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Federal Democratic Republic of Ethiopia **Ministry of Health**

HSDP IV Annual Performance Report

EFY 2006 (2013/14)

Version 1





HEALTH SECTOR DEVELOPMENT PROGRAMME IV **ANNUAL PERFORMANCE REPORT** EFY 2006 (2013/14)

VERSION 1

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ACRONYMS

АСТ	Artemisinin-based Combination Therapy				
AFP	Acute Flaccid Paralysis				
AIDS	Acquired Immunodeficiency Syndrome				
ANC	Antenatal Care				
APR	Annual Performance Report				
APTS	Auditable Pharmaceuticals Transaction System				
ARM	Annual Review Meeting				
ART	Antiretroviral Therapy				
ARV	Antiretroviral				
AusAID	Australian Aid				
ВСС	Behavioural Change Communication				
BEmONC	Basic Emergency Obstetric and Neonatal Care				
BSC	Balanced Score Card				
CAR	Contraceptive Acceptance Rate				
СВНІ	Community Based Health Insurance				
CBN	Community Based Nutrition				
CDC	Centre for Disease Control				
CEmONC	Comprehensive Emergency Obstetric and Neonatal Care				
CFR	Case Fatality Rate				
СНІЅ	Community-based Health Information System				
CIFF	Children's Investment Fund Foundation				
CLTSH	Community Led Total Sanitation and Hygiene				
СМАМ	Community-based Management of Acute Malnutrition				
CPD	Continuing Professional Development				
CPR	Contraceptive Prevalence Rate				
CREAM	Clear, Relevant, Economic, Adequate, Monitorable				
CSA	Central Statistical Agency				
DFID	Department for International Development				
DIS	Drug Information Service				
DNA	Deoxyribonucleic Acid				
DP	Development Partner				
DTC	Drug and Therapeutics Committees				
EDHS	Ethiopia Demographic and Health Survey				
EFY	Ethiopian Fiscal Year				
EHAQ	Ethiopian Hospitals Alliance for Quality				
EHIA	Ethiopian Health Insurance Agency				
eHMIS	Electronic Health Management Information System				
EHNRI	Ethiopian Health and Nutrition Research Institute				
EHRIG	Ethiopian Hospital Reform Implementation Guideline				
elDSR	Electronic Integrated Disease Surveillance and Response				
eMCS	Electronic Mobile Care Solution				
EMDHS	Ethiopia Mini Demographic and Health Survey				
EmONC	Emergency Obstetric and Neonatal Care				

EMR	Electronic Medical Record
EOS	Enhanced Outreach Strategy
ePHEM-HMIS	Electronic Public Health Emergency Management-Health Management Information System
EPHI	Ethiopian Public Health Institute
EPI	Expanded Program on Immunization
EQA	External Quality Assessment
ESA	Eastern and Southern Africa
EU	European Union
FF	Family Folder
FMHACA	Food, Medicine and Healthcare Administration and Control Authority
FMOH	Federal Ministry of Health
FP	Family Planning
GAVI	Global Alliance for Vaccines and Immunization
GC	Gregorian Calendar
GDP	Gross Domestic Product
GET 2020	Global Elimination of Trachoma by 2020
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GIS	Geographic Information System
GMP	Good Manufacturing Practice
GOE	Government of Ethiopia
GPS	Geographic Positioning System
GTP	Growth and Transformation Plan
НАРСО	HIV/AIDS Prevention and Control Office
НС	Health Center
HCF	Health Care Financing
HCMIS	Health Commodity Management Information System
НСТ	HIV Counselling and Testing
HDA	Health Development Army
HEP	Health Extension Program
HEW	Health Extension Worker
HF	Health Facility
ніт	Health Information Technician
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
НО	Health Officer
HP	Health Post
HPN	Health, Population and Nutrition
HR	Human Resources
HRD	Human Resources Development
HRH	Human Resources for Health
HRIS	Human Resources Information System
HRM	Human Resources Management
HSC	Health Science College
HSDP	Health Sector Development Program
HSS	Health Systems Strengthening
ICCM	Integrated Community Case Management
ICT	Information and Communication Technology
IDSR	Integrated Disease Surveillance and Response

IESO	Integrated Emergency Surgery Officer
IFMIS	Integrated Financial Management Information System
IHP	International Health Partnership
ILI	Influenza Like Illness
IMNCI	Integrated Management of Neonatal and Childhood Illnesses
IMR	Infant Mortality Rate
IRS	Insecticide Residual Spraying
IST	In-Service Training
т	Information Technician
IUCD	Intra-Uterine Contraceptive Device
IUSH	Integrated Urban Sanitation and Hygiene
JCCC	Joint Core Coordinating Committee
JCF	Joint Consultative Forum
JFA	Joint Financial Arrangement
JRM	Joint Review Mission
JSC	Joint Steering Committee
LIS	Laboratory Information System
LLIN	Long-Lasting Insecticide-treated Net
LQAS	Lot Quality Assurance Sampling
MARP	Most-At-Risk Population
МСН	Maternal and Child Health
MDG	Millennium Development Goals
MDG PF	MDG Performance Fund
MDR TB	Multi-Drug Resistant TB
MDSR	Maternal Death Surveillance and Response
MDT	Multi Drug Therapy
M&E	Monitoring and Evaluation
mHealth	Mobile Health
mhGAP	Mental Health Gap Action Programme
MMR	Maternal Mortality Ratio
MNCH	Maternal, Newborn and Child Health
MOE	Ministry of Education
MOFED	Ministry of Finance and Economic Development
MOU	Memorandum of Understanding
MOWIE	Ministry of Water, Irrigation and Energy
MRU	Medical Record Unit
MSD	Medical Service Directorate
МТСТ	Maternal to Child Transmission
NBTS	National Blood Transfusion Service
NCD	Non-Communicable Disease
NGO	Non-Governmental Organization
NHA	National Health Accounts
NHE	National Health Expenditure
NICU	Neonatal Intensive Care Unit
NMEI	New Medical Education Initiative
NMR	Neonatal Mortality Rate
NNP	National Nutrition Programme
NTD	Neglected Tropical Disease

ODF	Open Defecation Free				
OPD	Outpatient Department				
OR	Operational Research				
OWNP	One WASH National Program				
PBS	Promoting Basic Services				
PCV	Pneumococcal Conjugate Vaccine				
PF	Plasmodium Falciparum				
PforR	Program for Result				
PFSA	Pharmaceutical Fund and Supply Agency				
РНС	Primary Health Care				
PHCU	Primary Health Care Unit				
РНЕМ	Public Health Emergency Management				
PLWHA	People Living With HIV/AIDS				
РМТСТ	Prevention of Maternal to Child Transmission of HIV				
PNC	Postnatal Care				
PPD	Policy and Planning Directorate				
PPP	Public-Private Partnership				
PV	Plasmodium Vivax				
QA	Quality Assurance				
QC	Quality Control				
RDF	Revolving Drug Fund				
RDQA	Routine Data Quality Assessment				
RDT	Rapid Diagnostic Test				
RHB	Regional Health Bureau				
RUTF	Ready-to-Use Therapeutic Food				
SARI	Severe Acute Respiratory Infection				
SBA	Skilled Birth Attendance				
SHI	Social Health Insurance				
SLD	Second Line Drug				
SLMTA	Strengthening Laboratory Management Towards Accreditation				
SMART	Specific, Measurable, Assignable, Realistic, Time-related				
SNNPR	Southern Nations, Nationalities and Peoples Region				
SOP	Standard Operating Procedure				
SPA	Services Provision Assessment				
SSA	Sub-Saharan Africa				
TFR	Total Fertility Rate				
тот	Training of Trainers				
TWG	Technical Working Group				
U5MR	Under-5 Mortality Rate				
UNFPA	United Nations Population Fund				
UNICEF	United Nations Children's Fund				
USI	Universal Salt lodization				
VAS	Vitamin A Supplementation				
WaSH	Water, Sanitation and Hygiene				
WDG	Women Development Group				
who	World Health Organization				
WoFED	Woreda Finance and Economic Development				
WorHO	Woreda Health Office				



Executive Summary

EXECUTIVE SUMMARY

This Annual Performance Report of the fourth Health Sector Development Programme (HSDP) (2010/11-2014/15) gives an overview of the performance of the health sector in the Ethiopian Fiscal Year (EFY) 2006 (2013/2014), examining the progress made, the efforts that are underway and the challenges faced by the sector in the promotion of health, and in the implementation, financing and governance of health services.

As in previous years, the development process of the Annual Performance Report for EFY 2006 was widely consultative, involving Regional Health Bureaus (RHB), the various Directorates of the Federal Ministry of Health (FMOH), and agencies accountable to the FMOH as well as Development Partners (DP). The report highlights the major achievements and challenges of the health sector in EFY 2006, under the three Strategic Themes: (i) Health Service Delivery and Quality of Care; (ii) Leadership and Governance; and (iii) Health Infrastructure and Resources.

HEALTH SERVICE DELIVERY AND QUALITY OF CARE

This Strategic Theme comprises of the Health Extension Program (HEP), maternal and newborn health services, child health services, national nutrition programme, prevention and control of communicable and non-communicable diseases, public health emergency preparedness and response, and quality of health services. The performance of the sector during EFY 2006 was as follows:

- 1. Health Development Army (HDA) implementation has started in EFY 2003, with progress being made in the organization and network formation over the past three years. In EFY 2006, 29,849 Women Development Groups (WDGs) were established in Tigray, with the formation of 149,245 one-to-five networks. Similarly, in Southern Nations, Nationalities and Peoples Region (SNNPR) a total of 84,129 HDA groups with 626,953 one-to-five networks were formed, while Amhara Region established 118,625 HDA groups and 572,802 one-to-five networks, and Oromia Region a total of 195,864 HDA groups and 880,975 one-to-five networks. A total of 10,407 HDA groups with 41,561 one-to-five networks were established in Addis Ababa in EFY 2006. In Harari, 1,613 HDA groups with 5,510 one-to-five networks were established, while 2,286 HDA groups with 12,695 one-to-five networks were established in Dire Dawa. Therefore, at the national level, a total of 442,773 HDA groups with 2,289,741 one-to-five networks were formed in EFY 2006.
- 2. Many hygiene and environmental health activities were carried out in EFY 2006; with regard to Open Defecation Free (ODF) kebeles, a total of 3,655 kebeles were declared as ODF kebeles in EFY 2006.
- 3. The Ethiopia Mini Demographic Health Survey (EMDHS) 2014 was carried out in the fiscal year, showing a steep increase between 2011 and 2014 in Contraceptive Prevalence Rate (CPR) from 28.6% to 41.8%, and a decrease in Total Fertility Rate (TFR) from 4.8 to 4.1. A remarkable progress was also observed in the percentage of skilled birth attendance (reflecting the performance over the five year period before the survey) from 10.0% in 2011 to 14.5% in 2014, ranging from 6.6% in Afar to 86.0% in Addis Ababa.

Of note is the fact that this 2014 estimate, referring to the five-year period before the survey, is not directly comparable with the 2014 HMIS estimate, but with HMIS estimates of the skilled birth attendance (SBA) over the same period (i.e. ranging between 17% and 23%), showing relatively moderate discrepancies between the two sources.

- 4. Concerning maternal health services, antenatal care (ANC) coverage (at least one visit) increased from 97.4% in EFY 2005 to 98.1% in EFY 2006, postnatal care (PNC) coverage increased from 50.5% to 66.2%, while the percentage of deliveries attended by skilled health personnel increased from 23.1% in EFY 2005 to 40.9% in EFY 2006. Conversely, clean and safe delivery coverage by Health Extension Workers (HEW) declined from 11.6% in EFY 2005 to 8.8% in EFY 2006; this decline was due to the expansion of Health Centers (HC) and the strengthening of HC-Health Post (HP) networks, with subsequent focus on provision of skilled care at birth in the catchment areas and increase in SBA coverage. Contraceptive acceptance rate (CAR) slightly increased from 59.5% in EFY 2005 to 63.0% in EFY 2006. The proportion of pregnant women counselled and tested for prevention of maternal to child transmission (PMTCT) of HIV increased from 54.9% to 57.0%.
- 5. The percentage of HIV-positive pregnant women who received ART to prevent Maternal to Child Transmission (MTCT) of HIV has been estimated at 60.6% in EFY 2006, with an increase from 42.9% in EFY 2005. According to the 2013 UNAIDS Report, Ethiopia is one of the few "rapid decline" sub-Saharan African countries, with a reduction by 50% of new HIVinfections among children between 2009 and 2012.
- 6. The EDHMS 2014 showed a decrease in stunting prevalence from 58% to 40% among under 5 children between 2000 and 2014, while the proportion of children underweight declined from 41% to 25%, and the prevalence of wasting from 12% to 9% in the same period.
- 7. Concerning child health services, a general increase in immunization coverage was observed between EFY 2005 and EFY 2006 for pentavalent 3 vaccine (from 87.6% to 91.1%), pneumococcal conjugate vaccine (PCV) 3 (from 80.4% to 85.7%), measles vaccine (from 83.2%, to 86.5%), as well as for the percentage of fully immunized children (from 77.7% to 82.9%). The new rotavirus vaccine has been introduced into the routine immunization schedule in EFY 2006. The cumulative number of HCs providing Integrated Management of Neonatal and Childhood Illnesses (IMNCI) increased from 2,373 in EFY 2005 to 2,967 in EFY 2006. Concerning neonatal care, out of the total 850 HCs with established newborn corners, 313 were implementing the service, while the number of hospitals providing neonatal intensive care unit services has increased from 27 to 30 in EFY 2006.
- 8. The national VAS coverage among children aged 6-59 months in EFY 2006 was 71.7%, below the performance in the previous year (93.1%) as well as the target set for EFY 2006 (96.0%); wide differences were observed across regions, ranging between 2.0% in Gambella to 96.5% in Oromia Region.
- 9. In EFY 2006, the de-worming coverage of children aged 2-5 years (82.4%) was lower than in EFY 2005 (91.4%) and the annual target (97.0%) for EFY 2006, ranging between 5.8% in Gambella Region to more than 100% in Afar Region.
- 10. HIV/AIDS is one of the top priorities of HSDP IV. There was a steep increase in the number of facilities providing HIV Counselling and Testing (HCT), PMTCT and Antiretroviral Therapy (ART) services: the increase was from 3,040 in EFY 2005 to 3,447 in EFY 2006 for HCT, from 2,150 to 2,495 for PMTCT, and from 880 to 1,047 for ART in the same period. The number of HCT services decreased from 11,965,533 in EFY 2005 to 9,664,519 in EFY 2006.
- 11. A linear increase has been observed in the number of People Living With HIV/AIDS (PLWHA) ever enrolled, ever started and currently on ART over the past years; in particular, there was an increase between EFY 2005 and EFY 2006 from 744,339 to 805,948 for PLWHA ever enrolled in HIV/AIDS care (+61,609), from 439,301 to 492,649 for those ever started (+53,348), and from 308,860 to 344,344 for those currently on ART (+35,484).
- 12. In EFY 2006, the distribution of 19,866,625 Long Lasting Insecticide-treated Nets (LLIN) was planned in malaria-endemic areas; however, 11.7 million LLINs were actually distributed, increasing the cumulative number of distributed LLINs to 58,676,866. With regards to vector control, the revised plan was to implement IRS in 5,111,694 households in EFY 2006; however, a total of 3,930,604 households in malaria endemic areas were sprayed, below EFY 2005 performance (5,032,693 households) and target for the current year (with a target achievement of 76.9%). In EFY 2006, 2,627,182 laboratory confirmed plus clinical malaria

cases were reported, with a decrease with respect to the number of cases (3,862,735) reported in EFY 2005. The percentage of laboratory confirmed cases in EFY 2006 (84.1%) was higher than the percentage (73.8%) estimated in EFY 2005. A total of 213 deaths were recorded in EFY 2006, with a Case Fatality Rate (CFR) of 0.01%.

- 13. Between EFY 2005 and EFY 2006, only fluctuations were observed for TB treatment success rate (from 91.4% to 92.1%) and TB cure rate (from 70.3% to 69.1%), while TB case detection rate decreased from 58.9% to 53.7%: all these indicators were below the target set for EFY 2006. In EFY 2006, additional 13 Multi-Drug Resistant TB (MDR TB) centres started treatment services, increasing the total number of MDR TB treatment centers to 32 country-wide, while a total of 332 health institutions were providing follow-up services. A cumulative total of 1,559 MDR TB patients were enrolled in second line drug (SLD) treatment and, out of them, 598 MDR TB patients were enrolled in SLD treatment in EFY 2006.
- 14. Concerning prevention and control of Neglected Tropical Diseases (NTD), mapping the geographical distribution of trachoma and leishmaniasis has been completed, while mapping of lymphatic filariasis, schistosomiasis and soil-transmitted helminthiasis is still incomplete. A total of 7,482,414 people (out of the planned 8.4 million) received Ivermectin treatment for onchocerciasis in EFY 2006, while 1,422,298 people received preventive therapy (Ivermectin and Albendazole) for lymphatic filariasis. Furthermore, 1.4 million tablets of Praziquantel and 8 million tablets of Mebendazole have been given to school-children as part of the schistosomiasis and soil-transmitted helminthiasis prevention and control, respectively.
- 15. The National Strategic Plan for Control, Elimination or Eradication of Non-Communicable Diseases (NCD) was completed in EFY 2006. Progress was made in different areas, such as development of population-based cancer registry, prevention and control of mental diseases and tobacco control.
- 16. For the epidemic prone diseases under surveillance, the number of cases reported in EFY 2006 was as follows: 24,493 suspected measles cases (CFR=0.5%); 268,353 suspected dysentery cases (CFR=0.02%); 1,783 suspected meningococcal meningitis cases (CFR= 3.8%); 868 suspected anthrax cases (CFR=1.5%); 3,062 suspected rabies cases and exposures (CFR=1.4%); and 4,754 suspected relapsing fever cases (CFR=0.4%). Furthermore, the non-polio Acute Flaccid Paralysis rate was estimated at 3.2 per 100,000 children under 15 years, above the WHO standard; ten polio cases were confirmed in EFY 2006 from Dollo Zone in Somali Region, and appropriate response was undertaken. A total of 31 suspected yellow fever cases were reported from South Omo Zone of SNNPR in EFY 2006; furthermore, 12,238 cases of dengue fever were reported, mainly from Dire Dawa, Gode in Somali Region and Adaar Woreda in Afar Region, with almost all cases being reported from urban kebeles.
- 17. In relation to quality of health services, the Ethiopian Hospital Reform Implementation Guideline (EHRIG) has been implemented in EFY 2006, resulting in improved service delivery at public hospitals. The institutional mortality rate was 4% (better than the national target of 5%), the bed occupancy rate reached 60% (below the national target of 75%), the average surgical waiting time was estimated at 10 days, while the patient satisfaction reached 77%.
- 18. The Auditable Pharmacy Transactions and Services (APTS) Initiative aimed to improve the quality of pharmacy services and increase the availability of specialty drug to 70% and the availability of essential drugs to 100% in 22 high load university hospitals in EFY 2006. A number of undertakings have been performed in improving emergency care, including the implementation of the emergency services strengthening project in Addis Ababa.
- 19. In EFY 2006, the number of functional regional blood banks increased from 12 to 25, with 30 mobile teams collecting blood from the communities on a daily basis. A total of 87,685 units of blood were collected in EFY 2006, with a 46% increase from 60,090 in the previous year, while the proportion of voluntary blood donors increased from 54% to 70% in the same period.
- 20. In EFY 2006, a total of 30,927,623 outpatient department (OPD) visits were provided with an average of 0.35 OPD visit per person per year; this performance was slightly higher than the achievement in EFY 2005 (0.34).
- 21. Concerning the national laboratory system, trainings were given for laboratory professionals as well as equipment was provided to health facilities to improve the quality of the laboratory system in the country. As part of the on-going laboratory quality assurance mechanism, 156 laboratories have participated in these activities through use of quality control samples.

LEADERSHIP AND GOVERNANCE

The Leadership and Governance chapter comprises of evidence-based planning, monitoring, evaluation, policy formulation and implementation. It also includes the development and implementation of the regulatory framework. Different activities had been performed in EFY 2006.

- 22. The status of implementation during the fourth year of HSDP IV was monitored by the FMOH and regions using various monitoring and reporting mechanisms. The FMOH held regular Joint Steering Committee (JSC) meetings with Regional Health Bureaus (RHB) every two months, and bi-weekly Executive Committee Meetings with agencies. FMOH also held quarterly Joint Consultative Forum (JCF) meetings with Development Partners (DP), and bi-weekly Joint Core Coordinating Committee (JCCC) meetings. In addition, the FMOH developed the maternal, newborn and child health (MNCH) scorecard and, from mid-EFY 2006 onwards, progress in the maternal, neonatal and child health programs can be monitored every quarter using the MNCH scorecard for accountability and action purposes.
- 23. The FMOH conducted a mid-year inspection, involving members of the parliament and other government sectors, to verify activities that had been undertaken at grass roots level. The inspection was conducted in all regions, 26 zonal health departments , 52 WorHOs, 52 HCs as well as in kebele administration offices and one-to-five networks. The result of inspection has shown the strengths and weaknesses during the preparatory and implementation phases, and based on the inspection's results, measures were taken, particularly to strengthen the HDA and thereby the overall health system.
- 24. One of the major planning activities performed during EFY 2006 was the finalization of the Woreda-based Core Plan for EFY 2007. Furthermore, the draft Health Sector Transformation Plan was prepared for the coming five-year period (EFY 2008-2012) as part of the 2035 vision of the health sector.
- 25. Concerning the Health Management Information System (HMIS), the revision of the list of the HMIS indicators was completed; training was conducted in 3,338 (97.4%) public facilities and 4,175 (69.9%) private facilities, making a total of 7,513 (79.9%) public and private facilities being already trained. In addition to training, sufficient amount of printing materials were distributed directly to districts, and Tigray, Afar and Somali Regions have already started using the revised tools for recording and reporting.
- 26. The Community Health Information System (CHIS) is being implemented, with a cumulative number of 25,569 HEWs being already trained (78.6% of the total). CHIS implementation coverage increased from 40% in EFY 2005 to 64.5% in EFY 2006 country-wide, ranging from 2.5% in Somali Region to 99.0% in SNNPR. Amhara, Tigray and Oromia Regions showed an intermediate coverage (94.0%, 79.8% and 43.8%, respectively).
- 27. A Joint Review Mission (JRM) was conducted in EFY 2006, in collaboration with DPs, to review the level of achievement of the strategic objectives of HSDP IV, identify challenges, document best practices, and forward recommendations to improve future governance, management and implementation of activities to meet HSDP IV goals.
- 28. In EFY 2006, the operational research focused on HIV/AIDS, TB, malaria, immunization, traditional medicine, nutrition, and policy. In particular, the analysis of 2011/2012 data from antenatal care-based HIV surveillance sites was completed and released this year, estimating the HIV prevalence among pregnant women at 2%; a survey on the prevalence of the first line anti-TB drug resistance was completed, with estimation of MDR TB prevalence among new and re-treatment cases.
- 29. The regulatory system has been strengthened, and a number of activities related to Inspection and Quality Control of "Products", "Premises", and "Professional Practice" had been accomplished. In EFY 2006, 17,183 new health professionals were registered and licensed at federal and regional levels, while the registration was renewed for 8,963 health professionals. Import permits were given for pharmaceuticals, food products, and tobacco products, while export permits were given for drugs and food products. Inspection and licensing were carried out on a number of facilities, including food import and distribution enterprises, pharmaceuticals import and distribution enterprises, cosmetics importers and distributors, tobacco products importers and distributors, and health facilities.
- 30. With respect to gender mainstreaming, several activities have been implemented, including the launching of the Gender Mainstreaming Manual, with orientation meetings being organized with RHBs and federal level sector offices on this subject. The National Gender Training Manual and Standard Operation Procedures for the response and prevention of sexual violence were also developed in EFY 2006.

HEALTH INFRASTRUCTURE AND RESOURCES

- 31. In EFY 2006, a total of 203 new HPs were constructed, making a cumulative number of 16,251 HPs. During the year, a total of 305 HPs were equipped with medical kits.
- 32. According to the Service Provision Assessment (SPA) survey on the availability and functionality of health facilities carried out in EFY 2006, the total available HCs were 3,335, and, out of these, 3,315 (99.4%) were functional. A total of 257 HCs were equipped with necessary materials.
- 33. Similarly, according to the SPA survey, the total available public hospitals were 156 in EFY 2006, and, out of these, 150 (96.2%) were functional. On the other hand, ongoing construction of 123 hospitals was reported from seven regions.
- 34. With regard to Human Resource Development, 3,583 new medical students were enrolled in 27 public medical schools in EFY 2006, making the total medical students on training 14,290. The New Medical Education Initiative has been expanded to 13 medical schools, contributing to the increase in intake of medical students. The physician to population ratio improved from one physician per 26,943 population in EFY 2005 to 1 per 20,970 population in EFY 2006.
- 35. The Integrated Emergency Surgery and Obstetrics (IESO) training aims at improving the provision of emergency obstetric care and surgical services at primary hospital level. So far, 163 health officers have completed the training and have been deployed in different health facilities, while, in EFY 2006, 130 IESO students were enrolled in 11 existing and new training institutions, with a total of 504 being under training.
- 36. Concerning Accelerated Midwifery Training, 1,240 midwifery students have been enrolled in EFY 2006, with 1,219 midwifery graduates being deployed to health facilities in the same year.
- 37. In EFY 2006, 96 Level V nurse anaesthetists and 94 degree graduates have been trained and deployed. A total of 115 nurse anaesthetists are under training in eight health science colleges (HSC), while 630 trainees are attending Bachelor of Science Program in ten universities in the same year.
- 38. To maintain two Health Extension Workers (HEW) per Health Post, 4,825 students were enrolled for level III training, while 2,123 HEWs graduated in Level IV Health Extension Service Training and 2,357 HEWs were enrolled for upgrading to Level IV in 19 training centres.
- 39. In the framework of the Ambulance Service and Emergency Care/Paramedics Training to improve prehospital emergency care in managing all emergencies, including maternal emergencies, 256 paramedics graduated, while 259 were enrolled in six training centres. Concerning the health information technicians (HIT) training, a total of 1,266 students were on training in HSCs in EFY 2006, while 433 were graduated and deployed to health facilities, increasing the cumulative total of HIT professionals deployed in health facilities to 2,532. In EFY 2006, a total of 4,520 health professionals were deployed, including 937 general practitioners, 94 anaesthetists, and 61 IESO officers.
- 40. Out of the planned procurement of pharmaceuticals and medical equipment worth of ETB 8.26 billion, the Pharmaceutical Fund and Supply Agency (PFSA) has procured pharmaceuticals worth of ETB 6.18 billion (74.8% of the target) in EFY 2006. Out of the planned distribution of drugs and medical equipment worth of ETB 10.87 billion, the agency has distributed pharmaceuticals and medical equipment worth of ETB 10.46 billion (96.2% of the target) in the same year. In EFY 2006 the construction of 17 warehouses and 11 cold chain systems was completed. An assessment revealed that 27 selected tracer drugs were available at the time of data collection in 89% of health facilities (90% of hospitals and 89% of HCs), while the long term availability (during the previous 6 months) was 78% in health facilities (81% in hospitals and 78% in HCs). With regard to rational drug use, 37 health facilities have established Drug Information Services (DIS), while 267 health facilities have established Drug and Therapeutics Committees (DTC).
- 41. The Health Information Technology Initiative covers a wide range of applications, such as telemedicine, tele-education, mobile health (mHealth), electronic HMIS (e-HMIS), Electronic Medical Records, Geographic Information System, and Human Resources Information System. Concerning tele-education, three university hospitals (St. Paul's, Adama and Yirgalem) were connected via woreda-net in EFY 2006 to teach basic science courses for pre-clinical students. The number of facilities implementing eHMIS increased from 1,433 in EFY 2005 to 2,345 in EFY 2006.

- 42. The fifth round of the National Health Accounts (NHA) was carried in the year (based on 2010/11 expenditures) to estimate the flow of resources in the health sector. Per capita health expenditure increased from USD 16.1 per capita in 2007/08 to USD 20.8 in 2010/11, below the HSDP IV per capita spending target of USD 32. The "rest of the world" (including multilateral and bilateral donors and international non-governmental organizations) accounted for almost half (49.9%) of the health financing, households for 33.7% and Government for 15.6% (of whom, Federal Government for 5.2%, Regional and Local Government for 8.1% and Parastatals for 2.3%).
- 43. One of the main challenges hampering health care access and quality is the lack of resources. To address this challenge and hence to mobilize adequate resources for the health sector, different resource mobilization activities have been implemented, including: (i) revenue retention by health facilities for quality improvement; (ii) implementation of fee waiver system for enhanced equity; (iii) establishment of private wings and outsourcing for better efficiency; and (iv) pilot and implementation of community based and social insurance schemes for improved financial access to health services, avoiding payment at the point of care delivery. Revenue retention is additional to the block grant budget allocated from treasury, and it is used strictly for quality improvement activities. Currently 2,849 health facilities (101 hospitals and 2,748 HCs) are retaining and utilizing internally generated revenues to improve the quality of health services.
- 44. To tackle financial barriers to health care access, the government has initiated and is implementing two types of health insurance systems, namely, the Community Based Health Insurance (CBHI) for the rural population and urban informal sector, and the Social Health Insurance (SHI) for the formal sector employees. CBHI is being piloted in 13 woredas of four regions (Tigray, Amhara, Oromia and SNNP), and a total of 157,553 households have been registered at the end of EFY 2006. The CBHI scheme has generated ETB 29,402,451.40 in EFY 2006, with a 39.5% increase as compared to ETB 21,065,786.62 in EFY 2005. In EFY 2006, the Ethiopian Health Insurance Agency (EHIA) Implementation Directive was endorsed, and SHI scheme has registered a total of 20,390 out of 112,514 employees found in 127 federal level offices.
- 45. In EFY 2006, the percentage of total budget allocated in the health sector at regional level was 10.30%, which was higher than in EFY 2005 (9.75%), while the per capita health allocation was ETB 116.43, increasing from ETB 100.16 in EFY 2005. The regional block grant budget allocated to the health sector ranged from 5.6% in Harari to 15.6% in Gambella in EFY 2006. Although per capita allocation is increasing over time, the allocated budget for health in EFY 2006 was below the need of the sector for delivering quality care. This calls for enhancing implementation of the health care financing (HCF) reform and expansion of pre-payment schemes, such as community and social health insurance, as well as additional funds from different sources.
- 46. One of the main sources of funding for the health sector is the contribution from DPs. In EFY 2006, a total of USD 558.33 million was committed by DPs and a total of USD 612.87 million (109.8%) was disbursed. A total of USD 234.68 million was disbursed to MDG PF with a 76.1% increment from EFY 2005 (USD 133.23 million). The MDG PF accounted for 38.3% of total DPs' disbursement in EFY 2006 (increasing from 25.1% in EFY 2005).

CHALLENGES

Some of the major challenges encountered during the implementation of the activities planned in EFY 2006 Core Plan include the following:

- Slow implementation of HDA;
- Shortage of human resources in terms of number, capacity, and professional skills;
- Gaps in midwives, doctors and anaesthetists for provision of BEmONC and CEmONC services;
- Absence of 24 hours a day and 7 days a week service in many health facilities, especially in HCs;
- Low skilled care at birth;
- Inadequate supply of water and electricity at HPs and HCs;
- Shortage of transportation facilities;
- Inadequate quality of diagnostic laboratories;

- Low utilization of out-patient services;
- Limited capacity to provide on time supportive supervision and monitoring at each level;
- Limited capacity in data collection and analysis and in information use for decision making purposes;
- Failure to submit liquidation reports on time;
- Weak referral system;
- Lack of standard medical equipment management system; and
- Limited capacity to maintain cold chain system.

