AFRICAN DEVELOPMENT BANK GROUP

PROJECT: BORANA RESILIENT WATER DEVELOPMENT FOR IMPROVED LIVELIHOODS PROGRAM (BRWDLP)

COUNTRY: Ethiopia

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK (ESMF)

May, 2022

TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

ACCRONYMS

AfDB	African Development Bank
BRWDLP	Borana-Resilient Water Development for Improved Livelihoods Program
EA	Environmental Assessment
EPA	Environment, Forest Climate and Change Commission
EPC	Environmental Protection Council
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management
ESMoP	Environment and Social Monitoring Plan
ESF	Environmental and Social Standards
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plans
ESS	Environmental Social standard
FDRE	Federal Democratic Republic of Ethiopia
GBV	Gender Based Violence
IEF	Information Education and Communication
ISS	Integrated Safeguards Systems
IWRM	Integrated Water Resources Management
LULC	Land Use Land Cover
MoA	Ministry of Agriculture
MoWE	Ministry of Water and Energy
NBA	National Biodiversity Policy
OS	Operational safeguards
ORWEB	Oromia Regional Water and Energy Bureau
SEA	Sexual Exploitation Abuse
SH	Sexual Harassment
UNFCCC	United Nations Framework Convention on Climate Change
VAC	Violence against Children

EXECUTIVE SUMMARY

The Borana Resilient Water Development for Improved Livelihoods Program is proposed to be implemented in an area where serious and recurrent drought has been affecting the lives of the people and their livestock. Although the number of livestock died was in millions which is still increasing from day to day.

The Program is specifically focused on water supply which directly addresses identification and construction of water supply infrastructure from well fields found in Elewaya district to booster stations on the to be constructed main transmission from the wellfield boreholes to the finally planned main reservoir in Yabello District on Simu Hilltop. It is from this main reservoir that Resilient Water Development for Improved Livelihoods Program water supply routes to Arero, Dubluk, Surupha, Elweya, Weib, Sarite-Sabba and to the Wellfield Areas are supplied with to be designed Water Supply Routes

The Program adheres to the AfDB strategy on Addressing Resilient Water Development for Improved Livelihoods Program. Supporting the water supply access and capacity building to operationalize at the program phases and implement consecutive water supply schemes Strategy aligns with AfDB's Strategy in order to tackle root problems of the peoples and their livestock.

The program aims at constructing water supply wellfields, booster stations to the main reservoir, constructing the main transmission line to the main Reservoir planned on Simu Hill top near Yabello Town in Yabello district to connections to the whole eight districts (*Yabello, Arero, Wachile, Gamole, Dubluk, Dugda-Dawa, Dirre* and *El-Wayye* districts) of the program.

The program intends supports of the AfDB for expenses related to (a) digging essential number wells from the identified wellfields in Elewaya district (b) designed number of reservoirs and with their booster utilities, (c) constructing main transmission line from the wells to the main reservoir (d) constructing the main Command Reservoir to be constructed at Simu Hilltop near Yabello Town, (e) constructing motor houses, guard houses and other facilities detailed in the design document and (f) supporting institutional capacity strengthening for operationalize and implement the phase-I expenses of the intended water supply project.

The program comprises eight components ground water source development 9 boreholes at Galchet and 2 boreholes at Sarite Wellfield, Arero Water Supply Route, Dubluk Water Supply Route, Surupha Water Supply Route, Elweya Water Supply Route, Weib Water Supply Route, Sarite-Sabba Water Supply Route and Wellfield Area Water Supply Route. The project cost for each component presented under program description for ground water assessment and annexed for the rest which is estimated at Birr 8,178,380,212.31 for the overall project components expenses based on the engineering estimation report of the project. The budget is effected in 15 years project based on the project schedule. The support will

directly benefit the Borana zone human and livestock populations to overcome the existing serious water supply shortage in quantity and quality.

The environmental and social safeguards issued by AfDB are the bases of the Bank's support for inclusive economic growth and environmental sustainability. The AfDB has developed an Integrated Safeguard System (ISS) in order to better articulate its safeguard policies while improving their clarity, coherence and consistency (AfDB, 2013; AfDB, 2015). The AfDB ISS sets out the basic tenets that guide the approach to environmental safeguards and five Operational Safeguards (OS) were adopted.

The Operational Safeguard (OS) 1 sets out the Bank's overarching requirements for borrowers or clients to identify, assess, and manage the potential environmental and social risks and impacts of the project, including climate change issues. OS 1 requires the preparation of an Environment and Social Management Framework (ESMF), which establishes a mechanism to determine and assess potential environmental and social impacts of any Project. OS from 2 to 5 support the implementation of OS 1 and set out specific requirements relating to different environmental and social issues, including gender and vulnerability issues that are triggered if the assessment process reveals that the program may present certain risks. The operational safeguards highlighted in the ISS were considered in the current ESMF, considering the program potential to trigger some of these safeguards.

The framework for the Environmental and Social Management Plan (ESMP) provides guidance on procedures to be followed and standards to be met in implementing the components under Borana Resilient Water Development for Improved Livelihoods Program which should be in agreement with national and African Development Bank operational safeguard provisions. Institutional arrangements with clearly defined roles and responsibilities as well as monitoring protocols to be followed are presented to ensure that the required provisions are adhered to. Budgetary estimates are provided to support the implementation of the ESMP.

1. INTRODUCTION

1.1 Background

Borana Zone is one of the Oromia Zones frequently affected by drought as a result of erratic and unpredictable rainfall and rising temperatures (Figure2.1). Nowadays, the frequency of extreme weather events such as floods and droughts are increasing and seriously affecting the livelihood of the community. According to the zonal agriculture and natural resources office, the recurrent drought cycle is narrowed, the occurrence of recurrent drought for two to three consecutive years is becoming very common. From this perspective, climate change is more likely to make the water supply situation even more precarious than it is today**.** Water supply scheme based on large and reliable water sources, therefore, contribute to alleviate these adverse impacts of the prolonged droughts and other climate change impacts of the area.

Majority of Borana people are Agro-pastoralists and they often migrate to different areas for searching of water and pasture for their livestock as an adaptation mechanism to drought. The harsh climatic conditions not only affects human populations, but also, has serious effects on the livestock populations of the area. Because of this, the livestock productivity is highly reduced as a result of long migration and associated disease exposures.

The Government of Ethiopia through the Ministry of Water and Energy (MoWE) has requested support the African Development Bank (AfDB) for the Borana Resilient Water Development for Improved Livelihood Program to be implemented by the main program implementing body (Oromia Regional Water and Energy Bureau (ORWEB)) which contributes to improving the water supply scheme based on large and reliable water source which will contribute to alleviating the adverse impacts of prolonged droughts and other climate change impacts in Borana Zone, Oromia Region. Therefore, the provision of sustainable water supply for the community is not simply water but is about the improvement of the whole livelihood and living standard of the community in the Program implementation area (Borana Zone).

Since the specific projects under the program, except the phase 1 component of the program, are not known with certainty during this time the program is being prepared for presentation to the Bank, the Bank environmental assessment policy requires the borrower to prepare an Environmental and Social Management Framework (ESMF) that is to establish a mechanism for assessment of the environmental and social impacts of all projects under BRWDLP, and to set out, in general, the mitigation, monitoring and institutional measures to be taken during implementation and operation of the program to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels.

The key issues in this ESMF for Resilient Water Development for Improved Livelihoods Program include environmental and social concerns as raised by various legal instruments. This ESMF, therefore, provides the expected guidelines and defines the procedures whereby environmental and social impact assessments (ESIAs) and eventually environmental and social management plans (ESMPs) will be prepared and implemented for each project of the BRWDLP as may be required. This document is in compliance with Bank ISS and ESAP, as well as five Operational safeguards and the relevant Ethiopian environmental policies, laws, and regulations.

Furthermore, the OWEB, which is the main program implementing body, given the specific location of the Phase 1 project under the wider program (BRWDLP) which will comprise groundwater development in the

Gelchet wellfield, and development of the Wellfield Area Water Supply Route (includes the backbone, comprising the water collection and transmission system to the Simu Hilltop Reservoir) is currently known, has also prepared an Environmental and Social Impact Assessment (ESIA) to assess, identify and evaluate environmental and social impacts associated with the implementation of the Phase 1 project of the BRWDL program and to recommend mitigation and/or enhancement measures for the impacts that enable in harmonizing the problems with the social, economic and ecological conditions of the project from the wellfield to its reservoir site (Simu Hilltop Reservoir, at Yabelo district). The ESIA has been prepared as a separate, stand-alone document. The ESIAF has also been prepared in due consideration of the African Development Bank environmental assessment requirements as well as the Ethiopian environmental management requirements as outlined in various legal instruments and including considerations for the various international environmental regulations and requirements as well.

The OWEB is further required to disclose both documents (the ESMF and the ESIA) in-country as two separate documents so that they are accessible to the public, local communities, potential program-affected groups, local NGOs, and all other stakeholders. They will also be disclosed on the AfDB's external website. The date for the disclosure of these documents will precede the date for appraisal of the investment program. Stakeholders have been consulted during the preparation of the ESMF and ESIA (See Annex-13) and will have an opportunity to review and comment on the drafts. The final versions of both documents will be disclosed at the same locations and will include summaries of the consultations, the comments and suggestions received, and their disposition.

1.2 The Rationale of the ESMF

The Environmental and Social Management Framework (ESMF) is an environmental and social assessment approach for the Program development at this stage. It is prepared for AfDB operations that finance projects whose location, scope and designs are not precisely known at the time of the Bank appraises and approves the operation. The ESMF seeks to establish a process of environmental and social screening which permits the implementing body (The Oromia Water and Energy Bureau) of the government of Ethiopia to identify, assess and mitigate possible environmental and social impacts of the intended water supply project intervention.

