# The Federal Democratic Republic of Ethiopia Ministry of Agriculture



# Development Response to Displacement Impacts Project (DRDIP) in the Horn of Africa



**Environmental and Social Management Framework** 

February 2016 Addis Ababa

#### **EXECUTIVE SUMMARY**

The World Bank is supporting a Regional Operation on "Development Response to Displacement Impacts Project (DRDIP) in the Horn of Africa" in 2014 and Ethiopia along with Djibouti and Uganda are the participating countries. The main objectives of DRDIP is to improve access to social services, expand economic opportunities and enhance environmental management for host and forcibly displaced households in the targeted areas of the five regions in Ethiopia. The project is designed to fund a number of subprojects that will be identified and planned by strong participation of the host communities at grass root levels. The proposed project in Ethiopia is funded by the International Development Association (IDA) with an amount of US\$ 100 million.

The development objective of DRDIP is to improve access to social services, expand economic opportunities and enhance environmental management for host and forcibly displaced households in the targeted areas of Djibouti, Ethiopia and Uganda. DRDIP has five main components and six sub-components intended to benefit refugee hosting communities, and are discussed hereunder.

#### **Component 1: Social and Economic Services and Infrastructure**

Refugee hosting areas in Djibouti, Ethiopia and Uganda are characterized by huge development deficits, including low human capital, and limited access to basic social services and economic infrastructure. The service delivery capacity of local authorities in the three countries is also weak. Component 1 aims to improve access to basic social services and economic infrastructure and improve service delivery capacity of local authorities at the target subnational and local levels by financing community and strategic investments as well as capacity building initiatives. Community investments will be matched by community contributions, both cash and in-kind (materials and/or labor), and the process will follow a community-driven development approach.

#### **Component 2: Sustainable Environnemental Management**

Refugee-hosting areas face severe degradation of their environmental and natural resources, including deforestation and devastation of agricultural and range lands. The continued presence and influx of refugees exacerbates already severe environmental conditions, turning localities into fragile ecosystems. Component 2 aims to ensure that environmental and natural resources are carefully and sustainably managed so they can support current and future needs and livelihoods. The implementation of demand and supply-side interventions will be supported by the component. Supply-side interventions will support and enhance sustainable environmental and natural resources and household-scale irrigation schemes. Demand-side interventions, such as alternative energy sources, will aim to reduce unsustainable exploitation of natural resources, including risks mitigation and other challenges faced by crisis-affected host communities.

#### **Component 3: Livelihoods Program**

People from refugee-hosting communities derive their income either from traditional livelihoods, including agriculture, fisheries, pastoralism and/or agro-pastoralism; and/or non-traditional livelihoods, including skills-based jobs, service enterprises and small businesses. Each type of livelihood is characterized by low-level technologies and skills, leading to inherent low productivity. The lives and livelihoods of people from refugee hosting communities are impoverished and their incomes levels are low and unsustainable. Component 3 seeks to

improve livelihoods and increase incomes in refugee-hosting communities based on the market system approach. It will support interventions aimed at improving the productivity of traditional and nontraditional livelihoods.

#### **Component 4: Project Management, and Monitoring and Evaluation**

Project management and implementation will follow a decentralized approach using existing government structure at the national, subnational and local levels and community institutions to be established at the local level. The objective of this component is to ensure enhanced and effective project management, coordination, and implementation; and support the design of the project's monitoring and evaluation (M&E) system to be detailed in the M&E Manual.

#### **Component 5: Regional Support for Coordination, Capacity and Knowledge**

The key objective of the component is to support the establishment of a Regional Secretariat on Forced Displacement and Mixed Migration primarily for the HOA but with relevant linkages with the Great Lakes Initiative that will: (i) Spearhead the advancement of the development approach to displacement in the HOA; (ii) Facilitate the creation of knowledge with partnerships with relevant think tanks and/or universities in the three project countries of Djibouti, Ethiopia and Uganda and the HOA emerging from the implementation of the DRDIP with respect to Durable Solutions to Forced Displacement; (iii) Ensure annual learning and sharing workshops for all the HOA countries; and (iv) Contribute to the better understanding of the nexus between socio-economic development, forced displacement and mixed migration in the HOA by commissioning studies and/or focused research.

# I. Description of DRDIP target areas

The areas to be covered by the DRDIP-Ethiopia are 15 pastoral and agro-pastoral Woredas found in the lowlands of five regional states of the country, namely Somali, Afar, Gambella, Benishangul-Gumuz and Tigray regional states. These areas are characterized by water shortage, frequent drought, shortage of grass/fodder, outbreak of human and livestock diseases and gender disparities. The areas also have poor infrastructure developments, very limited social services (low education and literacy levels), susceptibility to natural hazards, increasing competition for scarce resources and limited livelihood opportunities. Recurring conflicts between ethnic groups over the use of resources has been common phenomenon in most pastoral areas. Generally, the physical environment of the project Woredas of the three regions (Afar, Ethiopian Somali and Tigray) under DRDIP is mostly arid and semi-arid intersected by several large rivers such as the Awash, Genale-Dawa, and Tekeze Rivers. General vegetation in the selected pastoral regions is natural savanna (bushed grassland with patches of woodland).

Benishangul Gumuz region is covered by natural terrestrial vegetation that consists of different types of woodlands. There are two protected areas near the project site. These are the Gore Shishime forest found around Gore Kebelle and Gara Mimi forest found in the nearby areas to the project site.

Gambella region has mixed vegetation cover of highland and lowland forest types, with increasing species diversity to the west. In the western part of the region are there are vast areas of permanent and seasonal swamps. The region contains one non gazetted National Park (i.e. Gambella National Park, 5,061 km<sup>2</sup>size) which is located between the Akobo and Gillo rivers, east of the road between Gambella city and Gog.

# II. Purpose and methodology of Environmental and Social Management Framework (ESMF)

This ESMF has been prepared for the DRDIP in order to avoid, minimize and mitigate the environmental and social issues that are likely to arise during the planning, design and implementation of sub-project level activities. It is also aimed to adapt for the Ministry of Agriculture and Natural Resources (MoANR) a framework that will facilitate compliance with relevant National, the World Bank and other requirements for sub-projects under the DRDIP in a coherent manner.

The ESMF is prepared by conducting document reviews, field visits and consultations with host communities, regional and Woreda administrations, key stakeholders and program implementers. It is prepared in line with the environmental and social safeguard policies of the World Bank and the Government of Ethiopia's (GoE's) environmental policies and legislations. It focuses also on the applicable safeguard policy elements of the World Bank for the Ethiopia project - OP/BP 4.01 Environmental Assessment, OP/BP 4.11 Physical Cultural Resources, OP/BP 4.12 Involuntary Resettlement, OP/BP 4.04Natural Habitats, OP/BP 4.36 Forests, OP /BP 4.09 Pest Management, OP/BP 4.37 Safety of Dams, and OP/BP 7.50 International Water Ways. The ESMF establishes a unified process for addressing all environmental and social safeguards issues on subprojects from preparation, through review and approval, to implementation. It provides general guidance to project implementers on the implementation of social and environmental safeguard principles, requirements and associated procedures that should be addressed prior to the commencement of the sub-projects on the ground.

The overall objectives of the DRDIP ESMF are to assess potential adverse environmental and social impacts, establish clear procedures and methodologies for environmental and social impact assessment (ESIA), to specify appropriate roles and responsibilities of different stakeholders, to determine the training, capacity building and technical assistance needs at different levels, and to provide practical information resources for implementing the ESMF.

# **III.** Organizational responsibilities for DRDIP implementation

The Ministry of Agriculture and Natural Resources (MoANR) is hosting the DRDIP and is the Implementation Agency (IA). Implementation of DRDIP activities will rely on existing government structures and existing and/or new community institutions. Thus, all levels of governments will have roles in providing oversight function; and government and community institutions in providing technical and implementation support. Implementation will follow a decentralized approach and local communities will assume the primary responsibility for executing project activities, including identifying, prioritizing and implementing community investments.

Government implementing agencies and community institutions will be supported by Project Coordination Units (PCU) at federal, regional, and Woreda levels. Project teams will also be responsible for coordinating implementation of the project, managing fund flows, ensuring fiduciary and safeguards obligations, monitoring performance, maintaining timely and regular physical and financial reports, and documenting best practices/lessons learnt. The Woreda Project Appraisal Team (WPAT) has the responsibility to appraise community investments (sub-projects), particularly in terms of social and environmental issues, technical soundness, gender equity, consistency with the Woreda Development Plan, and any issues raised by the community audit committees (CAC).

# IV. Legal, Policy and Administrative Framework

The Constitution of Ethiopia ensures sustainable development and the environmental rights of the people are protected in the constitution by the articles 43, 44 and 92.

The Environmental Policy of Ethiopia encourages creation of an organizational and institutional framework from Federal to community levels. The Environmental Policy of Ethiopia provides a number of guiding principles that require adherence to principles of sustainable development; in particular the need to ensure that Environmental Impact Assessment (EIA).

Climate Resilient Green Economy (CRGE) strategy comprises two strategies: the Climate Resilience Strategy and the Green Economy Strategy. The vision of CRGE is to achieve middle-income status by 2025 in a climate-resilient green economy. DRDIP project is also in line with this strategy.

The EIA Proclamation 299/2002 makes ESIA mandatory for specified categories of activities undertaken either by the public or private sectors, and possibly, the extension of ESIA to policies, plans and programmes in addition to projects. The proclamation requires the proponent of the project (whether it is public or private) must prepare an ESIA following the requirements specified in the legislation (article 8) and associated guidelines. Ministry of Environment, Forest and Climate Change or the sector Ministries delegated by it and relevant Regional Environmental Agencies will then review the ESIA and either approve the project (with or without conditions) or reject it. Based on the Proclamation No 299/2002, many of the regional states have also prepared and put in force their own ESIA regulations.

Environmental Pollution Control Proclamation 300/2002 addresses the management of hazardous waste, municipal waste, the establishment of environmental quality standards for air, water and soil; and monitoring of pollution. The proclamation also addresses noise and vibration as one source of environmental pollution.

More over Solid Waste Management Proclamation 513/2007, Research and Conservation of Cultural Heritage Proclamation No 209/2000, Public Health Proclamation, Expropriation of landholding for Public Purposes and Payment of compensation proclamation, Council of Minister Regulation No 135/2007 are reviewed in the preparation of this ESMF.

Directive No.1/2008 which was issued by Council of Ministers to determine projects subject to environmental impact assessment categorises projects into three schedules:

- Schedule 1: Projects which may have adverse and significant environmental impacts thus requiring a full Environmental Impact Assessment
- Schedule 2: Projects whose type, scale or other relevant characteristics have potential to cause some significant environmental impacts but are not likely to warrant a full ESIA study
- Schedule 3: Projects which would have no significant environmental and social impact and do not require an ESIA

Projects situated in an environmentally sensitive areas such as land prone to erosion; desertification; areas of historic or archaeological interest; important landscape; religiously important area, etc. will fall under Schedule I irrespective of the nature of the project.

ESIA Guideline, May 2000: The ESIA Guideline Document provides essential information covering the following elements: Environmental Assessment and Management in Ethiopia, Environmental Impact Assessment Process, Standards and Guidelines and Issues for sector EIA in Ethiopia covering agriculture, industry, transport, mining, dams and reservoirs, tanneries, textiles, hydropower generation, irrigation projects and resettlement.

The international conventions which are applicable in the country are also reviewed in the ESMF preparation process.

# V. World Bank safeguards requirements

The applicable World Bank safeguard policies as it applies to the DRDIP project are OP/BP 4.01 Environmental Assessment, OP/BP 4.11 Physical Cultural Resources, OP/BP 4.12 Involuntary Resettlement, OP/BP 4.04Natural Habitats, OP/BP 4.36 Forests, OP /BP 4.09 Pest Management, OP/BP 4.37 Safety of Dams, and OP/BP 7.50 International Water Ways.

# VI. Institutional Framework for National Environmental Management

Each of the main Federal institutions active in the construction of infrastructure or economic development is required by law to have its own environmental unit. At the National level, the Ministry of Environment, Forest and Climate Change (MoEFCC) is responsible for management and enforcement of environmental issues, policies and laws. MoEFCC delegated sector ministries in reviewing ESIA reports as well as ensuring timely and effective implementation supervision of sector specific ESIAs. Regional States are also required to establish their own regional environmental agencies, which are responsible for ESIAs. As a result, Environment Protection Bureau/offices have been established in all of the five regional states (i.e. Tigray, Benishangul Gumuz and Afar regions) have expanded their structures down to the Woreda level, though the Woreda environment protection offices are not accountable directly to the REPAs.

The REPAs of Ethiopian Somali and Gambella regions are established at regional bureau level only. REPAs have the responsibilities to evaluate ESIA reports of projects that are licensed, executed or supervised by regional states and that are not likely to generate inter-regional impacts.

Woredas are a key focus of the government's commitment to decentralized delivery of services. The various Woreda departments have a direct responsibility for finance, land use, natural resources, infrastructure, and development at the local level.

Kebeles provide a link between the state and households and are responsible for enforcing the directives from the federal and regional governments. In remote areas, kebeles may be the only association; governmental services are conveyed through them.

# VII. ESMF processes and implementation

The ESMF requires that all DRDIP sub-projects approved by the steering committee be screened for social and environmental impacts. Screening will help to determine if a sub-project belongs to category B or C (or Schedule I, II & III) and thence whether an ESIA or ESMP is required for a specific sub-project. DRDIP project will be subjected to environmental and social screening during the planning stage.

# VIII. Responsibilities in the ESMF Screening and Appraisal Process

The primary responsibility to conduct the screening of sub-projects rests on the project implementing bodies at Regional and Woreda levels and in particular the regional PCU. RPCU is responsible for implementing the DRDIP ESMF procedures. The PCU environment focal persons at regional levels will be in charge of conducting the environmental and social screening of each subproject. The environment focal person will be supported by members of the technical committee in the Woreda and by the Kebele Development Committee members. Before submitting the environmental and social screening of subprojects with application for approval to the regional environment protection offices it will be checked and approved internally by the Woreda Project appraisal committee and the Woreda council (i.e. the Steering Committee).

The DRDIP is a category 'B' project and sub-projects are anticipated not to require a full ESIA. However, environmental and social analysis is necessary and appropriate environmental and social management plan has to be prepared to prevent, minimize, mitigate or compensate for adverse impacts. Thus, the environmental and social management planning and implementation under DRDIP will be guided by the principles described in this ESMF. Outline of Roles and Responsibilities for the ESMF is listed in table 7.

# IX. Process and Procedures of the ESMF

The ESMF process and the procedural steps to be applied for identifying and managing environmental and social issues during subproject screening and approval are as follows:

- **Preparation** aimed to prepare and familiarize members of the different project implementing bodies from regional to kebele level with the fundamentals of the ESMF processes, reviewing ESMF and RPF requirements, establishing contact with the Regional & Woreda Environmental Protection Authority, identifying interested and affected communities and organizing meetings to inform them on the project activities. Moreover it creates a common understanding and awareness of the procedures involved among the key actors in the implementation of the ESMF.
- **Screening-** is for determining whether or not a project requires EIA and the level at which the assessment should occur. PCU will initiate the screening process. The screening phase for subprojects will be conducted in two stages: *Eligibility Check*-for fast track eligibility checking of identified sub-projects by the community at Kebele level by applying eligibility checklist; and *Subproject screening-* eligible sub-projects are further screened for potential impacts and environmental and social concerns. The environment focal person in the regional PCU initiates the process by completing the form contained in

- Annex a: ENVIRONMENTAL Screening Form. The outcome of environmental screening will be classifying the proposed DRDIP subproject into one of Schedule 1, 2 or 3 Categories (or Category B or C). The REPAs will review the Screening Report and will accept the project (with or without conditions) or reject it. The implementing agency will need to procure the services of an independent environmental consultancy service to prepare the ESIAs. Hence, there will be a need to develop a comprehensive ToR. An outline for the full ToR for a DRDIP subproject ESIA is contained in Annex B.
- The completed full ESIA report will be submitted to the relevant Regional EPA for clearance with an official application for review and approval. Similarly, the ESIA will be sent to the World Bank for final review and clearance.
- Category B (Schedule 2) subprojects will be subject to a limited Environmental and Social impact assessment that could be carried out by the regional and Woreda PCU with the help of an independent consultant. The depth of its information requirement can be defined in consultation with the relevant stakeholders.
- For Category C projects, the application of Environmental Guideline for construction contractors will be important and no further EA action is required.
- **Review and Decision-** The relevant REPAs will review the full/partial ESIAs and ESMPs submitted to it by the lead implementing agency/ regional PCU/. Reviewing by the REPA may include considerations of the adequacy of the ESIA report. The Regional Environmental Protection Authority will review the ESIA and EMP and may decide to accept (with or without conditions) or reject it. The final review and approval of the ESIA will be made by the World Bank.
- **Disclosure-** the applicable documents (ESIA, ESMP, CRMP and/or RAP) must be made available for public review at a place accessible to local people (e.g. at Woreda office, kebele council, and at the Regional EPA), and in a form, manner, and language they can understand. Disclosure of the ESIA in both the World Bank's info shop and website is also a requirement for the DRDIP.
- **Implementation and Supervision-**Implementation of mitigation measures and its systemic follow-up is needed for the sub-project to verify that measures identified in the Environmental and Social Management Plan (ESMP), Cultural Resources Management Plan (CRMP) and/or Resettlement Action Plan (RAP) are being implemented. It is therefore necessary that these plans are supervised, monitored and reported on together with other progresses of the subprojects. It is critical that the results of the ESIA process be duly incorporated into the legal contract. A standard set of environmental clauses to be included in each contract to be done by contractors. Examples of contract clauses are provided in Annex D: Example of Environmental Contract Clauses.
- **Monitoring the compliance-** of DRDIP subproject can be carried out internally and externally. Conducting compliance monitoring of projects implemented at regional and Woreda levels are the responsibilities of REPAs or WEPAs The planning for external compliance monitoring/inspection could be initiated by REPA itself or by the implementing agency/PCU/ in line with the M&E system.
- **Annual Environmental Reports-**must be compiled and submitted by the regional PCU to the Woreda and Regional Steering Committee for submission to the Regional EPA and World Bank for review.
- **Annual Reviews-**ESMF implementation will also be supported by conducting annual environmental and social performance audit (including audit of implementation of ESMPs, CRMPs, and RAPs) that will be carried out by a third party. The third-party

annual environmental and social performance audits will be conducted on the DRDIP to evaluate the overall implementation of the ESMF and the Project.

**Projects involving Asset Acquisition or Loss of Access to Assets**- should meet the national and World Bank's policy on involuntary resettlement (OP 4.12) requirements to all land acquisition and any changes in access to resources due to a subproject.

**Projects Involving Physical Cultural Resources Management** that the ESIA identify, CRMP should be prepared as part of ESIA. The plan in the ESMP should be consistent with Proclamation No 209/2000 on Research and Conservation of Cultural Heritage, the World Bank OP 4.11 for Cultural Property, and should take into account institutional capabilities relating to the management and preservation of physical cultural resources.

**Medical waste management** plan should be prepared for all subprojects financed under the DRDIP which include the construction or rehabilitation of health facilities (irrespective of their size). Strategy to address medical waste issues is described in this ESMF.

Use of **Integrated Pest Management (IPM)** strategy is recommended to address the use of agricultural chemicals in the DRDIP.

# X. Guidelines on Impact Mitigation and Monitoring

The DRDIP has the potential to provide significant socioeconomic benefits, and to deliver environmental benefits. However there are risks of adverse environmental and social impacts. Some of them are:

#### **Social and Environmental Benefits**

The livelihood, infrastructure and service subprojects to be implemented under the DRDIP are likely to deliver significant social benefits, provided that they are planned in an inclusive manner, and they are designed to ensure a distribution of benefits to vulnerable groups including the old, youth, women, and the poor. It is anticipated that implementation of the DRDIP will be beneficial to communities for it will bring about improvements in livelihoods and in areas of access to basic services such as water, education, and health. Degraded landscape rehabilitation through physical and biological conservation structures (bunds, terraces, trenches, diversion canals, etc...), afforestation and reforestation on communal and private lands will have environmental and social benefits as well. Introduction of sound natural resource management practices (including rangeland) will have their own positive impacts in the targeted areas and beyond.

#### **Adverse Environmental Impacts**

Some of the project interventions may have some localized but less sensitive, site specific and perhaps reversible environmental impacts. In some cases, there may be risks of permanent or economic displacement of people, requiring a carefully planned and implemented RAP. Some land acquisition or restriction of access include the following: rural feeder roads; schools; small-scale irrigation; water supply (ponds, shallow wells, cisterns, water pipe line extension, spring development): health care (health posts and veterinary posts); rangeland management; household livelihood diversification enterprises. Sub-projects will be screened for the possible environmental and social impacts and appropriate mitigation measures will be developed. DRDIP may individually have insignificant adverse environmental impacts. However, several

projects in combination, or in combination with other government or private sector activities, could have a larger, more significant cumulative impact. Potential negative impacts and possible mitigation measures for sub-project activities are listed in table 10.

#### **Training and Capacity Building**

The implementation arrangement of the DRDIP depends on all the sector offices found from Kebele to Federal levels. It is necessary that a sound understanding and dependable level of capacity exists in these institutions that would enable the implementation of the present ESMF and RPF. DRDIP ESMF can build upon the existing experiences of the Federal project implementing institutions by introducing its updated and contextualized ESMF to the current developments of National EIA requirements and procedures.

There is a need to enlighten the existing experiences in some DRDIP participating Woreda by introducing the correct ESMF procedures that satisfy both the National EIA procedures and World Bank requirements.

Woreda implementing agencies are staffed with subject matter specialists barely having training and experiences on environment management aspects. Woreda level government offices do not have the necessary capacity to apply the safeguards instruments effectively. Assessment of capacities in some of the Woreda environment protection and land administration offices has shown that there is a gap in manpower, training, logistics, and in monitoring and inspection equipment. Woreda and kebele will therefore need further training and capacity building to strengthen their capacity to ensure adequate safeguards implementation and monitoring.

Despite the Regional EPA in the DRDIP participating regions has developed increasing familiarity with ESMF procedures from implementation of other World Bank funded projects, there still exists capacity gap to be filled in terms of manpower training, logistics and equipment.

Consultations carried with host communities in all the participating regions have revealed the grass root community will need further capacity building support to transform their needs and demands into a viable and well prioritized community/kebele development plans that will guide DRDIP interventions at kebele/host community level.

The type of trainings necessary to these various target groups will vary and is briefly outlined under section 6.2. Proposed Environmental Management Topics are also described under section 6.2.1. General training program will be developed as a training module based on DRDIP ESMF and RPF, safeguard guideline and checklists.

# Monitoring of ESMF Implementation

Annual report on ESMF and RPF implementation will be prepared by the Federal PCU Environmental and Social Specialist and delivered to MoANR and the World Bank.

An independently-commissioned environmental and social audit will be carried out on an annual basis. The annual audit also provides a strong incentive for MoANR to ensure that the ESMF is implemented. It will help to ensure that individual EMPs, CRMPs and RAPs are developed and implemented for Schedule 1 and 2 subprojects.

The total cost of implementation of ESMF and including training cost as needed to address the capacity improvement of ESMF stakeholders is estimated at USD1.48 million.

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# ABBREVIATIONS

ARAP	Abbreviated Resettlement Action Plan
AARA	Administration for Refugee and Returnee Affairs
BP	Bank Procedures (World Bank)
BoANR	Bureau of Agriculture and Natural Resources
BoLF	Bureau of Livestock and Fishery
BoE	Bureau of Education
BoH	Bureau of Health
BoWCYA	Bureau of Women, Children and Youth Affair
CFT	Community Facilitation Team
CPC	Community Procurement Committee
CPMC	Community Project Management Committee
CRMP	Cultural Resources Management Plan
DA	Development Agents
ESIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EPA	Environmental Protection Authority
ERA	Ethiopian Roads Authority
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ETB	Ethiopian Birr
FTC	Federal Technical Committee
FSC	Federal Steering Committee
FPCU	Federal Project Coordination Unit
GoE	Government of Ethiopia
GP	Good Practice (World Bank)
IDA	International Development Association
DRDIP	Development Response to Displacement Impacts Project
FCA	Federal Cooperatives Agency
FEMSEDA	Federal Micro and Small Enterprises Development Agency
GOE	Government of Ethiopia
KDC	Kebelle Development Committee
MEFCC	Ministry of Environment, Forest and Climate Change
MHIS	Micro Household Irrigation Systems
MoANR	Ministry of Agriculture and Natural Resources
MOFED	Ministry of Finance and Economic Development
MoLF	Ministry of Livestock and Fishery
MoFPDA	Ministry of Federal Affairs and Pastoral Area Development
NGO	Non-Governmental organization
O&M	Operation and Maintenance
OM	Operational Manual
OP	Operational Policy (World Bank)
PAPs	Project Affected Persons
PCU	Project Coordination Unit
PDO	Project Development Objective
PFTA	Public and Freight Transport Authority
PIM	Project Implementation Manual
PSCAP	Public Sector Canacity Program
PCU	Project Implementation Unit
RAP	Resettlement Action Plan
REPA	Regional Environmental Protection Authority
RSC	Regional Steering Committee
	Regional Storing Committee
RTC	Regional Technical Committee

RPF	Resettlement Policy Framework
SDPRP	Sustainable Development and Poverty Reduction Programme
SAC	Social Audit Committee
SSI	Small Scale Irrigation
ToR	Terms of Reference
WC	Woreda Council
WPAT	Woreda Project Appraisal Team
WPCT	Woreda Project Coordination Team
WTC	Woreda Technical Committee
WSC	Woreda Steering Committee
WoFED	Woreda Office of Finance and Economic Development
WARDO	Woreda Agriculture and Rural Development Office
WLAEPO	Woreda Land Administration and Environmental Protection Office
USD	United States Dollars

# **1 INTRODUCTION**

Ethiopia is the largest refugee hosting country in Africa. At the end of 2013 there were 433,936 refugees in Ethiopia as a result of droughts, conflicts, political events and civil wars in neighbouring countries including Somalia, Eritrea, South Sudan, and Sudan (UNHCR 2014). At the end of December 2015, 733,644 refugees were distributed across the five National Regional States of - Afar, Tigray, Ethiopian Somali, Gambella and Benishangul-Gumuz; in 23 refugee camps located in 15 Woredas and 23 kebeles (UNHCR 2015). These regions, especially the first four, are among the least developed regions in the country, characterized by harsh weather conditions, poor infrastructure, extremely low capacity and high level of poverty. Due to their proximity to fragile and conflict-affected states of Eritrea, Somalia, South Sudan, and Sudan, these five regions are hosting over 84 percent of refugees in Ethiopia. The presence of refugees puts strains on the already weak public services and economic opportunities, jeopardizing the resilience of communities hosting the refugees.

In response to the impacts of forced displacement on refugee hosting communities, Ethiopia is part of the Regional Operation on "Development Response to Displacement Impacts Projects (DRDIP) in the Horn of Africa." The proposed regional initiative addresses the unmet social, economic and environmental needs of the local communities both host and displaced (refugees and returnees) in the targeted areas of the country. The proposed project will be funded by the IDA with an amount of US\$ 100 million.

The proposed project will contribute directly to the GTP objectives of expanding access to and ensuring quality of social services, and thereby achieving MDGs in the social sector. The development objective of DRDIP is *to improve access to social services, expand economic opportunities and enhance environmental management for host and forcibly displaced households in the targeted areas* of the five regions in Ethiopia. The proposed project seeks to address systemic and structural constraints impeding development in marginalized refugee hosting areas further exacerbated by refugee presence. The project is designed to fund a number of subprojects that will be identified and planned by strong participation of the host communities at grass root level.

This document provides an Environmental and Social Management Framework (ESMF) for subprojects to be supported under Components 1, 2 and 3 of the DRDIP. The ESMF is prepared by conducting document reviews and consultations with host communities, regional and Woreda administrations, key stakeholders and lead project implementers. The ESMF document is prepared in line with the environmental and social safeguard policies of the World Bank and the GoE's environmental policies and legislations. It is prepared with a focus on the applicable safeguard policy OP/BP 4.01 Environmental Assessment, OP/BP 4.11 Physical Cultural Resources, OP/BP 4.12 Involuntary Resettlement, OP/BP 4.04Natural Habitats, OP/BP 4.36 Forests, OP /BP 4.09 Pest Management, OP/BP 4.37 Safety of Dams, and OP/BP 7.50 International Water Ways.

# Institutional Framework for National Environmental

The ESMF establishes a unified process for addressing all environmental and social safeguards issues on subprojects from preparation, through review and approval, to implementation. The specific location/site, design and activities of the DRDIP sub-projects are going to be decided at later stages by the project implementers. The present ESMF is intended to provide general guidance to project implementers on the implementation of social and environmental safeguard

principles, requirements and associated procedures that should be accomplished prior to the commencement of the subprojects on the ground. It provides a general framework through which subprojects to be implemented by the DRDIP are required to get through, in order to fulfil the applicable National and World Bank safeguard requirements.

Whereas a brief outline of the DRDIP with emphasis on components 1, 2 and 3 is described in chapter one, organizational responsibilities for implementation of the ESMF are outlined in chapter two. The review of applicable National legislations and World Bank policies to the present ESMF are presented in chapter three. The essential procedures and process of the ESMF Implementation are presented in chapter four. The subsequent chapters also outline the guidance for environmental mitigation and management, capacity building and training, Environmental monitoring as well as budget for ESMF implementation.

# **1.1** Purpose and objectives of the ESMF

The purpose of preparing the ESMF is to provide a framework that will facilitate compliance with relevant National, the World Bank and other requirements for subprojects implemented under the DRDIP in a coherent manner. The ESMF will provide guidance to DRDIP staff at federal and regional levels, communities, districts (Woredas) and other participants regarding the sustainable environmental and social management of subprojects and households' livelihood diversification or income generating activities where the exact locations and potentially negative localized impacts were not known prior to project appraisal.

The overall objective and purpose of the DRDIP ESMF can be summarized as follows.

- Assessment of potential adverse environmental and social impacts commonly associated with the presence of displaced communities in refugee camps and the ways to avoid, minimize or mitigate them;
- To establish clear procedures and methodologies for the environmental and social assessment, review, approval and implementation of subprojects to be financed under the DRDIP,
- To specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to DRDIP;
- To determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF; and
- To provide practical information resources for implementing the ESMF.

The ESMF is complemented by an RPF that establishes the Project resettlement and compensation principles and implementation arrangements.

# 1.2 Methodology

The ESMF preparation involved document reviews and consultation with host communities and participating regional as well as Woreda administrations, stakeholders in the environment sector, and lead project implementing institutions. Key stakeholders consulted included the Ministry of Agriculture and Natural Resource, Ministry of Federal Affairs and Pastoral Area Development, Ministry of Water, Irrigation and electricity and the Ministry of Environment; Forest; and Climate Change. The methodology adopted for preparing the DRDIP ESMF is briefly discussed below.

