

## Ethio - Italian Cooperation

*Strengthening Health Infrastructures at Local  
Level*

**Programme Implementation Document  
(PID)**

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**Strengthening Health Infrastructures at Local Level**  
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**Programme Implementation Document**

Recipient country	Ethiopia
Financing agency	MAECI/DGCS
Title	Support to Safe Water, Drug Warehouses and Electronic Medical Records for health sector
Sector	Health
Type of agreement	Bilateral
Financial modalities	Soft loan
Executing agencies	<ul style="list-style-type: none"><li>• Ministry of Health</li><li>• Amhara, SNNP and AA Regional Health Bureaus</li></ul>
Proposed amount	Euro 5.000.000
Duration	24 months
Proposed starting date	At the entering into force of the Agreement

## Acronyms

AP	Action Plan
BOQ	Bill of Quantity
EFY	Ethiopian Fiscal Year
EDHS	Ethiopia Demographic and Health Survey
GTP	Growth and Transformation Plan
HCs	Health Centres
HEP	Health Extension Program
EMR	Electronic Medical Records
GOE	Government of Ethiopia
GOI	Government of Italy
HMIS	Health Management Information System
HPN	Health Population and Nutrition (development partners group)
HSDP	Health Sector Development Programme
IHP	International Health Partnership
IC	Italian Cooperation
ICT	Information and Communication Technology
IDC/UTL	Italian Development Cooperation/Local Technical Unit
JCCC	Joint Core Coordinating Committee
MAECI/DGCS	Italian Ministry of Foreign Affairs and International Cooperation/Directorate General for Development Cooperation
MDG	Millennium Development Goal
MoFED	Ministry of Finance and Economic Development
MoH	Ministry of Health
MSD	Medical Services Directorate
NBE	National Bank of Ethiopia
PBS	Protection of Basic Services
PHID	Public Health Infrastructure Directorate
PIC	Person in Charge
PID	Programme Implementation Document
RCB	Regional Commercial Banks
RHBs	Regional Health Bureaus
SAR	Semi-Annual report
SNNPR	Southern Nations Nationalities and Peoples Region
TAMU	Technical Assistance and Monitoring Unit
UTL	Italian Cooperation Office/Local Technical Unit
WB	World Bank

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# 1. Background and problems to be addressed

## 1.1 Origin of the Programme

Italy is committed to support poverty reduction and development initiatives aiming at achieving the Millennium Development Goals (MDGs) in Ethiopia and at contributing to the implementation of the Growth and Transformation Plan (GTP). The Italian Cooperation is also internationally committed to improve aid effectiveness, to harmonize and align the Italian Official Development Aid as per the principles of the Paris Declaration and the Accra Agenda for Action, in line with the commitment signed in the International Health Partnership global compact and Ethiopian compact.

The Federal Government of Ethiopia and the Government of Italy signed on the 30<sup>th</sup> of May 2013 an Ethio-Italian Cooperation Framework 2013-2015.

16% of the Italian contribution, equivalent to Euro 15.800.000, is addressed to sustain the Health Sector Development Programme (HSDP) and is articulated as follows:

	Initiative	Euro	Channel
1	Health Pooled Fund (HPF)	300.000	Multilateral
2	Millennium Development Goals Fund (MDG Fund)	7.000.000	Bilateral
3	Regional Health System Strengthening (HIS)	3.500.000	Bilateral
4	Soft loan for Health Sector	5.000.000	Soft Loan

Areas of intervention include Health Management Information System (HMIS), technical assistance and other activities at regional level, to key pillars of sector development, i.e. Human Resources Development (HRD) and Service delivery, based on the present Programme Implementation Document.

The formulation of the present document has been conducted jointly by the Italian Cooperation health experts, the Ministry of Health and the interested Regional Health Bureaus<sup>1</sup>, through a process of appraisal, consultations and negotiation. The programme, defined as Support to safe water, drug warehouses and Electronic Medical Records for health sector, builds on the previous experience of the Italian Cooperation in supporting the Ethiopian Health Sector, lessons learnt and key added values; it is meant to respond to current needs identified by the health sector monitoring system and expressed by the Country institutions; it is aligned to the HSDP IV.

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<sup>1</sup> Reference to the Letter of request for support from the MoH.

The cooperation between Italy and Ethiopia started in the '70s. During the last thirty years the approach moved from “projects” aiming at specific objectives to support to national programmes (TB control) and further to the harmonised and aligned support to the national strategic plans for the Health Sector. The Italian contribution to the HSDP started as a sectoral contribution in 2003, fully aligned to the country strategic plans. The present programme makes a further step towards alignment, with a direct contribution via a soft loan to other components dedicated to Health System Strengthening.

## **1.2 Country context**

The Federal Democratic Republic of Ethiopia, located in the Horn of Africa with the geographic coordinates of 80° N and 38° E, has a total estimated area of 1,104,300 sq km and shares borders with Somalia, Djibouti, Eritrea, Sudan, South-Sudan and Kenya. The great geographical diversity ranges from 4,550m above to 110m below sea level, with a variety of natural environments and a predominant climate of tropical monsoon.

According to Census Ethiopia counts a population of 90,1 million with more than 80 different ethnic groups and 83% of the population living in rural areas. A pyramidal age structure of the population shows 45.3% under 15 years, 50.4% between 15 and 65 years of age and 4.3% above the age of 65<sup>2</sup>, equal proportion of males and females. Women in the reproductive age group constitute 24% of the population, total fertility rate is estimated at 4.1 births per woman (Mini-DHS 2014). The overall dependency ratio for the country is estimated at 75 dependents per 100 persons in the working age group 15-64.

## **1.3 Socio-Economic Context**

The Ethiopian economy enjoyed a strong expansion allowing the real GDP to grow by an annual average of more than 10% for the period 2003/2004 through 2012/2013. GNI per-capita has increased 7% in the last three years, however it remains one of the lowest in the world (280 USD per capita, with Sub-Saharan average of 2000), with thirty one million people living below the national poverty threshold of 40-50 US cents a day. Ethiopia is among the poorest countries in the world, ranked 173 out of 187 countries in the 2014 UNDP Human Development Index.