According to the AfDB's ISS, operations that finance multiple, small-scale sub-projects whose location, scope, and design are not determined at the time that the Bank appraises and approves the operation should develop an ESMF. This means that the location and site-specific environmental and social risks created by the investment will only be known during the implementation of the Project. The features of the proposed project which make an ESMF the appropriate requirement under the AfDB's Operational Safeguard 1 (OS 1) are listed below:

- A number of sub-projects and components will be implemented over time;
- The sub-projects are spread over a wide geographic area, Borana Zone of the Oromia region;
- Design of the sub-projects and exact locations for implementation, even though their generic impacts can be predicted, their site specificities cannot be determined at this stage.

The difficulties inherent in defining the real E&S impacts of the project in terms of scope, the scale of activities, and likely impacts necessitated the development of this ESMF.

This ESMF is prepared to serve as a guideline to ensure that the environmental and social impacts of the BRWDLP are properly considered during program design and implementation. The ESMF guides the designing process of appropriate measures and plans to reduce, mitigate and/or offset adverse impacts and enhance positive outcomes including benefits for program beneficiaries and the environment. This ESMF thus provides a comprehensive framework on how to address potential adverse social and environmental impacts associated with the water development and integrated watershed management sector projects under the BRWDLP.

The ESMF will also provide compliance requirements for future project sites which would satisfy the requirements of laws (environmental regulations) in force in Ethiopia. The environmental and social assessment and AfDB's Operational Safeguard measures will be confirmed during the project implementation phase. The construction and operation of the proposed projects under this program are expected to bring several significant positive environmental and socio-economic benefits to the respective Project area of influence as well as to the nation at large. The Program will enhance economic and social developments along the corridor of the project area and these developments will likely lead to a much-improved quality of life for local communities. This ESMF will determine the institutional measures to be taken during the project implementation, including those relating to capacity building as well as expected to define the requirements that need to be complied with during project implementation so that all investments financed by the program fully comply with the national and international laws (including AfDB's Operational Safeguards requirements).

After undertaking appropriate assessments of the likely social and environmental impacts of the BRWDLP, the ESMF has proposed relevant mitigation and enhancement measures and strategies to be considered during the program activity design and implementation. Additionally, the framework stipulates mechanisms for screening, management, and monitoring of the likely environmental and social impacts that may emanate from the project's activities under the wider program during the implementation phase. The overall goal of the ESMF is to ensure that decision-making in subsequent stages of the program is informed and influenced by environmental and social considerations for the implementation of each project under the program. It aims also to integrate environmental and social concerns into the project's design and implementation under this program.

1.3 Purposes and Objectives of ESMF

1.3.1 Purposes of the ESMF

The purpose of an ESMF is to provide a unified process to address all E&S safeguard issues for subprojects at the respective project sites, from preparation, through appraisal and approval, to implementation. The ESMF describe the process across the various tiers for screening, assessing, identifying, assessing, and managing safeguard issues for site-specific project activities and subprojects that will be identified during project preparation and implementation. It thereby ensures compliance with the Bank's safeguards policies as well as local regulatory requirements.

1.3.2 General and Specific Objectives of the ESMF

1.3.2.1 General Objective

The general objective of the Environmental and Social Management Frameworks (ESMF) of the program is to depict the common procedures and methodologies as a framework for environmental and social impact consideration and management of the project components under the program. It also helps to integrate environmental concerns into the Borana Resilient Water Development for Improved Livelihoods Program development activities through establishing the National and Regional State of Oromia Water and Energy Bureau water supply long-term priorities in the field of the environment and social interventions in order to develop an action framework to enable the Bureau to collaborate with the donor international financer organizations, such as AfDB.

1.3.2.2 Specific Objectives

The specific objectives of the ESMF comprise the following. There are to.

- establish clear procedures and methodologies for the environmental and social assessment, for screening, planning, review, approval & implementation of the project to be financed under the Program;
- identify and specify appropriate roles and responsibilities and outlining the necessary reporting procedures for managing and monitoring of the environmental and social risks related to program;
- determine training, capacity building components, including training and technical assistance needed as well as indicate implementation strategies to successfully implement the provisions stated in the ESMF;
- Ensure equitable benefits and mitigation measures to ensure gaps between women and men are not aggravated through the development of the program interventions;
- identify generic potentially positive and adverse environmental and social impacts and risks that may be encountered in the Program intervention and indicate the possible enhancement and mitigation measures to avoid or minimize the predicted adverse impacts in the program areas;
- create a sense of understanding and strengthen the health and safety performance, and labor and working conditions of the project
- develop Environmental and Social Management and Monitoring Plan which, among others, constitutes the specific likely negative impacts, mitigation measure along with indicators to be monitored, specific responsible institutions and the required budget;
- identify and indicate information and resources required for the ESMF implementation;
- Establishing project funding required to implement the ESMF requirements; and
- Providing lessons learned for application to future Programs.

1.4 Scope and Principles of the ESMF

1.4.1 Scope of the ESMF

The scope of BRWDLP ESMF covers the eight districts of the Borana zone under the Oromia region of Ethiopia in which the specific locations will be decided later in consultation with the Oromia Region and City Administrations, as well as the Ministry of Water and Energy. Cognizant of the proposed program activities, the respective adverse impacts, and the need for safeguards instruments to enhance positive impacts and avoid/minimize/mitigate the anticipated adverse impacts, the assignment is to prepare the Environmental and Social Management Framework (ESMF).

As stated above, the purpose of the Environmental and Social Management Framework (ESMF) is to clarify the policies, principles, and procedures that will govern the mitigation of adverse environmental and social impacts caused by the respective water supply and integrated watershed development projects under the program.

Therefore, this ESMF first set out the principles, laws, regulations, guidelines, and procedures to assess the environmental and social impacts related to each project under the program. It analyses the environmental and social policies and legal requirements of the Government of Ethiopia and operational safeguards of the African Development Bank and ensures that environmental and social issues are dealt with in a proper and efficient manner meeting all the compliance requirements of the Government of Ethiopia and the African Development Bank.

1.4.2 Principles of the ESMF

The BRWDLP Environmental and Social Management Framework will be implemented based on the following principles, but are not limited to:

- **Principle one**: Allow broad consultation of the communities in the identification and planning of subproject types in their localities depending on their prioritized challenges;
- **Principle two:** Provide support to communities to develop their sub-project application to avoid or minimize environmental and social safeguards concerns;
- **Principle three:** Provide support to regulatory institutions to review applications and determine if additional, more detailed environmental or social planning is required before applications can be approved;
- **Principle four:** Provide support to communities, local authorities and extension teams in carrying out their respective roles by funding substantial training, information resources and technical assistance; and
- **Principle five:** Provide funding for quarterly and annual reviews for assessing compliance, learning lessons, training impacts, and improving future performance, as well as assessing the occurrence of potential cumulative impacts due to project funded and other development activities

1.5 Approaches and Methodologies during ESMF Preparation

1.5.1 Approaches

The ESMF preparations procedures involve screening and review processes that will determine which Bank Operational safeguard is triggered by a particular subproject and what mitigation measures will be required. The screening and review processes will ensure that subprojects with potential significant impacts will

further require a detailed study and the need for subproject specific environmental and social assessment and as applicable the environmental and social management plan (ESMP). Accordingly, as stated above, this ESMF was prepared in accordance with applicable African Development Bank (AfDB) operational safeguard and environmental assessment guidelines of Ethiopia which involves the following approach and methodologies:

Approaches of the ESMF has included the following:

- Review program background documents, including sources of information for any national and international experiences of the related technologies, financing arrangement and policy approach to identify typical E&S risks and impacts associated with BRWDLP;
- Methodology to be used for the review of country-specific regulations against the AfDB operational safeguards to determine the regulatory framework that will apply to the specific subprojects under the program;
- Review of the Integrated Safeguards System of the African Development Bank, focusing on requirements for an ESMF;
- Methodology for the collation of baseline data of countries' national policies and regulations, conducting a gap assessment against the AfDB's ISS and other E&S standards;
- Summaries the program components and description, including a typology of the potential subprojects to be financed, based on potential size/scale of subprojects and the environmental and social impacts and risks, paying particular attention to how subprojects will be identified, prepared, approved, and implemented, and how funds will flow to approved subprojects;
- Assess and outline the pertinent procedures for conducting an environmental and social assessment of subprojects;
- Preparation of screening procedures to be used for screening project sub-components; and Formulation of an indicative ESMP outline.

1.5.2 Methodologies

The ESMF is prepared in accordance with applicable Ethiopian Legislations and AfDB Operational Safeguard. During the preparation of this ESMF, both primary and secondary sources were collected, collated, analyzed, and discussed. The distinct methodologies adopted for the preparation of this ESMF include literature review and data gathering; Public consultation and discussions with relevant sector institutions and key sector stakeholders and beneficiaries; and site visits at the proposed program locations in the selected potential districts. An account of the existing biophysical and social environment conditions was gathered and discussed under the baseline information section of this ESMF and used to assess the potential environmental and social impacts generated from the proposed program's activities. Consultations with various stakeholders have been conducted and the outcomes of the consultations are discussed under the public consultation section (Chapter-10) and list of participants and minutes of the meeting are attached in Annexes 13 (Annex13.1 to Annex13.6).

1.5.2.1 Literature Review

The literature review involves the study of available information and strategic documents both at international and national levels on social and environmental wellbeing related issues prepared on resilient water supply project. In addition, with regard the general environmental management conditions for project, the policy frameworks in which the environmental policy, the water resources development policy and other relevant policies, the national environmental laws, regulations proclamation including the constitution of Ethiopia and guidelines; the African Development Bank (AfDB) safeguard policies and other relevant documents Ethiopia signed shall be collected and reviewed.