With one year to go until the 2015 target date for achieving MDGs, substantial improvements have been documented on many health-related goals, with remarkable progress having been made in reducing child mortality, improving nutrition, and combating HIV, tuberculosis and malaria. Ethiopia has shared with other countries that have made progress towards achievement of MDGs common overarching elements of success, including leadership and partnership, evidence and innovation, development and implementation of dual short term and long-term strategies, and adaptation to change for sustained progress.

Despite these positive developments, the sector still faces formidable challenges. Decreasing the huge burden of maternal mortality remains the single most serious challenge to the sector. Even though appropriate strategies and initiatives are in place, there are serious shortages of the required trained human resources, and there are also cultural, social and economic barriers to be overcome. In particular, despite the high increase in the percentage of deliveries assisted by skilled birth attendants (from 23.1% in EFY 2005 to 40.9% in EFY 2006), it is necessary to further strengthen the ongoing interventions to address the gaps in midwives, doctors and anaesthetists for provision of EmONC services, absence of 24 hours a day and 7 days a week service in most health facilities, rapid turnover of highly trained professionals, and inadequate availability of drugs, supplies and medical equipment.

Such constraints should be tackled if the MDGs are to be achieved by the target date. Furthermore, it is high time to envision the future of the health sector beyond 2015, and this knowledge lays the foundation for an integrative and transformative post-2015 sustainable development agenda. In this perspective, the FMOH is developing the 20-year health sector vision to achieve the health outcomes that commensurate with lower-middle income country by 2025 and middle-middle income country by 2035.

CHAPTER 1



Introduction

INTRODUCTION

The Fourth Health Sector Development Programme (HSDP) IV for the period 2010/11-2014/15 has passed its fourth year of implementation. This Annual Performance Report (APR) describes the implementation status of the HSDP in 2013/14 according to the three Strategic Themes: (i) Health Service Delivery and Quality of Care; (ii) Leadership and Governance; and (iii) Health Infrastructure and Resources. It is structured around the following ten Strategic Objectives of the health sector under the three Strategic Themes:

- 1. Improve access to health services;
- 2. Improve community ownership;
- 3. Improve quality of health services;
- 4. Improve public health emergency preparedness and response;
- 5. Improve pharmaceutical supply and services;
- 6. Improve evidence-based decision making, harmonization and alignment;
- 7. Improve regulatory system;
- 8. Improve health infrastructure;
- 9. Improve human capital and leadership; and
- 10. Maximize resource mobilization and utilization.

The report gives an overview of the performance of the sector in addressing these strategic objectives and how the various activities during the year have contributed to the improvement of the health status of the Ethiopian people. It examines the progress made, the efforts that are underway and the challenges faced by the sector in the promotion of health, and in the organization, financing and governance of health services. In particular, the report provides information on:

- Health service coverage levels for priority programs;
- Performance against target set in the core plan, using national and regional level indicators;
- Trends of achievements and regional comparisons;
- Status of the health sector support systems; and
- Public sector and donor expenditure analysis for the Ethiopian Fiscal Year (EFY) 2006.

The theme of the 16th Annual Review Meeting (ARM) is "Crossing the finishing line and visioning beyond: towards equitable and better quality health services in Ethiopia", and, therefore, special attention has been given to the analysis of the level of achievement of health Millennium Development Goals (MDG) and to the post-2015 development agenda in the framework of the next 20-year health sector vision.

In the preparation of this report, a uniform structure of presentation has been followed by indicating in each section the background, targets, achievements, challenges and the way forward. The report contains 29 Tables and 65 Figures that depict regional comparisons and trends of indicators selected for monitoring the implementation of the fourth year of HSDP IV.

Both quantitative and qualitative data have been used in the preparation of this report; its primary source has been the Health Management Information System (HMIS) aggregated quarterly reports for EFY 2006 based on regional reports, with the exception of data for certain programs not covered by the HMIS. Population figures were based on the estimates from the 2013 intercensus population survey provided by the Central Statistical Agency (CSA) as well as conversion factors from the same source. It is important to use a single authoritative source (CSA) to estimate population figures at regional and national levels, therefore ensuring standardization of procedures and comparability of results. This is a precondition for the appropriate analysis of population-based indicators, such as comparison across regions and over time. However, different population estimates are sometimes used at the local level from local surveys and other data sources of various reliability; these estimates should not be used at higher levels, because they would undermine the comparability across regions and over time.

Even though the HMIS is the main source of data, this report also uses other key sources of information such as earlier Annual Performance Reports, reports by the Federal Ministry of Health (FMOH) programs and other central level institutions, and surveys and studies undertaken by various stakeholder institutions. In particular, population-based indicators for maternal, newborn and child health (MNCH) have been estimated from the Ethiopia Mini Demographic and Health Survey (EMDHS) 2014 and compared with the estimates from the previous rounds of the Ethiopia Demographic and Health Surveys (EDHS) 2000, 2005 and 2011 for trend analysis purposes. Furthermore, results from the National Health Accounts (NHA) V published in 2014 (based on 2010/11 expenditures) are presented to estimate the flow of resources in the health sector.

As in previous years, the development process of the Annual Performance Report for EFY 2006 was widely consultative, involving stakeholders from Regional Health Bureaus (RHB), Directorates of FMOH, and agencies accountable to the FMOH as well as Development Partners (DP). The overall coordination and technical support was provided by a Committee led by the Policy and Planning Directorate (PPD) with oversight being provided by the Joint Core Coordinating Committee (JCCC). Representatives of DPs provided technical support in the compilation, formatting and collating process of the report in close collaboration with the Coordinating Committee at PPD. Draft submissions were made by RHBs, Directorates at FMOH, and agencies under the FMOH. Identified gaps were rectified by the relevant authority. The final draft was presented, for comments and approval, to RHBs, directorates, and finally to the Management Committee at the Head Office.

One of the objectives of the sixteenth ARM 2014 is to review the performance of the sector in EFY 2006 against targets and actions set in the plan. The major management tool that serves this purpose is the Annual Performance Report which is one of the core agenda items at the ARM. Encouraging accomplishments have been achieved so far; however, much remains to be done, and efforts continue to be needed to accelerate progress in achieving the MDGs; furthermore, interventions to improve health,

and to achieve health equity, will continue beyond 2015. This undertaking goes hand-in-hand with efforts to ensure universal health coverage. With this in view, participants of the sixteenth ARM are expected to discuss the issues highlighted in the report and offer valuable comments and suggestions that will enhance implementation of the strategic initiatives in EFY 2007.

CHAPTER 2





Health Service Delivery and Quality of Care

HEALTH SERVICE DELIVERY AND QUALITY OF CARE

Under the Strategic Theme "Health Service Delivery and Quality of Care", the provision and management of curative, preventive, rehabilitative and emergency health services as well as the promotion of good health practices are discussed in the following paragraphs, including provision of maternal, neonatal, child, youth and adolescent health services and public health emergency services.

The flagship programme to ensure health service delivery and quality of care is the Health Extension Program (HEP), which is the main vehicle for prevention, health promotion, behavioural change communication (BCC) and basic curative services through the effective implementation of essential packages and the continuous process of building and strengthening the Health Development Army (HDA).

The desired result is a community practicing and producing good health, being protected from emergency health hazards, and having access to quality health care.

2.1. HEALTH EXTENSION PROGRAM

HEP is an innovative community-based strategy to deliver preventive and promotive services and selected high impact curative interventions at community level. It brings community participation through creation of awareness, behavioural change, and community organization and mobilization. It also improves the utilization of health services by bridging the gap between the community and health facilities through the deployment of Health Extension Workers (HEW). The main objective is to improve access to essential health services provided at village and household levels, contributing to the improvement of the health status of the families, with their full participation, using local technologies and the skill and wisdom of the communities. In this context, with the aim to promote community mobilization and adoption of healthy lifestyles, a major initiative undertaken by the Ethiopian Government is the implementation of the HDA.

2.1.1. IMPLEMENTATION OF HEALTH DEVELOPMENT ARMY

The main focus of the HSDP is to improve community ownership and further enable the community to produce and maintain its own health through the establishment of a strong HDA. HSDP further focuses on the provision of improved primary health care services to mothers and children, as well as on prevention and control of communicable diseases in order to achieve the desired results.

HDA refers to an organized movement of the community through participatory learning and action meetings. Organizing a functional HDA requires the establishment of health development teams (HDA groups) that comprise up to 30 households residing in the same neighbourhood. The health development team is further divided into smaller groups of six members, commonly referred as one-to-five networks. The leaders of the health development teams and the one-to-five networks are selected by the team members. The main criteria

for selection of the leaders are being a model family and having the trust of the members in mobilizing the community. The strategy used in Tigray for HDA formation was the women-centered one-to-five network development, called Women Development Group (WDG) formation, while the other agrarian regions set up mixed (male and female) HDA groups. The formation of the health development teams and the one-to-five networks is facilitated by HEWs and the kebele administration.

The progress made in different regions on the formation of HDA groups and one-to-five networks in EFY 2006 is described as follows.

In Tigray Region, 29,849 WDGs have been established so far, with the formation of 149,245 one-to-five networks. Similarly, in Southern Nations, Nationalities and Peoples Region (SNNPR) a total of 84,129 HDA groups with 626,953 one-to-five networks were formed. Besides, Amhara Region established 118,625 HDA groups and 572,802 one-to-five networks, while in Oromia Region a total of 195,864 HDA groups and 880,975 one-to-five networks were established in the same year.

Likewise, a total of 10,407 HDA groups with 41,561 one-to-five networks were established in Addis Ababa in EFY 2006. In Harari, 1,613 HDA groups with 5,510 one-to-five networks were established, while 2,286 HDA groups with 12,695 one-to-five networks were established in Dire Dawa. Therefore, at the national level, a total of 442,773 HDA groups with 2,289,741 one-to-five networks were formed in EFY 2006.

With regard to networking health centers (HC) to health posts (HP), the following networks were established in the regions in EFY 2006: 122 HCs to 656 HPs in Tigray, 802 HCs to 3,302 HPs in Amhara, 1,180 HCs to 6,130 HPs in Oromia, 723 HCs to 3,838 HPs in SNNPR, 8 HCs to 26 HPs in Harari, 7 HCs to 31 HPs in Dire Dawa, and 76 HCs to 116 kebeles in Addis Ababa.

The HDA groups and networks brought lots of achievements, mainly in the areas of maternal health and hygiene and sanitation. Examples of best practices achieved in EFY 2006 by HDA in different regions are presented as follows.

Organization of coffee and tea ceremonies/conferences

- HDA has played a role in arranging monthly conferences, like "candle light ceremonies", for mothers who have recently delivered with the assistance of skilled health professionals to share experience with other pregnant women and improve peer-to-peer support.
- Efforts have also been made to attractively receive the pregnant women in the out-patients department (OPD) by preparing coffee and tea ceremonies as a courtesy and welcome to the health facility. In addition, the availability of maternity waiting areas and the provision of assorted clothing for the baby are additional incentives to promote institutional delivery.
- Members of the network give a contribution of ETB 10 for two lives (for the mother and foetus) to be used in the health facilities for coffee and tea ceremonies and for preparing porridge and other food items.

Strong linkage between health centers and health posts

• One of the achievements brought by the HDA is the strengthening of the Primary Health Care Unit (PHCU). In implementing HC-HP linkage, the PHCU board began to actively monitor and evaluate the implementation of PHCU plans, with health professionals at HC being assigned to HPs for supporting HEWs in a planned and scheduled manner with checklists; this helped to address skill, logistics and attitudinal challenges that HEWs were facing. It also helped to document and share best practices in HEP implementation, when HEWs were gathering for monthly review meetings at HC.

Use of traditional ambulance

• The HDA came up with locally made and modified stretchers to carry the labouring mothers to the nearby health facility or major road where the ambulance or other means of transportation could be accessed. The use of modified traditional ambulance during the rainy season has also helped mothers to give birth at health facilities.

Effective use of modern ambulance service

• The coordination between HPs and HCs, and the exchange of mobile phone numbers between the delivering mother's family and the health workers at HC and HP levels (midwife, HEW and ambulance driver) have been effective to improve the access to health facilities.

Identification of priority groups (pregnant women and under 5 children)

- Members of Women's Associations identified pregnant women in their vicinity and further sensitized them on the importance of skilled birth attendance (SBA).
- HDA and the one-to-five network members participated in the identification and registration of pregnant women, and also sent them to HPs for antenatal visit and follow up; furthermore, they went house-to-house to encourage pregnant women to deliver at health facilities. Besides, they identified and registered under five children and conducted community conversations on proper feeding habits.

Construction of latrines and creation of "open defecation free" kebeles

• Unemployed youth in many kebeles have been organized to support the community in the construction of pit latrines. The community shared the cost of constructions and paid the youth for the work done.

Experience sharing

• The model household heads (mothers) have disseminated their success stories in implementing HEP by projecting films and displaying photographs which in turn promoted their implementation also in urban settings.

The newly established health education team developed a draft Health Education and Communication Strategy, Health Learning Materials Development and Distribution Guideline, and Health Extension Profile. In addition, brochures on non-communicable diseases (cervical cancer, breast cancer, hypertension and diabetes) were prepared and printed in EFY 2006.

CHALLENGES

- Lack of commitment and low level of skills and experience on the part of management in implementing HDA;
- Inadequate performance of graduated model households in some packages;
- Limited involvement of one-to-five networks in the HDA implementation process;
- Lack of woreda and kebele level management staff to perform regular supporting supervision; and
- Unsatisfactory collaboration among sector offices having important roles in implementing HDA strategy.

WAY FORWARD

- Undertake capacity building measures on HDA implementation for management staff;
- Improve the process and quality of training and graduation of model households;
- Capacitate the members of one-to-five networks to promote their involvement in the HDA process;
- Strengthen regular supporting supervision at woreda and kebele levels; and
- Strengthen collaboration among sector offices.

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2.1.2. HYGIENE AND ENVIRONMENTAL HEALTH

Many hygiene and environmental health activities were carried out in EFY 2006. With regard to Open Defecation Free (ODF) kebeles, a total of 3,655 kebeles were declared as ODF kebeles in EFY 2006. Besides, the ODF verification team was established to assess ODF kebeles.

Other activities carried out in EFY 2006 were:

- The Community Led Total Sanitation and Hygiene (CLTSH) Procedure Manual and the CLTSH Training Manuals were prepared and distributed to regions. Besides, marketing guideline was developed and indorsed to increase latrine coverage.
- A workshop was organized on personal and environmental health program for 120 professionals selected from different federal and regional sectoral offices and the media.
- Training of Trainers (TOT) was organized on CLTSH facilitation skill and latrine transformation skill for 92 trainees from the following regions: 25 from SNNPR, 22 from Tigray, 23 from Amhara, and 22 from Oromia. Afterwards, a cascade training was given for 34 woredas in the same regions. Similarly, a total of 21 professionals were trained on CLTS facilitation skill from Gambella (4), Benishangul Gumuz (2), Dire Dawa (3), Somali (5), Afar (5) and federal level (2).
- A total of 101 environmental health and public health laboratory technicians were trained on portable physico-chemical and micro-biological test kit operation and utilization. Moreover, the Water Quality Inspection and Surveillance Draft Strategic Document was prepared. On the other hand, water treating chemicals were brought for pastoralist regions.
- The World Hand Washing Day, with the motto "Personal and Environmental Hygiene for Healthy Life", was celebrated with 5,000 participants from different governmental and non-governmental institutions. Likewise, celebration of the day was also carried out in the regions. For the occasion, a total of 12,000 leaflets, 12,000 posters and 5,000 stickers were prepared and distributed to respective regions.
- Hygiene and environmental health festivity was celebrated with the motto of "Practicing hygiene and environmental health to have healthy and productive citizens", and 163 participants attended from different ministries, house of representative, regions, universities and non-governmental organizations (NGO).
- Training was given on the procedures of climate change vulnerability and adaptation for members of Technical Working Group (TWG) on climate change comprised of different partners. Besides, the Draft Climate Resilience Health Strategy Framework was designed.
- The "One WASH National Program" (OWNP), including FMOH, Ministry of Education (MOE), Ministry of Water, Irrigation and Energy (MOWIE), Ministry of Finance and Economic Development (MOFED) as well as DPs, was launched in September 2013 as broad intersectoral program to ensure harmonization among stakeholders and improve the water supply and sanitation in schools and health facilities. The OWNP is the Government of Ethiopia's (GOE) main instrument for achieving the goals set for water, sanitation and hygiene (WaSH) in the Growth and Transformation Plan (GTP). An OWNP principles and implementation workshop was organized for 250 participants. To implement the five years OWNP (EFY 2007–2011), Federal and Regional Health Bureaus' physical, financial and procurement plan has been developed and submitted to National WaSH Coordination Office at MOWIE.
- To address the ever existing urban sanitation and hygiene problem, the Integrated Urban Sanitation and Hygiene (IUSH) Strategy Framework was developed and endorsed by Sector Ministries' State Ministers and DPs. This framework will pave the way for the formulation of IUSH Strategy, MoU and Five Year Strategic Action Plan.
- Based on EFY 2005 plan of action, a review meeting was conducted in the presence of four regional and 40 woredas Global Sanitation Fund Programme coordinators and finance focal persons. Based on the results of the review meeting, EFY 2006 plan of action was prepared. Quarterly supportive supervision was also conducted in the concerned programme woredas.

CHALLENGES

- Inadequate number of environmental health professionals at all levels;
- Absence of regular and integrated Monitoring and Evaluation (M&E) activities;
- Inadequate implementation of the hygiene and environmental health package in HEP;
- Limited ownership on OWNP and sanitation projects by some regions;
- Limited attention on urban sanitation;
- Inadequate capacity to scale-up best practices; and
- Uncoordinated support from partners.

WAY FORWARD

- Recruit environmental health professionals at all levels;
- Ensure integrated M&E activities;
- Improve the implementation of the hygiene and environmental health package in HEP;
- Strengthen the capacity of regions on the ownership of OWNP and sanitation projects;
- Give attention to urban sanitation;
- Strengthen the capacity of regions to scale-up best practices; and
- Strengthen harmonization and alignment according to "One-Plan, One-Budget, and One-Report" principle.

2.2. MATERNAL AND NEWBORN HEALTH SERVICES

The Government of Ethiopia is committed to achieve the MDG5 to improve maternal health, with a target of reducing Maternal Mortality Ratio (MMR) by three-quarters over the period 1990 to 2015. HSDP IV aims to reduce MMR from 676/100,000 live births to 267/100,000 live births. Another target of MDG 5 is to achieve, by 2015, universal access to reproductive health, including access to safe, affordable and effective methods of contraception. Contraceptive use contributes also to improvements in maternal, newborn and infant health by preventing unintended or closely spaced pregnancies as well as pregnancies in very young women, which can be risky. It has been documented that contraceptive use can have an impact in reducing maternal mortality by averting more than half of maternal deaths.

2.2.1. POPULATION-BASED INDICATORS FROM ETHIOPIA MINI DEMOGRAPHIC AND HEALTH SURVEY 2014

Results from the EMDHS 2014 are important to track progress towards the achievement of MDG5 in Ethiopia, as well as to compare Ethiopia's performance to the average in sub-Saharan African (SSA) countries. Population-based estimates from EMDHS 2014 on contraceptive use and fertility levels, trends and differentials as well as on SBA are presented in this section, while data on MMR were not collected in the above mentioned survey and are planned to be collected in the next EDHS 2016.

Concerning family planning (FP), Contraceptive Prevalence Rate (CPR) among currently married women increased from 8.1% in EDHS 2000 to 41.8% in EMDHS 2014 (Fig. 1A). While both rural and urban areas showed a consistent increase over time (Fig. 1B), a nine-fold increase in CPR was observed in rural areas (from 4.3% in EDHS 2000 to 39.0% in EMDHS 2014), with urban areas increasing from 35.6% to 59.6% (+67.4%) in the same period. Of note is the fact that the steepest increase in rural areas was observed between EDHS 2005 and EMDHS 2014, when CPR almost quadrupled in only 9 years (from 10.9% in EDHS 2005 to 39.0% in EMDHS 2014), due to the contribution of HEWs in promoting behavioural change and implementing FP services. Figure 2 shows that much of this improvement was attributable to the sharp increase in the use of injectables (from 3.1% to 31.0% in the same period).



Figure 1: Trend in Contraceptive Prevalence Rate (1A) and Distribution by Area (1B) (EDHS 2000-2011 and EMDHS 2014)



(Any Method and Injectables) (EDHS 2000-2011 and EMDHS 2014)

Current use of any contraceptive method varied notably by region, ranging from 1.7% in the Somali Region to 64.1% in Addis Ababa. Similarly, use of any modern contraceptive method was lowest in the Somali Region (1.0%) and highest in Addis Ababa (57.4%).

Concerning fertility, the Total Fertility Rate (TFR) in EMDHS 2014 (referring to the three-year period before the survey) was 4.1 children per woman (Figure 3A), meaning that an Ethiopian woman who is at the beginning of her childbearing age would give birth to about four children by the end of her reproductive period if fertility levels will remain constant over the childbearing years. The TFR in rural areas exceeded the TFR in urban areas by more than two children per woman (4.5 and 2.2 children per woman, respectively). However, it is important to note that, within the overall TFR decline observed in the country (from 5.9 in EDHS 2000 to 4.1 in EMDHS 2014), the steepest decline was observed in rural areas (from 6.4 in EDHS 2000 to 4.5 in EMDHS 2014) (Figure 3B). As discussed above, HEWs contributed to such rapid improvements in rural areas. The decline in urban

areas was steep between EDHS 2000 (3.3) and EDHS 2005 (2.4), followed by fluctuations around the latter rate (2.6 in EDHS 2011 and 2.2 in EMDHS 2014).



Figure 3: Trend in Total Fertility Rate (3A) and Distribution by Area (3B) (EDHS 2000-2011 and EMDHS 2014)

There were wide differences across regions, ranging from 1.7 children per woman in Addis Ababa (below the replacement level of fertility) to 7.3 children per woman in Somali Region. Fertility levels were higher than the national average in Somali, Afar, Benishangul Gumuz, Gambella, Tigray, and SNNP Regions.

In general, the fertility transition in Ethiopia is already advanced in urban areas, showing the lowest fertility rate as compared to urban areas in Eastern and Southern Africa (ESA), with Addis Ababa being the only city in ESA with below replacement fertility after the 1990's (TFR=1.7 from EMDHS 2014). Therefore, patterns in Ethiopia are characterised by high, but declining, fertility in rural areas, and low fertility in urban areas. These patterns are different from those observed in SSA, the region with the highest maternal mortality and lowest skilled care at birth, where women continue to have the lowest level of contraceptive prevalence (26%), with little progress reported since 2000.

Furthermore, maternal health data were also collected in EMDHS 2014, providing important populationbased estimates on antenatal and postnatal coverage as well as on skilled birth assistance. In particular, delivery assisted by skilled providers is the most important proven intervention in reducing maternal mortality and one of the MDG indicators to track national effort towards safe motherhood. A remarkable progress was observed from 10.0% in EDHS 2011 to 14.5% in EMDHS 2014, with a 45% increase in only three years; however, despite this progress, the percentage of SBA is still too low in Ethiopia, even when compared with the average estimate for SSA countries (40%) published in the United Nations (UN) MDG Report 2014. Figure 4 shows the consistent upward trend in SBA from as low as 5.6% in EDHS 2000 and 5.7% in EDHS 2005 up to 14.5% in EMDHS 2014. The proportion of births assisted by a skilled provider ranged from 6.6% in Afar to 86.0% in Addis Ababa.

Similarly, 15.4% of births were delivered at a health facility according to EMDHS 2014 (14.0% in a public facility and 1.4% in a private facility). Urban births were six times more likely than rural births to be delivered in a health facility (63.0% versus 10.4%). The percentage of births delivered in a health facility ranged from 6.4% in Afar to 86.5% in Addis Ababa.

Of note is the fact that these SBA estimates refer to the five-year period before the survey, while estimates of the same indicator from HMIS sources refer to the same year: therefore, it is not correct to compare DHS estimates with HMIS estimates of the same year (i.e. EMDHS 2014 and HMIS 2014). In addition, different methods and sources of data (population-based and facility-based, respectively) were used in surveys and routine administrative systems, further explaining the discrepancies found from different sources.



These recent improvements reflect the efforts to implement multiple and interrelated high impact interventions at both facility and community levels to remove bottlenecks hampering access to safe motherhood services, such as harmful traditional beliefs and practices, poor infrastructure, shortage of transportation facilities, and inadequate care at health facilities.

2.2.2. SERVICE INDICATORS

HSDP IV has devised a set of key inter-related performance indicators to monitor the progress made in improving maternal and newborn health. A measure of contraception - contraceptive acceptance rate (CAR) - is presented as a tracer of reproductive health. Antenatal care (ANC) coverage provides a measure of access to the health system and is critical to identify maternal risks and improve health outcomes for the mother and the newborn. Measures of coverage of skilled care at birth and birth attendance by HEWs, as well as postnatal care (PNC) services, are critical elements of the continuum of care. Human immunodeficiency virus (HIV)-related indicators are included to emphasize the need towards a more holistic approach to health care, and to promote further integration of the programs to prevent mother to child transmission (MTCT) of HIV and maternal health services. These indicators are summarized in Table 1 showing, for each indicator, EFY 2006 baseline, performance and target, as well as the overall HSDP IV targets set for EFY 2007.

ANC coverage (at least one visit) slightly increased from 97.4% in EFY 2005 to 98.1% in EFY 2006, the percentage of deliveries attended by skilled health personnel increased from 23.1% to 40.9% and PNC coverage increased from 50.5% to 66.2% in the same period. Similarly, CAR increased from 59.5% in EFY 2005 to 63.0% in EFY 2006. Conversely, clean and safe delivery coverage (by HEWs) declined from 11.6% in EFY 2005 to 8.8% in EFY 2006, much less than the planned coverage (35.0%) for the year.

The proportion of pregnant women counselled and tested for the prevention of mother to child transmission (PMTCT) of HIV increased from 54.9% to 57.0%. Out of these maternal health indicators, only ANC (98.1%) surpassed the target set for the year (97.0%) (Table 1). Figure 5 shows the trend in maternal health indicators observed between EFY 2002 and 2006.

Table 1:

Maternal Health Indicators

(EFY 2006 Baseline, Performance and Target and HSDP IV Target)

Indicator	EFY 2006 Baseline	EFY 2006 Performance	EFY 2006 Target	HSDP IV Target (EFY 2007)
Antenatal care coverage	97.4%	98.1%	97.0%	90.0%
Percentage of deliveries attended by skilled health personnel	23.1%	40.9%	60.0%	62.0%
Clean and safe delivery coverage (percentage of deliveries attended by HEWs)	11.6%	8.8%	35.0%	38.0%
Postnatal care coverage	50.5%	66.2%	79.0%	78.0%
Contraceptive acceptance rate	59.5%	63.0%	80.5%	82.0%
Percentage of pregnant women counselled and tested for PMTCT	54.9%	57.0%	84.0%	83.0%



Figure 5: Trend in Antenatal Care Coverage, Percentage of Deliveries Attended by Skilled Health Personnel and Postnatal Care Coverage (EFY 2002-2006)

2.2.2.1. REGIONAL DISTRIBUTION OF ANTENATAL CARE COVERAGE

As it was noted in the previous year, ANC coverage showed wide variation across regions, ranging from 54.4% in Gambella to 100% in Tigray, SNNP, Harari, Addis Ababa and Dire Dawa that achieved their EFY 2006 target; when compared to their baseline, except Oromia and Gambella, the remaining nine regions improved their performance (Figure 6).



2.2.2.2. REGIONAL DISTRIBUTION IN THE PERCENTAGE OF DELIVERIES ASSISTED BY Skilled Health Personnel

One of the key interventions to reduce maternal mortality is the SBA and its coverage is one of the MDG indicators to track national effort towards safe motherhood. The percentage of deliveries assisted by skilled health personnel showed a steep increase between EFY 2005 and EFY 2006 (from 23.1% to 40.9%); however, it remained below the target of 60% set for the year.

There was wide variation across regions, ranging from 20.8% in Gambella to 85.0% in Addis Ababa. Despite the fact that an increase was observed in all regions (Figure 7), only Harari (78.2%) exceeded its regional target (72.0%).



The FMOH uses multiple high impact interventions at both facility and community levels to address the 3 delays in: (i) seeking appropriate medical care for an obstetric emergency; (ii) reaching an appropriate emergency obstetric and neonatal care (EmONC) facility; and (iii) receiving adequate care when the facility is reached. To address the three delays accounting for high maternal and newborn mortality in the country, strategies have been designed and relevant activities being implemented are described as follows.

First delay in seeking appropriate medical care for an obstetric emergency

To tackle deeply rooted traditional practices that hinder mothers to seek appropriate medical care, monthly conferences with all pregnant mothers, along with the mobilization of HDA, have been implemented successfully in different regions. For example, in Tigray the monthly "candle light ceremonies" have been carried out, in which mothers who recently delivered with assistance by skilled health personnel share their experiences with other pregnant women, with also midwives and other health professionals attending the ceremony. This experience sharing ceremony has been found to be encouraging, and there is also a plan to expand this practice to other regions.

Second delay in reaching an appropriate emergency obstetric and neonatal care facility

According to the principle of "one ambulance per woreda", a total of 450 ambulances have been procured and distributed in EFY 2006, reaching a cumulative total of 1,262 ambulances being in place and providing services. The national rural road expansion project is also assisting for a smooth transfer of mothers to health facilities, contributing to address the second delay. In the same way, traditional ambulances have been used for the same purpose in areas where the terrain poses a significant challenge, such as in Tigray: the HDA organized the youth to carry the labouring mothers by locally made stretchers to the nearby health facility or major road where the regular ambulance could be accessed. Maternity waiting areas were constructed in many hospitals and HCs and used by pregnant women coming from remote villages and by those considered at high-risk for obstetric complications.

Third delay in receiving adequate care when the facility is reached

Health providers have been trained and regularly monitored to ensure that mothers get appropriate care on time once they arrive at health facilities, avoiding also unnecessary referrals. Awareness raising campaigns, such as "No mother shall die while we are serving" and "One Birr for one mother", are being pioneered by health providers working in some health facilities.

Regarding the expansion of basic emergency obstetric and neonatal care (BEmONC) services, a total of 1,492 health professionals have been trained in EFY 2006. Several activities have been conducted to ensure safe motherhood, including procurement and provision of drugs, medical supplies and equipments needed for obstetric and neonatal care services. In addition, a weekly reporting of health facility delivery services has been put in place to monitor improvements in coverage as well as to promote responsibility and accountability for health professionals.

Based on the directive prepared at national level, regional TOT and cascade trainings were conducted on maternal death surveillance and response (MDSR) in 29 zones of Oromia, Amhara, Tigray and SNNP Regions, and in Dire Dawa and Addis Ababa City Administrations. In addition, MDSR implementation report has been integrated with the Integrated Disease Surveillance and Response (IDSR) system.

2.2.2.3. REGIONAL DISTRIBUTION OF CLEAN AND SAFE DELIVERY SERVICE COVERAGE

Even though skilled attendance at birth is the most important intervention to reduce maternal mortality, some mothers are unwilling or unable to access a facility (HC or hospital) where skilled birth delivery services are provided. In these cases, in order to minimize home delivery, clean and safe delivery attendance by HEWs has been implemented. For this purpose, HEWs have been also trained to identify pregnant women with obstetric complications and ensure their timely referral.