Ethiopia is a Federal Democratic Republic with nine Regional States and two City Administrations namely: Oromia, Amhara, Southern Nations Nationalities and Peoples Region (SNNPR), Tigray, Somali, Afar, Benshangul Gumuz, Gambella and Harari and two city Administrations councils of Addis Ababa and Dire Dawa. The regional states and city administrations are sub divided into 814 administrative Woredas (districts), which are the basic decentralized administrative units and are further divided into more than 15,000 Kebeles. Decentralization is by devolution and the current decentralization process started in 2002. Regional budgets are largely financed through Federal block grants, while their own revenues are limited. Woredas and towns budgets are mainly composed by block grants from Regions (80-90% of

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<sup>2</sup> CSA and ICF, 2014. Ethiopia Mini Demographic and Health Survey 2014. Central Statistic Authority, Addis Ababa and ICF International, Calverton.

the total budget) and local revenues. It is estimated that more than 95% of woredas budget is absorbed by recurrent expenditures while only 5% is dedicated to capital investments. Regions and districts have regional Health Bureaus (RHB) and district health offices respectively for the management of public health services at their levels. The devolution of power to regional governments has resulted in shift of public service delivery including health care largely under the authority of the regions.

The significant economic growth registered in the past years marks an encouraging progress, although many constraints, toward the Ethiopia's objective to become a middle-income country in the next two decades.

Percentage share of health budget allocation from the total budget has shown some increment in last two years.

#### **1.4 Sector background**

Although remarkable progresses were made in the past years in the development of the health sector, Ethiopia still faces enormous challenges for the health of its people: morbidity and mortality due to treatable and preventable diseases are still very high and the general health status of the population is poor. The latest available figures show Infant Mortality Rate (IMR) of 59 deaths per 1000 live births, under-five mortality rate (U5MR) of 88 deaths per 1000 live births, while Maternal Mortality Ratio (MMR) remains at the high level of 676 deaths per 100,000 live births (EDHS 2011)<sup>3</sup>.

Communicable diseases remain the major causes of morbidity and mortality, with acute upper respiratory infections on top of the morbidity list, followed by malaria, whereas Pneumonia was the leading killer disease (HHI, EFY 2005)<sup>4</sup> Among the main causes of visits and admission are intestinal parasitosis, deliveries, diarrhoea, tuberculosis, AIDS, along with recently emerging non communicable diseases such as cardiovascular diseases, diabetes, cancers and injuries. In EFY 2006, a total of 30,927,623 Outpatient Department (OPD) visits were provided with an average of 0.35 OPD visits per person per year.

Malaria remains a major cause of morbidity and mortality in the country, with a total number of 2, 627, 182 laboratory confirmed plus clinical malaria cases in EFY 2006. According to the TB prevalence survey, TB prevalence (all forms) was 240 per 100,000 populations, (FMOH and EHNRI, 2011)<sup>5</sup>. According to 2011 EDHS, the adult HIV prevalence (age 15-49) is 1.5% (1.9% among women and 1.0% among men) with wide variations between sub-populations and geographic areas. Considering that 83% of the population resides in rural hard to reach areas, the availability, accessibility and utilisation of health care facilities are an enormous challenge.

The Health Extension Programme, with its over 30,000 Health Extension Workers and the accelerated expansion of Primary Health Care services has, in the past few years, achieved remarkable results in terms of availability of services also in many

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<sup>3</sup> CSA, 2011. Ethiopia Demographic and Health Survey 2011. Central Statistical Authority, Addis Ababa and ORC Macro, Calverton

<sup>4</sup> FMOH, Health and Health related Indicators, EFY 2005

<sup>5</sup> FMOH and EHNRI, 2011. First Ethiopian national population based tuberculosis prevalence survey. Federal Ministry of Health and Ethiopian Health and Nutrition Research Institute, Addis Ababa

remote areas, laying the ground for a really expanded access and potential improvement of the health situation. The current status requires more effort to complete the coverage and make fully operational the structure established so far.

Health sector financing in Ethiopia is partly dependent from external support, and many development partners contribute technically and financially to the health sector activities and development. Harmonization and alignment, to improve the coordination of external support and increase aid effectiveness, have been high in the agenda of the Ethiopian Government in the past decade and achieved substantial results in the health sector. The HSDP IV was developed in 2010 as a single programme framework for coordinating health sector action (one plan) and the “HSDP Harmonization Manual” was defined, focuses on ensuring one-plan, one-budget and one-report at all levels of the health system, including DPs. The progresses continued with the functioning of the HSDP joint governing system, marked by the establishment of the MDG fund, the Ethiopian IHP compact and the finalisation of the Joint Financing Arrangement for the MDG fund in April 2009. Relevant challenges remain for a real improvement of aid effectiveness and progresses to reaching the health MDGs. Among them, the slow progresses toward real alignment of all Development Partners to country programmes, the constraints in rolling out key health systems, the inadequacy of financial resources, the need to realise the mutual accountability between national and international stakeholders. A renewed opportunity for accelerating progresses is currently offered by the JANS exercise, which Ethiopia has decided to undertake along with the development of the HSDP IV, as a unique process, with the expectation, among the others, to enhance confidence in the strategy, bring more Partners and stakeholders on plan and 'on budget', inform decisions on technical/financial support and, eventually, lead to a more effective, coordinated response.

Italian Cooperation is actively involved in the above mentioned processes also because of the prime role played in the health-sector joint governing system and the technical assistance provided to the Ministry of Health during the last five years. It is committed to contribute to the harmonisation and alignment processes toward increased aid effectiveness.

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

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. According to the Annual Performance Report of EFY 2006 the total available HCs are 3,335, and, out of these, 3,315 (99.4%) are functional. A total of 257 HCs are equipped with necessary materials. In Amhara and SNNP Regions the total available health centres are 806 and 700, and from these 805 and 693 are functional respectively.

Similarly, according to annual Performance Report of 2006, the totals available public hospitals are 156 in EFY 2006 and, out of these, 150 (96.2%) are functional. In Addis Ababa 14 public hospitals are available and from these 13 are functional.