1.5.2.2 Field visit

An intensive two rounds field works were carried out in the selected proposed program implementation area at the selected districts of Borana Zone in October 2021 and also from 12/04/2022 to 18/04/2022 to conduct direct site observation with the purpose to identify anticipated environmental and social impacts and risks associated with the proposed program and carry out consultation with the concerned stakeholders and project affected community.

During the field survey, site-specific baseline data on the environmental and socioeconomic characteristics of the project area were collected through observations. In addition, relevant government offices were contacted, and sector related data was collected. Therefore, both primary and secondary data were collected from all possible sources. The collected data have been used to provide clear description of the baseline environmental and socioeconomic conditions of the project influence areas in order to assess potential environmental and social impacts of the intended water supply program respective projects. The study team also undertook preliminary flora and fauna assessment in order to collect indicative information associated with the specific projects under the program within the program implementation area.

1.5.2.3 Stakeholder Consultations

A stakeholder consultations have been carried out with key resource persons, elders, beneficiaries, institutions at the regional, zonal and district levels between 12/04/2022 to 18/04/2022. Among others, The consultative and discussions will be with Borana Zone Administration, the zone Water and Energy Office, the Wellfields district or Elewaya district administration, the district Water and Energy Office, the main command reservoir site Administration – with Yabello district administration, the district Water and Energy Office, with the three villages along the main transmission line, with each district rural land administrations. Consultation carried out with A list of consulted stakeholders is depicted in Annex-11 and Annex-13. The summary concerns and views raised by participants are depicted in section-10 of this ESMF. Some of the consultations were round table and focus group discussions. During these sessions, the major objectives of the program have been presented by the team and various information including the likely positive and negative impacts and the respective mitigation measures thoroughly discuss by the participants.

2. PROGRAM DESCRIPTION

2.1 Program Objective

The Program adheres to the AfDB strategy on Addressing Resilient Water Development for Improved Livelihoods Program. The Program is to support the critical water supply problems in quantity and quality of the Borana Zone of Oromia National Regional State of Ethiopia. The Program objective is to support projects under the program for eliminating and/or minimizing the critical water supply problems of the program areas as articulated in AfDB Strategy which recognizes resilient water supply.

The program development objective is to develop climate resilient and gender sensitive integrated and sustainable water and sanitation services among pastoralist communities in dryland areas of the Borana zone of Oromia region for improved health, livelihoods, nutrition, and food security. The program focuses on the impact of droughts, and sustainable recovery and resilience in water related sectors, using an IWRM approach. Key indicators include (i) the population with increased access to water and sanitation services, and (ii) increased land area under sustainable landscape management practices (in hectares).

2.2 Location and Water Accessibility of the Program

One of the Wellfields is found Galchet kebele of ElWeya District at some 80 km from the asphalt road and the other Wellfield is located in Sarite area of El-Wayye District at about 62 km from Yaaballo Town to the northwest direction along the Yaaballo-Taltalle road.

The center of the project area is located at Yabello Town at 568 km south of Addis Ababa (Finfinnee) the capital city of Ethiopia on the main asphalt road to Moyalee at the Kenyan border. The second path is using another asphalt road from Addis Ababa to Arbaminch and Konso and makes connection to dry weather road leading to Yabelo in the northwest. Most of the project area can be reached by driving along other gravel and earth roads connected to the main highway The Water Supply program encompasses the following rural areas and towns, with 8 district centers and villages of Borana Zone namely Yabello, Arero, Wachile, Gamole Dubluk, Dugda-Dawa, Dire and El-Wayye districts of Borana Zone of the Oromia National Regional State. The proposed Water Supply program is situated within the geographic coordinates of roughly from 5°08' N latitude and 39°03'E longitude at *Surupha* and from 4°21' N latitude and 38°16'E longitude at *Dubuluk*; and from 5°20'N latitude and 37°38'E longitude at *Sarite* and from 4°32' latitude and 39°03'E longitude at *Wachile*.The Program area spatially extends over a large territory; about 19,285 km2 and includes 62 Kebeles, of which 50 rural Kebeles and 12 small towns and urban centers. In addition, the proposed scheme also provide water for a huge number of livestock in aforementioned districts. The water source is groundwater; planned to be abstracted from 11 Boreholes found at Galchet and Sarite areas**.**

The Program has been designed to create access to safe and adequate water supply service for 308,576 human and 975,750 livestock populations residing in the heart of Borana Zone as shown in Figure 2.1 below

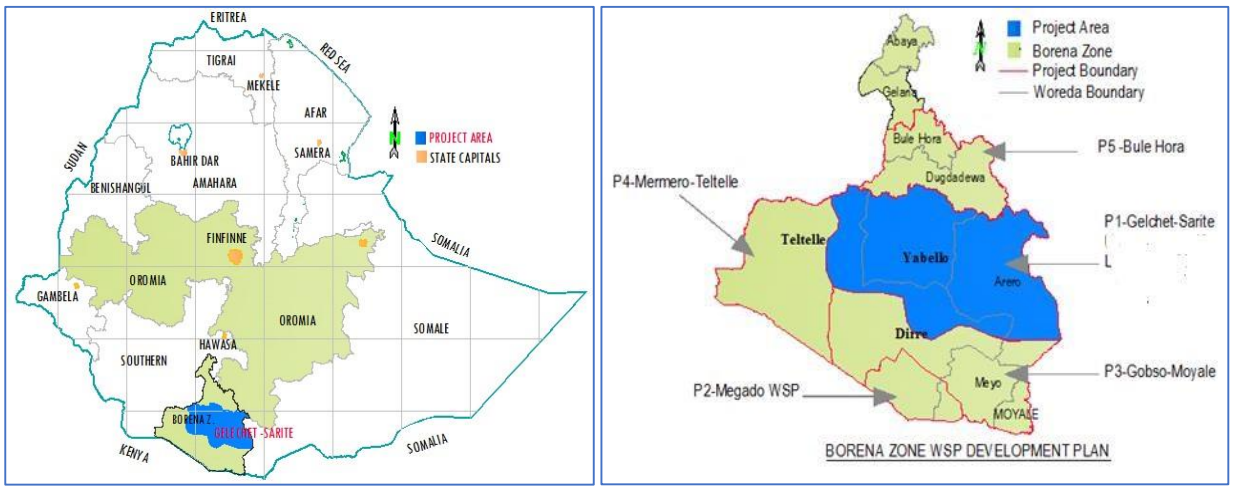


Figure2.1: Location of the Program area

2.3 Program Design and Key Components

The program will cover an estimated 50 rural villages (kebeles) and 12 small towns in the Borana zone. An estimated 285,000 people and 920,000 livestock are expected to benefit from the resilient water supply and sanitation infrastructure, livestock watering and water resource and micro watershed management subprojects proposed to be funded under the program by 2030. The program will be implemented in two phases over a 4-year duration.

The program components include: (i) Water Development for Multi Sector Use, including institutional sanitation interventions, (ii) Integrated Watershed Management, and (iii) Institutional Strengthening and Project Management. Phase 1 will provide water services for an estimated 24,810 people and 83,000 livestock (Chapter4.3). The financing Plan is presented in Table2.1 below. The program will cover an estimated 50 rural villages (kebeles) and 12 small towns in the Borana zone. An estimated 285,000 people and 920,000 livestock are expected to benefit from the resilient water supply and sanitation infrastructure, livestock watering and water resource, and micro watershed management subprojects proposed to be funded under the program by 2030. The program will be implemented in two phases over a 4-year duration. Phase 1 will provide water services for an estimated 24,810 people and 83,000 livestock in two districts and one water supply route (Wellfield Area Water Supply Route) (Appendix 2) whereas Phase 2 covers the remaining 6 water supply routes of Arero, Dubluk, Surupha, Elweya, Weib and Sarite-Sabba, which benefit the remaining 260,190 people and 837,000 livestock. The program components include: (i) Water Development for Multi-Sector Use, including institutional sanitation interventions, (ii) Integrated Watershed Management, and (iii) Institutional Strengthening and Project Management. The detailed program features are discussed in the below sections. The summary of indicative activities is indicated in Table 2.1 below.