#### a. Review of relevant legislations, policies and other documents

The ESMF preparation process involved conducting review of the existing national legislations, policies, guidelines and existing institutional arrangements for environmental management at Federal, Regional and district/Woreda/ levels to ensure incorporation of updates. The review of similar ESMF documents which include PCDP III, PSNP and SLMP2 project ESMFs were also conducted to draw lessons from its implementation and to provide a benchmark upon which the current ESMF will build upon. The ESMF toolkit and template of the World Bank (February, 2008) was reviewed and applied for the preparation of the current ESMF.

#### b. Consultation and field Observations

As part of the ESMF preparation process, stakeholder and community consultation meetings were held with the host communities, kebelle and Woreda administrations, and the relevant regional authorities found in Benshangul Gumuz Regional state. Host communities/kebelles/ found in Bambasi, Tongo and Homosha districts from the Benishangul Gumuz Regional state and Helewein, Bur Amino as well as Melka Dida kebelle host communities from Ethiopian Somali regional state were visited and consulted. The district administrations of these Woredas including its relevant sector offices such as the Natural Resource Conservation case teams found under the Office of Agriculture and Natural Resource as well as the Environment Protection and Land Administration office of the Woreda were also consulted. At regional level, Bureau of Agriculture and its Natural resource core process, the Regional Environment Protection and Land Administration Bureau were also consulted. The consultation meetings were attended by more than 150 participants.

The consultations were focused on providing information and receiving the concerns and opinions of the participants regarding the overall DRDIP objectives, its main and subcomponents for which the ESMF was prepared. A verbal presentation of the DRDIP objectives and main components were made to the stakeholder and community consultation participants and discussions were conducted to identify the adverse environmental and social issues affecting the host communities and the environment, to capture their concerns, opinions, and to indicate the institutional capacity gaps and other constraints that may impede implementation of the ESMF. Discussions were also conducted with sector Ministry offices that would have a stake in the implementation of the DRDIP. Fig 1: Showing community consultation meeting carried in Bambasi, and Homosha(Sherkole) kebelles



Fig 2: Showing community consultation meeting carried in Melkedida, Bur Amino and Helewein kebelles



# **1.3** COMPONENTS OF THE DRDIP

The proposed DRDIP will consist of four major components and a number of sub-components which are briefly described below. Out of the four components of the DRDIP, the main focus of the ESMF will be at Component 1, 2 and 3 together with its sub-components.

# **Component 1: Social and Economic Services and Infrastructure**

Refugee hosting areas in Djibouti, Ethiopia and Uganda are characterized by huge development deficits, including low human capital, and limited access to basic social services and economic infrastructure. The service delivery capacity of local authorities in the three countries is also weak. Component 1 aims to improve access to basic social services and economic infrastructure and improve service delivery capacity of local authorities at the target subnational and local levels by financing community and strategic investments as well as capacity building initiatives. Community investments will be matched by community contributions, both cash and in-kind (materials and/or labor), and the process will follow a community-driven development approach.

Subcomponent 1(a): Community Investment Fund - Subcomponent 1(a) seeks to improve community access to basic social services and economic infrastructure providing investment funds that, together with community contributions, will expand and improve service delivery and build infrastructure for local development. Investments will be identified, prioritized, implemented, and monitored by beneficiary communities. Potential investments (subprojects) include the construction, upgrading, rehabilitation and/or expansion of basic social services,

such as education, water supply, human health, and veterinary care; and economic infrastructure such as rural roads, market structures, and storage facilities. The target community will identify and prioritize the specific social services and economic infrastructure to be funded under this subcomponent through the community-driven development approach. Only those subprojects which are currently functioning and/or have budget for staff and materials provided by the respective administration will be supported. This is to ensure the sustainability of the interventions. Subcomponent 1(a) will also support strategic investments, that are larger in scope and impact than typical community-level investments (subprojects), and that will serve a cluster of project beneficiary communities.

These investments will be identified through the community prioritization process and will employ local labor, especially women and youth, during construction. Local governments will be responsible for operation and maintenance. An information and communication technologies (ICT) platform composed of a network of mobile phones/applications in the hands of beneficiaries and those managing the fund could be linked to a web-enabled dashboard, which could be used to upload data on investments and implementation status on a close to real-time basis. The process for planning, implementation and monitoring of the subcomponent 1(a) will be detailed in the Project Implementation Manual (PIM) for each participating country.

Area of Intervention	Community level Investments	Strategic Investments
Health	<ul> <li>Construction, repair or extension of existing Primary Health Posts only where health personnel are already present.</li> <li>Purchase of furniture or equipment for existing</li> <li>Installation of solar power supply systems</li> </ul>	<ul> <li>Upgrading/Expansion of Health Centers or Hospitals with additional wards/operations theatre</li> </ul>
WASH	<ul> <li>Construction or repair of (non-motorized) hand- pumps, tanks, dug wells, boreholes and haffirs.</li> <li>Motorizing of existing high-yielding water sources</li> <li>Construction of solid waste lagoons</li> <li>Repair of flood protection infrastructure (drainage, guttering, dykes etc.)</li> </ul>	<ul> <li>Expansion of Water Treatment Plants</li> <li>Upgrading piped water supply system</li> </ul>
Education	<ul> <li>Construction, upgrading or rehabilitation of existing primary schools, including the construction of additional class rooms, furniture and water supply.</li> </ul>	<ul> <li>Expansion of Secondary Schools with additional classrooms</li> </ul>
Social	<ul> <li>Establishment of community centres</li> </ul>	
Roads	<ul> <li>Opening of community access roads</li> <li>Rehabilitation of existing community access road</li> <li>Construction or rehabilitation of foot paths, culverts and bridges.</li> </ul>	<ul> <li>Construction of inter- community rural roads for improved connectivity</li> </ul>
Market infrastructure	<ul><li>Construction of market places and stalls</li><li>Construction of community storage facilities</li></ul>	<ul> <li>Construction and rehabilitation of multipurpose markets and warehouses</li> </ul>
Livestock	<ul> <li>Construction and/or rehabilitation of existing veterinary clinics, including procurement of basic furniture and medical equipment</li> <li>Construction and/or rehabilitation of cattle trough, livestock treatment and vaccination facilities (crush)</li> </ul>	<ul> <li>Construction and/or rehabilitation of primary and secondary livestock markets</li> <li>Construction and/or rehabilitation of feed stores</li> </ul>

Subcomponent 1(b): Capacity Building for Local Planning and Decentralized Service Delivery aims to improve the service delivery capacity of local level government authorities. It will support capacity-building interventions for local government authorities, the local implementing institutions for the community-driven planning process, local development management, service delivery capacities enhancement, mainstreaming of project interventions with government development planning and budgeting process, coordination of potential development stakeholders at local-level and community local-level development learning. Capacity-building activities to be financed under the project, will be explained in detail in the PIMs, but will include: (i) critically needed items, such as office equipment and facilities, field gear, vehicles, and technical resources, etc.; (ii) preparation, multiplication and dissemination of technical training materials; (iii) training, and knowledge and skills development at all levels, including for technicians and host communities; (iv) experience sharing tours; and (v) shortterm overseas study tours and South-South exchange programs. The project will also support technical assistance to reinforce the capacity of specialized implementing agencies, including the recruitment of national and international technical assistants to help with planning, engineering design, procurement, construction management and technical monitoring of physical investments.

#### **Component 2: Sustainable Environmental Management**

Refugee-hosting areas face severe degradation of their environmental and natural resources, including deforestation and devastation of agricultural and range lands. The continued presence and influx of refugees exacerbates already severe environmental conditions, turning localities into fragile ecosystems. Component 2 aims to ensure that environmental and natural resources are carefully and sustainably managed so they can support current and future needs and livelihoods. The implementation of demand and supply-side interventions will be supported by the component. Supply-side interventions will support and enhance sustainable environmental and neural resources, will aim to reduce unsustainable exploitation of natural resources, including risks mitigation and other challenges faced by crisis-affected host communities. Demand-side interventions will also seek to address gender issues by reducing drudgery (time and energy spent on collecting fuel wood) and exposure to risks and violence and by improving health and indoor air pollution through the use of cleaner fuels and fuel-saving cooking technologies. These aspects will be detailed in the individual country PIMs.

Sub-component 2(a): Integrated Natural Resources Management intends to enhance the productivity of environmental and natural resources, including arresting the degradation of fragile ecosystems in forest, range and agricultural lands. It would support soil and water conservation biological and physical activities on individual farms and communal lands, including the construction of soil bunds, stone bunds, artificial waterways, cut-off drains, check dams (gully rehabilitation), bench terraces, hillside terraces, trenches, area closures, planting of multipurpose trees, and groundwater recharge interventions. The sub-component will also enhance irrigation water use and management thereby increasing irrigated land, production and to communities. activities productivity for host Key be supported include rehabilitation/improving/upgrading existing traditional and modern Small Scale, Micro and Household Irrigation schemes. The use of remote sensor technologies installed on water pumps at the farm-level could be considered to monitor water use to inform water management decisions. Capacity-building activities that enhance the implementation of Integrated Natural Resources Management and Small Scale Irrigation Development and Management will be supported in each participating country, with technical assistance to service providers at multiple levels and support to communities.

**Sub-component 2(b):** Access to Energy seeks to improve access to energy by host communities, promoting the better use of energy resources and access to alternative sources of energy. Support will be given to interventions that address the host communities' energy requirements, such as domestic cooking and lighting; social services such as schools and health services; and productive activities, including lighting for small shops/businesses and manufacturing/processing. Household cooking is currently based on firewood and charcoal. To address this concern, improved cook-stoves will be introduced with appropriate community consultations about methods of cooking and baking and what types of firewood are locally available. Training would be provided on the use of the new stoves, including the preparation of fuel wood. Attention would be given to monitoring use, regular maintenance, and repairs. Solar lanterns and lamps are among the options for meeting home and street lighting as well as mobile phone charging needs. Establishing connections to grids -where possible- and off-grid decentralized energy supplies based on renewables and diesel engines will be explored in cooperation with other projects (World Bank and other funding sources) for meeting these and other productive energy uses.

#### **Component 3: Livelihoods Program**

People from refugee-hosting communities derive their income either from traditional livelihoods, including agriculture, fisheries, pastoralism and/or agro-pastoralism; and/or non-traditional livelihoods, including skills-based jobs, service enterprises and small businesses. Each type of livelihood is characterized by low-level technologies and skills, leading to inherent low productivity. The lives and livelihoods of people from refugee hosting communities are impoverished and their incomes levels are low and unsustainable. Component 3 seeks to improve livelihoods and increase incomes in refugee-hosting communities based on the market system approach. It will support interventions aimed at improving the productivity of traditional and nontraditional livelihoods. Traditional livelihoods will be informed by detailed technical, behavioral and performance market assessment for increased production, improved market interconnections and adoption of best practices. Non-traditional livelihoods will be identified based on market assessment to impart skills for increased employability, enterprise development and promote other income-generating activities. The component will strengthen existing community-based organizations (CBOs) and also support formation of new ones.

Sub-component 3 (a): Support to Traditional and Non-Traditional Livelihoods aims to increase the production and productivity of agriculture (crops and livestock), pastoralism (livestock), agro-pastoralism (crop and livestock) and fisheries; and commercialize livelihood activities for improved incomes, employment, and self-reliance. Intervention areas were identified based on key stakeholder and community consultations, but in-depth technical and market system assessment will inform implementation. Support will be provided to key activities based on the results of the market system assessment combined with the region and locality's potential and the traditional forms of livelihood practiced, including improved production practices; access to technology, equipment, storage and processing infrastructure, and finance; and access to input and output markets.

Nontraditional livelihoods will be identified based on market assessment to provide skills training for increased employability, and enterprise development and to promote other incomegenerating activities. Based on key stakeholder consultations, a number of livelihood options were identified, but market system assessments will inform implementation. The proposed interventions will be informed from lessons learned from existing projects, build on the experience of implementing agencies, tailored to country contexts. The subcomponent will follow a process-driven approach for systematic implementation with three phases: (i) preparatory phase, (ii) livelihood business plan subproject generation and approval phase; and (iii) livelihood business plan subproject implementation, follow-up mentoring, and commissioning phase. The subcomponent will also support innovations that could include technological, institutional and process innovations to be determined during implementation. Support programs for youth and women in technological innovations like digital commerce as well as in IT-enabled services that require computer/digital literacy could support modern and salaried jobs. The relevant department ministry will support the implementation of the livelihoods activities.

*Sub-component 3 (b): Capacity Building of Community-Based Organizations for Livelihoods* is intended to improve the service delivery capacity of farmer, pastoral, or agro-pastoral organizations, including CBOs. Establishing and building the capacity of CBOs will be supported due to the project's CDD approach, which involves CBOs being inclusively involved in the implementation and sustainability of project investments. CBOs involved in livelihoods promotion include farmer organizations, cooperatives, Savings and Credit Co-Operatives (SACCOs) and common interest groups (CIGs), will receive training in group management, savings, financial literacy, and book keeping. They will be encouraged to practice regular meetings, savings, and inter-loaning; timely repayment; and up-to-date accounting. The traditional and nontraditional livelihood activities will be implemented by CIGs and will receive capacity building on Group Management, Enterprise Selection, livelihood business plans preparation, procurement management, and technical and computer/digital skills. Local administration technical committees and/or facilitators will undertake these efforts.

#### **Component 4: Project Management, and Monitoring and Evaluation**

Project management and implementation will follow a decentralized approach using existing government structure at the national, subnational and local levels and community institutions to be established at the local level. The objective of this component is to ensure enhanced and effective project management, coordination, and implementation; and support the design of the project's monitoring and evaluation (M&E) system to be detailed in the M&E Manual. The component will support the establishment of institutions with different roles and responsibilities at multiple levels, including oversight, coordination, and technical bodies. Steering Committees (SCs), and Technical Committees (TCs) will be established at national, subnational and local levels. Project Coordination Units (PCUs) will be established at the National, subnational and local levels in Ethiopia and Djibouti; and a Project Implementation Support Team at the National level in Uganda; both will be adequately staffed with technical experts recruited in a competitive process. They will play a coordination and facilitation role. The project will build on existing community-level structures, such as Community Development Committees, and will establish new local-level institutions as needed, including Community Facilitation Teams, Community Project Management Committees, Community Procurement Committees, Social Audit Committees, etc.

The component will support the designing of the project Management Information System (MIS) for monitoring inputs, outputs and processes; evaluation of outcome and impacts; environmental and social safeguards monitoring; and participatory monitoring and evaluation and internal learning. M&E activities will also include regular monitoring of implementation

progress and performance, independent process monitoring, including *inter alia* regular assessments of community-level planning and review of the effectiveness and quality of capacity-building efforts; outcome and impact evaluations at baseline, mid-term and end-of-project; and annual thematic studies. The project's Results Framework (RF) will be used as a basis for reporting progress against indicators, including progress towards achieving the PDO and Implementation Progress (IP). The project will consider the use of mobile technologies to increase the reach and frequency of data capturing at local level and aggregating in a platform that could serve as a dashboard; such a tool would provide near real-time monitoring and ability to visualize and/or geo-localize activities supported by the project in the three countries.

# **Component 5: Regional Support for Coordination, Capacity and Knowledge**

The key objective of the component is to support the establishment of a Regional Secretariat on Forced Displacement and Mixed Migration primarily for the HOA but with relevant linkages with the Great Lakes Initiative that will: (i) Spearhead the advancement of the development approach to displacement in the HOA; (ii) Facilitate the creation of knowledge with partnerships with relevant think tanks and/or universities in the three project countries of Djibouti, Ethiopia and Uganda and the HOA emerging from the implementation of the DRDIP with respect to Durable Solutions to Forced Displacement; (iii) Ensure annual learning and sharing workshops for all the HOA countries; and (iv) Contribute to the better understanding of the nexus between socio-economic development, forced displacement and mixed migration in the HOA by commissioning studies and/or focused research.

A menu of the DRDIP subprojects is provided in Table 1 as guidance to the implementing institutions. It is important that subprojects are adapted to local conditions and protect the environment. The subprojects to be selected are required to meet the following criteria:

- Communal benefits: The subprojects must benefit the community as whole and the targeted households for livelihood improvement.
- Community acceptance: The subprojects must be accepted and approved by the community. They should have active community support and commitment.
- Feasibility and sustainability: The subprojects must be feasible technically, socially and economically. They should be simple and manageable in implementation and also in on- going maintenance in order to be sustainable.
- Productive: The subprojects should create durable assets which should contribute to rural development and to the reduction of poverty.
- Gender sensitivity: Priority should be given to subprojects that enable women to participate and increase access to productive assets.

Sub project category	Detailed infrastructure/service subproject types included under DRDIP menu
Social and Economic Investments Sustainable Environmental	Construction/rehabilitation/expansion of: - schools - water supply, - health centres, - veterinary care, - all weather rural roads, - market structures, and - storage facilities Integrated natural resources management:
Management	<ul> <li>Watershed Management/Development</li> <li>forestation</li> <li>plantation of multipurpose trees,</li> <li>Constructing/rehabilitating/upgrading of: <ul> <li>existing traditional and modern SSIs and MHIS;</li> <li>establishing new SSI and MHIS;</li> <li>water harvesting structures;</li> <li>head works, conveyance systems, on-farm irrigation structures;</li> <li>water application methods;</li> <li>small stream diversions;</li> <li>construction of ponds,</li> <li>hand-dug shallow wells,</li> <li>shallow tube wells;</li> <li>springs;</li> <li>check dams (gully rehabilitation);</li> <li>area closures;</li> <li>soil and water conservation on individual farm and communal lands;</li> <li>construction of soil bunds, stone bunds, artificial waterways, cut-off drains;</li> <li>bench terraces, hillside terraces, trenches;</li> <li>groundwater recharge interventions;</li> </ul> </li> </ul>
Livelihoods Program	<ul> <li>a) Traditional Livelihoods</li> <li>Provision of support for: <ul> <li>improved production practices,</li> <li>access to technology and equipment,</li> <li>access to storage and processing infrastructure,</li> <li>agriculture,</li> <li>livestock,</li> <li>fisheries (focusing Gambella &amp; Benishangul) and</li> <li>honey</li> </ul> </li> </ul>

# Table 1: List of suggested subprojects under DRDIP

<ul> <li>b) Non-Traditional Livelihoods</li> <li>Indicative menu of livelihood options: <ul> <li>petty trading,</li> <li>sand collection,</li> <li>milling,</li> <li>shops and restaurants,</li> <li>carpentry,</li> <li>tailoring and garment cutting,</li> <li>mobile phone repairs,</li> </ul> </li> </ul>
- mobile phone repairs, - masonry and
- construction.

The following subprojects will not be admissible as DRDIP subprojects. These include:

- Subprojects in locations that are ecologically sensitive such as wetlands and other unique habitats,
- Subprojects located within a recognized Cultural heritage site, or World heritage sites, and
- Subprojects that involve the significant conversion or degradation of critical natural habitats.

# **1.4 DRDIP** TARGET AREAS

The DRDIP will be implemented mainly in those Woredas of the five regions where refugee camps hosting displaced people from the neighbouring countries are found. The five regions includes the Ethiopian Somali, Benishangul Gumuz, Gambella, Afar, and Tigray National Regional States. The specific target host community Woreda and kebelles together with the refugee camps they host are listed in table-2 for each of the five regions.

National Regional State	Woreda/ Special Woreda	Refugee Camp	Kebele
	Mao-Komo	Tongo	Tongo
Beneshangul	Bambasi	Bambasi	Wamba
Gumuz	Homosha	Sherkole	Sherkole
	Homosna	Tsore	Tsore Almetema
Afar	Asayita	Asayita	Hinerie
	Berahle	Berahle	Berahle 01
	Tahtay Adyabo	Shimelba	Mai Kule
Timmer	Teeleret	Mai Aini	Mai Aini
Tigray	1 selemt	Adi Harush	Hundet
	Asgede-Tsimbla	Hitsats	Hitsats
		Bokolmanyo	Bokolmanyo
		Melkadida	Melkadida
	Dollo Ado	Kobe	Kobe
Ethiopian		Hilaweyn	Hilaweyn
Somali		Buramino	Buramino
Soman	Awharra	Awbarre	Awbarre
	Awbane	Sheder	Sheder
	Kebribeyah	Kebribeyah	Kebribeyah 02
	Gog	Pugnido	Pulajay and Ukedi
	Itang	Terkedi	Pulkode & Wankey
Gambella		Kule	Watgach & Pulkod
	Abol	Jewe	Jewe
	Dimma	Okugo	Merkes

#### Table 2: List of host community Kebelles, Woredas and hosted camps

#### 1.5 SUBPROJECT IDENTIFICATION AND COMMUNITY LEVEL PLANNING PROCESS

The project will follow a Community Driven Development (CDD) approach. As far as subproject selection is concerned communities will identify, prioritize, appraise, design, and implement subprojects that reflect their development priorities identified in a Community Development Plan (CDP) and elaborated in Community Action Plans (CAPs). The investments will be determined following a process of information dissemination and sensitization, and community mobilization, creation of inclusive community based organizations followed by mapping of social and economic infrastructure and resources to identify potential gaps and underserved populations. The process will bring together community representatives both from host and displaced populations in particular women, youth and female-headed households; representatives of community/traditional organizations, and the local governments.

Using simple subproject application forms, host communities will clearly define their objectives and propose activities and budgets, while taking into consideration the environmental and social implications of their projects. The creation of a Community development plan along with priority social and economic infrastructure, to be supported under the project will be an important output of the community engagement process. This plan would also be integrated into the planning and budget development processes of all agencies involved in the Woreda. In addition, the communities will participate in participatory monitoring, evaluation and internal learning. Specific role for communities in implementation, monitoring

and oversight will be designed to ensure community ownership, transparency of processes and accountability of the implementing actors.

Also, following the development of the CDP, an annual Community Livelihood Plan (CLP) will be formulated. The CLP will (a) identify households who will be supported to help them develop IGAs (b) provide a long list of livelihood activities that communities believe have potential for further development; (c) identify key issues that threaten livelihoods and require external solutions; and (d) select model households who would be willing to devote time and resources to test solutions and innovative approaches to address issues identified and would be potentially organized into pastoralist-research groups.

# 1.6 Environmental and Social context and baseline conditions

Ethiopia is located between 3° and 15°N latitude and 33° and 48°E longitude and covers a land surface area (including water bodies) of 1,127,127 km<sup>2</sup>. The country is currently divided into nine regional states and two City administrations. It is a country of great geographical and climatic diversity, which has given rise to many and varied ecological systems.

The rainfall pattern in Ethiopia is influenced by two rain-bearing wind systems, one bringing the monsoonal wind systems from the South Atlantic and the Indian Ocean and the winds from the Arabian Sea. The two wind systems alternate, causing different rainfall regimes in different parts of the country.

The areas to be covered by the DRDIP are mainly pastoral and agro-pastoral Woredas found in the lowlands of five regional states of the country. The five regional states are Benishangul Gumuz, Ethiopian-Somali, Gambella, Afar and Tigray. In terms of relief and soil characteristics, these areas are lowland areas less than 1,500 masl with yellow sand, yellow silt or red clay (oxidized) soils. Rainfall is erratic and the mean annual rainfall is less than 900 mm and annual mean temperatures are above 18°C (Bereha agro-ecological zone >22°C and Weina dega agro-ecological zone 18-20°C).

The natural (i.e. undisturbed) vegetation patterns in the Gambella region are closely related to patterns of rainfall and temperature, with local variations due to soil and drainage factors. In the upper parts of the foothills a mixed broadleaf montane forest occurs, with increasing species diversity to the west. Between 600 and 450 masl a lowland forest occurs. Between about 1,300 and 600 masl a transitional type of forest occurs with species of both the highland and lowland forest types. The woodlands can be divided into the Acacia-Commiphora woodlands in the drier southern lowlands and broadleaf Combretum-Terminalia woodland found in the wetter areas of the western lowlands. In the western part of the Region are vast areas of permanent and seasonal swamps. The Gambella Regional State contains one National Park (i.e. Gambella National Park). The Park have 5,061 km<sup>2</sup> size and is located between the Akobo and Gillo rivers. The Park was established as protected area in 1973 to conserve a diverse assemblage of wildlife including large wildlife species, particularly Nile Lechwe, White eared Kob and the Whale-headed Stork. There are extensive areas of swamp habitats.

Benishangul Gumuz region is covered by natural terrestrial vegetation that consists of dense forest, Riverine forest, broad-leaved deciduous wood lands, acacia woodland, bush land, shrub lands, boswellia wood land and bamboo thickets. There are some 24,731km<sup>2</sup> of woodlands and 14,222km<sup>2</sup> of shrubland in the Region. Reports indicate that there are more than 55 indigenous

tree species in the region. The Oxytenanthera abyssinica, the lowland bamboo, is found in most of the Benishangul Gumuz regional state. The region has about 300,823 hectares of bamboo according to LUSO (1997). According to the strategic plan for woody biomass conservation and development, out of the total land area of the region about 5% is cultivated land, 49% is woodland, 28% is bush land, 9% is bamboo land, 3% grass land, 0.15% marsh land, and about 2% open rocky land.

There are no officially gazetted National Parks and sanctuaries in Benishangul Gumuz Regional State. According to the Mao-Komo Woreda (Tongo) office of Agriculture and rural development, there are two protected areas. These are the Gore Shishime forest found around Gore Kebelle and Gara Mimi forest found in the nearby areas to the project site. The Region is also endowed with large inland water resources. It has four main rivers: Abay (Blue Nile), Gilgel Beles, Dabus, Didessa, Angar and Dinder rivers. The Benishangul gumuz region is the last region crossed by the Abay River before it leaves Ethiopia and enters into the Sudan.

Generally, the physical environment of the project Woredas of the remaining three regions (Afar, Ethiopian Somali & Tigray) under DRDIP is mostly arid and semi-arid intersected by several large rivers such as the Awash, Tekeze, and Genale-Dawa Rivers. General vegetation in the stated pastoral regions is natural savanna (bushed grassland with patches of woodland), and the predominant main plant species are Acacia spp., Albizia spp., Erythrina spp., Cordia, Ficus, Belanitesa egyptica, Euclea schimperi, Grewia tembensis, G. bicolor, Indigoferaspicata, Commiphora, Prosopis juliflora and various species of grasses including Chloris pycnothrix, Hyparrhenia anthistiriodes, H. dregeana, Cenchrus ciliaris, Heterpogon spp., Setaria acromelaena, Aristida kenyensis, Cyondon dactylon, Panicum atrosanguineum, Microchloa kunthii, etc.

National parks that are present in these regional states include the Kafta Humera National Park in Tigray region, the Babile wild life sanctuary in Ethiopian Somali Region and the Awash and Yangudi Rassa National Parks in the Afar Region, In these areas, pastoralists whose economic mainstay is livestock rearing exploit grazing land extensively, resulting in long term degradation of rangelands. Feed and water supply are achieved through either constant or partial herd mobility.

The project target population is comprised of pastoral and agro-pastoral households who depend on livestock as dominant livelihood and agro-pastoral households with small herds and flocks and who, to some extent, depend upon cropping. Pastoralism in Ethiopia relates to both an economic livelihood system that is based primarily on extensive livestock production, and to the characteristics of a community that is mobile and lives close to the country's borders. Pastoral communities have rich customary laws used for many centuries for political and social administration of the rangelands and their people.

Building on such laws, pastoral communities have developed traditional institutions and networks that have been serving their people in solving various economic, social and political matters. The dominant social capital or customary institutions involve social support mechanisms, natural resources management systems, social security systems, and conflict resolution systems. The project will be implemented in 15 pastoral and agro-pastoral Woredas of Somali, Afar, Gambella, Benishangul Gumuz and Tigray characterized by water shortage, frequent drought, shortage of grass/fodder, outbreak of human disease (particularly malaria), livestock disease and gender disparities in access to productive assets are the main sources of

vulnerability. Besides, they are characterized by poor infrastructure developments, very limited social services (and therefore low education and literacy levels), susceptibility to natural hazards, increasing competition for scarce resources and limited livelihood opportunities. The environmental characteristics of the areas in which DRDIP will be implemented are more usefully differentiated by altitude, rather than administrative boundaries. Thus they are presented in Table 3 below, with their elevation above sea level, which is broadly correlated with temperature.

<b>Table 3: Summary</b>	of the relevant	<b>Eco-climatic zones</b>	and environmental	l sensitivities
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Eco-Climatic Zone	Environmental sensitivity
Kolla	The semi-arid, dry savanna Kolla landscapes are
Low elevation semi-arid areas (500-1500m) of	vulnerable to deforestation and overgrazing,
western Tigray, southern Oromiya and northern	variable rainfall, slower rates of recovery and
Somali; dry savanna landscapes; rainfall is in the	wildfire potential; soils are generally nutrient
range of 200-800 mm.	poor and moderate-high erodability.
Bereha	Moisture and nutrient limitations, poor water
Low elevation arid areas in Afar, Somali,	holding capacity of soils, high livestock grazing
Benshangul, Gumuz and Gambella and the western	pressures and slow recovery rates present
parts of Tigray and eastern Oromiya (Harrerege and	constraints in these mostly Arid landscapes that
Bale); arid and dry savanna landscapes; rainfall is	generally have low soil quality, high erosion
generally less than 200 mm.	potential and vulnerability to pastoral
	livelihoods.

#### Map 1: Showing the National Parks and World Heritage Sites



# 2 ORGANIZATIONAL RESPONSIBILITIES FOR DRDIP IMPLEMENTATION

The proposed project will be housed in the Ministry of Agriculture and Natural Resources. Implementation of DRDIP activities will rely on existing government structures and existing and/or new community institutions. Thus, all levels of governments will have roles in providing oversight function; and government and community institutions in providing technical and implementation support. Implementation will follow a decentralized approach and local communities will assume the primary responsibility for executing project activities, including identifying, prioritizing and implementing community investments. Government implementing agencies and community institutions will be supported by project teams i.e. FPCU at the federal, RPCUs at regional, and WPCUs at Woreda levels. Project teams will also be responsible for coordinating implementation of the project, managing fund flows, ensuring fiduciary and safeguards obligations, monitoring performance, maintaining timely and regular physical and financial reports, and documenting best practices/lessons learnt.

# 2.1 FEDERAL LEVEL

The Ministry of Agriculture and Natural Resources (MoANR) will host the project and will be the lead implementing agency (IA). A Federal Steering Committee (FSC) chaired by the Minister of MoANR or his/her designee and constituted by Heads of relevant implementing agencies and Directors of relevant Directorates within the MoANR but also of other relevant ministries and federal level implementing agencies, including from MoFEC will be established. The main responsibility of the FSC is to provide strategic guidance and oversight to project management, coordination and implementation, including approving annual work plans and budget (AWP&B).

