527.17	568.60	567.44	615.00	655.68	2,933.89	43
Individual oriented clinical services	418.97	603.74	619.33	742.08	868.34	993.74	3,827.25	13
Totals	**883.06**	**1,677.01**	**1,507.07**	**1,662.54**	**1,883.51**	**2,096.38**	**8,826.50**	**100**
Capital investment	628.74	581.01	382.68	347.83	337.83	327.41	1,976.76	22
Recurrent	254.32	1,095.99	1,124.39	1,314.71	1,545.68	1,768.96	6,849.74	78
Best-case Scenario								
Family oriented community-based services	181.76	637.48	746.21	801.66	877.21	938.51	4,001.07	37
Population oriented schedulable services	63.39	389.65	196.52	179.25	194.75	209.99	1,170.17	11
Individual oriented clinical services	418.97	603.74	1,374.19	1,293.37	1,741.76	1,545.03	6,558.09	61

District, provincial, national governance & management	119.78	195.03	193.87	215.70	247.68	279.45	1,131.73	10
Totals	**883.06**	**1,419.30**	**2,104.19**	**2,083.38**	**2,654.80**	**2,566.38**	**10,828.05**	**100**
Capital investment	482.75	640.56	1,252.67	1,016.02	1,004.37	988.67	4,902.29	45
Recurrent	400.31	778.74	851.52	1,067.36	1,650.42	1,577.71	5,925.76	55

Budget estimates allocations to programme areas: in the base-case, 48% of the budget is allocated to strengthening service delivery component of HSDP-IV; followed by expansion and strengthening health infrastructure and resources 37%; and leadership and governance 15%. The three major disease programmes, i.e., prevention and control of malaria, HIV/AIDS, and TB/leprosy account for 30% of the total budget estimate. (See table 11)

Table 11. Base-case scenario: estimated budget by HSDP-IV programme areas (US$mill)

Programmatic areas	Baseline	2010/11	2011/12	2012/13	2013/14	2014/15	Total	%
		Base-case Scenario						
1. Leadership & governance	33.85	181.47	193.90	259.95	330.56	396.39	1,362.27	15
1.1 Community Empowerment	6.78	17.48	29.95	34.31	37.85	40.07	159.65	2
1.2 Monitoring & Evaluation, & Operational Research	7.36	15.36	24.05	29.35	33.53	36.57	138.85	2
1.3 System Strengthening & Capacity Development	19.71	148.63	139.91	196.29	259.19	319.74	1,063.76	12
2. Strengthening service delivery	626.12	738.73	801.56	819.06	885.90	949.44	4,194.69	48
2.1 Maternal-Newborn & RH-Adolescent Health	31.27	50.63	74.50	95.53	115.80	135.15	471.62	5
2.2 Child Health	25.06	37.95	43.01	45.04	48.46	51.24	225.70	3
2.3 Nutrition	6.38	13.56	19.89	22.91	25.29	26.63	108.27	1
2.4 Hygiene & Environmental Health	7.87	16.87	28.66	34.58	38.54	40.55	159.21	2
2.5 Prevention & Control of Malaria	111.45	240.53	202.06	137.51	120.79	103.46	804.36	9
2.6 Prevention & Control of HIV-AIDS	276.25	193.91	213.75	233.60	253.44	273.29	1,167.98	13
2.7 Prevention & Control of TB & Leprosy	152.72	131.96	137.04	141.70	146.22	150.61	707.53	8
2.8 Prevention & Control of Other Communicable Diseases	0.24	12.09	24.01	35.92	47.83	59.75	179.60	2
2.9 Prevention & Control of Non-Communicable Diseases	0.27	15.86	31.52	47.18	62.84	78.50	235.89	3
2.10 Public Health Emergency Management	0.45	6.54	7.07	7.10	7.49	7.76	35.97	0
2.11Public Health Nutrition Research, Quality Assurance	14.16	18.81	20.05	18.01	19.19	22.51	98.57	1
3. Expand & strengthen health infrastructure & resources	223.09	756.81	511.60	583.53	667.05	750.55	3,269.54	37
3.1 Expansion of PHC Facilities	39.48	273.94	32.62	44.17	55.71	67.25	473.69	5
3.2 Hospital Infrastructure	30.11	178.51	202.74	226.97	251.20	275.44	1,134.86	13
3.3 HR Salaries & Training	54.33	116.60	154.12	189.99	229.10	268.20	958.01	11
3.4 Pharmaceutical & Medical Equipment	97.00	184.51	115.65	112.74	118.18	123.62	654.71	7
3.5. Health Care Financing	2.17	3.24	6.47	9.67	12.86	16.04	48.27	1
Total	**883.06**	**1,677.01**	**1,507.07**	**1,662.54**	**1,883.51**	**2,096.38**	**8,826.50**	**100**

In the best-case scenario 56% of the budget is allocated to strengthening service delivery component of HSDP-IV; 31% for expansion and strengthening health infrastructure and resources: and leadership and governance 13%. Malaria, HIV/AIDS, and TB and leprosy are given a 40% share of the total estimated budget for the five years period. (See table 12)

Table 12. Best-case scenario: estimated budget by HSDP-IV programme areas (US$mill)

Programmatic areas	Baseline	2010/11	2011/12	2012/13	2013/14	2014/15	Total	%
Best -case Scenario								
1. Leadership & governance	33.85	190.97	203.40	269.45	340.06	405.89	1,409.78	13
1.1 Community Empowerment	6.78	22.56	35.03	39.39	42.93	45.16	185.08	2
1.2 Monitoring & Evaluation, & Operational Research	7.36	19.77	28.46	33.77	37.94	40.99	160.93	1
1.3 System Strengthening & Capacity Development	19.71	148.63	139.91	196.29	259.19	319.74	1,063.76	10
2. Strengthening service delivery	626.12	1,118.68	1,181.50	1,199.00	1,265.84	1,329.38	6,094.41	56
2.1 Maternal-Newborn & RH-Adolescent Health	31.27	72.07	95.95	116.98	137.25	156.59	578.84	5
2.2 Child Health	25.06	54.30	59.36	61.38	64.80	67.58	307.42	3
2.3 Nutrition	6.38	16.75	23.08	26.10	28.48	29.82	124.22	1
2.4 Hygiene & Environmental Health	7.87	18.06	29.84	35.76	39.72	41.73	165.11	2
2.5 Prevention & Control of Malaria	111.45	273.97	235.50	170.94	154.23	136.90	971.53	9
2.6 Prevention & Control of HIV-AIDS	276.25	367.94	387.79	407.63	427.48	447.32	2,038.17	19
2.7 Prevention & Control of TB & Leprosy	152.72	257.19	262.27	266.93	271.45	275.84	1,333.68	12
2.8 Prevention & Control of Other Communicable Diseases	0.24	12.27	24.19	36.10	48.01	59.93	180.50	2
2.9 Prevention & Control of Non-Communicable Diseases	0.27	16.06	31.72	47.38	63.04	78.70	236.90	2
2.10 Public Health Emergency Management	0.45	6.99	7.52	7.55	7.94	8.21	38.22	0
2.11Public Health Nutrition Research, Quality Assurance	14.16	23.06	24.30	22.26	23.44	26.76	119.81	1
3. Expand & strengthen health infrastructure & resources	223.09	767.67	522.47	594.40	677.91	761.42	3,323.87	31
3.1 Expansion of PHC Facilities	39.48	273.94	32.62	44.17	55.71	67.25	473.69	4
3.2 Hospital Infrastructure	30.11	178.51	202.74	226.97	251.20	275.44	1,134.86	10
3.3 HR Salaries & Training	54.33	127.47	164.99	200.85	239.96	279.07	1,012.34	9
3.4 Pharmaceutical & Medical Equipment	97.00	184.51	115.65	112.74	118.18	123.62	654.71	6
3.5. Health Care Financing	2.17	3.24	6.47	9.67	12.86	16.04	48.27	0
Total	**883.06**	**2,077.32**	**1,907.38**	**2,062.85**	**2,283.82**	**2,496.69**	**10,828.05**	**100**

4.4 Financing gap

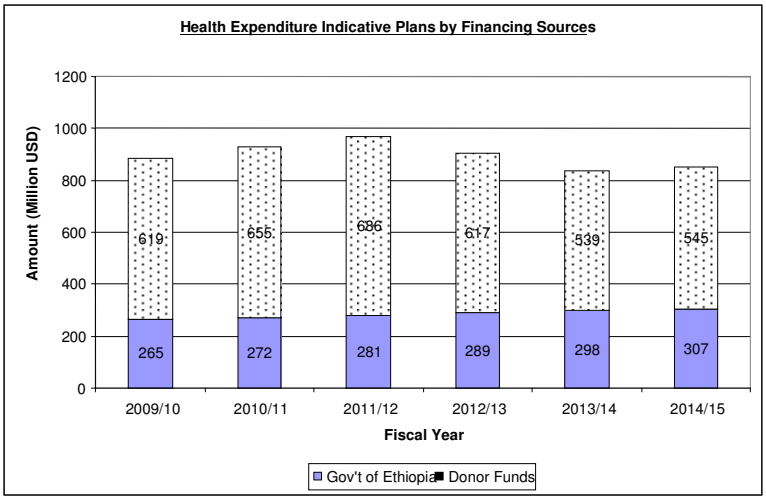
The most significant constraints against rapid scale up of health interventions are the prevailing inadequacy and inefficiency in the resource mobilisation and allocation for health. Baseline and target coverage of high interventions are included in the cost calculations for the two scenarios seen in Annex 6.

Taking into consideration the current poverty levels and the pace of the country's economic growth, it is projected that there will be a significant financing gap that will need additional resource mobilisation, with the consequence that a substantial proportion of the required resources may have to come from development partners.

The contribution of Government to HSDP-IV is expected to follow an upward pattern with expected rise in allocation from US$ 249 million in 2009/10 to US$ 307 million in 2014/15. As indicated in the figure 15 (above), the projected resource commitment by 14 development partners in the coming five years of HSDP- IV periods will show some decline, especially in the last three years of HSDP-IV implementation. For some development partners the current country

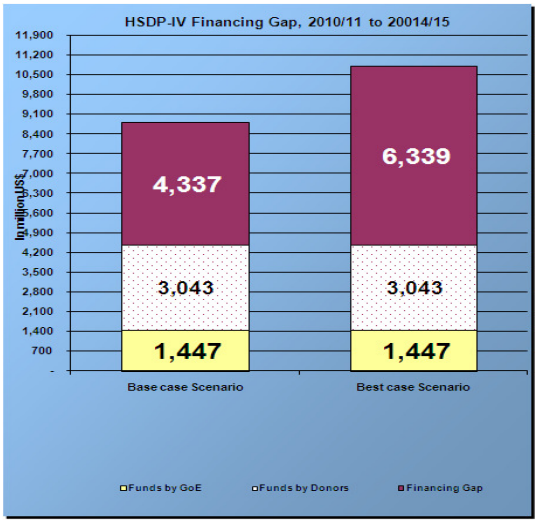
cooperation ends in 2009/10. Also the amount of donors' contributions has been incomplete as information from some donors has not been captured.

Figure 15. Breakdown of health expenditures – indicative plans by financing sources



While progress has been made on pooled funding with the introduction of the MDG Performance Fund, there is still a major challenge in the unpredictability and short time scale of most donor funding. There is currently no firm commitment for health financing beyond 2011/12, leaving big uncertainties in planning for health services. In contrast to the Paris declaration, the trend in the past several years has been an increasing donor preference for earmarked project funding, rather than harmonised pool-funding. Donors have pledged larger amounts under earmarking than the amounts under a broader health system strengthening agreement. According to current pledges, a major financing gap remains for health systems in general, and maternal-newborn and child health in particular.

Figure 16. HSPD-IV Financing Gap, 2010/11 to 2014/15

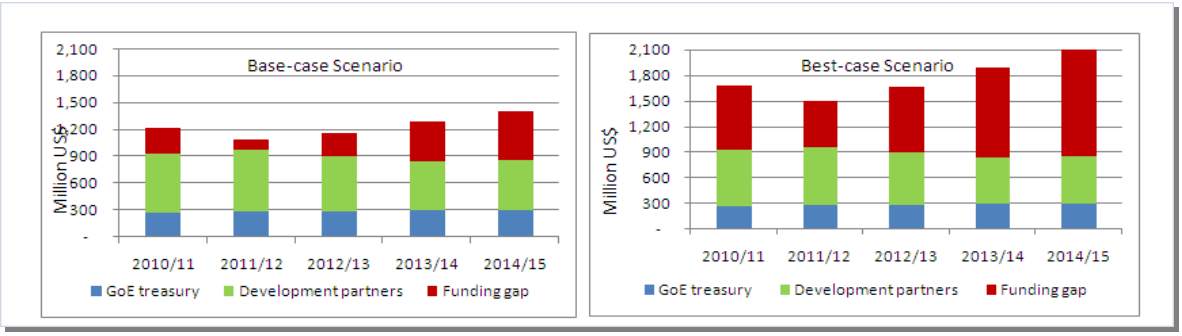


To assess the funding gap for the implementation of HSDP-IV, the estimated total budget is compared to the projected resource commitment from Government treasury and development partners. As depicted in Figure 16 (above), both the base-case and best case scenarios encounter a substantial funding gap. In addition, the gap widens over time, as most development partners are not able to accurately predict for the later years of HSDP-IV.

The financing gaps over the coming five years amount to US$ 4.337 billion for the base-case scenario and US$ 6.339 billion for the best case scenario. This represents an annual average funding gap of US$ 867.40 million and US$ 1,267.71 million for the base-case and best-case respectively.

A disaggregated analysis of the financing gap by programme areas confirms the inequity in the health sector. The major financing gap remains high in health systems, including expansion and strengthening pharmaceuticals followed by maternal-newborn health and child health. See table 13 (below) for the full detail of the funding gap in the best case scenario.

Figure 17. Funding gap over the coming five years period in Million US$



Based on the information compiled from 14 development partners substantial amount of the commitment for the coming years is concentrated in few vertical disease specific programmes. About 85% of the development partners projected commitments are for HIV/AIDS, TB and malaria. Although these diseases seemed well funded in previous years, there are still huge gaps to scaling the support out to the lower services delivery level.