Like in the previous year, a decline was observed in clean and safe delivery service coverage from 11.6% in EFY 2005 to 8.8% in EFY 2006, below the target set for the year (35.0%). Wide variations were observed across regions, ranging from 0.2% in Gambella to 18.0% in SNNPR. An increase in performance was observed only in four regions (Afar, Somali, Benishangul Gumuz and Harari), while a decrease was observed in four regions (Tigray, Oromia, SNNP and Gambella) and no change was seen in two regions (Amhara and Dire Dawa). These services were not supposed to be performed in Addis Ababa.

Except Tigray, none of the remaining regions achieved the regional target (Figure 8). The decline in clean and safe delivery service coverage observed in some regions (i.e. Tigray, Oromia and SNNP) showing an increase in SBA may be explained by the expansion of HCs and the subsequent focus on the provision of skilled care at birth in the catchment areas.



2.2.2.4. REGIONAL DISTRIBUTION OF POSTNATAL CARE COVERAGE

PNC coverage increased from 50.5% in EFY 2005 to 66.2% in EFY 2006, but this increase was below the target set for the year (79.0%). With respect to the regional distribution of PNC services, the highest coverage in EFY 2006 was observed in Oromia (73.9%), followed by Harari (73.1%) and SNNP (70.5%). An increase was observed in all regions; however, only Harari (73.1%) exceeded its regional target (73.0%) (Figure 9).



2.2.2.5. TREND IN CONTRACEPTIVE ACCEPTANCE RATE

CAR is presented as a proxy indicator for reproductive health service performance, and is one of the service indicators used to measure progress towards the achievement of MDG5. CAR increased from 59.5% in EFY 2005 to 63.0% in EFY 2006, below the target of 80.5% set for the year (Figure 10).



Contraceptive supplies, which serve about 11 million women, have been procured and distributed to health facilities.

In accordance with the plan to expand Intra-Uterine Contraceptive Device (IUCD) services to 200 new woredas, different awareness raising programs, including community conversations, have been organized. In addition, a monitoring system was put in place in health facilities which started IUCD insertion services. Moreover, FP training was provided at national level for 1,105 health professionals drawn from 200 woredas.

A national survey was conducted to identify the challenges related to the implementation of long-acting contraceptive methods, specifically IUCD and Implant.

A National Consultative Forum on Adolescent Reproductive Health Services was organized for different stakeholders, including universities, partners, parliamentarians, and youth associations.

FP training was conducted for health professionals drawn from 13 universities throughout the country.

TOT was provided for 5 health professionals on permanent FP methods and for 12 health professionals on postpartum IUCD at regional level. TOT on Implanon insertion and removal was provided to 722 health professionals drawn from different woredas; furthermore, these health professionals provided Implanon insertion training to 3,071 HEWs, and, during the training, Implanon insertion was provided to 19,931 mothers.

The Third International Conference on Family Planning was conducted in Addis Ababa (12-15 November 2013) focusing on the theme "Full Access, Full Choice". More than 3,300 delegates from 120 countries attended the conference, which ended with a call to action seeking to keep focus on family planning and sexual and reproductive health as part of the post-2015 development agenda. Best practices were shared from Ethiopia and all over the world. Ethiopia was chosen to host this important event because of the country's strong commitment to FP, and its success in providing FP services in rural areas through HEP leading to the increase in CPR observed in the past decade.

2.2.2.6. REGIONAL DISTRIBUTION OF CONTRACEPTIVE ACCEPTANCE RATE

Wide variations were observed across regions in EFY 2006, with the lowest rate (10.6%) being reported from Somali Region, and the highest (90.7%) reported from Amhara Region. An increase was observed in eight regions (Tigray, Afar, Amhara, Oromia, Somali, Benishangul Gumuz, Gambella and Harari); however, none of the regions performed above their annual targets (Figure 11).



2.2.2.7. PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV

In EFY 2006, out of 2,901,328 pregnant women who received at least one ANC, 1,931,832 (66.6%) pregnant women were tested for HIV, of whom 11,335 (0.59%) were HIV-positive. The percentage of HIV-positive pregnant women who received efficacious Antiretroviral (ARV) therapy to prevent Maternal to Child Transmission (MTCT) of HIV has been estimated at 60.6% in EFY 2006 (19,885 out of the estimated 32,807
HIV-positive pregnant women eligible), with an increase from 42.9% in EFY 2005. Out of this total (19,885), 9,696 newly received ART and 10,189 had previously received ART (Figure 12).



Figure 12: Status of Pregnant Women Tested Positive for HIV Who Received ART to Prevent Maternal to Child Transmission (MTCT) (EFY 2006)

Of note is the fact that "Option B+" strategy was implemented in EFY 2006: it is a "test and treat" strategy in which HIV-positive pregnant women start ART regardless of their CD4 count and are maintained on treatment for life. Option B+ represents a cost-effective strategy not only for preventing new HIV infections among infants, but also for improving the survival of HIV-infected mothers and reducing orphanhood, with a vision of an HIV free new generation. In this framework, a national strategic plan was endorsed, aiming at achieving the target of "no infant shall be born with HIV by EFY 2015". Regions have also prepared their own plans. A National Guideline on "Option B+" Implementation was developed and distributed to all health facilities country-wide. Accordingly, "Option B+" is being implemented in all regions of the country. Up to now, out of the planned 2,792, a total 2,542 government and 153 private health facilities are implementing "Option B+", reaching a 97% target achievement at national level in EFY 2006.

A total of 32 health professionals took TOT on "Option B+". Similarly, based on the new "Option B+ strategy", manuals, implementation guidelines, HMIS recording and reporting materials have been revised at all levels.

2.2.2.8. ABORTION CARE

Abortion care was given for 181,812 clients in EFY 2006, above the number of clients served in EFY 2005 (138,303).

- Gaps in midwives, doctors and anaesthetists for provision of EmONC services;
- Absence of 24 hours a day and 7 days a week service in most health facilities, especially in HCs;
- Lack of a separate newborn corner and absence of a neonatal unit in some health facilities;
- Low coverage of skilled delivery and newborn care;
- Inadequate supply of water and electricity at HP and HC levels;
- Inadequate skill on the part of HEWs and health professionals;
- Harmful traditional beliefs and practices affecting maternal health;
- Lack of regular supply of inputs to health facilities;
- Weak data collection, handling and analysis for decision making purposes;
- High turnover of trained staff;
- Low coverage of maternal health services in pastoralist areas;
- Weak integration of HIV services with FP services;
- High dropout rate among HIV-positive pregnant women taking ART;
- Limited access to services for early infant diagnosis of HIV; and
- Inadequate male partner involvement.

WAY FORWARD

- Scale-up the training of midwives and improve the availability of human resources (HR) capable to provide BEmONC services in all HCs;
- Provide round the clock delivery services in HCs nation-wide;
- Establish a newborn unit in all hospitals and a newborn health corner in all delivery rooms and maternity wards of all health facilities;
- Provide comprehensive emergency obstetric and neonatal care (CEmONC) in all hospitals and selected HCs by putting up functional maternities, nurseries, maternity theatres and laboratory services;
- Ensure availability of water and electricity at HP and HC levels;
- Undertake skill upgrading training;
- Strengthen HDA;
- Ensure the supply of inputs at regional and facility levels;
- Promote the use of information for decision making at point of data collection;
- Implement compensation mechanisms for staff;
- Increase awareness creation, design culturally acceptable interventions (outreach or mobile services) and strengthen service availability in pastoralist areas;
- Strengthen FP service in HIV outlets;
- Institute mother baby pair cohort follow up as a measure to reduce dropout rate among HIV-positive pregnant women taking ART;
- Encourage point of care testing for early infant diagnosis of HIV; and
- Advocate for male partner involvement through different medias.

2.3. CHILD HEALTH SERVICES

Several activities were articulated in HSDP IV, including strengthening routine immunization, expanding community and facility-based Integrated Management of Neonatal and Childhood Illnesses (IMNCI), establishing newborn corners and Neonatal Intensive Care Units (NICU), capacity building on program management for child health services, strengthening HEP, and implementing locally relevant and effective child health interventions in pastoralist areas in order to achieve MDG 4 to reduce child mortality, with a target of reducing under 5 mortality rate (U5MR) by two thirds over the period 1990-2015.

According to the "Level and trends in child mortality – Report 2013" published by the UN Inter-Agency Group for Child Mortality Estimation, Ethiopia is one of the seven high-mortality countries (together with Bangladesh, Malawi, Nepal, Liberia, Tanzania and Timor) with the greatest declines (by two thirds or more) in lowering child mortality between 1990 and 2012, therefore achieving MDG4 before the 2015 deadline.

2.3.1. POPULATION-BASED INDICATORS FROM ETHIOPIA MINI DEMOGRAPHIC AND HEALTH SURVEY 2014

Anthropometric measurements were included in the EMDHS 2014 to assess the nutritional status of under 5 children. In particular, the nutritional status was assessed by weighing under 5 children and measuring their height: these data were used to calculate three indices of nutritional status - height-for-age, weight-for-height, and weight-for-age. These indices are based on the growth standards published by the World Health Organization (WHO) in 2006, that replaced the previously used reference standards of the U.S. National Center for Health Statistics.

For the purpose of trend analysis, data for 2000 and 2005 were recalculated using the new WHO standard reference population, making them comparable to the results of the EDHS 2011 and the EMDHS 2014. In general, downward trends were observed over the four surveys in the proportion of children stunted and

underweight, and, to a lesser extent, also in the proportion of wasted children (Figure 13). The prevalence of stunting, reflecting chronic malnutrition, decreased by 31% (from 58% to 40.1%) between 2000 and 2014, while the proportion of children underweight declined even more substantially by 38% (from 41% to 25.3%) over the same period. There was also a decline in the prevalence of wasting, reflecting acute malnutrition, from 12% to 8.9% between 2000 and 2014.



There were wide variations across regions: for example, the prevalence of stunting children ranged between 49.2% in Afar and 21.8% in Gambella; similarly, the prevalence of children underweight ranged between 45.6% in Afar and 7.2% in Addis Ababa, while the highest prevalence of wasted children was found in Somali (27.0%) and the lowest one in Addis Ababa (3.1%) (Figure 14). In general, a downward trend was observed in all regions, except Afar and Somali, highlighting the urgency to strengthen nutritional interventions tailored to the specific needs of the mobile population in pastoralist areas.



Figure 14: Regional Distribution of Prevalence of Stunting, Underweight and Wasting among Under-5 Children (EMDHS 2014)

Despite the downward trends observed over time, the danger posed by under-nutrition is still a concern. For this reason, Ethiopia launched an ambitious revised National Nutrition Programme (NNP) in June 2013. At the core of the revised NNP is the target to reduce stunting prevalence from 44% to 30% by 2015. The renewed focus on stunting in Ethiopia is based on a thorough review of the evidence showing the consequences of stunting across the lifecycle starting with the first 1,000 days of life as well as its social and economic impact. It is crucial that all stakeholders align their work with the NNP to efficiently contribute towards accelerating the reduction of childhood under-nutrition in Ethiopia.

In Ethiopia, NNP uses multisectoral partnerships to tackle undernutrition and includes social protection, food security, community nutrition programmes, micronutrient supplementation, treatment of severe acute malnutrition and a package of free health services. According to WHO estimates, the country is now on track to achieve MDG 1c to reduce hunger.

2.3.2. SERVICE INDICATORS

2.3.2.1. IMMUNIZATION

In EFY 2006, pentavalent 3 immunization coverage was 91.1%, Pneumococcal Conjugate Vaccine (PCV) 3 immunization coverage was 85.7%, measles immunization coverage was 86.5%, and the percentage of fully immunized children was 82.9% (Table 2).

Table 2:

Immunization Coverage Indicators

(EFY 2006 Baseline, Performance and Target and HSDP IV Target)

Indicator	EFY 2006 Baseline	EFY 2006 Performance	EFY 2006 Target	HSDP IV Target (EFY 2007)
Pentavalent 3 vaccine coverage	87.6%	91.1%	93.0%	96.0%
Pneumococcal conjugated 3 vaccine coverage	80.4%	85.7%	88.0%	96.0%
Measles vaccine coverage	83.2%	86.5%	84.0%	90.0%
Full Immunization coverage	77.7%	82.9%	82.0%	90.0%

As shown in Figure 15, there was an increase in Pentavalent 3, measles and full immunization coverage rates; however, only measles immunization coverage (86.5%) and full immunization coverage (82.9%) met targets set for the year (84.0% and 82.0%, respectively).



and Full Immunization Coverage (EFY 2002-2006)

Of note is the fact that the new rotavirus vaccine has been introduced into the routine immunization schedule in EFY 2006; except Somali, all regions have included rotavirus vaccine in their routine immunization programs since October 2013, and doses adequate to vaccinate a total of 2.4 million children have been distributed to regions. Different mass-media messages and awareness-raising campaigns have been conducted about the newly started rotavirus vaccine immunization.

The challenges to be addressed are to sustain the past achievements and further expanding them by adopting new vaccines, while ensuring a functional cold chain system and reducing immunization coverage gaps by addressing inequities in access.

The recently conducted national immunization survey indicated that, out of the 20,660 registered refrigerators and freezers, 61.8% at health facility level and 63.5% at regional and woreda levels were functional, while, out of the non-functioning refrigerators and freezers, 60.1% were due to poor maintenance. Based on these findings, a five-year cold chain system improvement plan has been prepared and put into practice. In this context, a total of 10,000 refrigerator monitors were procured and distributed to regions, and training on their use was also given to health providers. Furthermore, training on immunization cold chain system management and maintenance was given for experts drawn from the Pharmaceutical Fund and Supply Agency (PFSA) and all regions for 30 days. Preparations have been made to transfer the national cold chain system to PFSA, and a national taskforce has been established for this purpose.

Other activities performed in EFY 2006 were as follows.

- As part of the efforts to increase immunization coverage and decrease drop-outs, mobilization of HDA was ensured at all levels.
- A media message was broadcast during the national first and second rounds of polio and meningococcal meningitis immunization campaigns; in this context, training was provided for 38 media professionals regarding the national immunization program.
- As part of strengthening areas with low coverage, a total of 35 zones have been identified and, accordingly, a technical advisor has been employed in each of these zones. In addition, 35 trucks were procured and distributed to these zones in order to transfer vaccine and other supplies.
- An outbreak of measles occurred in three zones (Wolaita Sodo, Hawassa and Gamo Goffa) of SNNPR and one zone (Borena) of Oromia Region. About 123 woredas in Oromia, SNNP and Somali Regions were covered in the response, with distribution of 3.4 million doses of measles vaccine and immunization of all under-15 children.
- In relation to the reported polio cases in the neighbouring Somalia, 10 laboratory confirmed polio cases were found in the Somali Region. At national level, two polio immunization campaigns were conducted successfully. In the first round, 12,530,982 under-five children (excluding Somali Region) were immunized, while, in the second round, a total of 13,348,069 under-five children were immunized at national level. In five regions and two selected zones of Oromia Region, a total of 4,062,816 under-fifteen children and those who were living in refugee camps were immunized in the third round of polio immunization campaign.
- Twenty two health providers took TOT training on meningococcal meningitis immunization at national level. A total of 18,926,853 persons aged between 1 and 29 years were immunized at national level.

2.3.2.1.1. REGIONAL DISTRIBUTION OF PENTAVALENT 3 IMMUNIZATION COVERAGE

Pentavalent 3 coverage was 91.1% at the national level in EFY 2006, above the performance in EFY 2005 (87.6%), but short of the target (93.0%) set for the year. The highest coverage (100.0%) was found in SNNPR and Addis Ababa, while the lowest one was found in Gambella (50.0%) (Figure 16). An increase in performance was observed in eight regions (Afar, Amhara, Oromia, Benishangul Gumuz, Gambella, Harari, Addis Ababa, and Dire Dawa), while it was stable in SNNPR; however, except Afar, Benishangul Gumuz, SNNP, and Addis Ababa, all the remaining regions performed below the target set for the year.



2.3.2.1.2. REGIONAL DISTRIBUTION OF PNEUMOCOCCAL CONJUGATE VACCINE 3 IMMUNIZATION COVERAGE

PCV3 coverage was 85.7% at the national level in EFY 2006, above the performance in EFY 2005 (80.4%), but below the target (88.0%) set for the year. The highest coverage (99.8%) was found in SNNPR and the lowest one in Gambella (27.7%) (Figure 17). Seven regions increased their performance (Amhara, Somali, Benishangul Gumuz, SNNP, Harari, Addis Ababa, and Dire Dawa), with only one region (SNNP) achieving its annual regional target in EFY 2006.



2.3.2.1.3. REGIONAL DISTRIBUTION OF MEASLES IMMUNIZATION COVERAGE

In EFY 2006, there was an increase in the measles immunization coverage (86.5%) from EFY 2005 performance (83.2%), above the target set for the year (84.0%). Regional distribution showed that SNNP was the best performing region (97.3%) and Gambella performed the least (45.0%) (Figure 18). Afar, Benishangul Gumuz and Addis Ababa were the only regions performing above the regional target set for the year. Nine regions showed a better performance in EFY 2006 than in EFY 2005 (Afar, Amhara, Oromia, Somali, Benishangul Gumuz, Gambella, Harari, Addis Ababa and Dire Dawa).



2.3.2.1.4. REGIONAL DISTRIBUTION OF FULL IMMUNIZATION COVERAGE

In EFY 2006, the full immunization coverage reached 82.9%, which was above the EFY 2005 performance (77.7%) and the target (82.0%) set for the year. The highest coverage was observed in SNNPR (96.2%) and the lowest one in Gambella Region (40.2%) (Figure 19). Only Afar and SNNP performed above their own regional target set for the year. Ten regions (Afar, Amhara, Oromia, Somali, Benishangul Gumuz, SNNP, Gambella, Harari, Addis Ababa, and Dire Dawa) showed a better performance in EFY 2006 than in EFY 2005.



2.3.2.2. THE INTEGRATED MANAGEMENT OF NEONATAL AND CHILDHOOD ILLNESSES

The IMNCI is an integrated approach to child and neonatal health that aims to reduce death, illness and disability, and to promote improved growth and development among children under five years of age.

The cumulative number of HCs providing IMNCI increased from 2,373 in EFY 2005 to 2,967 (89.0% of the total 3,335) in EFY 2006 (Table 3).

Table 3:

Distribution of Health Centers Providing IMNCI by Region

(EFY 2006)

Region	Cumulative Number of HCs Providing IMNCI Service in EFY 2005	Cumulative Number of HCs Providing IMNCI Service in EFY 2006
Tigray	183	187
Afar	19	73
Amhara	707	707
Oromia	668	1,033
Somali	37	146
Benishangul Gumuz	32	32
SNNPR	638	684
Gambella	12	28
Harari	8	8
Addis Ababa	53	53
Dire Dawa	16	16
National	2,373	2,967

2.3.2.3. OTHER ACTIVITIES

Improving neonatal service delivery has been a major priority in EFY 2006. As part of the preparation for the implementation of community-based neonatal care and newborn sepsis management by HEWs, training manuals were prepared, TOT was provided to 24 master TOT trainers, and TOT was also given for 307 health providers, who in turn trained 278 health professionals and 78 facilitators. So far, a total of 4,968 HEWs have been trained (out of the planned 5,759), and the program has started in 102 woredas and 2,445 HPs.

With regards to the Integrated Community Case Management (ICCM), the third national ICCM performance evaluation workshop was conducted; it was attended by 70 professionals drawn from different stakeholders. ICCM pre-service training was provided to 915 level 3 HEWs in Amhara and Benishangul Gumuz Regions.

Out of the total 850 HCs with established newborn corners, 313 (36.8%) were found to be actively implementing the service. In addition, 1,224 health professionals drawn from 1,000 HCs without newborn corners have been trained in EFY 2006.

The number of hospitals providing NICU services has increased from 27 to 30 in EFY 2006. In order to strengthen NICU service, a total of 124 continuous positive airway pressure devices, incubators and phototherapy equipment were distributed to 56 hospitals.

CHALLENGES

- Shortage of spare parts and accessories for refrigerators at HP level, and lack of proper concern for the cold chain system;
- Lack of daily vaccination services at HPs;
- Weak linkage between HPs and HCs;
- Inadequate data quality and use for action;
- High number of unvaccinated children and high dropout rate;
- Lack of automatic generator in areas with frequent power interruptions;
- Sub-optimal integrated supportive supervision at all levels;
- Inadequate access to service for mobile population;
- High turnover of experienced health workers;
- Inadequate knowledge and skills on neonatal care given to health professionals during their regular training prior to employment;
- Delay in distribution of ICCM supplies to HPs;
- Delay in implementation of newborn corners;
- Low coverage of NICUs in hospitals; and
- Inadequate space availed to NICU in some hospitals with limited equipment and material.

WAY FORWARD

- Strengthen the cold chain management system through regular supply of spare parts and accessories for refrigerators at HP level;
- Provide daily vaccination services at HPs;
- Strengthen the linkage between HPs and HCs;
- Capacitate data management and use for action at all levels;
- Strengthen immunization services and decrease the number of drop outs by mobilizing HDA;
- Avail automatic generators in areas with frequent power interruptions;
- Strengthen regular integrated supportive supervision at all levels;
- Design strategies adapted to mobile communities to ensure access to services;
- Devise appropriate strategies for retention of experienced staff;
- Promote both pre-service and in-service training (IST) and transfer of skills on neonatal care to health professionals;
- Improve the supply chain management system for timely provision of ICCM supplies to HPs;
- Increase the number of newborn corners by providing additional training and newborn corner sets;
- Ensure the availability of NICUs in all hospitals by accelerating training and technical support; and
- Apply NICU standard prepared by the FMOH

2.4. NATIONAL NUTRITION PROGRAMME

Implementing Vitamin A supplementation (VAS) and de-worming as well as scaling up community-based nutrition (CBN) and Universal Salt Iodization (USI) were the main activities planned in EFY 2006. Accordingly, the following activities were carried out during the year.

2.4.1. VITAMIN A SUPPLEMENTATION AND DE-WORMING

The national VAS coverage among children aged 6-59 months in EFY 2006 was 71.7%, below the performance in the previous year (93.1%) as well as the target set for EFY 2006 (96.0%); wide differences were observed across regions, ranging between 2.0% in Gambella to 96.5% in Oromia Region (Figure 20).



In EFY 2006, the de-worming coverage of 2-5 year children (82.4%) was lower than in EFY 2005 (91.4%) and the annual target (97.0%) for EFY 2006.

The coverage ranged between 5.8% in Gambella to more than 100% in Afar Region (Figure 21).



Figure 21: Comparison of Baseline, Performance and Target of Coverage of 2-5 Year Children De-Wormed by Region (EFY 2006)

2.4.1.1. TRANSITION FROM ENHANCED OUTREACH STRATEGY TO HEALTH EXTENSION PROGRAMME

In HSDP IV and in 2013 NNP, it was planned to shift the delivery mechanism from Enhanced Outreach Strategy (EOS) to routine HEP as a way to ensure sustainability of services. Accordingly, the FMOH and its partners have developed the transition plan for Vitamin A supplementation, de-worming and nutritional screening delivery mechanism from vertical EOS to routine HEP.

Currently EOS has been shifted to routine HEP in 143 woredas (all woredas in Tigray Region, 27 woredas in Amhara Region, 23 woredas in Oromia Region, 20 woredas in SNNPR and 27 woredas in the three urban regions). The HEP modality is a routine (daily) service delivery which is mainly a mix of facility-based and house-to-house delivery mechanism.

2.4.2. COMMUNITY BASED MANAGEMENT OF ACUTE MALNUTRITION

A total of 252,360 severely malnourished children were treated in EFY 2006, with a cure rate of 87.0%, a defaulter rate of 3.3%, and a mortality rate of 0.3%: these outcomes were slightly better than in the previous year (86.0%, 3.7%, and 0.4%, respectively).

It is worth noting that there was a steady increase in community-based management of acute malnutrition (CMAM) sites over the past six years (Figure 22), with 12,939 CMAM sites currently providing the service. More than four out of five severely malnourished children (85.9%) were found in three regions (41.9% in Oromia, 25.5% in SNNP, and 18.5% in Amhara), and intensive efforts are needed to strengthen prevention of malnutrition and early response in case of emergency in these regions.



Furthermore, 188,491 cartons of ready-to-use therapeutic food (RUTF), 2,855 cartons of F100, 2,795 cartons of F75, 244,942 bottles of Amoxicillin, and 12,207 cartons of Mebendazole were distributed for treatment of severe acute malnutrition cases, together with recording materials and patient follow up forms, in EFY 2006.

2.4.3. COMPREHENSIVE COMMUNITY BASED NUTRITION

Malnutrition contributes to over half of child deaths in Ethiopia, and productivity loss due to malnutrition is estimated at 10% of the Gross Domestic Product (GDP) in Ethiopia. Much progress has been made in addressing acute malnutrition through EOS for child survival, yet chronic malnutrition had been neglected, which constitutes about 80% of all forms of malnutrition and may be causing irreversible consequences on children's physical and mental health.

In order to prevent children from falling into malnutrition, family and community should be the first line of protection. The NNP places a critical importance on CBN. Currently, CBN activities are implemented in 372 woredas. Mothers/caregivers with children under two years of age are counselled by HEWs to improve children's nutritional status.

In March 2013, a total of 919,409 children were weighed with a participation rate of 44.1% and an underweight prevalence of 7%. In March 2014, there was an increase in the number of children weighed (1,144,348) as well as in the participation rate (49.0%), with a decrease in underweight prevalence (5%).

The program has shown a consistent downward trend in underweight prevalence over the years in CBN implementing woredas (Figure 23).



2.4.4. SALT IODIZATION

The salt iodization momentum has continued in EFY 2006. In Afdera, Dobi and Gudusbo, a total of 3,336,041 quintals of iodized salt were produced and, out of this total, 3,334,492 quintals (99.9%) were distributed to the market. Supply coverage of 92.6% was achieved out of the estimated annual demand of 3,600,000 quintals. There is concern about iodization quality related to lack of focus by salt producers, wide use of low iodization technology (knapsacks) and delay in establishing proper Quality Assurance (QA)/Quality Control (QC) mechanism. Therefore, strengthening the enforcement of the salt regulation will be one of the main focus areas during EFY 2007.

The cost recovery scheme to make potassium iodate supply sustainable has made marked progress, with 14 metric tons of new potassium iodate being procured through PFSA and distributed to the salt producers. Further 40 metric tons delivery of the new product was expected through PFSA at different time periods because the order for procurement was placed at different times. Overall facilitation of the procurement process and other possibilities need to be considered to avoid any breakdown in the supply chain system. In EFY 2006, a total of 21.6 metric tons of potassium iodate were distributed to salt producers with prepayment.

It has been decided by the national nutrition coordination body that food fortification, including salt iodization, will be implemented in EFY 2007 by the Ministry of Industry in collaboration with FMOH and other stakeholders.

In order to inspect iodized salt, a total of 45,000 rapid test kits were distributed, together with 150,00 copies of procedure manuals, to regions.

2.4.5. OTHER ACTIVITIES

In EFY 2006, nutrition coordinating and technical committees were established and have been meeting regularly in each region; furthermore, capacity building was provided to the national nutrition technical committee members.

In order to promote the nutritional status of the general population, different advocacy, social mobilization and BCC messages were developed on the importance of optimal breastfeeding, complementary feeding and diversified food consumption, and were broadcast through different medias. Besides, messages on the importance of using vitamins and minerals for healthy life were also broadcast.

New six blended integrated nutrition learning modules, based on the revised NNP, were prepared for health workers, and four NNP implementation guidelines were designed to address the nutritional requirements of neonates, under-five children, pregnant and lactating mothers, and those with communicable and non communicable diseases.

- Low attention on nutrition at different levels;
- Shortage of supplies (like Albendazole, iron folate, potassium iodate etc.);
- Limited regional commitment to transit VAS, deworming and nutritional screening to routine HEP service delivery according to the EOS transition plan;
- Inadequate adherence to regulation for salt iodization (such as low level of commitment of salt producers to improve quality, delay in establishing functional QA/QC systems, and weak enforcement of salt regulation and standards);
- Inadequate community mobilization through HDA;
- Weak supportive supervision and inadequate periodicity of review meetings;
- Slow progress on multisectoral nutrition coordination and linkage at regional and lower levels; and
- Shortage of trained human resources in nutrition.

- Strengthen comprehensive community-based nutrition;
- Ensure adequate and quality nutrition supplies (like Albendazole, iron folate, potassium iodate, Vitamin A, F75, F100, RUTF etc);
- Ensure smooth transition of VAS, deworming and nutritional screening to routine HEP service delivery;
- Ensure quality and safety of salt iodization and strengthen the enforcement of salt regulation;
- Promote advocacy, social mobilization and BCC and ensure involvement and ownership of the community through HDA;
- Strengthen integrated supportive supervision and conduct regular review meetings;
- Ensure and strengthen multisectoral nutrition coordination and linkage at all levels for nutrition; and
- Ensure retention of staff.

2.5. PREVENTION AND CONTROL OF COMMUNICABLE DISEASES

The following section explains what has been targeted and what has been achieved in HIV/Acquired Immunodeficiency Syndrome (AIDS), Tuberculosis (TB) and malaria prevention and control in EFY 2006.

2.5.1. HIV/AIDS PREVENTION AND CONTROL

HIV/AIDS is one of the top priorities of HSDP IV. According to the "HIV related estimates and projections for Ethiopia-2012" published by FMOH and Ethiopian Health and Nutrition Research Institute (EHNRI), the adult HIV prevalence is estimated at 1.2% (0.8% in males and 1.6% in females) and the adult HIV incidence at 0.03% in 2014.

2.5.1.1. TREND IN THE NUMBER OF FACILITIES PROVIDING HCT, PMTCT AND ART SERVICES

There was a steep increase in the number of facilities providing HIV Counselling and Testing (HCT), PMTCT, and Antiretroviral Therapy (ART) services in the EFY 2002-2006 period (Figure 24): in particular, the increase was from 3,040 in EFY 2005 to 3,447 in EFY 2006 for HCT, from 2,150 to 2,495 for PMTCT, and from 880 to 1,047 for ART in the same period.



Figure 24: Trend in Number of Facilities Providing HCT, PMTCT, and ART Services (EFY 2002-2006)

2.5.1.2. HCT SERVICE

The number of HCT services decreased from 11,965,533 in EFY 2005 to 9,664,519 in EFY 2006 (Figure 25); despite this reduction, it remained above the target (9.3 million) set for the year at the national level.



There were variations across regions, with only one region (Afar) increasing the number of clients using HCT in EFY 2006 with respect to the previous year (Figure 26). Five regions achieved their regional target (Amhara, SNNP, Harari, Addis Ababa and Dire Dawa), while the remaining six regions (Tigray, Afar, Oromia, Somali, Benishangul Gumuz and Gambella) performed below target.



In addition, a guideline was prepared, clearly indicating who needs to be tested for HIV (and when), and stressing the need for targeted testing, especially for most-at-risk populations (MARP). Furthermore, orientations were given on this approach to health care providers.

2.5.1.3. ANTIRETROVIRAL TREATMENT

A linear increase has been observed in the number of People Living With HIV/AIDS (PLWHA) ever enrolled, ever started and currently on ART over the past years (Figure 27); in particular, there was an increase between EFY 2005 and EFY 2006 from 744,339 to 805,948 for PLWHA ever enrolled in HIV/AIDS care (+61,609), from 439,301 to 492,649 for those ever started (+53,348), and from 308,860 to 344,344 for those currently on ART (+35,484).



Figure 28 depicts the current pattern of access to chronic HIV care, showing the regional distribution of the cumulative number of PLWHA ever enrolled and ever started as well the number of those currently on ART in EFY 2006. As it was reported in EFY 2005, the highest number of PLWHA ever enrolled, ever started and currently on ART was found in Amhara, Oromia, and Addis Ababa Regions, followed by Tigray and SNNP Regions.