This project will be implemented in Hospitals and Health Centres. The project document will have three components:

**1. Provision of Pure and Potable water for Health Centres in Amhara and SNNP Regions;**

**2. Construction of Drug Warehouses for Health Centres of Amhara region, and**

**3. Electronic Medical Record (EMR) Implementation in Addis Ababa Hospitals**

### **1.5 Problems to be addressed**

#### **Component 1: Provision of Pure and Potable Water**

##### *Problem statement*

In Ethiopia only 65% of health centres have different types of water sources within 500 meters. Sources of water are of different types: piped water in the HC compound, piped water in the neighbouring areas, track water, public water points, borehole, protected dug well, protected spring or rain water. In Amhara and SNNP Regions 64% and 69% of health centres respectively have similar types of water source. The remaining health centres do not have any type of water source within 500 meters.

Moreover, Ethiopia through Health Extension Program (HEP) within the GTP is strengthening accessibility of health care and subsequently achieving universal coverage of primary health service. During 2010-2012/13 the number of health posts constructed was 903, 573 and 380 respectively; totalling 1856 for the three years. Hence the cumulative number of HP increased from 15,095 in 2010/11 to 15,668 in 2011/12 and to 16,048 in 2012/13. Hence it is important to provide all Health facilities with adequate water in terms of quantity and quality.

##### *Beneficiaries*

32 Health Centres in Amhara Region and 29 in SNNPR and their estimated 518,500 clients per year will directly benefit from this intervention. Indirect beneficiaries will be the remaining population (about 1,006,500) of their respective catchments areas.

#### **Component 2: Drug Warehouses Construction**

##### *Problem statement*

Drugs and medical supplies, are mostly used in the treatment, cure, prevention, or diagnosis of disease or used to otherwise enhance physical or mental well-being. Medical supplies including laboratory diagnostic test kits and reagents are very valuable, scarce, and expensive and need to be stored and managed in a proper storage to avoid reduction in their efficiency implying production of wrong results both in the diagnosis and treatment of patient. As these drugs and medical supplies are limited and expensive in nature, it becomes imperative to improve their management as well as the storage system to minimize wastage and achieve efficient utilization.

An efficient storage system should be sturdy and durable in structure to maintain proper storage conditions, quality and minimize wastage. To do so, well structured room and also internal facilities like cabinets, pallets and shelves are required.

### *Beneficiaries*

15 Health Centres in Amhara Region and their estimated 127,500 clients per year will directly benefit from this intervention. Indirect beneficiaries will be the remaining population (about 247,500) of their respective catchments areas.

## **Component 3: EMR Implementation**

### *Problem statement*

Electronic medical record (EMR) is a computerized record of patient's information at every encounter with health care providers at health institutions. It includes information that the patient provides to the attending physician/nurse, such as patient's identification, socio-demographic and economic information, medical history, physician's physical assessment, diagnosis and treatment plan. It also contains laboratory test results, x-rays and other diagnostic images, a list of medications prescribed and reports that indicate the results of operations and other medical procedures.

The primary purpose of EMR is to assist health care professionals in providing the most effective patient care. It documents information about each encounter the individual has with a health care provider. It is also used to communicate information about the patient from one provider to another, making continuity of care possible. This is especially important as care is not limited to one provider or institution at a specified time period, but instead encompasses multiple care providers at several institutions and multiple illnesses over time. Additionally, it has also other functions like supporting research and education, quality of service review, disease surveillance, insurance billing and reimbursement etc.

### *EMR in Ethiopia*

In Ethiopia automation, computerization and in general modernization of the Health Information System in order to improve the effectiveness and efficiency of the health services and the day to day activities of health care providers are among the objectives identified in the Health Sector Development Plan (HSDP). Particularly HSDP IV clearly states the scale up of EMR to all hospitals in the country.

According to the HSDP IV Annual Performance Report EFY 2006, the MRU (Medical Record Unit) – EMR module for patient's registration and retrieval has been deployed in 45 hospitals and 59 health centres. In EFY 2007, the FMOH is planning to implement full EMR in ten hospitals in Addis Ababa as a flagship initiative.

This project is planning to implement full EMR system at the 5 federal hospitals in Addis Ababa. Baseline/readiness assessments will be conducted at the hospitals and all the important resources will be availed before proceeding with the implementation of EMR. Additionally, training will be conducted for health care providers which will help to make them committed to implement the system.

### *Beneficiaries*

4 General Hospitals and 1 Specialized Hospital in Addis Ababa and their estimated 3,060,000 clients per year as well as 136 staff that will be trained on EMR will directly benefit from this intervention. Indirect beneficiaries will be the remaining population (about 5,940,000) of their respective catchments areas.

## **2. Programme strategy**

### **2.1 Objectives**

#### *General Objective*

To improve the health status of Ethiopian population according to HSDP and in line with the health Millennium Development Goals.

#### **Component 1: Provision of Pure and Potable Water**

#### *Specific Objective*

To improve the provision of acceptable health services in order to increase coverage, reduce morbidity, mortality and disability for the people of Amhara and SNNPR through the provision of a sustainable water supply and waste water system in 61 health centres.

#### *Expected results*

1. Creation of maps on water supply to the health centres for the 2 regions
2. Creation of a database on water availability in the health centres of the 2 regions
3. Standardized method for health centres on: water collection, distribution and waste water management.
4. 61 health centres in 2 regions have an independent water supply scheme and waste water system.

#### *Activities and time-frame*

1. Mapping of the health facilities without clean or inadequate water supply
2. Data collection on the sources of water supplying the health centres
3. Based on the findings of the data collection and mapping, design a standardize approach suitable for any type of health centre in the 2 regions
4. Construction and/or rehabilitation of the water/waste water schemes in 61 health centres

The contract signed for the construction of the water facilities, within the selected HC, is to be considered a “turn-key” contract. One single contractor will be responsible for supply of materials, installation and constructions.

No	Activity	Task	Deliverable	Responsibilities	Date (Tentative outcome date)	Remarks
1	Mapping of HCs with inadequate access to water	Survey in the selected regions on HCs water availability and propose the most reasonable option for water availability improvement and waste water treatment.	Assessment document	RHBs, TAMU		
2	Data collection on water resources in the selected HCs	Analysis of the existing water facility present in the health centres	Technical document Complete tender documents with technical specification	RHBs, TAMU		Data collected must be produced in a form suitable for database creation.
3	Elaborate a standardized action for the selected HCs	Preparation of drawings Preparation of a tentative BOQ	Drawings and BOQs Construction and supply contracts	MOH, RHBs, TAMU		
4	Construction and/or rehabilitation of water schemes/waste water in 61 HCs	Procurement process Launch all necessary tender procedures and select the construction companies 61 Works supervision HCs are rehabilitated according to tender documents specification and drawings	61 HC with new water scheme	Contractor(s)		Procurement procedures will be in line with the Bilateral Agreement.