Table 13. Total budget, projected commitment & funding gap by programme areas

	Total budget estimate		Projected resources committed	Funding gap 2010/11-2014/15	
	Base-case Scenario	Best-case Scenario		Base-case Scenario	Best-case Scenario
1. Leadership & governance	1,362.27	1,409.78	439.40	922.88	970.38
1.1 Community Empowerment	159.65	185.08	72.61	87.05	112.47
1.2 Monitoring & Evaluation & Operational Research	138.85	160.93	54.83	84.02	106.10
1.3 System Strengthening & Capacity Development	1,063.76	1,063.76	311.95	751.81	751.81
2. Strengthening service delivery	4,194.69	6,094.41	3,076.65	1,118.04	3,017.76
2.1 Maternal-Newborn & RH-Adolescent Health	471.62	578.84	154.49	317.13	424.35
2.2 Child Health	225.70	307.42	76.01	149.69	231.41
2.3 Nutrition	108.27	124.22	14.31	93.96	109.91
2.4 Hygiene & Environmental Health	159.21	165.11	34.69	124.52	130.42
2.5 Prevention & Control of Malaria	804.36	971.53	566.13	238.23	405.41
2.6 Prevention & Control of HIV-AIDS	1,167.98	2,038.17	1,395.12	-227.13	643.05
2.7 Prevention & Control of TB & Leprosy	707.53	1,333.68	662.01	45.52	671.67
2.8 Prevention & Control of Other Communicable Diseases	179.60	180.50	72.53	107.07	107.97
2.9 Prevention & Control of Non-Communicable Diseases	235.89	236.90	72.33	163.56	164.58
2.10 Public Health Emergency Management	35.97	38.22	0.11	35.86	38.11
2.11Public Health/Nutrition Research & Quality Assurance	98.57	119.81	28.93	69.64	90.88
3. Expansion & strengthening health infrastructure & resources	3,269.54	3,323.87	973.45	2,296.09	2,350.42
3.1 Expansion of PHC Facilities	473.69	473.69	145.38	328.31	328.31
3.2 Hospital Infrastructure	1,134.86	1,134.86	144.94	989.92	989.92
3.3 HR Salaries & Training	958.01	1,012.34	454.04	503.97	558.30
3.4 Pharmaceutical & Medical Equipment	654.71	654.71	219.74	434.97	434.97
3.5. Health Care Financing	48.27	48.27	9.37	38.91	38.91
Total	**8,826.50**	**10,828.05**	**4,489.50**	**4,337.00**	**6,338.55**

4.5 Financing channels and arrangements for HSDP-IV

Three channels of funding currently operate in the country, which also work for the health sector. These are:

Channel 1a (un-earmarked): this the disbursement channel used by Government itself. At each administrative level, the specialised finance bodies control the release of funds and report upwards on their utilisation. This is the channel that is used by donors providing budget support and PBS component-I.

Channel 1b (earmarked): this channel is an earmarked fund transferred through MoFED, with funds from each donor being tagged (with a two figure code), and sent to the region and zone/Woreda (with a location code). The funds are reported on and accounted for separately, and used to pay only for activities agreed by the particular donor, often according to its specific procurement and disbursement procedures.

Channel 2: this is a channel whereby the Regional and Zonal/Woreda finance bodies are by-passed. Sector units at each administrative level expend and account for funds. There are variations on this channel. Some DPs centralise disbursement responsibility at the Federal level (so that even regional contractors are paid centrally). Other donors have worked directly with regional and/or Woreda administrations.

Channel 3: in this financing channel, DPs usually carry out any procurement and pay the contractor directly. Government merely agrees to, and budgets for, what is to be provided by the donor, and ensures that the expenditures are included in any overall HSDP accounting and auditing.

In-addition to the above three channels, there are two channels which operate specifically in the health sector. These are:

Technical Assistance Pooled Fund: this fund was established in 2005 by five DPs to provide support to FMoH. It fills a critical gap in capacity and is also the first of its kind as a pooling arrangement in the health sector. It provides support in technical assistance, sector reviews, operational research, and other activities at FMoH level. Currently, the fund is being managed by UNICEF.

The MDG Performance Fund: the MDG Performance Fund and MDTF have also come to operation during HSDP III. MDG Performance Fund is described in HSDP-III and started working in 2007 with funds from GAVI for health systems strengthening. A huge financing gap in health systems, maternal health, and the particular nature of health services – a large number of public good elements in service delivery and a high proportion of recurrent inputs bought internationally (medicines, commodities and equipment) – warrants the establishment of a strong Federal MOH Level MDG Performance Package Fund to support the implementation of HSDP. The MDG PF will help to finance four thematic areas: a) Health extension programme, b) Service delivery (MCH), c) Public health commodity procurement and d) Health systems strengthening. For further details on the management of the MDG PF, see the Joint Financing Arrangement.

4.6 Preferred channels of financing HSDP-IV

For the health sector, the preferred modes are mainly: i) Channel 1a - the block-grant to Woreda (currently supported by PBS Component 1); and ii) the MDG Performance Fund ("MDG Fund", currently supported by the seven signatories of the JFA). These channels are preferred due to their lower transaction costs for the government.

4.7 Application of "one-budget" to channels and mechanisms

The main purposes of implementing a "one budget" approach at all levels of the health system are to: 1) Ensure that various channels and funding mechanisms finance "one plan"; and 2) Reduce the transaction costs for the government that arise when dealing with multiple channels and financing mechanisms.

There has been only listless progress in the sector, however, in moving toward these financing mechanisms. In response, the HSDP Harmonisation Manual has proposed interim processes that will partially address these challenges. Accordingly, "one-plan financing" could be realised by applying the following procedures:

- Making sure that all project support is aligned with priorities in the sector;
- Providing information regarding project activities and funds allocated to local Government in the locations where the project is implemented to ensure that project activities are incorporated in the "one-plan" at that particular level of the health system;
- Ensuring regular negotiation and discussion between local Government and project managers to allow flexibility, and to avoid gaps and overlaps;
- Promoting accountability and coherence through joint monitoring and evaluation (with local Government and other stakeholders) of project implementation.

Chapter 5. Management arrangement of HSDP-IV

This chapter describes the mandates of the different levels of the health system. It also elaborates on the planning, governance, procurement, financial management, monitoring and evaluation processes that apply to HSDP IV.

5.1 Governance structure

The current system for HSDP joint governance and coordination has evolved incrementally over the past twelve years, with a number of ad hoc modifications driven by changes in both the international aid architecture and the funding arrangements used within Ethiopia. Over the years, the system has become increasingly complex and required revision of some of the structures.

Most of the governance structures of HSDP III were functional but some were not as active as they were supposed to be. The governance structures are now revised in order to strengthen and rationalize the structures. The resulting modified governance structure is summarized here and the details of its functions are annexed. [see Annex ?]

Joint Consultative Forum

The Joint Consultative Forum (JCF) is the highest governing body and will serve as a joint forum for dialogue on sector policy and reform issues between GoE, DPs and other stakeholders; it will oversee the implementation of the IHP, allocation and utilization of MDG PF, PBS, GAVI and all other donor supported projects. This highest body will ensure effective linkages between development partners, regional bureaus and other sectors and will be chaired by the Minister of Health and co-chaired by HPN co-chairs.

Joint Core Coordinating Committee

The Joint Core Coordinating Committee (JCCC) will continue to be the technical arm of the JCF and also the Policy, Plan and Finance General Directorate. The major functions of the JCCC will be to give operational oversight; to monitor the implementation of all pooled funds, including the Health Pooled Fund, GAVI, MDG PF; to organise and coordinate the monitoring, review and evaluation missions and meetings of HSDP and to facilitate the implementation of the findings and recommendations of these meetings and missions. It will also undertake other technical assignments as instructed by the JCF. In addition, the JCCC will analyse and agree to MoH recommendations on the allocation or reprogramming of funding, which will be linked with reviewing quarterly financial and activity plans and reports. (THIS MEANS JCCC HAS DECISION MAKING RESPONSIBILITIES WITHOUT BEING MANDATED TO DO SO BY HPN!!)

It will be chaired by the Director General of the Policy, Plan and Finance General Directorate. The members will be MoH – PPF GD and other Directors as needed, and 6 individuals from HPN, to include the managing agent of the TA pool fund plus one co-chair (to be nominated by HPN and agreed by MOH). (SEE ABOVE)

In-addition to these governance structures, the Global Fund coordinating mechanism (CCM) and the coordination mechanism for the EPI activities (ICC), will remain as is and may be strengthened or merged with other functional bodies as appropriate in the future.

5.2 Inter-sectoral collaboration & public private partnership

In order to reach the MDGs, Ethiopia will have to not only ensure the provision of high quality health care services, but also to address the environmental factors and health determinants that contribute to the society's collective health and illness. Health determinants are the range of personal, social, economic, and environmental factors that influence the health status of individuals or populations. Improvement in the national health status cannot be fully achieved by only treating and managing diseases and injuries, but it also requires the collective actions of a wide range of actors outside the health sector, such as agriculture, infrastructure, education, environmental protection, etc. Health care provision, as well, cannot be the exclusive domain of the public sector, but needs to mobilise the collaborative efforts of public/private partnership through engaging with the NGO sector and private for profit health providers.

One of the biggest organisational and operational challenges facing the health sector is bringing all of these different actors together for a common pursuit and towards improving health through concerted action against major public health problems, and providing adequate amounts and quality of care. Key sectors and mechanisms for inter-sectoral actionable collaboration during implementation of HSDP-IV are indicated as follows:

- Collaborate with MoE in training health workers and school health promotion.
- Collaborate with Ministry of Water Resources to ensure availability of adequate and clean water supply.
- Collaborate with Ministry of Agriculture on nutrition, prevention and control of communicable diseases.
- Collaborate with Ministry of Finance on improving resource allocation to the health sector.
- Collaborate with the media in public health awareness creation and dissemination of health messages and information to the general public.
- Collaborate with Ministry of Youth and Sports in adolescent health services.
- Collaborate with Ministry of Women Affairs to ensure gender equality and maternal and child health services.
- Collaborate with Ministry of Transport on the reduction and prevention of road traffic accidents and improvement in efficient referrals of the injured.

Public Private Partnership will be enhanced through collaborative endeavours on selected health sector priority programmes and health system issues, such as:

- Collaborate with private sector on the expansion of health infrastructure, local production of pharmaceuticals, provision of health services, training of health professionals and mobilisation of resources for the health sector.
- Collaborate with professional associations on improving quality of health services and reducing professional malpractices.

The HSDP-IV plan is that inter-sectoral collaboration will take place at different levels of the health system through formal government institutions (such as regional and Woreda councils) and health sector governance structures (such as CJSC, RJSC and WJSC). The major hallmark for intersectoral collaboration is the operationalisation of joint planning, implementation, monitoring and evaluation at all levels of the health system, as described in key FMoH documents (such as the HSDP Harmonisation Manual). A complete set of manuals and tools will be developed to also guide public/private partnerships in health.

5.3 Health service delivery arrangement

The Ethiopian health service is now restructured into a three tier system. These levels are:

a) The **primary care level** has three kinds of service points – health posts, health centres and primary hospitals.

- The Health Posts and Health Centres are organised into PHCUs, which is composed of a HC and five satellite HPs. Taken together, the PHCU provides services to a population of about 25,000 persons.
- Each Health Post (HP) is staffed with two HEWs, and is responsible for a population of 3-5,000 persons. The HEWs are expected to spend less than 20% of their time in health posts, and more than 80% of their time is meant to be spent on community outreach programme visits to households, especially mothers and children. The HEWs provide 96 hours of training to households on the selected packages of HEP and follow the household's practices before certification and graduation of the household. HEWs also provide selected health care services, including family planning, EPI, OTP, clean delivery and essential newborn care services, diagnosis and treatment of malaria, diagnose and treatment of pneumonia, and management of diarrhoea and dehydration using ORS.
- A HC has an average of 20 staff. It provides both preventive and curative services. It also serves as a referral centre and practical training institution for HEWs. The HC has an inpatient capacity of five beds. Rural HCs serve populations up to 25,000 persons; urban HCs serve up to 40,000 persons.
- A Primary Hospital provides inpatient and ambulatory services to an average population of 100,000. In addition to what a HC can provide, a primary hospital provides emergency surgical services, including Caesarean Section and gives access to blood transfusion service. It also serves as a referral centre for HCs under its catchment areas, and is a practical training centre for nurses and other paramedical health professionals. A primary hospital has an inpatient capacity of 25-50 beds. On average, a Primary Hospital has a staff of 53 persons.

b) The **secondary care level** is comprised of General Hospitals.

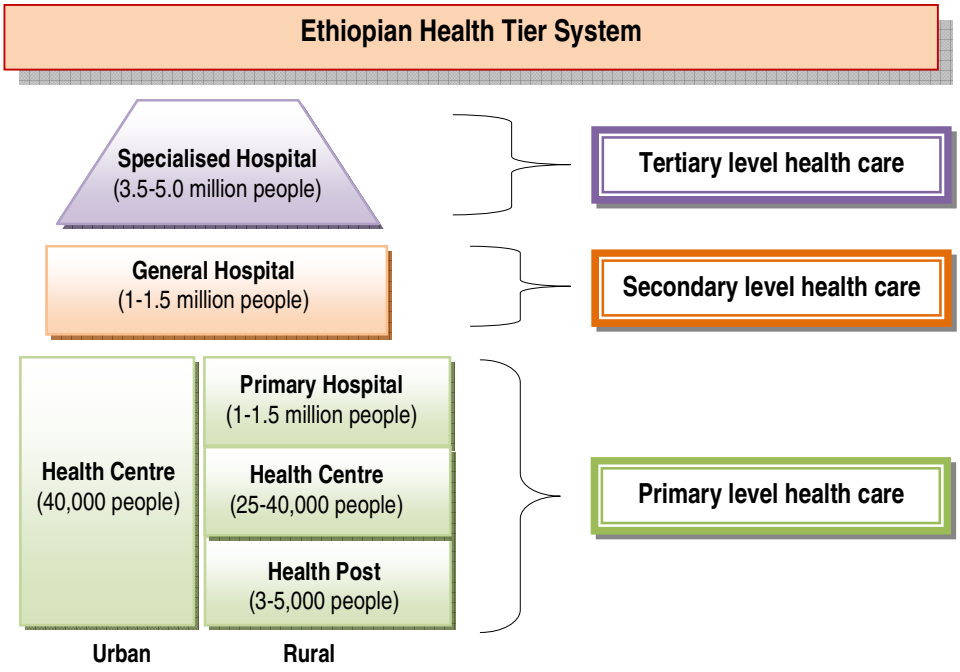
- A General Hospital provides inpatient and ambulatory services to an average of 1,000,000 people. It is staffed by an average of 234 professionals. It serves as a referral centre for primary hospitals. It has an inpatient capacity of XX beds and serves as a training centre for health

officers, nurses and emergency surgeons, as well as other categories of health workers.

c) The **tertiary care level** is comprised of Specialised Hospitals.

- A specialised hospital serves an average of five million people. It is staffed by an average of 440 professionals. It serves as a referral general hospitals and has an inpatient capacity of XX beds.

Figure 16. Ethiopian Health Tier System



5.4 Health planning

The Ethiopian health planning is composed of two planning cycles. The first and most significant reference planning cycle is the five year strategic planning called the HSDP. It serves as a guiding blueprint on which all other plans are developed, e.g., Regional Health Plans, etc. The second is the annual planning cycle that translates the five year HSDP into the annual Plan of Work with details of achievable targets, strategies and interventions under the different levels of the health care system.

In this respect, the commitment of the GoE to strengthen the implementation of "one-plan" in the health sector will continue throughout the HSDP-IV period.

The following are the principles underpinning the planning process, which apply to all stakeholders operating in the health sector at all levels.

Government ownership and leadership of all health planning processes: This means that the FMoH, RHBs, ZHDs, WorHOs at all levels of the health system own the process, and have the responsibility to organise and lead the planning sessions and other processes.

Consultation with all stakeholders: All stakeholders in the overall health system, including governmental, health development partners (DPs) NGOs, CSOs, private sector, etc., will take part in the planning process in a spirit of partnership and will have roles to play and responsibilities to assume.

Linkage to resource mapping from all stakeholders at that particular levels of the health system: All stakeholders (government, donors, NGOs, etc.) will avail their expected resource commitments to the health sector every three years and confirm the same every year. The resources need to be disaggregated by thematic and geographic areas to enhance evidence-based planning and decision-making at all levels of the health system.

Approval of the plan and budget by the relevant local government authority through the formal political process: A comprehensive health plan will be presented to the council/parliament of the local government to ensure government ownership, provide a clear picture of activities and resources in the health sector as well as to improve evidence-based government resource allocation at all levels of the health system.