Table2.1: Indicative Program component activities

Project Component	Component Description
Component-1: Water Development for Multi-Sector Use, including institutional sanitation interventions	The program will deploy climate-resilient water safety planning, including water quality monitoring, and explore private sector participation in the operation of the WSS facilities. This component will finance investments in climate-resilient multiple-use water infrastructure improvement needs in 50 Rural kebeles and 12 small towns in Borana Zone. An indicative investment under this component includes: **Water supply infrastructure:** • Ground Water source development (Drilling of boreholes) • Construction of the wellfield area water supply route (including the backbone, water collection, and transmission to Simu Hilltop Reservoir, other reservoirs, and last-mile connectivity) • The transmission and distribution systems, which will include water mains, reservoirs, and distribution networks; water connections; macro and micro metering; and pressure monitoring systems • Development of pressurized and gravity Water supply Collector, Conveyance, and distribution systems • Supply and installation of pumps, generators, Water meters, valves, and all accessories • Construction of public fountains and cattle and camel troughs • Construction of Scheme Administration Offices (office, shade, stores, garage, and compound works; auxiliaries structures at satellite offices) • Access road and other facilities (Operators dwelling, Guard house, fence with Gate, etc.). • Other auxiliaries (pump house, Generator, and guardhouses. operators' dwellings, Manager Dwellings etc.) • Livestock watering troughs, and associated infrastructure for smallholder agriculture • Use of smarter water systems (e.g., deployment of Supervisory Control and Data Acquisition (SCADA) system for strengthened efficiency **Sanitation Infrastructure /facilities** • Design and Construction of sanitation facilities in Primary Schools, public places like markets, and health facilities • Latrine for Teachers, Girls & Boys students • Public Shower Room with Septic Tank • Construction of VIP Latrines • Biogas plant • Septic tanks • Hand Washing facilities • Solid Waste disposal pits • Strengthen existing early warning systems and the information value chain

Project Component	Component Description
	• Building on interventions carried out by the MoWE and those financed by bilateral DPs. • Design review to strengthen readiness for program implementation of Phases 1 and 2
Component-2: Integrated Catchment Management	The program will emphasize the selection of technologies that do not encourage crowding to alleviate pressure on any single water point to avert degradation. This component will strengthen the provision of equal economic opportunities for women, men, and youth and provide opportunities for green jobs, 50% of which will be targeted for women and 25% for youth. This component focuses on community-led physical and biological soil and water conservation measures for the protection of the water sources to reduce pollution. These will include: • Development of community-based micro watershed and source protection plans with climate adaptation mainstreamed • Establishment of watershed management committees, rangeland route delineation; social mobilization, and capacity building, • Rangeland management • Technical support for target micro watershed/rangeland rehabilitation and livelihood activities, including tree planting and beekeeping
Component-3: Institutional Strengthening and Project Management	This component will finance the establishment of a project implementation unit (PIU) and staffed by experts at federal, regional, and District levels. Financed activities will include: • Provide institutional strengthening and capacity building of the relevant institutions/stakeholders • Operating costs of the PIU and the line departments responsible for program implementation • Capacity building to address gender needs, strengthening utility management, including financial sustainability, through the introduction of affordable tariffs whilst ensuring sufficient cost recovery, equipment; staff costs for a program coordinator, accountant, procurement, safeguards, climate change, and gender specialists • Nutrition-sensitive communications to promote WaSH in schools, health facilities, and households using existing local delivery platforms will be undertaken • Knowledge management and outreach, Coordination of project activities, Documentation, organization of stakeholder's workshops and preparation of project annual work programs and budgets, project evaluation , • Supervision quality control, contract management and safeguard compliance

Project Component	Component Description
	• Program audits, and studies under components 1 and 2. • Improvement of monitoring and evaluation systems.

2.4 Detailed features of Program activities

2.4.1 Water Supply Systems

Three separate (independent) systems are designed based on the locations of wellfield and topography of project area. The 1st one is a mini water system consists one of the existing boreholes located in the Gelchet wellfield and a distribution network designed to partially supply **398 m^3/day (1.5%)** of water to the wellfield area population.

The 2nd is a big water system consists of multi-boreholes of the Gelchet wellfield and huge distribution network area designed to supply **24,658 m^3/day (92.7%)** of water to the following areas.

- About 1,763 m3/day of water partially covers the wellfield area population
- 2,117 m3/day of water covers the central part of project area (part of Yabelo Zone)
- 4,061 m3/day of water will be transferred to Surupha Route to supply Northern area of Borana Zone
- 7,474 m3/day of water will be transferred to Arero Route to cover Eastern part of Borana Zone
- 3,715 m3/day of water will be transferred to Elweya Route to supply around Yablelo town and Northwestern area of Borana Zone
- 5,530 m3/day of water will be transferred to Dubluk and Weib Routes to supply South and Southeastern areas of Borana Zone.

The 3rd one is relatively a small water system consisting of an existing borehole located in Sarite wellfield and a distribution network designed to supply 1,555 m3/day (5.8%) Sarite_Sabba area of Western Borana Zone.

In addition, the project will be financed and built in two phases. **Phase 1** will bring bulk water from the wellfield to Simu Command Reservoir as well as to villages located near the wellfield, while **Phase 2** will extend the water supply from Simu to five urban centers. Figure2:3 shown below shows the general layout of the water system components.

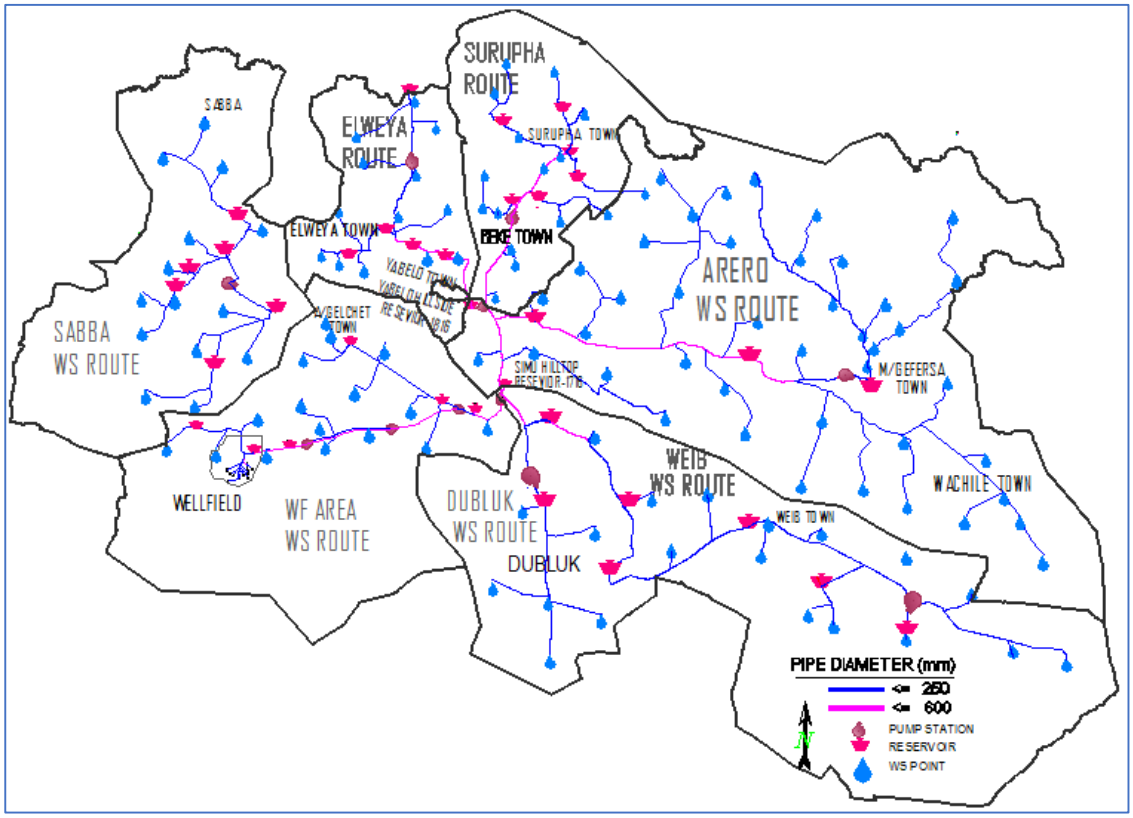


Figure2.2: General layout of the water supply system

2.4.2 Water System Components

For the purpose of prioritization and system Simplification, the program area has been subdivided into seven Zones/Routes as follows. This is depicted in Figure 2.3 shown below with estimated population of 171,012 in 2007. The Resilient Water Development for Improved Livelihoods Program water supply routes are:

1. Arero Water Supply Route
2. Dubluk Water Supply Route
3. Surupha Water Supply Route
4. Elweya Water Supply Route
5. Weib Water Supply Route
6. Sarite-Sabba Water Supply Route
7. Wellfield Area Water Supply Route

The water supply system is designed to meet the growing water demands of population for a period of 15 years. Year 2022 is to be considered as kickoff of operation and construction is to be completed by year 2037. The design capacity of each supply zone and population to be served including main distribution route sketches are presented in Figure2.1 below. The total water demand required at end of design period

(year 2037) is around 26,630 m3/day of which Rural is 22,308 m3/day and Urban is 4,322 m3/day. The overall estimated engineering budget estimates is Birr 8,178,380,212.31 or 160,360,396.32 USD.