A Federal Technical Committee (FTC) chaired by the Director of Emerging Regions Coordination Directorate of the MoANR and constituted by technical experts drawn from relevant Directorates within the MoANR and from other relevant ministries and agencies will be established. The main responsibility of the FTC is to provide technical backstopping to the FSC, including technical review of AWP&B and implementation issues that require the attention and decision of the FSC.

The Ministry of Agriculture and Natural Resources (MoANR) will host the project and will be the lead implementing agency (IA). It will support project implementation through a Federal Project Coordination Unit (FPCU) to be established and housed in its jurisdiction. The FPCU will perform the following functions:

- Coordination of the implementation of project activities at the federal level;
- Ensure fiduciary and safeguards compliance, including supervision, monitoring and capacity building of agencies involved in the implementation of project activities at regional and Woreda levels;
- Monitoring overall performance, and evaluation of the project's impact and assessment of progress towards the PDO;
- Liaise with other stakeholders and involve in public communication;
- Strengthening capacity to implement and monitor project activities at all levels; and
- Mobilizing external technical support as necessary

# 2.2 **REGIONAL LEVEL**

A Regional Steering Committee (RSC) chaired by the Head of Bureau of Agriculture and Natural Resources (BoANR) and/or Bureaus/Commissions of Pastoral Development or his/her designee and constituted by Heads of relevant (project implementing) sector offices (Bureaus), including Bureau of Finance and Economic Cooperation (BoFEC) will be established. The main responsibility of the RSC is to provide strategic guidance and oversight to project management, coordination and implementation at a regional level, including approving annual work plans and budget (AWP&B) of the region.

A Regional Technical Committee (RTC) chaired by the Process Owner of relevant Core Process and constituted by technical experts drawn from relevant Processes within the BoANR and/or Bureau/Commission of Pastoral Development but also from Processes of other sector offices will be established. The main responsibility of the RTC is to provide technical support to the RSC, including technical review of AWP&B of the region and implementation and coordination issues that require the attention and decision of the RSC.

The Bureau of Agriculture and Natural Resources (BoANR) and/or Bureau/Commission of Pastoral Development will support project implementation through a Regional Project Coordination Unit (RPCU) to be established and housed in its jurisdiction. The RPCU will perform the following functions:

- Coordination of the implementation of project activities at the regional level;
- Ensure fiduciary and safeguards compliance, including supervision, monitoring and capacity building of agencies involved in the implementation of project activities at regional and Woreda levels;
- Monitoring overall performance, providing regular financial and progress reports to BoANR and FPCU;
- Liaise with other stakeholders and involve in public communication at regional level;
- Strengthening capacity to implement and monitor project activities at regional and Woreda levels; and
- Mobilizing external technical support as necessary

Sector bureaus/offices at regional and zonal levels will assist Woreda and kebele level offices and institutions in implementation of project activities and will also engage in capacity building activities. They will provide support to Woredas in relation to all activities carried out at this level. This will include inter alia sensitization and awareness creation on CDD principles, facilitation of community level planning, establishment/strengthening of community institutions, procurement and financial management, social and environmental assessments, identification and development of livelihood opportunities, and design, construction and quality assurance of social and economic infrastructure.

# 2.3 WOREDA LEVEL

At Woreda level, project oversight will be provided by the Woreda Council (WC), which will serve as Woreda level Steering Committee (WSC). The WC, chaired by the Woreda Administrator (WA) or his/her Deputy comprises of heads of various sector offices, including pastoral development and/or agriculture, water, education, health, rural roads, small and micro enterprises agency, cooperative promotion, finance, and representatives of NGOs active in the Woredas as well as representative from microfinance institutions, if available. The WC is

ultimately responsible for all Woreda level project activities, including approval of Woreda level AWP&B. The WC will closely collaborate with RPCUs to deliver on project activities, including facilitating capacity building activities.

Technical backstopping will be provided by Woreda Technical Committee (WTC) to be established by drawing/assigning dedicated technical staff (Focal Persons (FPs) from the various sector offices responsible for project implementation at Woreda level. The main responsibility of the WTC is to facilitate local level planning, supervise implementation of subprojects, support identification and development of livelihoods, and promote community level learning. Technical backstopping will also be provided to community institutions by experts (Subject Matter Specialists (SMSs)) of the various Woreda sector offices; Woreda Technical Committees (WTCs) as well as Woreda Project Appraisal Committees (WPACs).

Each Woreda will establish a Woreda Project Appraisal Team (WPAT) with membership from the various sectoral offices, including from Woreda offices of finance. The WPAT is separate from the WTC (so that its members have no facilitation responsibilities under the project and can maintain a certain measure of independence). The main responsibility of the WPAT is to appraise community investments (subprojects), particularly in terms of social and environmental issues, technical soundness, gender equity, consistency with the Woreda Development Plan, and any issues raised by the community audit committees. They will check readiness of community institutions to implement subprojects and as subprojects are implemented, the achievement of milestones against which funds will be disbursed.

The Woreda Offices of Pastoral Development or Woreda Offices of Agriculture and Natural Resources (WoANR) will support project implementation through a Woreda Project Coordination Unit (WPCU) to be established. The WPCU will perform the following functions:

- Coordination of the implementation of project activities at the Woreda level;
- Monitoring overall performance, providing regular financial and progress reports to WoANR and RPCU;
- Liaise with other stakeholders and involve in public communication at Woreda level

Most of project's implementation will be decentralized to the community level, with beneficiary communities assuming primary responsibility for executing many project activities.

# 2.4 COMMUNITY LEVEL (HOST COMMUNITIES)

The project will follow a Community Driven Development (CDD) approach. Communities themselves will be the true implementing agencies of the project. As such, they will identify, prioritize, appraise, implement, monitor, and evaluate subprojects which are financed through the project. In addition, they will participate in participatory monitoring, evaluation and internal learning. Successful implementation of DRDIP's core interventions will depend on strong community institutions. The Project will pay particular attention to strengthening existing community institutions and build on these. Where necessary, however, it will support the establishment of new community institutions.

One of the existing community institutions at kebele level is the Kebele Development Committee (KDC). The KDC, as the developmental arm of the GoE's lowest level administration structure, will provide general implementation oversight and will liaise with and coordinate support from WPCU but also Woreda sector offices or implementing agencies. Implementation of project activities at the community level will be supported by community institutions, including existing but also new institutions to be established. Such community institutions as Community Procurement Committee (CPC), Community Project Management Committee (CPMC); Social/Community Audit Committee (SAC), Community Facilitation Team (CFT); and others, as deemed necessary, will be established to support project implementation.

Fig 3: institutional arrangement for Project Management from Federal to Kebelle Host Community Level.


## 3 LEGAL, POLICY AND ADMINISTRATIVE FRAMEWORK

## 3.1 THE CONSTITUTION AND RELEVANT POLICIES

### **3.1.1** The Constitution of Ethiopia

The constitution of the Federal Democratic Republic of Ethiopia provides the overriding principles for all legislative frame-works in the country. The concept of sustainable development and the environmental rights of the people are protected in the constitution by the articles that stipulate the rights of peoples in the country. The concept of sustainable development and environmental rights are enshrined in article 43, 44 and 92 of the Constitution of GOE.

## **3.1.2 Environmental Policy of Ethiopia**

The goal of the Environmental Policy of Ethiopia is to improve and enhance the health and quality of life of all Ethiopians and to promote sustainable social and economic development through the sound management and use of resources and the environment as a whole so as to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. For the effective implementation of the Environmental Policy of Ethiopia the policy encourages creation of an organizational and institutional framework from Federal to community levels. The Environmental Policy of Ethiopia provides a number of guiding principles that require adherence to principles of sustainable development; in particular the need to ensure that Environmental Impact Assessment:

- a) Considers impacts on human and natural environments;
- b) Provides for early consideration of environmental impacts in projects and programs design;
- c) Recognizes public consultation;
- d) Includes mitigation and contingency plans;
- e) Provides for auditing and monitoring; and
- f) Is a legally binding requirement.

## **3.1.3** Climate Resilient Green Economy (CRGE)

The DRDIP will contribute to the Climate Resilient Green Economy. Launched in 2011, the CRGE aims to achieve the GTP goal of building Ethiopia into a middle-income country by 2025 in a way that is both resilient to the negative impacts of climate change and does not result in a rise in greenhouse gas emissions. The CRGE comprises two strategies: the Climate Resilience Strategy and the Green Economy Strategy.

The Climate Resilience Strategy is overseen by the Ministerial Steering Committee (in the Prime Minister's Office), and led by a Technical Committee chaired by the Ministry of Environment & Forest. DRDIP will also support the Climate Resilient Green Economy (CRGE) by increasing climate resilience by strengthening household resilience to shocks through enhancing livelihoods; and by reducing carbon emissions and increasing carbon sequestration through re-forestation and integrated environmental management works.

## 3.2 Environmental Proclamations

### 3.2.1 Proclamation 299/2002, Environmental Impact Assessment

This Proclamation (No 299/2002) aims primarily at making the ESIA mandatory for categories of projects specified under a directive issued by the MoEFC. The Proclamation makes ESIA mandatory for specified categories of activities undertaken either by the public or private sectors, and possibly, the extension of ESIA to policies, plans and programmes in addition to projects. The proponent of the project (whether it is public or private body) must prepare an ESIA following the requirements specified in the legislation (article 8) and associated guidelines. The Ministry of Environment, Forest and Climate Change or the sector Ministries delegated by it and relevant Regional Environmental Agencies will then review the ESIA and either approve the project (with or without conditions) or reject it.

The Proclamation requires, among other things:

- Specified categories of projects to be subjected to an ESIA and receive an authorization from the Ministry of Environment, Forest and Climate Change or the relevant regional environmental agency prior to commencing implementation of the project.
- The Ministry of Environment and Forestry or the relevant regional environmental agencies may issue an exemption from carrying out an ESIA in projects supposed to have an insignificant environmental impact.

Procedures that need to be followed in the process of conducting an environmental impact assessment are described in the Proclamation and further elaborated in the draft ESIA procedural guideline issued in 2003 E.C. Thus a project developer is expected to act as follows:

- Undertake a timely environmental impact assessment, identifying the likely adverse impacts, and incorporating the means of their prevention.
- Submit an environmental impact study report to the Ministry of Environment and Forest, delegated sector ministry or the relevant regional environmental agency for review and approval.

To put this Proclamation into effect the Ministry of Environment, Forest and Climate Change has issued an ESIA Directive (Directive no.1/2008) and other draft procedural guideline documents, which provide details of the ESIA process and its requirements.

Based on the Federal ESIA Proclamation No 299/2002, many of the regional states have also prepared and put in force their own ESIA regulations. Some of these regional ESIA regulations put stricter rules on the project proponents and ESIA practitioners to facilitate for the preparation of ESIA's with dependable and sufficient information that would enable sound decision making.

#### **3.2.2** *Proclamation 300/2002, Environmental Pollution Control*

Proclamation No. 300/2002 on Environmental Pollution Control primarily aims to ensure the right of citizens to a healthy environment and to impose obligations to protect the environment of the country. The proclamation is based on the principle that each citizen has the right to have

a healthy environment, as well as the obligation to protect the environment of the country. The law addresses the management of hazardous waste, municipal waste, the establishment of environmental quality standards for air, water and soil; and monitoring of pollution. The proclamation also addresses noise and vibration as one source of environmental pollution and it seeks for standards and limits for it providing for the maximum allowable noise level taking into account the settlement patterns. In general, the Proclamation provides a basis from which the relevant environmental standards applicable to Ethiopia can be developed, while sanctioning violation of these standards as criminally punishable offences. Furthermore, it empowers the MoEFC and/or the Regional Environmental Authority to assign environmental inspectors with the duties and responsibilities of controlling environmental pollution.

## 3.2.3 Proclamation 513/2007, Solid Waste Management

This proclamation came into force with an objective of implementing effective solid waste management in the country. The Proclamation recognized the existing solid waste management problems in the country and emphasizes the need to prevent environmental pollution that may result from the disposal of solid waste. The MoEFC is responsible for initiating and overseeing the implementation of overall policies, strategies and guidelines on solid waste management. Regional environmental agencies and City Administrations are also responsible for drawing out their plans as regards the implementation of the Proclamation and monitoring efficacy.

The Proclamation promotes community participation in order to prevent adverse effects and enhance benefits resulting from solid waste. It provides for preparation of solid waste management action plans by urban local governments. Therefore Article 5.1 of the proclamation states that Urban Administrations shall ensure the participation of the lowest administrative levels and their respective local communities in designing and implementing their respective solid waste management plans. In Article 5.1 each Region or urban administration shall set its own schedule and, based on that, prepare its solid waste management plan and report of implementation.

## 3.2.4 Proclamation No 209/2000: Research and Conservation of Cultural Heritage

The Proclamation outlines the requirements for studying cultural heritage and specifies that a permit is required before any exploration; discovery or study of cultural heritage may be undertaken. Requirements for chance finds are also outlined in the Act. Article 41 which states that: "Any person who discovers any cultural heritage in the course of excavation connected with mining, explorations, building works, road construction or other similar activities shall report to the Authority and protect and keep same intact until the Authority takes delivery thereof". The Authority shall take all appropriate measures to examine, take delivery and register the Cultural heritage so discovered. Where the Authority fails to take appropriate measures within 6 months, the person that discovered the cultural heritage may be released from the responsibility by submitting a written notification with a full description of the situation to the Regional Government official.

## 3.2.5 Public Health Proclamation

The Public Health Proclamation comprehensively addresses aspects of public health, waste handling and disposal, including food quality control, food standard requirements, water quality control, availability of toilet facilities, and the health permit and registration of different operations.

## **3.2.6** *Proclamation No 455/2005: Expropriation of landholding for Public Purposes and Payment of compensation*

The proclamation provides for the expropriation of landholdings for public purposes and payment of compensation and establishes the legal principles and framework for expropriation and compensation.

Regarding the determination of compensation, the basis and amount of compensation is clearly explained in Article 7(1) which states that "land holder whose holding has been expropriated shall be entitled to payment of compensation for his property situated on the land and for permanent improvements he made". Article 7(2) also states that "the amount of compensation for property situated on the expropriated land shall be determined on the basis of replacement cost of the property".

Under article 8(1) of this proclamation a displaced land holder whose land holding has been permanently expropriated shall in addition to the compensation payable under the articles of this proclamation is paid displacement compensation, which shall be equivalent to ten times the average annual income he secured to bring the five years preceding the expropriations of the land.

## 3.2.7 Regulation No 135/2007: Council of Minister Regulation

The regulation is titled "payment of compensation for property situated on land holdings expropriated for public purposes". It is issued by the council of Ministers for the purpose of not only paying compensation but also to assist displaced persons to restore their livelihood. The regulation provides the procedures for application of proclamation No 455/2005, for compensation payment for property situated on expropriated land for public benefit.

The regulation identified the type of properties eligible for payments of compensation which includes buildings, fences, crops, perennial crops, trees, protected grass, improvement made on rural land; relocated property, mining license and burial grounds.

## 3.2.8 Environmental guidelines and standards

The MoEFC has issued some guidelines and standards which are endorsed by the National environmental council. The purpose of these guidelines and directives is to ensure that development projects integrate environmental considerations in the planning process as a condition for their approval. These include Directive No.1/2008, which was issued to determine projects subject to environmental impact assessment. Other draft environmental guidelines prepared and posted on the website of the MoEFC that are widely used for several years now include the following:

**ESIA Procedural Guideline (draft), November 2003:** This guideline outlines the screening, review and approval process for development projects in Ethiopia and defines the criteria for undertaking an ESIA. According to this ESIA procedural guideline, projects are categorized into three schedules:

Schedule 1: Projects which may have adverse and significant environmental impacts thus requiring a full Environmental Impact Assessment

- **Schedule 2:** Projects whose type, scale or other relevant characteristics have potential to cause some significant environmental impacts but are not likely to warrant a full ESIA study
- Schedule 3: Projects which would have no significant environmental and social impact and do not require an ESIA

However, projects situated in an environmentally sensitive areas such as land prone to erosion; desertification; areas of historic or archaeological interest; important landscape; religiously important area, etc. will fall under Schedule I irrespective of the nature of the project.

*Guideline for Environmental and Social Management Plan (draft)*, May 2004: outlines the fundamental contents that need to be featured while preparing an Environmental and Social Management Plans (EMP) for proposed development projects in Ethiopia and provides template forms to be used for such purposes. The guideline also provides guidance on the preparation of institutional arrangements for implementation of EMPs.

*ESIA Guideline, May 2000:* The ESIA Guideline Document provides essential information covering the following elements:

- Environmental Assessment and Management in Ethiopia
- Environmental Impact Assessment Process
- Standards and Guidelines
- Issues for sector environmental impact assessment in Ethiopia covering agriculture, industry, transport, mining, dams and reservoirs, tanneries, textiles, hydropower generation, irrigation projects and resettlement.

## **3.2.9** Relevant International Agreements

The following environmental conventions has been signed and ratified by Ethiopia. As a result the following International Conventions are applicable in the country.

- The Convention on Biological Diversity;
- The United Nations Framework Convention on Climate Change;
- The United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa;
- The Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade; and
- The Stockholm Convention on Persistent Organic Pollutants.

#### Table 4. Relevant MoEFC Guidelines and Standards

GUIDELINE / STANDARD	DESCRIPTION
Directive No.1/2008	The directive lists about 22 types of development projects that are determined to be subject to ESIA in accordance with proclamation 200/2002. The directive is endorsed by the National Environment Council.
Draft ESIA Guideline, July 2000	<ul> <li>The ESIA Guideline Document provides essential information covering:</li> <li>Environmental Assessment and Management in Ethiopia</li> <li>The Environmental Impact Assessment Process</li> <li>Issues for sectoral environmental impact assessment in Ethiopia covering: agriculture, industry, transport, mining, dams and reservoirs, tanneries, textiles, hydropower generation, irrigation projects and resettlement projects.</li> <li>Annex 1 identifies the activities for which a full ESIA, partial measure or no action is required. Annex 2 provides an example of an application form. Annex 3 provides standards and guidelines for water and air.</li> </ul>
Draft ESIA Procedural Guideline, November 2003.	The guideline outlines the screening, review and approval process for development projects in Ethiopia and defines the criteria for undertaking an ESIA.
Draft Guideline for Environmental Management Plan, May 2004	The guideline outlines the necessary measures for preparation of an Environmental Management Plan (EMP) for proposed developments in Ethiopia and the institutional arrangements for implementation of EMPs.
Environmental Impact Assessment Guidelines on Road and railway, 2004	The guideline focus on linear transport projects, more specifically on roads and railways, which have many common features in terms of environmental impacts. It highlights major issues and potential impacts that should be taken into account during the preparation and assessment phases.
Ethiopian Roads Authority (ERA) Environmental Procedures Manual, 2001	ERA prepared this manual for the use and technical guidance for design personnel of the Ethiopian Roads Authority and consultants doing an Environmental Assessment Study during road design. The manual was developed in order to standardize Environmental Procedures for design of new roads and rehabilitation of existing roads.

#### 3.3 WORLD BANK SAFEGUARD REQUIREMENTS

The present DRDIP ESMF will serve as an instrument to satisfy the Bank's Environmental Assessment (EA) requirement. In the present context of the DRDIP, the Environmental Assessment takes into account the natural environment (air, water, and land); human health and safety; as well as social aspects (involuntary resettlement and physical cultural resources). The Environmental Assessment will consider natural and social aspects in an integrated way.

#### **OP/BP 4.01 Environmental Assessment**

The DRDIP ESMF will address the requirements of OP/BP 4.01 on Environmental Assessment. The objective of this policy is to ensure that DRDIP subprojects are environmentally sound and sustainable, and that decision-making is improved through appropriate analysis of actions and of their likely environmental impacts. This policy is triggered if a DRDIP subproject is likely to have adverse potential environmental risks and impacts on its area of influence.

The Bank reviews as necessary the environmental screening of each proposed DRDIP subproject to ensure whether the appropriate extent and type of EA is determined for the DRDIP subproject. The Bank ensures classification of the proposed subproject into one of the three

categories, depending on the type, location, sensitivity, and scale of the project and the nature and magnitude of its potential environmental impacts.

Category A: Proposed project is classified as category A if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works. Category-A DRDIP subprojects will not be financed by the Bank.

Category B: Proposed project is classified as category B if it's potential adverse environmental impacts on human population or environmentally important areas-including wetlands, forests grasslands and other natural habitats –are less adverse than those of Category A projects. These impacts are site specific; few if any of them are irreversible; and in most cases mitigation measures can be designed more readily than for Category A Projects.

Category C: a proposed Project is classified as category C if it is likely to have minimal or no adverse environmental impacts. Beyond screening, and application of Environmental Guideline for construction contractors, no further EA action is required for a category C Projects.

In addition, OP/BP 4.01 requires that during the EA process, for all Category A and B projects, the implementing agency consult project-affected groups and local nongovernmental organizations (NGOs) about the project's environmental aspects and takes their views into account. The implementing agency will initiate such consultations as early as possible. For Category A projects, the implementing agency consults these groups at least twice: (a) shortly after environmental screening and before the terms of reference for the EA are finalized (i.e. scoping); and (b) once a draft EA report is prepared. In addition, the implementing agency will consult with such groups throughout project implementation as necessary to address EA related issues that affect them.

#### **OP/BP 4.11 Physical Cultural Resources**

The objective of this policy is to assist the implementing agency to avoid or mitigate adverse impacts of DRDIP subprojects on physical cultural resources. For purposes of this policy, "physical cultural resources" are defined as movable or immovable objects, sites, structures, groups of structures, natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. Physical cultural resources may be located in urban or rural settings, and may be above ground, underground, or underwater. Their cultural interest may be at the local, provincial or national level, or within the international community.

The impacts on physical cultural resources resulting from project activities, including mitigating measures, may not contravene either the Country's national legislation, and OP/BP 4.11, or its obligations under relevant international environmental treaties and agreements. The following projects are classified during the environmental screening process as Category A or B, and are subject to the provisions of this policy: (a) any project involving significant excavations, demolition, movement of earth, flooding, or other environmental changes; and (b) any project located in, or in the vicinity of, a physical cultural resources site recognized by the Country. The implementing agency identifies physical cultural resources likely to be affected by the DRDIP subproject and assesses its potential impacts on these resources as an integral part of the EA process, in accordance with the Bank's EA requirements. The TORs normally

specify that physical cultural resources be included in the baseline data collection phase of the EA. As an integral part of the EA process, the implementing agency develop a physical cultural resources management plan that includes measures for avoiding or mitigating any adverse impacts on physical cultural resources, provisions for managing chance finds, any necessary measures for strengthening institutional capacity, and a monitoring system to track the progress of these activities. The physical cultural resources management plan is consistent with the country's overall policy framework, OP/BP 4.11 and national legislation and takes into account institutional capabilities with regard to physical cultural resources.

#### **OP/BP 4.12 Involuntary Resettlement**

Involuntary Resettlement is triggered in situations involving involuntary taking of land and involuntary restrictions of access to legally designated parks and protected areas. The policy aims to avoid involuntary resettlement to the extent feasible, or to minimize and mitigate its adverse social and economic impacts. It promotes participation of displaced people in resettlement planning and implementation, and its key economic objective is to assist displaced persons in their efforts to improve or at least restore their incomes and standards of living after displacement. The policy prescribes compensation and other resettlement measures to achieve its objectives and requires that borrowers prepare adequate resettlement planning instruments prior to Bank appraisal of proposed projects.

This policy covers not only physical relocation but any loss of land or other assets resulting in: (i) relocation or loss of shelter: (ii) loss of assets or access to assets; (iii) loss of income sources or means of livelihood, whether or not the affected people must move to another location. This policy also applies to the involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons. In the event that there are differences between national legislation and OP 4.12, the provision of the later will prevail during project implementation.

The applicable World Bank safeguard policies as it applies to the DRDIP are summarized in table 5.

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP	Yes	OP 4.01 is triggered because of the following activities of the project: (i) expansion and improvement of service delivery which will include small infractructure. (ii) construction or rehabilitation of physical structures for
4.01		water catchment management such as check-dams, water harvesting structures, and (iii) land-based livelihood activities which may have limited adverse environmental and social impacts. The specific sites for implementing these activities are not yet known, therefore Environmental and Social Management Frameworks (ESMEs) have been prepared in all
		the three project countries as the specific instrument for analyzing potential environmental and social risks. The ESMF would be used to develop a site specific Environmental Management Plan (EMP) prior to the commencement of activities mainly under Component 1 and 3. The
		ESMF includes standard methods and procedures, along with appropriate institutional arrangements for screening and reviewing project activities and monitoring the implementation of mitigation measures to prevent adverse and cumulative impacts. The effective use of the ESMF would be regularly reviewed and audited.
Natural Habitats OP/BP 4.04	Yes	Project activities in Ethiopia are not likely to encompass natural habitats. In Uganda, specific project sites are currently not known. However, Component 2 may involve forestry, water catchment management and thus likely encompass some natural habitats such as forests, wetlands, rivers, etc. Provisions in the ESMF have been made to ensure that the proposed interventions are screened and appropriate preventive or mitigation measures are formulated and executed during project implementation.
		However in Djibouti, the Ali Sabieh Region is home to unique biodiversity, especially the "Aire naturelle terrestre protegee d'Assamo" which is natural habitat to the Beira antelope. No project activities will be supported in this protected area. The project will also not support any activities which are likely to indirectly affect the ecosystem critical for the survival of this species. The ESMF will screen out any activities that could have indirect or cumulative impacts on this habitat.
Forests OP/BP 4.36	Yes	Activities under Component 2 are likely to have a positive impact on forests with the implementation of physical and biological measures for soil and water conservation and afforestation. The ESMF provides detailed procedures to screen program activities/subprojects for potential adverse environmental and social impacts, and to take measures to avoid, minimize and mitigate impacts on forests. Project activities in Djibouti are not likely to take place in protected forest areas.
Pest Management OP 4.09	Yes	The project will support activities under Component 3 which are likely to be agriculture based and may increase the application of agrochemicals (insecticides, herbicides, fertilizers, etc.). Therefore, the ESMF includes a guideline for an Integrated Pest Management (IPM) to address related environmental and social impacts of the project.
Physical Cultural Resources OP/BP 4.11	Yes	The project sites and their potential cultural and historical significance are not known. The ESMF includes provisions and a set of procedures to screen project activities for such impacts and to deal with chance finds.
Indigenous Peoples OP/BP 4.10	Yes	Triggered only for Ethiopia, a Social Assessment (SA) and enhanced public Consultations with the affected persons and communities were completed. The Social Management Plan provides key findings of the SA including the process used to foster free, prior, and informed consultations and broad community support, including provision of grievance redress

# Table 5: World Bank – Applicable Operational Policies, Bank Procedures

		and benefit sharing issues. Identified mitigating measures have been incorporated into the project design
Involuntary Resettlement OP/BP 4.12	Yes	The proposed project will not undertake any activities that will displace people. However, it would support small-scale infrastructure that might affect land holdings of individual farmers. While these interventions are yet to be identified, as a precautionary measure, the project has prepared and consulted upon resettlement policy frameworks for all three countries and these will be disclosed prior to appraisal to address any issues which might arise from economic displacement and/or restriction of access to communal natural resources.
Safety of Dams OP/BP 4.37	Yes	Component 2 may support small dam constructions (less than 4.5 meters) as part of small and micro scale irrigation schemes. The project will use the FAO 'Manual on Small Earth Dams, A Guide to Siting, Design and Construction'' or comparable text in French.
Projects on International Waterways OP/BP 7.50	Yes	The project will finance small-scale irrigation investments but these are not likely to be located in international waterways basins in Uganda and Djibouti. However, in Ethiopia the project is located in international water basins such as Baro, Gilo, Gambella, Awash, Nile and Wabi Shebelle rivers. While the impact of small-scale irrigation on these rivers would be insignificant and the cumulative abstraction be minor, Riparian countries will be notified in accordance with the policy.
Projects in Disputed Areas OP/BP 7.60	No	n/a

#### 3.4 INSTITUTIONAL FRAMEWORK FOR NATIONAL ENVIRONMENTAL MANAGEMENT

#### 3.4.1 Proclamation 295/2002, Establishment of Environmental Protection Organs

The Environnemental Protection Proclamation (Proc. 295/2002) assigns responsibilities for environmental management to various entities in order to ensure sustainable use of environmental resources, thereby avoiding possible conflicts of interest and duplication of efforts. It is also intended to establish a system that fosters coordinated but differentiated responsibilities among environmental protection offices at a Federal and Regional State level. Each of the main Federal institutions active in the construction of infrastructure, or economic development is required by law to have its own environmental unit.

#### 3.4.2 *Ministry of Environment, Forest and Climate Change*

At the National level, the MoEFC is mandated with responsibilities for management of environmental issues. An amendment to the definition of powers and duties of the executive organs of the FDRE which was made in 2013 (proclamation no. 803/2013) gives the MoEFC powers to fulfill its role in ensuring the realization of the environmental objectives provided under the constitution. In a recent and similar amendment to the definition of powers and duties of the executive organs of the FDRE that was made following the 2015 General elections, the name of the Ministry was slightly changed from MoEFD to MoEFC to reflect the focus of its growing role in Climate Change activities. MoEFC is involved in the development of environmental policy and legislation; setting environmental quality standards for air, water and soils; monitoring pollution; establishing systems and procedures for ESIA; and in establishing a national environmental information system.

Enforcing the laws and policies including ESIA, environmental monitoring and auditing, for all projects or activities that falls under the control of the Federal Government also falls within the responsibilities of the MoEFC and its delegated sector ministries. MoEFC had delegated six sector ministries including the Ministry of Transport; Information and Communication, Ministry of Agriculture, Mining, Industry, Water & Energy, as well as Ministry of Trade. The delegated sector Ministries have been assigned the dual role of reviewing ESIA reports as well as ensuring timely and effective implementation supervision of sector specific ESIAs.

The Regional States are also required to establish their own regional environmental agencies, which are responsible for ESIAs for regionally managed infrastructures or development activities. The Ministry of Environment, Forestry and Climate Change (MoEFC) is required to provide regional authorities with guidance, technical support, and capacity building; support the development of various guidelines, including procedures appropriate to sector projects; undertake awareness creation in other federal agencies; and provide technical support to those agencies.

Following the screening, review and comment of environmental impact statements both the MoEFC and REPAs approve project ESIAs and issue an environmental clearance/ permit where applicable. MoEFC and Regional Environmental Protection Authorities (REPAs) also undertake environmental audits where required to ensure that projects are complying with their Environmental Management Plans (EMPs) and their commitments to environmental mitigation and monitoring.

## 3.4.3 Regional Environment bodies

Proclamation 295/2002 requires regional states to establish or designate their own regional environmental agencies. Regional Environment Protection Bureau/offices have been established in almost all of the five regional states under consideration (refer table 6). In particular the REPAs in three of the five regional states (i.e. Tigray, Benishangul Gumuz and Afar regions) have expanded their structures down to the Woreda level, though the Woreda environment protection offices are not accountable directly to the REPAs. The Woreda level environment protection offices reports to the Woreda administration. The REPAs of Ethiopian Somali and Gambella regions are established at regional bureau level only.