## **Component 2: Drug Warehouses Construction**

### *Specific Objective*

To improve the storage of drugs and medical supplies in Amhara region.

### *Expected results*

15 health centres have an adequate drug warehouses

### *Activities and time-frame*

1. Design and technical specification preparation
2. Procurement process
3. Construction
4. Monitoring: work supervision and inspection

The contract signed for the construction of the drug warehouse, within the selected HC, is to be considered a “turn-key” contract. One single contractor will be responsible for supply of materials, installation and constructions.

## **Component 3: EMR Implementation**

### *Specific Objectives*

To establish a fully functional EMR system in 5 hospitals in Addis Ababa

### *Expected results*

1. 5 hospitals equipped with the required ICT materials;
2. 5 hospitals MRU staffs and health professionals trained on the use of EMR software;
3. 5 hospitals produce automated reports through EMR system.

### *Activities and time-frame*

1. Site assessment
2. Procure hardware for 5 new hospitals
3. Install network system for 5 new hospitals
4. Test the network system
5. Install EMR software for the newly selected hospitals
6. Test EMR software with real patient data
7. Maintain the EMR system;
8. Document the EMR system
9. Prepare instruction manual for users
10. Provide training to MRU staffs on the use of EMR software
11. Ensure continuous follow up and provide support
12. Conduct regular meeting with the facilities staff.
13. EMR software is used with real patient data

## 2.2 Logical framework

	Programme logic	Verifiable indicators	Verification sources	Conditions
<b>General Objective</b>	The General Objective of the Programme is to improve the health status of Ethiopian population according to HSDP and in line with the health Millennium Development Goals.			
<b>Specific Objective COMPONENT 1</b>	To improve the provision of acceptable health services in order to increase coverage, reduce morbidity, mortality and disability for the people of Amhara and SNNPR through the provision of a sustainable water supply and waste water system in 61 health centres.	100% of the HC has 60 l/day per in-patient and 20l/day for out patient  Increase of 11% in Amahara and 14% in SNNP of HC with available water source within 500m	Water data collection survey and HC data	Suitable climate condition to implement the works. It can be foreseen the drawing and bidding documents preparation during the rainy season and the work construction during the dry season.
<b>Expected result COMPONENT 1</b>	<ol style="list-style-type: none"> <li>1. Creation of maps on water supply to the health centres for the 2 regions</li> <li>2. Creation of a database on water availability in the health centres of the 2 regions</li> <li>3. Standardized method for health centres water collection, distribution and waste water management</li> <li>4. 61 health centres in 2 regions have an independent water supply scheme and waste water system</li> </ol>	<p><b>Results 1 and 2:</b> 2 regions have a updated database and can produce maps on the water availability of the HC</p> <p><b>Result 3:</b> MOH has a standardize methodology on water interventions in the HC</p> <p><b>Result 4:</b> 100% of in patients can access 60l/day of water 100% of out - patients can access</p>	<p><b>Result 1 and 2:</b> RHBs report</p> <p><b>Result 3:</b> MOH reports</p> <p><b>Result 4:</b> Water meters readings</p>	

	<b>Programme logic</b>	<b>Verifiable indicators</b>	<b>Verification sources</b>	<b>Conditions</b>
		20l/day of water		
<b>Activities</b> COMPONENT 1	<p>For result 1</p> <p>1. Mapping of the health facilities without clean or inadequate water supply</p> <p>For result 2</p> <p>1. Data collection on the sources of water supplying the health centres</p> <p>For result 3</p> <p>1. Based on the findings of the data collection and mapping, design a standardize approach suitable for any type of health centre in the 2 regions</p> <p>For result 4</p> <p>1. Construction and/or rehabilitation of the water/waste water schemes in 61 health centres</p>			<b>For activity 4:</b> Availability of water confirmed Availability of electric power if needed confirmed
<b>Specific Objective</b> COMPONENT 2	To improve the storage of drugs and medical supplies in Amhara region.	Reduction of 30% of drugs and medical supply wastage	HC and drugs warehouse data  Infrastructure Unit of ARHB	Budget secured from IDC as a soft loan. Standard design prepared and approved
<b>Expected result</b> COMPONENT 2	15 health centres have an adequate drug warehouses	Drug warehouse according to national standards	Infrastructure Unit of ARHB	
<b>Activities</b> COMPONENT 2	<p>1. Design and technical specification preparation</p> <p>2. Procurement process</p> <p>3. Construction</p> <p>4. Monitoring: work supervision and inspection</p>			

	<b>Programme logic</b>	<b>Verifiable indicators</b>	<b>Verification sources</b>	<b>Conditions</b>
<b>Specific objective</b> COMPONENT 3	To establish a fully functional EMR system in 5 hospitals in Addis Ababa	5 hospitals produce automatic EMR reports	Hospitals reports	
<b>Expected result</b> COMPONENT 3	<ol style="list-style-type: none"> <li>1. 5 hospitals equipped with the required ICT materials</li> <li>2. 5 hospitals MRU staffs and health professionals trained on the use of EMR software and implementing EMR system</li> <li>3. 5 hospitals produce automated reports through EMR system</li> </ol>	<b>For all expected results:</b> % of new patients enrolled with the EMR system	Hospitals records	
<b>Activities</b> COMPONENT 3	<p>For result 1</p> <ol style="list-style-type: none"> <li>1. Site assessment</li> <li>2. Procure hardware for 5 new hospitals</li> <li>3. Install network system for 5 new hospitals</li> <li>4. Test the network system</li> </ol> <p>For result 2</p> <ol style="list-style-type: none"> <li>1. Install EMR software for the newly selected hospitals</li> <li>2. Test EMR software with real patient data</li> <li>3. Maintain the EMR system;</li> <li>4. Document the EMR system</li> <li>5. Prepare instruction manual for users</li> <li>6. Provide training to MRU staffs on the use of EMR software</li> <li>7. Ensure continuous follow up and provide support</li> <li>8. Conduct regular meeting with the facilities staff.</li> </ol> <p>For result 3</p> <ol style="list-style-type: none"> <li>1. EMR software is used with real patient</li> </ol>			