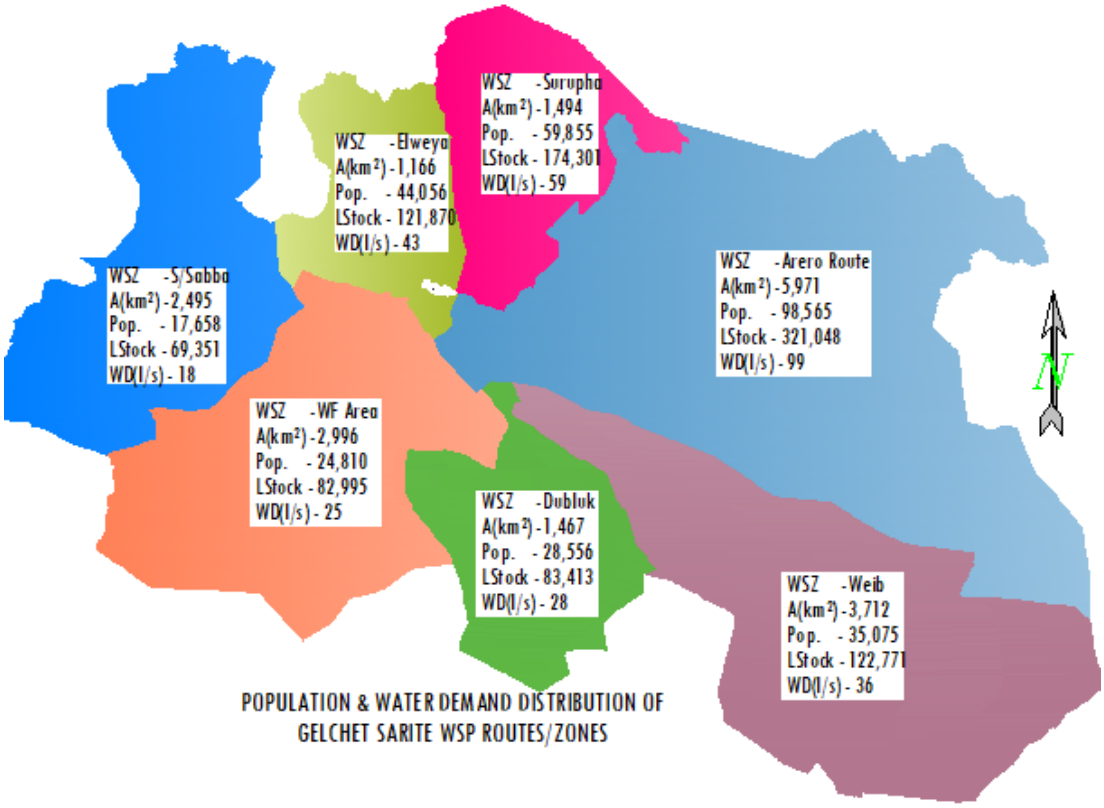


Figure2.3: Design capacities of seven supply route of the project

The network configuration needed to meet the water demand requirements of population up to 2035 is presented in figure below. It covers a total land area of 19,285 km^2. Three separate (independent) systems are designed based on the locations of wellfield and topography of project area. The first one is a mini water system consists one of the existing boreholes located in the Gelchet wellfield and a distribution network designed to partially supply **398 m3/day (1.5%)** of water to the wellfield area population. The second is a big water system consists of multi-boreholes of the Gelchet wellfield and huge distribution network area designed to supply **24,658 m3/day (92.7%)** of water to the following areas: About **1,763 m3/day** of water partially covers the wellfield area population; **2,117 m3/day** of water covers the central part of project area (part of Yabelo Zone); **4,061 m3/day** of water will be transferred to Surupha Route to supply Northern area of Borana Zone; **7,474 m3/day** of water will be transferred to Arero Route to cover Eastern part of Borana Zone; **3,715 m3/day** of water will be transferred to Elweya Route to supply around Yablelo town and Northwestern area of Borana Zone; **5,530 m3/day** of water will be transferred to Dubluk and Weib Routes to supply South and Southeastern areas of Borana Zone. The third one is relatively a small water system consisting of an existing borehole located in Sarite wellfield and a distribution network designed to supply **1,555 m3/day (5.8%)** Sarite Sabba area of Western Borana Zone.

2.4.3 Boreholes/Wellfields

The Borehole sites are located at Galchet and Sarite wellfields located 80 and 62 km southwest and west of Yabello town respectively. A total of 11 boreholes, 9 at Galchet and 2 at Sarite wellfields. At the borehole site raw water extraction facilities (submersible electric pump and surface pipe work), and back-up generator set will be established. The generator will be housed in a building comprising concrete slab structure with concrete brick walls and corrugated iron roofing. At the wellfield, the proposed plan also consists the construction of operators' dwellings and guardhouses. The compound of all the borehole site facilities will be fenced by barbed wire.

Figure2.4: Location of the Wellfields

2.4.4 Wellfield Collector pipes and Primary Transmission mains

From Galchet wellfield, the raw water from the boreholes will be collected by 8 km long collector pipes and lifted to Simu reservoir by 84 km long rising main crossing Addis-Moyale Road. Then the water is transferred from Simu reservoir to the 5 routes (*Arero*, *Elwaya*, *Dubulk*, *Weib* and *Surupha*) via transmission lines of different sizes. As per the design, the transmission lines will be laid at an average depth trench depth of 1.2 to1.4 meter. Here, the major civil work expected along the route are excavation of trenches and pipe laying activities.

2.4.5 The Command Reservoir (Simu Main Reservoir)

The command reservoir is located on Simu hill and has a capacity of 1000 m^3 from which the water is conveyed to pressure line routes along *Yabalo*, *El-Waya*, *Surupha*, *Arero*, *Weib, wellfield* and *Dubluk*

routes. The Reservoir is expected to be of concrete construction, established on a concrete foundation. The proposed reservoir sites provide adequate elevation to allow gravity supply.

2.4.6 The Transmission lines

From the main command reservoir, the water will be supplied by gravity towards Yabalo, El-Weya, Surupha, Arero, Weib, and Dubluk routes via transmission lines. The gravity main will be DN 200 and the chosen material is Ductile Iron for pipes.

2.4.7 Service Reservoirs

As per the proposed plan, nearly **35** water storage reservoirs are to be constructed in different parts of the region. The water storage reservoirs are of different capacity. The reservoirs are expected to be concrete construction, established on a concrete foundation. The proposed reservoir sites provide adequate elevation to allow gravity supply to the whole distribution system.

2.5 Program Beneficiaries

The project beneficiaries by the subproject or phase-I and the project phase-II is beyond the current project is shown in Table2.2 on next page. The *human population* projections for the phase-I area project of the Program areas indicates 101,730; 112,567; 123,103 and 132,923 peoples and also for the other Program areas indicates 134,232; 148,588; 161,582 and 175, 653 peoples for the years 2020, 2025, 2030 and 2035 respectively.

The estimated livestock population of the whole program areas are projected as 335,267; 341,901; 371,973 and 399,146 and for the overall of Program districts including the phase-I indicates 790,948; 860,478; 923,351 and 975,730 for the years 2020, 2025, 2030 and 2035 respectively.

3. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

The project proponent needs to ensure that its project activities are in line with all relevant national policies, legislations and standards operating in Ethiopia, African development Bank's policies, procedures and standards and other relevant international standards. In this chapter relevant policies, legal and administrative framework that are relevant to this project are covered. The project proponent shall observe these frameworks in the designing and implementing the proposed project activities.

3.1 Constitution of FDRE

As a supreme law of Ethiopia, all national policies, laws and regulations as well as institutional frameworks of the country must comply with the constitutional provisions. The constitution of FDRE, proclamation 1/1995 contains a number of articles, which are relevant to environmental matters in connection with development objectives as well as to the Environment in general. The Constitution specifically deal with the right to development, environmental rights, and environmental objectives respectively, and some of the main provisions are listed as follows:

Article 25- Right to Equality: All persons are equal before the law and are entitled without any discrimination to the equal protection of the law. In this respect, the law shall guarantee to all persons equal and effective protection without discrimination on grounds of race, nation, nationality, or other social origin, color, sex, language, religion, political or other opinions, property, birth or other status.

Article 35- Rights of Women: The historical legacy of inequality and discrimination suffered by women in Ethiopia considered, women, to remedy this legacy, are entitled to affirmative measures. The purpose of such measures shall be to provide special attention to women so as to enable them to compete and participate on the basis of equality with men in political, social, and economic life as well as in public and private institutions

- Women have the right to full consultation in the formulation of national development policies, the designing, and execution of projects, and particularly in the case of projects affecting the interests of women.
- Women have the right to acquire, administer, control, use and transfer property. In particular, they have equal rights with men with respect to use, transfer, administration, and control of land. They shall also enjoy equal treatment in the inheritance of property.
- Women shall have a right to equality in employment, promotion, pay, and the transfer of pension entitlements.

Article 37- Right of Access to Justice: Everyone has the right to bring a justifiable matter to, and to obtain a decision or judgment by, a court of law or any other competent body with judicial power.

Article 39- Rights of Nations, Nationalities, and Peoples: Every Nation, Nationality, and People in Ethiopia has the right to a full measure of self-government which includes the right to establish institutions of government in the territory that it inhabits and to equitable representation in State and Federal Governments.

Article 40- The Right to Property: This Article stated that:

- "Private property", for the purpose of this Article, shall mean any tangible or intangible product which has value and is produced by the labor, creativity, enterprise, or capital of an individual citizen, associations which enjoy juridical personality under the law, or in appropriate circumstances by communities specifically empowered by law to own property in common.
- The right to ownership of rural and urban land, as well as of all natural resources, is exclusively vested in the State and in the peoples of Ethiopia. Land is a common property of the Nations, Nationalities, and Peoples of Ethiopia and shall not be subject to sale or to other means of exchange.
- Ethiopian peasants have right to obtain land without payment and the protection against eviction from their possession. The implementation of this provision shall be specified by law.

Ethiopian pastoralists have the right to free land for grazing and cultivation as well as the right not to be displaced from their own lands. The implementation shall be specified by law.

- Every Ethiopian shall have the full right to the immovable property he builds and to the permanent improvements he brings about on the land by his labor or capital. This right shall include the right to alienate, to bequeath, and, where the right of use expires, to remove his property, transfer his title, or claim compensation for it. Particulars shall be determined by law.
- Without prejudice to the right to private property, the government may expropriate private property for public purposes subject to payment in advance of compensation commensurate to the value of the property

Article 41 Economic, Social, and Cultural Rights (Social development, inclusion, consultation, and participation)

- Provides the rights of citizens in engaging freely in economic activities, choose livelihoods, create and expand job opportunities for the unemployed including to find gainful employment.
- Ensure improved living standards and sustainable development to the nations, nationalities and peoples of Ethiopia.
- Ensures Ethiopians have the right to ownership of rural and urban land, as well as of all natural resources, is exclusively vested in the State and in the peoples of Ethiopia. Land is a common property of the Nation/s, Nationalities and Peoples of Ethiopia and shall not be subject to sale or to other means of exchange.
- Every person has the inviolable and inalienable right to life, the security of person and liberty.
- Ensure Ethiopian farmers and pastoralists receive fair prices for their products, obtain an equitable share of the national wealth commensurate with their contribution.
- Vulnerable groups support and assistance encompass the physically and mentally disabled, the aged, and to children who are left without parent or guardian.
- Equal access to public social services, with FDRE obligation to allocate resources to provide to the public health, education and other social services.
- Ensure participation and meaningful consultation of the nations, nationalities and peoples of Ethiopia to enhance the capacity of citizens for development and to meet their basic needs.
- The constitution provides the right to hold opinions without interference to seek, receive and impart information and ideas and freedom of association for any cause or purpose.