Concerning PLWHA currently on ART, out of the target of 431,644 who need ART, 344,344 PLWHA were currently on ART at the end of EFY 2006, with a target achievement of 79.8%. Wide variations were observed across regions, with Amhara Region showing the highest number of PLWHA currently on ART (102,088) in EFY 2006 (Figure 29).



2.5.1.4. OTHER ACTIVITIES

In EFY 2006, TOT was provided to 40 professionals on multi-sectoral response to HIV/AIDS in government mega-project areas and institutions. Besides, training was given for 263 participants from the educational sector and young students on prevention and control of HIV/AIDS and other HIV/AIDS related programs. Similarly, in Gambella Region, training was organized for three days for participants from regional HIV/AIDS Prevention and Control Office (HAPCO), RHB, Women and Children Affairs Bureau and partners on strategies of behavioural change of MARPs for HIV/AIDS prevention and control. On the other hand, TOT was organized for 40 trainees on PLWHA care and support implementation procedures.

A framework for transition of the support to HIV prevention, care and treatment services from international partners to the national health system was developed in order to foster sustainability and consolidate the gains achieved so far. This framework has been cascaded in Tigray, Amhara, Oromia, SNNP and Addis Ababa Regions, and implementation has already started.

Forecasting was done on the needs for ART drugs, reagents and opportunistic infection drugs for procurement purpose. A total of 48 CD4 count machines, chemistry analyzer machines and haematology machines were under procurement process in EFY 2006. CD4 count was done for 30,000 new clients in the same fiscal year.

Based on WHO 2013 Guideline on ART Treatment, a National Consolidated ART Treatment Guideline was developed. In addition, ART initiation for PLWHA with CD4 count less than 500 and TB-HIV co-infected individuals regardless of the CD4 count is being implemented in all regions. Stavudine phase out was successfully completed among adults, while paediatrics Stavudine phase out is on progress in all regions.

A study on pre-ART care was carried out in 92 health institutions and the study report was finalized.

In EFY 2006, the condom strategy was designed and submitted for endorsement. Moreover, 280 million condoms were procured and distributed by the government to regions. In the same manner, a total of 80.7 million condoms were procured and distributed by partners to regions. To this end, priority was given to MARPs and corridors of high transmission, and a total of 25.97 million condoms were meant for sexworkers and 0.40 million condoms were meant for students in higher educational institutions.

CHALLENGES

- Inadequate implementation of supportive supervision;
- Shortage of condoms and rapid diagnostic kits;
- Inadequate continuum of care before, during, and after delivery;
- Delay in maintenance of CD4 count machines;
- Lack of revised operational procedure guideline on different HIV-related laboratory diagnoses;
- Shortage of budget to secure HIV test kits;
- Duplication of efforts in interventions on MARPs by different partners;
- Poor coordination and information gap among agencies and RHBs;
- Weak participation of partners on integration of multi-sectoral responses to HIV/AIDS;
- Difficulty in delivering services in pastoralist areas; and
- Limited capacity in data collection and use as well as in information dissemination.

WAY FORWARD

- Enhance supportive supervision;
- Ensure regular provision of condoms and other supplies;
- Ensure appropriate scale-up of Option B+ strategy;
- Ensure on time maintenance of CD4 count machines;
- Prepare the revised operational procedure guideline on HIV-related laboratory diagnoses;
- Mobilize financial resources to address shortage of HIV test kits;
- Harmonize interventions on MARPs among partners;
- Set clear roles and responsibilities for agencies and RHBs;
- Reach consensus with partners on integration of multi-sectoral responses to HIV/AIDS and strengthen the follow-up;
- Implement service delivery adapted to mobile communities in pastoralist areas; and
- Strengthen the capacity in information use and dissemination.

2.5.2. MALARIA PREVENTION AND CONTROL

The major activities planned for malaria prevention and control focused on expanding vector control and strengthening malaria case detection and treatment. In particular, increasing the availability and use of Long Lasting Insecticide-treated Nets (LLIN) as well as implementing Indoor Residual Spray (IRS) are powerful vector control tools for reducing malaria transmission; furthermore, access to care for suspected malaria cases and appropriate diagnostic testing and therapeutic management at all places of care are needed to ensure that all patients with malaria receive prompt and effective treatment.

2.5.2.1. LONG LASTING INSECTICIDE-TREATED NET DISTRIBUTION

In EFY 2006, the distribution of 19,866,625 LLINs was planned in malaria-endemic areas; however, 11.7 million LLINs were actually distributed, increasing the cumulative number of distributed LLINs to 58,676,866 (Figure 30). A total of 12 million LLINs are still under procurement, and are planned for distribution in EFY 2007.



Figure 30: Trend in Cumulative Number of Insecticide Treated Nets Distributed (EFY 2002 – 2006)

With regards to vector control, the revised plan was to implement IRS in 5,111,694 households in the fiscal year. However, a total of 3,930,604 households in malaria endemic areas were sprayed in EFY 2006, below EFY 2005 performance (5,032,693 households) and target for the current year (with a target achievement of 76.9%). Furthermore, 6,475 spray pumps were distributed to the regions.

It is worth noting that, according to the WHO Malaria Report 2013, the proportion of the Ethiopian population protected by any vector control was more than 60% in 2012, resulting among the best performing countries in SSA.

In EFY 2006, different anti-mosquito chemicals (184,222 Kg of Bendiocarb, 639,663 Kg of Propaxer, and 1,190 Kg of Deltametrin) were distributed to regions. Furthermore, a total amount of ETB 42.8 million was sent to regions to support IRS; a TOT was organized for 149 trainees coming from Tigray, Amhara, Oromia and SNNP Regions on community-based IRS at kebele level, and cascade training is underway. A total of 204 stores were ready to keep anti-mosquito chemicals in Oromia, SNNP and Tigray Regions in EFY 2006.

2.5.2.2. TREND IN MALARIA CASES

In EFY 2006, the total number of laboratory confirmed plus clinical malaria cases were 2,627,182 (with a decrease from 3,862,735 cases reported in EFY 2005). In particular, the monthly pattern showed an increase in the first half of EFY 2006 (reaching 396,727 cases in October), followed by a decrease until April (115,256) and an upward fluctuation in May (Figure 31). A total of 213 deaths were recorded in EFY 2006, with a Case Fatality Rate (CFR) of 0.01%.



Out of the total 2,627,182 malaria cases reported in EFY 2006, 2,210,298 (84.1%) were confirmed by either microscopy or rapid diagnostic tests (RDT), out of which 1,415,150 (64.0%) were Plasmodium falciparum (PF) and 795,148 (36.0%) were Plasmodium vivax (PV). The percentage of laboratory confirmed cases in EFY 2006 (84.1%) was higher than the percentage (73.8%) estimated in EFY 2005. For comparison purpose, the proportion of suspected malaria cases confirmed by a diagnostic test in the public sector in SSA was estimated at 61% according to the WHO Malaria Report 2013.

The monthly patterns of the total laboratory confirmed malaria cases, PF malaria cases and PV malaria cases (Figure 32) were similar to the overall pattern of malaria cases (laboratory confirmed plus clinical) reported in EFY 2006.



In EFY 2006, the highest number of laboratory confirmed plus clinical malaria cases was reported from SNNPR (708,520), followed by Amhara Region (683,679 cases), and Oromia Region (474,641 cases) (Table 4). Of note is the fact that there was a steep decrease between EFY 2005 and 2006 in these regions with the highest number of cases (from 1,273,317 to 708,520 in SNNPR, from 1,185,111 to 683,679 in Amhara, and from 708,530 to 474,641 in Oromia), with downward trend being observed in other two regions (Tigray and Afar), while there was an increase in other six regions (Somali, Benishangul Gumuz, Gambella, Harari, Addis Ababa, and Dire Dawa).

Table 4:

Distribution of Laboratory Confirmed plus Clinical Malaria Cases by Region (EFY 2006)

		Cases					
Region	Population at risk	Number	Incidence per 100,000 at risk population	Percent			
Tigray	3,692,543	250,911	6,795	9.6			
Afar	1,816,304	63,181	3,479	2.4			
Amhara	15,496,009	683,679	4,412	26.0			
Oromia	22,559,104	474,641	2,104	18.1			
Somali	4,781,604	55,573	1,162	2.1			
Benishangul Gumuz	792,055	275,119	34,735	10.5			
SNNPR	11,943,783	708,520	5,932	27.0			
Gambella	406,607	100,481	24,712	3.8			
Harari	182,128	8,800	4,832	0.3			
Addis Ababa	316,704	4,047	1,278	0.2			
Dire Dawa	204,085	2,230	1,093	0.1			
National	59,978,887	2,627,182	4,380	100.0			

A total amount of 5,321,471 doses of artemisinin-based combination therapy (ACT), 200,000 vials of Artesunate injection, and 7,416,167 RDTs were distributed to regions for malaria prevention and control.

Integrated malaria control and treatment training was given to 238 health professionals, and malaria diagnosis and treatment training was provided to 55 health professionals coming from higher educational institutions and hospitals.

CHALLENGES

- Budget constraints at woreda level to conduct IRS activities;
- Delay in LLIN procurement to replace the "old" ones; and
- Inadequate utilization of LLINs.

WAY FORWARD

- Ensure budget for IRS activities;
- Ensure replacement of "old" LLINs; and
- Promote LLIN utilization

2.5.3. TUBERCULOSIS AND LEPROSY PREVENTION AND CONTROL

The main objective of the Tuberculosis and Leprosy Prevention and Control 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 the mortality resulting from TB to such an extent that both diseases are no longer public health problems.

2.5.3.1. TB PREVENTION AND CONTROL

2.5.3.1.1. TB CASE NOTIFICATION

In EFY 2006, a total of 116,633 TB cases (all forms) were reported with a TB case notification rate of 133 per 100,000 population; this performance was below that observed in EFY 2005, when 130,614 TB cases (all forms) were reported with a TB case notification rate of 152 per 100,000 population. Out of the 116,633 cases reported in EFY 2006, 34.0% were smear positive pulmonary TB, 34.8% were smear negative pulmonary TB, and 31.2% were extra pulmonary TB.

There was regional variation in TB case notification, ranging from 56 per 100,000 population in Somali to 311 per 100,000 population in Dire Dawa (Figure 33). It is worth noting that the decrease in TB case notification rate observed in Harari in EFY 2006 is due to the fact that, in the previous years, TB patients from other regions getting diagnosis in Harari were included in the cohort and counted in the numerator for the estimation of the regional TB case notification rate, while returning back to their regions for treatment. This situation was corrected this year.



In EFY 2006, the TB case detection rate was 53.7%, below the detection rate in EFY 2005 (58.9%) as well as below the target set for the year (81.0%). Variations were observed across regions, ranging from 22.7% in Somali Region to over 100% in Afar and Dire Dawa. Only the latter two regions achieved their annual target set for the year (Figure 34).



2.5.3.1.3. TB TREATMENT OUTCOMES

In EFY 2006, TB treatment success rate showed a slight increase from 91.4% in EFY 2005 to 92.1% in EFY 2006. On the other hand, TB cure rate slightly decreased from 70.3% to 69.1% in the same period (Figure 35).



2.5.3.1.3.1. TB TREATMENT SUCCESS RATE

TB treatment success rate slightly increased from 91.4% in EFY 2005 to 92.1% in EFY 2006, which was below the target set for the year (97%). Large variations were seen across regions, with the highest performance being observed in Tigray, Afar, Oromia, and Benishangul Gumuz Regions. The lowest performance was observed in Somali Region. Six regions (Tigray, Afar, Amhara, Oromia, Benishangul Gumuz, and Harari) improved their performance in EFY 2006, while a decrease in performance was observed in the remaining five regions (Somali, SNNP, Gambella, Addis Ababa, and Dire Dawa) (Figure 36).



2.5.3.1.3.2. TB CURE RATE

TB cure rate slightly decreased from 70.3% in EFY 2005 to 69.1% in EFY 2006; moreover, it was below the target set for the year (92%) (Figure 37). The best performance was found in Dire Dawa (81.6%), while four regions (Somali, SNNP, Gambella and Harari) decreased their performance in EFY 2006 from the previous year.



2.5.3.2. LEPROSY PREVENTION AND CONTROL

2.5.3.2.1. LEPROSY CASE DETECTION

The prevalence of leprosy has sharply declined from 200 per 100,000 population in 1983 to 0.5 per 100,000 population in 2012, following the introduction of Multi Drug Therapy (MDT) in 1980s. The prevalence of leprosy has been constant over the past five years and, in EFY 2006, a total of 3,080 new leprosy cases were detected, the majority of whom being detected in Oromia and Amhara Regions (Figure 38).



2.5.3.3. OTHER ACTIVITIES

In EFY 2006, community-based TB prevention and control was strengthened through HDA, and procedure manuals were revised on Multi-Drug Resistant TB (MDR TB) prevention and control. Furthermore, an implementation guideline was prepared on GeneXpert machine rollout, and a total of 28 GeneXpert machines were providing service in the same fiscal year. Moreover, new training and essential resources were made ready for health facilities where 71 machines will be deployed.

A Strategic Plan for TB and Leprosy Prevention and Control was developed, and a total of 160,000 copies of formats of TB suspect case referral and TB case follow-up, together with revised TB registers, were printed and distributed to all regions.

Capacity building was given to professionals working in health facilities providing service on MDR TB. A national laboratory network was established among eight health facilities providing MDR TB treatment services and MDR TB diagnostic laboratories to strengthen the referral system.

Since 2001, a cumulative total of 1,559 MDR TB patients were enrolled in second line drug (SLD) treatment and, out of them, 598 MDR TB patients were enrolled in SLD treatment in EFY 2006 (Figure 39). Treatment outcomes of MDR TB patients enrolled on treatment in EFY 2004 were evaluated in EFY 2006, with 216 out of the total 289 MDR TB cases (74.7%) having completed successfully their treatment.



In EFY 2006, additional 13 MDR TB centres started treatment services, increasing the total number of MDR treatment centers to 32 country-wide, while a total of 332 health institutions were providing follow-up services.

In selected five prisons, TB waiting rooms were constructed in the fiscal year. On the other hand, a total of 1,231 health facilities were found not to make acid-fast-bacilli diagnosis for TB cases, and, therefore, 900 microscopes were provided to these facilities to alleviate the problem.

A slide load survey was conducted in order to identify health facilities that needed LED microscope. Besides, a Standard Operating Procedure (SOP) document was prepared on LED microscope operation, reagent preparation and quality control. Similarly, a Sputum Microscopy Manual was drafted based on the WHO Global Laboratory Initiative Guideline.

Currently, the FMOH is implementing a mapping exercise to identify high leprosy burden areas in Ethiopia by zone, woreda and HF levels so that focused interventions will be implemented in these areas in EFY 2007. Assessment of the current implementation status of leprosy referral centres was also conducted to identify performance gaps and support health professionals in providing quality services. In EFY 2006, leprosy mapping and referral assessment was conducted, a Leprosy Training Manual was revised, and a documentary film on comprehensive health service delivery package for leprosy was produced.

- Irregular supply of reagents;
- Inadequate implementation of External Quality Assessment (EQA);
- Underutilization of TB culture diagnostic services due to insufficient sample transportation mechanism;
- Incomplete and delayed reporting from some health facilities (HF) and Woreda Health Offices (WorHO);
- Low ownership of MDR TB management at all levels stalling the expansion of MDR TB treatment sites;
- Limited community participation on suspect TB identification through HDA and community TB care expansion; and
- Inadequate implementation of daily observed treatment at facility level.

WAY FORWARD

- Strengthen the supply of reagents;
- Improve the quality of laboratories through strengthening EQA and provision of quality microscopes;
- Strengthen sputum sample transportation to effectively utilize TB culture diagnostic facilities;
- Strengthen planning, M&E, reporting and implementation capacity;
- Promote ownership of MDR TB management at all levels;
- Promote community participation on suspect TB identification through HDA and community TB care expansion; and
- Strengthen the implementation of daily observed treatment at facility level.

2.5.4. PREVENTION AND CONTROL OF NEGLECTED TROPICAL DISEASES

In EFY 2006, many activities were performed in prevention and control of Neglected Tropical Disease (NTD), including:

- The Health Workers Manual on the Eight Targeted Neglected Tropical Diseases has been prepared, to be used particularly by HEWs;
- Mapping the geographical distribution of trachoma and leishmaniasis has been completed, while mapping of lymphatic filariasis, schistosomiasis and soil-transmitted helminthiasis is still limited to a few districts;
- A total of 7,482,414 people (out of the planned 8.4 million) received Ivermectin treatment for onchocerciasis in EFY 2006;
- A total of 1,422,298 people received preventive therapy (Ivermectin and Albendazole) for lymphatic filariasis;
- Over the last few months, 1.4 million tablets of Praziquantel and 8 million tablets of Mebendazole have been given to school-children as part of the schistosomiasis and soil-transmitted helminthiasis prevention and control;
- Thirty-two experts drawn from all regions and federal stakeholders have taken WHO Integrated Neglected Tropical Disease Program Managers' Training;
- Forty six program managers and finance officers took training on WHO African Programme for Onchocerciasis Control Finance Management Guideline for five days;
- Twenty three NTD program managers took training on NTD program management for three days;
- Thirty NTD program managers took training on leishmaniasis diagnosis and treatment;
- The Alliance for the Global Elimination of Trachoma by 2020 (GET 2020) was organized in collaboration with all concerned bodies; and
- Trachoma radio and television spots were broadcast every week via national media.

- Incomplete mapping for some NTDs resulting in gaps for comprehensive planning and action;
- Inadequate coordination and co-implementation of interventions, impeding efficient use of limited resources;
- Inadequate surveillance system for effective monitoring of progress;
- Limited community mobilization; and
- Inadequate partnership and resource mobilization.

WAY FORWARD

- Complete the mapping of NTDs;
- Strengthen coordination and co-implementation of interventions at federal and regional levels;
- Strengthen the surveillance system nationwide;
- Advocate for multi-sectoral engagement and promote community mobilization; and
- Promote partnership and resource mobilization.

2.6. PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES

With regard to prevention and control of non-communicable diseases (NCD), the following activities were carried out in EFY 2006:

- The National Strategic Plan on NCDs has been formulated;
- A national consultative meeting on NCDs was conducted in Addis Ababa with the participation of FMOH officers, RHB representatives, Addis Ababa University Medical Faculty staff and implementing partners;
- A high level advocacy workshop for members of the Parliament was conducted on NCDs, mainly focused on cancer and their risk factors;
- Sensitization workshops on prevention and control of major NCDs were conducted in Hawassa and Dire Dawa;
- The National Cancer Committee, chaired by her Excellency the First Lady, was established, with the aim to promote: (i) high level advocacy among politicians, policy makers, donors and partners for the prevention and control of cancer; (ii) resource mobilization; (iii) awareness raising among the general population; and (iv) coordination, implementation and monitoring of cancer prevention and control programs;
- A FMOH Tobacco Free and Physically Active Initiative was launched within the FMOH premises and the FMOH has been declared a smoke-free workplace;
- Fifteen health professionals drawn from five university hospitals were trained on population based cancer registry;
- A national quantification document for chemotherapy drugs has been finalized, while the quantification of Insulin is underway;
- Procurement and other preparatory activities are underway for the initiation of radiotherapy and nuclear medicine in five university hospitals;
- A memorandum of understanding (MOU) on prevention and control of mental health problems has been signed with six universities;
- Thirty health professionals drawn from Amanuel Specialized Hospital and from Addis Ababa and Oromia Regions took training on mental health;
- The World Sight Day has been celebrated in the presence of many stakeholders, and eye exam was given for 310 individuals during the celebration; and
- A national symposium on tobacco control was conducted, in which an action plan on tobacco policy was prepared.

- Limited mental health service coverage;
- Lack of technical and financial support;
- Low level of awareness on NCDs and their risk factors both in the general population and among health professionals; and
- Limited number of national and international partners working on NCDs.

- Scale up the "mental health Gap Action Programme" (mhGAP) into the primary health care (PHC) system in all regions;
- Ensure technical and financial support to NCD plan;
- Conduct intensive awareness raising campaign on NCDs and their risk factors nationwide; and
- Carry out high level advocacy to increase the number of national and international partners.

2.7. PUBLIC HEALTH EMERGENCY PREPAREDNESS AND RESPONSE

Public Health Emergency Management (PHEM) is the process of anticipating, preventing, preparing for, detecting and communicating, responding to, controlling and recovering from consequences of public health threats in order to minimize health and economic impact.

Therefore, the strategic objective aims to improve how the health system copes with existing and emerging disease epidemics, acute malnutrition, and natural disasters of national and international concern. The desired responses include improved health risk identification, early warning, response and recovery from the disasters. The expected outcomes of this strategic objective are early detection and verification, rapid response and containment of public health emergencies and recovery and rehabilitation of the communities affected.

The specific strategies that are underway during HSDP IV include: (i) community involvement; (ii) resource mobilization; (iii) integrated communication and information systems across multiple sectors; (iv) advanced operational readiness assessment; (v) multi-sectoral coordination for emergency preparedness and response; (vi) comprehensive training and evaluation; and (vii) proper application of Information and Communication Technology (ICT).

These strategies will contribute towards an effective early warning, preparedness, response, recovery and rehabilitation system. In EFY 2006, the Ethiopian Public Health Institute (EPHI) accomplished several activities, including: (i) identification of major public health risks and assessment of vulnerability; (ii) verification and timely response to outbreak rumours; (iii) strengthening of public health surveillance and database management system; (iv) resource mobilization, coordination and collaboration with partners; and (v) preparation, revision, and distribution of guidelines.

A total of 2,217 public health emergency rumours were communicated to the EPHI and confirmed within 3 hours, with only 31 (1.4%) of them being found to be real public health emergencies for whom appropriate responses were undertaken.

Ninety percent of public health epidemic cases had laboratory confirmation, and 80% of them were confirmed as important emergency and public health cases.

In Somali Region, there was a polio epidemic which crossed the border from Somalia, and the response was undertaken according to the standards set by WHO.

As it was experienced last year, a post-epidemic survey was carried out on meningitis, and possible interventions were identified and applied in the fiscal year. Besides, 64 woredas were identified and vaccinations were carried out in these woredas.

In order to implement its activities, EPHI has also mobilized a total of ETB 276,843,769 for public health emergency management. Furthermore, a total of ETB 2.21 million were used in the fiscal year for meningitis preventive vaccination, ETB 89.10 million for measles epidemic control, and ETB 10.32 million for Guinea Worm eradication.

2.7.1.1. MEASLES

In EFY 2006, a total of 24,493 laboratory confirmed and epidemiologically linked measles cases were reported from all regions (Table 5), with an increase with respect to those reported in EFY 2005 (11,721). Out of these cases, 9,745 (39.8%) were reported from Amhara Region, followed by SNNPR with 7,727 cases (31.5%). The incidence rate was highest in Gambella Region (473 per 100,000 U5 children). Out of the total number of 127 deaths, 58 were reported from Amhara (45.7%), followed by Oromia with 44 deaths (34.6%). The average national CFR was 0.5%.

Table 5:

Distribution of Suspected Measles Cases and Deaths by Region

(EFY 2006)

		C	Cases		Deaths			
Region	Number	Percent	Incidence Rate (per 100,000 U5 Children)	Number	Percent	CFR (%)		
Tigray	441	1.8	61	1	0.8	0.2		
Afar	18	0.1	11	0	0.0	0.0		
Amhara	9,745	39.8	360	58	45.7	0.6		
Oromia	3,940	16.1	73	44	34.6	1.1		
Somali	1,226	5.0	229	12	9.4	1.0		
Benishangul Gumuz	342	1.4	217	5	3.9	1.5		
SNNPR	7,727	31.5	278	3	2.4	0.0		
Gambella	253	1.0	473	3	2.4	1.2		
Harari	128	0.5	440	1	0.8	0.8		
Addis Ababa	643	2.6	281	0	0.0	0.0		
Dire Dawa	30	0.1	58	0	0.0	0.0		
National	24,493	100.0	191	127	100.0	0.5		

The monthly pattern of laboratory confirmed and epidemiologically linked measles cases was similar to that observed in the last year, with low number of cases during the raining season and an increase starting in October-November; however, as mentioned above, the number of cases was higher in EFY 2006, with a peak in March (Figure 40).



2.7.1.2. POLIOMYELITIS

In EFY 2006, a total of 1,267 stool samples of suspected Acute Flaccid Paralysis (AFP) cases were received at the national laboratory for diagnosis. In order to demonstrate that the surveillance system is sensitive enough to detect polio cases, the WHO standard is to have a non-polio AFP rate of at least 2 per 100,000 children under 15 years. At the national level, non-polio AFP rate in EFY 2006 was 3.2 per 100,000 children under 15 years, which was above the WHO standard (2.0) and EFY 2005 performance (2.6). All regions reported above the WHO standard (Figure 41) in EFY 2006, with Somali Region showing the highest non-polio AFP rate (6.5) and Addis Ababa showing the lowest one (2.2). Ten polio cases were confirmed in EFY 2006 from Dollo Zone in Somali Region; of them, four cases were reported from Warder Woreda, and three cases from Geladin and Bokh Woredas each. During the outbreak period, supplemental immunization was undertaken throughout the Somali Region, mop up activities were implemented in the affected woredas and those at risk, and surveillance was also carried out for detecting additional cases.



Figure 41: Comparison of Non-Polio Acute Flaccid Paralysis Rate per 100,000 Children Under 15 Years by Region (EFY 2006)

AFP stool sample adequacy rate is another indicator used to measure the effectiveness of the surveillance system. At national level it reached 86%, above the WHO standard (80%). All regions, with the exception of Somali, Benishangul Gumuz and Harari, performed above the WHO standard of 80% (Figure 42).



Figure 42: Comparison of AFP Stool Sample Adequacy Rate by Region (EFY 2006)

2.7.1.3. DYSENTERY

In EFY 2006, a total of 268,353 cases of dysentery were reported from all regions, being similar to the number reported in EFY 2005 (263,457). The highest number of cases was reported from Oromia (76,152, corresponding to 28.4%), followed by Amhara (58,677, corresponding to 21.9%) (Table 6). The incidence rate was highest in Benishangul Gumuz Region (1,763 per 100,000 population). A total of 43 deaths were reported from seven regions, with Oromia reporting 13 deaths and accounting for 30.2% of the total deaths. The national CFR was 0.02%.

Table 6:

Distribution of Suspected Dysentery Cases and Deaths by Region

(EFY 2006)

		С	ases	Deaths			
Region	Number	Percent	Incidence Rate (per 100,000 population)	Number	Percent	CFR (%)	
Tigray	36,068	13.4	727	8	18.6	0.02	
Afar	7,155	2.7	426	0	0.0	0.00	
Amhara	58,677	21.9	293	9	20.9	0.02	
Oromia	76,152	28.4	232	13	30.2	0.02	
Somali	10,690	4.0	201	1	2.3	0.01	
Benishangul Gumuz	17,209	6.4	1,763	0	0.0	0.00	
SNNPR	42,367	15.8	238	3	7.0	0.01	
Gambella	2,166	0.8	547	7	16.3	0.32	
Harari	655	0.2	290	0	0.0	0.00	
Addis Ababa	15,006	5.6	469	2	4.7	0.01	
Dire Dawa	2,208	0.8	517	0	0.0	0.00	
National	268,353	100.0	305	43	100.0	0.02	

Like the previous year, the monthly pattern of dysentery cases showed fluctuations throughout the year (Figure 43), with slight increase during the raining season probably due to contamination of drinking water.



Figure 43: Trend in Suspected Dysentery Cases by Month (EFY 2005 and 2006)

2.7.1.4. MENINGOCOCCAL MENINGITIS

In EFY 2006, a total of 1,783 suspected meningococcal meningitis cases were reported from all regions, which was lower than in EFY 2005 (2,289), with the highest number of cases being reported from SNNPR

(935, corresponding to 52.4%), followed by Oromia (434, corresponding to 24.3%) (Table 7). A total of 67 deaths were reported, out of which Oromia accounted for 33 (49.3%). The overall CFR was 3.8% at the national level.

Table 7: Distribution of Suspected Meningitis Cases and Deaths by Region (EFY 2006)

		Cases		Deaths			
Region	Number	Percent	Incidence Rate (per 100,000 population)	Number	Percent	CFR (%)	
Tigray	68	3.8	1	0	0.0	0.0	
Afar	17	1.0	1	0	0.0	0.0	
Amhara	161	9.0	1	4	6.0	2.5	
Oromia	434	24.3	1	33	49.3	7.6	
Somali	20	1.1	0.4	1	1.5	5.0	
Benishangul Gumuz	16	0.9	2	0	0.0	0.0	
SNNPR	935	52.4	5	20	29.9	2.1	
Gambella	110	6.2	28	6	9.0	5.5	
Harari	0	0.0	0	0	0.0	0.0	
Addis Ababa	19	1.1	1	3	4.5	15.8	
Dire Dawa	3	0.2	1	0	0.0	0.0	
National	1,783	100.0	2	67	100.0	3.8	

Unlike the previous year, there was no outbreak, and the monthly pattern of meningococcal meningitis cases showed an increase during the dry season (January to May) (Figure 44).



Figure 44: Trend in Suspected Meningococcal Meningitis Cases by Month (EFY 2005 and 2006)

2.7.1.5. ANTHRAX

A total of 868 suspected anthrax cases were reported from four regions (Tigray, Amhara, Oromia and SNNP) (Table 8). The highest number of cases was reported from Amhara (604 cases, corresponding to 69.6%), followed by Oromia (129, corresponding to 14.9%). The incidence rate was also highest in Amhara Region (3 per 100,000 population). Out of the total number of 13 deaths (with a CFR of 1.5%) observed at the national level, Tigray and Amhara Regions reported five deaths each, while the remaining three deaths were reported from Oromia.

Table 8:Distribution of Suspected Anthrax Cases and Deaths by Region

(EFY 2006)

		Cases		Deaths			
Region	Number	Percent	Incidence Rate (per 100,000 population)	Number	Percent	CFR (%)	
Tigray	103	11.9	2	5	38.5	4.9	
Afar	0	0.0	0	0	0.0	0.0	
Amhara	604	69.6	3	5	38.5	0.8	
Oromia	129	14.9	0.4	3	23.1	2.3	
Somali	0	0.0	0	0	0.0	0.0	
Benishangul Gumuz	0	0.0	0	0	0.0	0.0	
SNNPR	32	3.7	0.2	0	0.0	0.0	
Gambella	0	0.0	0	0	0.0	0.0	
Harari	0	0.0	0	0	0.0	0.0	
Addis Ababa	0	0.0	0	0	0.0	0.0	
Dire Dawa	0	0.0	0	0	0.0	0.0	
National	868	100.0	1	13	100.0	1.5	

The monthly pattern of suspected anthrax cases reported in EFY 2006 showed fluctuations, with a peak in February (Figure 45).



2.7.1.6. RABIES

In EFY 2006, a total of 3,062 rabies cases and exposures were reported from eight regions (Table 9). The highest number of cases was reported from Tigray (1,256, corresponding to 41.0% of the total), followed by Amhara (755) and Oromia (598). Out of the total 42 deaths (with a CFR of 1.4% at the national level), 19 were reported from Oromia Region (45.2%).