	<b>Programme logic</b>	<b>Verifiable indicators</b>	<b>Verification sources</b>	<b>Conditions</b>
	data			
		<b>Resources</b>	<b>Costs</b>	<b>Pre conditions</b>
		Technical staff from MoH and RHBs Water and building materials Electronic material IT materials and software development Staff training	Soft Loan: Component 1 3,784,000 Euro Component 2 216,000 Euro Component 3 1,000,000 Euro  <b>GRAND TOTAL:            5,000,000 Euro</b>	Signature of the bilateral agreement between MAECI/DGCS and MoFED  Continuous support from the MoH to the current Health policies

## 2.3 Components

This project will be implemented in Hospitals and Health centres. The project document will have three components:

1. Provision of Pure and Potable water for Health Centres in Amhara and SNNP Regions;
2. Construction of Drug Ware House for Health Centres of Amhara region, and
3. EMR Implementation in Ababa Hospitals

## 2.4 Budget

### Summary of preliminary programme estimated costs (in Euro)

	COMPONENTS	EURO
1	Water to HC	3,784,000
2	Building Warehouses	216,000
3	EMR	1,000,000
	<b>Total</b>	<b>5,000,000</b>

This cost estimation is indicative and, under the total amount of Euro 5,000,000, the share among sub components can be adjusted according to the actual needs and on the base of the plans of actions in which detailed budget will be developed.

### Component 1 - Preliminary cost estimation for provision of pure and potable water

The 3.784.000 Euro will be shared between Amhara and SNNPR regions based on their population size.

The number of health centres to be handled by this soft loan for provision of pure and potable water supply in Amhara and SNNP Regions are 32 and 29 respectively.

	Description	Unit	Unit cost EURO	Quantity'	Total
1	Studio di fattibilita' e supervisione lavori	Lump sum	400,000	1	400,000
2	Water scheme for HCs (RWH systems, spring protection, borehole drilling/rehabilitation, water tank, pipes GI, pipes HDPE, fittings, pumps)	HC	51,836.06	61	3.162.000
3	Waste water systems (septic tank construction, PVC pipes, concrete works)	HC	3,639.34	61	222.000
	<b>TOTAL 1+2+3</b>				<b>3.784.000</b>

Budget shall be subjected to changes in case of need during the preparation of the operational plan.

### Component 2 - Preliminary cost estimation for Construction of Drug Ware House

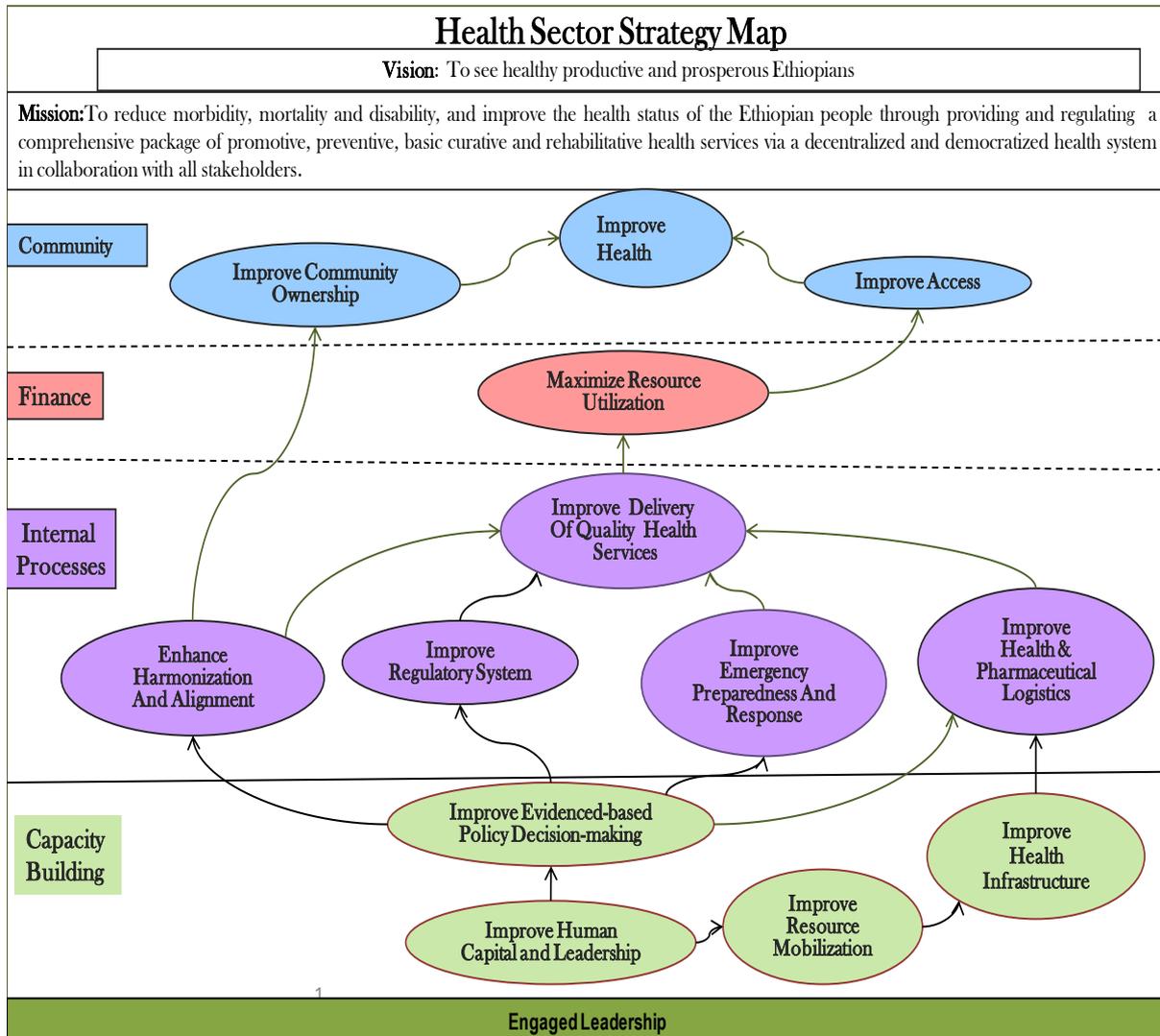
220.000 Euro are allocated for Drug ware house construction in 15 health Centres of Amhara Region.