The regional environmental agencies are responsible for coordination, formulation, implementation, review and revision of regional conservation strategies as well as environmental monitoring, protection and regulation (Article 15). Relating to ESIA specifically, Proclamation 299/2002 gives regional environmental agencies the responsibility to evaluate ESIA reports of projects that are licensed, executed or supervised by regional states and that are not likely to generate inter-regional impacts. Regional environmental agencies are also responsible for monitoring, auditing and regulating implementation of such projects. The institutional standing of regional environmental agencies varies among regions. In some regions, they are established as separate institutions, while in others they are within Regional Sector Bureaus (e.g., Bureau of Land Use Administration).

**Role in the Implementation of the ESMF:** Following screening by the responsible PCUs, the REPAs will review and approve project EIAs and will issue an environmental permit/ license where applicable. The REPAs will undertake environmental audits where required to ensure that the implementing agencies are complying with their Environmental and Social

Management Plans (ESMPs) and their commitments to environmental management, mitigation and monitoring. Table 6 shows the existing competent environment authorities at regional level and the status of regional environmental regulations applicable for environmental and social management.

Tranugement ut regionarie ven					
Region	Cities	Responsible Regional	Availability of regional	EIA proclamation	Regional regulation/guideline
		Environment	Environment	adopted at	for land acquisition
		Environment	Environment	adopted at	for fand acquisition
		Agency	Office	regional level	& compensation in
					place
			Yes/No		
Tigray	Mekelle	Tigray EPLAUA	Yes	Yes	Yes
Benishangul	Assosa	Benishangul	Yes	No	Yes
Gumuz		Gumuz		(Draft level)	
		LAUEPB			
Gambella	Gambella	Gambella	Yes	No	No
		LUAEPA	(Regional Head		
		20112111	Office)		
Afar	Semera	Afar FPI AIIA	Ves	Ves	Ves
111 <b>a</b> 1	Jenner a		105	105	100
<b>E</b> (1 · ·	T' T'		37	<b>X</b> 7	NT
Ethiopian	Jigjiga	EPMEDA	Yes	Yes	No
Somali			(Regional Head		
			Office)		

 Table 6: Summary of existing institutions and critical legislations for Environmental and Social Management at regional level.

## 3.4.4 Ministry of Agriculture and Natural Resources

The MoANR is responsible for a broad array of agricultural production and research, food security, poverty reduction, natural resource management and rural development programs and activities. The regional Bureaus of Agriculture and Natural Rsources are directly involved in delivery of programs with Woredas, in keeping with the decentralization strategy and the government's Growth and Transformation Plan.

## 3.4.5 Ministry of Water, Irrigation and Energy

This ministry is responsible for overall inventory, planning and management of surface and ground water resources in the country. This includes aspects of watershed management, water supply and water quality management that affect rural development programs. Regional Water Bureaus are directly involved in assisting Woredas and other agencies in water resource development projects.

## 3.4.6 Woreda Offices

The Woredas are a key focus of the government's commitment to decentralized delivery of services. The various departments at the Woreda level have a direct responsibility for finance, land use, natural resources, infrastructure, and development at the local level. The agriculture departments have subject matter specialists and others who advise development agents working at the village level. The DRDIP implementation will depend upon appropriate inputs and management controls related to soil and water conservation, small scale irrigation development,

rainwater harvesting, road development and water supply, sanitation and waste management associated with rehabilitated schools and clinics.

## 3.4.7 Kebele Administration

The kebeles (areas with an average population of about 5,000) are in practice the primary contact level for most Ethiopian citizens. Kebele administrations consist of an elected Kebele council (in principle 100 members), a kebele executive committee of 5-7 citizens, a social court, and the development and security staff posted in the kebele. The kebele council and Executive committee's main responsibilities are:

- Preparing an annual kebele development plan;
- Ensuring the collection of land and agricultural income tax;
- Organizing local labor and in-kind contributions to development activities;
- Resolving conflicts within the community through the social courts.

Kebele executive committees are answerable to their Woreda council. Unlike executive committee members at the region and zone, elected members receive no stipend. The only official Kebele officer is the council chairman, who receives a small monthly allowance. The kebeles provide a link between the state and households and are responsible for enforcing the directives from the government ministries. In remote areas, the kebeles may be the only association; governmental services are conveyed through them.

#### 3.5 THE ESMF AND RESETTLEMENT POLICY FRAMEWORK

Resettlement Policy Framework is prepared in a separate document and it forms an integral part of the overall Environmental and Social Management Framework for the DRDIP. The majority of DRDIP subprojects are expected to impact mainly on rural farm or communal lands, where the proposed subprojects under component 1 to 3 will be implemented. For this reason, the RPF provides for cases of compensation and resettlement in rural situations.

The implementing agency officials (BoANR, Woreda & Kebelle Steering committee members, e.t.c) and PCU experts involved in implementation of the ESMF should read carefully the Resettlement Policy Framework and the national/regional legislation related to Expropriation of land for public purposes and compensation. The RPF will contain full details of the RAP preparation process, Proclamation 455/2005: Expropriation of Land Holdings for Public Purposes and Payment of Compensation and the Regulations No. 135/2007 on the Payment of Compensation for Property Situated on Landholdings Expropriated for Public Purposes. In the event that there are differences between national legislation and OP 4.12, the provision of the later will prevail during project implementation.

## 4 ESMF PROCESSES AND IMPLEMENTATION

This section outlines the procedures that the DRDIP implementing agencies and related stakeholders will follow to identify, assess, and review the environmental and social aspects of subproject and oversee its implementation. The ESMF requires that all DRDIP subprojects approved by the steering committee be screened for social and environmental impacts. Screening will help to determine if a subproject belongs to category B or C (or Schedule I, II & III) and thence whether an ESIA or ESMP is required for a specific subproject.

Investments under DRDIP will be subjected to environmental and social screening during the planning stage, and appropriate prevention and mitigation steps will be taken based on the results of the environmental and social screening process outlined in this document. The ESMF outlines the steps to be taken to realize the outcomes of the screening and categorization and describes the various elements of the process including:

- Steps to be taken for a partial ESIA if required, including an application for environmental authorization;
- Guidelines on the environmental and social impacts of DRDIP subprojects; and
- Compliance mechanisms including proposed generic mitigation measures.

## 4.1 ENVIRONMENTAL AND SOCIAL RISKS ADDRESSED BY THE ESMF

The DRDIP has the potential to provide significant socioeconomic benefits, and to deliver environmental benefits. However there are risks of adverse environmental and social impacts, owing to:

- Inherent environmental risks involved in economic infrastructure subprojects such as building of rural roads, schools, health centres, water supply including dust and noise, safety and accidents, pollution or contamination of waterways and groundwater sources due to application of agrochemicals, and secondary impacts owing to the sourcing of construction materials;
- Social risks during construction of subprojects such as road, school, etc. impacts on people, buildings (houses, shops, kiosks, etc.) economic and social activities in the vicinity of the project, risks of disruption to livelihoods and potential for economic resettlement and displacement of people associated with land take, loss of asset in the form of perennial fruit trees and crops,
- Limited implementation capacity of the implementing agency involved to integrate measures to prevent or mitigate environmental impacts into the design of projects, and during construction, and operation of the projects.

These risks are taken seriously by the GoE and the Ministry of Agriculture and Natural Resource owing to the importance of the environmental impacts involved and the need to ensure improvements in people's well-being. People's livelihoods are often dependent on a sustainable environment, and adverse environmental or social impacts of infrastructure projects will be carefully avoided or mitigated. The GoE has developed its environment institutions at Federal and Regional levels and corresponding legal framework for environmental management over the past twenty years. The activities set out in this ESMF therefore build on the GoE's laws, policies and procedures in environmental management and associated institutional

arrangements. The DRDIP ESMF will offer additional opportunities to enhance and strengthen environmental management practices by the GoE.

## 4.2 **GUIDING PRINCIPLES**

The DRDIP is a category 'B' project and subprojects are anticipated not to require a full ESIA. However, environmental and social analysis is necessary and appropriate environmental and social management plan has to be prepared to prevent, minimize, mitigate or compensate for adverse impacts. Thus, the environmental and social management planning and implementation under DRDIP will be guided by the following principles.

- Project planning and implementation will integrate appropriate Environmental and Social Management Plan.
- The project planning process will be participatory and communities have the opportunity to prioritize needs;
- Identified subprojects by the communities will be screened, vetted and adopted in the Kebele Development plan on the basis of selection criteria and eligibility checklist designed to eliminate projects with major or irreversible environmental or social impacts.
- Approval at regional, zonal and Woreda levels will involve the appropriate Environmental Protection and Rural Land Administration Agency/Office (REPLA/B), which will have the right to decline a project on environmental or social grounds, or to conduct an assessment of likely impacts prior to approval.

#### 4.3 **RESPONSIBILITIES IN THE ESMF SCREENING AND APPRAISAL PROCESS**

The primary responsibility to conduct the screening of subprojects rests on the project implementing bodies at Regional and Woreda levels and in particular the regional PCU which is responsible for implementing the DRDIP ESMF procedures. The implementing agency (MoANR) will establish a Project Coordination Unit (PCU) at Federal & Regional levels under the steering committees which will constitute, among others, a focal person/specialist/for environment. The PCU environment focal persons at regional levels will be in charge of conducting the environmental and social screening of each subproject. The environment focal person will be supported by members of the technical committee of the Woreda and by the Kebelle Development Committee members in conducting the environmental and social screening of subprojects. Before submitting the environmental and social screening of subprojects with application for approval to the regional environment protection offices, it will be checked and approved internally by the Woreda Project Appraisal Team and the Woreda council (i.e. the steering Committee). Table-7 below outlines the proposed roles and responsibilities for the different steps in screening and appraisal. Additionally, monitoring of safeguard instruments will be strengthened by including measurable indicators and clear reporting system concerning triggered safeguard policies.

Activity	Lead Role for preparation	Lead role for review,
	and/or implementation	approval &monitoring
Completion of screening using the	Regional PCU in association with	Regional REPA and the
form in Annex A: Screening	Woreda technical & kebelle	World Bank, for review and
Form.	development committee members	clearance of ESIA and RAP
	+ WPAC and Woreda Council	documents.
ESIA, EMP and RAP preparation	Regional PCU + Woreda Steering	
	Committee + Woreda Technical	
	Committee + KDC + Independent	
	consultants.	
Implementation of ESIA, EMP	Regional PCU, Woreda technical	
and RAP.	committee and Steering Committee	
Monitoring of EMP and RAP	+ KDC & Stakeholders (e.g.	
implementation.	Contractor + Regulatory	
Annual Audit	Authorities)	

Table 7: Outline of Roles and Responsibilities for the ESMF.

#### 4.4 **OVERVIEW OF SUBPROJECT CATEGORIZATION AND THE ESMF PROCESSES**

The ESMF has been designed to support the application of World Bank Safeguard policies in combination with Ethiopian legislation on environmental impact assessment for DRDIP subprojects. The principles of OP/BP 4.01 on Environmental Assessment in relation to Categorization of subprojects were briefly outlined as follows.

Category A: Proposed project is classified as category A if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works. Because of the small scale nature of DRDIP subprojects, it is generally expected that none of the subprojects will fall under this category and the Project will not finance subprojects that can be categorized as A.

Category B: Proposed project is classified as category B if it's potential adverse environmental impacts on human population or environmentally important areas-including wetlands, forests grasslands and other natural habitats –are less adverse than those of Category A projects. These impacts are site specific; few if any of them are irreversible; and in most cases mitigation measures can be designed more readily than for Category A Projects. Based on the nature and scale of the DRDIP funded subprojects, it is anticipated that most of it will fall under this Category B.

Category C: a proposed project is classified as category C if it is likely to have minimal or no adverse environmental impacts. Beyond screening, no further EA action is required for a category C Projects. The minimal potential impacts of those projects are mitigated through the application of standard environmental management procedures.

On the other hand, the important national requirements that define the categorization of subprojects into various schedules are summarized in the following directives and guidelines:

- a) Directive no.1/2008
- b) Draft ESIA Guideline, July 2000
- c) Draft ESIA Procedural Guideline, November 2003
- d) Draft Guideline for Environmental Management Plan, May 2004

The Draft ESIA Procedural Guideline, November 2003 describes Schedule 1, 2 and 3 activities or projects. A summary of key DRDIP subprojects related activities is presented in table 8 below.

Table	8:	MoEFC	Schedules	1.	. 2 and 3.	
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Schedule 1:	Projects which may have adverse and significant environmental and social impacts, and		
	may, therefore, require full ESIA;		
	1. Agriculture: water management projects for agriculture (drainage, irrigation), River		
	diversions and water transfers between catchments,		
	2. Forestry activities: Forest plantation and afforestation and introduction of new species		
	3. Fisheries activities: Medium to large scale fisheries, Introduction of new species in		
	water bodies, commercial fisheries		
	4. Building and Civil Engineering Industries: Construction and expansion / upgrading		
	of roads, River drainage and flood control works		
	5. Water Supply: canalization of water courses, diversion of normal flow of water		
	water transfers scheme		
	6. Transport: Rural Road programs		
	7. Land Reclamation and land development: rehabilitation of degraded lands		
	8. Multi-sectoral Projects: Diverse construction - public health facilities, schools, storage		
	building, River basin development and watershed management projects, integrated		
	conservation and development programmes e.g. protected areas.		
Schedule 2:	List of projects that require a partial environmental impact study		
	Small - Scale activities and enterprises: Bee-keeping, Small animal husbandry and urban		
	livestock keeping, Rural water supply and sanitation, Market places (livestock and		
	commodities), Wooden furniture and implement making, Hospitals and dispensaries,		
	Schools, Community centre and Social halls, play grounds, Rain water harvesting, Land		
	drainage (small scale).		
Schedule 3:	Projects which would have no impact and do not require ESIA.		
	Social infrastructure and services: Educational facilities (small scale), Teaching facilities		
	and equipment, Training, Medical centre (small scale), Medical supplies and equipment,		
	Nutrition.		
	Production Sector: Surface water fed irrigation projects covering less than 50 hectares, all		
	small scale agricultural activities, protected forest reserves (small scale), rearing of cattle		
	(<50 heads); pigs (<100 heads), or poultry (<500 heads), Livestock fattening projects (small		
	scale), bees keeping projects (small scale), all small scale trades except trade in endangered		
	species and hazardous materials, assistance to refugee returned and displaced person.		

#### 4.5 **PROCESS** AND PROCEDURES OF THE ESMF

The proposed DRDIP ESMF process and the procedural steps to be applied for identifying and managing environmental and social issues during subproject screening and approval are set out below. The complete screening form is set out in Annex A.

#### 4.5.1 Preparation

During the early stages of DRDIP Community Development Plan and Woreda Annual Plan preparation process including during subproject selection and prioritization phases, the different project implementation bodies found at Regional, Woreda and Kebelle levels including members of the steering and technical Committees, the Woreda council, the Woreda Project Appraisal Team (WPAT), members of the Kebelle Development Committee (KDC), Community Project Management Committee (CPMC) and other participating sector institutions will have to prepare and familiarize themselves with the fundamentals of the ESMF process. This is done by accomplishing the following:

a) Reviewing ESMF.

The project implementing bodies from regional to kebelle level, steering committees, PCU and relevant sector institutions and in particular the Woreda Office of Agriculture

and Natural Resources will have to obtain copies of the ESMF, as well as all relevant federal and regional laws, guidelines and procedures relating to environmental protection, cultural heritage and resettlement issues. Members of the different project implementing bodies from regional to kebelle level (i.e. steering & technical committees, PCUs, WPAT, Woreda Council, KDC, CPMC), relevant sector institution experts and the REPA staff at regional & Woreda level will have to complete training requirements for implementation of DRDIP ESMF. This will help to ensure that there is good knowledge of DRDIP ESMF requirements at different levels of the project implementing bodies, PCU and other professional and technical staffs.

- b) Establishing contact with the Regional & Woreda Environmental Protection Authority:
  - Provide them with a copy of this ESMF document;
  - Provide them with details of the contact at the Regional & Woreda Agriculture and Natural Resources Bureau and the related PCU
  - Inform the Regional EPA that subprojects are being planned that may be classified as being Category B or C activities in terms of Federal and regional environmental legislation.
- c) Identifying interested and affected communities, NGOs, businesses, etc., and organizing meetings to inform them of the proposed activities and its potential impacts.

This preparation stage is an important exercise in creating a common understanding and awareness of the procedures involved among the key actors in the implementation of the ESMF. It creates a level ground on which effective working relationships could be built in the implementation process. However, this is a one-off exercise which could be repeated only when the need emerges.

#### 4.5.2 Step 1: Environmental Screening

Subproject screening is the first important step in the ESMF processes that should be undertaken for determining whether or not a project requires an ESIA and the level at which the assessment should occur. The environment focal person in the Regional PCU will initiate the screening process. For the purpose of selecting subprojects with minimum environmental and social impacts, the screening phase for subprojects will be conducted in two stages. The first stage of environmental screening is to conduct "Eligibility Check" and the second stage involves conducting full "subproject screening".

#### Stage (a): Eligibility Check

The initial stage of the environmental screening will be conducted at the early stages of subproject selection and prioritization phase in consultation with the kebelle development committee by applying eligibility checklist (Table 9). The purpose of eligibility screening is for fast track eligibility checking of identified subprojects by the community at Kebelle level. The eligibility screening checklist can be completed by the Woreda PCU coordinator in collaboration with the kebele development committee and frontline service providers such as the DA's.

No	Will the project	Yes	No
1	Cause any large-scale physical disturbance of the site or the surroundings		
2	Cause significant involuntary displacement of people or social		
	disturbances, involuntary loss of assets		
3	Involve removal or conversion of forests and other natural resources		
4	Cause degradation of critical natural habitats		
5	Affect important physical and cultural resources (historical, religious,		
	archaeological sites and monuments)		
6	Involve construction of dams more than 10 meters		
7	Cause any loss of biodiversity		
8	Affect any vulnerable or underserved groups		

Table 9: Checklist for subproject eligibility screening at Keble level

If the subprojects is found to have any of the above features tagged by 'Yes' responses, it will be considered as not eligible and have to be rejected from inclusion into the kebelle/Woreda development plan unless the adverse impacts can be avoided by change of design or location.

#### Stage (b): Subproject screening

Eligible subprojects are further screened for potential impacts and environmental and social concerns. Environmental Screening will be conducted for each Component-1 and 2 subproject contained in the endorsed DRDIP annual plan of the Woreda having specified site location. environment focal person in the regional PCU initiates the process by completing the form contained in

Annex a: ENVIRONMENTAL Screening Form. The aim of the screening form is to assist in identifying potential impacts based on field investigations in the kebelle of the subproject site. The screening exercise should also involve the cultural heritages and resettlement aspects of the subproject. Based on the nature and size of the subproject, the environment focal person can seek assistance from other members of the Regional & Woreda PCU, the Woreda technical and kebelle development committees as well as from kebelle frontline service providers while carrying the environmental screening.

For Component-3 subproject on Livelihood improvement program a separate screening form is provided in Annex B to assess the environmental and social impacts of proposed livelihood subprojects. The regional PCU in collaboration with the Woreda PCT coordinator will conduct the screening in similar way as above.

The outcome of environmental screening will be classifying the proposed DRDIP subproject into one of Schedule 1, 2 or 3 Categories (or Category B or C). The completed screening form will be submitted first to the WPAT for internal checking and then to the Woreda Council (i.e. Woreda Steering committee) which is chaired by the Woreda administrator for internal approval. It will then be submitted to the appropriate REPA with an official application for review and approval and copies to the Regional PCU and Bureau of Agriculture and Natural Resource.

The Regional Environmental Protection Authority will review the Screening Report and will:

- (a) Accept the document with conditions relating to implementation;
- (b) Accept the documents with required and/or recommended amendments; or
- (c) Reject the document with comments as to what is required to submit an acceptable Screening Report.

Following the approval of the subproject environmental screening report by REPA, the subproject will be fed into one of the following processes based on its approved Categorization.

The results of the Screening Report – whether an environmental and social management planwill be included by the Woreda PCU in the DRDIP Application Form. The next step in the ESMF process is to proceed to the next actions to fulfil the requirements based on the screening categorization, which is outlined in step 2 below.

*Environmental Screening Principles:* Screening of subprojects can only be carried out after the specific site and location for the subproject is identified. Conducting field visit to the subproject site and developing understanding of the biophysical and social environments including the rural setting around the project site is essential to appraise how the subproject activities will interact with the environment. The aim of the screening form in Annex A is to assist in identifying potential impacts based on field investigations in the area of the subproject site. The screening mechanism seeks to focus on those subprojects with potentially significant adverse environmental impacts or whose impacts are not fully known. Thus appraisal of the subproject site is quit essential to anticipate and identify the magnitude of potential impacts which is necessary for carrying the screening exercise.

## 4.5.3 Step 2A: Category A Projects, full ESIA preparation

The purpose of preparing an ESIA is to generate sufficient information on significant impacts, which will be used to determine whether or under what conditions the subproject should proceed.

The responsibility of preparing the an ESIA is that of the Woreda Council (Woreda steering Committee) and the lead implementing agency at Woreda level which in this case is the Woreda Office of Agriculture and Natural Resource. The cost of conducting the ESIA will be covered by the Woreda lead implementing agency, from the DRDIP budget allocated for ESMF implementation. The implementing agency may need to procure an independent environmental consultancy service to prepare the ESIA. Hence, there will be a need to develop a comprehensive ToR and prepare a comprehensive scope of work for a consultant who will carry out the Environmental and Social Impact Assessment for the DRDIP subproject.

As a starting procedure to develop the ESIA ToR, scoping of the Schedule-I DRDIP subproject will be needed. Based on the nature and type of the DRDIP subproject, the scoping can be carried either by a team composed from the Woreda and regional technical committee members or by the environment safeguard specialist of the regional PCU along with the Woreda Project Coordinator. In the earlier case, the Regional Agriculture and Natural Resources office in collaboration with the regional PCU can establish a scoping team drawing experts from relevant stakeholder/sector institution, environmental and social safeguard specialists from the PCU and others as appropriate. The main purpose of the scoping exercise is to:

- a) establish boundaries of the ESIA study
- b) identify the main issues or concerns to be assessed
- c) involve and consult potentially affected groups
- d) consider reasonable alternatives

The outcome of scoping is a Terms of Reference that will guide the undertaking ESIA study for the proposed subproject under consideration. Before applying the ESIA TOR for selection of consultancy, it requires to be reviewed and agreed upon with REPA. Hence, it will be submitted to the relevant Regional EPA with a request for review and approval. REPA will review the ESIA TOR and may accept the ToR for implementation, accept the ESIA TOR with required and/or recommended amendments/additions to be made, or reject the ESIA TOR with comments explaining the improvements required to submit an acceptable ESIA TOR. The resulting agreed ESIA TOR is expected to consist of the following contents which are also required by the national ESIA laws:

- (a) Executive summary
- (b) Policy, legal, and administrative framework.
- (c) Project description.
- (d) Baseline data.
- (e) Environmental and social impacts.
- (f) Analysis of alternatives
- (g) Proposed Mitigation Measures
- (h) Environmental and Social Management Plan (EMP).
- (i) Appendixes:
  - References.
  - List of ESIA report preparers.

- Record of interagency and consultation meetings.
- Tables presenting the relevant data.
- List of associated reports.

An outline for the full Terms of Reference for a DRDIP subproject ESIA is contained in Annex C: Terms of Reference for ESIA.

Following the approval of the ESIA ToR and hiring of a competent consultancy, carrying out the ESIA study based on the ToR will continue. As part of the ESIA preparation process, Environmental and Social Management Plans (ESMPs) will be prepared. Effectiveness of the ESMP will ensure that appropriate mitigation measures have been employed to avoid and/or minimize any potential impacts resulting from the implementation of the proposed subproject activity.

A monitoring and supervision plan for the ESMP that summarizes key areas on which internal and external monitoring and supervision will focus should also be prepared. The Monitoring and Supervision plan should identify the critical risks to implementation of the ESMP and how such risks will be monitored during implementation. The Regional EPA would advise the implementing agency on its role for carrying out external environmental monitoring and supervision of the ESMP within the overall plan for the project.

Finally the ESMP will outline the appropriate budget required to implement measures for mitigation and monitoring.

During the study of the full Environmental Impact Assessment the regional environment safeguard specialist together with other members of the PCU and relevant technical committee members will have to ensure the quality of the assessment by conducting interim review of draft ESIA report submissions. The full ESIA and ESMP will then be presented by the regional PCU environment safeguard specialist and the consultant in collaboration with the Woreda project coordinator to the Woreda project appraisal team and steering committee for further internal review and approval. The draft full ESIA report will also be submitted to the Regional and Federal PCUs for further internal review and comment.

The completed full ESIA report will then be submitted to the relevant Regional EPA for clearance with an official application for review and approval. The ESIA should finally be reviewed and cleared by the World Bank. The stakeholders should consulted upon on the design, and scoping and before the ESIA is finalized.

## 4.5.4 Step 2B: Category B Sub Projects, Partial ESIA preparation

Category B subprojects will be subject to a limited Environmental and Social impact assessment that could be carried out by the regional and Woreda PCU or with the help of an independent consultant. Category B subprojects are required to prepare "Partial" ESIAs in which the depth of its information requirement can be defined in consultation with the relevant Regional EPA.

Generally, the scope of partial ESIA for Category B project is narrower than that of Category-A ESIA. Like Category-A ESIA, it examines the project's potential negative and positive environmental impacts and recommends any measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and improve environmental performance which will be summarised in the ESMP. The findings and results of the partial ESIA will be described in the project documentation. Undertaking the preparation of the partial ESIA involves:

- A field assessment of the subproject area to identify likely environmental and social impacts;
- Consultation with beneficiaries and affected communities;
- Use of the ESMF impact mitigation checklists attached in Annex E:
- Preparation of an ESMP or, if necessary, a full or abbreviated RAP

During the study of the partial Environmental and social impact assessment and Environmental Management Plan the regional environment safeguard specialist together with other members of the PCU, WPAT, and WTC will have to ensure the quality of the assessment by conducting interim review of draft ESIA report submissions. The partial Environmental Impact Assessment and Environmental Management Plan will then be presented by the regional PCU environment safeguard specialist and the consultant in collaboration with the Woreda project coordinator to the WPAT and Woreda steering committee (Woreda Council) for further internal review and approval. The draft full ESIA report will be submitted to the Regional and Federal PCUs for further internal review and comment.

The completed partial ESIA report will then be submitted to the relevant Regional EPA with an official application for review and approval. For sub-projects that requires partial and full ESIAs, the World Bank should review and clear the ESIAs before they are implemented. The stakeholders will be consulted upon on the design and scoping and before the ESIA is finalized.

For Category C projects, the application of Environmental Guideline for construction contractors will be important and no further EA action is required.



Figure 4: Full/Partial ESIA Application Process

## 4.5.5 Step 3A: Review and Decision

The relevant Regional Environmental Protection Authority will review the full/partial ESIAs and ESMPs submitted to it by the lead implementing agency/ regional PCU. The purpose of review is to examine and determine whether the full/partial ESIA and EMP are an adequate assessment of the environmental effects of the DRDIP subproject under consideration and of sufficient relevance and quality for decision-making. Reviewing by the REPA may include considerations of the adequacy of:

- Compliance with the "approved TOR";
- Required information;
- The examination of alternatives, assessment of impacts, appropriateness of mitigation measures and monitoring schemes as well as implementation arrangements;
- The use of scientific and analytical techniques;
- The extent of public involvement and reflection of PAPs concerns; and

The Regional Environmental Protection Authority will review the ESIA and EMP and may decide to:

- (a) Accept the document with conditions relating to implementation;
- (b) Accept the documents with required and/or recommended amendments; or
- (c) Reject the document with comments as to what is required to submit an acceptable ESIA and EMP.

## 4.5.6 Step 3B: Disclosure

In compliance with World Bank guidelines and the ESIA proclamation, before a DRDIP subproject ESIA is approved, the applicable documents (ESIA, ESMP, CRMP and/or RAP) must be made available for public review at a place accessible to local people (e.g. at Woreda & kebele offices, regional bureaus, at the Regional EPA), and in a form, manner, and language they can understand. Disclosure of the ESIA in both the World Bank's info shop website is also a requirement for the DRDIP subproject ESIA.

## **Step 4: Implementation & Supervision**

When approval has been given to the full/partial ESIA/ESMP implementation of mitigation measures and its systemic follow-up is needed for the subproject. Supervision and compliance monitoring comprises on site-inspection of subproject activities to verify that measures identified in the ESMP, are being implemented. Compliance monitoring and supervision of the EMP covers:

- determining whether the project is being carried out in conformity with environmental safeguards and legal agreements;
- ensuring that the anticipated impacts are maintained within the levels predicted,
- identifying problems as they arise during implementation and recommend means to resolve them;
- monitoring that certain unforeseen impacts are identified and mitigated,
- recommending changes in project concept/design, as appropriate, as the project evolves or circumstances change; and

- Realizing and optimizing the benefits expected, and
- Providing information for a periodic review and alteration of the environmental management plan and enhance environmental protection through good practice at all stages of the project.

It is therefore necessary that Environmental and Social Management Plan, Cultural Resources Management Plan or Resettlement Action Plan is supervised, monitored and reported on together with other progresses of the subprojects.

For subprojects implemented by contractors, most of the arrangements regarding design, construction, implementation, and supervision are contained in a legal contract signed between the implementing agency and the contractors. It is critical that the results of the ESIA process (mitigation measures, design specifications, supervision plans, and monitoring arrangements) be duly incorporated into the legal contract. In addition to special measures that may need to be included in the contract, the DRDIP subproject will find it very advantageous to prepare a standard set of environmental clauses to be included in each contract to be done by contractors. If necessary, these could be prepared individually for different categories of DRDIP subprojects. Examples of contract clauses are provided in Annex J: Example of Environmental Contract Clauses.

Monitoring the compliance of DRDIP subproject implementation with the mitigation measures set out in its ESMP, CRMP and/or RAP will be carried out internally and externally. Internal monitoring will be mainly conducted by the environment and social safeguard specialist of the regional PCU, and the Woreda PCT coordinator who are responsible for environmental and social management. The regional and Woreda PCU and in particular the environment and social safeguard specialist and PCT coordinator will have the primary responsibility for carrying out this monitoring by regularly visiting the subprojects, and pursuing the corrective measures as required. Moreover, with the support and guidance of the regional and Woreda PCU, the Community Project Management Committee (CPMC) and Kebelle Development Committees will also play an important role in closely monitoring and supervising implementation of the mitigation measures in subprojects implemented by the community itself. The supervision and monitoring to be conducted on the ESMP should focus on the critical risks to implementation of the ESMP. On the other side, for subprojects implemented by a contractor, the construction firm should also assign a supervisor to conduct its own internal monitoring on the implementation of those mitigation measures included in the signed contract through environmental clauses.