- Protect and preserve historical and cultural legacies, and contribute to the promotion of the arts and sport

Article 43 right to development Article 43 of the FDRE constitution states, that:

- The peoples of Ethiopia as a whole and each Nation, Nationality and people in Ethiopia in particular have the right to improve living standards and to sustainable development; Nations have the right to participate in national development and, in particular, to be consulted with respect to policies and projects affecting their community;
- All international Agreements and relations concluded, established or conducted by the state shall protect and ensure Ethiopia‘s right to sustainable development;
- All international Agreements and relations concluded, established or conducted by the state shall protect & ensure Ethiopia‘s right to sustainable development; &
- The basic aim of development activities shall be to enhance the capacity of citizens for development and to meet basic needs.

Article 44 states about Environmental right as below:

- All persons have the right to live in a clean and healthy environment; and
- All persons who have been displaced or whose livelihoods have been adversely affected as a result of state programs have the right to compensation, including relocation with adequate state assistance.

Article 92 of FDRE also includes the following Environmental objectives:

- Government shall endeavor to ensure that all Ethiopians live in a clean and healthy environment;
- The design and implementation of programs and development shall not damage or destroy the environment;
- People have the right to full consultation and the expression of views in the planning and implementation of environmental policies and projects that affect them directly; and
- Government and citizens shall have the duty to protect the environment.

In general, the constitution has laid down the policy and legal bases regarding environmental management, to harmonize and integrating environmental considerations into a decision-making process in a manner that promotes sustainable development.

3.2 National Policy Frameworks

3.2.1 Environmental Policy of Ethiopia (EPE)

The Environmental Policy of the Federal Democratic Republic of Ethiopia (EPE) was approved by the Council of Ministers in April 1997 (EPA/MEDAC 1997). It is based on the CSE, which was developed through a consultation process over the period 1989-1995. The policy has the broad aim of rectifying previous policy failures and deficiencies, which in the past have led to serious environmental degradation. It is fully integrated and compatible with the overall long term economic development strategy of the

country, known as Agricultural Development Led Industrialization (ADLI), and other key national policies like the National Population Policy and the National Policy on Women.

The overall EPE's goal is to improve and enhance the health and quality of life of all Ethiopians and to promote sustainable social and economic development through the adoption of sound management and use of natural, human-made and cultural 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. To this end, the Government of Ethiopia has issued several sectoral policies.

Some of the specific objectives of the Policy include sustainable utilization of non- renewable resources, identifying and developing natural resources that are currently underutilized, accounting for the full costs and benefits of natural resource development and empowering and encouraging public participation in environmental management issues.

The section of the EPA concerning EIA sets out a number of policies, key elements of which may be summarized as follows:

- The need for EIA to address social, socio-economic, political and cultural impacts, in addition to physical and biological impacts, and for public consultation to be integrated within the EIA procedures.
- Incorporation of impact containment measures within the design process for both public and private sector development projects, and for mitigation measures and accident contingency plans to be incorporated within environmental impact statements (EISs).
- Creation of a legal framework for the EIA process, together with a suitable and coordinated institutional framework for the execution and approval of ESIAs and environmental audits.
- Development of detailed technical sectoral guidelines for ESIA and environmental auditing.
- Development of ESIA and environmental auditing capacity and capabilities within the EPA, sectoral ministries, and agencies, as well as in the regions.

The Policy has been developed as a national instrument enhancing the objectives of the Constitution and setting out clear cut directions with respect to environmental concerns particularly in terms of regulatory measures adopted as well as in the process of design, implementation and operation of development projects. Its recognition of the significance of addressing cross-sectoral environmental issues in the context of a national approach to environmental assessment and management integrates the efforts of a wide range of institutions across the country. It provides a sound and rational basis for addressing the country's environmental problems in a coordinated manner

3.2.2 Water resource policy

Ethiopian Water Resource Management Policy, Proclamation No 197/2000, was formulated in 1998 for comprehensive and integrated water resources management towards efficient, equitable, and optimal utilization of the available water resources for socio-economic development on a sustainable basis. The specific objectives of the policy include:

- To promote development of the water resources of the country for economic and social benefits of the people, on equitable and sustainable basis;

- To allocate and apportion the water, based on comprehensive and integrated plans and optimum allocation principles that incorporate efficiency of use, equity of access, and sustainability of resources:
- To manage and combat drought as well as other drought associated impacts, and disasters through efficient allocation, redistribution, transfer, storage and efficient use of water resources; and
- To conserve, protect and enhance water resources and the overall aquatic environment on sustainable bases.

The document includes policies to establish and institutionalize environment conservation and protection requirements as integral parts of water resources planning and project development.

3.2.3 Public Health policy

Ethiopia in general, has a low level of health, even in comparison with other Sub-Saharan countries. This is largely related to low levels of income and widespread poverty, low levels of education, nutritional deficiencies, poor environmental conditions, and inadequate access to health services. The government has therefore, assigned a very high priority to significantly improving health care and, in 1998, issued a health policy based on the following main principles:

- Democratization and decentralization of the health care system;
- Promotion of disease preventive components;
- Ensuring accessibility to health care for the whole population;
- Promotion of private sector and NGO participation in the provision of health care;
- Development of appropriate capacity based on needs assessment, and
- Promotion and strengthening of inter-sectoral activities through a national self-reliance program.

The priority areas of the policy are in the field of Information Education and Communication (IEC) of health to create awareness and behavioral change of the society towards health issues, emphasis on the control of communicable disease, epidemics, and on diseases that are related to malnutrition and poor living condition, promotion of occupational health and safety, the development of environmental health, rehabilitation of health infrastructures, appropriate health service management system, attention to traditional medicines, carrying out applied health research, provision of essential medicines, and expansion of frontline and middle level health professionals.

3.2.4 National Policy on women

This Policy was issued in March 1993 emphasizing that all economic and social programs and activities should ensure equal access of men and women to the Country ‘s resources and in the decision-making process, so that Women can benefit equally from all activities carried out by the Federal and Regional Institution. The Policy objectives are:

- Laws, regulations, systems, policies and policies and development plans that are issued by the Government should ensure the equality of men and women; special emphasis should be given to the participation of rural women.

- Economic, social and political policies and program, as well as cultural and traditional practices and activities, should ensure equal access of men and women to the country ‘s resources and the decision-making process; and
- The central government and regional administrations should ensure that women participate in and benefit fully from all activities carried out by central and regional institutions.
- Development institutions, program and projects should ensure women‘s access to and involvement in all interventions and activities.

3.2.5 National population policy

This Policy was issued in April 1993 and aims at closing the gap between high population growth and low economic productivity through a planned reduction in population growth combined with an increase in economic returns. With specific reference to natural resources, the main objectives of National Population Policy are:

- Making population and economic growth compatible and the over-exploitation of natural resources unnecessary;
- Ensuring spatially balanced population distribution patterns, with a view to maintaining environmental security and extending the scope of development activities;
- Improving productivity of agriculture and introducing off-farm/nonagricultural activities for the purpose of employment diversification;and
- Maintaining and improving the carrying capacity of the environment by taking appropriate environmental protection and conservation measures.

3.2.6 National biodiversity policy

The National Biodiversity Policy (NBP) was established in 1998 based on a holistic ecosystem approach to conserve, develop and utilize the country's biodiversity resources. Integration of biodiversity conservation and development in federal and regional sectoral development initiatives, and mobilization of international cooperation and assistance, have been identified as the principal strategies for implementation of the policy.

The policy provides for guidance towards effective conservation, rational development, and sustainable utilization of the country’s biodiversity, and contains comprehensive policy provisions for the conservation and sustainable utilization of biodiversity. Protection of biodiversity-related traditional indigenous knowledge and communities' benefit sharing arrangements are not yet effective. Similarly, the potential of biodiversity-related opportunities has not yet been exploited to enhance sustainable livelihood to the desired level. However, there is a general understanding with respect to changing the management approach in order to bring about the desired benefits.

Wetlands are considered among the most productive type of ecosystem in the world, providing benefits far in excess of those obtained from alternative uses to which they are subjected. Ethiopia is endowed with vast wetlands, including a tract in the project area; however, efforts towards their conservation and sustainable utilization are very limited, and no clear policy and legislative framework have been designed.

3.2.7 Land Tenure Policy

The Constitution of the Federal Democratic Republic of Ethiopia (FDRE) states that the right to ownership of rural and urban land, as well as all-natural resources, is exclusively vested in the State and People of Ethiopia. Article 40 of the Constitution indicates that land is a common property of the Nations, Nationalities, and the People of Ethiopia, and shall not be subjected to sale or to other means of transfer. Buying and selling of land is prohibited but leasing rights is allowed. Moreover, it is the right for existing landowner to be compensated fully and satisfactorily if land is expropriated by the state.