	Description	Unit	Unit cost EURO	Quantity	Total
1	Design, BOQ and Specification, preparation, supervision	lump sum	21.000	1	21.000
2	Construction	HC	13.000	15	195.000
	<b>TOTAL 1+2</b>				<b>216.000</b>

### Component 3 - Preliminary cost estimation for EMR implementation

	Description	Unit	Unit cost EURO	Quantity	Total
1	Hardware	Hospital	43,816	5	219,080
2	software	Hospital	1,388.8	5	6,944
3	EMR operational costs	Hospital	31,379	5	156,895
4	Training and capacity building	Hospital	20,653.4	5	103,267
5	LAN		102,762.8	5	513.814
	<b>Total 1+2+3+4+5</b>				<b>1.000.000</b>

## 2.5 Strategic approach



The diagram above shows the strategic approach of the Health Sector in Ethiopia.

The present Programme will contribute:

- 1) at Capacity Building level to: a) Improve Human Capital and leadership and b) Improve Evidenced-based policy decision making;
- 2) at Internal Process to: a) Improve delivery of quality health services;
- 3) at Community level to: a) Improve community ownership; b) Improve health and c) Improve access.

## 2.6 Programme timeframe

Description	Months																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
<b>Approval of the Programmatic Plan</b>	X																							
<b>Approval of the AP</b>	X																							
<b>Disbursement request</b>	X												X											
<b>COMPONENT 1</b>																								
Assess the infrastructure	X	X	X	X																				
Elaborate a standardized action for the selected HC		X	X	X																				
Procurement process				X	X	X	X																	
Construction								X	X	X	X	X	X	X	X	X	X	X	X					
Monitoring								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>COMPONENT 2</b>																								
Design and technical specification preparation	X	X																						
Procurement process		X	X	X	X																			
Construction					X	X	X	X	X	X	X	X	X	X	X	X								
Monitoring: work supervision and inspection					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>COMPONENT 3</b>																								
Site assessment	X	X																						
Procure hardware for 5 new hospitals		X	X	X	X	X	X																	
Install network system for 5 new hospitals.							X	X	X	X														
Test the network system							X	X	X	X	X													
Install EMR software for the newly selected hospitals									X	X	X													
Test EMR software with real patient data											X	X	X											
Maintain the EMR system											X	X	X	X	X	X	X	X	X	X	X	X	X	X
Document the EMR system	X	X	X																					
Prepare instruction manual for users	X	X	X																					
Provide training to MRU staffs on the use of EMR software.											X	X	X	X					X	X				
Ensure continuous follow up and provide support											X	X	X	X	X	X	X	X	X	X	X	X	X	X
Conduct regular meeting with the facilities staff.	X			X			X			X			X			X			X		X	X	X	X
EMR software is used with real patient data														X	X	X	X	X	X	X	X	X	X	X

### 3. Programme implementation

#### 3.1 Institutions and bodies involved and their roles

The main Institutions and Bodies involved in the implementation of the Programme are:

For the GOE side:

The **Ministry of Finance and Economic Development of Ethiopia (MoFED)**, represents GOE as counterpart of GOI for this Programme. In line with the provisions defined in the Agreement, MoFED will establish a Financial Agreement with Artigiancassa in order to channel the Loan funds to the GOE and assist MoH in opening the special bank account, in Euro currency for the Programme at the National Bank of Ethiopia (NBE).

The **Ministry of Health (MoH)** will act as the recipient Executing Agency at federal level. MoH will:

- with the assistance of MoFED, will open one Bank account dedicated to the Loan funds.
- will communicate as soon as the Financial Agreement will enter into force all the detailed Bank accounts to the IDC/UTL, in order to allow the Loan transfer;
- assist the RHBs to open their accounts at Regional Commercial Banks in local currency;
- be responsible for the management of the Loan (disbursement, procurement, reporting, accounting, auditing, etc.).
- will designate the Person in Charge (PIC) for the management of funds provided under the Agreement. The PIC will be supported by the Technical Assistance and Monitoring Unit (TAMU, here below described) for what concern the following his/her tasks:
  - the preparation and endorsement, if complying with the PID, of the APs and SARs (here below described);
  - the transmission of APs to the SC for approval;
  - the transmission of the SARs, fund reallocation requests to the IE, who will subsequently transmit to MAECI/DGCS for approval, when necessary after being reviewed by UTL.

The **Regional Health Bureaus (RHBs)**, of Amhara and SNNP will act as delegated Executing Agencies for the Programme at Regional level. They will be responsible for the management of funds of the Components 1 and 2 of the Programme. Their responsibilities include the implementation of the activities in their APs.

The RHBs, with the assistance of TAMU, will:

- 1) prepare the APs to be sent to the PIC for the endorsement;
- 2) procure the goods and services necessary for the implementation of the APs;
- 3) sign and manage the relative contracts;
- 4) prepare technical and financial reports according to the provisions of the Agreement and transmit them to the PIC for endorsement.

The **National Bank of Ethiopia** (hereinafter referred as NBE) acting as administrator of the "Special Account" denominated "XXXXXXXXXX" in Euro currency into which the GOI shall transfer agreed funds;

Note: The funds will then be transferred by MoH in Ethiopian Birr to the Regional Commercial Banks accounts opened by Amhara and SNNP regions for the purpose of the activities of this Programme.

The **Regional Commercial Banks** (hereinafter referred as RCB), acting as administrators of the Regional Special Accounts in Ethiopian Birr opened by the concerned Regional Health Bureaus upon MOH's request.

For the GOI side:

The **Directorate General for Development Cooperation of the Italian Ministry of Foreign Affairs and International Cooperation (MAECI/DGCS)**, representing the GOI for the Agreement and acting as Financing Agency for the Loan;

The **MAECI/DGCS**, represents the GOI as counterpart of GOE for the Programme. It acts as Financing Agency. MAECI/DGCS will designate, in agreement with the MoH, and in accordance with MAECI/DGCS internal procedures, the Italian Expert to the TAMU and also other experts during the implementation of the activities as indicated in the present PID. MAECI/DGCS will execute jointly with FMOH, evaluation activities (ongoing, final, ex-post) whenever deemed appropriate.