Maintenance of vertical (federal → regional → zonal → woreda) and horizontal linkage: all levels of the health system will ensure that plans for their level (including the activities of all stakeholders operating at that particular level) will address national priorities while also considering local priorities. The targets set at a particular level of the health system will also be consistent with a cumulative average of the targets set by the lower levels reporting to that particular level of the health system. It is also important that the activities of all stakeholders operating at a particular health system level are incorporated into the health plan of that level of the system.

Alignment of annual plans to strategic plans (in terms of priority and time) at all levels of the health system: annual plans represent the detailed operationalisation of the five year strategic plan. It is therefore very important to make sure that annual plans reflect the priorities as well as the stipulated targets in sufficient details within the specified time frame.

Both strategic and annual planning are the results and consultations of top down and bottom up processes. The top down process ensures alignment of national priorities and targets with that of the regions and Woredas. It also helps to create consistency between the health sector plans and PASDEP and MDGs. The bottom up process ensures that the priorities and targets of regions and districts take local capacity into account. The details of planning process including the calendar of events, the role of stakeholders can be found in the Annex 5.

It is important to note that annual plans are developed in two stages: the core plan and comprehensive plan. The core plan is about achieving national targets whilst the comprehensive plan is the core plan plus activities that are related to local health priorities. The Core Plans are the result of district level planning, which is then compiled at the regional level and eventually consolidated to produce the Sectoral National Annual Health Plan by the FMoH. This document is presented to the Annual Review Meeting (ARM) of the health sector each year.

The comprehensive annual plan constitutes the full core plan together with locally specific health issues. This is prepared at all levels, from facility to federal.

Comprehensive annual plans have the following features:

- Scope: which will reflect all activities and budgets, including those implemented by public sector, donor agencies, NGOs and communities;
- Resource mapping and financing: which provides an estimate of the total amount of resources available from all sources: government, specific donors, internally generated revenue, NGOs, etc;
- Implementation schedule: a list of major activities, a quarterly/monthly implementation schedule and the responsible body for the implementation of each activity; and
- Monitoring framework: an established system for assessing progress during implementation. This includes key performance indicators, baseline data, annual targets, information sources and data collection mechanisms as well as reporting and feedback mechanisms.

5.5 Financial management and auditing

Financial management encompasses the management of the finances of a business/organisation to achieve financial objectives. It refers to the various procedures and processes governing the flow of funds, through the stages of authorisation, disbursement, payments, reporting, accounting and auditing. The function of auditing in a government body or in any organisation is an essential element of public control and accountability. In a good auditing system, the management and financial controllers provide a fair, objective and reliable assessment of the organisation's performance, thereby helping maintain or restore credibility.

The financial management of HSDP-IV will be aligned with existing government procedures. The FGoE has set uncompromising standards of financial management for the funds that are part of the block grant/direct budget support. Various studies have confirmed that the basic systems are already in place to ensure adequate control of public funds. In Ethiopia, the accounting system is sufficiently developed to track different sources of funding all the way to final uses. The challenge remains on how to routinely monitor and report funding by HSDP component. It is envisaged that this will be facilitated through the harmonisation of budget coding outlined in the Financing Plan.

The Ethiopian budget system separates recurrent from capital expenditure as a strategic principle to distinguish the on-going operational costs of government services from the discrete investment expenditures that add up to government assets. This distinction is blurred, however, due to the long tradition of including external support within budget category 5. At present, the capital budget is composed of two different components: i) FGoE capital resources from domestic revenues; and ii) loans and grants/loans coming from external sources, both bilateral and multilateral. Traditionally, all external funding is recorded under the capital budget, regardless of the nature of expenditure being supported by such funds. In theory, the FGoE accounting system enables the collation of financial data in sufficient detail to at least report on an *ex post* basis. In HSDP-

IV, a continued work will be undertaken to enhance financial management reporting.

Although regional states have a substantial degree of autonomy, the Federal Government takes the lead in setting financial management standards. The regions are also required to report their expenditure in the formats and at the times specified by MoFED. MoFED has overall responsibility for the management of public funds, including federal subsidies to the regional states. The Federal Office of the Auditor General (FOAG) is the supreme auditing institution of Ethiopia, with responsibility for auditing all federal funds, including subventions to the regional states. It is directly accountable to the Council of the Peoples Representatives.

In practice, all federal and regional offices are required to submit monthly reports on expenditure, and these serve as conditions for further disbursement. Quarterly and annual financial reports are also collated by different bodies as part of a progress report in the implementation of projects. To the maximum extent possible, these regular financial reports are used as the basis for financial monitoring of the HSDP. However, it is agreed that the standard systems may be supplemented, if necessary, with special reporting arrangements to ensure adequate monitoring.

The Integrated Financial Management Information System (IFMIS), which is contracted out, is expected to bring remarkable improvements to the financial management, quality and speed of reporting for all stakeholders from all levels of the health system. In fact, IFMIS is a system that will facilitate the linkage of financial expenditure (performance) with physical implementation performance, thereby enhancing the efficiency and effectiveness of health programme management at all levels. The system, which will ultimately be automated as a web-based programme, will provide access to information on physical performance and financial expenditure status of health programmes up to the level of districts.

Constitutionally, regional auditors-general are responsible for auditing regional expenditures. The regions, however, may delegate responsibilities to the federal government. The federal government also has the right to instigate audits for all federally derived funds, which include all external aids and loans. Internal audit mechanisms continuously monitor financial management and proper adherence to financial and procedural regulations. The FOAG remains the independent auditor for the sector. So far, one of the main challenges encountered is a delay in auditing, caused by a variety of reasons. This issue will be taken up with relevant authorities and addressed during the HSDP-IV implementation period.

Meanwhile, in accordance with the desire to move increasingly toward pooled funding and budget support, various harmonised procedures, such as the MDG Performance Fund, have been put in place to minimise additional transaction costs for Government.

5.6 Procurement and logistics management

The aim of a procurement procedure is to acquire goods and services in the most economic, efficient and transparent possible manner. The health sector

collaborated with DPs to finalise the Logistic Master Plan in 2006. The Master Plan outlines an integrated and efficient procurement system that reduces fragmentation of procurement management activities at national and sub-national levels. As a result of the master plan, PHARMID was changed to PFSA, a semi-autonomous institution responsible for procuring and distributing pharmaceuticals, equipment and medical supplies to the public health institutions. Although the objectives, targets and initiatives of the pharmaceutical logistic management system have been indicated in topics presented earlier, it is worth elaborating the core activities of the Agency.

These are:

Selection and quantification: PFSA procures and distributes dugs and pharmaceuticals on the basis of the approved Essential Pharmaceuticals List (EHCL). This list is developed and updated utilising the Ethiopian Essential Health Services Package and the Standard Treatment Guidelines, in order to match products to the primary health care programme, and focus resources on essential and vital products. A Logistics Management Information System (LMIS) will be finalised, pilot tested and implemented in the public health sector. The data from this LMIS will be the basis for forecasting / quantifying results for the essential pharmaceuticals of the public sector system.

Financing: the Revolving Drug Fund (RDF) capacity will be enhanced to ensure adequate supply of the essential pharmaceuticals. It will be capitalised by Government/MOH and donor funds. The RDF covers operational expenses, capital replacement, and expansion; meanwhile, it also protects against inflation and losses due to a number of factors including expiration of drugs. Health facilities will retain user fee revenues and use them to procure pharmaceuticals. In the long run, the purchaser (health insurance agency) will be expected to be the provider of funds to health institutions to procure health commodities from the nearest hub.

Procurement: PFSA undertakes bulk procurement based on a medium term rolling procurement plan that will be prepared in collaboration with programme departments, Regions/Cities, and DPs. Procurement will be made according to the procurement legislation and procedures, which are expected to include a domestic preference allowance for national manufacturers. All suppliers must be approved by the Health Regulatory Agency (DACA) and products must be registered or have a specific exemption. Participation of local manufacturers will be stimulated.

In addition to pharmaceuticals, the PFSA will also be in charge of procuring and distributing equipment, medical supplies, contraceptives, vaccines, other PF commodities, etc. financed by the MDG Performance Fund and based on an agreed administrative/management fee. Meanwhile, FMoH will have the flexibility of selectively using DPs that have comparative advantages over PFSA to procure and distribute pharmaceuticals, as deemed necessary.

Procurement planning is very important for the timely implementation of programmes and activities. The starting point in any procurement is the preparation of a bid document. The content, arrangements and volume may vary according to the size and type (equipment, civil works, consultancy, ICB NCB, etc) of procurement to be done, but it should be clear and comprehensive and ensure that the goods/services are described with sufficient details to form

the basis for competitive bidding. In a normal situation, the bidding documents would have been prepared, notices given in the appropriate public media with sufficient instructions, and bid documents ready for sale from the day the notices are printed or announced in the media.

Bid opening and evaluation procedures will comply with international and national standards. Major elements in the bidding process are formation of a tender committee, opening of bids in the presence of bidders, staged and detailed valuation of bids, and determination of the three successful winners of the bid. Once the evaluation process is completed and winners are identified, the successful top winning bidder is promptly notified in writing and requested to sign a contract, while unsuccessful bidders will be notified as soon as possible.

Distribution (storage and transport): distribution will utilise a network of 16 hubs/ warehouses, with locations based on population density and operational feasibility. Regular orders from health institutions will be packaged and delivered by the hubs. The average transport costs will be included in the commodity sales price.

Inventory management: a robust inventory control system will be established in the public sector health facilities. The hubs and central warehouses will have automated inventory control tools to quickly process orders, manage stock according to best practices, provide security, and limit wastage and expiry. These warehouses will be physically organised following a standard model so that inventory management practices are enhanced (at minimum, through separate receiving, quarantine, storage, and dispatch areas).

Integrated Pharmaceuticals Fund and Supply Management Information System (IPFSMIS): after finalisation and roll-out, the IPFSMIS will enhance information gathering and use for logistics-related decision making at all levels of the PFSA and health facilities. The IPFSMIS network will connect the central PFSA warehouse with major and secondary hubs and then with health facilities. Two-way information flow will help the PFSA to get data on stock availability, consumption and new requirements from all health facilities, and thereby strengthen needs-based procurement and demand-driven distribution.

The LMIS will allow the agency to communicate with its branches to gather data for forecasting, distribution, fleet management, Revolving Drug Fund, human resources and other general issues. There will be interfacing with other programmes currently running at PFSA head office, branches and health facility level and data can be gathered either on a paper-based or automated system. The existing software programmes at different levels, e.g., for commodity tracking, inventory management, warehouse stock location, bar code system, dispensing tools, and other appropriate systems will be interfaced to avoid duplication.

The Integrated Pharmaceuticals Fund and Supply Management Information System (IPFSMIS) implementation project has identified the operational requirements at all level and its implementation will help the Agency to capture data from source at hub level and to compile for decision making and interventions.

5.7 Monitoring and evaluation

Monitoring and evaluation (M&E) is an action-oriented and pre-planned management tool that operates on adequate, relevant, reliable and timely data that is collected, compiled and analysed into information on programme/project objectives, targets and activities. The objectives of M&E are to improve the management and optimum use of resources for the sector programmes and to make timely decisions to resolve constraints and/or problems of implementation.

The key elements for a successful programme management and implementation are the designing of a programme built on a hierarchy of objectives, targets, activities and measurable indicators. Agreed indicators are the most important management tool for monitoring, review and evaluation purposes. Indicators are always directly linked to the objective setting of a programme.

The monitoring plan for HSDP-IV will draw significant lessons from the previous experiences, which suffered from insufficient and poor quality of information for planning, monitoring and evaluation purposes. In order to improve M&E, the monitoring and evaluation system is designed as part of the Policy, Planning and M&E core Process and will be implemented at all levels of the health system. A single results-based framework with a small number of indicators to make the monitoring and evaluation process effective and efficient will be agreed for the national level M&E system.

Routine administrative report (HMIS)

While patient cards and registers are designed to capture all patient-related data, reports will be based on the 107 sector-wide indicators that have been jointly agreed and endorsed by the Government and DPs. Commensurate resources will be allocated to put in place the human resources, tools and equipment needed for the proper documentation, compilation, analysis, use and timely reporting of routine facility data as per the standard. All stakeholders operating in the health sector should support and use the HMIS for programme monitoring. The indicators are shown in Annex 8 of this document.

Each health facility and administrative level will put in place the necessary institutional mechanisms (HMIS technician, or team) as per the standard indicated in the new design of HMIS. Data from client-patient records will be collected from health facilities. The data will be aggregated and analysed to compare performance versus plans for the facility's own consumption. Facilities will supply data to the relevant administrative levels through the routine reporting mechanism as per the HMIS reporting calendar. Validation of the data is done through performance monitoring, ISS, surveys and regular inspections.

Performance monitoring and quality improvement

Performance monitoring is the continuous tracking of priority information on conducted activities and the indicators of success in order to identify achievement gaps and lessons learnt as inputs to subsequent planning and implementation of corrective measures. The Quality Improvement Process is a performance monitoring activity in which health facilities (hospitals, health centres and health posts) use locally available data generated during health service provision for a continuous process of measurement, reflection and

improvement. The Performance Monitoring and Quality Improvement Standard Operating Procedure has been endorsed as part of the PPME Core Process. It clearly outlines the fundamental building blocks of performance monitoring and quality improvement, i.e., Quality Planning, Quality Performance Measurement, Quality Improvement Activities, Staff Involvement, Evaluation of Quality Programme, and Clinical Information System.

Evaluation/operational research

Evaluation: Evaluation is a well thought out and systematic approach designed to assess the value or worth of a specific programme, intervention or project or any of its components, and where possible, to link particular outputs or outcomes to particular interventions. Programme evaluation requires a systematic process of data collection, analysis and interpretation about interventions and their effects linked with a guiding set of evaluation questions. It fundamentally consists of making a value judgment regarding an intervention, a service or any one of their components, with the purpose of helping in evidence-based decision making. In such evaluation processes, some issues may require further detailed investigation to get a clear picture of the "whys" of programme performances or achievements. Programme evaluations usually focus on process issues, e.g., examining the appropriate execution of programme components, or on outcome issues, e.g., examining the worth of implementing an intervention or any of its components.

Operational research: It is technically impossible to obtain all health and health-related data needed for adequate decision making exclusively through the HMIS. Hence, regular demand side and supply side surveys will be conducted to capture selected sets of data and triangulate various sources for improving the accuracy of information about the outcomes and impacts of health interventions. The major principles that underpin this activity are: 1) the data sets need to be mutually agreed between the Government and DPs; 2) the surveys should be conducted by/under the leadership of Government in defined and logical frequency; 3) timing of the surveys should align with the Government calendar; and 4) DPs should provide adequate resources (financial and technical).

Assessments could also be conducted to measure the performance of a certain health system issue or to verify if commitments or intended results in relation to specific agreements have been realised. A case in point is regular assessment of the adherence of stakeholders to the principles of one-plan, one-budget and one-report.

Manuals and tools produced for evaluation/operational research will be used during the implementation of HSDP-IV.

Integrated Supportive Supervision (ISS) and inspection

Integrated Supportive Supervision is a process of guiding, helping, training, and encouraging staff to improve their performance in the provision of high-quality health services. It emphasises the use of integrated tools for all priority programmes and empowering of health service providers at all levels. A guideline and set of tools for ISS have been finalised as part of the BPR; these will be put to use during the implementation of HSDP-IV.