Table 9:

Distribution of Suspected Rabies Cases/Exposures and Deaths by Region (EFY 2006)

		Cases		Deaths			
Region	Number	Percent	Incidence Rate (per 100,000 population)	Number	Percent	CFR (%)	
Tigray	1,256	41.0	25	7	16.7	0.6	
Afar	0	0.0	0	0	0.0	0.0	
Amhara	755	24.7	4	5	11.9	0.7	
Oromia	598	19.5	2	19	45.2	3.2	
Somali	44	1.4	1	0	0.0	0.0	
Benishangul Gumuz	36	1.2	4	0	0.0	0.0	
SNNPR	371	12.1	2	11	26.2	3.0	
Gambella	1	0.0	0.3	0	0.0	0.0	
Harari	0	0.0	0	0	0.0	0.0	
Addis Ababa	1	0.0	0.03	0	0.0	0.0	
Dire Dawa	0	0.0	0	0	0.0	0.0	
National	3,062	100.0	3	42	100.0	1.4	

Unlike last year, the monthly distribution in EFY 2006 shows that the highest number was reported in January, followed by fluctuations up to the end of the fiscal year (Figure 46).



Figure 46: Trend in Suspected Rabies Cases by Month (EFY 2005 and 2006)

2.7.1.7. RELAPSING FEVER

In EFY 2006, a total of 4,754 suspected relapsing fever cases were reported from all regions (Table 10). The highest number of cases was reported from SNNPR, with 2,038 cases (42.9%), followed by Oromia with 1,350 cases (28.4%). Out of the total 20 deaths, 19 were reported from Oromia, with the remaining being reported from SNNPR. The CFR was 0.4% at the national level.

Table 10:

Distribution of Suspected Relapsing Fever Cases and Deaths by Region (EFY 2006)

		Cases		Deaths			
Region	Number	Percent	Incidence Rate (per 100,000 population)	Number	Percent	CFR (%)	
Tigray	112	2.4	2	0	0.0	0.0	
Afar	68	1.4	4	0	0.0	0.0	
Amhara	649	13.7	3	0	0.0	0.0	
Oromia	1,350	28.4	4	19	95.0	1.4	
Somali	1	0.0	0.02	0	0.0	0.0	
Benishangul Gumuz	322	6.8	33	0	0.0	0.0	
SNNPR	2,038	42.9	11	1	5.0	0.05	
Gambella	4	0.1	1	0	0.0	0.0	
Harari	1	0.0	0.4	0	0.0	0.0	
Addis Ababa	199	4.2	6	0	0.0	0.0	
Dire Dawa	10	0.2	2	0	0.0	0.0	
National	4,754	100.0	5	20	100.0	0.4	

The monthly pattern of cases showed that the highest number occurred during the raining season, then gradually decreasing, as in the previous year, up to the end of the EFY 2006 (Figure 47).



Figure 47: Trend in Suspected Relapsing Fever Cases by Month (EFY 2005 and 2006)

2.7.1.8. YELLOW FEVER

Since November EFY 2005, a total of 165 suspected yellow fever cases were reported from South Omo Zone of SNNPR; out of these, 31 were reported in EFY 2006 (Figure 48). Eight samples were tested positive for yellow fever. The distribution of suspected cases by kebele and woreda is shown in Figure 49.



Figure 48: Distribution of Suspected and Confirmed Yellow Fever Cases by Epidemiological Week in South Omo Zone of SNNPR (EFY 2005- 2006)





2.7.1.9. DENGUE FEVER

Dengue fever cases were reported in September EFY 2006 in Dire Dawa town for the first time in Ethiopia. Furthermore, the outbreak has expanded to other regions with similar ecological features, mainly to Adaar Woreda in Afar Region and Gode town in Somali Region. Almost all cases were reported from urban kebeles. A total of 12,238 suspected dengue fever cases were reported from September to April EFY 2006 (Figure 50). Serum samples were collected and screened by enzyme-linked immunosorbent assay test for arboviruses, and further investigated by real-time Polymerase Chain Reaction (PCR). Out of 80 samples collected from Dire Dawa, 50 were tested positive for dengue fever serotype DEN-2. Environmental management activities were conducted with mobilization and participation of the community.



WHO Epidemiological Week with Corresponding Month

Figure 50: Distribution of Suspected Dengue Fever Cases by Epidemiological Week (September to May EFY 2006)

2.7.1.10. INFLUENZA

The influenza sentinel surveillance was established in Ethiopia in October 2008 GC. Currently there are eight influenza sentinel sites in Ethiopia; of them, five are severe acute respiratory infections (SARI) sentinel sites, and the remaining three are influenza like illness (ILI) sentinel sites. Four are in Addis Ababa (one SARI site and 3 ILI sites), and the remaining four are in Mekelle, Adama, Bahir Dar and Hawassa.

Since the beginning of the surveillance, excluding the data from 2009 GC outbreak, a total of 3,204 samples were collected from both SARI and ILI sites. Of them, 687 (21.4%) were positive for Influenza (Table 11). Out of these positive cases, 444 were positive for influenza A and 243 for Influenza B (Table 12). Concerning the sub-types of influenza A, 224 were seasonal influenza A/H3, 200 were influenza A (pandemic H1N1), and 20 were seasonal influenza A/H1 (Table 13).

Table 11:

Number of Influenza Samples Collected, Number of Positive Cases and Positivity Rate by Year (from November 2008 to August 2014 GC)

Sample				Ŷ	'ear			
	2008	2009	2010	2011	2012	2013	2014	Total
Samples Collected	25	208	152	120	869	1,191	639	3,204
Negative	24	197	145	101	654	836	560	2,517
Positive	1	11	7	19	215	355	79	687
Positivity Rate (%)	4.0	5.3	4.6	15.8	24.7	29.8	12.4	21.4

Table 12:

Number of Positive Cases by Influenza Type and Year

(from November 2008 to August 2014 GC)

Influenza Type				Ye	ear			
	2008	2009	2010	2011	2012	2013	2014	Total
Influenza B	0	1	1	10	39	135	57	243
Influenza A	1	10	6	9	176	220	22	444
Total Positive Cases	1	11	7	19	215	355	79	687

Table 13: Number of Influenza A Positive Cases by Sub-type and Year

(from November 2008 to August 2014 GC)

Influenza Sub-type				Year				
	2008	2009	2010	2011	2012	2013	2014	Total
Seasonal Influenza A/H3	0	7	0	7	14	182	14	224
Seasonal Influenza A/H1	1	0	0	0	0	18	1	20
Swine H1(Pandemic H1N1)	0	3	6	2	162	20	7	200
Total Influenza A Cases	1	10	6	9	176	220	22	444

The distribution of influenza positive cases by sub-type and year is shown in Figure 51.



CHALLENGES

- Weak implementation of electronic reporting (ePHEM/HMIS);
- Low reporting completeness and timeliness from Gambella and Afar Regions (below 80%);
- Inadequate integration of PHEM component in woreda based planning and HEW refresher training;
- Weak collaboration between PHEM and EPI, nutrition and malaria programs;
- Poor documentation of surveillance data at woreda level, with sub-standard data quality in some areas;
- Inadequate data analysis and use, especially at lower levels; and
- Limited laboratory capacity for timely confirmation of diagnosis.

WAY FORWARD

- Speed the implementation of ePHEM/HMIS;
- Ensure high reporting completeness and timeliness through implementation of electronic reporting system;
- Integrate PHEM component in woreda based planning and HEW refresher training;
- Strengthen the collaboration with EPI, nutrition and malaria programs;
- Continue training of health workers and PHEM officers to strengthen data quality and use for action; and
- Provide national and regional levels with equipment and supplies, expand diagnostic capacity at regional level, and link each level of PHEM with hospital and HC laboratories.

2.8. QUALITY OF HEALTH SERVICES

HSDP IV focuses on a comprehensive and continuous quality monitoring mechanism that will enable all levels of the health system to look at all aspects of performance and quality of services. Improving the quality of services is realized through scrupulous implementation of tools, manuals and standards. In EFY 2006, the performance of the sector with respect to improving quality of services was as follows.

2.8.1. QUALITY IMPROVEMENT

The Ethiopian Hospital Reform Implementation Guideline (EHRIG) has been implemented in EFY 2006, resulting in improved service delivery at public hospitals. It aims at strengthening hospital management as a foundation for ensuring high quality clinical care and improving patient satisfaction at hospital level. Among 124 EHRIG standards, around 76% were achieved in EFY 2006 (Figure 52).



The Ethiopian Hospitals Alliance for Quality (EHAQ) aimed at sharing experiences among lead and general member hospitals for quality improvement. In EFY 2006, patient satisfaction cycle of EHAQ was closed, following the achievement of its goal, and a new cycle for promoting quality in service delivery has started. At the closing ceremony of the patient satisfaction cycle, the best performing public institutions (6 lead hospitals, 3 clusters, 11 general member hospitals, 2 hospitals, and one RHB) were awarded, after being evaluated through data driven and transparent approach.

Concerning the selection process, three steps were followed: (i) primary selection was based on the key performance indicators reported from the hospitals to RHB and FMOH; (ii) secondary selection was based on criteria developed by an independent audit team at Medical Service Directorate (MSD) of FMOH; and (iii) tertiary selection was based on on-site validation of results by a national team of experts drawn from different organizations, using a check list developed by an independent auditing committee.

Auditable pharmacy transactions and services

The Auditable Pharmacy Transactions and Services (APTS) Initiative aimed to improve the quality of pharmacy services and increase the availability of specialty drug to 70% and the availability of essential drugs to 100% in 22 high load university hospitals in EFY 2006. To achieve this objective, many activities were performed, including selection of specialty and essential drugs, their quantification and forecasting for the next three years, provision of training, development of legal framework, development of all necessary documents and guidelines, and, finally, designing and reengineering the pharmacy unit.

The implementation of the APTS Initiative has a number of advantages. Through APTS, hospitals have established evidence-based, transparent and accountable pharmaceutical services and financial transactions. Moreover, the pharmaceutical services have become auditable, therefore reducing wastages of medicines, expiry rates as well as improving the quality of pharmaceutical care.

Hospitals have managed to utilize budget appropriately. APTS has also allowed hospitals to easily deliver monthly cost and consumption reports. Currently more than 30 hospitals from different regions have been implementing APTS with encouraging results.

Pre-facility and facility-based emergency service

To improve the quality of emergency services in Ethiopian public hospitals, a number of initiatives have been implemented, such as: (i) ambulance procurement, distribution and utilization; (ii) establishment of emergency command post; (iii) provision of training on basic and advanced life support; and (iv) strengthening of specialty care like intensive care unit, burn services, and trauma care services.

A number of undertakings have been performed in improving emergency care. In addition to provision of important trainings on basic life support, 450 ambulances were distributed to regions. Besides, different guidelines, such as Ambulance Management Guideline, First Aid Guideline, Intensive Care Unit Establishment Guideline, and Liaison Services Manuals, have been prepared. Compilation of the national ambulance utilization data indicated that more than 317,988 patients benefited from the ambulance service, 70% of whom were mothers.

The most important achievement in emergency medical system has been the establishment of Addis Ababa Emergency Services Strengthening Project. A city-wide coordination mechanism has been created through the signature of MOU between relevant stakeholders, including FMOH. An emergency and referral coordinating team has been established, composed of emergency professionals from hospitals. The team, which works 24 hours a day, makes announced and unannounced visits to hospitals, facilitating emergency referrals and taking corrective action on the spot. The team has two three digit cell phones that have been made accessible to the public. Following the deployment of the team, dramatic improvements have been observed in emergency patient care and referrals; as a result, all emergency referrals currently in Addis Ababa are communicated and accompanied by health professionals.

MSD also provided training to build hospital capacity on quality improvement, including "Plan-Do-Study-Act" cycles, data collection analysis and reporting, EHRIG, emergency case management, and paediatric and maternal quality care.

Currently, around 123 public hospitals collect and analyze data on key performance indicators and report them to RHB and FMOH, showing improvements in most of the indicators related to quality of health services.

2.8.2. HEALTH FACILITY REFORM

In EFY 2006, the health facility reform has brought many improvements, and the hospital performance showed progress. Some of the achievements are mentioned below:

- Waiting time at OPD reached an average of 52 minutes, with a performance above the target of 60 minutes set at the national level;
- Emergency triage within 5 minutes reached 80%, but, despite the improvement, it was below the national target of 85%;
- Institutional mortality rate was 4%, which was better than the national target of 5%;
- Bed occupancy rate reached 60%, below the national target of 75%;
- The average surgical waiting time was estimated at 10 days; however, it was 30 days in Addis Ababa due to shortage of beds and insufficient number of health facilities;
- Patient satisfaction reached 77%, below the national target of 81%.

These achievements can also be taken as a basis for developing HC service delivery reform and, with this regard, a draft guideline was prepared in EFY 2006.

Many activities were performed in implementing the hospital reform, including the following:

- More than 350 senior physicians in Addis Ababa were trained on hospital reform and hospital development army;
- Four rounds of supportive supervision and monthly performance review meetings were conducted at hospitals in Addis Ababa in the presence FMOH senior management;
- Situation assessment of pharmaceutical services and infection prevention activities were done in 11 hospitals in Addis Ababa;
- Two national hospital performance review meetings and regular supportive supervisions were conducted to regional hospitals;
- Thirty nurses were trained on TOT on nursing, and, similarly, 30 quality management professionals were trained on quality management;
- Nurse Leadership Manual was developed and experience sharing visit was arranged for some nurse managers in Spain;
- Quantification of laboratory equipment, supplies and reagents were determined for 38 hospitals;
- Guideline was prepared to better manage university and federal hospitals;
- Arrangement was made for provision of health care for homeless youth in Addis Ababa; and
- A total of 1,220 surgical interventions were performed through surgical campaigns, and a total of 17,526 returnee compatriots from Saudi Arabia were provided with health care.

CHALLENGES

- Inadequate engagement of senior health professionals in hospital reform activities;
- Marked variability in implementation of reform initiatives between regions and hospitals;
- Ambiguity of university hospitals management and poor reform implementation;
- Poor attitude of health workers in spite of the efforts;
- Weak referral system;
- Inadequate supply of essential pharmaceuticals;
- Delayed implementation of Electronic Medical Records (EMR) System;
- Delay in implementation of Health Centre Reform; and
- Poor facility management and medical equipment management in hospitals.

WAY FORWARD

- Promote the engagement of senior health professionals in hospital reform activities;
- Strengthen the implementation of reform initiatives at all levels;
- Promote hospital reform implementation in university hospitals according to the standards;
- Undertake corrective actions to improve performance of health workers;
- Strengthen the referral system;
- Ensure supply of essential pharmaceuticals;
- Speed implementation of EMR;
- Speed the implementation of Health Centre Reform; and
- Strengthen the capacity in hospital management and medical equipment management.
2.8.3. BLOOD SAFETY

The National Blood Transfusion Service (NBTS) reversion from the Ethiopian Red Cross Society to the government health care service delivery system has been completed. Its mission is to ensure the availability of safe and adequate blood and blood products to all patients who need blood transfusion. The aim is to eliminate deaths due to lack of safe blood and to contribute to the quality of health care service delivery as well as contributing to achieving health related MDGs.

In EFY 2006, the number of functional regional blood banks increased from 12 to 25, with a total of 30 mobile teams collecting blood from the communities on a daily basis. These blood banks are strategically located to supply safe blood to all government and non-government health facilities within 150-200 Km radius of their catchment areas (Figure 53). Currently, the proportion of health facilities accessing safe blood and blood products from the NBTS and its network increased to 52%.



Figure 53: Distribution of Functional Blood Banks to Supply Safe Blood to Health Facilities Located within 150 - 200 km Radius (EFY 2006)

100,000 87,685 80,000 Numbei 60,090 60,000 55,690 52,480 44,680 40,000 20,000 0 2002 2003 2004 2006 2005 Year Figure 54: Trend in Number of Units of Blood Collected (EFY 2002 - 2006)

In EFY 2006, the NBTS collected 87,685 units of blood, with a 46% increase from 60,090 in the previous year (Figure 54).

There was an increase in the proportion of voluntary blood donors from 54% in EFY 2005 to 70% in EFY 2006, while the proportion of replacement blood donors decreased from 46% to 30% in the same period (Figure 55), resulting in a reduction of the rate of transfusion transmitted infections. It is worth noting also that the HIV-prevalence among blood donors decreased from 2.5% in EFY 2005 to 0.8% in EFY 2006.



Figure 55: Trend in Percentage of Voluntary and Replacement Blood Donors (EFY 2002-2006)

A new strategy was implemented to increase blood collection from voluntary non-remunerated blood donors, focused on community awareness creation, involvement and ownership as well as blood donor mobilization. The culture of blood donation has improved in the country using multiple media outlets, with participation of renowned leaders (political, religious, and local leaders, as well as artists and other celebrities). Additionally, creating strong donor and youth associations partnerships, and preparing large awareness campaigns, have been strengthened.

The NBTS has been strengthening the quality of the service through blood bank staff and hospital clinician's capacity building programs, technical support and joint performance review of regional blood bank facilities. The service has been participating in external quality assessment (EQA) schemes, and is in the process of enrolling in the step-wise accreditation program for blood transfusion services as well as establishing internal quality assessment schemes with the regional blood banks.

To ensure equitable access to safe blood in the country, the construction of one national blood bank and 12 strategically located regional blood banks has been initiated in order to avail safe and adequate blood and its product to all transfusing facilities, thus increasing access to safe and adequate blood for the whole population.

CHALLENGES

- Unclear organizational structure of the transfusion service at national and regional levels;
- Inadequate community awareness creation and communication programs regarding voluntary blood donation;
- Inadequate number of regular voluntary non-remunerated blood donors;
- Delay in procurement process of supply and equipment;
- Inadequate technical staff availability in regional blood banks;
- Lack of fully automated blood bank laboratory services;
- Shortage of blood component preparation, especially at the regional level;
- Inappropriate clinical use of blood; and
- Inadequate blood transfusion service quality assurance system.

WAY FORWARD

- Devise a clear organizational structure of NBTS and its relationship with regional blood bank services;
- Promote community awareness creation and communication programs through media;
- Strengthen regular voluntary non-remunerated blood donations;
- Strengthen the blood bank supply procurement system;
- Recruit adequate staff for regional blood banks;
- Automate the blood bank laboratory services;
- Equip selected regional blood banks with blood component preparation equipment;
- Promote appropriate clinical use of blood through training; and
- Strengthen blood transfusion service quality assurance system.

2.8.4. UTILIZATION OF HEALTH SERVICES

Health service utilization is measured by outpatient department (OPD) attendance per capita, which is an indicator of accessibility of the services, reflecting the interaction between demand and supply of outpatient care.

In EFY 2006, a total of 30,927,623 OPD visits were provided with an average of 0.35 OPD visit per person per year; this achievement was slightly higher than the performance in EFY 2005 (0.34 OPD visit per person per year) (Figure 56).



Figure 56: Trend in OPD Attendance Per Capita (EFY 2002-2006)

Wide variations were observed across regions, ranging between 0.13 visit per person per year in Somali Region and 0.99 in Harari (Figure 57).



CHALLENGES

- Failure to plan and provide skill-based training at each level;
- Weakness in scaling-up best practices;
- Lack of functional performance monitoring team; and
- Low OPD attendance per capita.

WAY FORWARD

- Introduce skill based and hands-on training to health professionals;
- Implement Balanced Score Card (BSC) for ensuring accountability;
- Strengthen the monitoring and evaluation system and make the performance monitoring team functional; and
- Promote the use of health services through improved access and provision of quality care.

2.9. NATIONAL LABORATORY SYSTEM

According to the WHO laboratory quality ranking, every laboratory system is expected to fulfil the five levels of laboratory quality standards, ranging from one to five. As part of this quality standard mechanism, 90 laboratory professionals drawn from 15 laboratories participated in Strengthening Laboratory Management Towards Accreditation (SLMTA) 2 and 3 training. Similarly, one laboratory participated in external quality control managed by international experts; whereas 22 laboratories participated in national laboratory quality control and standard assessment.

As part of increasing the number of laboratories participating in SLMTA Program, training was provided in 49 hospital laboratories in different regions: 12 in Amhara, 17 in Oromia, 1 in Harari, 10 in SNNP, and 9 in Tigray. In addition, microbiology assessment was conducted in 76 hospitals.

Training on different laboratory equipment and techniques was provided for 346 laboratory professionals.

Five hundred fifty eight laboratory professionals drawn from regions took training on HIV, malaria, TB diagnosis, laboratory management, Laboratory Information System (LIS), and other related subjects.

With regards to HIV testing, training was provided for laboratory professionals on different testing techniques; specifically, 4 took TOT on CD4 Prima, and 8 took training on Deoxyribonucleic Acid (DNA)-PCR.

Two laboratories have started diagnosis using the MIGIT Machine.

Sixty one laboratory professionals drawn from Benishangul Gumuz and Gambella Regions took training on TB florescence and Ziehl-Neelsen microscopy. In addition, 140 laboratory professionals working at federal and university hospital laboratories took basic training on malaria smear microscopy and quality assurance.

As part of the on-going laboratory quality assurance mechanism, 156 laboratories have participated in QC activities through provision of quality control samples (regarding chemistry and haematology, DNA PCR, viral load, and TB culture).

CHALLENGES

- Shortage of skilled and capable human resources;
- Inadequate transport facilities and spare parts for equipment; and
- Shortage of laboratory inputs.

WAY FORWARD

- Implement relevant recruitment and retention mechanisms;
- Provide adequate transport facilities and spare parts for equipment; and
- Ensure adequate supply of laboratory inputs.

CHAPTER 3





Leadership and Governance

LEADERSHIP AND GOVERNANCE

3.1. EVIDENCE-BASED DECISION MAKING BY ENHANCED HARMONIZATION AND ALIGNMENT

This strategic objective is to support evidence-based decision making through enhanced partnership, harmonization and alignment, and integration of projects and programs at the point of health service delivery. It includes identification of health system bottlenecks, research, HMIS, performance monitoring, quality improvement, surveillance, use of information for policy formulation, planning, and resource allocation.

The outcome is the proper generation and use of evidence to address the critical health problems of the community at all levels of the health system, and the realization of "One-plan, One-budget and One-report", with effective integration and alignment of health projects and programs.

3.1.1. PLANNING

The EFY 2007 plan was prepared as per the "One-plan, One-budget and One-report" principles of the HSDP Harmonization Manual. At the beginning of EFY 2006, discussion was held with RHB planning heads in order to identify the challenges of the planning process.

The problems identified and solutions suggested were taken into account for the preparation of EFY 2007 Woreda-based Health Sector Plan. The Joint Steering Committee (JSC) and JCCC endorsed the plan of action, revised the planning format and planning manual based on the HDA ignition document at the initial phase of the planning.

As the EFY 2007 is the last year of HSDP IV, due focus was given on identification of key bottlenecks based on HDA situation analysis, and preparation of strategic initiatives that enable the sector to meet the strategic plan targets. An indicative plan containing the annual targets and proposed strategic initiatives was prepared on the basis of a six month performance evaluation, being in turn further discussed at regional level and adapted to their respective context. At regional level, 643 facilitators participated in the planning orientation and indicative plan preparation.

At woreda level, WorHO, Woreda Finance and Economic Development (WoFED), HCs and NGOs participated in the planning process. Budgeting the woreda and hospital planning was conducted using activity-based costing, taking into account resources mapped at national level. The plans of all woredas were aggregated both at zonal and regional levels. Comprehensive plans of each respective level and health sector plan were prepared based on the aggregated plans. Resource gap analysis was also conducted at national level based on the aggregated woreda plans. Furthermore, the draft Health Sector Transformation Plan was prepared for the coming five-year period (EFY 2008-2012) as part of the 2035 vision of the health sector, with strategic themes of excellence in health service delivery, excellence in quality assurance, excellence in leadership and good governance and excellence in health system capacity. Target setting and costing was conducted using "One Health Tool". Draft plan was approved by the JSC and submitted to the social cluster for discussion.

In EFY 2006 BSC champion teams drawn from federal hospitals and agencies were given training on the BSC to create uniformity in cascading BSC within the health sector. The current status of BSC implementation was evaluated in seven regions that have started implementation. Based on the findings, a manual was prepared to train regional champions.

3.1.2. ROUTINE DATA COLLECTION AND AGGREGATION

The goal of HMIS is availing reliable, timely and complete information to make evidence–based decision making possible at each level. Through the efforts made so far, the timeliness, completeness and reliability of data have improved and it has been possible to use the data for woreda-based plan preparation and performance monitoring purposes.

In response to the changes in health system organization at PHCU level, in epidemiological pattern (with an increment of non-communicable diseases), in service delivery modality, in focus on maternal health and quality of services, as well as in international strategies and programs, the exercise of revision of the list of HMIS indicators had been initiated in EFY 2005.

In EFY 2006 the process was accelerated with revitalization of a technical and advisory committee for revision of indicators, and implementation of an indicators revision procedure as an iterative process. The indicators revision procedure stresses the pragmatic use of evidence to select indicators with involvement of all stakeholders. International criteria for selection of indicators, such as "Specific, Measurable, Assignable, Realistic, Time-related" (SMART) and "Clear, Relevant, Economic, Adequate, Monitorable" (CREAM) methods, were adopted to prepare nine national selection criteria.

A TWG led by the M&E case team was set up, then consultations were made with partners, and advisory committee meetings were conducted to finalize the revision of indicators; the revised list includes 122 indicators.

Based on the revised indicators list, the FMOH developed the procedure manual as well as recording and reporting tools. Master level training was provided for 1,594 participants drawn from all regions, DPs, and private sector. The training was cascaded to 3,338 (97.4%) public facilities and 4,175 (69.9%) private facilities, making a total of 7,513 (79.9%) public and private facilities (Table 14).

Table 14:

Progress in Roll Out of the Revised List of Indicators at Health Facilities by Region $_{(\text{EFY }2006)}$

	Training on Revised List of HMIS Indicators									
	Public			Private			Pu	Public and Private		
Region	Number of Public Facilities	Number of Public Facilities Trained	%	Number of Private Facilities	Number of Private Facilities Trained	%	Number of Public and Private Facilities	Number of Public and Private Facilities Trained	%	
Tigray	239	239	100.0	170	0	0.0	409	239	58.4	
Afar	68	65	95.6	43	0	0.0	111	65	58.6	
Amhara	819	805	98.3	1,025	931	90.8	1,844	1,736	94.1	
Oromia	1,293	1,293	100.0	2,903	2,878	99.1	4,196	4,171	99.4	
Somali	151	78	51.7	29	0	0.0	180	78	43.3	
Benishangul Gumuz	33	33	100.0	51	51	100.0	84	84	100.0	
SNNPR	680	680	100.0	900	208	23.1	1,580	888	56.2	
Gambella	27	27	100.0	168	45	26.8	195	72	36.9	
Harari	10	10	100.0	28	26	92.9	38	36	94.7	
Addis Ababa	91	91	100.0	620	0	0.0	711	91	12.8	
Dire Dawa	17	17	100.0	36	36	100.0	53	53	100.0	
National	3,428	3,338	97.4	5,973	4,175	69.9	9,401	7,513	79.9	

In addition to training, sufficient amount of printing materials were distributed directly to districts, and Tigray, Afar and Somali Regions have already started using the revised tools for recording and reporting.

There are almost 6,000 private facilities serving a large segment of the population, with a considerable amount of information being captured, but not systematically communicated to monitor the overall health service performance in the country. Thus FMOH planned to implement the reformed HMIS in these facilities according to the service standard set by the Food, Medicine and Healthcare Administration and Control Authority (FMHACA). FMOH developed a guideline for implementation of HMIS at private health facility level, together with Indicator Definition Manual, Facilitator Manual, Participant Manual and Information Use Manual.

In addition, disease classification coding and audiovisual training material development have been carried out to strengthen HMIS.

Community Health Information System (CHIS) has been designed to make the information system and decision making effective at the grass roots level. Owing to the family centered provision of health service, a family folder (FF) was designed to record health information related to the members of the family from birth to death as well as to housing condition. Though implementation of family folder started in EFY 2003, its implementation was sluggish with only 40% coverage at the end of EFY 2005. In EFY 2006, efforts were made to speed CHIS implementation in rural kebeles, increasing CHIS coverage to 64.5%. (Table 15).

Table 15:

Progress in Scale-up of the Community-based Health Information System by Region $_{(\text{EFY }2006)}$

	HEWs Training			HPs with Family Folders and Materials			HPs Implementing CHIS (Started Reporting)		
Region	Number of HEWs to be Trained	Number of HEWs Already Trained	%	Number of HPs	Number of HPs with Tools	%	Number of HPs	Number of HPs implementing CHIS	%
Tigray	1,400	1,200	85.7	672	631	93.9	672	536	79.8
Afar	592	137	23.1	378	45	11.9	378	45	11.9
Amhara	6,332	6,332	100.0	3,317	3,128	94.3	3,317	3,117	94.0
Oromia	13,093	9,528	72.8	6,428	4,693	73.0	6,428	2,816	43.8
Somali	1,967	187	9.5	1,062	27	2.5	1,062	27	2.5
Benishangul Gumuz	948	279	29.4	384	45	11.7	384	67	17.4
SNNPR	7,671	7,671	100.0	3,835	3,795	99.0	3,835	3,795	99.0
Gambella	395	111	28.1	111	46	41.4	111	29	26.1
Harari	40	40	100.0	33	19	57.6	33	19	57.6
Dire Dawa	84	84	100.0	31	30	96.8	31	30	96.8
National	32,522	25,569	78.6	16,251	12,459	76.7	16,251	10,481	64.5

Routine data quality assessment (RDQA) was conducted, based on recording and reporting data of EFY 2005 4th quarter. A total of 95 rural and urban WorHOs, and 214 health facilities (182 HCs and 32 hospitals) were randomly selected from all regions. The assessment revealed improvements in reporting timeliness and completeness as well as in data quality control at facility level using Lot Quality Assurance Sampling (LQAS) method, while gaps persisted in use of information for decision making. Besides, a trend analysis of the results from four subsequent RDQA rounds carried out in the past years was conducted to assess the change in data quality, reporting completeness and timeliness, and information use over time. On the basis of the two documents and draft HIS strategic plan, the health information quality improvement program has been developed.

3.1.3. PERFORMANCE MONITORING AND COORDINATION

Performance monitoring and coordination activities were carried out regularly in EFY 2006 in all the governance structures of the health system, in accordance with the guideline of BSC. Accordingly, the FMOH held regular JSC meetings with RHBs every two months, and bi-weekly Executive Committee Meetings with

agencies. FMOH also held quarterly Joint Consultative Forum (JCF) meetings with DPs, and bi-weekly JCCC meetings.

Most of the RHBs undertook their annual performance review meetings with woredas, zones and other stakeholders. During these meetings, strengths and challenges of the respective regions were reviewed.

In EFY 2006, the 15th ARM was held in Mekelle (9-11 October 2013) in the presence of 800 participants representing federal, regional, woreda, and community level organizations as well as DPs. The motto of 15th ARM was "The last lap towards MDGs: promise renewed to end preventable maternal and child death in Ethiopia".

FMOH conducted a mid-year inspection, involving members of the parliament and other government sectors, to verify activities that had been undertaken at grass roots level. The inspection was conducted in all regions, 26 zonal health departments, 52 WorHOs, 52 HC as well as kebele administration offices and one-to-five networks. The result of inspection has shown the strengths and weaknesses during the preparatory and implementation phases at all levels. Based on the inspection results, measures were taken, particularly to strengthen the HDA and thereby the overall health system.

The MNCH Scorecard for accountability and action is a mechanism through which Heads of State and Government can track progress in maternal, newborn and child health in order to increase transparency and accountability. The MNCH Scorecard visually highlights high-performing areas as well as low-performing areas showing bottlenecks to be addressed through locally adapted solutions. The FMOH developed MNCH scorecard and, from mid-EFY 2006 onwards, progress in the maternal and child health (MCH) programs can be monitored every quarter using the MNCH scorecard.

As in previous years, issues of coordination, harmonization, financing and monitoring were addressed in EFY 2006 by the JCF between FMOH and Health, Population and Nutrition (HPN) Donors Group. Bi-annual and annual performance reports have been submitted to the Prime Minister's Office, and annual and four year GTP reports have been submitted to MOFED.