The implementation of the recommended mitigating measures will also be monitored externally by the relevant Regional Environmental Protection Authority. The compliance monitoring of projects implemented in the jurisdiction of the zonal and Woreda level environmental protection offices is their main area of responsibility and hence will undertake external monitoring and supervision on the subprojects. The PCU environment and social safeguard specialists will have to collaborate with the Regional and/or Woreda Environmental Protection Authority in the planning for external compliance monitoring inspections. The planning for external compliance monitoring/inspection could be initiated by REPA itself or (if that is not coming forward from REPA side) by the implementing agency/PCU/ in line with the M&E system.

## 4.5.7 Step 5: Annual Environmental Reports

Once implementation of the DRDIP subproject has started, regular supervision missions will be carried out by the regional implementing agency PCU as described in the preceding section. An annual environmental report must be compiled and submitted by the regional PCU to the Woreda and Regional Steering Committee for submission to the Regional EPA and World Bank for review.

The purpose of the annual report is to provide:

- A record of DRDIP project activities, experience and issues running from year-to-year throughout the DRDIP that can be used for identifying difficulties and improving performance; and
- Practical information for undertaking an annual review.

Format for Annual Environmental Report is appended in Annex D.

## 4.5.8 Step 6: Annual Reviews

ESMF implementation will also be supported by conducting annual environmental and social performance audit (including audit of implementation of ESMPs that will be carried out by a third party. The third-party annual environmental and social performance audits will be conducted on the DRDIP to evaluate the overall implementation of the ESMF and the Project itself. The annual environmental and social performance audits will be considered to be the principal source of information to Project management for improving performance, and to Bank supervision missions. It is expected that these reviews will be carried out by an independent local consultant or other service provider that is not otherwise involved in the Project. The purpose of the reviews is two-fold:

- to assess compliance with ESMF procedures, learn lessons, and improve future ESMF performance; and
- to assess the occurrence of, and potential for, cumulative impacts due to Projectfunded and other development activities.

#### 4.6 SUBPROJECTS REQUIRING A SPECIAL PROCEDURE AND GUIDELINES

#### 4.6.1 **Projects involving Asset Acquisition or Loss of Access to Assets**

It may appear that a subproject might involve involuntary loss of assets or access to assets. The World Bank's policy on involuntary resettlement (OP 4.12) applies to all land acquisition and any changes in access to resources due to a subproject. This issue covers:

- i. a reduction in people's access to their economic resources such as land, pasture, water, public services or other resources on which they depend;
- ii. the temporary or permanent loss of crops, fruit trees and household infrastructure such as granaries, outside toilets, kitchens, etc;
- iii. adverse impacts especially on vulnerable people such as the elderly, the physically challenged and women, particularly if heads of household, or widows.

The policy aims to avoid involuntary resettlement to the extent feasible, or to minimize and mitigate its adverse social and economic impacts. This policy also applies to the involuntary restriction of access to legally designated parks and protected areas resulting in adverse impacts on the livelihoods of the displaced persons. Under all circumstances where such impacts might arise, the subproject must be referred to the Woreda Valuation and Compensation Committee for a determination as to whether such involuntary losses are expected, and if so, for implementation of the procedures in the Resettlement Policy Framework. In the event that there are differences between National legislation and OP 4.12, the provision of the later will prevail during project implementation.

## 4.6.2 Projects Involving Physical Cultural Resources Management

If there is a possibility that subproject construction or other activities may result in damage to cultural property, procedures for avoiding such damages should be followed. It is important that the ESIA identify the specific procedures for addressing impacts on cultural property of a given subproject. As an integral part of the ESIA process, the implementing agency should develop a physical cultural resources management plan (CRMP) that includes measures for avoiding or mitigating any adverse impacts on physical cultural resources and provisions for managing chance finds. The measures will need to be integrated into the ESMP to address the issues of avoiding damage to cultural properties.

The plan in the ESMP should be consistent with Proclamation No 209/2000 on Research and Conservation of Cultural Heritage, the World Bank OP 4.11 for Cultural Property, and should take into account institutional capabilities relating to the management and preservation of physical cultural resources. The procedures to avoid damage to cultural property would include:

- Consultations with the appropriate authorities and local inhabitants to identify known or possible sites during subproject planning;
- Relocating of subprojects to avoid identified sites; and
- Construction procedure for dealing with "chance finds". This procedure includes cessation of work until the significance of a "find" has been determined by the appropriate authorities and local inhabitants, and until fitting treatment of the site has been determined and carried out.

#### 4.6.3 Medical Waste Management

It is critical that a medical waste management plan is prepared for all subprojects financed under the DRDIP which include the construction or rehabilitation of health facilities (irrespective of their size). Therefore subprojects involving the rebuilding of rural health facilities should include provisions for the safe management of medical wastes. The following strategy addresses medical waste issues in the DRDIP subproject:

- A Waste Management Guide for Rural Health Clinics and market places has been prepared by Government and disclosed, to assist subproject design and operations;
- A preliminary environmental audit of clinic rehabilitation proposals will be undertaken by a qualified professional;
- All health facility subprojects will undergo environmental screening to identify environmental impacts and carry environmental assessment to develop mitigation requirements associated with the health facility waste;

- All health facility subprojects will be required to prepare a Waste Management Plan following approval of the subproject by Woreda Council and before implementation. This plan will be based on the Waste Management Guide for Rural Health Clinics. The Medical Waste Management Plan addresses:
  - > The quantity and quality of wastes generated
  - > The available disposal and treatment options at the site
  - Methods to segregate medical waste from general waste
  - > Internal rules for waste handling, collection and storage

#### 4.6.4 Integrated Pest Management

The Government supports the use of biological or environmental controls and other measures to reduce reliance on agricultural chemicals. Integrated Pest Management (IPM) refers to a mix of farmer-driven, ecologically based pest control practices that seek to reduce reliance on synthetic chemical pesticides. It involves (a) managing pests (keeping them below economically damaging levels) rather than seeking to eradicate them, (b) relying, to the extent possible, on nonchemical measures to keep pest populations low; and (c) selecting and applying pesticides, when they have to be used, in a way that minimizes adverse effects on beneficial organisms, humans, and the environment.

The following strategy addresses the use of agricultural chemicals and to promote IPM in the DRDIP:

- Information on acceptable and unacceptable pesticides will be provided to farmers and Woreda staff to encourage compliance with government policy and international conventions.
- Training in agricultural activities on pesticide and fertilizer applications, safe chemical handling and IPM will be provided to communities as required.
- Pest-resistant crops varieties
- Use of disease/weed-free planting stock
- Farming practices that increase resistance to pests (proper soil preparation, spacing, planting, watering, etc.)
- Farming practices that suppress pest populations (crop rotation, cover crops, intercropping, etc.)
- Traditional manual control of pests (weeding, removing insect pods, etc.)
- Biological controls (predators, pathogens, pheromones, etc.)
- Targeted chemical use (pest scouting/selective treatments)
- Based on the Guide, an IPM Plan will be produced for each agricultural activities which likely utilize agrochemicals.

## 5 GUIDELINES ON IMPACT MITIGATION AND MONITORING

The project will have both positive and negative impacts and the impacts may occur at different stages of the project cycle (mainly during implementation and operation). The environmental and social management plan is intended to maximize the positive impacts and ensure sustainability of projects by avoiding, minimizing and/or mitigating the negative impacts through appropriate mitigation measures.

### 5.1 OVERALL SOCIAL AND ENVIRONMENTAL BENEFITS AND IMPACTS

The livelihood, infrastructure and service subprojects to be implemented under the DRDIP are likely to deliver significant social benefits, provided that they are planned in an inclusive manner, and they are designed to ensure a distribution of benefits to vulnerable groups including the old, youth, women, and the poor. It is anticipated that implementation of the DRDIP will be beneficial to communities for it will bring about improvements in livelihoods and in areas of access to basic services such as water, education, and health.

The environmental and social impacts of the Environmental Management component of the DRDIP subproject are also expected to be largely positive because the project activities are focused on degraded landscape rehabilitation through physical and biological conservation structures (bunds, terraces, trenches, diversion canals, etc...), afforestation and reforestation on communal and private lands. The DRDIP will be beneficial to the environment since environmentally and socially sound natural resource management practices (including rangeland) will be introduced. To mention some of the cumulative positive impacts of such interventions:

- > Important habitats and biodiversity will be restored at the landscape level
- Critical ecosystems will be rehabilitated and ecosystem goods and services will be revitalized
- > Farm and landscape productivity will be improved
- Local livelihoods will be diversified and improved.

The potential environmental benefits of the DRDIP may also depend on the type, nature and location of the subproject. There is a need to ensure that projects are planned, constructed and operated in a manner which maximizes benefits. In particular, this should take cognizance of the poor and vulnerable groups as mentioned above, and ensure their participation in ongoing consultation and targeting throughout the design and implementation of the DRDIP subprojects.

#### 5.2 ADVERSE ENVIRONMENTAL IMPACTS

Some of the project interventions may have some localized but less sensitive, site specific and perhaps reversible environmental impacts. These types of subprojects include construction of water harvesting structures (e.g., ponds, storage tanks), community access roads, roadside flood harvesting/drainage systems, diversion canals, small dams, small scale irrigation structures, area ex-closures, reforestation and afforestation in communal and private lands. The subprojects may include agricultural land management activities that may necessitate applying agrochemicals as part of the agronomic practices.

In some cases, there may be risks of permanent or economic displacement of people, requiring a carefully planned and implemented RAP. Community subproject activities are expected to

have some land acquisition or restriction of access which include the following: rural feeder roads; schools; small-scale irrigation; water supply (ponds, shallow wells, cisterns, water pipe line extension, spring development): health care (health posts and veterinary posts); rangeland management; household livelihood diversification enterprise such as (i) livestock rearing/fattening; (ii) fish production; (iii) bee-keeping and honey production; and (iv) crop production activities; etc.

The subprojects will be screened for the possible environmental and social impacts and appropriate mitigation measures will be developed. The checklist of activities (source of impacts), the potential negative impacts and possible mitigation measures for subprojects covered under the DRDIP component are indicated in Annex E.

### 5.3 CUMULATIVE IMPACTS OF THE PROJECT

DRDIP subprojects may individually have insignificant adverse environmental impacts. However, several projects in combination, or in combination with other government or private sector activities, could have a larger, more significant cumulative impact.

The avoidance and mitigation of cumulative impacts requires: avoidance and mitigation of the impacts of individual projects; careful planning based on sound technical knowledge of the location, size, and material requirements of infrastructural projects, within the Woreda and regional planning cycles.

subproject	r otonium r (ogun (o rinpuous	
Construction of roads subprojects	Footpath blocking drainage for runoff water	- Install culverts or bridges across natural and manmade drainage channels and keep cleared of debris
	Ponding on path providing breeding site for vectors of water borne disease	- Construct path so that water drains away by rising above surrounding ground level and by sloping the surface of the path towards the sides; fill depressions with granular material
	Footpath becoming a water course during rains and causing erosion	- Provide drainage ditches on both sides of the path and install small check dams to reduce velocity of water flow; direct water from ditch alongside footpath into natural or manmade drainage channels as frequently as possible to minimize the volume of runoff water carried by the ditch; plant shrubs and trees on the uphill side of the ditch to slow water runoff
	Erosion of lands downhill from road bed or in borrow areas	-Plant grass along the edge of the road; construct during dry season
	Create dust to nearby houses during construction	-Dust control by water or other means
	Increased sediments into streams, ponds and rivers due to erosion from road tops and sides	- Prevention of erosion by re-vegetation, dry construction and physical stabilization
	Possible land acquisition, loss of livelihoods	- Refer to RPF or OP 4.12
	Creation of stagnant pools of water in left borrow pits	- Rehabilitation of borrow pits sites
	Flooding and erosion caused	- Ensure that openings are adequately sized to

Table 10:	Potentia	al Negative Impacts and Poss	ible Mitigation Measures for Subproject activitie	S
Type	of	Potential Negative Impacts	Example of Possible Mitigation Measures	l.

	by overflowing and blockage of openings -Bridge deck failure causing accidents and injuries	<ul> <li>accommodate flows and organize regular clean out of openings</li> <li>-Establish and implement a maintenance program and establish a source of funding to pay for repair works</li> </ul>
Type of subproject	Potential Negative Impacts	Example of Possible Mitigation Measures
Construction subprojects	-Landslides and soil erosion on sloppy hillsides	-Terracing; excavation to level; control of water flows
(school class rooms, perimeter walls,	-Destruction of vegetation during excavation may cause loss of flora and fauna	- Construction contracts to include provisions for limiting vegetative removal and for re-vegetation of the construction area after completion of works.
health care centers, dispensaries)	Soil erosion, deposition of fine materials (sand, silts, clays) in downstream water courses during construction, particularly in the rainy season	- Construction contracts will require re-vegetation as soon as possible; contractors to be limited regarding activities that can be carried out in the rainy season; contractors will be required to treat excavated areas below flood water levels as required under the design contract (use of stone gabions and mattresses, before the start of each rainy season
	- Traffic disruption	- Best engineering practices to be employed to ensure traffic disruptions are kept to a minimum
	- Dust impacts	- In extreme cases, particularly near clinics & schools contractors will be required to moisten the construction area to minimize dust.
	Pit formation from sand mining	- Use sand from existing borrow pits; fill back pits
	Health posts will generate medical waste	-Refer to Subproject Medical Waste Management, Include medical waste management provisions in the design of the health care facility -Provide relevant training for medical waste management
	Ineffective management of pit latrines and water points at schools will contribute to water and soil pollution and related public health risks	<ul> <li>-Choose culturally acceptable sanitation facilities</li> <li>-Ensure regular maintenance of pit latrines and water points</li> <li>-Include hygiene and sanitation education in the school curriculum</li> </ul>
	Pressures on existing water sources	- Liaise with local utilities to ensure adequate water supply
	-Soil and water pollution due to large number of labourers on the construction site and related wastes	Build latrines and ensure adequate waste water disposal; ensure safe storage of construction materials such as oils, paints
	Soil and water pollution due to remainder of construction wastes, tools, equipment, and temporary infrastructure, and use of quarries	- Contractors to clear construction site of temporary infrastructures and restore vegetation of the site, and to refurbish quarries

Type of subproject	Potential Negative Impacts	Example of Possible Mitigation Measures
Construction of roads subprojects	Footpath blocking drainage for runoff water	- Install culverts or bridges across natural and manmade drainage channels and keep cleared of debris
	Ponding on path providing breeding site for vectors of water borne disease	- Construct path so that water drains away by rising above surrounding ground level and by sloping the surface of the path towards the sides; fill depressions with granular material
	Footpath becoming a water course during rains and causing erosion	- Provide drainage ditches on both sides of the path and install small check dams to reduce velocity of water flow; direct water from ditch alongside footpath into natural or manmade drainage channels as frequently as possible to minimize the volume of runoff water carried by the ditch; plant shrubs and trees on the uphill side of the ditch to slow water runoff
	Erosion of lands downhill from road bed or in borrow areas	-Plant grass along the edge of the road; construct during dry season
	Create dust to nearby houses during construction	-Dust control by water or other means
	Increased sediments into streams, ponds and rivers due to erosion from road tops and sides	- Prevention of erosion by re-vegetation, dry construction and physical stabilization
	Possible land acquisition, loss of livelihoods	- Refer to RPF or OP 4.12
	Creation of stagnant pools of water in left borrow pits	- Rehabilitation of borrow pits sites
	Flooding and erosion caused by overflowing and blockage of openings	- Ensure that openings are adequately sized to accommodate flows and organize regular clean out of openings
	-Bridge deck failure causing accidents and injuries	-Establish and implement a maintenance program and establish a source of funding to pay for repair works

Type of subproject	of	Potential Negative Impacts	Example of Possible Mitigation Measures
Construction of small scale irrigation schemes	of e	<ul> <li>Competing claims over water use and conflicts</li> <li>Risk of erosion to downstream areas</li> <li>Reduced water flow and limited access to water in the downstream areas</li> <li>Development of salinity due to mismanagement of water and irrigated land.</li> <li>Increased use of agro- chemicals and pesticides</li> <li>Soil and air pollution from agro-chemicals.</li> <li>Ground and surface water pollution</li> <li>Faulty designs causing flooding</li> <li>Reservoirs (small dams</li> </ul>	<ul> <li>Carry out assessment study on water demand and availability</li> <li>Carful design and installation of canal structures so that excess flows will be directed to natural waterways.</li> <li>Regulate water flow and maintain the optimum flow to downstream dwellers and ecological requirements.</li> <li>Adopt IPM for pest and weed control</li> <li>Use only prescribed and standard agro-chemicals (avoid unpermitted chemicals that are classified by international conventions)</li> <li>Conduct social assessment and prepare RAP</li> <li>Apply water efficient technologies and techniques</li> <li>Provide alternative designs and locations or avoid if subprojects directly affect physical cultural resources, destruct natural habitats, inflict deforestation, or cause biodiversity loss</li> </ul>

for irrigation) become	
breeding place for disease	
vectors (malaria)	
Involuntary land acquisition	
Pick of land clearing and	
-Kisk of fand clearing and	
blodiversity loss	
-Mismanagement of water may	
cause gully erosion	
- Loss of water due to	
mismanagement	
- Reduced flow, erosion and	
sedimentation on international	
waterways	
- Impacts on physical cultural	
resources	
- Destruction of natural	
habitate through land clearing	
fan aultinetian	
for cultivation	

Type of	Potential Negative Impacts	Example of Possible Mitigation Measures
subproject		
Water supply	Over exploitation of aquifers	Consult with regional hydro-geologist or regional EPA
subprojects	Spillage of water and creation	-Select well site where water drains away from well; do
1 5	of stagnant pools of water at	not construct well in a depression or on low-lying.
	well head which will be a	poorly drained site: construct drainage ditches to divert
	breeding ground for vectors of	run-off water around well site: construct concrete nad
	water-borne diseases	around the base of the well head (see modular design):
	water borne discuses	and build soak away pit
		- Coordinate activities with ongoing Rural Water Supply
		and Sanitation Project as appropriate
	Contamination of well water	-Install hand nump on the well and do not allow users to
	by users	draw water by lowering containers into the well: ensure
	by users	well head is properly sealed
	Contamination of wall water	Do not construct latrings within a minimum of 30 m of
	by soopage from pit latrings	the hand dug well 60 m is preferable
	by seepage nom pit latimes	the hand dug wen, of his preferable
	Soil and water pollution due to	- Ensure regular emptying; conduct hygiene education
	seepage from tanks	campaign to raise awareness of the health risks of
	1.0	exposed sewage; establish and support affordable pump
		out services
	Soil and water pollution	-Ensure regular maintenance
	Sludge disposed of	-Ensure that sludge is properly dried and disposed of in
	indiscriminately and causing	a manner that poses no risk to human health
	health risks	
	Possible land acquisition	-Refer to RPF
	Animals accessing sewage	-Install and maintain proper fencing to prevent animals
	ponds and transmitting	from entering the area
	diseases to people	
	Incompletely treated waste	- Operate ponds in a manner that only allows waste
	water contaminating surface	water meeting prescribed quality standards leaving the
	water streams	treatment site; ensure that ponds are sized and operated
		to retain waste water for an adequate period to complete
		the treatment process
	-Erosion along banks of	-Stabilize sections of bank susceptible to erosion; plant
	drainage channel causing	shrubs and trees on uphill side of ditch to slow water
	siltation of channel and loss of	runoff
	land	

	Latrines overflowing and creating health risks through people and animals coming in contact with human wastes	-Conduct hygiene education campaign to raise awareness of the health risks of exposed human waste and promote the support and use of municipal or private sector cleaning services
	Flies and rodents carrying diseases from the latrines	-Block pathways for flies, i.e. by putting a screen over the vent and installing lid on the hole; ensure latrines are constructed with a suitable superstructure to prevent entry of rodents into vault
	Open defecation	- Conduct hygiene education campaign to raise awareness of the health risks of open defecation, and promote the use of latrines

#### 6 TRAINING AND CAPACITY BUILDING

#### 6.1 INSTITUTIONAL CAPACITY ASSESSMENT

The institutions responsible for implementing the various components and subcomponents of the DRDIP are outlined in chapter 2. Clearly the implementation arrangement of the DRDIP depends on all the sector offices found at the various levels (Kebelle, Woreda, Regional and Federal levels,) for they are involved directly as implementers of the DRDIP (e.g. Secretariats of Woreda Agriculture and NR, Livestock & Fishery Development, Health; Education, Cooperative, Women & youth, and KDC e.t.c) and indirectly as members of the project management committees (e.g. Federal and Regional steering and technical committee members and PCU). On the other side, the role of the environmental regulatory agencies at regional, zonal and Woreda levels (where it exists) in implementing the DRDIP ESMF and RPF is unavoidably important. Therefore, it is necessary that a sound understanding and dependable level of capacity exists in these institutions that would enable the implementation of the present ESMF and RPF. From this perspective, the following observations were made regarding the existing capacities in the institutions during the consultations carried out with the stakeholders and host communities found in the participating regions:

- 1. Most of the project implementing agencies at Federal & Regional levels (e.g. MoANR, MoLF, FCA, and its regional and Woreda counterpart offices e.t.c) have the experience of implementing World Bank funded development projects such as the SLMP I & II, PCDP I to III, PSNP I & II e.t.c. The implementation of these projects by the Federal project implementing agencies has created a certain level of institutional capacity and familiarity in implementing ESMF procedures. At the Federal levels the degree of awareness and institutional capacity for ESMF implementation is comparatively high owing to the presence of project coordination units staffed with environmental and social safeguard specialists. The DRDIP ESMF can build upon the existing experiences of the Federal project implementing institutions by introducing its updated and contextualized ESMF to the current developments of National EIA requirements and procedures.
- 2. The screening, review and approval procedures being applied by the current SLMP II, PSNP-II and PCDP-III ESMFs appear to overlook the role of Regional, Zonal and Woreda level EPLUAs during review and approval of screening reports, full/partial ESIAs and RAPs as required. In some cases the Woreda level environment protection officers are required to do the screening, review and approval works as members of Woreda technical teams, which may put them in a contradictory position to serve as a reviewer and screening report preparer at the same time. Such practices represent inconsistencies with the national EIA procedures and need to be rectified. Thus there is a need to enlighten the existing experiences in some DRDIP participating Woreda by introducing the appropriate ESMF procedures that satisfy both the National EIA procedures and World Bank requirements.
- 3. The Woreda implementing agencies including the office of Agriculture and Natural Resources are staffed with subject matter specialists that are barely trained and experienced on environment management aspects. Woreda level government offices do not have the necessary capacity to apply the safeguards instruments effectively. The kebelle administrations and its front line service providers such as the DAs are similarly barely trained on environmental management aspects. The Woreda and kebelle staff will therefore need further training to strengthen their capacity to ensure adequate safeguards implementation monitoring. Thus there is a need for carrying capacity building at these levels to facilitate for better implementation of the ESMF.
- 4. In recent years, several regional states have expanded their structure of the Regional Environment Protection and Land Administration Agencies to Zonal and Woreda levels. Out of the five participating regions in the DRDIP, Tigray; Benishangul Gumuz and Afar regional states have decentralized their respective Regional EPLUA bureaus down to the Woreda levels. The Woreda Environment Protection and Land Administration offices are directly answerable to their respective Woreda Administrations. The main role of the Woreda environment protection and land administration offices is to carry out environmental monitoring and auditing of investment projects being implemented in the Woreda. Assessment of capacities in some of the Woreda environment protection and land administration gap in manpower, training, logistics, and in monitoring and inspection equipments.
- 5. Despite variations in their capacity and experiences, almost all of the Regional EPA in the DRDIP participating regions has developed increasing familiarity with ESMF procedures from implementation of other World Bank funded projects. In this regard the Regional EPAs of emerging regions such as Benshangul Gumuz and Gambella are now becoming familiar in implementing ESMF procedures based on their experiences of ULGDP II project. However, there still exists capacity gap to be filled in terms of manpower training, logistics and equipments to properly discharge their regulatory responsibilities.
- 6. The host community at grass root level appears to be aware of the various impacts affecting its physical and social environment that are caused by the presence of refugee camps in the area. The host community is also conscious of its needs and demands of social services, economic infrastructures, environment rehabilitation measures, as well as livelihood support mechanisms. The consultations carried with host community will need further capacity building support to transform their needs and demands into a viable and well prioritized community/kebelle development plans that will guide DRDIP interventions at kebele/host community level. The capacity building efforts at grass root level should target at developing community institutions such as the KDC, CPMC, SAC and CFT e.t.c. Similarly, the kebele administration also requires to be included in all capacity building efforts as it is the key link in implementing the DRDIP subprojects.

Therefore, there is going to be a need to fill in the capacity gaps identified to exist in the above stated areas for all the institution involved in the DRDIP ESMF and RPF implementation. Capacity building and training will be required to (i) enhance the capacity of all implementing entities at the Federal, Regional, Woreda and kebelle levels to be able to implement and monitor the execution of safeguard instruments; and (ii) to enhance capacity of community levels public administrative structures and community-based institutions to monitor issues related to triggered safeguards.

### 6.2 TRAINING REQUIREMENTS

One of the capacity building areas sought for by the ULGs and different stakeholders involved in the implementation of the DRDIP is the provision of training. The training to be offered will address different target groups which will have a role in implementing the ESMF and RPF instruments at various levels. These include the high level project coordination and management groups, (such as members of steering/coordination committees and other decision makers), PCU, technical committees and the sector offices at Woreda and Kebelle level (e.g. Secretariats of Woreda Agriculture and NR, Livestock & Fishery Development, Health; Education, Cooperative, Women & youth, etc.), the beneficiary community based institutions (e.g. KDC, CPMC, CFT and SAC), and the regional and Woreda level REPAs. As a result, the type of trainings necessary to these various target groups will vary and is briefly outlined as the followings:

## a. Awareness raising and general training workshop

General training and awareness raising workshop will be provided for DRDIP implementing institutions at Federal and Regional levels (i.e. MoANR, MoLF, FCA, MoFEC, MoFPDA, ARRA and their counterpart regional offices) that includes the steering and technical committee members as well as the project coordination unit members at Federal & Regional levels. Being part of the project implementation and management organ, the Woreda steering committee members will also participate in the awareness raising and general training workshop.

Awareness raising workshops are necessary to conduct immediately after launching the project and as the need arise at later stages. The awareness raising workshops and trainings should target the higher officials, DRDIP management and coordination organs including the technical committees to be established at Federal and Regional levels. The awareness raising should focus on clarifying DRDIP objectives, the ESMF and RPF requirements, its institutional arrangements for implementation, coordination, its work flow to the lower level of the administrative strata at the Woreda and kebelle levels and so on. It is important to clarify the roles and responsibilities of each stakeholder based on established guidelines such as the ESMF and RPF. The awareness raising workshop would also focus on introducing the ESMF and RPF procedures and associated implementation tasks as required by the World Bank and the GoE.

# b. Technical training on ESMF and RPF

This detailed training will mainly focus on the technical staffs that will be involved in directly applying the ESMF and RPF procedures. It includes the experts in the regional PCU, Woreda PCT, members of WPAT, WTC, professional experts from sector bureaus involved, members of kebelle level KDC, CPMT and SAC as well as the regional; zonal and Woreda level REPAs and etc. The training will focus in explaining the details of the National and World Bank environmental requirements and the procedures that need to be fulfilled to comply with it as set out in the present ESMF and RPF. Implementation of the ESMF and RPF including all aspects of environmental management, EIA, public consultation, and integration of environmental management planning will be the centre topics for the training. The training would also cover skills upgrading refreshment topics such as EIA review and quality assurance, environmental management of medical wastes associated with establishment/rehabilitation of rural clinics, a *Medical Waste Management Guide for Rural Health Centres* was produced by Government and disclosed. Introducing this guideline in the training sessions will also be important.

Additionally, specific training and capacity building of kebele and sub-kebele community structures involved in the identification, selection and approval of infrastructural projects will also be provided. The training covers the development of a basic watershed or catchment area plan and design and sequencing of integrated subprojects for soil and water conservation and watershed regeneration including:

- Participatory methods for community action
- Subproject consultation, design and approval
- Watershed concept for soil and water conservation
- Gully treatment prescriptions
- Water harvesting structures, such as rooftop catchment systems
- Appropriate irrigation technologies
- Terracing and bunding methods
- Check dams and other control structures
- Biological measures for soil and water conservation
- Plantation methods and management for effective soil conservation
- Rural road construction and rehabilitation
- Implementation of all aspects of the ESMF

### c. Farmer Training in Irrigated Agriculture

In subprojects involving small-scale irrigation systems, there is often a need to provide farmers with training on managing the increased number of inputs, including fertilizers, pesticides and their alternatives, management of these systems, the development of water user committees and follow-up extension support to assist farmers and DAs in developing irrigated agriculture, and managing the environmental aspects including integrated pest management. Guidance for *Integrated Pest Management* (IPM) plans was also developed by Government and disclosed (Annex G).

### d. Sensitization

The beneficiary communities at the grass root level will need to be sensitized about the overall objectives of the DRDIP including the main component, environmental sustainability and the need to consider environmental concerns in subproject selection and prioritization, as well as the role of public participation in the implementation of the DRDIP.

# Table 11: Training Requirements for Various Groups of Participants

	High Level Project Management and coordination (Federal, Regional	Regional Environment Authorities	PCU, PCT, technical , Members	Woreda, kebelle, Community Leaders/ beneficiaries		
Linkages between environmental, social and natural resource management and sustainable rural livelihoods	A	Т	Т	Т		
National/Regional ESIA legislation and relevant World Bank Safeguard environmental policies	A	Т	Т	Т		
Potential localized impacts of subprojects and suitable mitigation measures	A	Τ	Т	Τ		
Addressing land acquisition and access to resources through resettlement planning and compensation	A	Т	Т	A		
Use of the ESMF, its procedures, resources and forms	Α	Τ	Τ	A		
Methods of community involvement	A	Τ	Τ	T		
Cumulative impacts assessment	A	Τ	Τ	S		
Legend: $T$ = Detailed training, $S$ = Sensitisation to the issues, $A$ = Awareness-raising						

### 6.2.1 Proposed Environmental Management Topics

The ESMF, RPF and Operational manuals of the DRDIP are important tools that provide guidance on how to incorporate mitigation measures and to minimize adverse effects of subprojects. The capacity building efforts for the implementing agencies, PCU and technical committees to be involved in undertaking an in-house reviewing of full/partial ESIAs of DRDIP should take place in conjunction with dissemination of these materials. These documents will serve to guide the selection of subprojects, and will be essential in managing potential environmental effects at early stages of the project life-cycle. Staffs of the implementing institutions involved and the regional monitoring and evaluation staff will receive training based on these materials.