Monitoring and evaluation related to performance-based financing and other high priority and emergency situations will need a mechanism verification of routine reports and accountability. This will be addressed by an inspection process, which will be established at all levels in the health sector. Unlike ISS which focuses on on-site support provision, inspection is primarily to check activities and make institutions accountable for their level of compliance to agreed levels of performance. The necessary manuals and tools for conducting inspection have been finalised as part of PPME BPR; these will be fully implemented during HSDP-IV.

5.8 Key indicators for results framework at national level

Indicators measure progress towards agreed objectives and targets. Indicators with targets for each strategic objective are listed in Chapter 3, section 3.6 and a comprehensive list of indicators to monitor all programmatic areas in HSDP-IV is included in Annex 8. The following is a selected list of indicators that should be routinely available on an annual basis (or more frequently). Listing the indicators below does not imply that other indicators will not be made available. In selecting these indicators, reference is made to HMIS indicators, various programmatic indicators, and the result framework agreed upon as part of IHP+. Details about methods, frequency and responsible bodies for collecting these indicators are found in Annex 8.

MNCH

1. Contraceptive acceptance rate
2. Focused ANC 1+
3. Proportion of deliveries attended by skilled health attendants
4. Proportion of deliveries attended by HEW
5. Post-natal care coverage
6. Proportion of pregnant women who receive ANC at PMTCT site who received testing for HIV
7. Proportion of deliveries of HIV+ women that receive full course of ARV prophylaxis
8. Immunisation coverage: Pentavalent 3, Rotavirus, Pneumococcal, measles and fully immunised
9. Protection at birth against neonatal tetanus
10. Health facility with services like PMTCT, BEmONC, CEmONC, IMNCI, Youth friendly services

Disease prevention and control

11. PIHCT testing rate
12. VCT testing rate
13. Cumulative number of PLHIV ever enrolled in HIV care
14. Cumulative number of PLHIV ever started on ART
15. Proportion of patients who are currently on ART
16. TB case detection rate
17. TB cure rate
18. TB treatment success rate
19. Proportion households in malarious areas possess at least one LLITN
20. Proportion of households in IRS targeted areas that were sprayed in the last twelve months

Nutrition

21. Children 6-59 months given vitamin A every 6 months
22. Children 2-5 years de-wormed every 6 months

Hygiene and environmental health

23. Proportion of households using household water treatment and safe storage practice
24. Proportion of households utilising latrine

Health infrastructure

25. Number of new health facilities constructed (by type)
26. Number of health facilities upgraded (by type)
27. Proportion of health facilities with latrine and with functioning water supply
28. Proportion of health facilities with water supply
29. Number of hospitals implementing EMR
30. Number of hospitals implementing tele-medicine

Human resources

31. Health staff to population ratio by category
32. Proportion of institutions staffed as per standards

Pharmaceutical supply and services

33. Average stock-out duration essential drug availability
34. Percentage of stock wasted due to expiry

Community ownership

35. Proportion of model households graduated
36. Proportion of health facilities with boards where communities are represented

Quality health services

37. Inpatient mortality rate
38. Customer satisfaction index
39. Outpatient (OPD) attendance per capita
40. Bed Occupancy Rate
41. Average length of stay (ALOS)

Public health emergency preparedness and response

42. Proportion of epidemics averted (AWD, malaria and meningitis)
43. Proportion of epidemics controlled with zero mortality

Evidence-based decision making

44. Proportion of partners implementing "one-plan"

45. Proportion of partners providing funds as DBS or MDG PF
46. Facilities implementing new HMIS/M&E system (by type of facility)
47. Completeness and timely submission of routine health and administrative reports
48. Review meetings conducted by level

Resource mobilisation and utilisation

49. Percentage of government budget allocated for health
50. Facilities retaining and utilising revenue (by type)
51. The ratio of health budget utilisation to allocation

5.9 Risk mitigation

One of the major risks that the HSDP-IV may face is insufficiency of financial resources. As indicated in the costing chapter, there is US$ 4.34 billion gap to achieve the MDGs. To address this risk, the strategic objective on resource mobilisation and utilisation clearly states how effectively and efficiently resources will be mobilised and utilised. As such, there will be proactive resource mobilisation from external sources using the different mechanisms stated in the resource mobilisation BPR. Internally, developing health insurance is expected to increase financing to the health sector.

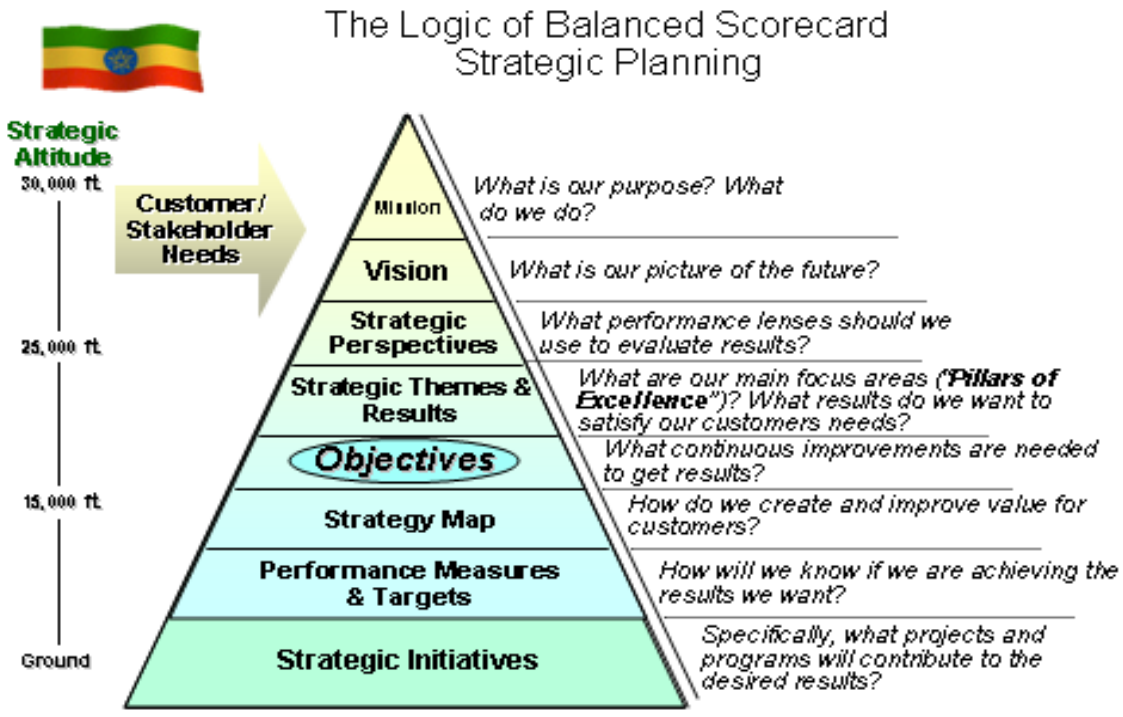
Improving community ownership and strengthening public-private partnership are additional mechanisms that will improve health care financing, as well as improving utilisation of quality health care services. More details of the risks anticipated for the supply and demand side are identified and solutions to tackle them are well addressed in chapter three (SWOT and stakeholder analysis, strategic objectives and strategic initiatives).

Annex section

Annex 1: How to Build a Balanced Scorecard – Nine Steps to Success[xlii]

The Ethiopian Government, through the Civil Service Reform Programme, requires all public bodies in Ethiopia to plan using the Balanced Scorecard (BSC) approach. All bodies (Facilities, Woreda, Zonal and Regional Health Offices, FMOH) will have an aligned strategic plan. The visions, goals and objectives jointly formulated through this process, and cascaded down, but adapted to the realities of regions, zones, woredas and health facilities constitute the basis of the linkage between the respective plans.

The balanced scorecard is a strategic planning and management system designed to help everyone in an organization understand and work towards a shared vision and strategy. A completed scorecard system aligns the organization's shared vision with its business strategy, desired employee behaviors, and day-to-day operations. Strategic performance measures are used to better inform decision making and show progress toward desired results. The organization can then focus on the most important things that are needed to achieve its vision and satisfy customers and stakeholders, and satisfy its employees. Other benefits include the identification of more efficient processes focused on stakeholder needs, improved initiative prioritization, improved internal and external communications and improved linkage between budgeting and cost control processes and strategy.

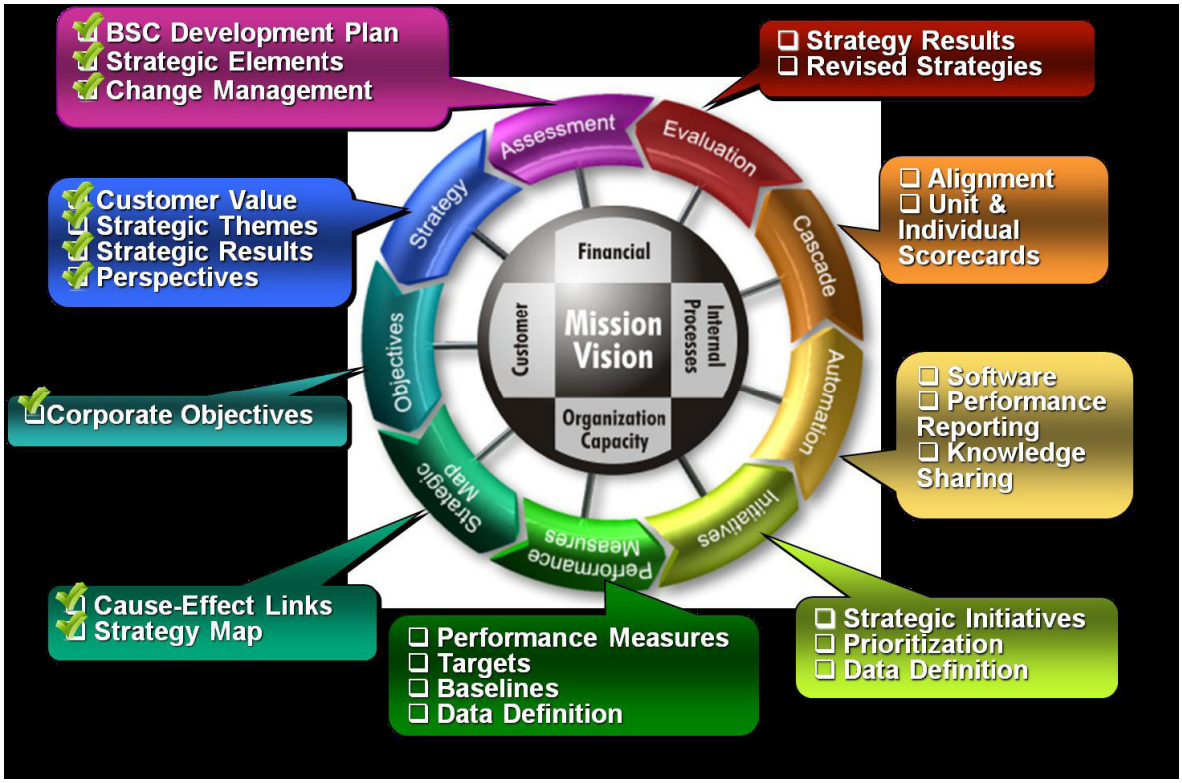


The components of the management system are shown in Figure 1 (above). Starting at high —strategic altitude, Mission (purpose of the organization), Vision, and Core Values are translated into desired Strategic Results. The organization's —Pillars of Excellence, or Strategic Themes, are selected to focus effort on the strategies that will lead to success. Strategic Objectives are the —DNA of strategy and are used to decompose strategy into actionable components that can be monitored using Performance Measures.

Measures allow the organization to track results against targets, and to celebrate success and identify potential problems early. Finally, Strategic Initiatives translate strategy into a set of high-priority projects that need to be implemented to ensure the success of strategy. Engaged leadership and interactive, two-way communication are the cornerstones of a successful management system. Once the strategic thinking and necessary actions are determined, annual program plans, projects and service level agreements can be developed and translated into budget requests.

The nine steps of the framework are: Step one of the scorecard building process starts with an organization assessment of *mission* (organizations purpose) and *vision*, *organization challenges* (pains) and *enablers*, and *organization values*. In Step Two, strategies, including *strategic themes*, *strategic results*, and *perspectives*, are developed by the FMOH-RHB joint steering committee and the executive committee to focus attention on customer needs and their value proposition. In Step Three, strategies are decomposed into *strategic objectives* that are linked in *cause-effect relationships* to produce a strategy map (Step Four) for each strategic theme. As part of Step Four, theme strategy maps are then merged into an overall organizational strategy map that shows how the organization creates *value* for its customers and stakeholders. In Step Five, *performance measures* are developed for strategic objectives, and in Step Six, *strategic initiatives* are developed that support the strategic objectives. To build accountability throughout the organization, performance measures and strategic initiatives are assigned to owners and documented in data definition tables.

At the conclusion of Step Six, the sector-wide balanced scorecard is built. Steps Seven through Nine of the process involve the *implementation* of the scorecard throughout the organization. These steps are interpreted in to action through operational plan. In Step Seven, the implementation process begins by applying performance management software to get the right performance information to the right people at the right time to be useful and used. This automation of the scorecard adds structure and discipline to the system; helps transform disparate corporate data into information and knowledge; and helps communicate performance information. During Step Eight, directorate scorecards are developed to support the objectives on the organization scorecard, and then team and individual scorecards are developed. This process of translating the corporate scorecard into divisional units is referred to as *cascading*. Cascading translates high-level strategy into consistent lower-level objectives, measures, and operational details and is the key to organization alignment around strategy. *Performance measures* are developed for all objectives at all organization levels. As the scorecard management system is cascaded down through the organization, objectives become more operational and tactical, as do the performance measures. Accountability follows the objectives and measures, as ownership is defined at each level. An emphasis on results and the strategies needed to produce results is communicated throughout the organization. In Step Nine, an Evaluation of the completed scorecard is done. Evaluation addresses questions related to whether or not our strategies are working, whether we are measuring the right things or not or if our environment has changed.