In order to strengthen the capacity and standardize the procedures for reporting, an assessment was conducted and a standard report writing protocol was developed.

The booklet "Health and Health-related Indicators" for EFY 2005 was disseminated electronically and printed copies are ready for distribution.

In order to enhance the use of information, a "Special Annual Review Meeting Bulletin" was published for the second time in October 2013. The bulletin was disseminated at the 15th ARM to inform participants on major progress updates, best practices, new initiatives, and abstracts of articles on key operational researches (OR), surveys and programme evaluations carried out in EFY 2006.

The Health Bulletin "Policy and Practice" was published by FMOH in April 2014, providing updates on the level of MDG achievement, envisioning the future of the health sector, health sector performance, child nutrition, CHIS, and gender analysis of hospital data.

3.1.4. EVALUATION

A Joint Review Mission (JRM) was conducted in EFY 2006, in collaboration with DPs, to review the level of achievement of the strategic objectives of HSDP IV, identify challenges, document best practices, and forward recommendations to improve future governance, management and implementation of activities to meet HSDP IV goals. It is planned to present the main JRM report findings at ARM 2014.

EMDHS was conducted in EFY 2006, in collaboration with EPHI, CSA and DPs; it provides population-based information on patterns, trends and distributions of indicators related to contraceptive use, fertility, maternal and child health, and nutrition. The main results of EMDHS 2014 are described in the respective chapters of this report.

To improve the dissemination of results and enhance use of evaluation and operational research findings, a Monitoring and Evaluation Digest Manual was developed.

CHALLENGES

- Delay in implementation of CHIS in pastoralist and urban areas;
- Inadequate use of data quality assurance mechanisms at district and facility levels;
- Lack of integration of HMIS with pharmaceutical, regulatory, human resource, and other information systems;
- Inadequate coordination with stakeholders and partners at regional level;
- Gap in establishment and functioning of performance review teams;
- Poor documentation and dissemination of monitoring and evaluation, routine information, surveys, surveillance and operational research findings; and
- Limited practice of experience sharing and documenting, and scale up of best practices.

WAY FORWARD

- Speed the implementation of CHIS in pastoralist and urban areas;
- Strengthen health information quality improvement mechanisms;
- Promote integration of different information systems;
- Establish planning, monitoring and evaluation task force/technical working groups in all regions;
- Establish functioning performance review teams;
- Promote documentation and dissemination of results;
- Build information use capacity at national and regional levels; and
- Strengthen the capacity of documenting and disseminating best practices.

3.2. OPERATIONAL RESEARCH

Operational research is performed in the health sector in order to identify and study priority problems of public health importance and produce evidence that would help decision-makers to improve the services, and develop realistic health sector policies and strategies. In EFY 2006, the following operational researches focusing on HIV/AIDS, TB, malaria, immunization, traditional medicine, nutrition, and policy have been conducted by EPHI

- An assessment on HIV drug resistance has been conducted using the new WHO guideline, with part of the analysis being already completed on samples collected from 122 health facilities; in addition, trend analysis on HIV drug resistance in the period 2008-2010 was disseminated to FMOH.
- The analysis of 2011/2012 data from antenatal care-based HIV surveillance sites was completed and released this year, estimating the HIV prevalence among pregnant women at 2%; ANC surveillance 2014 has already started. To estimate the prevalence of HIV in MARPs, a total of 6,240 blood samples were collected from sex workers and truck drivers in ten towns.
- Survey results on the prevalence of the first line anti-TB drug resistance, with estimation of MDR TB prevalence among new and re-treatment cases, were disseminated to key stakeholders.
- A study to improve the acceptability of iron supplementation by pregnant women has been conducted in the four agrarian regions since EFY 2004, with completion of the implementation phase in EFY 2006. Likewise a pilot study on micronutrient prevalence (Iodine, Iron, Zinc and Vitamin A) was conducted and the coverage of iodized salt was disseminated in an international conference.
- EPHI has conducted several operational researches on nutrition, traditional and modern medicines, such as a research on efficacy of ACT against PF malaria and a research on plants having anti-parasitic and anti-malaria effect. Furthermore, based on research findings, a manual was developed to determine the expiry date of two food products for babies.

- A research was completed regarding anti-rabies vaccine, with determination of the dose and duration of immunity, and 15,000 doses of anti-rabies vaccine were produced and distributed to regions.
- As part of the plan to strengthen health system, a Service Provision Assessment (SPA) survey has been conducted in 4,710 health facilities. In addition, an evaluation was undertaken on the progress of the maternal and child health program towards MDG achievement.

CHALLENGES

- High attrition of professionals and inability to hire trained professionals;
- Delay in procurement of supplies for research purposes; and
- Weak monitoring and feedback mechanism at all levels of the HDA.

WAY FORWARD

- Speed up the approval and implementation of the incentive package aimed at retention of high level professionals;
- Speed-up the procurement process; and
- Strengthen BSC/M&E at all levels.

3.3. REGULATORY SYSTEM

The strategic objective is to ensure safety and quality in the delivery of health services, products and practices. It includes: (i) preventing professional malpractice; (ii) strengthening quarantine services; (iii) enhancing environmental health activities; (iv) enforcing regulations and prevention of drug abuse; (v) Promoting collaboration among regulatory actors; (vi) controlling institutional solid and liquid waste disposal; and (vii) building HDA for quality assurance of health and health related products and services, promoting the public wing as well as government wing.

In EFY 2006, the following key activities were planned at federal and regional levels: (i) conduct registration and provide license to 7,000 new graduates, and renew licenses of 4,500 health professionals; (ii) conduct inspection in 8,000 health facilities and in 10,000 health related facilities; (iii) strengthen inspection of illegal trade of food items and drugs; (iv) provide technical support to 25 private hospitals to meet standards; (v) implement the newly designed evaluation and registration strategies for ensuring quality of selected food products and medicines (vi) conduct pre-post quality assurance tests on 1,200 drugs and food items; (vii) conduct inspection in 12 drug factories and in 276 food factories; and (viii) capacitate health facilities to improve quality of health service delivery so as to meet regulatory standards.

In EFY 2006 the FMHACA and regional regulatory authorities prepared a national plan for the first time and started to produce a single national report.

Community empowerment is a key factor for the establishment of an effective regulatory system, combating illegal trade and promoting the provision of quality products and services. In this connection, mass mobilisation was conducted in different regions, including Addis Ababa, Somali (Jijiga), Amhara (Dessie and Gondar), and Tigray (Shire and Alamata). Moreover, capacity building and joint inspection with regional regulatory bodies were carried out to protect the public from poor quality products and services.

In addition BCC messages were broadcast using radio programs, radio spots, and television spots. Ninety five high schools established anti-drug club.

To strengthen the quality assurance system, legal instruments were developed and implemented, including the Healthcare Waste Management and Disposal Directive, the Narcotic and Psychotropic Directive, the Precursor Chemicals Control Directive, the Food Supplements Registration Directive, the Health Professionals Registration and Licensing Directive, and the Infant Formula Registration Directive.

3.3.1 INSPECTION AND QUALITY ASSURANCE OF "PRODUCTS"

The designed registration strategy has been implemented and evaluation for market authorisation was conducted for 442 medicines, 84 medical equipments, 10 vaccines, 79 food supplements, and 23 infant formulas, while market authorization was given for 384 medicines and 68 food supplements. In addition, 190 new drugs were introduced in the national drug list.

Quality control tests were made on 782 items, in addition 319 medicines samples were collected (from formal and informal sectors) and analysed for counterfeit/substandard quality evaluation. Pre-marketing tests were made on 16 physicochemical items, 178 microbiology items, 437 toxicology items, 95 condoms, and 29 iodized salt samples. Post marketing test were made on 27 iodized salt samples.

Import permits were given for 2,317 pharmaceuticals, 7,543 food products, 55 infant food products, and 76 tobacco products, while export permits were given for 6,220 food products and 162 drugs. On the other hand, products (including medicines, food products, and cosmetics) worth ETB 12,613,691 had been detained at the port of entry for not meeting the country requirements, and disposed properly.

3.3.2 INSPECTION AND QUALITY CONTROL OF "PREMISES"

Inspection and licensing were carried out on a number of new facilities, including 498 food import and distribution enterprises, 145 pharmaceuticals import and distribution enterprises, 194 cosmetics importers and distributors, 9 tobacco products importers and distributors, 3 special health facilities and 10 cross regional health facilities.

Inspections were conducted and licenses were renewed for 599 exporters, importers and distributors of food items, 276 of pharmaceuticals, 112 of cosmetics and sanitary products, 54 of tobacco products, 5 specialized health facilities, and 56 cross regional health facilities.

Various measures were taken on the basis of the inspection results: 24 importers and distributors of pharmaceuticals, and 3 importers of cosmetics, received warning, suspension or revocation according to the severity of the infringement, while entry permit and license were denied to 165 food importers and distributors. Similar measures were taken by regional regulatory bodies, for a total of 1,814 health facilities and 6,328 health related facilities at the national level.

Good Manufacturing Practice (GMP) inspections were conducted on 12 existing and two new local pharmaceutical manufacturers, and on 80 foreign pharmaceutical companies exporting to Ethiopia. Local GMP/Hazard Analysis Critical Control Point inspection was conducted for 112 existing and 71 new food manufacturers.

As part of the quarantine services, 41,510 international passengers were given vaccination certificates for yellow fever, and 31,434 for meningitis.

3.3.3 INSPECTION OF "PROFESSIONAL PRACTICE"

In EFY 2006, 2,270 new and 630 existing health professionals were registered and licensed at federal level, while regions registered 14,913 new health professionals and renewed 8,333, making the total of 17,183 newly registered health professionals and 8,963 health professionals with renewed registration. Measure was taken on 38 health professionals (37 at federal level and one at regional level) due to ethical and competence problems.

CHALLENGES

- Attrition of skilled and experienced professionals because of the poor retention mechanisms;
- Poor supportive supervision and feedback system;
- Limitations in public relations and communication works;
- Inadequate integration and collaboration with regions, stakeholders and concerned bodies;
- Limited capacity in performing food laboratory tests;
- Limited involvement of the communities; and
- Different organizational structures across regions.

WAY FORWARD

- Finalize and implement human resources regulation strategy;
- Strengthen supportive supervision;
- Improve communication systems;
- Strengthen health regulation army through functional networks and continuous evaluative training;
- Build capacity in performing food laboratory tests;
- Enhance community empowerment in health and health related services and products regulation; and
- Revise and harmonize the organizational structures across regions.

3.4. GENDER MAINSTREAMING

In EFY 2006, several activities have been implemented to mainstream gender in the health sector. In particular, the Women and Youth Directorate has revised the Gender Mainstreaming Manual in line with the GTP that ensures gender equity and equality at all levels of the health sector. Moreover, the manual plays a vital role in addressing health issues caused and aggravated by gender-related determinants.

The Gender Mainstreaming Manual has been launched in EFY 2006, with orientation meetings being organized with RHBs and federal level sector offices. This has created good understanding of the concept and ease in mainstreaming gender in all the building blocks of the health system. It has also promoted accountability through identification of points for entry for addressing priority issues of the health sector.

Health Sector Gender Mainstreaming

Gender Mainstreaming is a process, but not an end by itself. It recognizes that gender is a social construct that has health implication both for men and women. It is a means to institutionalize gender equality through different tools for evidence-based gender analysis. It also involves balancing the health situation of men and women as well as the different technical and administrative units of an institution.

Importance of the Health Sector Gender Mainstreaming

It is well known that there is a strong correlation between women's empowerment and health. This implies that, with increased empowerment, women's health seeking behavior and reproductive health choices will also increase. Low male engagement, lack of accurate and timely information, and inappropriate traditional practices have influenced utilization of health services by women. Therefore, gender mainstreaming plays a vital role in addressing these barriers and promoting service seeking behavior among women at all levels.

In this perspective, it is important to strengthen the capacity of health sector workforce with knowledge and skill on how to mainstream gender into their daily work. To this effect, a standardized National Gender Training Manual was developed to support the integration of gender equality dimensions as well as to address knowledge gaps and to accelerate the operation of gender mainstreaming. The manual has undergone many consultative meetings and pretested for its applicability before use.

Other achievements made in EFY 2006 include: (i) development of Standard Operation Procedures for the Response and Prevention of Sexual violence; (ii) award of women with extraordinary performance in promoting gender mainstreaming; (iii) celebration of International Women's Day; (iv) collaboration with several DPs and sectors to advance women affairs and gender mainstreaming, in particular to contribute to the country's achievement of MDG 8.

Women Empowerment

In order to enhance leadership and decision making power of women, the directorate has done advocacy for increased number of female leaders. To this effect, out of the 16 assistant director positions in the head office, 5 (31.3%) were filled by female employees, with female employees filling also 24 (38.1%) of the 63 case team coordinator positions.

Key strategies

Key strategies considered to move forward include: (i) focusing on people needing special attention (e.g. disabled); (ii) strengthening the health response to violence against women; (iii) enhancing youth centers; and (iv) strengthening partnership for women and youth.

CHALLENGES

- Insufficient human resources;
- Inadequate gender analysis in programs and service delivery points;
- Limited supportive supervision in developing regions; and
- Limited number of partners working on gender issues.

WAY FORWARD

- Strengthen human resources;
- Promote gender analysis in programs and service delivery points;
- Strengthen supportive supervision in developing regions; and
- Promote the involvement of partners on gender issues.

CHAPTER 4





Health Infrastructure and Resources

HEALTH INFRASTRUCTURE AND RESOURCES

This section describes the progress made in EFY 2006 in constructing and equipping HPs and HCs as well as in constructing, rehabilitating and expanding hospitals and strengthening medical equipment management.

4.1. HEALTH INFRASTRUCTURE DEVELOPMENT, REHABILITATION AND MAINTENANCE

4.1.1. CONSTRUCTION OF HEALTH POSTS

In EFY 2006, a total of 203 new HPs were constructed, making a cumulative number of 16,251 HPs (Figure 58).



The highest number of HPs is found in Oromia Region (6,428), accounting for 39.6% of the total, followed by SNNPR (3,835) and Amhara (3,317) Regions (Table 16).

Table 16:

Cumulative Number of Health Posts by Region

(EFY 2006)

Region	Cumulative Number of Available HPs in EFY 2006
Tigray	672
Afar	378
Amhara	3,317
Oromia	6,428
Somali	1,062
Benishangul Gumuz	384
SNNPR	3,835
Gambella	111
Harari	33
Dire Dawa	31
National	16,251

4.1.2. EXPANSION OF HEALTH CENTERS

The number of newly constructed and completed HCs was 90, increasing the cumulative total of available HCs from 3,245 in EFY 2005 to 3,335 in EFY 2006 (Figure 59).



According to the SPA survey on the availability and functionality of health facilities carried out in EFY 2006, out of the 3,335 HCs that were available, 3,315 (99.4%) were functional. Furthermore, a total of 211 HCs were under construction (Table 17).

The highest number of HCs was found in Oromia Region (1,253), accounting for 37.6% of the total, followed by Amhara (806) and SNNPR (700) Regions.

Table 17:

Number of Available, Functional and Under Construction Health Centers by Region (EFY 2006)

Regions	Available	Functional	Ongoing construction
Tigray	212	211	1
Afar	60	60	18
Amhara	806	805	43
Oromia	1,253	1,249	64
Somali	145	140	20
Benishangul Gumuz	32	32	9
SNNPR	700	693	31
Gambella	31	29	1
Harari	8	8	0
Addis Ababa	73	73	24
Dire Dawa	15	15	0
National	3,335	3,315	211

4.1.3. EQUIPPING OF HEALTH POSTS AND HEALTH CENTERS

In EFY 2006, a total of 305 HPs and 257 HCs were equipped with necessary equipment and materials.

4.1.4. CONSTRUCTION, REHABILITATION AND EXPANSION OF HOSPITALS

4.1.4.1. FEDERAL HOSPITALS

Amanuel General Hospital and Mental Health Research Institute: the project has been carried out in two phases:

Phase I: the construction of the new General Hospital, which includes 161 inpatient beds, has reached 93% of physical progress, and it will be completed in December 2014.

Phase II: The design has been completed for the construction of the Research Institute and administration buildings with offices and housing to accommodate approximately: (i) offices for 50 administration staffs; (ii) different training rooms for 50 to 100 students; and (iii) 20 family guest rooms.

St. Paul's Millennium Medical College: the construction of the college has been completed.

St. Paul's Millennium Medical College G+6 Apartment Building: the progress of construction of one block with 36 flats with two bed rooms and 4 flats with three bed rooms has reached 15%.

St. Paul's MCH Building: it comprises of eight floors, 308 inpatient beds, and two lecture rooms, and has a capacity of eight delivery rooms at one time; 23% of the work has been completed. However, there has not been any progress in this fiscal year because of the poor performance of the contractor; therefore, the contractual agreement was terminated and a bid was floated to select a new contractor to resume the work.

St. Paul's Guest House Building: it comprises of guest rooms, lecture rooms, conference rooms, a meeting hall and a multi-purpose room; the building has been completed.

St. Paul's G+10 Apartment Building Design: the design is going to be done by a consulting firm and the bid was floated, with the evaluation of the bid documents being already started.

St. Peter 2B+ G+1 Building: the progress of the construction has reached 15%.

St. Peter Workshop, Fence and Guard House Construction: the preparation phase has been completed and the construction will start in the coming fiscal year.

St. Peter Hospital G+6 Apartment Building: the progress of construction of one block with 36 flats with two bed rooms and four flats with three bed rooms has reached 35%.

Alert Hospital Rectification and Triage Expansion: the construction has reached its final phase, with only laundry, placenta pit, TB-ward walk way construction reaching 85%.

Alert Hospital Master Plan: the design work has been completed.

Alert Hospital G+2 Directorate Residences: financial evaluation has been finalized and the bid document has been already prepared.

Alert Hospital G+6 Apartment Building: the progress of construction of two blocks with 36 flats with two bed rooms and four flats with three bed rooms has reached 25%.

G+12 MOH Staff Residence Building Design: architectural and structural design has been finalized, a bid document has been prepared, and the bid process is underway.

Adama Anti-Malaria Center: the construction has started.

Health Extension Workers' Houses: out of 198 houses planned, 154 houses have been already completed.

Blood Banks: the construction of 15 regional blood banks has been completed, while the construction of three additional regional blood banks has been planned, and Gondar blood bank is in site handover. The construction of Jijiga and Arba Minch blood banks is on the bid process.

Operating Room Blocks: the construction of 13 blocks has started.

Medical Equipment Maintenance Workshop: six workshops are under construction and five on bid process.

4.1.4.2. REGIONAL HOSPITALS

According to the SPA survey, the total available public hospitals were 156 in EFY 2006, and, out of these, 150 (96.2%) were functional. On the other hand, ongoing construction of 123 hospitals was reported from seven regions (Table 18).

Table 18:

Number of Available, Functional and Under Construction Hospitals by Region (EFY 2006)

Regions	Available	Functional	Ongoing construction
Tigray	31	31	2
Afar	5	5	1
Amhara	20	19	53
Oromia	47	46	55
Somali	9	9	1
Benishangul Gumuz	2	2	4
SNNPR	21	20	7
Gambella	3	1	0
Harari	2	2	0
Addis Ababa	14	13	0
Dire Dawa	2	2	0
National	156	150	123

Concerning hospital design, a project is underway to produce the standard design of the general hospital at national level, with 100 beds as per the new design of the health care delivery tier system, and serving a catchment area of 1,000,000 population; the preliminary design development process has been completed and is under revision for approval.

CHALLENGES

- Serious shortage and unexpectedly high price of construction materials; and
- Limited capacity of contractors and RHB contract administration.

WAY FORWARD

- Strengthen the collaboration with all stakeholders and mobilization of qualified contractors; and
- Strengthen the capacity of contractors and RHB on contract management.

4.2. HUMAN CAPITAL AND LEADERSHIP

This strategic objective entails: (i) leadership development; (ii) human resource planning, development and management, including recruitment, retention and performance management; (iii) community capacity development; and (iv) technical assistance management. The expected outcome is to ensure adequate availability of skilled and motivated staffs who are committed to work and stay in a well managed sector.

The strategic initiatives to strengthen human resource development and administration in EFY 2006 included: (i) increase the capacity of medical students intake to 4,000 and improve quality of education; (ii) increase the Integrated Emergency Surgery Officers (IESO) intake capacity from 451 to 681; (iii) increase the annual enrolment of anaesthesia professionals from 240 to 320; (iv) increase the annual enrolment of Level IV Health Extension Service Training from 2,000 to 2,650; and (v) enhance emergency medicine, ambulance service, in service training and level IV biomedical technicians.

The following section describes the performance of the sector in implementing the federal and regional level strategic initiatives to improve human capital and leadership in EFY 2006.

4.2.1. TRAINING

4.2.1.1. MEDICAL DOCTORS

The WHO standard for the physician to population ratio in developing countries is one physician per 10,000 population. Compared to EFY 2005 (1:26,943), this ratio has improved to 1 per 20,970 population in EFY 2006. In EFY 2006, 3,583 new students were enrolled in 27 public medical schools, making the total medical students on training 14,290 (Table 19). The New Medical Education Initiative (NMEI) has been implemented in 13 medical schools.

To strengthen teaching capacity, lecture notes, modules, books, ICT equipment, Therasim simulation software and laboratory aids have been distributed to the medical schools.

To support the technical capacity of teachers, training on problem based-learning was provided to 109 teachers from new medical education schools as well as 10 international specialists and 20 experienced local specialists were being deployed in medical schools.

Besides, integrated supportive supervision was provided to 13 new medical schools, new and existing medical schools were networked in eight groups, and performance appraisal of new medical education initiative students was conducted to assess and fill knowledge and skill gaps.

4.2.1.2. INTEGRATED EMERGENCY SURGERY AND OBSTETRICS TRAINING

One of the major initiatives designed by the FMOH in EFY 2001 was to improve the provision of emergency obstetric care and surgical services at primary hospital level where a gynaecologist or surgeon are not available. IESO training was thus started as a three years master's program for health officers (HO) in five universities aimed at reducing maternal mortality related to pregnancy and child birth. So far, 163 health officers have completed the training and have been deployed in different health facilities. In EFY 2006, 130 health professionals were enrolled in 11 existing and new training institutions, with a total of 504 professionals being under training (Table 20).

Table 19: Number of Medical Students by Year of Study and University

(EFY 2006)

Name of University	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year	6 th Year	Total
Adama	171	125	164	105	93	294	952
Addis Ababa	367	245	320	235	290	294	1,751
Arba Minch	200	125	107	62	62	51	607
Bahir Dar	166	235	169	106	108	72	856
Defence	0	16	0	23	0	28	67
Gondar	403	245	100	200	212	173	1,333
Haromaya	340	225	225	188	108	66	1,152
Hawassa	394	252	258	125	258	110	1,397
Jimma	410	395	310	222	213	199	1,749
Mekelle	298	252	323	175	184	199	1,431
St. Paul	130	170	125	127	42	33	627
Adigrat	115	0	0	0	0	0	115
Wachamo	78	0	0	0	0	0	78
Debre Tabor	53	0	0	0	0	0	53
Axum	28	66	45	0	0	0	139
Wollo	43	76	56	0	0	0	175
Debre Markos	41	72	50	0	0	0	163
Debre Birhan	43	62	65	0	0	0	170
Ambo	38	73	80	0	0	0	191
Wolloga	25	60	60	0	0	0	145
Wolayitasodo	38	68	66	0	0	0	172
Medawolabu	17	64	52	0	0	0	133
Dilla	18	48	68	0	0	0	134
Dire Dawa	31	58	62	0	0	0	151
Yekatit 12 Hospital	57	72	85	0	0	0	214
Adama Hospital	47	76	56	0	0	0	179
Yirgalem Hospital	32	65	59	0	0	0	156
Total	3,583	3,145	2,905	1,568	1,570	1,519	14,290

Table 20: Number of IESO Trainees and Number of Graduates

(EFY 2006)

University/College	Number of Students on Training	Cumulative Number of Graduates
limma	70	34
Mekelle	64	43
Hawassa	62	27
Haromaya	64	24
Gondar	46	35
Adama	61	0
SPHMMC	13	0
Wollo	62	0
Dilla	23	0
Arba Minch	14	0
Wolaita Sodo	25	0
Total	504	163

As part of capacity building, supportive supervision was conducted in 10 universities and 25 hospitals. Assessment was conducted to identify knowledge gap, and training is being provided for graduates. Educational materials, teaching aids and medical equipment are being procured for medical schools.

A field visit was conducted at ten primary hospitals in four regions (Oromia, Amhara, SNNP and Tigray) where IESO officers have been deployed, and registers of operating room, maternity and delivery wards were reviewed for the 12 month period preceding the field visit in order to document the context where task shifting on IESO was implemented, as well as the program's milestones, challenges and lessons learned.

Interviews with key informants showed that the majority of IESO graduates were deployed in primary hospitals, with improvement of rural community's access to emergency obstetric and surgical life-saving interventions, and increase in volume of obstetric and surgical emergency cases managed with life-saving surgical interventions, while a decrease was observed in maternal deaths as well as in referral of cases that can be managed at primary hospital level. Moreover, the confidence and motivation of other health cadres has improved, having the backup from IESO graduates. On the other hand, deployed IESO graduates reported challenges in their work environment that need due attention, particularly the lack of referral feedback and supportive supervision, shortage of medical equipment and supplies, high turnover of support staff, inadequate access to blood bank, non-standardized incentive schemes and future career development ladder.

4.2.1.3. ACCELERATED MIDWIFERY TRAINING

In order to give prompt response to problems arising during pregnancy and child birth, and to reduce maternal and infant mortality, the other strategy designed and implemented by the FMOH was the accelerated midwifery training program and the plan to staff each HC with two midwives.

In EFY 2006 1,219 midwifery graduates were deployed to health facilities. The graduates took pre-deployment training to be acquainted with the actual working environment at health facilities, while 120 got mentorship in collaboration with the Midwifery Association. Out of the planned 4,676, a total of 4,409 (94.3%) graduates were deployed in the past three years. As shown in Table 21 the midwifery students actually enrolled and attending classes are 1,240.

Based on identified gaps, ICT equipment (LCD, Laptop) and 2,005 log books were provided to medical schools, while vehicles are being procured. Twenty experienced midwives were recruited as preceptors to fill the shortage of teachers and clinical mentors.

To ensure the quality of the accelerated training program, the Midwifery Education Standard was developed in collaboration with key stakeholders. In addition, on the basis of standard-based management training, Arba Minch, Jijiga, Mekelle, Hawassa and Gondar established an Education Development Centre that is mainly responsible for quality improvement initiative.

Table 21:

Number of Trainees in Accelerated Midwifery Training Program (3rd Round) (EFY 2006)

Region / College	Intake (3 rd round)	Number of Graduated (3 rd round)
Amhara Region		
Debre Tabor	90	89
Dessie	80	80
Teda	86	86
Bahir Dar	96	96
Debre Birhan	90	89
Oromia Region		
Metu	137	134
Nekemte	160	159
Shashemene	171	166
Negele	167	159
Somali Region		
Jijiga	163	161
Total	1,240	1,219

4.2.1.4. LEVEL V ANAESTHESIA TRAINING

Anaesthetists play a critical role in the provision of emergency surgery at primary hospitals and HCs. In order to increase access to the services of nurse anaesthetists, in EFY 2006 the FMOH has trained and deployed 96 Level V nurse anaesthetists and 94 degree graduates. A total of 115 nurse anaesthetists are under training in eight health science colleges (HSC) in EFY 2006 (Table 22), while 630 trainees are attending the Bachelor of Science Program in ten Universities (Table 23).

In order to strengthen the learning and teaching process, 2,400 books and 810 teaching medical equipments have been dispatched to HSCs. In addition, the FMOH has conducted pre-deployment training, supportive supervision and transfer of budget for HSCs.

Based on the gaps identified, 22 anaesthetists were deployed for medical schools. Effective teaching skill, preceptor and technical updating trainings were provided to 138 anaesthesia teachers. In collaboration with MOE and DPs, standard for certificate of competency and revision of anaesthesia module were implemented. Table 22:

Number of Graduates Number of Trainees Region **Health Science College** (EFY 2005 Intake) (EFY 2006 Intake) Harari Harari 28 20 Amhara 46 0 Dessie Tigray Dr. Tewolde 22 0 **SNNPR** 0 13 Hawassa 0 Hosana 8 0 14 Arba Minch Oromia Shashemene 0 20 Adama Hospital Medical College 0 15 0 Nekemte 14 0 Somali Jijiga 11 Total 96 115

Number of Level V Anaesthesia Trainees (EFY 2006)

Table 23:

Number of Anaesthesia Trainees in BSc Program by University and Year of Study $_{(\text{EFY }2006)}$

University	1 st Year	2 nd Year	3 rd Year	4 th Year	Total
Addis Ababa	30	25	54	45	154
Jimma	30	30	28	29	117
Dilla	15	15	17	9	56
Gondar	30	26	33	26	115
Wolaita Sodo	16	16	0	0	32
Mekelle	25	30	19		74
Debre Tabor	15	0	0	0	15
Dire Dawa	31	0	0	0	31
Hawassa	21	0	0	0	21
Axum	15	0	0	0	15
Total	228	142	151	109	630

4.2.1.5. HEALTH EXTENSION WORKERS

Based on philosophy of HEP to provide community level services that are efficient and meet the needs of individuals and families at household level, career development of HEWs has been started in order to update and improve the skills and knowledge of the Level III HEWs to achieve certification at Level IV. The Level IV Health Extension Service Training eventually used standard curriculum and learning modules that were prepared based on unit of competence and occupational standards developed by FMOH and MOE. In EFY 2006, 2,123 qualified for Level IV and 2,357 HEWs were enrolled for upgrading to Level IV in 19 training centres (Table 24).

To maintain two HEWs per HP, 4,825 students were enrolled for level III training. To support the teaching and learning process, 5,000 teaching modules were distributed to training centres and 61 HEW trainers and program managers were trained on teaching skill.

Table 24:

Number of HEWs Recruited for the Upgrading Program to Level IV

(EFY 2006)

Region	Number of Training Centers	Number of HEWs Graduated in EFY 2006	Number of HEWs Enrolled in EFY 2006
Oromia	4	1,063	1,069
Amhara	5	492	500
SNNPR	4	288	290
Tigray	2	176	200
Somali	1	104	106
Harari and Dire Dawa	1	0	84
Gambella	1	0	65
Benishangul Gumuz	1	0	43
Total	19	2,123	2,357

4.2.1.6. AMBULANCE SERVICE AND EMERGENCY CARE/PARAMEDICS TRAINING

This training program is a new category in Human Resources for Health (HRH) pre-service training in Ethiopia. The objective of this training program is to improve pre-hospital emergency care in managing all emergencies, including maternal emergencies. Fourteen trainers were trained on teaching methodology and technical skills. A total of 256 paramedics graduated, while 259 were enrolled in 6 training centres in EFY 2006 (Table 25).

Table 25:

Ambulance Service and Emergency Care/Paramedics Training

(EFY 2006)

Region	Number of Training Centers	Number of Graduated in EFY 2006	Number of Enrolled in EFY 2006	Remark
Oromia	2	155	157	
Amhara	2	50	51	
Harari	1	34	34	12 for Somali, 7 for Harari, 3 for Dire Dawa, 5 for Benishangul Gumuz and 7 for Gambella.
Tigray	1	17	17	
Total	6	256	259	

4.2.1.7. HEALTH INFORMATION TECHNICIANS

The purpose of the Health Information Technician (HIT) program is to train and deploy HITs in the category of mid-level professionals, who will be responsible for the collection, analysis, maintenance, retrieval, and reporting of health data, in accordance with data quality and regulatory standards of Ethiopia.