The Land Policy of Ethiopia strongly supports that project plans must include attractive and sustainable resettlement strategies to the people who are going to be displaced because of the development plan, and they must be fully convinced, compensated and have to participate in all phases of the project implementation. Hence, this policy has laid a foundation in building trust-ship among the people who are going to be displaced as a result of the development (in this case people displaced for the proposed Borana water network project activities) and the implementers who have powers and duties specified under relevant regulations. Consequently, for effective implementation of the policy intent, the FDRE has proclaimed the Expropriation of Landholdings for Public Purposes and Payment of Compensation (Proclamation No. 455/2005), Regulation on Payment of Compensation for Properties Situated on Landholdings Expropriated for Public (Regulation No.135/2007) and Rural Land Administration and Land Use Proclamation (Proclamation No. 456/2005).

3.2.8 National Social Protection Policy of Ethiopia

The main objectives of Social Protection Policy of Ethiopia are the following:

- Protect poor and vulnerable individuals, households, and communities from the adverse effects of shocks and destitution;
- Increase the scope of social insurance;
- Increase access to equitable and quality health, education and social welfare services to build human capital thus breaking the intergenerational transmission of poverty;
- Guarantee a minimum level of employment for the long term unemployed and under-employed;
- Enhance the social status and progressively realize the social and economic rights of the excluded and marginalized; and,
- Ensure the different levels of society are taking appropriate responsibility for the implementation of social protection policy.

3.2.9 Wildlife Policy

The main strategy and policy that addresses wildlife conservation is the Wildlife Policy and Strategy of 2005 (WPS). This policy emphasizes development-oriented conservation. The main objective of the WPS is to create a conducive environment whereby the country's wildlife and their habitats are protected and developed in a sustainable manner, and to enable the sector to play an important role in the economic development of the country. The policy aims to protect wildlife through proper administration of wildlife protected areas, conservation of endemic and threatened species, and prevention of disasters and promotion of wildlife health services. It also seeks to establish proper systems to control trafficking in wildlife and wildlife products as well as to promote sustainable wildlife utilization. Some of the strategies to stop

trafficking include establishing check points at entry and exit points and regulation of national and international trade in wildlife and wildlife products in accordance with national and international conventions.

The Wildlife Policy also states that the wildlife resources of the country will be properly utilized for sustainable tourism, hunting, trade, ranching and food. Eco-tourism will also be promoted in protected areas and international conventions regarding wildlife and wildlife trade will be implemented. The income secured from wildlife resources will be used to benefit local people and will be reinvested in wildlife conservation endeavors. The income from wildlife will also be used to enhance the overall growth of the national economy. The wildlife policy covers a wide range of policies and strategies relating, amongst others, to wildlife conservation and protected areas. It is developed by the forms Ministry of Agriculture /MoA/, whose prime objective is the preservation, development, and sustainable utilization of Ethiopia's wildlife resources for social and economic development and for the integrity of the biosphere. The Policy has the following objectives:

- To conserve, manage, develop and sustainably utilize the wildlife resource so that the country can derive the socio-economic and ecological benefit from the resource; and
- To enable the country to discharge its obligations assumed under the international treaties regarding the conservation and utilization of wildlife and pass the resource and benefits to the coming generation.

3.3 Strategies

3.3.1 Conservation Strategy of Ethiopia

The Conservation Strategy of Ethiopia, which was approved by the Council of Ministers, provided a strategic framework for integrating environmental planning into policies, programs and projects. With regard to development of alternative energy resources and their utilization, the relevant strategies include the following:

- Develop alternative energy sources (e.g., solar power, wind, biogas, agricultural bio-fuel, liquid bio-fuel or small hydroelectric plants) for towns and villages remote from the national grid;
- Acquire, develop, test and disseminate appropriate and improved energy use technologies (e.g. improved stoves, charcoal kilns, solar powered cookers and heaters); and,
- Demonstrate and support the use of other energy sources (e.g. geothermal, solar, etc.) in the various economic sectors where it is currently little used such as in transportation, irrigation, crop-drying, food processing, fish drying, and thermal heating.

3.3.2 Ethiopia's Climate-resilient Green Economy Strategy

The Government of the Federal Democratic Republic of Ethiopia has initiated the Climate-Resilient Green Economy (CRGE) initiative to protect the country from the adverse effects of climate change and to build a green economy that will help realize its ambition of reaching middle-income status before 2025. Ethiopia's green economy plan is based on the following four pillars:

- Improving crop and livestock production practices for higher food security and farmer income while reducing emissions;

- Protecting and re-establishing forests for their economic and ecosystem services, including as carbon stocks;
- Expanding electricity generation from renewable sources of energy for domestic and regional markets; and,
- Leapfrogging to modern and energy-efficient technologies in transport, industrial sectors, and buildings.

3.3.3 Gender mainstreaming strategy and guideline (2010)

This strategy was adopted at policy, program and project level by government and development partners to ensure the outcomes of development to be shared equally between men and women; both men and women enjoy equal opportunities, status and recognition. The ratification of the Family Law and amendments made to the criminal code significantly support to fight abuses committed against woman and children. Proclamation No, 1156/2019 gives special attention to woman and young workers. The proclamation provides protection for woman in general and pregnant woman in particular from hard work and long hours. The law clearly states that women should not be discriminated against as regards to employment and payment on bases of her sex. Gender norms in Ethiopia vary widely depending on geographic location, ethnicity, and religion, especially related to property ownership, inheritance, and the division of assets after divorce. However, the new Family Code has changed all that. Passed in 2000, it gives equal rights to women in marriage, and it requires all assets be divided equally among both partners in the case of a divorce. By now, all the states in Ethiopia have approved this new Code. Ethiopia is one of many developing countries implementing gender policy reforms, especially regarding women's equal access to assets and resources.

3.4 Regulations, Proclamations and Procedural Guidelines

3.4.1 Establishment of environmental protection organs

The objective of this Proclamation (No. 295/2002) is to assign responsibilities to separate organizations for environmental development and management activities on one hand, and environmental protection, regulations, and monitoring on the other, in order to ensure sustainable use of environmental resources, thereby avoiding possible conflicts of interest and duplication of effort. It is also intended to establish a system that fosters coordinated but differentiated responsibilities among environmental protection agencies at federal and regional levels.

This Proclamation re-established EPA as an autonomous government institution of the Federal Government of Ethiopia. Furthermore, the Proclamation states that each regional state should establish an independent regional environmental agency or designates an existing agency that shall be responsible for environmental monitoring, protection and regulation in their respective regional states.

3.4.2 Proclamation on Environmental Impact Assessment (EIA)

The aim of the Environmental Impact Assessment (EIA) Proclamation (Proc. No. 299/2002) is to make an EIA mandatory for specified categories of activities undertaken either by the public or private sectors and is the legal tool for environmental planning, management and monitoring.

The Proclamation elaborates on considerations with respect to the assessment of positive and negative impacts and states that the impact of a project shall be assessed on the basis of the size, location, nature, cumulative effect with other concurrent impacts or phenomena, trans-regional context, duration,

reversibility or irreversibility or other related effects of a project. Categories of projects that will require full ESIA, not full EIA or no EIA are provided. To affect the requirements of this Proclamation, the EPA has issued a Procedural and Technical EIA Guidelines, which provide details of the EIA process and its requirements.

3.4.3 Proclamation on Environmental pollution control

This Proclamation, Proc. No. 300/2002, is mainly based on the right of each citizen to have a healthy environment, as well as on the obligation to protect the environment of the Country and its primary objective is to provide the basis from which the relevant ambient environmental standards applicable to Ethiopia can be developed, and to make the violation of these standards a punishable act. The Proclamation states that the "polluter pays‖ principle" will be applied to all persons. Under this Proclamation, the EPA is given the mandate for the creation of the function of Environmental Inspectors. These inspectors (to be assigned by EPA or regional environmental agencies) are given the authority to ensure the implementation and enforcement of environmental standards and related requirements.

3.4.4 Proclamation on Ethiopian Water Resources Management

The Proclamation on Ethiopian Water Resources Management (Proc. No. 197/2000) was issued in March 2000 and provides legal requirements for Ethiopian water resources management, protection, and utilization. The aim of the Proclamation was to ensure that water resources of the country are protected and utilized for the highest social and economic benefits, to follow up and supervise that they are duly conserved, ensure that harmful effects of water use are prevented, and that the management of water resources is carried out properly.

The Proclamation defines the ownership of water resources, powers and duties of the Supervising Body, inventory of water resources and registry of actions, permits and professional licenses, fees, and water charges. According to the Proclamation, all water resources of the country are the common property of the Ethiopian people and the State. As provided in the Proclamation, the Supervising Body [the Ministry pertaining to water resources at the central level, or any organ delegated by the Ministry] shall be responsible for the planning, management, utilization and protection of water resources. It shall also have the necessary power for the execution of its duties under the provisions of this Proclamation. According to Article 11 (1), no person shall perform the following activities without a permit from the Supervising Body without prejudice to the exceptions specified under Article 12:

- Construct water works;
- Supply water, whether for his own use or for others;
- Transfer water which he/she abstracted from a water resource or received from another supplies; and
- Release or discharge waste into water resources unless otherwise provided for in the regulations to be issued for the implementation of this Proclamation.

As defined in Article 12, any person shall utilize water resources for the following purposes without requiring a permit from the Supervising Body:

- Dig water wells by hand or use water from hand-dug wells;
- Use water for traditional irrigation, artisanal mining, and for traditional animal rearing, as well as for water mills.

3.4.5 Expropriation of Land Holdings & Compensation Payment Proclamation

Proclamation No. 1161/2012, issued in September 2005, deals with the expropriation of land for development works carried out by the government and determination of compensation for a person whose landholding has been expropriated. It includes provisions on power to expropriate landholdings, notification of expropriation order, responsibility for the implementing agency, and procedures for removal of utility lines. The proclamations shall apply throughout the country in rural and urban centers in matters related to land expropriation. Payment of compensation, resettlement of the landholders whose land is expropriated for public purpose. As to the principles, the proclamation includes:

- Expropriation of land for the public purpose shall be made only on the basis of approved land use plan, urban structural ,plan and development master plan
- Compensation and resettlement assistance compensation for expropriated land shall sustainably restore the livelihood of displaced people
- The amount of compensation to be paid at federal, Regional, Addis Ababa, and Dire Dawa for similar properties and economic losses in the same areas shall be similar.