The **Italian Development Cooperation/Local Technical Unit (IDC/UTL)** represents MAECI/DGCS in Ethiopia for the implementation of this Agreement. It is responsible for the supervision of the bilateral cooperation activities between Italy and Ethiopia. It will supervise the TAMU's experts and it will take part to the Steering Committee as member.

The **TAMU**. In order to facilitate an effective implementation of the Programme, a Technical Assistance, and Monitoring Unit (TAMU) shall be established in support of the MOH's and RHBs' operations and to monitor Programme's operations. Among other activities, the TAMU will support the MOH and the RHBs in research and studies activities. The TAMU will be staffed with Italian Experts designated by MAECI/DGCS, in agreement with the MoH, local experts and support personnel, constituting the TAMU's Team. The PIC will be the direct counterpart of the TAMU's IE. The TAMU shall be located outside the MoH facilities and the relevant equipment and running costs, office rent and personnel salaries, shall be financed by GOI via Channel 3 option of HSDP.

**Artigiancassa S.p.A** (hereinafter referred to as "Artigiancassa"), the Italian Financial Institution appointed by GOI to sign the Financial Agreement with MoFED. Artigiancassa will act as lender for the Loan on behalf of GOI providing all the transfers requested by MoFED and receiving the repayments with the Financial Agreement.

The Parties, having properly informed all the above-mentioned Institutions and Bodies, will provide them with a copy of the present Agreement. The Parties will ensure that such Institutions and Bodies will fulfil, for what concerns to each of them, the obligations of the Agreement.

### 3.2 Programme governance and management

The Programme shall operate within the regular framework of the HSDP. The MoH will act as Executing Agency for the Programme. The essential elements of the governance and management of the Programme, are as follows:

It is foreseen that the Programme will last 24 months. The disbursement of Loan is foreseen in one instalment.

1. A **Steering Committee** (hereafter referred to as “SC”) will be established. It will be composed by 6 members representing MoFED, MOH, UTL, RHBs of Amhara and SNNP, and TAMU. The SC will be in charge of the overarching supervision of the Programme. It shall meet annually to evaluate the progress towards the achievement of objectives, the adherence/alignment with national sectoral policies and to endorse the operational plans for the Loan. All the decisions of the SC must be unanimously taken. It will meet under request of one of its members, at least once a year or any time decisions are required. Costs associated with the participation to the meetings, if any, will be borne by the respective institutions.
2. The **MOH**. The MoH will act as Executing Agency of the Programme .
3. The **RHBs**. The RHBs of Amhara and SNNP regions will act as delegated executing Agencies and will carry out the activities to be implemented at local level with the support of the TAMU.
4. The Programme shall comply with the framework of the **HSDP**, and shall follow the present **Programme Implementation Document** for the execution of funds of the Loan.
5. The **execution of the Programme** shall be under the direct responsibility of MOH. The MOH shall provide at its own costs the salaries of the personnel involved in the Programme, including the Person in Charge, whose roles and responsibilities are defined at the following point 6.
6. The **PIC**. The MoH shall designate the **Person in Charge** (PIC) of the management of the funds of the Loan. The PIC will be the direct counterpart of the TAMU's Italian Expert (IE) and will be supported by TAMU's Team. He/she will sign all reports and requests for transfer of funds according to the relevant provisions of the Agreement and will have towards the Parties the responsibility to ensure the full implementation of the Agreement. The PIC, under the overall guidance of the SC, shall also steer and coordinate the technical assistance provided to the Programme. Concerning the day-by-day management of activities financed under the Loan, the PIC will act in regular consultation and agreement with the IE.
7. The Programme **implementation schedule** shall be detailed within the relevant APs.

Upon entering into force of the Agreement and the signature of a **Financing Agreement** between MoFED and the Italian intermediary bank Artigiancassa, and pursuant to the following clauses of this Agreement, the same Artigiancassa will transfer the funds, in **two** different instalments of **3.000.000 Euro** the first one and **2.000.000 Euro** the second one according to the following crediting procedures.

### **Crediting procedures**

The financial resources provided by the Italian side through the Loan under the present Agreement will be transferred to MOH in Euro currency to the Special Account at the **National Bank of Ethiopia** denominated "XXXXX". The funds allocated to this component will be then transferred by MoFED to MOH's account.

The **indicative estimated share** of the Loan by Programme's Components has been determined during the preliminary joint appraisal phase and can be adjusted based on the detailed Action Plans without exceeding the total amount of Euro 5,000,000 and according to the procedure described in the Article 9.1 of the Agreement. It is as follows:

	COMPONENTS	I Instalment	II Instalment	EURO
1	Provision of safe water to selected health centres	1.784.000	2.000.000	3,784,000
2	Construction/rehabilitation of selected health centres' drug warehouses	216.000	0	216,000
3	Implementation of EMR in selected hospitals	1.000.000	0	1,000,000
	<b>Total for the 3 Components</b>	<b>3.000.000</b>	<b>2.000.000</b>	<b>5,000,000</b>

The following pre-conditions will have been fulfilled prior to the start up of the crediting procedure by MAECI-DGCS:

#### For the **first installment**:

- a) MOH shall have assigned the PIC;
- b) MoFED shall have informed the MAECI/DGCS via Italian Embassy regarding the details of the destination bank account;
- c) PIC shall have submitted a specific request for the crediting of the instalment to Artigiancassa through the Italian Embassy;
- d) MOH shall have provided a programmatic plan relative to the entire amount of funds which shall be approved by IDC/UTL.

#### Pre-condition for the disbursement of **second installment** are:

- a) 60% of the previous instalment is committed and 30% of the previous instalment is spent and justified;

- b) The technical, financial and procurement audit is carried out, and its report submitted and approved by the MAECI/DGCS and Artigiancassa. The procurement report shall concern only the tenders below the thresholds mentioned in art.9.3
- c) PIC shall have submitted a specific request for the crediting of the instalment to Artigiancassa through the Italian Embassy.

### 3.3 Procurement procedures

In line with the Ethiopia IHP Country Compact and the HSDP Health Harmonization Manual, the MoH utilizes GoE channels and procedures for Procurement under HSDP. Those procedures are in line with those of the World Bank.