In EFY 2006 a total of 1,266 students were on training in HSCs (Table 26), while 433 HITs were graduated and deployed to health facilities, increasing the cumulative total of HIT professionals deployed in health facilities to 2,532.

Regions	1 st Year	2 nd Year	3 rd Year	Total
Tigray	0	0	32	32
Afar	40	15	10	65
Amhara	0	132	149	281
Oromia	278	0	0	278
Somali	26	34	0	60
Benishangul Gumuz	6	10	9	25
SNNPR	0	235	147	382
Gambella	8	14	6	28
Harari	5	11	5	21
Addis Ababa	0	0	68	68
Dire Dawa	14	5	7	26
National	377	456	433	1,266

Table 26: **Training Program of Health Information Technicians** (EEX 2006)

Regarding biomedical technician level IV training, Debre Markos University, in collaboration with FMOH and DPs, enrolled 200 students, while necessary technical, financial and material supports were provided to increase the enrolment capacity to 400.

4.2.2. IN-SERVICE TRAINING

FMOH has been working to provide need-based, standardized, and institutionalized in-service training to ensure sustainability and ownership in capacity building. Activities performed in EFY 2006 were as follows:

- The National In-service Training Directive and Implementation Guideline was disseminated to RHBs, professional associations, DPs, and IST centres;
- Capacity building, such as a benchmarking workshop in ALERT Hospital and trainings on course designing and training skill, was provided for nationally selected 35 local IST centres;
- Procurement of IST materials and auditorium furniture has been undertaken, while IST focal persons were assigned to regions for training on IST program management;
- A total of 161 FMOH staffs were trained on different topics based on assessed training needs;
- To build the capacity of health professional associations to serve as continuing professional development (CPD) providers, project management and CPD course designing trainings were provided to nine professional associations.
- Furthermore, standardization of in-service training manuals as per the IST Directive has already been started, and, so far, eight in-service training packages were approved, including leadership, management and governance for different levels, human resources for health management, leadership in strategic information, pain management, infection prevention, and patient safety for health service providers and BEmONC.

4.2.3. NATIONAL LICENSING EXAMINATION

While expanding training institutions, the quality of training was not getting enough attention. Since the establishment of Technical and Vocational Education and Training Centers, the training of lower level health care workers who completed the pre-service training has been checked against occupational standard and curriculum using national qualifying exam (certificate of competence) that was prepared by the FMOH in collaboration with MOE. This experience might be used as a good lesson for higher education exit check program development, as it is done in many countries in the world, where National Licensing Examination is used in order to improve healthcare through standardized assessment methods.

4.2.4. SPECIALTY INITIATIVES IN HOSPITAL BASED SURGERY, OBSTETRICS AND GYNAECOLOGY, AND NURSING TRAINING

In order to develop clinical post graduate training, and address the low rate of specialist physicians, the Human Resources Directorate is planning to use regional and district hospitals in the country for residency training in surgery and in obstetrics and gynaecology.

It is also planned to launch nursing speciality programs in neonatal intensive care unit and operating theatre to address the emerging special clinical care needs of the community.

4.2.5. DEPLOYMENT

The FMOH has been engaged in establishing a human resource database to carry out equitable deployment of health manpower, especially those that are in short supply. Accordingly, 937 general practitioners, 94 anaesthetists, 61 IESO officers, and other health professionals have been deployed during the year (Table 27).

To ensure the quality of training on medicine, pharmacy, midwifery, nursing, and anaesthesia, implementation guideline and health sector draft standard policy document were developed.

Table 27:

Number of Health Personnel Deployed by Occupation (EFY 2006)

Occupation	Number of Health Professionals Deployed
General Practitioners	937
Health Officers	1,506
Optometrists	48
Anesthetists	94
Biomedical Engineers	26
Integrated Emergency Surgery and Obstetrics Officers	61
BSc Nurses	1,170
Midwives	294
Clinical Pharmacists	305
Radiology Technologists	42
Psychiatrists	37
Total	4,520

CHALLENGES

- Poor data quality in Human Resource Information System (HRIS);
- Low capacity in management of HRH;
- Inadequate focus on HRH by Human Resource Administration from Civil Service at woreda level;
- Critical shortage of qualified teaching staff in teaching institutions;
- Delay in implementation of the standardized health workers motivation and retention package in most of the regions;
- Delay in approval of salary and carrier structure for Anaesthesia (level V), Master in Pediatric Nursing and Master in Infectious Diseases;
- Unclear mandate between FMOH and teaching institutions in human resource development (HRD);
- Inadequate ownership by universities on some teaching programs;
- Limited attention to IST institutionalization and standardization at RHB level;
- Weak coordination with partners, private and other sectors;
- Inadequate monitoring and quality assurance of health professional education;
- Limited implementation of the tele-education program; and
- Delay in hospital based specialty training.

WAY FORWARD

- Focus on data quality and roll out of HRIS at regional, zonal and woreda levels;
- Strengthen the capacity in Human Resources Management (HRM);
- Focus on HRH at woreda level;
- Support teaching institutions with teaching aids and staffing;
- Facilitate endorsement of human resource strategic plan, and motivation and retention package;
- Ensure approval of salary and career structures;
- Clarify the mandate between FMOH and teaching institutions in HRD;
- Promote ownership of universities on teaching programs;
- Focus on IST institutionalization and standardization;
- Strengthen coordination with partners, private and other sectors ;
- Strengthen monitoring and quality assurance mechanism for higher education training centers;
- Establish the tele-education program; and
- Develop hospital based specialty training.

4.3. PHARMACEUTICAL SUPPLY AND SERVICES

PFSA aims to increase the availability of quality pharmaceuticals (drugs, medical equipment and medical supplies for prevention, diagnosis and treatment) at an affordable price by ensuring adequate supply to health facilities in a sustainable manner. The agency aims to achieve improved rational drug use and a significant reduction in pharmaceuticals wastages. The expected outcome is ensuring adequate availability of the right pharmaceuticals at the right place and at the right time in the right condition, being also properly used by patients and clients.

In EFY 2006, PFSA planned to procure and distribute essential pharmaceuticals and health program commodities, build warehouses and modernize the inventory and distribution system, support the capacity of local pharmaceuticals manufacturers, promote rational drug use, improve the revolving drug fund (RDF) and its efficient use, build capacity and good governance, implement integrated pharmaceuticals fund and supply information management system, and strengthen monitoring and evaluation. The performance of the planned activities in EFY 2006 is described as follows.

4.3.1. PHARMACEUTICALS PROCUREMENT AND DISTRIBUTION

PFSA planned to procure pharmaceuticals, medical supplies and equipment worth of ETB 8.26 billion in EFY 2006, and it procured pharmaceuticals, medical supplies and equipment worth of ETB 6.18 billion (74.8% of the planned procurement) in the year. In addition, pharmaceuticals, medical supplies and equipment worth of ETB 3.77 billion were donated by DPs and received at the PFSA warehouses.

The agency planned to distribute pharmaceuticals, medical supplies and equipment worth of ETB 10.87 billion in EFY 2006 and it distributed pharmaceuticals, medical supplies and equipment worth of ETB 10.46 billion (96.2% of the planned distribution) in the fiscal year.

The agency has packed and distributed medical equipment kits directly to 257 newly constructed HCs and 305 HPs. ICCM program drugs and medical supplies worth of ETB 22.12 million were distributed to 1,634 HPs.

An assessment conducted to measure the level of availability and wastage of 27 tracer drugs in HCs and hospitals revealed that these tracer drugs were available at the time of data collection in 89% of the health facilities (90% of hospitals and 89% of HCs), while the long term availability (during the previous 6 months) was 78% in the health facilities (81% in hospitals and 78% in HCs).

The agency has continued to provide support to local manufacturers of pharmaceuticals and medical equipment by: (i) providing 25% of price protection for local manufacturers when they compete in an international bid; and (ii) rewarding 30% of advance payments for local manufacturers.

Accordingly, the agency, in collaboration with key stakeholders, identified 115 types of drugs and medical supplies to be manufactured with competitive price using local capacity. The agency signed a contract agreement worth of ETB 914.6 million with local manufacturers, who manufactured and provided pharmaceuticals and medical supplies worth of ETB 614.4 million in EFY 2006.

To strength the RDF, the agency has mobilized additional ETB 190 million from DPs.

4.3.2. INFRASTRUCTURE

Modern warehouses and distribution networks ensure the potency and safety of pharmaceuticals, the reduction of wastage rate, and the enhancement of the capacity of the health system to respond to change in program demands and emergency situations.

In EFY 2006, the construction of 17 warehouses and offices was completed, out of which stores built at the head office and Dire Dawa hub became functional; furthermore, the construction of 11 cold chain systems was completed.

PFSA procured 17 medium trucks with refrigeration facilities, 22 heavy trucks, 14 pick–up vehicles and four cars. The agency has started the procurement of 16 midi-buses, one bus, and 46 medium transport trucks.

In order to reduce the shortage and the wastage of pharmaceuticals, medical supplies and medical equipments by establishing modern and effective inventory and distribution system, training was provided on integrated pharmaceuticals and logistics system to 4,022 professionals, and computer-based health commodity management information system was established in 163 health facilities in EFY 2006.

In addition, 153 health facilities were equipped with shelves, ladders, ventilators, and pallets, while 2,100 facilities were supplied with inventory management print outs (including bin cards and stock cards) worth of ETB 21 million to strengthen paper-based management.

To strengthen transparency and accountability of pharmaceuticals supply and services, draft Auditable Pharmaceuticals Transaction System (APTS) Standard was being developed in consultation with stakeholders. In the mean time, preparatory works were being carried out to start implementation of APTS in 22 hospitals managed by universities, FMOH and Addis Ababa City Administration.

4.3.3. RATIONAL DRUG USE

In EFY 2006, PFSA planned several activities to improve the use of medicines by health professionals and patients. Assessing the functionality of Drug and Therapeutics Committees (DTC) at public hospitals throughout the country, developing SOPs and documentation and reporting formats for the provision of clinical pharmacy services, developing articles for public education on rational use of medicines, capacitating community pharmacies as part of the Model Community Pharmacy Initiative, capacitating health professionals on DTC, rational prescribing and rational dispensing practices, establishing and strengthening drug information services (DIS) at health facilities, were among the key activities carried out in this area during the year.

Accordingly, 37 health facilities have established DIS after getting training, computers and reference materials during the year. Training on DTC as well as on rational prescribing and dispensing practices was provided to a total of 408 professionals from 204 health facilities. A total of 267 health facilities (63 hospitals and 204 HCs) have established DTC in EFY 2006. A one-month long clinical pharmacy in-service training was provided to 25 pharmacists from 21 hospitals so as to strengthen clinical pharmacy service. Twenty-six hospitals that are implementing clinical pharmacy services are producing regular report and the agency has made preparation so as to undertake preliminary assessment on their implementation. In an attempt to standardize the service, the agency has drafted SOPs for the provision of clinical pharmacy services that contain all the necessary documentation and reporting formats.

In order to increase the public awareness on appropriate use of medicines, a total of 26 articles were produced and published on Addis Zemen Newspaper (every other week) during the budget year. To enable community pharmacies to provide services of good quality and high ethical standard, a document

(Model Community Pharmacy Initiative) has been prepared, pharmacies have been identified, MOU has been signed, and training has been provided to professionals so as to implement the initiative.

In line with the plan to establish a computer-based system, training was provided to 89 professionals on Health Commodity Management Information System (HCMIS) and to 83 professionals on Pharmaceutical Logistics Information and Tracking System (PLITS).

CHALLENGES

- Weak coordination with stakeholders;
- Weak internal audit system and delay of EFY 2003 audit report;
- Poor infrastructure for supply chain management (trucks, cold chain, warehouses, connectivity etc.);
- Gap in inventory management and quantification skill along the supply chain;
- High turnover rate of qualified staff;
- Inadequate handling of pharmaceuticals at airport warehouses;
- Delay in procurement and distribution of pharmaceuticals and medical supplies;
- Delay in procurement and assembly of medical equipment;
- Delay in construction, hand over and use of new warehouses and offices; and
- Robbery of pharmaceuticals and medical equipment along the supply chain and forged procurement requests from health facilities.

WAY FORWARD

- Strengthen coordination with stakeholders, including custom offices, sectors, agencies, RHBs and DPs, using HDA and good governance systems;
- Revise the organizational structure to meet administrative, legal and audit requirements;
- Strengthen the infrastructure for supply chain management;
- Build capacity on pharmaceuticals quantification and inventory management;
- Devise staff motivation and retention strategy;
- Strengthen pharmaceutical fund and supply management information system; and
- Strengthen pharmaceuticals forecasting, procurement, storage and distribution.

4.4. HEALTH INFORMATION TECHNOLOGY

4.4.1. HEALTH INFORMATION TECHNOLOGY

The goal of the Health Information Technology Initiative in Ethiopia is to improve access and quality of health services using appropriate technology. This initiative covers a wide range of applications, such as telemedicine, tele-education, mobile health (mHealth), electronic HMIS (e-HMIS), Electronic Medical Records (EMR), Geographic Information System (GIS), and HRIS. As part of the implementation of this initiative, the following main Health Information Technology activities were carried out in EFY 2006.

4.4.2. MOBILE HEALTH

The FMOH identified mHealth as a tool to strengthen the implementation of the HEP in Ethiopia and help accelerate the achievement of the health-related MDGs. The FMOH with partners has identified five priority areas (referral, data exchange, supply chain management, training and education, and consultation) for mHealth integration within the health system. An initial set of indicators (regarding FP, ANC, delivery, immunization, malnutrition, malaria, TB, front-line stock out, and vital statistics), derived from routine data sources (including family folder, HEW tally sheets and HMIS report), was selected to be tracked through mHealth. In EFY 2004, the mHealth roadmap was finalized to help guide the design and implementation

process, while in EFY 2005 an initial pilot was implemented in four woredas located in four regions in two phases (data recording into a web-based electronic data entry system and collection of data using mobile phone, respectively). On the basis of the past experiences and after their evaluation, the FMOH has moved in EFY 2006 to interactive voice response technology/mHealth system that can be accessed for free full-time (24 hour a day and 7 days a week) using any available phone. The system accommodates English, Amharic, Tigrigna and Oromifa languages. The required hardware was procured and the software was developed. Currently this system has been implemented in 65 woredas on vaccine data.

4.4.3. TELE-EDUCATION AND TELEMEDICINE

Tele-education and telemedicine network was initiated to provide access to knowledge, expertise and other healthcare resources in a timely, convenient and cost effective manner. The network provides resources across three areas: health service delivery, education, and research.

In EFY 2005, 13 medical universities started the implementation of tele-education. In EFY 2006, three university hospitals (St. Paul's, Adama and Yirgalem) were connected via woreda-net to teach basic science courses for pre-clinical students. Thirty health professionals and six information technology (IT) staffs were trained on videoconference group teaching and how to use the videoconference system for e-learning. The operational strategy and roadmap documents for e-learning and telemedicine were developed. On this basis, four universities (Axum, Debre Birhan, Debre Markos and Wollow) arranged setup room, internet connectivity, and HR for e-Learning system.

4.4.4. ELECTRONIC HEALTH MANAGEMENT INFORMATION SYSTEM

The eHMIS is a comprehensive system which includes also PHEM, electronic Mobile Care Solution (eMCS), electronic Integrated Disease Surveillance and Response (e-IDSR), GIS, and is part and parcel of the smartcare-EMR; it addresses the growing need for a timely, complete and accurate reporting across the health system. In EFY 2006 training was provided to 5,700 professionals. The number of facilities implementing eHMIS increased from 1,433 in EFY 2005 to 2,345 in EFY 2006. In addition, eHMIS has been upgraded to fit the changes in the revised list of HMIS indicators.

4.4.5. ELECTRONIC MEDICAL RECORD/ MEDICAL RECORD UNIT

Medical Record Unit (MRU)-EMR is the component of Electronic Health Record System/ Smartcare that computerizes the MRU/card rooms. The MRU–EMR module has been deployed up to now in 45 hospitals and 59 HCs. In EFY 2007, the FMOH is planning to implement full EMR in ten hospitals in Addis Ababa as a flagship initiative.

4.4.6. GEOGRAPHIC INFORMATION SYSTEMS FOR HEALTH

GIS is a system that will enable the collection, storage, management, analysis, retrieval, modelling and visualization of spatially referenced information. The spatial distribution is needed to improve monitoring the spread of disease, modelling its future diffusion and planning timely allocation of resources. In EFY 2006, SPA and census data were collected using Geographic Positioning System as input for GIS application at the national level.

4.4.7. HUMAN RESOURCE MANAGEMENT INFORMATION SYSTEM

In EFY 2006, in collaboration with a DP, HRIS upgraded version 1.3.0 was implemented at FMOH, Oromia and Addis Ababa RHBs, and FMHACA. Regions are using HRIS-license module to share health professionals' license information. The system has been deployed at three regional regulatory departments (in Tigray, Oromia, and Addis Ababa) and is currently available online for public access. Users of the system have been trained on this new version.

CHALLENGES:

- Shortage of IT professionals;
- Gap in harmonization among several eHealth initiatives and ICT infrastructures;
- Lack of national standard in implementing eHealth systems in health facilities; and
- Lack of eHealth systems implementation guidelines.

WAY FORWARD

- Deploy skilled IT professionals;
- Harmonize efforts of key stakeholders towards standardization and interoperability;
- Prepare the national standard to implement eHealth systems in health facilities; and
- Produce eHealth systems implementation guidelines.

4.5. RESOURCE MOBILIZATION AND UTILIZATION

Health services in Ethiopia are financed from the federal and regional governments, grants and loans from bilateral and multilateral donors, NGOs, and private contributions. Although health financing has improved significantly over years, it remains a major challenge for the health system. To estimate the flow of resources in the health sector, the fifth round of the National Health Accounts (NHA) was carried out in EFY 2006, while the Health Care Financing (HCF) reform is being implemented, with a focus on mobilization of additional resources from DPs, retention and utilization of user fee revenues at health facility level, implementation of fee waiver and exemption services, establishment of health facility governing boards, introduction of private wings in the public hospitals, and development of risk sharing and pre-payment schemes.

The following sections describe major activities carried out in EFY 2006.

4.5.1. THE NATIONAL HEALTH ACCOUNTS V (BASED ON 2010/11 EXPENDITURES)

The NHA system is a globally recognized tool to estimate the flow of resources in the health sector. Ethiopia's health sector is financed from multiple sources including household out-of-pocket spending, the government treasury (federal, regional, district, and municipal levels), bilateral and multilateral donors and NGOs, private enterprises, and parastatal organizations. In order to track health care expenditure and the flow of resources between different levels of the health care system, the FMOH conducted five rounds of NHA: NHA I in 2000 (based on 1995/96 expenditures), NHA II in 2003 (based on 1999/2000 expenditures), NHA III in 2007 (based on 2004/05 expenditures), NHA IV in 2010 (based on 2007/08 expenditures), with the NHA V (based on 2010/11 expenditures) being conducted in 2014.

The overall objective of NHA V was to provide evidence on the Ethiopian health care financing system for the overall sector as well as for priority areas. Specific objectives were to estimate financing trends, sources of health financing, and fund management responsibilities, as well as to identify which providers of health care are getting how much funding for which services.

Regularly tracking the amount of resources spent on health is critical for informed health financing policy making. Per capita spending on health in 2007/08 was only 16.1 USD and it has increased to USD 20.8 in 2010/11, far less than the WHO's recommended USD 34 in 2001, revised to USD 60 by 2015. Pursuant to this, the Ethiopian Government has introduced a wide range of HCF reforms aimed at increasing financing for delivery of essential health care services, and thereby improving quality and equity in provision of health care. These reforms, which include retention and use of internally generated revenues in government-owned health facilities, are generating additional resources, which have been used to improve quality.

Trend in national health expenditure

NHA V showed that there has been an increment in health spending both in nominal and per capita terms. Nominally, the national health expenditure (NHE) increased from ETB 11.1 billion (USD 1.2 billion) in 2007/08 to over ETB 26.5 billion (USD 1.6 billion) in 2010/11. Per capita health expenditure increased from USD 16.1 per capita in 2007/08 to USD 20.8 in 2010/11 (Figure 60). This figure is below the HSDP IV per capita spending target of USD 32, and it is also below USD 34 per capita expenditure recommended by WHO in 2001 and recently updated to USD 60 by 2015. Thus, health is still underfinanced and there is strong need for making more resources available to the sector to improve health service delivery and ultimately the health status of the population.



NHE, at the current market price, increased by 138% between 2007/08 and 2010/11. Government contributions grew by 67% in the same period; however, most of the increment came from households (+116%) and the "rest of the world" (+202%). The "rest of the world" category includes multilateral and bilateral donors and international NGOs, while "Government" category includes Federal, Regional and Local Government as well as Parastatals sources. As a result, the "rest of the world" accounted for almost half (49.9%) of the health financing, households for 33.7% and Government for 15.6% (of whom, Federal Government for 5.2%, Regional and Local Government for 8.1% and Parastatals for 2.3%) (Figure 61).



Distribution of national health expenditures by financing agents, recipients and services

Other major findings of NHA V were as follows:

• Financing agents (managing funds)

The government is the major manager of health resources, but households and private sector also play a significant role. All government (federal, regional, and parastatal) institutions together managed nearly half (48.9%) of NHE in 2010/11, with an increase with respect to 2007/08. This increase was due to the growing contribution from major donor programs, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), Promoting Basic Services (PBS), and the Global Alliance for Vaccines and Immunization (GAVI), using the government system and management. Government and partners also

created the MDG Performance Fund (MDG PF), which is managed within the government system. In 2010/11, households together with other private sector financing sources managed 34.4%, while donors and international NGOs managed 14% of NHE.

• Recipients

Government health facilities are the major recipients of health spending in 2010/11, accounting for nearly 34% of NHE, with PHCU accounting for nearly 15% and hospitals for nearly 19%. Public health programs are also major recipients of health resources, accounting for 27% of the overall spending. Private providers (both for-profit and non-profit) received 16% of NHE.

• Services

Curative care services were still the major functions for which health resources were spent. Curative care services remained the major target of health expenditures, accounting for 51.6% of NHE, out of which 43.8% went to outpatient services and 7.8% to inpatient services. Prevention of communicable diseases, including maternal and child health, accounted for 27%. Expenditures on general health administration were estimated at nearly 8%.

Policy implications

These findings will help measure progress in financing HSDP, as well as inform the health insurance initiative and other HCF reforms. The Ethiopian health sector is highly donor financed (nearly half in 2010/11), as well as largely financed by households (34%), that are burdened by high out-of-pocket costs for health that usually are incurred at time of sickness. It is for this reason that the introduction of prepayment mechanisms and insurance is critical to pool risks between the healthy and the sick as well as the poor and the better-off. In this perspective, progress in implementing HCF reform as well as health insurance is described in the following paragraphs.

4.5.2. HEALTH CARE FINANCING

One of the main challenges which hinder health care access and quality is the lack of resources. To address this challenge and hence to mobilize adequate resources for the health sector, different activities have been implemented, including: (i) revenue retention by health facilities for quality improvement; (ii) implementation of fee waiver system for enhanced equity; (iii) establishment of private wings and outsourcing for better efficiency; and (iv) pilot and implementation of community based and social insurance schemes for improved financial access to health services, avoiding payment at the point of service delivery.

This section outlines the performance of the major HCF reform projects during EFY 2006.

4.5.2.1. REVENUE RETENTION FOR QUALITY IMPROVEMENT

Revenue retention is additional to the block grant budget allocated from treasury, and it is used strictly for quality improvement activities.

Currently 2,849 health facilities (101 hospitals and 2,748 HCs) are retaining and utilizing internally generated revenues to improve the quality of health services. Based on reports from health facilities, they have utilized the retained revenues to: (i) purchase drugs; (ii) improve laboratory services (i.e. purchase of microscopes, haematology complete blood count machines, centrifuges, haematology diagnostic products, chemicals and reagents, etc.); (iii) improve medical equipment (i.e. purchase of Doppler ultrasound machines, operating and patient monitoring tables, modern dental equipment, etc.); (iv) improve the infrastructure of health facilities (i.e. safe water supply, water tank installation, generator, laundry, etc.); (v) renovate and expand the constructions (i.e. patient waiting areas, card rooms, triage rooms, pit latrines, etc.); (vi) improve HMIS (i.e. purchase of computers, installation of local network, printing of consultation cards, request formats, prescriptions, and patient referral slips etc.); and (vii) improve staff motivation (i.e. construction of staff residence, provision of transportation and cafeteria services, etc.)

4.5.2.2. FEE WAIVER SYSTEM FOR ENHANCED EQUITY OF ACCESS TO HEALTH SERVICES

Fee waiver scheme is being implemented as a mechanism for financial risk protection to promote equity of access to health services. Citizens who cannot afford to pay for their medical expenses are entitled to the fee waiver scheme, and any authority providing waiver certificate shall cover costs incurred for the service provided. According to the latest information (as of June 2014), 1,431,359 fee waiver beneficiaries were screened for the service in the country (except in Somali and Afar Regions), and the woredas and regional governments allocated a budget of ETB 19,444,766 for fee waiver beneficiaries. It should be noted that Amhara Region accounts for about 82% of the beneficiaries selected as the reform is fully implemented in the region.

As per the legal framework of health service delivery administration, governance and management, health facilities shall be administered by a joint governing body established from the community, staff of the health institutions, and representatives from other government offices.

Therefore, among the 3,351 health facilities which are under the reform (125 hospitals and 3,226 HCs), 3,103 health facilities (123 hospitals and 2,980 HCs) have formed governing bodies, with most of them being functional in EFY 2006.

4.5.2.4. PRIVATE WING AND OUTSOURCING

Private wing has been designed to increase health workers' motivation and reduce attrition of highly qualified medical doctors. Besides, it provides alternative choices of health care for clients, mobilizes additional resources to improve quality of services in the non-private wing sections of the other wards, and reduces inefficiencies.

In EFY 2006, 48 public hospitals have opened private wing services nationwide (increasing from 45 public hospitals in EFY 2005): five federal, referral, and teaching hospitals, nine in Tigray Region, four in Amhara Region, 22 in Oromia Region, one in Somali Region, two in Benishangul Gumuz Region, four in Addis Ababa and one in Dire Dawa City Administrations. Private wing service is not yet started in SNNP, Harari, Afar, and Gambella Regions.

Concerning outsourcing of non-clinical services, 65 hospitals in nine regions (with the exception of Afar and Somali) have already started the process of transferring non-clinical services to an outside supplier by contracting out to the third party having the expertise to provide outsourced services. Currently, construction, printing, maintenance, catering, gardening, security and other services are outsourced. The objectives are to reduce costs, improve quality and efficiency, and use expertise which is not available in-house, allowing also health facilities to focus on the provision of their core clinical services.

4.5.3. HEALTH PARTNERSHIP COORDINATION

Lack of resources is one of the main challenges in Ethiopia that hinders health care access and quality. Strengthening effective partnership with different stakeholders will also help to mobilize adequate resources for the health sector. Different activities were carried out in EFY 2006, including: (i) public-private partnership (PPP); (ii) bilateral agreements (iii) NGOs coordination; and (iv) diaspora coordination.

4.5.3.1. PUBLIC PRIVATE PARTNERSHIP

In EFY 2006, the Public-Private Partnership Strategic Framework Document has been prepared and approved that will let the private sector to participate in areas of sub-specialization in health care, like treating heart, kidney and diabetes mellitus-related cases and complications; to open pharmaceutical factories; and to develop professional skills through training. Besides, this will also formalize and strengthen the already existing public-private integrated work that has been started in the areas of malaria, TB and HIV/AIDS.

A PPP conference was held and different experiences were shared and documented in EFY 2006. Moreover, a survey was conducted to assess the strengths and challenges of existing PPPs. The inputs obtained from the experience sharing conference and the assessment will be used for the development of an implementation guideline.

4.5.3.2. BILATERAL AGREEMENT

In accordance with the agreement reached with neighbouring countries on addressing common health-related issues, the following activities were carried out in EFY 2006. Agreement points were reviewed and progress was reported to Ministry of Labor and Social Affairs on the 12th Ethio- Djibouti Ministers' Joint Commission Meeting Position Statement. Similarly, a report on strengths and challenges of the agreement points of the 19th Ethio-Djibouti and 27th Ethio- Kenya common border commissioners and leaders meeting was submitted to the Immigration and Nationality Affairs Office.

On the other hand, a report was submitted to respective offices on the results of 3rd Ethio- Sudan Ministers' Forum and 15th Border Development Commission Agreements.

Communication was made on other health-related bilateral meetings and agreements to Ministry of Foreign Affairs, and bilateral agreement documents were prepared with Governments of Russian Federation, South African Republic, Nigeria and Egypt. In the same year, the agreement between Russian Federation and GOE was signed, and the agreement document between South African Republic and GOE was sent to the Ministry of Foreign Affairs for further development.

4.5.3.3. NGO COORDINATION

In EFY 2006, a supervision, M&E, and control system regarding NGO activities was launched, after approval by Ministry of Civil Service. Assessment has been conducted in six regions and two city administrations to check bilateral relationships of RHBs with NGOs in monitoring and evaluation of project implementation.

Inspection has been conducted on three NGOs following the claims that they were not implementing activities as per the plan, and the decision is still pending. A standard checklist for project appraisal and a protocol for reviewing proposals have been developed and implemented in EFY 2006.

4.5.3.4. DIASPORA COORDINATION

In EFY 2006, a total of 38 volunteers, including gynecologist and obstetrician, orthopedic surgeon, clinical nurse advisor, network engineer, anesthesiologist, general practitioner, pediatric nurse, pediatrician, program coordinator, midwifery tutor, microbiologist, biochemist, ICU nurse, biomedical engineer and anatomist, came to Ethiopia and served the community in different areas of health services. Besides, a medical team of 15 professionals came in the same fiscal year to provide medical service in the country.

4.5.3.5. OTHER ACTIVITIES

A draft directive for strategies to strengthen internal resource generation and mobilization was prepared and will be applied in higher education institutions and federal hospitals. Besides, a concept note was prepared on strategies for internal financial resources generation.

On the other hand, an initial draft document was developed to increase taxation on goods that affect health, like cigarette and alcohol beverages, and a directive was prepared to provide free health care services for homeless citizens.

Financial Proclamation was under process and the proposal document was submitted to higher officials to give legal backup on HCF strategies. Besides, a situational analysis report on HCF was submitted to the Prime Minister's Office, MOFED, Regional President's Offices and RHBs to show the status of the amount of financial resources in the health sector.

4.5.4. HEALTH INSURANCE

The financial barrier is one of the major barriers hampering the access to health care services in Ethiopia. To promote equity and access, the GOE has articulated equitable financial mechanisms into its policy and strategies; currently, the country adopted two equitable financial mechanisms: (i) community based health insurance (CBHI); and (ii) social health insurance (SHI).

4.5.4.1. COMMUNITY-BASED HEALTH INSURANCE

Since EFY 2004, CBHI has been implemented in 13 pilot woredas (3 in Amhara, 3 in Tigray, 4 in Oromia and 3 in SNNPR), and in EFY 2006 the scheme has been expanded by starting the preliminary work in other 161 woredas (15 in Tigray, 39 in Amhara, 60 in Oromia and 47 in SNNPR).

In EFY 2005 CBHI scheme registered a total of 143,852 households, increasing to 157,553 in EFY 2006; similarly the number of beneficiaries increased from 608,675 in EFY 2005 to 687,309 in EFY 2006. As a result, the enrolment rate increased from 47.9% in EFY 2005 to 52.4% in EFY 2006.

Out of 687,309 beneficiaries registered in the CBHI scheme, 297,182 have been served (87.2% at HC and 12.8% at hospital) in this fiscal year, and a total amount of ETB 12,030,825.09 was reimbursed.