Training materials will be kept under constant review and revision by the PCU in MoANR including enhancing of the communication aspects. The training includes:

# 6.2.1.1 Introduction to Environmental and Social Management Framework

This section will introduce participants to the theory and application of the DRDIP ESMF as a decision making tool. It will outline the principles of ESMF and provide clear definitions on ESMP practice terminology (e.g. screening and scoping, impacts [negative, positive, cumulative] natural resource base [water, soil, land, biodiversity, air, etc.], social baseline [employment, social, health, literacy etc.] and mitigation and monitoring. It will also provide guidance on the criteria required for the development of an effective ESMP in practice.

### 6.2.1.2 Ethiopian Environmental Legislation.

This section will discuss the application of Ethiopian legislation in terms of the relevant environmental and social laws and policies which apply to activities under the project.

# **6.2.1.3 Screening of DRDIP subprojects**

A list of potential activities to be financed under the DRDIP will be discussed. Application of the screening checklist will be explained using case studies.

# 6.2.1.4 Impact Identification

Potential impacts related to various types of activities will be discussed, in terms of their significance (adverse or minimal, positive or negative), magnitude (long term versus short term), and impact category (localized or cumulative).

### 6.2.1.5 Mitigation measures and Implementation Monitoring

Mitigation measures and implementation monitoring as it apply to various types of DRDIP activities will be discussed, in terms of their application cost and feasibility. The importance of monitoring measures will also be discussed to measure the effectiveness of mitigation plans and to monitor performance.

# 6.2.1.6 Responsibilities for Planning and Reporting

For each target audience, responsibilities for environmental and social management will be discussed as they relate to DRDIP implementation. This will include responsibilities for planning, management of impacts and mitigation measures, monitoring, partnerships with NGOs and technical service providers, and the reporting of outcomes achieved in implementing the mitigations as well as monitoring plans.

### 6.2.1.7 World Bank Safeguards Policies

Detailed application of the safeguard policies on Environmental Assessment OP/BP 4.01, Involuntary Resettlement OP 4.12, and Cultural Property (OP 4.11) and all the other applicable safeguard policies will be discussed by applying examples and case studies.

### **6.2.1.8 Integrating environment to development planning**

Integrating environmental and social considerations into development planning will encompass defining processes, procedures and responsibilities for environment related activities and actions into the preparation of the DRDIP annual development plans and budgets. Thus there will be a need to carry out Environmental awareness and outreach programs for the Federal, Regional, Woreda and local communities on sustainable development and environmental management principles and ESMF procedures.

Training to PCU, technical staff, environmental officers, local administration and sector agency staff, Labour and social affairs officers, Women, youth and children affair office representatives on issues of environmental and social considerations, is required in the form of a phased training. This general training program will be developed as a training module based on DRDIP ESMF and RPF, safeguard guideline and checklists.

## 6.3 TECHNICAL AND FINANCIAL ASSISTANCE

Owing to the expressed capacity gap by the regional and Woreda level environment protection agencies to conduct environmental monitoring and inspection which include lack of equipment for monitoring and inspection, as well as lack of transport and related logistical resources to discharge its regulatory responsibilities in full, there appears necessary to provide financial support for the Authorities to enable it to acquire the facilities and build its capacity for monitoring and inspection of subprojects.

Provision of the following technical assistance will be important for the implementing agencies at Woreda level (Agriculture & Natural Resource secretariat):

- > Technical and financial assistance to the implementing agencies to secure local consultancy services, where the implementing agency does not have internal capacity or this cannot be provided by the regional PCU:
- $\triangleright$
- Produce a Screening Report, an ESIA TOR, an Environmental Impact Assessment, Environmental Management Plan, Cultural Resources Management Plan or full/abbreviated Resettlement Action Plan; and
- Establish and support operation of systems for monitoring and reporting on ESIA, EMP, CRMP and RAP implementation.
- Appointment of environmental and social safeguard specialist in the regional and federal PCU responsible for overall ESMF & RPF implementation.

The Environmental and Social Specialists in the Federal and Regional PCU will contribute to the objectives of the Project which include:

- The preparation, together with the implementing entities, of annual work programs and budgets to fulfil ESMF requirements of subprojects;
- Monitoring project progress as it relates to compliance with the ESMF guidelines, resolving implementation bottlenecks, and ensuring overall implementation of ESMF in such a way that project implementation proceeds smoothly;
- Collecting and managing information relevant to the subproject environmental management works (i.e. environmental monitoring and audit reports of EMPs, CRMPs, RAPs and ARAPs); and
- Ensuring that the implementing bodies are supported adequately and that they adhere to the principles of the project, and more specifically to compliance with ESMF guidelines.

### 6.4 TERMS OF REFERENCE FOR DRDIP ENVIRONMENTAL AND SOCIAL SPECIALIST

**OBJECTIVE**: To provide technical advice on environmental management and mitigation, and ensure that the DRDIP ESMF is fully implemented.

# TASKS

- Establish the system of screening forms and ESIA as set out in this ESMF, and oversee their smooth operation including advice to implementing agency on the procurement of consultants for any required ESIA or RAP studies;
- Liaise with the relevant REPA on a regular basis;

- Commission an independent consulting firm to carry out an environmental performance audit of the DRDIP on an annual basis;
- Provide specific technical advice on mitigation measures for subprojects;
- Provide technical advice to implementing agencies on all technical issues related to natural resources and environmental management. These issues will relate to impacts on surface water, groundwater, natural resources and vegetation, sourcing of materials used in construction, human health, ecology and protected areas, land and soil degradation;
- Raise awareness and proactively create demand for this technical advice among stakeholder/beneficiary institution officers;
- Liaise with the implementing agency to ensure the project's compliance with the RPF and all resettlement aspects of the project;
- Be responsible for collating information related to the RPF and resettlement;
- Undertake review of ESIAs and RAPs to ensure compliance with the ESMF and RPF; and
- Lead the delivery of capacity building programs on Environmental management for stakeholder officers.

# 7 MONITORING OF ESMF IMPLEMENTATION

Annual report on ESMF and RPF implementation will be prepared by the Federal PCU Environmental and Social Specialist and delivered to MoANR and the World Bank. In addition, any Schedule 1 subproject financed by DRDIP that has been subject to an ESIA study (or RAP etc.) will also be required to produce an annual audit report, for delivery to MoANR and the World Bank.

An independently-commissioned environmental and social audit will be carried out on an annual basis. This will be conducted as part of the annual performance audit of the DRDIP. The audit team will report to the MoANR and the World Bank. An audit is necessary to:

- a) indicate to what extent environmental and social considerations are being incorporated into the MoANR planning process;
- b) asses that mitigation measures were being identified and implemented by the implementing agency, and
- c) ensure that DRDIP subprojects were being correctly screened.
- d) identify any amendments in the ESMF approach that are required to improve its effectiveness.

The annual audit also provides a strong incentive for MoANR to ensure that the ESMF is implemented. It will help to ensure that individual EMPs, CRMPs and RAPs are developed and implemented for Schedule 1 and 2 subprojects. The annual audit Report will include:

- A summary of the environmental and social performance of the DRDIP based on a sample of subprojects;
- A presentation of compliance and progress in the implementation of the project EMPs, CRMPs and RAPs;
- A synopsis of the environmental monitoring results from individual project monitoring measures (as set out in the project EMPs, CRMPs and RAPs).

The main tasks of the audit study will be:

- Consideration of the description of the project;
- Indicate the objective, scope and criteria of the audit;
- Study all relevant environmental law and regulatory frameworks on health and safety, sustainable use of natural resources and on acceptable national and international standards;
- Verify the level of compliance by the proponent with the conditions of the environmental management plan;
- Evaluate the implementing agencies' knowledge and awareness of and responsibility for the application of relevant legislation;
- Review existing project documentation related to all infrastructure facilities and designs;
- Examine monitoring programs, parameters and procedures in place for control and corrective actions in case of emergencies;
- Examine records of incidents and accidents and the likelihood of future occurrence of the incidents and accidents;

- Examine and seek views on health and safety issues from the project employees, the local and other potentially affected communities; and
- Prepare a list of health and environmental concerns of past and ongoing activities.

# 8 **PROPOSED IMPLEMENTATION BUDGET**

The breakdown of estimated costs for putting the ESMF into operation is provided in Table 12. This includes the costs of providing the capacity building and training set out in Chapter 7. The total estimated costs for mainstreaming environment into the DRDIP is USD 1,486,250 consisting of:

- a) USD 500,000 which will be included in the consultants procured to provide ESIA and RAP for DRDIP subprojects. These consultants will be responsible for the work on preparation and implementation of ESIA, EMP, CRMP, RAP and ARAP objectives and activities.
- b) USD 35,000 for the preparation of ESMF and RPF training materials;
- c) USD 331,250 for delivery of ESMF and RPF training as described in Section 7.2
- d) USD 270,000 for provision of an Environmental and Social expert in PCU for the five years duration of the DRDIP;
- e) USD 150,000 incentives for REPA to provide technical support and enhance its capacity for reviewing environmental screening, ESIA, RAP, ARAP report and other similar activities.
- f) USD 200,000 MoANR to undertake Environmental and Social Performance Audit

The above costs will be funded from DRDIP Component A and B. The DRDIP Environmental and Social Specialist will report on DRDIP ESMF expenditure. This will provide for another way of monitoring on the extent that environmental and social issues are being addressed by the implementing agency.

Costs related to the required mitigation measures for DRDIP subprojects are not set out in the budgets presented here. These will be assessed and internalized by implementing agency as part of the overall subproject cost. It is extremely difficult to estimate the proportion of project costs that can be expected to be devoted to mitigation measures. However, a rough rule of thumb is that it can be estimated to cost between 2% and 5% of the total project cost. Compensation and resettlement costs will be borne by the implementing agencies.

Activity	YR1	YR2	YR3	YR4	YR5	TOTAL	Notes
Technical Assistance support for preparation of ESMF & RPF Screening Reports, ESIAs, EMPs, CRMPs, RAPs, ARAPs	100,000	100,000	100,000	100,000	100,000	500,000	Assume lump sum USD 100,000 for preparation of 5 ESIA, 5 RAP per year ( assuming that one document prepared by 10,00USD)
Training supplier develops ESMF & RPF other related training modules	35,000					35,000	Assume lump sum USD 35,000 for development of the various training modules
Training supplier delivers DRDIP ESMF, RPF and other related training	66,250	66,250	66,250	66,250	66,250	331,250	Assume 250 participants x USD 25 pd x 5days awareness raising courses + 100 participants x USD 35 pd x 10days in-depth courses
PCU Envi & Social Management experts	54,000	54,000	54,000	54,000	54,000	270,000	Assume USD 2250 (Birr 45,000 per month total excluding monthly wage, travel, DSA, computer, etc.)
Support for Regional and Woreda EPAs to build capacity to carry out review of environmental screening, ESIA, RAP, ARAP report and other similar activities.	30,000	30,000	30,000	30,000	30,000	150,000	Lump sum USD 30,000 allocated for Regional and Woreda EPAs.
MoANR to undertake Environmental and Social Performance Audit	40,000	40,000	40,000	40,000	40,000	200,000	To undertake Environmental and social performance Audit
Total ESMF & RPF costs	325,250	290,250	290,250	290,250	290,250	1,486,250	

Table 12: Proposed Budget for Implementation of the DRDIP ESMF

# ANNEX A: ENVIRONMENTAL SCREENING FORM

DRDIP subproject name:						
Location (include map/sketch):	(e.g. region, district, etc.)					
Type of activity : (e.g. new construction,						
rehabilitation, periodic maintenance)						
Estimated Project Cost: (Birr)						
Proposed Date of Works Commencement:						
Technical Drawing and Specifications	(circ	ele	Yes	No		
Reviewed :	answer):					
This report is to be kept short and concise.						
1. Site Selection:						
Physical data:	Yes/No answers and bullet lists preferred except where descriptive detail is essential.					
Site area in ha						
Any existing property to transfer to project						
Any plans for new construction						

Refer to project application for this information.

### 2. Impact identification and classification:

### 2.1 Site selection

When considering the location of a DRDIP subproject, rate the sensitivity of the proposed site in the following table according to the given criteria. Higher ratings do not necessarily mean that a site is unsuitable. It does indicate a real risk of causing undesirable adverse environmental and social effects, and that more substantial environmental and/or social planning may be required to adequately avoid, mitigate or manage potential effects. The following table should be used as a reference.

Issues	Site Sensitivity Low	Medium	High	Rating
Natural habitats	No natural habitats present of any kind	No critical natural habitats; other natural habitats occur	Critical natural habitats present	
Water quality and water resource availability and use	Water flows exceed any existing demand; low intensity of water use; potential water use conflicts expected to be low; no potential water quality issues	Medium intensity of water use; multiple water users; water quality issues are important	Intensive water use; multiple water users; potential for conflicts is high; water quality issues are important	
Natural hazards vulnerability, floods, soil stability/ erosion	Flat terrain; no potential stability/erosion problems; no known volcanic/seismic/ flood risks	Medium slopes; some erosion potential; medium risks from volcanic/ seismic/ flood/ hurricanes	Mountainous terrain; steep slopes; unstable soils; high erosion potential; volcanic, seismic or flood risks	
Cultural property	No known or suspected cultural heritage sites	Suspected cultural heritage sites; known heritage sites in broader area of influence	Known heritage sites in project area	
Involuntary resettlement	Low population density; dispersed population; legal tenure is well-defined; well- defined water rights	Medium population density; mixed ownership and land tenure; well- defined water rights.	High population density; major towns and villages; low-income families and/or illegal ownership of land; communal properties; unclear water rights.	

# 3. Checklist of impacts identification and

Schools, health centres, market structures and storage facilities (Construction and maintenance) Impacts during construction, operation and decommissioning phases	Potential for Adverse Impacts					
	None	Low	Med	High	Unknown	
Will subproject carry wet season excavation?						
Will subproject cause significant vegetation removal?						
Will subproject cause noise and air pollution? (Dust, e.t.c)						
Will subproject cause aesthetic disruption to the						
surrounding areas?						
Will subproject cause soil erosion or flooding concerns?						
(e.g., due to highly erodible soils or steep gradients)						
Will subproject cause or exacerbate creation of quarry sites						
or borrow pits?						
will subproject affect the quantity of quality of surface						
(a g wells)?						
Is subproject located within or nearby environmentally						
sensitive areas (e.g. intact natural forests wetlands parks						
e.t.c)?						
Will the subproject require land (public or private) to be						
acquired (temporarily or permanently) for its						
development?						
Will the subproject use land that is currently occupied or						
regularly used for productive purposes (e.g. gardening,						
farming, pasture, fishing locations, forest)?						
Will the subproject result in temporary or permanent loss						
of crops, fruit trees or household infrastructure such as						
granaries, outside toilets and kitchens?						
will the subproject displace individuals, families or						
Cultural or raligious sites disturbed?						
Will the subproject cause disturbance of economic						
activities leading to loss of income or property?						
Will the subproject generate medical waste?						
Will the subproject cause soil and water pollution due to						
seepage from tanks?						
Will the subproject result in increasing the production of						
liquid wastes (e.g. sewage wastewater, and domestic or						
construction wastes)?						
Will the subproject cause poor water drainage and increase						
the risk of water-related diseases such as malaria or						
bilharzias?				ļ		
Wildlife habitats or populations disturbed?				ļ		
Environmentally sensitive areas disturbed?						
Other (specify):						

Water supply and Sanitation, hand-dug shallow wells, shallow tube wells, springs (Construction and maintenance) Impacts during construction, operation and decommissioning phases	Potenti	al for Ac	dverse In	npacts	
	None	Low	Med	High	Unknown
Is subproject located within or nearby environmentally sensitive areas (e.g. intact natural forests, wetlands, parks, e.t.c)?					
Will subproject cause competing claims for water and social tension?					
Will subproject cause disturbance to wildlife habitats or populations?					
Will subproject involve draining of and/or disturbance to wetlands?					
Will subproject cause sedimentation to water sources and reservoirs during drilling?					
Will subproject cause soil erosion and initiation of flooding, gully erosion?					
Will subproject cause significant vegetation removal/deforestation?					
of water-related diseases such as malaria or bilharzias?					
Will subproject cause spillage of water and creation of stagnant pools of water at well head which will be a breeding ground for vectors of water-borne diseases during operation?					
Will subproject cause soil and water pollution due to seepage from tanks?					
Will subproject cause contamination of well water by users during operation?					
Will subproject raise health and safety concern during construction and operation?					
Will subproject cause noise and air pollution? (Dust, e.t.c)					
Will the subproject require that land (public or private) to be acquired (temporarily or permanently) for its development?					
Will the subproject use land that is currently occupied or regularly used for productive purposes (e.g. gardening, farming, pasture, fishing locations, forest)?					
Will the subproject result in temporary or permanent loss of crops, fruit trees or household infrastructure such as granaries, outside toilets and kitchens?					
Displace individuals, families or businesses?					
Cultural or religious sites disturbed?					
Will the subproject cause disturbance of economic activities leading to loss of income or property?					
Result in the production of solid or liquid waste, or result in an increase in waste production, during construction or operation?					
Environmentally sensitive areas disturbed? Other (specify):					

# 4. Classification

Afforestation, area closures, construction of soil /stone bunds & terraces, cut-off drains, check dams (gully rehabilitation) Impacts during construction/rehabilitation and operation phases	Potential for Adverse Impacts				
	None	Low	Med	High	Unknown
Will the forestation subproject compromise to local biodiversity?					
Will subproject cause risk of mono-cropping (resorting to exotics)?					
Will subproject cause risk of introduction of invasive exotic species?					
Will subproject cause risk of wildlife attack on domestic animals?					
Will subproject involve area enclosures that lead to loss of access?					
Will subproject instigate soil erosion and flooding?					
Will subproject involve draining of and/or disturbance to wetlands?					
Will subproject cause loss of biodiversity through cut and fill activities?					
Will subproject cause disturbance to wildlife habitats or populations?					
Will subproject cause restriction of human and livestock mobility?					
Will subproject cause restriction of access to communal lands?					
Will subproject require land (public or private) to be acquired (temporarily or permanently) for its development?					
Will the subproject use land that is currently occupied or regularly used for productive purposes (e.g. gardening, farming, pasture, fishing locations, forest)?					
Will the subproject result in temporary or permanent loss of crops, fruit trees or household infrastructure such as granaries, outside toilets and kitchens?					
Cultural or religious sites disturbed?					
Disturbance of economic activities leading to loss of income or property?					
Cause poor water drainage and increase the risk of water- related diseases such as malaria or hilbarzias?					
Environmentally sensitive areas disturbed?					
Other (specify):					

Small Scale Irrigations and MHIS, water harvesting structures, small stream diversions, ponds (rehabilitation/construction and operation) Impacts during construction, operation and decommissioning phases	Potentia	ll for Ad	verse Im	pacts	
	None	Low	Med	High	Unknown
Will subproject involve use of agro-chemicals?					
Will subproject involve competing claims for water and social tension?					
Will subproject cause disturbance to wildlife habitats or populations?					
Will subproject disrupt ecologically sensitive areas?					
Will subproject cause land clearing and biodiversity loss?					
Will subproject cause new settlement pressures?					
Will subproject increased soil salinity?					
Will subproject instigate soil erosion and flooding? (e.g., due to highly erodible soils or steep gradients)					
Will subproject create risk of breeding disease causing vectors?					
Will subproject cause soil pollution?					
Will subproject involve draining of and/or disturbance					
Will subproject affect local communities?					
Will subproject cause sedimentation to water sources and reservoirs?					
Will subproject raise health and safety concerns?					
Is subproject located within or nearby environmentally					
sensitive areas (e.g. Parks, intact natural forests, wetlands,					
e.l.c)?					
acquired (temporarily or permanently) for its development?					
Does it use land that is currently occupied or regularly used					
for productive purposes (e.g. gardening, farming, pasture,					
fishing locations, forest)?					
Does it result in temporary or permanent loss of crops, fruit					
trees or household infrastructure such as granaries, outside toilets and kitchens?					
Displace individuals, families or businesses?					
Cultural or religious sites disturbed?		1	ł		
Disturbance of economic activities leading to loss of					
income or property?					
Other (specify):					

All weather rural roads (Construction and maintenance)Impacts during construction, operation and decommissioning phases	Potentia	al for Ad	verse Im	pacts	
	None	Low	Med	High	Unknown
Will subproject be located in forest priority areas and					
cause destruction of habitats?					
Will subproject cause significant vegetation removal?					
Will subproject in a number of stream crossings or disturbances?					
Will subproject cause noise and air pollution? (Dust, e.t.c)					
Will subproject cause landslides and soil erosion on sloppy hillsides?					
Will subproject cause soil erosion and initiation of flooding, gully erosion?					
Will subproject cause loss of biodiversity through cut and fill activities?					
Will subproject cross through and cause destruction of natural habitats?					
Will subproject cause sedimentation to water sources and reservoirs?					
Will subproject cause soil erosion or flooding concerns? (e.g., due to highly erodible soils or steep gradients)					
Will subproject cause or exacerbate creation of quarry sites or borrow pits?					
Is subproject located within or nearby environmentally sensitive areas (e.g. intact natural forests, wetlands, parks, e.t.c)?					
Will the subproject require land (public or private) to be acquired (temporarily or permanently) for its development?					
Will the subproject use land that is currently occupied or regularly used for productive purposes (e.g. gardening, farming, pasture, fishing locations, forest)?					
Will the subproject result in temporary or permanent loss of crops, fruit trees or household infrastructure such as granaries, outside toilets and kitchens?					
Will the subproject displace individuals, families or businesses?					
Cultural or religious sites disturbed?					
Will the subproject cause disturbance of economic activities leading to loss of income or property?					
Will the subproject result in increasing the production of solid and liquid wastes (e.g. sewage wastewater or construction wastes)?					
Will the subproject cause poor water drainage and increase the risk of water-related diseases such as malaria or					
bilharzias?					
Wildlife habitats or populations disturbed?					
Environmentally sensitive areas disturbed?					
Other (specify):					

# 7. Detailed questions:

i. Preliminary Environmental Information: Yes/No answers	and bullet lists preferred excep
where descriptive detail is essential	-
State the source of information available at this stage (feasibility report or other environmental study).	
efer to application and/or relevant environmental authority	for this information.
<b>ii. Identify type of activities and likely environmental impa</b> <i>lists preferred except where descriptive detail is essential</i>	cts: Yes/No answers and bull
What are the likely environmental impacts, opportunities, risks and liabilities associated with the subproject	
efer to ESMF– Impact, Mitigation and Monitoring Guidelin	ies
iii. Mitigation of Potential pollution: Yes/No answers and bu	llet lists preferred except when
descriptive detail is essential	
Does the DRDIP subproject have the potential to pollute the environment, or contravene any environmental laws and regulations?	
Will the DRDIP subproject require pesticide use?	
If so, then the proposal must detail the methodology and equipment incorporated in the design to constrain pollution within the laws and regulations and to address pesticide use, storage and handling.	
Does the design adaguately detail mitigating manufac?	

iii. Determine environmental screening category: Yes/No answers and bullet lists preferred					
except where descriptive detail is essential.					
After compiling the above, determine which category the					
DRDIP subproject falls under based on the environmental					
categories A, B and C.					

Refer to ESMF – Screening and Review Process Categorization & Recommendations\*

	Category	
	Category A	Project to be fed into the standard ESIA process determined by EPA
	Category B	Project will not require an ESIA, but will necessitate the inclusion of environmental and social mitigation and enhancement measures in the design and implementation of the project through the use of standard construction contract clauses and an environmental management plan
	Category C	Project is not subject to environmental assessment as no potential impacts are anticipated.

# \*Place tick in applicable box

Reviewer: Name: Signature: Date:

### ANNEX B: HOUSEHOLDS' LIVELIHOOD DIVERSIFICATION INTERVENTIONS

### **Environmental and Social Screening Form**

The Environmental and Social Screening Form (ESSF) has been designed to assist in the screening of livelihood improvement component interventions of DRDIP in Ethiopia. These interventions either those implemented by seed money provided to be injected by DRDIP for eligible host community members and financed using innovation grants to innovative household or group of the households. These interventions could be related to on- farm activities such as poultry farming, bee-keeping, livestock rearing/fattening, pasture development, production of cash crops/horticulture and off-farm activities. Especially, interventions related to agricultural sector may have environmental & social adverse effects. Therefore, before approval of seed money or loan from own saving the proposed intervention as per business plan will be screened using this Form. Similarly, any intervention proposed to be funded by innovative will be screened to identify any negative impacts. Thus, this screening form is designed to guide the planning process and identify the potential negative impacts and recommend mitigation measures if any.

A. Name of the proposed intervention
B. Sector
C. Name of the Woreda
D. Name of the kebele/communitiesin which the intervention is to be
implemented
E. Name of householdsex
F. Name of the Approving Authority
G. Contact details of the person responsible for filling out this ESSF:
Name:
Job title:
Telephone numbers:
Fax Number:
E-mail address
Date:
Signature:

### PART A: Brief description of household livelihood diversification interventions

Please provide brief description of the proposed households' livelihoods diversification activities or enterprise. Describe the location, site and surroundings. Describe how it will be implemented including technical supports and training and resources required.

# Part B. IDENTIFICATION OF ENVIRONMENTAL AND SOCIAL NEGATIVE IMPACTS

Investments under Rural Livelihood Program such as livestock rearing, livestock fattening, marketing livestock and livestock products, cash crop production etc. and off-farm business such as petty trade, waving, metal works, wood work, etc. may cause some negative impacts. Thus, these subprojects will be subjected to environmental and social screening during the planning stage, and appropriate steps will be taken based on the results of the environmental and social screening process outlined as follows.

1. Will the interventions lead to loss of cultivable land, loss of grazing land, loss of resources like water and loss of traditional livelihoods?

Yes \_\_\_\_\_ No \_\_\_\_\_ if yes what mechanisms devised ------

2. May the proposed intervention drive the conflict or exacerbating conflict within the community?

Yes \_\_\_\_\_ No \_\_\_\_\_ if yes what mechanisms devised ------

\_\_\_\_\_

Will the operation of household livelihood interventions involve the considerable clearing of natural vegetation that may lead to degradation of forest /bushes?
 Yes \_\_\_\_\_\_ No \_\_\_\_\_ if yes what mechanisms devised------

\_\_\_\_\_

- 4. Does proposed household livelihood diversification activity or modern technology prone to drought risks that damages the livelihood of the household? Yes------if yes describe mitigation mechanism------
- 5. Does proposed household livelihood diversification activity or modern technology can create vector for malaria infestation in the area? Yes \_\_\_\_\_\_ No \_\_\_\_\_ If yes, please indicate current efforts to address malaria issues in the area, or, make recommendations how such concerns should be addressed.
- 6. Will the proposed household livelihood diversification activity (like livestock fattening and livestock rearing), modern technology or business enterprise generate solid and/or liquid wastes that possible affect heath of household or neighboring households? Yes \_\_\_\_\_\_ No \_\_\_\_\_\_. If yes, describe measures for waste management ------
  - -----
- 7. Will the livelihood diversification/enterprise requires skill for implementation, regular maintenance and/or repair?

Yes-----No----- If yes, are there sufficient capacity at household levels to carry out effective operations and maintenance activities? Indicate types and extent of capacity building needs.-----

8. Key concepts emphasized as sustainable livelihoods principles such as the idea that "poor people themselves should be key actors in identifying and addressing livelihood priorities .Hence, Has household consultation and participation been sought for selection of livelihood diversification interventions?

Yes \_\_\_\_\_ No \_\_\_\_\_ Describe the consultation process that has taken place and list the recommendations made by the household head and members ------

- May proposed livelihood intervention decrease women's decision making power and participation in the implementation? Yes------ if yes describe measures to be taken avert the negative impact------
- 10. Poor household may not practice improved technologies because they perceive them as more management intensive; require more inputs such as labor and finance. May the proposed technologies/ enterprise require more intensive management or household labor? Yes------ No.----- if yes describe how the household will come up to solve the problem------
- 11. Does proposed household enterprise fit in with existing household's livelihood strategies? Yes-----,No------ If yes what aspect of the household fit with the proposed interventions?------

12.Household interventions that reduce labor requirements, especially for women, may allow households to diversify into other income-earning activities or devote more time to childcare, or be more suitable for families with one or more members who are sick—an especially important consideration with the rise of HIV/AIDS. Hence, will technologies/ household interventions require many purchased inputs/ or more women labor? Yes------ if yes describe recommendable solutions ------

13. May enterprise adversely affect vulnerable people (e.g., elderly poor, physically challenged, women, particularly head of households or widows, etc.) living in the area?

Yes	-No	-If yes	describe	measures t	o be tak	cen

-----

\_\_\_\_\_

This form has been signed after Project approval:

Name \_\_\_\_\_\_ Signature-----Date-----Date------

### ANNEX C: TERMS OF REFERENCE FOR ESIA

An environmental and social impact assessment (ESIA) report for an infrastructure project should focus on the significant environmental and social issues of the proposed project, whether it is/or includes new construction or rehabilitation. The report's scope and level of detail should be commensurate with the project's potential impacts.

The ESIA report should include the following items (not necessarily in the order shown):

a. **Executive summary**. Concisely discusses significant findings and recommended actions.