Procurement activities will be performed at local level by MOH, with the assistance of TAMU, according to the budget allocations and following existing World Bank procedures. They must also meet the eligibility criteria for contractors, eligible and ineligible costs, ethical clauses, contract general as for the Annex B of the Agreement.

WB thresholds are:

	<b>International Competitive Bidding (ICB) thresholds</b>
Services	More than 200 001 USD per contract for firms More than 100 001 USD for individual consultant
Goods	More than 500 001 USD
Works	More than 5 000 001 USD

	<b>National Competitive Bidding (NCB) thresholds</b>
Services	Less than 200 000 USD per contract for firms Less than 100 000 USD for individual consultant
Goods	Less than 500 000 USD
Works	Less than 5 000 000 USD

MAECI/DGCS holds the right to review procurement decisions in order to ensure that activities have been conducted transparently and efficiently in conformity with established guidelines and bilateral Financing Agreement.

For all **ICB** processes, regarding the entire amount of the Programme, prior no objection from MAECI/DGCS will be required at all steps: bidding document preparation (expression of interest, terms of reference, request for proposals), selection process, financial opening and awarding of the related contract.

For all **NCB** processes, at end of every year of activity, MOH and IDC/UTL shall perform an ex-post review of all procurement procedures on the basis of financial and technical audit report presented by the MOH.

All the procurement procedures, both for ICB and for NCB, shall be reviewed by the PIC.

### **3.4 Planning and Reporting**

#### Action Plans

1. Within 30 days from the receipt of the Loan, MOH, with the support of the TAMU, shall prepare an Action Plan (AP) relative to the entire amount of funds or part of it. Each AP shall be submitted to the PIC and the Steering Committee for endorsement and subsequently approved by IDC/UTL. After approval of the AP by the IDC/UTL, MOH can start utilizing the funds.

#### Reports

1. The MOH will provide joint financial and technical reports to IDC every six months (Semi-Annual Reports, SAR). The reports will analyze the utilization of the entire Loan. The TAMU will support the MOH in drafting such reports.
2. The six months report, shall include two sections reporting the description of the activities carried out (first section) and the relevant financial, administrative, procurement information (second section). The first of such reports shall cover the first six months of activity starting from the date in which the funds have been credited. The last of the six months report produced shall also have the function of Final Project Report (FPR).
3. Day to day monitoring activities of the Programme shall be responsibility of the PIC in collaboration with TAMU and shall be performed in accordance to the PID.
4. The PIC is responsible for maintaining an updated accounting system that contains records to ensure the accuracy and reliability of Programme financial information and reporting. The accounting system shall also ensure that supporting documents (statements of expenditure, bidding documents, contract documents etc.) are properly identified and that approved/amended budgetary lines are not exceeded. The original documents must be kept in MOH's offices. The accounting system and/or record keeping must track the advances received and the expenditure records by the Programme. Financial reports, statements of the executed expenses and contracts shall be presented to SC whenever required.
5. At the moment of requesting the second instalment, MoH shall provide an Instalment Request Report having the same structure and transmission procedure as for the points 1 and 2 above.

At the end of the Programme the last of the SARs produced shall serve as Final Programme Report.

### **4. Sustainability**

Ethiopian Government is the principal financing entity of the health sector and the “Soft loan” provides additional funds and technical assistance for a limited period of time in order to help achieve the above mentioned specific objectives.

Elements of sustainability are:

- The “Health Sector Development Plan” witnessing the strong country ownership of development process and the sectoral approach;
- The federal structure of the country ensuring clear mandates to each of his components. The MoH at federal level has the function of general policy making and address. The regional and sub-regional level have the function of planning, implementing and monitoring health activities. Both levels have autonomous budget.
- Partnership principles between MoFED, MoH and Development Partners, as for the “International Health Partnership”, are in an advanced stage of development and are consistently enforced in Ethiopia.

In particular, for Component 1, all water scheme will be constructed as much as possible utilizing local material and where possible renewable energy. Technical staff of the HC will be involved in the construction work in order to guarantee an efficient operation and maintenance of the scheme after the construction period.

## **5. Gender impact**

Gender is one of the crosscutting issues considered in HSDP and registering achievements like establishment of specific functional women’s affairs units in the MoH. In the HSDP, Gender issues are taken in consideration through the setting of the specific objective “Mainstreaming gender at all levels of the health system”. Accordingly, a training manual on physical violence and analytic framework on gender and health, including analysis of data on female workers and use of the data for advocacy purposes, has been developed and will be published and distributed in the near future.

## **6. Risks and assumptions**

Considering that the present Loan is included in the international support to the Health Sector of the Country and this sector is partially but substantially dependent by this support for its own development, a substantial decrease of the international aid could cause a restructuring of the Health services and of the targets.

However, the present initiative is included in the priority programmes for the Ethiopian Government that is relevant in the international political agenda also: this fact constitutes a strong element of mitigation of the above mentioned risks.

A further risk factor could be identified in the natural events (epidemic diseases, droughts, floods) for which exist, however, a surveillance system and immediate response (with the participation of Italy also) that should limit the impact on the Health sector.

In regards to the activities of the counterparts at regional level, the absorption of the funds constitute a limited factor and potentially a negative element for the implementation of the Programme, if this is not constantly monitored and supported, internally and externally.

Since during rainy season site accessibility could be a problem for the contractors, during this season can be planed the drawing and bidding documents preparation meanwhile the work construction can be carried out during the dry season.

## **7. Auditing and Monitoring & evaluation**

Audits will be performed by an independent auditing firm selected based on a call for tenders or assigned by the Office of the Federal Auditor General (OFAG). The auditor will audit yearly the disbursements under the Programme, on basis of the Ethiopian fiscal year.

Audit reports shall be made available no later than six (6) months after the last day of each fiscal year.

The audit will focus on both:

- Administrative and financial aspects: compliance with PID procedures (including procurement process, bidding document preparation, selection and awarding process);
- Technical aspects: compliance with the technical clauses of the contracts, infrastructure quality check, compliance and follow up of the projects impact indicators.

The final audit should justify the use of 100% of the tranches.

Other M&E activities

Parties will have the right to perform, at their own expenses, all the monitoring & evaluation, control and auditing activities that shall be deemed necessary. Joint (ongoing, final and ex-post) evaluation activities will be organized by MAECI/DGCS through its IDC/UTL office whenever deemed appropriate.