Since the start of CBHI scheme, a total number of 909,214 beneficiaries received medical care and a total amount of ETB 29,970,693.95 was reimbursed to the respective health facilities. On the other hand, the scheme in 13 pilot woredas collected a total amount of ETB 15,563.906.22 general subsidy from FMOH and a total amount of 12,107,255.81 targeted subsidy from regional and woreda administrations. In general, CBHI scheme has generated ETB 29,402,451.40 in EFY 2006, with a 39.5% increase as compared to ETB 21,065,786.62 in EFY 2005.

In EFY 2006, a total amount of ETB 5,878,644.00 was subsidized from FMOH for pilot woredas (ETB 2,102,544 in Amhara, ETB 1,185,312 in Tigray, ETB 1,760,448 in Oromia, and 830,340 in SNNPR). Besides, a total amount of ETB 18,329,090.00 was subsidized by Amhara Regional State and Woreda Administrations.

Out of 161 newly starting CBHI woredas, Amhara Region has established CBHI offices in 26 woredas and the remaining 13 woredas are underway. On the other hand, SNNP, Oromia and Tigray Regions approved the career structure for their respective CBHI offices and the deployment of human resources has been started.

Sensitization workshop and plenary discussion were organized for a total of 84 media professionals in Amhara and SNNP Regions, 304 zonal, woreda, and kebele administration heads in Amhara Region, and 365 health facility heads, health professionals and financial officers on pharmaceuticals supply, laboratory service improvement and, in general, on CBHI scheme.

A total of 523 health professionals working in health facilities providing CBHI services were given two days training on the scheme, and 41 financial staffs were trained on CBHI financial management. Similarly, a total of 97 finance officers in SNNPR were trained on CBHI financial management, and a total of 208 officers from Oromia Region were trained on the CBHI principles and CBHI guideline. Besides, 80 CBHI office workers were trained on information management and overall monitoring and evaluation of the program.

4.5.4.2. SOCIAL HEALTH INSURANCE

SHI is organized for formal sector including pensioners to ensure access to health care services. In EFY 2006, SHI scheme has registered a total of 20,390 out of 112,514 employees found in 127 federal level offices.

In EFY 2006, the Ethiopian Health Insurance Agency (EHIA) Implementation Directive was prepared and, after the approval by the directors' board, the document was printed. Besides, to strengthen the functionality of EHIA, 60 employees have been recruited in the main office, and a total of 368 employees have been hired in 24 branch offices. A draft career structure for 66 positions was prepared and ready for submission to Ministry of Civil Services.

Out of 24 branches, 20 have opened their office; furthermore, 25 vehicles were donated for the program, and 18 branch offices received cars for field activities.

Sensitization workshop on SHI was organized for 73 human resource unit and communication officers of Prime Minister's Office, Ministry of Trade and Addis Ababa City Administration. In addition, 500 copies of brochures and banners were prepared and distributed. Besides, SHI related messages were broadcast through different radio and television media centers.

Similarly, sensitization workshop on SHI was organized for a total of 250 heads of different bureaus and offices of Afar and Gambella Regions.

Training on SHI was given for 21 media workers and 74 journalists from Dire Dawa, Addis Ababa, Afar, Somali, Harari and national media agencies. Moreover, TOT was provided for 16 participants from regions and EHIA on SHI legal framework and implementation guideline. Besides, 43 participants from private and government media centers and members of the Social Affairs Committee of the House of Representatives were given training on SHI. Similarly, participants (788 from Oromia, 94 from Amhara, 63 from SNNPR, 17 from Tigray, 96 from Somali, 43 from Harari and 27 from Dire Dawa) received training on SHI.

CHALLENGES

- Delay in finalization of preparatory works for the implementation of SHI;
- Lack of adequate human resources in CBHI scheme;
- Limited commitment by higher officials on the sensitization and mobilization of beneficiaries;
- Limited understanding on the scheme by employers and employees;
- Limited political leadership at some levels and ownership in some woreda administrations; and
- Low quality of health care services (i.e., caused by unavailability of drugs, medical supplies, and adequate staff) and low commitment of health providers which in turn affect client satisfaction.

WAY FORWARD

- Accelerate the finalization of the preparation phase and start implementation of SHI as planned;
- Deploy CBHI staff as per the design and directive;
- Strengthen HDA at region and branch offices;
- Sensitize employers and employees;
- Establish frequent communications with Regional Governments;
- Include the CBHI and SHI performance indicators in the HDA checklist at all levels so that the implementation of the health insurance will be streamlined with the health indicators; and
- Identify the root causes of medicine stock-out and find out alternative solutions to avail adequate drugs and medical supplies.

4.5.5. FINANCIAL/EXPENDITURE MANAGEMENT AND CONTROL

The management and control system aims to ensure accountability and transparency in the utilization of the funds so as to meet the objectives for which the funds have been provided. To this end, effective internal control and good governance are the main instruments.

The FMOH has made efforts to audit both recurrent and capital budgets and the audit report was submitted to concerned bodies in the fiscal year. Similarly, an audit was performed by an external auditor on the accounting system that regards the recording and the reporting of the transactions of the grant funds, reliability of the financial reports for the accounts of the grant funds, authorization and authenticity in the utilization of the grant funds, proper documentation/file management system, safeguarding and proper utilization of assets that are purchased/donated by the grant funds: the audit opinion in 99% of the audit report was clean/unqualified opinion.

In EFY 2006, a total amount of ETB 901.42 million was liquidated by FMOH for the implementation of activities under different initiatives and programs. On the other hand, out of the overall non liquidated long term grants, only 14% was liquidated in the fiscal year. Furthermore, 95.5% of the government budget and 68.6% of DP's contribution were liquidated at the federal level in the same fiscal year.

Besides the FMOH corrective measures taken on the audit findings and recommendations given on external audit reports, the following are the major activities carried out in EFY 2006 with regard to the financial management and control:

- Gefersa Mental Health Institution was audited;
- Training was organized in the regions, except Oromia and Somali, on the integral approach of financial auditing to strengthen regional level auditing;
- Out of 22 DP financial contributions, 18 were audited;
- Performance auditing was carried on 4 federal hospitals, including Black Lion Hospital Emergency Unit, on EFY 2004 and 2005 career development process, on vehicle management, and human resource management with respect to deployment and transfer;
- Auditors' forum has been established, under the guidance and the supervision of the Internal Audit Directorate, among FMOH agencies and federal hospitals with the goal of creating model internal audit and strong internal control system.

4.5.5.1. INTEGRATED FINANCIAL MANAGEMENT INFORMATION SYSTEM

Integrated Financial Management Information System (IFMIS) is a strategic initiative under the Expenditure Management and Control Program which is part of the Civil Service Reform Programs. IFMIS aims to support public bodies and regions to generate accurate, accessible and timely government-wide financial information and reports which contribute to improved financial decision making. IFMIS is expected to be the single source for national consolidated financial information, with all stakeholders accessing government financial information from a unified source. The project is expected to adopt global best practices and ensure that data are entered only once, avoiding data entry repetition during consolidation, therefore ensuring harmonization and integration between different departments. In this perspective, GOE has purchased an internationally recognized enterprise resource planning software (Oracle).

The health sector represented by FMOH has been participating in the national project since EFY 2003. A team comprising of nine FMOH staff joined the national project and was trained on Oracle E-Business. During the design, the requirements of the health sector were carefully addressed. As a result, an acceptable and flexible solution was provided for channel 2 fund management, integrating all channel 2 grant fund users, and enabling them to work in a unified and integrated modality.

During the fiscal year, the new solution was launched at FMOH level for treasury accounts and channel 2 grants. Besides, IT infrastructure and user connectivity activities were performed at FMOH garage store, and Blood Bank Directorate. Role based training and refresher training were conducted for 150 end users who are working in the system. Following the refresher training, IFMIS was launched; an IT infrastructure assessment was conducted at five RHBs, and change management training on the solution was provided. Furthermore, orientation sessions were conducted with different stakeholders in the health sector. The next step will be the scale up of the solution in RHBs and agencies, which will be conducted with the help of information system database, network and application experts.

CHALLENGES

- Inadequate execution of change management;
- Absence of effective communication mechanisms to collect statements of expenditures from regions and health facilities, and
- Staff turnover.

WAY FORWARD

- Conduct change management workshops at different levels;
- Prepare beginning balance for all channel 2 funds and launch the system at FMOH and five selected regions and institutions, and
- Ensure motivation and stability of staff.

4.5.6. PUBLIC BUDGET ALLOCATION

This section explains the allocation to the health sector out of the total public budget in EFY 2006. The source of data is MOFED. Besides, it shows only the allocation to the health sector at regional level.

4.5.6.1. PERCENTAGE SHARE OF THE PUBLIC HEALTH BUDGET ALLOCATION FROM THE TOTAL BUDGET

In EFY 2006, the percentage of total budget allocated in the health sector at regional level was 10.30%, which was higher than in EFY 2005 (9.75%) (Figure 62). In EFY 2006, the per capita health allocation was ETB 116.43, increasing from ETB 100.16 in EFY 2005. The regional block grant budget allocated to the health sector ranged from 5.6% in Harari to 15.6% in Gambella in EFY 2006. An increase in the percentage share of health budget from EFY 2005 to EFY 2006 was observed in seven regions (Tigray, Afar, Amhara, Oromia, Benishangul Gumuz, SNNPR and Gambella), whereas the remaining four regions (Somali, Harari, Addis Ababa and Dire Dawa) showed a decrease.

As it was observed in the previous years, the per capita allocation is increasing over time; however, the allocated budget for health in EFY 2006 was below the need of the sector for delivering quality care. This calls for enhancing implementation of HCF reform and expansion of pre-payment schemes, such as community and social health insurance, as well as additional funds from different sources.



Figure 62: Comparison of Percentage of Total Budget Allocated to the Health Sector by Region (EFY 2005 and 2006)

4.5.7. DEVELOPMENT PARTNERS' CONTRIBUTION TO THE HEALTH SECTOR

The contribution from DPs is one of the major sources of funding for the Ethiopian health sector. The following section shows how much was contributed and disbursed by DPs to the health sector.

4.5.7.1. PROPORTION OF EACH DONOR'S CONTRIBUTION AS COMPARED TO THE **TOTAL DP DISBURSEMENT**

In EFY 2006, a total of USD 558.33 million was committed and a total of USD 612.87 million (109.8%) was disbursed using channel 2 modality (Table 28), which was above the disbursement in EFY 2005 (531.13 million).

Table 28:

Commitment and Disbursement of Funds by Development Partner

(EFY	2006)
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S.N.	Source of Funds	Commitment (in USD) in EFY 2006	Disbursement (in USD) in EFY 2006	Percentage disbursement
1	MDG Performance Fund			
	DFID	110,769,231.00	142,558,200.00	128.7%
	AusAid	12,500,000.00	4,973,250.00	39.8%
	World Bank	36,000,000.00	35,393,073.00*	98.3%
	Netherlands Embassy	7,142,857.00	7,142,827.00	100.0%
	Irish Aid	4,935,065.00	5,523,618.00	111.9%
	Spanish Aid	1,948,052.00	2,022,548.00	103.8%
	UNICEF	1,500,000.00	1,500,000.00	100.0%
	Italian Cooperation	1,298,701.00	0.00	0.0%
	UNFPA	1,000,000.00	2,000,000.00	200.0%
	GAVI	40,000,000.00	33,420,034.00	83.6%
	WHO	0.00	148,337.00	
	Total	217,093,906.00	234,681,887.00	108.1%
2	Technical Assistance Pooled Fund			
	DFID	563,465.00	563,465.00	100.0%
	Italian Cooperation	194,805.00	0.00	0.0%
	AusAid	410,633.00	410,633.00	100.0%
	USAID	1,000,000.00	992,315.00	99.2%
	Total	2,168,903.00	1,966,413.00	90.7%
3	Bilateral Partners			
	CDC**	7,251,000.00	3,480,480.00	48.0%
	Total	7,251,000.00	3,480,480.00	48.0%
4	UN Organizations			
	UNICEF	78,520,327.00	31,198,065.00	39.7%
	UNFPA	15,898,894.00	4,700,643.00	29.6%
	WHO	3,785,260.00	21,610,616.00***	570.9%
	Total	98,204,481.00	57,509,324.00	58.6%
5	Global Fund			
	Malaria	80,503,597.00	86,715,500.00	107.7%
	ТВ	20,971,909.00	22,483,878.00	107.2%
	HIV/AIDS	124,560,832.00	199,924,923.00	160.5%
	Total	226,036,338.00	309,124,301.00	136.8%
6	GAVI			
	CSO		2,060,000.00	
	Rota	2,469,000.00	2,469,000.00	100.0%
	Total	2,469,000.00	4,529,000.00	183.4%
7	Foundations			
	CIFF	4,866,067.00	1,573,940.00	32.0%
	Anonymous Donor	237,844.00	0.00	0.0%
	Total	5,103,911.00	1,573,940.00	30.8%
	Grand total	558,327,539.00	612,865,345.00	109.8%

* World Bank had already disbursed USD 25,518,793.08 in EFY 2005, and disbursed USD 9,874,280.07 in EFY 2006, with a total of USD

35,393,073.15 being disbursed out of the total amount committed (36,000,000.00) for EFY 2006.

** There is channel 2 contribution to regions but not documented here.

*** The disbursement is beyond commitment due to various campaign activities.

Global Fund with a total of USD 226.04 million committed and USD 309.12 million disbursed for malaria, TB and HIV/AIDS programs, was the largest contributor to the health sector, followed by the Department for International Development (DFID) with a total USD 111.33 million committed and USD 143.12 million disbursed in EFY 2006 (Figure 63).



Figure 63: Distribution of Amount Committed and Disbursed by Development Partner (EFY 2006)

As share of disbursement by DP, Global Fund accounted 50.4% of the total, followed by DFID (23.4%), GAVI (6.2%), World Bank (5.8%), United Nations Children's Fund (UNICEF) (5.3%), WHO (3.6%), Netherlands Embassy (1.2%), United Nations Population Fund (UNFPA) (1.1%), Irish Aid (0.9%), Australian Aid (AusAID) (0.9%), Centre for Disease Control (CDC) (0.6%), Spanish Aid (0.3%), Children's Investment Fund Foundation (CIFF) (0.3%) and USAID (0.2%) (Figure 64).



Figure 64: Percentage Distribution of Disbursement by Development Partner (Out of Total Disbursed) (EFY 2006)

As it was documented in EFY 2005 report, channel 3 contributors are not accounted for in the above financial contribution. Nonetheless, there is a considerable amount of resources provided by US partners through channel 3 modality which is not monitored by FMOH.

4.5.7.2. MDG PERFORMANCE FUND

The MDG Performance Fund (MDG PF) is a pooled funding mechanism managed by the FMOH using GOE procedures. In the framework of the Ethiopia International Health Partnership (IHP) Compact, it provides flexible resources, consistent with the "One-plan, One-budget and One-Report" concept, to secure additional funding to the HSDP. It is one of the GOE's preferred modalities for scaling up DP assistance in support of HSDP.

Joint Financing Arrangement (JFA) refers to the arrangement that sets out the jointly agreed terms and procedures for MDG PF management, including planning, financial management, governance framework and decision-making, reporting, review and evaluation, audit and supply chain management.

As per the JFA, the MDG PF covers all program areas where there is a funding gap, with the exception of salaries or wages. However, in the past five years the MDG PF has covered mostly the procurement of public goods required to facilitate the health service delivery at the lower levels.

In EFY 2006, three additional donors have joined the MDG PF: (i) the World Bank through Program for Result (PforR); (ii) GAVI with its Health System Strengthening (HSS) Support; and (iii) European Union (EU) through a new approach to channel the first three year fund (21 million Euro) through UNICEF to MDG PF in support of the MCH program. All these contributions will follow the management principles set out in the JFA. EU signed the JFA in EFY 2006, while WB has not yet signed it.

There was a MDG club meeting in which audit findings were discussed for both MDG audit held in EFY 2005 and Public Procurement Agency audit held in EFY 2004; as agreed during the meeting, the official response was compiled and circulated to all DPs.

A total amount of USD 234.68 million was disbursed to MDG PF, with a 76.1% increment from EFY 2005 (USD 133.23); the MDG PF accounted for 38.3% of total DP's disbursement in EFY 2006.

In EFY 2006, DFID was the major contributor to MDG PF, accounting for 60.7% of the total amount disbursed by DPs for MDG PF, followed by World Bank (15.1%), GAVI (14.2%), Netherlands Embassy (3.0%), Irish Aid (2.4%), AusAid (2.1%), Spanish Aid and UNFPA (0.9%), UNICEF (0.6%), WHO (0.1%), whereas there was no disbursement from Italian Cooperation (Figure 65).



Figure 65: MDG Performance Fund Disbursement (EFY 2001 - 2006)

The major areas funded through the MDG PF in EFY 2006 are indicated in Table 29.

Table 29:

Areas of Support Funded by the MDG Performance Fund

(EFY 2006)

	USD		
Area of focus	Total MDG PF allocation	Rolled over from previous years*	Total Budget for EFY 2006
Public Health Commodity Procurement	107,400,000	168,050,329	275,450,329
Health System Strengthening	38,200,000	3,890,226	42,090,226
Health Service Delivery	3,200,000	117,812	3,317,812
Maternal Health	10,750,000	13,368,880	24,118,880
Child Health	7,389,838	9,490,310	16,880,148
Human Resource Development	13,900,000	9,051,904	22,951,904
Prevention and Control of Communicable and Non Communicable Diseases	9,580,000		9,580,000
Health Extension Program	7,000,000		7,000,000
Miscellaneous	50,000	30,000	80,000
Total	197,469,838	203,999,461	401,469,299

* Rolled over refers to all the funds which are not liquidated so far. It is not necessarily in cash, it includes all committed and paid sources.

In EFY 2006, public health commodity procurement received the highest amount of budget (USD 275.45 million), followed by health system strengthening (42.09 million) and maternal health services (USD 24.12 million).

4.5.7.2.2. IMPLEMENTATION STATUS OF THE MDG PERFORMANCE FUND

MDG PF is used to fill the financial gap in most underfunded priorities of the sector. In particular, the MDG PF focused mainly on the following areas in EFY 2006: (i) HEP; (ii) Maternal and newborn health, (iii) Child health, (iv) Communicable and non communicable diseases (v) Health service delivery; (vi) and HSS that includes infrastructure, strengthening HRs, supporting governance, HCF and HMIS.

In 2006 the MDG PF plan was integrated in the overall comprehensive plan and communicated to DPs. Majority of the MDG PF was used for procurement in bulk, adding value for money. The implementation of the MDG PF was reported to JCCC quarterly, and, after comments were received from JCCC members and contributing partners, final reports were compiled and sent to all contributors. The quality and timeliness of the quarterly reports have improved in EFY 2006.

Health Extension Program

In EFY 2006 financial support was given to the proper functioning of the HDA at all levels. In addition, support was provided to the integrated refresher training for HEWs and training of HEW supervisors, EPI and WorHO focal persons on management and preventive maintenance of cold chain. Procurement of motorbikes for the trained supervisors has also started.

Maternal and Newborn Health

In EFY 2006 the support of the MDG PF to the MNCH program focused on: (i) procurement of contraceptives, EmONC drugs and supplies; (ii) procurement of emergency and communication equipment for ambulances; (iii) procurement of equipment for operating rooms and neonatal units; and (iv) construction of operating rooms at health facilities.

The EmONC drugs and supplies will be distributed to health facilities to reimburse the deliveries attended free of charge, including normal and caesarean section deliveries. This will encourage facilities to provide delivery services free of charge. To improve the efficiency and effectiveness of the ambulance services, emergency and communication equipments were procured, including GPS. Support was also provided to the construction of operating rooms at HCs where a primary hospital is not available and is not planned for the near future.

Child Health

In order to strengthen the child health program, the MDG PF has supported various activities, including: (i) procurement of vaccines, syringes and safety boxes; (ii) procurement of cold room equipment and spare parts; (iii) procurement of solar refrigerators to emerging regions; and (iv) procurement of refrigerated trucks and cold boxes. Construction of warehouse at PFSA head office was also supported to strengthen the logistics and supply management and improve the cold chain system.

Communicable and Non Communicable Diseases

Although activities for controlling communicable diseases have been funded through other major partners, like GFATM, there existed critical gaps in procurement of insecticide chemicals and IRS operational costs, that were addressed through MDG PF. In addition, in EFY 2006, the MDG PF supported a new activity in the malaria program, which was the provision of financial support to the high malaria burden areas in Tigray and Amhara with high seasonal workload. In addition, support was given to build a Malaria Training Centre in Adama, where all malaria trainings will take place; the construction has already started after the completion of the preparatory work, like design and bidding process. Support was also given to training of health professionals on leprosy diagnosis and treatment at ALERT Hospital.

Regarding the support for NCD control, the following activities were implemented in EFY 2006:

- Provision of drugs at a subsidized price for chronic illnesses (i.e. cancers);
- Integration of mental health in primary health care services by providing training to health professionals;
- Preparation of a survey on national NCD burden, with its initial phase (preparation of a concept note and work plan) being already completed in EFY 2006.

Health Service Delivery

MDG PF supported the establishment of service delivery corners for the homeless people in HCs in Addis Ababa. The HCs, one per sub city, were identified in collaboration with the Addis Ababa Health Office, and started the activities at the end of the fiscal year: these activities include preventive, promotive, clinical curative, and outreach services.

Health System Strengthening

Under HSS, different areas were supported as follows:

- Concerning HRD, areas of support were: (i) pre-deployment training for all medical professionals; (ii) hiring senior expatriate specialists for training and mentorship of NMEI and IESO; (iii) provision of teaching materials to training institutions and practicum sites; (iv) medical equipment maintenance training level 4; and (v) training of paramedics.
- Concerning procurement of equipment for health facilities, in addition to the procurement for MNCH, the MDG PF supported the procurement in the following areas: (i) medical equipment for HCs and hospitals; (ii) photovoltaic solar equipment for HCs and HPs; (iii) heavy duty printing machines; (iv) 26 medium buses for the new medical schools; and (v) 125 vehicles to support the integrated supportive supervision and program implementation.
- Concerning construction, the MDG PF supported the construction of the following structures: (i) regional medical equipment maintenance workshops; (ii) three new blood banks in Jijiga, Gondar and Arba Mich; (iii) 16 blood banks; and (iv) 59 HCs in the three emerging regions. Furthermore, support was provided for the finalization of HCs in various regions, the renovation of the FMOH store, and the construction of housing for FMOH staff in order to ensure staff retention at federal level. The majority of the budget allocated for these activities has not been utilized, and it will be used in EFY 2007 as the preparatory phase has been completed in EFY 2006.
- In addition there was fund allocated to support: (i) EHAQ to improve quality of service based on the agreed standards; and (ii) HMIS, mainly for printing HMIS formats, and implementing telemedicine, IFMIS, and EMR.

CHAPTER 5





Conclusion

CONCLUSION

This report gives an overview of the planned activities, main achievements and key challenges encountered in EFY 2006, with a special focus on the theme "Crossing the finishing line and visioning beyond: towards equitable and better quality health services in Ethiopia". It tries to address the critical question of how to speed the pace of change observed in the past into dramatically faster progress during the HSDP IV period ending in 2014/15, which is the deadline of the quantitative, time-bound framework of accountability of the MDGs.

While struggling for development and better health, Ethiopia is an example that low-income countries can improve service coverage and achieve better health if policies, programs and strategies are supported by political will, community involvement, and commitment at all levels with harmonized efforts of all stakeholders. In fact, Ethiopia improved health outcomes despite relatively low health expenditures and GDP per capita, and in the face of considerable socioeconomic challenges, showing that health can be achieved with relatively few resources if these are used strategically. It is for this reason that Ethiopia is now considered as an example of country with the "good health at low cost". Furthermore, Ethiopia is one of the few "fast track" countries achieving many targets of the MDGs before the 2015 deadline: for example, it is one of the seven high-mortality countries with the greatest declines (by two thirds or more) in lowering child mortality between 1990 and 2012, therefore achieving MDG4. It is also one of the few African countries showing a rapid decline by 50% or more of new HIV infections among children between 2009 and 2012. Furthermore, EMDHS 2014 showed rapid progress in increasing CPR (with a five-fold increase from 8% in 2000 to 42% in 2014) as well as in decreasing malnutrition rate (with child stunting rate dropping from 58% to 40% in the same period). The country is now

Central to Ethiopia's health performance is the country's strategy to deliver more and better health care to women and children. To this end, the HSDP has been successful in putting in place the HEP which has contributed to improved availability and accessibility of PHC services, and paved the way for the achievement of the MDGs. In this perspective, the implementation of the HDA is underway with the aim to drive behavioural change and expand safe health practices at community level, with a vision of considering the community as a potential producer of health, instead of as a mere consumer of medicines and curative services.

Concerning maternal health services, an increase in service coverage was observed between EFY 2005 and EFY 2006 for antenatal and postnatal care as well as for SBA. In particular, the steep increase in percentage of deliveries assisted by skilled health personnel observed in EFY 2006 is a major achievement towards safe motherhood, reflecting multiple high impact interventions implemented at both facility and community levels to address the 3 delays in seeking care, reaching an EmONC facility, and receiving adequate care. Concerning population-based indicators, EMDHS 2014 showed not only an increase in CPR from 29% in 2011 to 42% in 2014, but also a more rapid improvement in rural areas with respect to the urban ones, with HEWs playing a central role in such achievement. Although increasing by 45% between 2011 and 2014, the population-based estimate of SBA (reflecting the five year period before the survey) is still low.

These mixed results highlight that, although interventions needed to avert much of the burden of maternal mortality are known, they require a functioning health system to have an effect at the population level. To this end, interventions are underway to address key issues, such as gaps in midwives, doctors and anaesthetists for provision of EmONC services, absence of 24 hours a day and 7 days a week service in health facilities, rapid turnover of highly trained professionals, and inadequate transport facilities and spare parts for equipment. Therefore, FMOH recognizes that implementing EmONC services requires an enabling environment, including improvements in referral systems, communication, transport, equipment, drugs and other supplies. This enabling environment would eventually be able to support the effective delivery of a broader range of health services. Furthermore, not only HEWs have been put in place country-wide to implement HEP packages at community level, but also investments were made to build a professional health workforce, including physicians, midwives, IESOs, and nurse anaesthetists, to provide continuum of care from the community to the referral hospital.

Concerning child health services, immunization coverage has improved in EFY 2006, and good progress has also been recorded for nutrition. The National Nutrition Programme is using multisector partnerships to tackle undernutrition and includes social protection, food security, community nutrition programmes, micronutrient supplementation, treatment of severe acute malnutrition and a package of free health services.

Ethiopia has implemented pro-poor policies and has performed better than other SSA countries, providing an example that it is possible to sharply reduce preventable child deaths, when concerted action, sound strategies, adequate partnership and political will are consistently applied in support of newborn and child health services. However, challenges still remain; for example, neonatal mortality rate (NMR), that accounts for 42% of U5MR, has been stagnant over the past ten years. It is worth noting that the first 28 days of life – the neonatal period – represent the most vulnerable time for a child's survival, highlighting the crucial need for health interventions that specifically address the major causes of neonatal deaths. Targeted interventions are underway, including the development of community-based newborn care, implementation of integrated community case management of common childhood illnesses, and establishment of newborn corners in HCs, neonatal units in regional hospitals, and neonatal intensive care units in tertiary hospitals.

With respect to prevention and control of communicable diseases, a general increase in coverage of key MDG-related interventions for disease control has been observed over time.

Encouraging results have been achieved in HIV/AIDS control, with combination of relatively low HIV prevalence, sustained prevention efforts and increased ART coverage. As mentioned above, Ethiopia is also one of the few "rapid decline" sub-Saharan African countries, with a reduction by 50% of new HIV infections among children between 2009 and 2012.

Concerning malaria prevention and control, a three-pronged approach was implemented, consisting of early diagnosis and effective treatment, selective vector control and epidemic prevention and control. With the distribution of 11.7 million long lasting insecticide-treated nets, their cumulative number reached about 58.7 million in EFY 2006. According to the WHO Malaria Report 2013, the proportion of the Ethiopian population protected by any vector control (LLIN or IRS) was more than 60%, resulting among the best performing countries in SSA. The number of laboratory confirmed plus clinical malaria cases decreased by about one-third in EFY 2006 with respect to EFY 2005, with 84% confirmation rate by either microscopy or RDT tests (the average in SSA countries was 61% in 2012).

Concerning TB control, only slight fluctuations in treatment success and cure rates were observed in EFY 2006, whereas TB case detection rate has decreased in the same year. In order to achieve higher case detection and cure rates, efforts should be made to strengthen the capacity of detecting and reporting TB cases as well as to ensure adequate availability of trained staff and laboratory equipment to perform sputum-smear examination during treatment.

Progress has been made in developing partnership and increasing resource mobilization and utilization towards the achievement of MDGs. Health has moved in recent years from underinvestment and single disease focus, to increased funding, harmonisation between FMOH and partners, and a systemic approach. A critical step

towards "One Budget" has been the establishment of the MDG PF to facilitate resource pooling in order to finance the priorities under the HSDP, with an increasing number of DPs joining MDG PF (up to 12 in EFY 2006): as a result, the total amount disbursed to MDG PF by DPs increased in EFY 2006, reaching USD 234.68 million, with a 76.1% increment from EFY 2005 (USD 133.23). In EFY 2006, the MDG PF increased its share of total DP's disbursement to 38.3% (from 25.1% in EFY 2005).

There is not a simple formula for success; however, Ethiopia has shared with other "fast-track" countries in achieving MDGs common overarching elements of success, including leadership and partnership, evidence and innovation, development and implementation of dual short term and long-term strategies, and adaptation to change for sustained progress. In particular, Ethiopia is implementing multisectoral strategies to address crucial health determinants: for example, it is estimated that around half of the reduction in child mortality is the result of health sector interventions (i.e. skilled care at birth, immunization and family planning), while the other half is attributed to interventions made in other sector (i.e. girls' education, women's political and economic participation, and water and sanitation). Furthermore, Ethiopia is implementing country-specific strategies to mobilize the community and develop partnership, using robust evidence for decision-making and accountability (as exemplified by use of scorecards) as well as a planning approach which takes into consideration immediate needs, long-term vision and adaptation to address change and sustain progress. Besides, Ethiopia is using shared guiding principles based on national leadership and partner harmonization that shape strategies, align stakeholder action and steer progress. In this way, Ethiopia maximizes health outcomes by developing catalytic strategies, implementing cost-effective and high impact interventions, and using evidence-based, innovative, and context-specific approaches.

The past experience of achievements and challenges provides important hints to guide policies, strategies and programmes to be implemented in the next years with the support of all partners. Despite the fact that Ethiopia is on track to meet many targets of the MDGs, there is the unfinished MDG agenda around mortality reduction, particularly maternal and newborn mortality, and challenges are still to be addressed in promoting the well-being of the populations across the life course, addressing inequalities, ensuring universal health coverage, and balancing economic, social and sustainable development.

It is high time to envision the future of the health sector beyond 2015, and this knowledge lays the foundation for an integrative and transformative post-2015 sustainable development agenda. In this perspective, the FMOH is developing the 20-year health sector vision to achieve the health outcomes that commensurate with lower-middle income country by 2025 and middle-middle income country by 2035. The purpose of this visioning exercise is to define the framework for strategic action to enable Ethiopia to advance toward this objective.

Approaching 2015 - the target year for the achievement of the MDGs - we are mindful of the significant gaps and challenges that still confront us, and we cannot afford to fail; however, we believe that, with the contribution of the communities, health professionals and partners, we are on the right track to achieve our goals.





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