- b. **Policy, legal, and administrative framework**. Discusses the policy, legal, and administrative framework within which the ESIA is carried out. Identifies relevant international environmental agreements to which the country is a party.
- c. **Project description**. Concisely describes the proposed project and its geographic, ecological, social, and temporal context, including any offsite investments that may be required. Indicates the need for any resettlement plan. Normally includes a map showing the project site and the project's area of influence.
- d. **Baseline data**. Assesses the dimensions of the study area and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences. Also takes into account current and proposed development activities within the project area but not directly connected to the project. Data should be relevant to decisions about project location, design, operation, or mitigation measures. The section indicates the accuracy, reliability, and sources of the data.
- e. **Environmental and social impacts**. Predicts and assesses the project's likely positive and negative impacts, in quantitative terms to the extent possible. Identifies mitigation measures and any residual negative impacts that cannot be mitigated. Explores opportunities for environmental enhancement. Identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions, and specifies topics that do not require further attention.
- f. **Analysis of alternatives**. Systematically compares feasible alternatives to the proposed project site, technology, design, and operation—including the "without project" situation—in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. For each of the alternatives, quantifies the environmental impacts to the extent possible, and attaches economic values where feasible. States the basis for selecting the particular project design proposed and justifies recommended emission levels and approaches to pollution prevention and abatement.
- g. Environmental management plan (EMP). Covers mitigation measures, monitoring, budget requirements and funding sources for implementation, as well as institutional strengthening and capacity buildings requirements.
- h. Appendixes
  - i. **List of ESIA report preparers** individuals and organizations.
  - ii. **References** written materials both published and unpublished, used in study preparation.
  - iii. **Record of interagency and consultation meetings**, including consultations for obtaining the informed views of the affected people and local nongovernmental organizations (NGOs). The record specifies any means other than consultations (e.g., surveys) that were used to obtain the views of affected groups and local NGOs.
  - iv. Tables presenting the relevant data referred to or summarized in the main text.
  - v. List of associated reports (e.g., socio-economic baseline survey, resettlement plan)

### ANNEX D: FORMAT OF AN ANNUAL ENVIRONMENTAL REPORT

Relevant environ	mental authority:						
<b>Reporting dates:</b>							
Name of the Regi	ion:						
<b>DRDIP</b> Subproje	cts approved:						
Subproject title	Activities	Project phase <sup>1</sup>	Environmental.	ESIA / EMP	Environmental	Effectiveness of	Issues <sup>2</sup>
			Category	completed?	license granted?	EMP	
(name, location, title or reference)	(new construction, rehabilitation, maintenance)	See note below	(A, B or C) or (1, 2, and 3)	Yes, No or N/A	Yes, No or N/A	Good, poor, or needs improvement	See note below
1							
2							
3							
etc							

<sup>&</sup>lt;sup>1</sup> Subproject phase will be one of the following: (a) under project preparation or appraisal, (b) appraised, or (c) implementation

<sup>&</sup>lt;sup>2</sup> Issues: accidents, litigation, complaints or fines are to be listed

Types of sub projects	Potential negative impacts	Examples of possible mitigation measures
Construction of small scale irrigation schemes	<ul> <li>Competing claims over water use and conflicts</li> <li>Risk of erosion to downstream areas</li> <li>Reduced water flow and limited access to water in the downstream areas</li> <li>Development of salinity due to mismanagement of water and irrigated land</li> <li>Increased use of agro-chemicals and pesticides</li> <li>Soil and air pollution from agro-chemicals</li> <li>Ground and surface water pollution</li> <li>Faulty designs causing flooding</li> <li>Reservoirs (small dams for irrigation) become breeding place for disease vectors (malaria)</li> <li>Involuntary land acquisition</li> <li>Risk of land clearing and biodiversity loss</li> <li>Mismanagement of water may cause gully erosion</li> <li>Loss of water due to mismanagement</li> <li>Reduced flow, erosion and sedimentation on international waterways</li> <li>Impacts on physical cultural resources</li> <li>Destruction of natural habitats through land clearing for cultivation</li> </ul>	<ul> <li>Carry out assessment study on water demand and availability</li> <li>Carful design and installation of canal structures so that excess flows will be directed to natural waterways</li> <li>Regulate water flow and maintain the optimum flow to downstream dwellers and ecological requirements</li> <li>Adopt IPM for pest and weed control</li> <li>Use only prescribed and standard agrochemicals (avoid unpermitted chemicals that are classified by WHO)</li> <li>Conduct social assessment and prepare RAP</li> <li>Apply water efficient technologies and techniques</li> <li>Provide alternative designs and locations or avoid if subprojects directly affect physical cultural resources, destruct natural habitats, inflict deforestation, or cause biodiversity loss</li> </ul>
Construction and rehabilitation of community access roads and path	<ul> <li>Road side erosion and initiation of flooding and gully erosion in agricultural fields</li> <li>Quarry site opening causes pollution of surface and ground water</li> <li>Roads may cross and cause destruction of natural habitats and forests Disturbance to ecologically important habitats, cultural, religious and historical sites or resources</li> <li>Loss of biodiversity thought cut and fill activities and soil excavations</li> <li>Restriction of wildlife movement</li> <li>Disturbance of ecologically sensitive areas</li> </ul>	<ul> <li>Apply road drainage guidelines and include standard road side stabilization activities as part of the design</li> <li>Chanel road spillways to natural waterways</li> <li>Rehabilitate quarry sites with natural vegetation, rip raping, shaping and refilling, and avoid creation of standing water</li> <li>Avoid disturbance to cultural or religious sites. Unavoidable incidences must be agreed with stake holders such as leaders of churches, mosques and community.</li> <li>Reroute/redesign if alignment crosses important habitats and forests</li> </ul>

# ANNEX E: ENVIRONMENTAL AND SOCIAL IMPACT MITIGATION AND MONITORING CHECKLISTS

### Environmental and Social Management Framework

	<ul> <li>Erosion and sedimentation to water infrastructure and water sources</li> <li>Involuntary land acquisition</li> <li>loss of livelihood and economic benefits</li> </ul>	<ul> <li>Avoid effects on habitats and wildlife movement corridors through alternative routes, or relocate species for ex-situ conservation</li> <li>Avoid forest, riparian and wetland habitats with particular biodiversity</li> <li>Avoid occupied land. Prepare procedures to ensure equitable resolution</li> <li>Avoid and minimize if project causes of relocation of people</li> </ul>
Gully treatment on communal and private lands using physical and biological measures	<ul> <li>Restriction of access to communal lands</li> <li>Restriction of human and livestock mobility</li> <li>Risk of introduction of invasive exotic species</li> <li>Risk of harboring rodents and other crop pests</li> </ul>	<ul> <li>Community awareness,</li> <li>Consultative meetings and consensus built</li> <li>Alternative routes formed</li> <li>Compensations for loss of access (if caused economic loss)</li> <li>Non-invasive exotic and indigenous species</li> <li>Use those species that disfavor pests</li> </ul>
Degraded land treatment on communal and private lands using physical and biological measures	<ul> <li>Restriction of access to communal lands</li> <li>Restriction of human and livestock mobility</li> <li>Risk of introduction of invasive exotic species</li> <li>Risk of rodents and other pests</li> <li>Risk of disease vectors from water harvesting structures (ponds)</li> <li>Low standard physical structures due to lack of capacity</li> </ul>	<ul> <li>Community awareness,</li> <li>Consultative meetings and consensus built</li> <li>Alternative rout formed</li> <li>Compensations for loss of access (if caused economic loss)</li> <li>Selection and use of non-invasive exotic and indigenous species, pest repellent and species that doesn't harbor rodents</li> <li>Implement physical structures as per the standards given in relevant guidelines</li> </ul>
Area ex-closures for degraded and upland rehabilitation through natural regeneration and reforestation	<ul> <li>Restriction of access to humans and livestock</li> <li>Risk of involuntary land acquisition and causing relocation of households</li> <li>Risk of conflict over diverse interests</li> <li>Loss of economic or livelihood benefits</li> <li>Risk of wildlife and crop pests</li> </ul>	<ul> <li>Provision of alternatives (options for cut and carry, awareness</li> <li>on alternative forage sources, forage species provision)</li> <li>Consecutive community consultations and consensus on benefits and costs, responsibilities of management, benefit sharing arrangements</li> <li>Compensation for loss of land or economic benefits to victims</li> </ul>

### Environmental and Social Management Framework

		• Prepare wildlife management plans and training of communities on cultural practices to manage pests
Reforestation/afforestation on communal lands	<ul> <li>Restriction of access and mobility</li> <li>Involuntary land acquisition</li> <li>Wildlife attack on domestic animals and increase of crop pests (birds, primates, mammals)</li> <li>Risk of mono-cropping (resorting to one or two exotic species)</li> <li>Loss of economic or livelihood benefits</li> <li>Compromise to local biodiversity (indigenous species)</li> </ul>	<ul> <li>Provide alternative routes for human and livestock mobility</li> <li>Make interventions participatory and entirely based on community consensus</li> <li>Avoid appropriation of land or eviction of households</li> <li>Conduct continuous consultative meetings</li> <li>Compensate for loss of economic benefits</li> <li>Prioritize indigenous and multiple mix of species for planting</li> </ul>
Soil and water conservation measures (terracing, check dams, trenching), reseeding, re-vegetating on individual lands	<ul> <li>Risk of harboring of rodents and crop pests</li> <li>Loss of farmland due to structures</li> </ul>	<ul> <li>Introduce cultural pest management practices</li> <li>Use species that disfavor pests and rodents</li> <li>Train farmers on pest management</li> <li>Follow guidelines to implement structures</li> </ul>
Agro-forestry interventions	Risk of harboring of rodents and crop pests	<ul> <li>Introduce cultural pest management practices</li> <li>Use pest resistant crop varieties</li> </ul>
Introducing PFM for forest and woodland management	<ul> <li>Restriction of access</li> <li>Loss of economic and livelihood benefits</li> <li>Rising of conflicting interests</li> <li>Disruption to indigenous/traditional resource use and management systems</li> <li>Risk of creating competing claims</li> </ul>	<ul> <li>Consultative meetings and community consensus on benefits and responsibilities</li> <li>Provide alternatives or compensate for loss of economic and livelihood benefits</li> <li>Build community consensus and constitute regulatory mechanisms</li> <li>Integrate traditional systems</li> <li>Create opportunities for wider participation</li> </ul>
Establishing and/or strengthening community level protected area system, conservation zones, communal reserves, groves, wildlife corridors	<ul> <li>Involuntary land acquisition</li> <li>Restriction of access for humans and livestock</li> <li>Loss of economic and livelihood benefits</li> <li>Wildlife attack on livestock and increased crop pests</li> </ul>	<ul> <li>Provide alternatives or compensate for loss of economic and livelihood benefits</li> <li>Avoid or minimize land acquisition from individual holdings</li> <li>Prepare wildlife management plans and training of communities on cultural practices to manage pests</li> </ul>

# Environmental and Social Management Framework

		Carry out social assessment report and prepare social management plan
Integrating agro-silvo- animal husbandry systems/practices	<ul> <li>Loss of land (grazing land shortage) due to increased density of trees</li> <li>Increased risk of crop pests</li> </ul>	<ul> <li>Avoid competing claims on land (for grazing and tree planting)</li> <li>Introduce cultural pest management practices</li> </ul>
Establishing pockets of wood stands at homestead level	<ul> <li>Increased risk of crop pests</li> <li>Competition with annual or food crops</li> <li>Ground water depletion through deep root system</li> <li>Disruption to nutrient cycle if species have allelopatic effects</li> </ul>	<ul> <li>Introduce cultural pest management practices</li> <li>Planting sites should be different and with sufficient distance from crop fields</li> <li>Planting should not be done close to water bodies, wetlands, shallow water table areas</li> <li>Select species that do not cause allelopatic effect</li> </ul>
Construction of water harvesting structures (ponds, reservoirs)	<ul> <li>Site becomes mosquito (disease vectors) breeding area and malaria infestation increases</li> <li>Loss of land</li> </ul>	<ul> <li>Plant mosquito repellent tree and shrub species around water ponds</li> <li>Compensate for loss of land, livelihoods or economic benefits</li> </ul>
Introduction of high value crops (vegetables, root crops and fruit seeds, seedlings)	<ul> <li>Increased load of agro-chemicals to control pests and plant diseases</li> </ul>	Introduce and apply cultural pest management practices
Introducing new varieties of plant species for forage and food crops	• Risk of introducing new pests and crop diseases with new the germplasm	• Conduct quarantine checks and follow national guidelines for introduction of new germplasm

### ANNEX F: GUIDELINE FOR ENVIRONMENTAL MANAGEMENT PLAN

When a subproject includes distinct mitigation measures (physical works or management activities), an Environmental Management Plan (EMP) needs to be included with the subproject application. An EMP usually includes the following components:

- **Description of adverse effects**: he anticipated effects are identified and summarized.
- **Description of mitigation measures:** Each measure is described with reference to the effect(s) it is intended to deal with. As needed, detailed plans, designs, equipment descriptions, and operating procedures are described.
- **Description of monitoring program:** Monitoring provides information on the occurrence of environmental effects. It helps identify how well mitigation measures are working, and where better mitigation may be needed. The monitoring program should identify what information will be collected, how, where and how often. It should also indicate at what level of effect there will be a need for further mitigation. How environmental effects are monitored is discussed below.
- **Responsibilities:** The people, groups, or organizations that will carry out the mitigation and monitoring activities are defined, as well as to whom they report and are responsible. There may be a need to train people to carry out these responsibilities, and to provide them with equipment and supplies.
- **Implementation schedule:** The timing, frequency and duration of mitigation measures and monitoring are specified in an implementation schedule, and linked to the overall subproject schedule.
- **Cost estimates and sources of funds:** These are specified for the initial subproject investment and for the mitigation and monitoring activities as a subproject is implemented. Funds to implement the EMP may come from the subproject grant, from the community, or both. Government agencies and NGOs may be able to assist with monitoring.
- Monitoring Methods: Methods for monitoring the implementation of mitigation measures or environmental effects should be as simple as possible, consistent with collecting useful information, so that community members can apply them themselves (see example below). For example, they could just be regular observations of subproject activities or sites during construction and then use. Are fences and gates being maintained and properly used around a new water point; does a stream look muddier than it should and, if so, where is the mud coming from and why; are pesticides being properly stored and used? Most observations of inappropriate behavior or adverse effects should lead to commonsense solutions. In some cases (e.g. unexplainable increases in illness or declines in fish numbers), there may be a need to require investigation by a technically qualified person.

ESMP preparation template form

Potential environmental &	Proposed mitigation measures	Responsible for implementing the mitigation measures	Responsible for monitoring the implementation of mitigation measures	Time Horizon		Cost Estimate	
social impacts				Mitigation	Monitori ng	Mitigation	Monitoring

### ANNEX G: PEST MANAGEMENT FRAMEWORK FOR AGRICULTURE SUBPROJECTS

Small-scale agricultural subprojects may involve strengthening existing practices, introducing, diversifying or the intensification of crop production. Support for the development of small-scale agriculture and certain livestock activities (i.e. tick dips) may lead to the introduction or increased use of pesticides and other agricultural chemicals such as herbicides and fertilizers. Pests are organisms that compete with humans, domestic animals, or crops for nutritional resources. They include species of insects, mites, nematodes, mollusks, plant pathogens, vertebrates and weeds. Fertilizers are used to promote crop growth.

It is critical that appropriate planning, design and management be adopted for the handling, use, and management of all agricultural chemicals to avoid potential negative environmental impacts. If appropriate for small-scale agriculture projects funded under PCDP, abbreviated pest management plan for agriculture subprojects should address the following issues:

- 1. Proper use of agricultural chemicals such as fertilizers to avoid reduction in soil and groundwater quality.
- 2. Prevent fertilizer run-off into surface water sources to avoid negative impacts on aquatic environments.
- 3. Proper use of pesticides and herbicides to avoid contamination of crops, soils and water.
- 4. Proper use, handling and storage of all agricultural chemicals to avoid adverse health impacts on the rural population.
- 5. Ensure that banned or unauthorized agricultural chemicals are not used.
- 6. Proper handling and disposal of unused agricultural chemicals and packaging materials (i.e. sacks, plastic containers, etc.).

### ANNEX H: ENVIRONMENTAL AND SOCIAL GUIDELINES FOR HOUSEHOLDS' LIVELIHOOD DIVERSIFICATION INTERVENTIONS CHECKLIST

The following environmental and social guidelines will be incorporated into the DRDIP Implementation Manual. They are intended to guide the appraisal of interventions thereby drawing attention to the environmental and social aspects of such activities. Therefore, based on the result of the screening process for environmental and social impacts as required by OP 4.01 Environmental Assessment, OP 4.04 Natural Habitats, OP 4.09 Pest Management, OP 4.10, OP 4.11 Physical Cultural Resources and OP 4.12 Involuntary Resettlement, the following points should be considered during planning and appraisal to mitigate any adverse effect.

### Before selection of interventions properly understand the nature of households' livelihoods

- The proposed technologies/household enterprise should fit in with existing household livelihood strategies,
- Understand people's vulnerabilities, or susceptibilities to stresses and shocks describing or understanding the issues affecting livelihoods in a household,
- A better understanding of the roles, need and responsibilities of both men and women and of the issues surrounding their access to and control over resources,
- It is vital to understand how the livelihoods of various disadvantaged and underserved groups differ in terms of strengths, vulnerabilities and voice and what effect this has. This allows for targeted actions should recognize micro realities and support people to build upon their own strengths.
- Recognize the importance of human capabilities as central to household livelihood diversification. Thus we need to understand the different types of capital (or assets) that people have. We need to understand their vulnerabilities,
- Respect of poor people, recognizing that they are juggling very limited resources, and do have skills this is empowering in itself. This is very important if interventions are likely to succeed. Starting from where people are strong is much more likely to be successful than starting where they have no resources or capacity,
- Understand people's vulnerabilities, or susceptibilities to stresses and shocks describing or understanding the issues affecting livelihoods in a household.

### > Participatory identification and selection of the interventions

- Participatory identification of the needs and priorities of women, men and different socio-economic groups. Identifying promising livelihood opportunities,
- People must be key actors in identifying and addressing their livelihood priorities, including the poor. Outsiders and organizations need processes that enable them to listen and respond to people's views; we need to understand people's livelihoods and how these can be enhanced in a holistic way, which recognizes the interrelationships between the different aspects of their lives,
- Check whether the interventions or enterprise adversely affect or not vulnerable people (e.g., elderly poor, physically challenged, women, particularly head of households or widows, etc.) living in the area,
- Conduct consultation and ensure participation of household for selection of technologies/ enterprises,
- A technology or livelihood intervention should not decrease women's decision making power and participation in the implementation or not,

- Micro-credit program should be appropriate to culture of the people and respond to specific need of the vulnerable nations, nationalities and people,
- Specific groups minorities women, youth and female household are not likely to lose out from the proposed interventions,
- The proposed intervention should not drive the conflict or exacerbating conflict or creating cohesion within the community,
- The interventions that will not lead to loss of cultivable land, loss of grazing land, loss of resources like water and loss of traditional livelihoods,
- In case of non-farm activities, consider improved tools and equipment and increasing the skills of to enhance production and productivity.

### > Factors that reinforce diversification decisions

- One of the most critical considerations in taking up a diversification decision was availability of additional hands at the household level,
- Motivating, training and organizing the poor to participate in these opportunities,
- Arranging for credit and infrastructure, establishing the supply chain and the production processes, developing market linkages,
- Diversification decisions are often due to unforeseen circumstances, therefore, need to consider agro-climatic conditions, especially drought, often influence the diversification decisions in dry land areas,
- The role of markets and infrastructure development could reinforce, especially in taking up new activities. Diversification can be highly influenced by the general economic growth in the area, and growth of any specific sub-sector in the area,
- Input supply, training, technical assistance, market linkages) are needed,
- Human capital, in the form of knowledge and skills, is often required to properly make use of technologies and implementation of household enterprise,
- Poor household may not practice improved technologies because they perceive them as more management intensive; require more inputs such as labor and finance,
- Technologies/household interventions that do not require many purchased inputs may be more accessible to households with low income or access to transportation and market infrastructure. Those that reduce labor requirements, especially for women, may allow households to diversify into other income-earning activities or devote more time to childcare, or be more suitable for families with one or more members who are sick an especially important consideration with the rise of HIV/AIDS.

### > Viability of loans and risk mitigation

- Loan size should vary according to the experience and the capacity of the household and must base on business plan,
- Viability of loans and integration of credit with services necessary for supporting livelihoods of the households,
- Providing seed money should not ultimately affect the viability of loans that may led to a large number of defaulters, which ultimately created a perception that the poor were not bankable,
- The Credit has to be based on an integrated approach, where the intervention would include all services necessary for supporting livelihoods of the households,
- Reducing risks in various economic activities is another way of improving incomes. There are two broad methods of risk mitigation – the physical methods and the financial methods. For example, in crop cultivation, deep ploughing in summer, timely sowing, protective irrigation during gaps in the monsoon rains, pest control measures, etc. are all physical methods used to minimize or eliminate the risk of losing either part, or all of the crop. In animal husbandry, vaccinating animals is a form of risk mitigation,

- Financial risk mitigation through livestock insurance is form risk mitigation against the death or loss of animals, or loss of productive assets. In contrast, crop insurance protects a farmer against reduction in yield of crops due to weather changes, pest attacks, or any other reasons.
- > Discourage clearing of natural vegetation/avoid disease carries
- Discourage engaging in considerable clearing vegetation bushes or deforestation or any other activity that might have a negative impact on the social and economic welfare of the local communities,
- Adopt safe practices regarding pest management in its agricultural subprojects, and vector management in its health subprojects to ensure that these investments are environmentally and socially sustainable,
- Consider management of solid and/or liquid wastes generated as result of the proposed household livelihood diversification activity such as livestock rearing and fattening,

### ANNEX I: ENVIRONMENTAL AND SOCIAL GUIDELINES FOR RURAL WATER SUPPLY AND SANITATION SUBPROJECTS CHECKLIST

To facilitate the screening process for environmental and social impacts as required by OP 4.01, as well as good environmental project design, the following points should be considered by the teams:

### Water allocation:

✓ It is important that the community or the water utility has the right to abstract the required amount of water, which should be recognized in the overall planning and management of water resources. The amount may be small, but it is a priority and must be protected.

### Water quantity:

✓ To prevent water-washed diseases (scabies, body lice, tropical ulcers) and several eye infections (trachoma, conjunctivitis) which tend to spread due to poor hygiene, water supply systems for a minimum level of service should be designed to deliver at least 20 liters per person per day (plus wastage) without excessive queuing.

### Water quality:

- ✓ Protection of ground water and surface water;
- ✓ Determine applicability of water quality standards: if national drinking water quality policy is not available, use WHO drinking water quality standards;
- ✓ Ensure testing and treatment for parasites, hazardous chemicals, bacteria, viruses;
- ✓ Frequency and responsibility for water quality testing;
- ✓ Frequency and responsibility for treatment of water sources;
- ✓ Responsibility for monitoring and water quality control at the household level (beneficiaries, water user associations)
- Responsibility for monitoring and water quality control at the district level/project level (official authorities);
- ✓ Technical adequacy, quality and safety of bulk storage facilities;
- ✓ Technical adequacy, safety and protection of pumping facilities.

### Source protection:

- $\checkmark$  Look at the natural and human activities that take place around the well or spring box;
- ✓ If a surface water source is used, there needs to be an understanding how these activities affect the water quality at the point of withdrawal;

### ANNEX J: EXAMPLE OF ENVIRONMENTAL CONTRACT CLAUSES

### Construction activities and environmental rules for contractors

The following information is intended solely as broad guidance to be used in conjunction with local and national regulations. Based on this information, environmental rules for contractors should be developed for each project, taking into account the project size, site characteristics, and location (rural vs. urban).

After choosing an appropriate site and design, construction activities can proceed. As these construction activities could cause significant impacts on and nuisances to surrounding areas, careful planning of construction activities is critical. Therefore the following rules (including specific prohibitions and construction management measures) should be incorporated into all relevant bidding documents, contracts, and work orders.

### **PROHIBITIONS**

The following activities are prohibited on or near the project site:

- $\Rightarrow$  Cutting of trees for any reason outside the approved construction area;
- $\Rightarrow$  Hunting, fishing, wildlife capture, or plant collection;
- $\Rightarrow$  Use of unapproved toxic materials, including lead based paints, asbestos, etc.
- $\Rightarrow$  Disturbance to anything with architectural or historical value;
- $\Rightarrow$  Building of fires;
- $\Rightarrow$  Use of firearms (except authorized security guards);
- $\Rightarrow$  Use of alcohol by workers.

### **CONSTRUCTION MANAGEMENT MEASURES**

### *Waste Management and Erosion:*

Solid, sanitation, and, hazardous wastes must be properly controlled, through the implementation of the following measures:

### Waste Management:

- $\Rightarrow$  Minimize the production of waste that must be treated or eliminated.
- $\Rightarrow$  Identify and classify the type of waste generated. If hazardous wastes (including health care wastes) are generated, proper procedures must be taken regarding their storage, collection, transportation and disposal.
- $\Rightarrow$  Identify and demarcate disposal areas clearly indicating the specific materials that can be deposited in each.
- $\Rightarrow$  Control placement of all construction waste (including earth cuts) to approved disposal sites (>300 m from rivers, streams, lakes, or wetlands).Dispose in authorized areas all of garbage, metals, used oils, and excess material generated during construction, incorporating recycling systems and the separation of materials.

### Maintenance:

- $\Rightarrow$  Identify and demarcate equipment maintenance areas (>15m from rivers, streams, lakes or wetlands).
- ⇒ Ensure that all equipment maintenance activities, including oil changes, are conducted within demarcated maintenance areas; never dispose spent oils on the ground, in water courses, drainage canals or in sewer systems.
- $\Rightarrow$  Identify, demarcate and enforce the use of within site access routes to limit impact to site vegetation.
- $\Rightarrow$  Install and maintain an adequate drainage system to prevent erosion on the site during and after construction.

## Erosion Control

- $\Rightarrow$  Erect erosion control barriers around perimeter of cuts, disposal pits, and roadways.
- $\Rightarrow$  Spray water on dirt roads, cuts, fill material and stockpiled soil to reduce wind induced erosion, as needed.
- $\Rightarrow$  Maintain vehicle speeds at or below 10mph within work area at all times.

Stockpiles and Borrow Pits

- $\Rightarrow$  Identify and demarcate locations for stockpiles and borrow pits, ensuring that they are 15 meters away from critical areas such as steep slopes, erosion prone soils, and areas that drain directly into sensitive water bodies.
- $\Rightarrow$  Limit extraction of material to approved and demarcated borrow pits.

#### Site Clean up

 $\Rightarrow$  Establish and enforce daily site clean up procedures, including maintenance of adequate disposal facilities for construction debris.

#### SAFETY DURING CONSTRUCTION

The Contractor's responsibilities include the protection of every person and nearby property from construction accidents. The Contractor shall be responsible for complying with all national and local safety requirements and any other measures necessary to avoid accidents, including the following:

- $\Rightarrow$  Carefully and clearly mark pedestrian-safe access routes.
- $\Rightarrow$  If school children are in the vicinity, include traffic safety personnel to direct traffic during school hours.
- $\Rightarrow$  Maintain supply of supplies for traffic signs (including paint, easel, sign material, etc.), road marking, and guard rails to maintain pedestrian safety during construction.
- $\Rightarrow$  Conduct safety training for construction workers prior to beginning work.
- ⇒ Provide personal protective equipment and clothing (goggles, gloves, respirators, dust masks, hard hats, steel-toed and –shanked boots, etc.,) for construction workers and enforce their use.
- $\Rightarrow$  Post Material Safety Data Sheets for each chemical present on the worksite.
- ⇒ Require that all workers read, or are read, all Material Safety Data Sheets. Clearly explain the risks to them and their partners, especially when pregnant or planning to start a family. Encourage workers to share the information with their physicians, when relevant.
- $\Rightarrow$  Ensure that the removal of asbestos-containing materials or other toxic substances be performed and disposed of by specially trained workers.
- $\Rightarrow$  During heavy rains or emergencies of any kind, suspend all work.
- $\Rightarrow$  Brace electrical and mechanical equipment to withstand seismic events during the construction.

#### NUISANCE AND DUST CONTROL

To control nuisance and dust the Contractor should:

- $\Rightarrow$  Maintain all construction-related traffic at or below 15 mph on streets within 200 m of the site.
- $\Rightarrow$  Maintain all onsite vehicle speeds at or below 10 mph.
- $\Rightarrow$  To the extent possible, maintain noise levels associated with all machinery and equipment at or below 90 db.

- $\Rightarrow$  In sensitive areas (including residential neighbourhoods, hospitals, etc.) more strict measures may need to be implemented to prevent undesirable noise levels.
- $\Rightarrow$  Minimize production of dust and particulate materials at all times, to avoid impacts on surrounding families and businesses, and especially to vulnerable people.
- $\Rightarrow$  Phase removal of vegetation to prevent large areas from becoming exposed to wind.
- $\Rightarrow$  Place dust screens around construction areas, paying particular attention to areas close to housing, commercial areas, and recreational areas.
- $\Rightarrow$  Spray water as needed on dirt roads, cut areas and soil stockpiles or fill material.
- $\Rightarrow$  Apply proper measures to minimize disruptions from vibration or noise coming from construction activities.

# **COMMUNITY RELATIONS**

To enhance adequate community relations the Contractor should:

- $\Rightarrow$  Following the country and EIA requirements, inform the population about construction and work schedules, interruption of services, traffic detour routes and provisional bus routes, as appropriate.
- $\Rightarrow$  Limit construction activities at night. When necessary ensure that night work is carefully scheduled and the community is properly informed so they can take necessary measures.
- $\Rightarrow$  At least five days in advance of any service interruption (including water, electricity, telephone, and bus routes) the community must be advised through postings at the project site, at bus stops, and in affected homes/businesses.

## CHANCE FIND PROCEDURES FOR CULTURALLY SIGNIFICANT ARTEFACTS

The Contractor is responsible for familiarizing themselves with the following "Chance Finds Procedures", in case culturally valuable materials are uncovered during excavation, including:

- $\Rightarrow$  Stop work immediately following the discovery of any materials with possible archaeological, historical, paleontological, or other cultural value, announce findings to project manager and notify relevant authorities;
- $\Rightarrow$  Protect artefacts as well as possible using plastic covers, and implement measures to stabilize the area, if necessary, to properly protect artefacts
- $\Rightarrow$  Prevent and penalize any unauthorized access to the artefacts
- $\Rightarrow$  Restart construction works only upon the authorization of the relevant authorities.

#### **ENVIRONMENTAL SUPERVISION DURING CONSTRUCTION**

The bidding documents should indicate how compliance with environmental rules and design specifications would be supervised, along with the penalties for non-compliance by contractors or workers. Construction supervision requires oversight of compliance with the manual and environmental specifications by the contractor or his designated environmental supervisor. Contractors are also required to comply with national and municipal regulations governing the environment, public health and safety.

# ANNEX K: SUMMARY OF SMALL DAM SAFETY GUIDELINE (MOA)

# 1. Introduction

The overarching dam safety objective is to protect people, property and the environment from the harmful effects of mis-operation or failure of dams and reservoirs. To ensure that dams and reservoirs are operated and that activities are conducted so as to achieve the highest standards of safety that can reasonably be achieved, measures have to be taken to achieve the following three fundamental safety objectives:

- $\checkmark$  To control the release of damaging discharges downstream of the dam,
- ✓ To restrict the likelihood of events that might lead to a loss of control over the stored volume and the spillway and other discharges,
- ✓ To mitigate through onsite accident management and/or emergency planning the consequences of such events if they were to occur.

These fundamental safety objectives apply to dam and activities in all stages over the lifetime of a dam, including planning, design, manufacturing, construction, commissioning and operation, as well as decommissioning and closure.

# 2. Planning of small Dams

There are some fundamental principles which should be applied through the investigation, design, construction and commissioning stages to achieve an adequate level of safety. The principles are:

- ✓ the competence and experience of the owner's agents relative to the nature and dam hazard category of the dam, must be appropriate in all areas;
- ✓ there must be a cooperative and trusting relationship between the owner and technical advisers, and the designers must be given full control over decision making in critical areas;
- ✓ the owner must agree to apply the appropriate level of funding for investigations, design and construction to reduce the chances of critically important issues (particularly related to foundations) being not sufficiently well assessed or under protected;
- ✓ the designer/technical adviser has a duty not to compromise unduly due to financial pressures from the owner, developer or contractor;
- ✓ continuity of key technical advice should be maintained throughout all stages of the dam from development, through design, construction and commissioning, to reduce chances of critical points of design philosophy and intent being misinterpreted during construction or commissioning.