BSC Development Plan
Strategic Elements
Change Management
Strategy Results
Revised Strategies
Customer Value
Strategic Themes
Strategic Results
Perspectives
Alignment
Unit & Individual Scorecards
Corporate Objectives
Software
Performance Reporting
Knowledge Sharing
Cause-Effect Links
Strategy Map
Performance Measures
Targets
Baselines
Data Definition
Strategic Initiatives
Prioritization
Data Definition
Assessment
Evaluation
Cascade
Automation
Initiatives
Performance Measures
Strategic Map
Objectives
Strategy
Financial
Internal Processes
Organization Capacity
Customer
Mission Vision

Annex 2: Challenges & gaps of HSDP III & linkages to HSDP-IV

Areas	Challenges	Recommendations	Strategies
Maternal, Neonatal, Child & Adolescent Health	Lack of 24/7 services in most health facilities, especially in HCs & unavailability of HEWs on weekend/night Low quality of service provision (Long waiting time, poor counselling service, lack of privacy) Inadequate organisation of hospital services to effectively handle emergencies. Shortage of adequate & safe blood Poor delivery room environment & poor attitude of health workers Service inaccessibility & transportation problem Absence of separate neonatal units in most hospitals Weak referral system, service integration & supportive supervision. Shortage, high turnover, & insufficient skill of midwives & delivery attendants due to poor quality of training Slow procurement & distribution of medicines & supplies leading to shortage at service delivery point & Poor stock management Lack of FP method mix High unmet need for FP Limited availability of adolescent & youth friendly reproductive health services Lack of awareness & misconception on RH & CH Services Religious & cultural problems & traditional practices/beliefs Low health seeking behaviour Insufficient resources	Provide round the clock delivery services in HCs. Improve quality of service provision Implement Emergency Triage Assessment & Treatment (ETAT). Provide Comprehensive Emergency Obstetric Care (CEOC) at all hospitals & selected HCs. Accelerate completion & functionality of new blood banks. Ensure provision skilled delivery services in all HCs Establish separate neonatal units in hospitals. Enhance referral system Improve contraceptive logistics information system Improve availability of long acting contraceptives Scale up quality training for midwives & improve skills of HEWs by strengthening clean & safe delivery trainings Ensure motivation scheme & reward for best performances Strengthen supply chain management system, effective LMIS & procurement Expand & Integrate FP service with other services Empower women & encourage male involvement in FP Provide adolescent & youth friendly RH services. Increase awareness through social mobilisation & community conversation Rapid rollout of pneumonia treatment & other common childhood illnesses through HEP. Ensure provision IMNCI services in all HCs Resource mobilisation (advocate more resource flow towards maternal health)	Strengthen facility based maternal, newborn, child & adolescent health services. Implement BPR in all health facilities. Introduce training of emergency medicine by 2010 to improve emergency medical service Strengthen Basic & Comprehensive EmONC Improve referral system, including paediatric referrals. Improve contraceptive logistics information system Improve availability of long acting contraceptives Strengthen multispectral collaboration on newborn, child & adolescent health programmes. Scale up midwife training Capacity building on programme management for maternal & child health services. Increase net financial & non-financial incentives for rare skill professionals to be assigned in rural areas Strengthen supply chain management (including social marketing) Strengthen logistic management information systems. Scale up FP programme with focus on long-term options Stronger RH-HIV integration, (e.g., FP-HIV prevention links through common messages & dual protection) Enhance Youth Friendly services. Launch Social Mobilisation Strengthen IMNCI service at facility & community levels. Strengthen routine immunisation. Strengthen proactive resource mobilisation Enhance coordination & harmonised approach among all partners.
Disease Prevention & Control	Ineffective use of HEP for prevention & control of TB leading to low community awareness & demand for service[xiii]. Weak diagnostic laboratory services. Poor follow up on HCs to start DOTS service Inaccessibility of AFB diagnostic services	Ensure effective use of HEP for prevention & control of major communicable diseases. Expansion of DOTS service to all HPs / community DOTS & to all HCs Enhance laboratory capacity at all levels as per the BPR design & expand AFB diagnostic services to all HCs &	Expand & enhance DOTS via maximum use of HEP for case detection, contact tracing & treatment follow up. Upgrade laboratory networks, & implement Practical Approach to Lung Health (PAL) Ensure early case detection, & diagnosis through quality-assured bacteriology

Areas	Challenges	Recommendations	Strategies
	Poor diagnostic skill & (high proportion of smear negative & EPTB) Poor referral linkages between HP & HCs Inadequate community participation on environmental management of vector control; low IRS coverage & resistance to DDT. Low usage of ITNs by households in some areas. Recurrent malaria epidemics & outbreaks diverting attentions from prevention control program. Shortage of HIV test kits & supplies & poor stock management Inadequate management & support to PMTCT leading to low coverage. Low performance of PMTCT/MNCH /SRH services in urban & semi urban health posts. Weak integration of ANC with PMTCT Shortage of OI drugs Low performance of STI services & TB/HIV collaboration Slow implementation of programmes to tackle NCDs	hospitals Intensify referral linkage & feedback Introduce PICT for TB (active case finding strategies) to all OPD visitors, PLHIV, household visits by HEWs, Expand MDR –TB management to all tertiary level hospitals. Enhance emphasis on environmental management specifically strengthen IRS Increase emphasis on IEC/BCC to translate high levels of net ownership into utilisation. Rapidly implement Public Health Emergency Management Core Process at all levels. Strengthen effective LMIS & procurement & Ensure availability of HIV test kit & supplies Enhance integration of HCT & PMTCT in RH services as per BPR design. Improve availability of OI/STI drugs Improve TB HIV collaboration Expand PMTCT services at all health facilities level Increase awareness through community conversation & mass media	Improve information systems, including notification & referral routines. Scale-up collaborative TB/HIV activities. Scale-up prevention & management of multidrug-resistant TB (MDR-TB). Community empowerment & mobilisation Selective vector control (ITN, IRS, Environmental management) Early diagnosis & treatment of cases of malaria. Strengthen Disease Surveillance by implementing PHEM Core Process at all levels. Strengthen supply chain management Strengthen logistic management information systems Better access & quality of chronic HIV/AIDS care & treatment (enhance service integration, laboratory, referral, availability of essential commodities, public private partnership & address human resource issue) Enhance PMTCT service through integration with MNCH & linkage with HEP. Expansion of routine HIV testing during ANC Strengthen community mobilisation & male involvement Establish programme management & coordination structure for control of NCDs Advocacy, Social Mobilisation & Sensitisation for NCDs programme implementation Develop & sustain partnership & collaboration for integrated NCDs control
Health Extension Program	Inadequate skill based trainings of HEWs, particularly on conducting deliveries. Attrition & absence of HEWs from their catchment areas; Slow career development for HEWs; Lack of community ownership Low performance in completion of model household training due to poor follow-up Low WASH facilities at HP level & inadequate awareness.	Enhance sustained commitment of leadership to programme implementation. Enhance coordinated Integrated Refresher Training (IRT). Assess & improve effectiveness of ISS model between WoHO, HCs, supervisors & HEWs; Finalise & implement carrier structure for HEWs; Enhance capacity of public & private sectors on WASH. Improve WASH knowledge & facilities at HP level Link health facilities with WASH to improve water supply	Strengthen Integrated Refresher Training for HEWs Strengthen supportive supervision & motivation Develop curriculum & implementation manual for career development of HEWs Strengthen Health Extension Programmes Enhance community ownership via Model family graduation Strengthen water supply safety measures Community Led Total Sanitation & Hygiene Strengthen Coordination & collaboration of sectors
	Poor quality of health services.	Implement PMQ standard & Health & Health Related	Implement BPR in all health facilities.

Areas	Challenges	Recommendations	Strategies
Other Health System Issues	Low fiscal space & poor staff absorption capacity of health system Persistent critical funding gap for health systems. Poor predictability of donor funds. Inadequate capacity for fund liquidation, reporting & auditing of funds in the sector. Slow progress in harmonising donor procedures with those of Government. Uncoordinated & misguided research efforts among various stakeholders Poor dissemination & translation to action of research results Slow implementation of HMIS leading to incomplete & inconsistent reporting. Delay in construction of HPs & HCs;	Regulatory Core Process. Improve budget allocation to health sector specifically to health systems Improve implementation of HCF reforms & FRM Core Process. Improve accountability & strengthen financial management system by design & implementing IFMIS. Continues monitoring of IHP+ Compact. Effective research coordination, prioritisation, dissemination & use Enhance implementation of HMIS/ M&E system. Accelerate construction of HPs & HCs.	Strengthen regulatory service to both public & private sector institutions. Strengthen inspection & licensing Implement performance review as part of M&E. Evidence-based planning & budget allocation. Scale up health care financing reform Strengthen proactive resource hunting. Introduce social & community health insurance. Introduce IFMIS Strengthen financial management & accountability development program Advocate one plan, one budget & one reporting frame Strengthen regular adherence evaluation. Effective implementation of Research & Technology Transfer Core Process Scale up M&E/HMIS. Accelerated expansion of health facilities
Nutrition	Inadequate capacity of HEWs & community promoters Lack of sustained promotion on breast feeding Harmful traditions Lack of Infant formula code/ proclamation Lack of knowledge of mothers on exclusively breastfeeding	Strengthen & sustain promotion of community-based nutrition Increase awareness of health professionals & mothers on breast feeding Enact code of infant formula implementation	Expand Community-Based Nutrition (CBN). Sustain Enhanced Outreach Strategy (EOS) with Targeted Supplementary Food (TSF) & transition EOS into HEP. Health Facility Nutrition Services. Essential Nutrition Actions/Integrated Infant & Young Feeding counselling services.

Annex 3: Summary of bottleneck analysis conducted for HSDP-IV

(Linking key interventions and strategies to health system bottlenecks)

1a. Family-oriented community-based services

	Major system bottlenecks	Possible causes	Proposed operational strategies/solutions
Family Preventive/WASH Services	Availability & capacity of HEWs & community promoters Low utilisation of services	Inadequate capacity of HEWs & community promoters Inadequate number of HEWs & community promoters Attrition rate of HEW Lack of community ownership Inappropriate communication approaches Expectation of supplies for household level health interventions by the community ITN not suitable for housing & weather condition in some areas	Integrated Refresher Training for HEWs Supportive supervision Motivation (carrier, rewards) Enhances community ownership via Model family graduation Accountability matrix for community empowerment Inter-regional or local best practice experience sharing Strengthen health promotion Coordination & collaboration of sectors
Family neonatal care	Availability essential commodities Availability & capacity of HEWs Low utilisation of services	Inadequate supply of clean delivery kits Low water supply & poor sanitary system of health posts Inadequate HEWs trained on clean & safe delivery, insufficient skill Unavailability of HEWs on weekend/night Transportation problem Low quality of service provision Low health seeking behaviour	Strengthen supply chain management Local assemble of kits for safe & clean delivery Frequent & organised distribution of kits Link with WASH to improve water supply Avail alternative/ solar power Strengthen & expand clean & safe delivery trainings Strengthen health promotion Improve quality of service provision Enhance free service Increase communication/referral linkage
Infant & child feeding	Availability essential commodities Availability & capacity of HEWs Low utilisation of services	Inadequate capacity of HEWs & community promoters Lack of sustained promotion on breast feeding Inadequate professional attitude on advantage of early feeding Harmful traditions Lack of infant formula code/ proclamation Lack of knowledge of mothers on exclusively breastfeeding Occupational influence	Strengthen & sustain promotion of community-based nutrition Increase awareness of health professionals on breast feeding Enact code of infant formula implementation Baby-friendly hospital initiative Improve low cost technologies to reduce work load of care givers
Community Management Illnesses	Availability essential commodities Availability & capacity of HEWs Low utilisation of services	Inadequate supply & lack of continuous refilling of ORS & ORT Lack of knowledge of mothers on advantage of recommended home fluids	Strengthen supply chain management including social marketing Enhance availability & importance of ORT corners Strengthen promotion of on additional fluid & feeding for children with diarrhoea

1b. Population-oriented schedulable services

	Major system bottlenecks	Possible causes	Proposed operational strategies/solutions
Preventive care for adolescents & adults	Availability of supplies Availability/ capacity of Health workers Accessibility of services Low utilisation of services	Stock supply problem Lack of awareness & misconception Limited fiscal space for hiring staff Religious & cultural problems Weak service integration & linkage High unmet need for FP Lack of FP method mix Inadequate long acting contraceptives. Weak contraceptive LMIS Lack of decision making by women Lack of communication skills of health care providers	Increase contraceptive commodities supply Expand health facilities & provision of FP services Increase awareness through social mobilisation & community conversation Improve contraceptive logistics information system Improve availability of long acting contraceptives Integrate FP service with other services Women empowerment & encourage male involvement in FP
Preventive pregnancy care	Availability of supplies Availability/ capacity of Health workers Accessibility of services Low utilisation of services	Inadequate/inaccessible functional primary health facilities Poor quality of service (Long waiting time, poor counselling service, lack of privacy) Low perceived benefit by pregnant women	Expansion of health facilities services Increase awareness creation through social mobilisation Service integration Increase model families graduation Improve inter-personal communication & counselling skills
HIV/AIDS prevention & care	Availability of supplies Availability/ capacity of Health workers Accessibility of services Low utilisation of services	Shortage of HIV test kits & supplies Inaccessible service Weak integration of ANC with PMTCT Lack of awareness about the PMTCT service	Ensure availability of HIV test kit & supplies Pre-service training for health professionals Enhance inter-sectoral partnership with development partners Expand the PMTCT services at all health facilities level Service integration Improve quality of service to create demand Increase awareness through community conversation & mass media
Preventive infant & child care	Availability of supplies Availability/ capacity of Health workers Accessibility of services Low utilisation of services	Shortage of supplies such as vaccine & injection materials (Cold chain) Geographical location barriers - Transport problem Communication problem of care provider Low vaccine efficacy monitoring system Refrigerator maintenance & spare problem	Improve supplies Improve cold chain management & vaccine storage system, Provide training on cold chain management Increase awareness & social mobilisation activities Intensify regular Campaign to enhance service coverage

1c. Individual oriented clinical services

	Major system bottlenecks	Possible causes	Proposed operational strategies/solutions
Clinical primary level skilled maternal & neonatal care	Availability of supplies Availability/ capacity of Health workers Accessibility of services Low utilisation of services	Insufficient resources Poor stock management Prolonged procurement & distribution process Lack of Access to water supply Inadequate number of trained midwives High turnover of trained professionals/poor motivation Inaccessibility Poor quality of service Concomitant traditional practices/beliefs	Resource mobilisation (advocate more resource flow towards maternal health) Strengthen effective LMIS & procurement Continued quality midwifery training Ensure motivation skim Speed up HCs construction Ensure the provision skilled delivery services in all HCs Improve quality of service Intensify Advocacy Communication & Social Mobilisation (ACSM) Reward for best performances
Management of Illnesses at Primary Clinical Level	Availability of supplies Availability/ capacity of Health workers Accessibility of services Low utilisation of services	Insufficient resources &poor stock management Lack of Access to water supply Inadequate number of trained Health professionals on IMNCI High turnover of trained professionals/poor motivation Service inaccessibility Poor quality of service Poor attitude/health seeking behaviour of care takers	Resource mobilisation Strengthen effective LMIS & procurement Continued quality of training Ensure motivation skim Speed up HCs construction Ensure the provision IMNCI services in all HCs Improve quality of service Intensify Advocacy Communication & Social Mobilisation (ACSM) Reward for best performances
Clinical first referral illness management	Availability of supplies Availability/ capacity of Health workers Accessibility of services Low utilisation of services	Insufficient resources Poor stock management High turnover of trained professionals/poor motivation Service inaccessibility Poor attitude/health seeking behaviour of care takers Poor follow up on HCs to start DOTS service Poor Health seeking behaviour for early diagnosis Poor referral linkages between HP & HCs Passive case finding methods Inaccessibility of AFB diagnostic services Poor diagnostic skill & (high proportion of smear negative & EPTB) Poor adherence to case finding algorithms, Poor contact tracing Inadequate Drug Sensitivity Testing (DST) & second line treatment options	Resource mobilisation Strengthen effective LMIS & procurement Expand DOTS service to all HCs Expand the AFB diagnostic services to all HCs & hospitals Intensify referral linkage & feedback In-Place PICT for TB (active case finding strategies) to all OPD visitors, PLHIV, household visits by HEWs, - Build the diagnostic & case finding capacity of health professionals Improve tracing all contacts of known smear positive TB cases Expansion of DOTS service to all HPs / community DOTS Advocate to do the last microscopy & declare cure to all smear positive TB cases Build the capacity the drug quality testing capacity at country level Expand DST service & ensure diagnosis of all re-treatment/category II cases Expand MDR –TB management to all tertiary level hospitals