#### Dam site investigation

#### Selecting the Dam Site

When choosing the location and size, the dam owner should also take into account what would happen if the dam failed suddenly and whether it would result in loss of life, injury to persons or livestock, damage to houses, buildings, roads, highways or railroads. The owner of the dam should ensure to avoid locating the dam where run-off from houses, dairies or septic systems can pollute the water.

# **Considerations at Investigation Stage**

#### **Technical Consideration**

Site selection and site investigations are critical components to the success or failure of a dam. Regarding the technical consideration the following important aspects should be considered:

- ✓ The catchment is the area of land from which run-off is to be collected. If it is the main source of water supply, make sure that it is capable of yielding enough water to maintain both, the supply in the dam and the required releases over all periods of intended use. The catchment area however should not be too large, as it will then require a big and expensive overflow system (or spillway) to safely pass excess runoff from heavy rainfall without overtopping the dam.
- $\checkmark$  Topographical features such as slope, width and height of dam, as well as reservoir
- $\checkmark$  capacity will influence construction costs.
- ✓ Conducting site tests to establish the material properties for the embankment and foundation.
- ✓ A good location for a spillway that will effectively handle runoff and minimize erosion.
- $\checkmark$  Watershed activities that can affect the water quality or quantity of runoff.

## Environmental Considerations

Dams with their associated reservoirs can have substantial environmental effects and any existing dam or new project must comply with the Ethiopian environmental and environmental legislations and associated licensing or permit requirements. It also complies with World Bank Safety of Dam Operational Policy (OP/BP. 4.37). It should be recognized at the outset that dam developments have effects extending beyond the immediate confines of the dam and inundated areas. For example;

- ✓ Reservoir slope stability may become a dam safety issue due to the risk of overtopping caused by large volumes of reservoir water being displaced by slope failures.
- ✓ Sitting of the dam/reservoir must take into consideration the local earthquake and faulting activity which may cause breaching of the dam
- ✓ Groundwater level changes may affect stability and land use around the reservoir margins and possibly adjacent to the downstream river, as a result of changed water levels.
- ✓ Trapping of sediments in the reservoir can result in upstream shoaling and loss of reservoir storage.
- ✓ Flora/fauna effects may occur in storage basin, downstream, and in passage around and through the dam.
- ✓ Minimum flow maintenance downstream of the dam to ensure the survival of flora and fauna, and to reduce causes of stream bed deterioration.
- $\checkmark$  Social development/changes to downstream use given the changed flood situation.

# Dam Design

#### Embankment dams Design

The single most common cause of earthen dam failures is overtopping of the embankment. An undersized spillway will lead to overtopping; therefore spillway design is critical to reservoirs. The spillway must be located such that discharge will not erode or undermine the toe of the dam. If the banks of the spillway are made of erosive material, provision must be made for

their protection. Consideration must be given to the hazard to human life and potential property damage that may result from the failure of the dam or excessive flow rates through the spillway. Further consideration must be given to the likelihood of downstream development that may result in an elevation of the hazard classification.

# Extreme Events

Large earthquakes, storm/flood activity and failure of upstream dams can be considered extreme events. The risk of failure from these events is minimized by using engineering design standards and relevant guidelines incorporating adequate margins of safety. Emergency preparedness set up well in advance is the only available measure of reducing the impact when a dam failure is about to happen.

## Sedimentation

The effective life of many of small dams is reduced by excessive siltation – some small dams silt up after only a few years. This issue is poorly covered in the many small dam design manuals that are available, as they mostly focus on the civil engineering design and construction aspects. Appropriate methods/tools have to be chosen to predict, and where possible reduce, siltation rates in small dams.

# **3.** Construction of a Dam

The quality of construction is all-important to dam safety. As far as construction is concerned, the following requirements are necessary from the dam safety viewpoint:

- ✓ the contractors must be suitably experienced and committed to achieving the standards of work specified;
- ✓ the level of supervision of the works, quality assurance procedures and designer continuity, must be appropriate to the scale and complexity of the dam;
- ✓ the owner must recognize that inherent uncertainties may remain after design investigations and only be revealed during construction, and have funding in place to deal with costs arising from additional requirements identified during construction;
- ✓ any area identified in the design process as requiring confirmation by the designer during construction, must be totally under the designer's control, and no design change, however small, shall be made without the designer's review and formal approval;
- $\checkmark$  a suitably detailed design report and drawings showing the as-built structure of all components of the dam and foundation shall be developed as an on-going and integral part of the construction supervision process, and be prepared after completion of each component so that there is a reliable record to refer to at all times in the future.

Therefore, the dam owner should ensure all the above mentioned requirements are fulfilled and complied.

#### Selecting the contractor

The use of inexperienced contractors and/or inadequate supervision can develop into an expensive liability. Nothing can take the place of a reputable contractor, using appropriate equipment and experienced machine operators and working under supervision of an experienced engineer.

## Construction Supervision

Construction supervision is an important phase of dam construction. Supervision is meant to ensure that the design factors and specification requirements have actually been included in the final product.

If foundation preparation, material selection, outlet/spillway installation and embankment compaction are not properly carried out then the safety of the dam will be compromised. So, for all small dam types (both earthen and rock fill) expected to be constructed, all the dam safety requirements applicable should be considered accordingly.

## 4. Safety Surveillance

#### Purpose of Regular Inspection

The purpose of a dam safety surveillance program is to avoid failure of the dam, by giving early warning of any kind of symptom of trouble as early as possible. It is the most economical and effective means an owner has of maximizing the long-term safety and survival of the dam. Its primary purpose is to monitor the condition and performance of the dam and its surroundings.

## Frequency of Inspections

The frequency of inspection required for an effective program of surveillance depends on a variety of factors including:

- $\checkmark$  Size or capacity of the dam;
- $\checkmark \qquad \text{Condition of the dam; and}$
- ✓ Potential for damage resulting from failure of the dam (represented by the hazard category).

Adoption of the inspection frequency for a particular dam is the responsibility of the owner, though professional advice should be sought for large dams or those categorized under significant and high hazard dams.

According to the dam safety guidelines prepared for AGP, the suggested inspection frequencies for small dams of less than 15 m height for the two levels surveillance (quick visual inspection and comprehensive examination) is presented in the table below and should be followed critically.

Quick Visual Inspection	
Dam Hazard Potential classification	
High	twice weekly
Significant	weekly
Low	fortnightly
<b>Comprehensive Examination</b>	
Dam Hazard Potential classification	
High	monthly
Significant	3-monthly
Low twice-yearly	

## **Special Inspections**

Special inspections will be required after unusual events such as earthquakes, major floods, rapid drawdown or volcanic activity. Special inspections should enable the dam owner to become aware of faults before partial or total failure occurs. Times when inspections additional to those above are recommended are:

- ✓ before a predicted major rainstorm (check embankment, spillway and outlet pipe);
- ✓ during and after severe rainstorms (check embankment, spillway and outlet pipe);
- $\checkmark$  after any earthquake, whether directly felt on the owner's property or reported by local news media (check all aspects of the dam).

Inspections should be made during and after construction and also during and immediately after the first filling of the storage.

## **Dealing with Problems**

A systematic program of safety surveillance should maximize the likelihood that any developing conditions likely to cause failure would be found before it is too late. Surveillance will also help early detection of problems before they become major repair bills. As identified earlier typical problems (many of which are treatable if found early enough) are most likely to fall into one of the following categories: seepage/leakage; erosion; cracking; deformation/movement; concrete structure defects; and spillway blockage.

## Instrumentation and Monitoring

Instrumentation at a dam furnishes data to determine if the completed structure is functioning as intended, provides a continuing surveillance of the structure, and is an indicator of developments which may endanger its safety. Typical items instrumented or monitored include;

- ✓ profiles and condition, deformations, seepages or damp areas (visual)
- $\checkmark$  reservoir water levels which relate to dam loads and flood behaviour
- ✓ local rainfall which relates to background seepages
- ✓ drainage and distinguishable seepages which relate to control of leakage water flow
- ✓ Clarity of seepage flow which relates to potential erosion of embankment or foundation material.
- $\checkmark$  water pressures within the dam and foundations which relate to structural behavior
- ✓ movement or deformation of the dam surface and internal structure which relates to structural behavior
- $\checkmark$  stresses within the dam which relate to structural behavior
- $\checkmark$  seismic acceleration which relates to structural behavior

#### 5. Operation and Maintenance of Dams

Effective and ongoing operation, maintenance and surveillance procedures are essential to ensure the continued viability and safety of a dam and its appurtenant structures. Poor operation, maintenance and surveillance will invariably result in abnormal deterioration, reduced life expectancy and possibility of failure. The proper operation, maintenance and surveillance of a dam provide protection for the owner and the general public. Furthermore, the cost of good operation, maintenance and surveillance procedures is small compared with the cost and consequences of a dam failure which could include major repairs, loss of life, property damage and litigation.

Because many small dams fail through lack of maintenance, it is prudent to have a definite and systematic maintenance plan. The maintenance plan should be decided upon when the construction work on the dam is completed. It will affect the life of the storage if you do not maintain it properly. A good plan should include the practices to be used, as well as the approximate time of the year when they are applicable.

# ANNEX L: SUMMARIZED REPORT OF CONSULTATIONS

# • INTRODUCTION

As part of the ESMF preparation processes for the DRDI project, community and stakeholder consultations were carried out in four host Woredas and six kebelles found in Somali and Benishangul Gumuz Regional states. The community consultation meeting were held in Melka Dida, Helewein, and Bur Amino kebelles of Dollo Addo Woreda and Womba, Jema & Tongo kebelles of Bambasi, Homasha and Tongo Woredas respectively. Consultation discussions were also conducted with stakeholder offices such as the Woreda and Regional Agriculture and Natural resources offices, Woreda and Regional level Environmental protection offices and other relevant experts. In order to initiate the participation of the stakeholders and community members a presentation was made that cover the project objectives, components and the main elements of the draft DRDIP ESMF procedures.

The main purpose of the community and stakeholder consultations was to inform & create awareness about the DRDI project by providing project information and to encourage their participation by providing the venue to reflect their views, opinions and concerns on the ESMF development. The consultation meetings were also aimed at enabling the community and stakeholder representatives to identify the environmental impacts and issues that concern them most in relation to the DRDI project and to involve them in developing appropriate mitigation actions by applying their indigenous/local knowledge of the project implementation areas. Interviews were also conducted with selected stakeholders to identify institutional capacity gaps and other constraints to implement the ESMF procedures. The stakeholder and community consultation meetings were attended by more than 125 participants.

# • KEY FINDINGS OF THE CONSULTATION MEETINGS

The key findings of the community consultation meetings held with the host communities are summarized as follows.

## 8.1 SUMMARY OF WOMBA (BAMBASI), JEMMA (HOMOSHA) & TONGO CONSULTATIONS

The following main points were raised and discussed with the host communities and local authority representatives.

# 8.1.1 General Environmental and social impacts identified (Negative & Positive)

- Most of the conflicts between the host community and immigrants emerge from natural resource uses. The immigrants are very damaging in deforesting the area. They cut the forest irresponsibly including by uprooting it in distractive manner. For example, the host community traditionally attaches value for big trees and do not cut it due to respect. In contrast, the immigrants cut large and small trees invariably.
- The immigrants cut and use the forest for food, fuel wood, building house and fences, and for raising additional income. The immigrants traditionally prefer to use fuel wood than other alternatives such as stoves and that is putting a lot of pressure on the forest. They collect fuel wood by moving out to the field in a large group constituting hundreds

of them and inflict great damage to the forests. They also damage crops and vegetables on their way by freely walking over it and harvesting it on the way if found ripe.

- The immigrants produce charcoals, tables and chairs from the forest trees and sell it in the market. They prepare food for sale in the market by cutting and uprooting wild false banana tree.
- Some members of the host community also use the immigrants to illegally produce charcoal from the forest. Bamboo and savannah grass are extensively used for building houses and its presence is fast declining in the area.
- The camp administration conduct awareness raising campaigns, but it is not well received by the immigrants. There are forest protection guards hired by AARA, but are not effective for the immigrants change time and techniques to go and cut forest trees.
- The host community is heavily affected by the stealing of harvests from their farm land and irrigation farms. It was stated that more than 70% of their produce is stolen right from the farms. The host community is stopping to cultivate its irrigated land because of the looting of harvest.
- The host community deeply complains and resents stealing of their cattle. The cattle are taken into the camp and slaughtered. The community is abandoning to rear chicken, goats and cattle due to the stealing by the immigrants. The immigrants steal the animals day and night. The host community is heavily affected by the stealing which they take and slaughter it in the camps.
- The host community believes that it is not benefited by hosting the immigrants. The host community asserts that, it was frequently stated that 25% of the support budget to the immigrants will be channeled to host community, but that is not done.
- The community complains that some job opportunities created within the refugee camps and which can be covered by locals are not given to host community members. Jobs such as Janitors, security e.t.c can be covered by able youth of the host community.
- The community seeks guards to be recruited by the DRDI project to protect their irrigation lands. Also the forest protection guards formerly employed by AARA are now fired. Thus the community prefers priority be given to employ the forest protection guards by the DRDI project.
- The community is willing to provide land for development infrastructures voluntarily without requiring compensation payments. The community seeks social and economic infrastructures to be built in the kebelle and believes land should not be a constraint for development projects.

# 8.1.2 Specific Host community level issues

## 8.1.3 Bambasi Woreda / Womba kebelle

- The immigrants have degraded the forest cover that used to exist in Womba area between Womba village and the refugee camps. For example, Higla forest which was protected as area enclosure by the community is highly degraded by the immigrants.
- The host community observes that the once very common savannah grass and bamboo vegetation has disappeared from their locality and are anxious about it. The community attaches its disappearance with the extensive use of these natural resources by the immigrants.
- The host community in womba runs around 30 hactars of irrigated land along the Dabus River. However, the community deeply complains that they have nearly stopped working and cropping the irrigated land because of the stealing by immigrants when the crops and vegetables ripens. The Woreda administration also stated that there are small irrigations in womba area and residents frequently report loss of equipment from their irrigation.
- The immigrants also do fishing on the Dabus River which is affecting the access of host community. Thus the DRDI project can work on alleviating such problems and is welcomed by the Woreda administration.
- The host community states that the immigrants were alone when they first arrived in womba refugee camp. However, their cattle came in truck loads and now they have herd of cattle. There are large numbers of cattle owned by the immigrants in the camp. These cattle's usually damage host community cropped farmlands by using it as a pasture. They have also impacted the host community by increasing the pressure on the available pasture land.
- The road that connects womba kebelle and the refugee camp with Bambasi is now heavily damaged by the heavy traffic of the camp. The host community complains that it has become difficult to drive pregnant mothers with ambulances on the road. The dust created due to vehicles moving to and from the camps has also made walking on the road difficult. The community seeks the road to be maintained and upgraded to concrete asphalt level.
- The Bambasi Woreda administration believes that the level of impacts on the host community is unparalleled by the small benefit gained as a result of the presence of immigrants. The immigrants are found not far from the host community. Their influence and impact on the host community is high. Their participation on street vending and trade in Bambasi town is exceeding that of the locals.
- There are now efforts to educate them on the impacts of deforestation and the associated national rules and regulations on forest/tree cutting. Committee was established to work on that and it seems to have improved the situation.
- The host community complains that those members of the host community who has given up their land for the refugee camp purposes should have been given priority for

job opportunity and employment within the camp. But so far no youth or adult has been given a job in the refugee camps.

- With regard to waste management the refugee camp in Womba/Bambasi is provided with waste collection and disposal facilities and is managed properly. They have a place for disposing solid waste by burning it.
- The refugee camp administration have provided water supply to womba kebelle and built a water tanker to womba village from the boreholes developed for the immigrants.
- Efforts of re-forestation and seedling plantation is planned to start this year as a result of long discussions held between the local authorities and the refugee camp administrators.
- The host community appreciates the medical treatment they receive at camp health facility, TVET school enrollment of host community children, and the construction of classrooms in womba to upgrade and open grade nine in womba primary school. The community seeks to upgrade the school up to grade 12.
- The community expects that implementation of the project can support them in alleviating many of the burdens they have.

# b. Homosha Woreda / Jemma Kebelle consultations

- The immigrants started camping in Homosha Woreda since 1991. A comparison of the natural resource base in the area before and after they started camping shows that the presence of wildlife and indigenous trees has considerably decreased. Formerly the area used to be inhabited by lions. Currently lions and other wild animals are rarely seen in the area.
- The forest in Jema kebelle is heavily affected by the deforestation activities of the immigrants. The immigrants cut the trees irresponsibly by uprooting it. They even harass the local communities for trying to stop them from cutting trees.
- The immigrants like the occurrence of wildfire for it creates an opportunity to easily hunt the wildlife. The immigrants consume all types of wild animals without preference and that is not favored by the host community.
- The refugee camps in Sherkolle have solid waste collection and disposal facilities which adequately manage the wastes generated in the camps. However, with regard to liquid waste management, there are occurrences of mis-management arising from the large number of immigrants and shortage of toilets within the camp. The host community in Jamma kebelle found nearby the camp complains about sewage flow problems originating in the camp.
- The host community complains that the immigrants have brought in cross boarder animal diseases together with their cattle. The local community cattle are severely affected by such diseases and have lost all of its cattle. The occurrence of tse-tse fly in the area has intensified and farmers are now obliged to buy oxen for a couple of months only for tilling their farmland and they sell it back before it dies after they finish.

• The community welcomes the project in anticipation that it will do practical works on the ground that supports them. The community seeks for health facilities to be built in their kebelle as it is done for the refugees.

## 8.1.4 Stakeholder consultations in Bambasi, Homosha and Assosa

The following main points were raised and discussed with the host communities and local authority representatives.

- a. Bambasi Woreda ANR and EPLA office
- There were problems in selection of the site for refugee camps. All those impacts were not anticipated to occur at the beginning which has now become a source of conflict between the municipality/administration and the local residents.
- According to the Woreda NR expert, the main forest areas in the surrounding are heavily degraded by the immigrants. In order to reduce these impacts NGOs like Lutheran Federation and AARA are working on different options of reforestation and providing alternative energy sources. The immigrants for example are provided with solar panels, stoves e.t.c but they don't use it and sell it in the market. The reforestation effort is also not much effective. The level of deforestation and use by the immigrants sometimes initiate the locals to do the same by disappointment caused due to their unreserved use of the natural resource.
- The immigrants use water supply from common sources which is also used by the host community. This has been a source of conflict between the host community and immigrants.
- There are also impacts of solid waste disposal in the area.

Regarding ESMF implementation experiences:

- Bambasi Woreda participates in SLMP-II project and the NR core process conducts environmental and social screening of subprojects. There is a limited experience in the NR department of the Woreda. The Woreda NR department undertakes the environmental screening together with the environment officer of the Woreda environment protection office. Initially, eligibility check of sub projects is conducted at kebelle level by the DA.
- The Woreda environment protection office is active in conducting environmental enforcement on private investors in the agriculture field. It was stated that there are about 66 investors engaged in large scale agriculture and the Woreda EPA actively conducts follow up monitoring and auditing on the implementation of mitigation actions stated in their EIAs or environmental audit reports.

#### b. Benishangul Gumuz Region Agriculture and Natural Resource Bureau

The following main points were raised and discussed with the host communities and local authority representatives.

- The forest cover in all the three Woredas where refugee camps exist are degraded heavily.
- The Natural Resource Conservation Core process of the region believes that reforestation efforts alone may not be enough to solve the environmental degradation taking place in the area. The following were suggested as additional mitigation options:

- ✓ Substituting their fuel wood demand for cooking by other technologies, such as stove, solar panel, biogas, e.t.c
- Replacing their demand of house building materials by other options outside the forest resources (timber, bamboo & grass)
- ✓ Though not fully effective, continuing to protect forest cutting by guards
- Small rivers such as Menge and Tumet found in Homosha Wereda that used to flow continuously year round are now drying in the dry season following the forest degradation.
- Small rivers found between the Gubre 40 and Gubre 50 camps in Homosha are showing signs of pollution with sewage generated by the immigrants.
- The immigrants in Sherkole camp have opened shops along the street side and are trading without having to pay taxes. This has greatly affected the competitiveness of the local traders in the host community.

# C. BENISHANGUL GUMUZ REGION EPLAU

The following main points were raised and discussed with the host communities and local authority representatives.

- The Regional EPLAU agrees that the main environmental and social impacts affecting the host Woredas due to immigrants are related to natural resource exploitation including forest degradation and artisanal gold mining as well as social impacts such as stealing of crops, cattle & properties, rape, and committing criminal acts on host communities.
- The region adopts and applies the Federal EIA law. The region has not yet finalized endorsing its own regional EIA law.
- The Regional EPLAU has the experience of reviewing and clearing EIAs prepared by investors in the Agriculture sector.
- The Regional EPLAU have logistical and manpower shortage to conduct environmental auditing and EIA monitoring.
- The Regional EPLAU indicated that it has never received complaints from host communities in relation to waste management problems originating from Refugee camps.
- The Regional EPLAU suggested the following mitigation options as possible means to avert the current environmental degradation
  - ✓ Strengthening the forest guards to prevent tree cutting
  - ✓ Planting indigenous tree seedlings
  - Providing energy saving stoves to immigrants and controlling and enforcing its use
  - ✓ Helping the immigrants to plant fuel woods that compensate their fuel wood consumption.
  - Providing the immigrants alternative energy sources such as gasoline stoves, solar battery chargers, e.t.c
  - $\checkmark$  Restricting open grazing of cattle in rangelands and feeding the cattle at ranch

# 8.2 SUMMARY OF MELKA DIDA, HELEWEIN AND BUR AMINO (DOLLO ADO WOREDA) CONSULTATIONS

#### 8.2.1 General Environmental and social impacts identified (Negative & Positive)

- One of the major environmental impacts raised by the host communities is the loss of vegetation cover (bush land) caused by the refugees. The immigrants cut trees extensively and have caused environmental degradation. It is estimated that a Vegetation cover within 20km radius of each refugee camp has perished as a result of the immigrants. A bylaw restriction on tree cutting enforced by local controllers was put in place by the surrounding kebelles, but its effectiveness is low.
- The host community also suggested that the youth can be organized to prevent cutting of trees by the immigrants.
- The immigrants have affected the wildlife of the area. The host community raised that the immigrants hunt wildlife including in the nights and that has resulted in reducing wildlife availability in the area.
- The solid waste management in refugee camps is good and no plastic fiestals are littered around. The refugee camps are facilitated with waste collection and disposal means. However, the plastic waste situation is worse in Melkadida and the other host community villages. The host community raised that goats are dying after eating plastic fiestals (i.e. plastic packaging waste). The farm lands are also being covered by fiestals and becoming unsuitable for farming. The host community also suggested that, in order to solve the problem of waste management the youth can be organized on waste collection activities and need to be provided with waste bins, push carts or trucks for waste collection/transport, and waste disposal facilities, e.t.c.
- ➤ The immigrants have long started to rear cattle and especially goats. Some of them have now owned a herd of goat in large number. The host community raised that the herd is adding extra pressure to the available pasture land and is affecting the host community cattle. Often host community goats are also stolen and taken into the camp by the immigrants.
- > The host community listed the following impacts affecting women as a result of refugee presence:
  - Exposed them to fetch drinking water from distant areas
  - Prolonged waiting time on long que in grain mills as a result of the extra shortage created by the demand of the immigrants
  - Exposed women to collect fuel wood from distant areas due to rapid deforestation taking place in the area
  - Difficulties to support children to go to school in Bokolmayo or Dollo Addo after grade 6.

Land use title certificates are given to farmers by the local authorities. This is also done in the small towns partially. The local authorities together with the community have agreed to provide land needed for development infrastructure without requiring compensation voluntarily. There is an experience of providing land for the refugee to be used for developing different infrastructures for free. Thus there is an experience on that and when the development infrastructure is to be built for the community, land can be provided voluntarily without

compensation. This, however, doesn't include land to be used for water harvesting/dams because the command areas will be usually farmlands belonging to individuals and it is difficult to provide replacement farmland.

## 8.2.2 Specific Host community level issues

## a. Melkadida

- Kobe refugee camp is 4km whereas Bokolmayo is 20kms from Melaka Dida. The host community in Melka dida is surrounded by refugee camps and they feel the social and environmental impacts affect them from all directions. And being host to all these immigrants all the pressure is burdened on them.
- The plastic waste situation is worse in Melkadida village. Host community goats are dying after eating plastic fiestals. The farm lands are also being covered by fiestals and becoming unsuitable for farming.
- Host community states that all assistance is provided to the refugees and none is given to them. It is not the refugees who are immigrants, but it is us who has become immigrants. The social infrastructures present in the camp such as water supply, school, and health facilities are far better than those of the host communities. Thus, they need to upgrade and expand the school, health center and be provided with stoves, and support with microfinance by organizing in SMEs.
- Women participants stated that they are organized in SME and are working in vegetable, milk, and meat vending. They are supported by some NGOs but no support comes from the government side. We need to be supported with technology, training and micro-finance to modernize our milk, meat and vegetable trade.

## b. Helewein

- The host community complains that the immigrants steal the fences of the farms of the host community during night times. They allow their cattle to graze on the crop farms and destroy it. These activities are affecting them very much.
- The host community has problems of social services such as schools. Children are attending classes under tree shades. Thus, they expressed their expectation on the DRDI project to alleviate the shortage of these social service infrastructures in their village.
- With the arrival of the immigrants to the area, new phenomenon such as rape has occurred in the area which was not common before. Women often face difficulty to go to farm lands and other places.

# 8.2.3 Stakeholder consultation in Dollo Ado Woreda Agriculture and Natural Resource Office

The following main points were raised during the consultation with the core process heads and experts of the Dollo Ado Woreda office of Agriculture and Natural Resource.

- 70% of the population in Dollo Addo is agro-pastoralist.
- Immigrants have settled up to 70kms inland distance in the Woreda. They have inflicted considerable damage on the natural resource. They cut trees walking up to 20kms radius. This has become a source of conflict with the host community, because the community endeavors to protect the forest and prevents the immigrants from cutting.

- The immigrants use the timber not only for fuel wood but also for building their houses. They even sell the timber in the market for others who build their houses.
- The community complains and resents on the natural resource degradation and wildlife hunting done by the immigrants.
- There are no efforts done so far on re-afforestation, as well as water and soil conservation on the degraded land. There are 1 or 2 NGOs active on environment but the UNHCR has stopped budgeting for environment since 2013.
- Even if the Dawa and Genale rivers are present, the community does not have a meaningful irrigation structure.
- The use of alternative energy sources such as stove should be considered to prevent the continued degradation on the vegetation cover and the wildlife in the area.
- There is a limited experience of implementing ESMF procedures in Dollo Addo Woreda. The Woreda participated in PCDP I and now it is participating in PSNP III project together with Dolobay and Bare Woredas. Environmental and social screening of PSNP subprojects is carried by the Woreda NR expert in collaboration with the DA and Save the Children. Save the children is an implementing organization of PSNP in the three Woredas. The screening report is reviewed by the Woreda NR core process and is approved first there. It is then sent to the Woreda food security task force for further review and approval.
- The Woreda NR core process has a vacant position for environmentalist which is not yet filled in. The regional environment protection bureau has not devolved its branches to Woreda level.

# List of contacted people

No.	Name	Institution	Responsibility	Telephone
1	Issa hojele	Bambasi Woreda	Woreda Administrator	0917171516
	-	Administration		
2.	Feisel Ali	Bambasi town Municipality	City Manager	0917 420700
3	Abdulkasim	Bambasi Woreda Agriculture	Head of the office	0933 349518
	Mohamed	& NR office		
4	Chalachew Manaye	Bambasi Woreda EPLA office	Head of Environment	0927 486742
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5	Ayalew Molla	Bambasi Woreda	Information and	0910 437732
		Administration	Communication officer	
6	Ato Solomon	Bambasi Woreda Agriculture	Natural Resource	0912 941096
_	Tibebu	and Natural Resource Office	Conservation Head	0000 500 500
7	Ali Mussa	Wemba Kebelle	Kebelle Manager	0928 588629
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8	Asres Moges	Homosha Woreda	Natural Resource	0917 458183
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10	Delay Adiana	Administration	Head of Environment	0020 460590
10	Belay Adissu	Homosna woreda EPLA	Head of Environment	0920 400580
11	Haii Quaman	Jame Kahalla Administration	Kabala Chairman	
11	Musso Abmod	Penishangul Pagion	Head of the Purson	0010 010660
12	Rubskar	Environment Forest and Land	Head of the Bureau	0910 910009
	Dabekei	Administration Bureau		
13	Puagme Obsi Migr	Renishangul Region	Deputy Head	0015 0/2068
15	i uagine Obsi Migi	Environment Forest and I and	Environment Protection	0913 942908
		Administration Bureau	Environment Protection	
14	Murad Mifta	Benishangul Region	EIA review and	0911 707057
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		Administration Bureau	supervision expert	
15	Habtamu Tafere	Benishangul Region	Ecology conservation	0913 174864
		Environment, Forest and Land	expert	
		Administration Bureau		
16	Bekele Benti	Benishangul Region	Forest Development	0912 126504
		Environment, Forest and Land	and Conservation	
		Administration Bureau	expert	
17	Jama Abdulnasir	Dollo Addo Woreda	Woreda Administrator	
		Administraion		
18	Nur Mohamed	Dollo Ado Woreda	Head of the Office	0921 651770
	Farah	Agriculture and NR Office		
19	Abdulrezak Salih	Dollo Ado Woreda	Deputy Head, Natural	0917 179717
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			and Environment	
20	Damias Mart	Dollo Ado Warada	Vonservation	0010 201117
20	Demise Mera	Dollo Ado woreda	Natural Resource	0910/29111/
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21	Ahmed Mohamad	Dollo Ado Woreda	Fytension	0912 637807
<i>L</i> 1	Umer	Agriculture and NR Office	Communication &	0912 037007
			Technology Trabsfer	
			Head	

22	Mewlid Abdi	Dollo Ado Woreda	Natural Rsource	0939 073142
		Agriculture and NR Office	Protection Core Process	
			Owner	
23	Hassen Mohammed	Dollo Ado Woreda	Animal Science	0912 870364
		Agriculture and NR Office	Development Core	
			Process Owner	
24	Daniel Adefris	AARA Melka Dida Branch	Branch Office Head	0930 106426
25	Nigatu Bogale	MoANR, Regions of Special	Director	0911 530077
		Support Coordinating		
		Directorate		
26	Tsehay Eshete	MoANR, Regions of Special	Project Design Task	0912 091407
		Support Coordinating	Team Leader	
		Directorate		
27	Yebegaeshet	MoANR, SLMP-II project	Environment Specialist	0911 343837
	Legesse			
28	Beweldnesh	MoANR, SLMP-II project	Social safeguard	0911 013470
	Tsegaye		specialist	

The over 125 Participants of the meetings held in the host community kebelles are shown in the attendance lists attached with the summary of consultations.

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