Annex 4: Projection of human resources requirement

HRH Category	2015	2020
Nurses	41,009	49,362
HEW	33,320	41,664
General Practitioner	10,846	14,792
Laboratory Technician	10,608	12,845
Midwife	**8,635**	**9,866**
Pharmacy Technician	8,704	9,839
HIT	7,607	8,849
Health Officer	6,345	8,293
Radiographer	1,954	2,796
Pharmacist	2,037	2,779
Dental Professional	1,145	2,385
Public Health Specialist	1,400	2,158
Environmental and occupational health worker	1,595	1,961
Dentist	633	1,770
IESO	996	1,611
Laboratory Technologist	1,133	1,567
Psychiatric Nurse	923	1,360
Biomedical Technician	874	1,256
Obstetrician	820	1,094
Surgeon	847	1,024
Hospital Manager	650	986
Paediatrician	719	940
Internist	730	910
Physiotherapy professional	550	746
Ophthalmologist	304	524
Orthopaedics	283	418
Radiologist	316	415
Psychiatrist	304	410
ENT Specialist	210	349
Anaesthesiologist	233	309
Clinical Pathologist	210	275
Dermatologist	202	273
Total	**146,142**	**183,826**

Ranked by required numbers to be reached by 2020

Annex 5: Planning and budgeting calendar

	Annual planning activities	Time-frame	Involved parties
A	Federal Ministry of Health		
1	Mapping of next year's resources at FMoH level	10 February	All departments of FMoH in consultation with MoFED & health partners
2	Develop a draft annual Core Plan & share it with RHBs	28 February	All departments of FMoH
3	Finalise Core Plan at FMoH-RHBs steering committee meeting	9 March	FMoH-RHBs Joint Steering Committee members
4	Workshop on FMoH capital & recurrent budget proposal to MoFED	10 March	All departments of FMoH
5	Finalisation of FMoH capital/recurrent plan & submit to MoFED	23rd March	All departments of FMoH
6	Set up, orient & deploy teams of Technical Assistance (TAs) to assist RHBs, ZHDs, & WorHOs in the preparation of core plans	13 to 18 March	PPD/ FMoH
7	Prepare a Sectoral National Annual Plan based on core plans of RHBs, FMoH activities & activities of all stakeholders obtained through a consultative process.	April 20	PPD/ FMoH, partners
8	Revise & finalise Sectoral National Annual Plan based on approved regional/Woreda annual core plans	June	PPD/ FMoH
B	Regional Health Bureaus		
1	Conduct consultation with stakeholders to identify available resources & discuss priorities & targets	15 February	RHBs in consultation with BOFED, FMoH & health partners in respective regions
2	Based on agreed Core Plan & resources available, regions will prepare a draft Regional Core Plan indicating priorities, targets & key activities & share it with Woredas.	March 18	
3	Guide & assist WorHOs to complete planning information format produced by FMoH	March 14-26	RHBs & Technical Assistants
4	Organise & guide Regional Planning Workshops to discuss & refine Woreda annual health plans	March 27-April 13	RHBs /ZHDs
5	Consolidate Regional Core Plan & submit to FMoH/PPD.	April 18	RHBs
6	Revise & finalise regional annual core plan based on approved Woreda, regional & zonal budgets & communicate to FMoH/PPD	June	RHBs
C	Zonal Health Departments		
1	Participate in Regional planning workshop & assist Woredas in preparing their draft annual plans.	March 27-April 13	ZHDs
2	Compile & produce zonal core plan	April 13-20	ZHDs
D	Woreda Health Offices		
1	Conduct stakeholder consultation to map resources available for next fiscal year	February 20-28	WorHOs in consultation with WOFED, Woreda Joint Steering Committees & health partners
2	Complete Woreda profile form for core planning exercise at regional planning workshop.	March 14-26	WorHOs & Technical Assistants
3	Participate in regional planning workshop, revise Woreda annual health plan & submit to RHBs/ ZHDs	March 27-April 13	WorHOs, RHBs, ZHDs & TAs
4	Use opportunity of regional level workshop to finalise detailed Woreda plan – including core plan, other WorHO activities not in core plan, & activities of stakeholders at Woreda level.	March 27-April 13	WorHOs, RHBs, ZHDs & TAs
5	Submit detailed Woreda annual plan to WoFED & Woreda council for approval.	April 15	WorHOs
6	Finalise Woreda annual plan based on approved Woreda budget & communicate to RHBs/ZHDs	June	WorHOs
E	Health Facilities (Hospitals & Health Centres)		
1	Prepare facility annual plan	April 5	Facility management in consultation with management boards

Annex 6: Budget analysis*

Annex 6.1: Additional budget by service mode & capital/recurrent costs

	Baseline	2010/11	2011/12	2012/13	2013/14	2014/15	Total	%
Base-case Scenario								
Family oriented community based services	181.76	527.17	568.60	567.44	615.00	655.68	2,933.89	33
Population oriented schedulable services	63.39	351.06	125.27	137.31	152.49	167.51	933.64	11
Individual oriented clinical services	418.97	603.74	619.33	742.08	868.34	993.74	3,827.25	43
District, provincial, national governance & management	119.78	195.03	193.87	215.70	247.68	279.45	1,131.73	13
Total	**883.06**	**1,677.01**	**1,507.07**	**1,662.54**	**1,883.51**	**2,096.38**	**8,826.50**	**100**
Capital investment	628.74	581.01	382.68	347.83	337.83	327.41	1,976.76	22
Recurrent	254.32	1,095.99	1,124.39	1,314.71	1,545.68	1,768.96	6,849.74	78
Best-case Scenario								
Family oriented community based services	181.76	637.48	746.21	801.66	877.21	938.51	4,001.07	37
Population oriented schedulable services	63.39	383.36	190.23	172.96	188.46	203.71	1,138.72	11
Individual oriented clinical services	418.97	603.74	1,374.19	1,293.37	1,741.76	1,545.03	6,558.09	61
District, provincial, national governance & management	119.78	195.03	193.87	215.70	247.68	279.45	1,131.73	10
Total	**883.06**	**1,419.30**	**2,104.19**	**2,083.38**	**2,654.80**	**2,566.38**	**10,828.05**	**100**
Capital investment	482.75	640.56	1,252.67	1,016.02	1,004.37	988.67	4,902.29	45
Recurrent	400.31	778.74	851.52	1,067.36	1,650.42	1,577.71	5,925.76	55

Annex 6.2: Estimated added cost of HSDP-IV 2011- 2015

Programmatic areas	Baseline spending	Additional funding need under	
	2009/10	Base case Scenario	Best case Scenario
1.1 Community Empowerment	6.79	87.05	112.47
1.2 M&E	7.36	84.02	106.10
1.3 Health System Strengthening	19.71	751.81	751.81
2.1 Maternal-Newborn and RH-Adolescent Health	31.27	317.13	424.35
2,2 Child Health	25.06	149.69	231.41
2.3 Nutrition	6.38	93.96	109.91
2.4.Hygiene and Environmental Health Services	7.87	124.52	130.42
2.5 Prevention & Control of Malaria	111.45	238.23	405.41
2.6 Prevention & Control of HIV-AIDS	276.26	- 227.13	643.05
2.7 Prevention & Control of TB & Leprosy	152.72	45.52	671.67
2.8 Prevention & Control of Other Communicable Diseases	0.24	107.07	107.97
2.9 Prevention & Control of Non-Communicable Diseases	0.27	163.56	164.58
2.10 Public Health Emergency Management	0.45	35.86	38.11
2.11 Public Health/Nutrition Research & Quality Assurance /FSU	14.16	69.64	90.88
3.1 Expansion of PHC Facilities	23.48	328.31	328.31
3.2 Hospital Infrastructure	30.11	989.92	989.92
3.3 HR Salaries & Training	54.33	503.97	558.30
3.4 Pharmaceutical & Medical Equipment	97.00	434.97	434.97
3.5. Health Care Financing	2.17	38.91	38.91
TOTAL	**867.06**	**4,337.00**	**6,338.55**

*Note: amounts presented in US$ millions

Annex 6.3: Total cost of HSDP-IV in three scenarios by capital/recurrent

	Baseline	2010/11	2011/12	2012/13	2013/14	2014/15	Total
Base-case scenario							
Family oriented community based services	181.76	527.17	568.60	567.44	615.00	655.68	2,933.89
Capital investment	73.52	65.63	32.88	12.73	7.80	3.79	122.83
Recurrent	181.76	461.55	535.72	554.71	607.20	651.88	2,811.06
Population oriented schedulable services	63.39	351.06	125.27	137.31	152.49	167.51	933.64
Capital investment	25.64	129.45	26.30	30.24	30.47	30.61	247.07
Recurrent	63.39	221.61	98.97	107.08	122.02	136.90	686.57
Individual oriented clinical services	418.97	603.74	619.33	742.08	868.34	993.74	3,827.25
Capital investment	298.31	265.69	231.38	224.95	222.81	220.02	1,164.86
Recurrent	120.66	338.05	387.95	517.13	645.53	773.73	2,662.39
District, provincial, national governance & management	119.78	195.03	193.87	215.70	247.68	279.45	1,131.73
Capital investment	85.29	120.24	92.12	79.91	76.74	73.00	442.01
Recurrent	34.50	74.79	101.75	135.79	170.93	206.45	689.72
Total	**883.06**	**1,677.01**	**1,507.07**	**1,662.54**	**1,883.51**	**2,096.38**	**8,826.50**
Capital investment	628.74	581.01	382.68	347.83	337.83	327.41	1,976.76
Recurrent	254.32	1,095.99	1,124.39	1,314.71	1,545.68	1,768.96	6,849.74
Best-case scenario							
Family oriented community based services	181.76	637.48	746.21	801.66	877.21	938.51	4,001.07
Capital investment	73.52	86.59	76.75	87.70	80.81	71.28	403.13
Recurrent	181.76	550.89	669.45	713.96	796.40	867.24	3,597.94
Population oriented schedulable services	63.39	383.36	190.23	172.96	188.46	203.71	1,138.72
Capital investment	25.64	168.04	97.56	72.17	72.73	73.10	483.60
Recurrent	63.39	215.32	92.68	100.79	115.73	130.61	655.12
Individual oriented clinical services	418.97	603.74	1,374.19	1,293.37	1,741.76	1,545.03	6,558.09
Capital investment	298.31	265.69	986.24	776.24	774.09	771.30	3,573.56
Recurrent	120.66	338.05	387.95	517.13	967.67	773.73	2,984.53
District, provincial, national governance & management	119.78	195.03	193.87	215.70	247.68	279.45	1,131.73
Capital investment	85.29	120.24	92.12	79.91	76.74	73.00	442.01
Recurrent	34.50	74.79	101.75	135.79	170.93	206.45	689.72
Total	**883.06**	**1,419.30**	**2,104.19**	**2,083.38**	**2,654.80**	**2,566.38**	**10,828.05**
Capital investment	482.75	640.56	1,252.67	1,016.02	1,004.37	988.67	4,902.29
Recurrent	400.31	778.74	851.52	1,067.36	1,650.42	1,577.71	5,925.76

Annex 6.4: Financing gap by programme for 2011-2015

	Base case scenario	Best case scenario
1.1 Community Empowerment	87.05	112.47
1.2 Monitoring & Evaluation and Operational Research	84.02	106.10
1.3 System Strengthening & Capacity Development	751.81	751.81
2.1 Maternal-Newborn and RH-Adolescent Health	317.13	424.35
2.2 Child Health	149.69	231.41
2.3 Nutrition	93.96	109.91
2.4 Hygiene & Environmental Health	124.52	130.42
2.5 Prevention & Control of Malaria	238.23	405.41
2.6 Prevention & Control of HIV-AIDS	- 227.13	643.05
2.7 Prevention & Control of TB & Leprosy	45.52	671.67
2.8 Prevention & Control of Other Communicable Diseases	107.07	107.97
2.9 Prevention & Control of Non-Communicable Diseases	163.56	164.58
2.10 Public Health Emergency Management	35.86	38.11
2.11Public Health/Nutrition Research & Quality Assurance	69.64	90.88
3.1 Expansion of PHC Facilities	328.31	328.31
3.2 Hospital Infrastructure	989.92	989.92
3.3 HR Salaries & Training	503.97	558.30
3.4 Pharmaceutical & Medical Equipment	434.97	434.97
3.5. Health Care Financing	38.91	38.91

Annex 7: High impact interventions & indicators

High impact interventions & indicators		2010/11-2014/15		
1. Family oriented community based services	**Indicators**	**Baseline**	**Base case scenario**	**Best case scenario**
ITN for under five children	Proportion of children<5 who slept under ITN the previous night	42%	65%	86%
ITN for pregnant mother	Proportion of pregnant women who slept under ITN the previous night	42%	65%	86%
Quality of drinking water	Proportion of households treating water at home	8%	43%	88%
Hygiene & sanitation	Proportion of HHs utilising latrine	31%	60%	93%
Hand washing by mothers at critical time	Percentage of mothers practicing hand washing with soap at critical time	13%	43%	88%
Indoor Residual Spraying (IRS)	Proportion of households covered with IRS (in IRS targeted areas)	78%	82%	88%
Clean delivery & essential newborn care	Proportion of births attended by HEWs	11%	38%	25%
Early breastfeeding & temperature management	Proportion of children put to breast within an hour of birth	69%	75%	92%
Exclusive breastfeeding for children 0-6 months	Proportion of children exclusively breastfeed for 6 months	49%	57%	70%
Continued breastfeeding for children 6-11 months	Proportion of children aged 6-11 months receiving breast milk.	75%	75%	85%
Complementary feeding	Proportion of children 6-9 months receiving complementary food & breastfeeding	54%	62%	84%
Oral Rehydration Therapy	Proportion of diarrhoea cases that continued feeding & drank more fluid	37%	65%	89%
Zinc for diarrhoea management	% children with diarrhoea who are treated with zinc at community level	0%	62%	75%
Zinc for diarrhoea management	Proportion of diarrhoea cases treated with zinc	0%	62%	88%
Artemisinin-based combination therapy for children	% children treated for malaria at community level	3%	21%	29%
Artemisinin-based combination therapy for children	Proportion of children with malaria receiving ACT	8%	54%	89%
Artemisinin-based combination therapy for pregnant women	% of pregnant women treated for malaria at community level	5%	16%	22%
Artemisinin-based combination therapy for pregnant women	Proportion of pregnant women with malaria receiving ACT	15%	49%	88%
Artemisinin-based combination therapy for adults	Proportion of adults with malaria receiving ACT	4%	12%	19%
Artemisinin-based combination therapy for adults	Proportion of adults with malaria receiving ACT	15%	48%	88%
Malaria treatment with chloroquine	% Fever cases in children receiving chloroquine treatment	3%	21%	32%
Chloroquine for malaria (P.vivax)	Proportion of fever cases in children receiving chloroquine	7%	52%	88%
Therapeutic feeding for malnourished children/OTP	% of children with SAM receiving therapeutic feeding	5%	14%	19%
Therapeutic feeding for malnourished children	Proportion of under 5 children managed for severe acute malnutrition	18%	45%	72%
Community-based pneumonia treatment for children	% children treated for pneumonia at community level	0%	17%	41%
Iodised salt	Proportion of HHs using iodised salt	4%	45%	95%
Family Planning	Contraceptive Prevalence Rate (CPR)	32%	66%	86%
Antenatal care	Proportion of pregnant women who	31%	76%	88%

High impact interventions & indicators		2010/11-2014/15		
1. Family oriented community based services	**Indicators**	**Baseline**	**Base case scenario**	**Best case scenario**
	received ANC 4+			
TT immunisation	% of mothers with birth in last 12 months protected against tetanus	52%	57%	86%
TT immunisation/Neonatal tetanus protection	Percentage of newborns protected against tetanus	42%	76%	88%
Detection & management of bacteriuria in pregnancy	% pregnant women with bacteriuria screened & treated with antibiotics	12%	76%	86%
Detection & management of syphilis in pregnancy	% pregnant women with syphilis screened & treated with antibiotics	9%	76%	86%
Prevention & treatment of iron deficiency anaemia in pregnancy	% pregnant women who receive iron supplementation	10%	76%	88%
PMTCT	Proportion of HIV+ pregnant women receiving complete ARV course	8%	76%	80%
Condom Use	% of high risk sexual contacts with use of condom	17%	76%	80%
Antibiotics for opportunistic infection	% eligible HIV+ patient receiving cotrimoxazole prophylaxis	17%	77%	80%
Measles immunisation	Proportion of children 12-23 months who received Measles vaccination	77%	84%	90%
Pentavalent immunisation	Proportion of children 12-23 months vaccinated for Penta 3	82%	88%	96%
Full immunisation	Proportion of children 12-23 months fully immunised	66%	82%	90%
Rota immunisation	Proportion of children 12-23 months vaccinated for Rota	0%	0%	90%
Pneumococcal immunisation	Proportion of children 12-23 months vaccinated for Pneumococcal	0%	0%	90%
Vitamin-A	Percent of children 6-59 months old who got at least 2 doses of vit-A in last 12 mos	94%	94%	96%
De-worming	Percent of children aged 2-5 years de-wormed at least twice in last 12 months	86%	90%	96%
Postnatal care	Percent of mothers & newborns who got 2 follow up visits within 1 week of delivery	5%	25%	65%
Skilled delivery care	Proportion of births attended by a skilled attendant	18%	65%	85%
Active third stage management of labour	% of deliveries with active management of third stage	18%	65%	85%
B-EmONC	Percent of women with major direct obstetric complications that were treated in B-EmONC facilities	18%	75%	96%
C-EmONC	% of deliveries by C/S (as a proportion of all births, norm 5%-15%)	20%	70%	96%
Neonatal resuscitation	Proportion of asphyxiated newborns who received neonatal resuscitation	7%	75%	96%
Management of PROM	% Preterm prolonged rupture of membranes treated with antibiotics	10%	75%	96%
Pre -eclampsia management	% (pre) eclampsia cases getting Mag Sulf	3%	25%	65%
Neonatal infection management	% of neonatal sepsis cases treated with antibiotic	25%	42%	74%
U-5 pneumonia treatment	Proportion of children under five with pneumonia treated with antibiotics	25%	25%	40%
Antibiotics for diarrhoea & enteric fevers	Proportion of cases of dysentery & enteric fevers treated with antibiotics	6%	43%	88%
Measles Vitamin A management	Proportion of children with measles treated with Vit A	12%	48%	89%
Management of complicated	Proportion of complicated malaria	31%	69%	92%

High impact interventions & indicators		2010/11-2014/15		
1. Family oriented community based services	**Indicators**	**Baseline**	**Base case scenario**	**Best case scenario**
malaria	requiring 2nd line drugs & managed			
Management of complicated malaria	Proportion of complicated & severe malaria being diagnosed & treated	30%	70%	92%
STI management	% of adults with STI being diagnosed & treated	36%	50%	88%
Antibiotics for opportunistic infections	% AIDS cases treated for opportunistic infections	35%	50%	88%
Male circumcision	% circumcised men	92%	92%	92%
ART for children with Aids	Proportion of eligible children who are started on ART	52%	67%	83%
ART for pregnant women with AIDS	Proportion of eligible pregnant women started on ART	17%	60%	93%
ART adults with AIDS	% eligible HIV+ adults receiving ART	21%	40%	79%
Management of first line ART failures	% first line ART failures receiving adequate second line ART regimen	10%	31%	68%
Management of first line ART failures	Management 2nd line ART failure	5%	15%	42%
DOTS	TB Case Detection Rate	34%	45%	75%
DOTS	TB Treatment Success Rate	84%	88%	90%
DOTS	TB Cure Rate	67%	70%	81%
Re-treatment TB cases	% TB cases re-treated among all TB patients	12%	70%	82%
Management of multidrug resistant TB (MDR)	% MDR TB patients treated with second line drugs of all estimated MDR cases	2%	16%	55%

x 8: Detailed indicators for monitoring HSDP-IV quality indication

Indicators	Type	Baseline	Yearly Target					Source	Periodicity
			1	2	3	4	5		
ove Access									
e maternal, neonatal, child & adolescent health									
nal mortality ratio (MMR)	Impact	590*					267	EDHS	Every 5 yrs
tional maternal mortality rate	Impact						Less than 1	HMIS	Quarterly
-5 mortality rate (U5MR)	Impact	101/1000					68	EDHS	Every 5 yrs
mortality rate (IMR)	Impact	77/1000					31	EDHS	Every 5 yrs
atal mortality rate	Impact	39/1000					15	EDHS	Every 5 yrs
atal mortality rate (Institutional)	Impact						Less than 1	HMIS	Quarterly
fertility rate (TFR)	Impact	5.4					4	EDHS	Every 5 yrs
ge/adolescent pregnancy rate	Impact	17%					5%	EDHS	Every 5 yrs
aceptive prevalence rate (CPR)	Outcome	32%					66%	EDHS / HMIS	Every 5 Yrs / annual
aceptive acceptance rate	Outcome	56%	66%	74%	79%	81%	82%	EDHS / HMIS	Every 5 Yrs / Quarterly
t need for family planning	Outcome	34%	24%	17%	12%	11%	10%	EDHS	Every 5 yrs
ed antenatal care coverage (1+ visits)	Outcome	68%	76%	83%	88%	89%	90%	EDHS / HMIS	Every 5 Yrs / Quarterly
ed antenatal care coverage (4+ visits)	Outcome	31%	53%	70%	81%	83%	86%	EDHS/HFS	Every 5 Yrs / 2-3 yrs
nt of deliveries attended by skilled health ant	Outcome	18.4%	36%	49%	58%	60%	62%	EDHS / HMIS	Every 5 Yrs / Quarterly
rtion of deliveries attended by an HEW	Outcome	11%	22%	30%	35%	37%	38%	EDHS / HMIS	Every 5 Yrs / Quarterly
rtion of women with major direct obstetric ications treated in B-EmONC sites	Outcome	12%	37%	56%	69%	72%	75%	HF Survey	2-3 yrs
atal care coverage	Outcome	34%	52%	65%	74%	76%	78%	EDHS / HMIS	Every 5 Yrs/ Quarterly
nt of newborns who get 2 home visits in 1st wk irth	Outcome	5%	29%	47%	59%	62%	65%		
rean section rate (of total pregnancy)	Outcome	1%	4%	5%	6%	7%	7%	HMIS	Quarterly
on care	Outcome							HMIS	Quarterly
nt of pregnant women getting ANC at PMTCT no are tested for HIV	Outcome	16%	42%	63%	76%	79%	83%	HMIS	Quarterly
nt deliveries of HIV+ women that receive full e of ARV prophylaxis	Outcome	8%	36%	56%	70%	73%	77%	HMIS	Quarterly

Indicators	Type	Baseline	Yearly Target					Source	Periodicity
			1	2	3	4	5		
nt of HIV exposed infants tested by DNA PCR	Outcome						100%		Quarterly
3 coverage, (Rota Virus & Pneumococcal ne is Zero)	Outcome	82%	88%	92%	95%	96%	96%	EDHS / HMIS	Every 5 Yrs / Quarterly
es immunisation	Outcome	77%	82%	86%	89%	89%	90%	EDHS / HMIS	Every 5 Yrs / Quarterly
mmunised	Outcome	66%	75%	83%	88%	89%	90%	EDHS / HMIS	Every 5 Yrs / Quarterly
tion at birth (PAB) against neonatal tetanus	Outcome	42%	60%	73%	82%	84%	86%	EDHS / HMIS	Every 5 Yrs/ Quarterly
nt of newborn with neonatal sepsis who get ent	Outcome	22%	43%	58%	69%	71%	74%	HFS	2-3 yrs
nt of asphyxiated newborns being resuscitated	Outcome	7%	34%	54%	68%	71%	75%	HFS	2-3 yrs
nt of U-5 children with pneumonia who got otics at facility level	Outcome	25%	31%	31%	34%	37%	40%	HFS	2-3 yrs
nt of U-5 children with pneumonia who get otics at community by HEW	Outcome	0%	16%	29%	37%	39%	41%	HFS	2-3 yrs
nt of U-5 children with fever in past 2 wks who eated in first 24 hrs of fever	Outcome	15%	52%	68%	78%	82%	85%	HFS	2-3 yrs
nt of U5 children with diarrhoea who got ORT	Outcome	37%	58%	73%	83%	86%	89%	HFS	2-3 yrs
nt of U5 children diagnosed & treated for a	Outcome	32%	52%	67%	77%	80%	82%	HFS	2-3 yrs
nt of HCs & Hospitals with PMTCT services	Output	24%	54%	77%	92%	96%	100%	HMIS	Annually
nt of HCs with available B-EmONC services	Output	5%	43%	72%	91%	95%	100%	HMIS	Annually
nt of hospitals with C-EmONC services	Output	51%	71%	85%	95%	98%	100%	HMIS	Annually
rtion of HFs with safe abortion services	Output	4%	30%	45%	55%	65%	75%	HF Survey	Every 2- 3 yrs
rtion of health centres that implement IMNCI	Output	52%	67%	84%	95%	97%	100%	HMIS	Annually
rtion of hospitals that implement IMNCI	Output	62%	100%	100%	100%	100%	100%	HMIS	Annually
nt of HFs with minimum basic package of scent friendly services	Output	10%	45%	65%	80%	90%	100%	HF Survey	2-3 yrs
ve nutritional status									
lence of anaemia in women of childbearing age yrs)	Impact	27%					12%	EDHS	Every 5 yrs
weight prevalence in U-5 children	Impact	38%					27%	EDHS	Every 5 yrs
ng prevalence in U-5 children	Impact	46%					37%	EDHS	Every 5 yrs
ng prevalence in U-5 children	Impact	11%					3%	EDHS	Every 5 yrs
rtion of low birth weight	Impact							HMIS	Quarterly
nt of U-5s weighed for growth monitoring	Outcome							HMIS	Quarterly
rtion of U-5 children managed for severe acute	Outcome	23%	51%	71%	85%	88%	91%	HFS	Every 2 -3 yrs

Indicators	Type	Baseline	Yearly Target					Source	Periodicity
			1	2	3	4	5		
trition at HF									
nt of U-5 children with severe acute trition that are managed by HEWs/OTP	Outcome	5%	11%	15%	18%	19%	19%	HFS	Every 2 -3 yrs
defaulter & mortality rate in TFP	Outcome		C=>75; D=<15%; M=<5%	C=>75; D=<15%; M=<5%	C=>75; D=<15%; M=<5%	C=>75; D=<15%; M=<5%	C=>75; D=<15%; M=<5%	HFS	Every 2 -3 yrs
rtion of newborns breastfed within 1 hr of birth	Outcome	69%	78%	85%	90%	91%	92%	EDHS	Every 5 yrs
rtion of exclusive breast feeding 0-6 months	Outcome	49%					70%	EDHS	Every 5 yrs
nt of children 6-9 months old getting ementary food & breastfeeding	Outcome	54%					65%	EDHS	Every 5 yrs
nt of children 6-59 months old who got at least es of vitamin-A in last 12 months	Outcome	94%	95%	95%	96%	96%	96%	Admin Report	Annually
rtion of households using iodised salt	Outcome	4%	40%	68%	86%	90%	95%	EDHS	Every 5 yrs
ntage of children aged 2-5 yrs de-wormed two in the last 12 months	Outcome	86%	88%	90%	92%	94%	96%	Admin Report	Annually
nt of pregnant women given iron during ancy	Outcome	10%	41%	63%	79%	82%	86%	EDHS, Survey	Every 2- 3 yrs
ove hygiene & environmental health									
rtion of HHs utilising latrine	Outcome	20%	45%	63%	76%	79%	82%	HMIS	Annually
rtion of HHs with latrine	Output	60%	74%	85%	92%	93%	95%	HMIS	Annually
rtion of households using HH water treatment storage practices	Outcome	7%	36%	56%	70%	74%	77%	Survey	2- 3 yrs
nt of Kebeles free of open defecation	Outcome	15%	40%	50%	60%	70%	80%	Survey	2- 3 yrs
ention & control of major communicable diseases									
dence & prevalence of HIV/AIDS									
ortality	Impact							EDHS	Every 5 yrs
nce of HIV	Impact	0.28%	0.22%	0.18%	0.16%	0.14%	0.14%	EDHS	Every 5 yrs
nt of youth aged 15-24 using condom stently for sex with non-regular partners	Outcome	59%	73%	80%	80%	80%	95%	EDHS	Every 5 yrs
nt of population aged 15-49 yrs with ehensive knowledge of HIV/AIDS	Outcome	22.60%	51.40%	65.8	80.20%	80.20%	80.20%	EDHS	Every 5 yrs
VCT + PIHCT testing)	Outcome	5.8 million	9.2 million	9.2 million	9.2 million	9.2 million	9.2 million	HMIS	Quarterly
er of STI cases treated	Outcome	39267	60000	60000	60000	60000	60000	HMIS	Quarterly
number of PLHIV ever enrolled in HIV care	Outcome	443,964						HMIS	Quarterly
lative number of PLHIV ever started on ART	Outcome	246,347	324,021	377,669	431,317	458,141	484,966	HMIS	Quarterly
nt of eligible pregnant women getting ART	Outcome		26%	35%	44%	53%	95%	HMIS	Quarterly
nt of eligible children who are getting ART	Outcome		54%	57%	59%	61%	95%	HMIS	Quarterly
rtion of eligible adults who are receiving ART	Outcome	53%	31%	40%	50%	59%	95%	HMIS	Quarterly

Indicators	Type	Baseline	Yearly Target					Source	Periodicity
			1	2	3	4	5		
ding pregnant women)									
rtion of needy OVCs who got care & support	Outcome	30%	35%	40%	43%	45%	50%	Admin Report	Quarterly
er of needy PLHIV who got care & support	Outcome	60000	70000	80000	85000	90000	10000	Admin Report	Quarterly
nt of eligible HIV+ receiving cotrimoxazole ylaxis	Outcome	70%/35%	0%	0%	0%	0%	0%	HF survey	every 2 yrs
dence & prevalence of TB & Leprosy									
ity from all forms of TB	Impact	64/100,000				20/100,000		EDHS	Every 5 yrs
se detection rate	Outcome	34%	50%	63%	71%	73%	75%	HMIS	Quarterly
atment success rate	Outcome	84%	86%	88%	89%	90%	90%	HMIS	Quarterly
culosis cure rate	Outcome	67%	74%	80%	83%	84%	85%	HMIS	Quarterly
nt of MDR TB cases treated with 2nd line drugs	Outcome	2%	7%	15%	26%	39%	55%	Admin Report	Annually
nt of health posts providing community DOTS	Output	6%	15%	23%	32%	41%	50%	Admin Report	Annually
rtion of PLHIVs screened for TB	Outcome	15%	41%	54%	64%	72%	80%	HF Survey	Every 2 yrs
nt of registered TB patients tested for HIV	Outcome	38%	100%	100%	100%	100%	100%	HMIS	Quarterly
nt of registered TB patients who are HIV+	Outcome	24%					10%	HMIS	Quarterly
rtion of TB negative PLHIVs put on INH ylactic therapy (IPT)	Outcome	2%	34%	50%	66%	83%	80%	HF Survey	Every 2 yrs
ases of leprosy	Outcome							HMIS	Quarterly
eprosy treatment completion rate	Outcome	91%	93%	95%	96%	97%	98%	HMIS	Quarterly
II disability rate in new cases of leprosy	Outcome	7%	4%	3%	2%	1%	1%	HMIS	Quarterly
dence & prevalence of Malaria									
fatality ratio of U-5 children & adults with lab med (RDT/Micro) malaria	Impact						Less than 2%	Survey	3-5 yrs
onfirmed (RDT/Microscopy) malaria incidence ar in U-5 children & adults	Impact						< 5 / 1000 pop'n per yr	HMIS	Quarterly
lence of parasite infection in U-5 children &							Less than 1%	Survey	3-5 yrs
dity attributed to malaria	Impact							HMIS	Quarterly
nt of malarious Kebeles with no malaria for 24 s in Woredas targeted for elimination	Outcome		40%	60%	75%	90%	100%	HF Survey	2-3 yrs
ratory-confirmed malaria cases seen in HFs	Outcome	370,000	246,000	184,000	122,000	91,000	60,000	HMIS	Quarterly
nt of suspected malaria cases confirmed by lab s/Micro) within 24 hrs of fever onset	Outcome		100%	100%	100%	100%	100%	Survey	Every 2 yrs
rtion of households in malarious areas ssing at least one LLITN	Output	65.6%	75%	83%	88%	89%	90%	Survey / Admin Report	Every 2 yrs
nt of pregnant women who slept under LLITN evious night	Outcome	41.2%	60%	73%	82%	84%	86%	Survey	Every 2 yrs
nt of U-5 children sleeping under LLITN on	Outcome	42.5%	60%	73%	82%	84%	86%	Survey	3-5 yrs

Indicators	Type	Baseline	Yearly Target					Source	Periodicity
			1	2	3	4	5		
us night									
rtion of households in IRS targeted areas ed in the last 12 months	Output	55%	64%	70%	74%	75%	77%	Admin Report	Annually
dence & prevalence of other communicable diseases									
lence of Schistosomiasis in endemic areas	Impact	14%	11%	9.50%	8.5	7.5	7%	Survey	Every 5 yrs
lence of Leishmaniasis in endemic areas	Impact	9.7% in M; 4.5% in F	8.7% & 3.5%	8.2% & 3.0%	7.5% & 2.5%	7.2% & 2.2%	7% & 2%	Survey	Every 5 yrs
lence of lymphatic filariasis	Impact	23.7% M & 18.5% F	20.6% & 15.5%	19% & 14%	17.5% & 12.5%	16.8% & 11.8%	16% & 11%	Survey	Every 5 yrs
lence of intestinal parasites (*helminthiasis)*	Impact	No baseline					40%	Survey	Every 5 yrs
lence Trachomatous trichiasis	Impact	3.10%	2.26%	1.84%	1.42%	1.20%	1%	Survey	Every 5 yrs
dence & prevalence of major non-communicable diseases									
rtion of adult mortality attributable to chronic ses/Take WHO Recommended process tors (Only to have national doc)	Impact	Rural 25% DALYs; Urban 35% DALYs	23% & 33%	22% & 32%	21% & 31%	20.5% & 30.5%	20% & 30%		
lence of high blood pressure among adults	Impact	Urban 31%; Rural 10%	30% & 9.5%	28.5% & 8.5%	27% & 7%	25% & 6%	25% & 5%	Special Survey	Every 5 yrs
nt of HFs with integrated mental health service	Output	10%	26%	34%	42%	46%	50%	Admin rept / Superv rept	Every 5 yrs
se cataract surgical cases (CSR)	Output	460	676	784	892	946	1000	HMIS	Annually
rove community ownership									
rtion of model households graduated via HEP	Output	25.6%	50%	67%	79%	82%	85%	Admin report	Annually
nt of community health promoters vs need	Input	42%	60%	74%	83%	86%	88%	Admin report	Annually
nt of HFs with boards having community entatives	Output	20%	22.20%	50%	100%	100%	100%	Admin report	Annually
rove resource mobilisation & utilisation									
nt of public HFs retaining & using their revenue	Inputs	20%	22.20%	50%	50%	100%	100%	Admin report	Annually
ally generated revenue as share of total health t	Inputs	9%	10%	11%	12%	12.5%	13%	HMIS	Annually
ursed amount as percent of total fees waived	Inputs	70%	75%	80%	85%	90%	100%	HMIS	Quarterly
nt of public hospitals with a private wing	Output	2%	74%	85%	93%	100%	100%	Admin report	Annually
budget as a proportion of total budget	Inputs	5.60%	9.40%	11.20%	13%	14%	15%	HMIS	Annually
pita public expenditure on health	Inputs	16.1 USD	20	26	28	30	32 USD	HMIS	Annually
er capita expenditure	Inputs	0.49	0.83	1.20	1.57	1.94	2 USD	Admin report	Annually

Indicators	Type	Baseline	Yearly Target					Source	Periodicity
			1	2	3	4	5		
udget as percent of total recurrent budget	Inputs	9%	10%	11%	12%	13%	14%	HMIS	Annually
nt of public sector HFs that have revised user improve cost sharing	Inputs	1%	50%	100%	100%	100%	100%	Admin report	Annually
pocket health expenditure as percent of total spending	Outcome	37%	35%	32.60%	27%	22.20%	18%	NHA Survey	Every 5 yrs
nt of people enrolled in health insurance gregated by formal & informal sector)	Inputs	1%	4%	11.50%	25%	40%	50%	Survey	
of health budget utilisation to allocation	Output	70%	78%	82%	85%	88%	90	HMIS	Annually
se financial liquidation rate	Output	63%	78%	80%	85%	90%	90%	Admin report	Annually
rtion of funds dispersed per performance	Output	0	32%	48%	72%	75%	80%	Admin report	Annually
ove quality health services									
ent mortality rate	Impact							HMIS	Quarterly
al admission rate	Output	4.8 / 1,000						HMIS	Quarterly
ccupancy rate (BOR)	Output	50.80%	74%	78%	82%	84%	85%	HMIS	Quarterly
ge length of stay (ALOS)	Output	8.4 days	7.1	6.4	5.7	5.3	5 days	HMIS	Quarterly
tient attendance per capita (disaggr M & F)	Output	0.2	0.4	0.5	0.6	0.65	0.7	HMIS	Quarterly
mer satisfaction index	Outcome	50%	70%	80%	90%	95%	100%	Survey	Annually
nt of referred patients who complete full referral ss (from beginning to feedback)	Output	0					80%	Survey	Annually
nt of hospitals with designated emergency unit	Input	50%	70%	80%	90%	95%	100%	Admin report	Annually
rtion of emergency patients getting emergency less than 5 minutes	Output	50%	70%	80%	90%	95%	100%	survey	Annually
rtion of patients getting safe & adequate blood usion service	Output	50%	64%	71%	78%	82%	85%		Annually
rtion of standardised laboratories for ated diseases at different levels	Inputs	25%	40%	50%	60%	65%	70%	survey	Annually
ove public health emergency preparedness & response									
nt of epidemics averted (AWD, malaria & gitis)	Outcome						75%	Admin report	Annually
nt of epidemics controlled with zero mortality	Outcome						50%	Admin report	Annually
ove Pharmaceutical Supply & Services									
tial drugs availability	Inputs	65%	80%	90%	95%	98%	100%	HMIS	Quarterly
nt of HFs with stock-outs of essential drugs	Inputs	35%	20%	10%	5%	2%	0%	HMIS	Quarterly
rement lead time (average time between order very for supplier)	Inputs	240days/2	190	170	150	135	120 days	Admin report	Annually
nt of dispensed drugs adequately labelled	Inputs	43%	60%	70%	78%	85%	90%	Survey	2-3 yrs
nt of prescriptions containing antibiotics	Inputs	58%	45%	39%	34%	29%	25%	Survey	2-3 yrs

Indicators	Type	Baseline	Yearly Target					Source	Periodicity
			1	2	3	4	5		
rtion of patients with adequate information on sed drugs	Output	68.00%					100%	Survey	2-3 yrs
ntage of stock wasted due to expiry	Output	8.24%	5%	4.50%	3.50%	2.50%	2%	Admin report	Annually
ove Regulatory system									
nt of institutions complying to service standards	Output							Admin report	Annually
nt of health related institutions licensed / ed	Output	??	100%	100%	100%	100%	100%	Admin report	Annually
rtion of health institutions licensed/ certified	Output	??	100%	100%	100%	100%	100%	Admin report	Annually
nt of food establishments licensed / certified	Output	??						Admin report	Annually
ction coverage of health institutions	Output	??	100%	100%	100%	100%	100%	Admin report	Annually
ction coverage of health related Institutions	Output	??	10%	3%	5%	70%	90%	Admin report	Annually
ction coverage of food establishments	Output	??	10%	30%	60%	80%	90%	Admin report	Annually
nt of traditional medicine practitioners ered & licensed	Output	??	10%	20%	40%	60%	80%	Survey	2-3 yrs
nt of professionals licensed (modern, ative & traditional)	Output	??	100%	100%	100%	100%	100%	Survey	2-3 yrs
rtion of registered medicine & food	Output	??						Survey	2-3 yrs
age of medico-legal service	Output	??						Admin report	Annually
ntine coverage	Output	??	100%	100%	100%	100%	100%	Admin report	Annually
prevalence rate	Outcome							Survey	2-3 yrs
rtion of regulatory measures taken on unethical ligent professionals	Output	??						Admin report	Annually
ove evidenced-based decision-making through enhanced harmonisation & alignment									
nt of health managers (programme & HF) using data for decision making	Inputs		100%	100%	100%	100%	100%	Survey	2-3 yrs
t completeness (as percent of routine / ation-based reports received)	inputs	6%	40%	57%	74%	82%	90%	HMIS	Quarterly
t timeliness (as percent of routine / population- reports received within time specified)	Inputs	57%	70%	77%	83%	86%	90%	HMIS	Quarterly
spondence of data reported & recorded (LQAS)	Output	15%	45%	60%	75%	82%	90%	HMIS	Quarterly
rtion of Woredas with evidence-based plan d vertically & horizontally	Inputs	100%	100%	100%	100%	100%	100%	Admin Report	Annually
rtion of partners implementing one plan	Inputs		100%	100%	100%	100%	100%	Survey	Annually
nt of partners using national M&E framework ment & harmonisation)	Inputs		100%	100%	100%	100%	100%	Survey	Annually
rtion of health development partners providing through MDG Pool Fund	Inputs						75%	Admin Report	Annually
nt of research conducted that addresses	Inputs						95%	Admin Report	Annually

Indicators	Type	Baseline	Yearly Target					Source	Periodicity
			1	2	3	4	5		
y public health problems									
nprove health infrastructure									
n post to population ratio	Output						1;5000	HMIS	Annually
n centre to population ratio	Output						1: 25000	HMIS	Annually
ry hospital to population ratio	Output						1;100,000	HMIS	Annually
er of constructed general hospitals	Inputs						1;1,000,000	Admin Report	Annually
er of constructed referral hospitals	Inputs						1;5,000,000	Admin Report	Annually
er of maintained health centres	Inputs						100%	Admin Report	Annually
er of maintained hospitals	Inputs						100%	Admin Report	Annually
er of equipped & furnished health posts	Inputs						100%	Admin Report	Annually
er of equipped & furnished health centres	Inputs						100%	Admin Report	Annually
er of equipped & furnished hospitals	Inputs						100%	Admin Report	Annually
er of HFs with communication equipment							100%		
er of HFs with electricity							100%		
er of HFs with water supply							100%		
er of HFs with latrine & working water supply							100%		
er of new technologies (vaccines) adopted &	Inputs						10	Admin Report	Annually
er of hospitals implementing EMR	Inputs						100%	Admin Report	Annually
er of health facilities implementing EHMIS	Inputs						100%	Admin Report	Annually
er of hospitals with tele-medicine									
rove human capital & leadership									
rship development index	Output							HMIS	Annually
ution of HRH by geographic site & category	Inputs							HMIS	Annually
nt of critical HRH gap filled by TA (Technical ance)	Inputs							HMIS	Annually
er of trained & deployed health professionals egory	Inputs							HMIS	Annually
rtion of institutions staffed as per standard	Inputs							HMIS	Annually
n workforce density:	Output	0.7/1000					1.7/1000		
cian to population ratio	Inputs	1:37,996					1:5,500		
rtion of institutions staffed as per standard	Inputs						100%	HMIS	Annually
nt of PHCUs using workload based staffing ard	Inputs						100%		
mentation of e-HRIS at regional level	Inputs						100%		
etency level for essential knowledge & skill gregated by category)	Output						100%		

Endnotes

[i] DHS, 2005
[ii] MoFED, 2008 Macro economic development report
[iii] MoFED, 2007/08 Annual Progress Report
[iv] Ibid
[v] WHO, 2010, World Health Statistics
[vi] Lancet, 2010
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[viii] FMoH, 2004/05, HSDP III, (HSDP I & II Overview)
[ix] Ibid
[x] Ibid
[xi] FMoH, 2008/09 Administrative Report
[xii] Ibid
[xiii] FMoH, 2009 EmONC Survey Report
[xiv] FMoH, 2008/09 Administrative Report
[xv] FMoH, 2008/09 ARM Performance Report
[xvi] FMoH and WHO, 2007 Health Facility Survey
[xvii] FMoH, 2007/08 Health and Health Related Indicator
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[xix] Ibid
[xx] HAPCO, 2007 Single point estimate
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[xxiv] USAID, Tuberculosis profile, Ethiopia, 2009
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[xxvii] FMoH, 2010, TB prevention and control programme annual bulletin No 2
[xxviii] FMoH, 2008/09 ARM Performance Report
xxix WHO, 2007, Community Based Survey of Injuries
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[xxxi] FMoH, 2009/10 Administrative Report
[xxxii] Ibid
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[xxxiv] WHO Global Health Observatory, apps.who.int/ghodata/, accessed 25 Feb 2011, Africa and global data is from 2009
[xxxv] L10k Survey????
[xxxvi] FMoH, 2008/09 ARM Performance Report
[xxxvii] Financial sustainability study for the social health insurance scheme in Ethiopia, 2010
[xxxviii] The projection is based on the feasibility studies undertaken to implement CBHI in the pilot woredas.
[xxxix] THE captures health spending from all sources: government, donors, and private including household out-of-pocket payments.
[xl] Federal Ministry of Health, 2009. The fourth round of Ethiopia's National Health Accounts (NHA).
[xli] The generic list of high impact interventions organised into three-service delivery mode: family/community, population oriented – both through outreach and on facility with schedule; delivery and skill management at health facility. The list is supported with the scientific evidence on efficacy and effectiveness from the various Lancet series (2003 child survival, 2005 neonatal survival, 2006 maternal, 2008 nutrition); the British Medical Journal (2005 for maternal); and the Cochran meta analysis by the World Bank, WHO and UNICEF in reviewing the literature on the efficacy of a list of interventions on reducing maternal mortality.
[xlii] Extract from: FMoH (2010) "Guideline for Building and Implementing a Balanced Scorecard Strategic Planning and Management System"