3.4.6 Proclamation on Rural Land Administration and Use

This Proclamation, Proc. No. 456/2005, came into effect in July 2005. The objective of the Proclamation is to conserve and develop natural resources in rural areas by promoting sustainable land use practices. In order to encourage farmers and pastoralists to implement measures to guard against soil erosion, the Proclamation introduces a Rural Land Holding Certificate, which provides a level of security of tenure. The MoA is charged with executing the Proclamation by providing support and coordinating the activities of the regional authorities. Regional governments have an obligation to establish a competent organization to implement the rural land administration and land use law.

According to the Proclamation, where land, which has already been registered, is to be acquired for public works. Compensation commensurate with the improvements made to the land shall be paid to the land use holder or substitute land shall be offered. The Proclamation imposes restrictions on the use of various categories of land, for example wetland areas, steep slopes, land dissected by gullies, etc.

3.4.7 Wildlife Development, Conservation and Utilization Proclamation

The proclamation on Development, Conservation and Utilization of Wildlife (No. 541/2007) clearly demarcates the responsibility of the federal and regional governments, encouraging the involvement of local communities residing around conservation areas, and the private investors in the management of protected areas. The proclamation has the following major objectives;

- Conserve, manage, develop and properly utilize Wildlife resources of Ethiopia.
- Creates conditions necessary for discharging governmental obligations assumed under treaties regarding the conservation, development, and utilization of Wildlife.
- Promote Wildlife based tourism and encourage other Wildlife investments.

The law also encourages the possibility of designing and administering protected areas by the federal and regional governments, private investors, and local communities with respect to the criteria maintained in the proclamation. The law allows some activities; sport hunting under permission of the authority, trade on

wildlife and their products under license, and support benefit sharing mechanisms among federal, regional and local community from wildlife income.

The Wildlife legislation has been supported by Ethiopian Wildlife Regulation (No. 163/2008). According to this regulation, inside protected areas (i.e., National Parks, Wildlife Sanctuaries and Wildlife Reserves) the following activities are prohibited.

- Passing or transferring of any weapon
- Hunting or fishing
- Propelling any vehicle, aircraft or boat during hours not allowed.
- Picking, disturbing, destroying, damaging or defacing any natural or manmade object.
- Undertaking agricultural activities or preparing land for cultivation.
- Allowing grazing and watering domestic animals.
- Allowing passing through or keeping any domestic or wild animals those are stranger to an area.
- Undertake exploration and mining in the protected areas.
- Planting, cutting, chopping, removing, taking, damaging or transferring any plant species.
- Setting or attempting to set fire.
- Bee keeping or honey harvesting, removing or attempting to remove Wildlife products.
- Constructing roads or other structures or spoiling or disturbing the existing natural landscapes.
- Using spraying or disposing any pesticides or herbicides.
- Selling or offering for sale any goods or providing services, and
- Displaying any notice or advertisement at critical wildlife areas.

3.4.8 Proclamation on Public Health

Public Health Proclamation (Proc. No. 200/2000) entered into force in March 2000.The Council of Ministers may issue regulations for the implementation of this proclamation, and the Ministry of Health may issue directives for the implementation of the regulations issued under this Proclamation. The objectives of the Proclamation include: enhancing popular participation in implementing the country‘s health sector policy, promoting attitudinal changes through a primary health care approach and promoting healthy environment for the future generation.

The Proclamation has five parts. Part one is called _General ‘, and focuses on titles and definitions. Part two deals with the establishment of advisory Board with powers and duties, whereas Part three is about the appointment of Inspectors with powers and duties respectively. Part four is very comprehensive with 11 articles and other sub-articles on public health. The major articles under Part four of this Proclamation include food quality control, food standard requirements, water quality control, occupational health control and use of machinery, waste handling and disposal, availability of toilet facilities, control of bathing places and pools, disposal of dead bodies, control at entrance and exit ports, communicable diseases and the requirement of health permit and registration before resumption and after completion of construction. Part

five is on Miscellaneous Provisions – including obligation to cooperate, penalty, repealed and applicable laws, power to issue regulations, power to issue directives and, effective date.

3.4.9 Proclamation on Research and Conservation of Cultural Heritage

The Authority for Research and Conservation of Cultural Heritage (ARCCH) has been established by Proclamation No. 209/2000 as a government institution with a legal personality. The Proclamation has also provisions for the management of cultural heritages in part two, exploration, discovery, and study of Cultural Heritages in part three, and miscellaneous provisions in part four.

Article 41 of the Proclamation deals with Fortuitous Discovery of Cultural Heritages and Sub-Article 1 states that any person who discovers any Cultural Heritage in the course of an excavation connected to mining explorations, building works, road construction, or other similar activities or in the course of any other fortuitous event, shall forthwith report to the Authority for Research and Conservation of Cultural Heritage (ARCCH), and shall protect and keep it intact until the Authority takes delivery thereof. Sub-Article 2, on the other hand, states that the Authority shall, upon receipt of a report submitted pursuant to Sub-Article (1) hereof, take all appropriate measures to examine, take delivery of and register the Cultural Heritage so discovered.

3.4.10 Proclamations on Persons with Disability and Vulnerable groups

Proclamation No. 568/2008 is on rights to employment for Persons with disabilities: makes null and void any law, practice, custom, attitude, and other discriminatory situations that limit equal opportunities for persons with disabilities. It also requires employers to provide an appropriate environment for work, training and take affirmative measures, particularly when employing women with disabilities.

3.5 Environmental assessment guidelines

With a view to implement the environmental laws, environmental guidelines have been issued by the EPA. Among these are the technical and procedural ESIA guidelines, which were issued in 2000 and 2003 respectively. They are intended to guide developers, competent agencies and other stakeholders in carrying out ESIAs.

The Guidelines follow the conventional pattern adopted in many other countries and make provision for screening, scoping, identification and evaluation of impacts, the development of environmental management and monitoring plans, consideration of alternatives, ESIA report structure and information requirements, etc. The procedural guideline details the required procedures for conducting an ESIA, the permit requirements, the stages and procedures involved in ESIA process, and the roles and responsibilities of parties involved in the ESIA process. It also includes the categories of projects (schedule of activities) concerning the requirement of ESIA, and list of project types under each category.

The technical guideline specifies tools particularly standards and guidelines that may be considered when engaging in the ESIA process, and detail key issues for environmental assessment in specific development sectors. The Guideline provides the categories, the relevant requirements for an ESIA and lists project types under each category. In accordance with this Guideline, projects are categorized into three schedules:

- **Category 1** Projects which may have adverse and significant environmental impacts and therefore, require a full Environmental Impact Assessment;

- **Category 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; and
- **Category 3**: Projects which would have no impact and do not require an ESIA.

The ESIA laws and guidelines of Ethiopia require the preparation of environmental impact statement (ESIA report) and its submission to the EPA or REA for projects requiring ESIA. The legal documents also state that an ESIA report should contain sufficient information that enable the determination of whether or under what conditions the project should proceed. Furthermore, they include a list of contents that should be in the report as a minimum requirement.

3.6 The African Development Bank Environmental and Social Policies, Procedures and Standards

The environmental and social safeguards of the African Development Bank (AfDB, or the Bank) are a cornerstone of the Bank's support for inclusive economic growth and environmental sustainability in Africa. As the Bank adapts to emerging environmental and social development challenges, safeguards can quickly become out of date. To this end, AfDB has developed an Integrated Safeguards System (ISS) based on the two previous safeguard policies namely; Involuntary Resettlement (2003) and Environment (2004) and other three cross-cutting policies and strategies: Gender (2001), the Climate Risk management and Adaptation Strategy (2009) and the Civil Society Engagement Framework (2012).

Bank's sector policies: Health (1996), Integrated Water Resources Management (2000), Agriculture and Rural Development (2000, 2010), and Poverty Reduction (2004). It brings these policies and strategies into a consolidated framework that is intended to enhance the effectiveness and relevance of the Bank's work. The ISS consists four interrelated components;

- ***The Integrated Safeguards Policy Statement*** – Describes common objectives of the Bank's safeguards and lays out policy principles. It is designed to be applied to current and future lending modalities, and it takes into account the various capacities and needs of regional member countries in both the public and private sectors.
- ***Operational Safeguards (OSs)*** – are a set of five safeguard requirements that Bank clients are expected to meet when addressing social and environmental impacts and risks.
- ***Environmental and Social Assessment Procedures (ESAPs)*** – provide guidance on the specific procedures that the Bank and its borrowers or clients should follow to ensure that Bank operations meet the requirements of the OSs at each stage of the Bank's project cycle.
- ***Integrated Environmental and Social Impact Assessment (IESIA)*** – Guidance Notes provide technical guidance to the Bank's borrowers or clients on standards on sector issues, such as roads and railways, hydropower, or fisheries, or on methodological approaches clients or borrowers are expected to adopt to meet OS standards.

The operational safeguards are the major components of the Bank's ISS intended for:

- Better integrate considerations of environmental and social impacts into Bank operations to promote sustainability and long-term development in Africa
- Prevent projects from adversely affecting the environment and local communities or, where prevention is not possible, minimize, mitigate and/or compensate for adverse effects and maximize development benefits;
- Systematically consider the impact of climate change on the sustainability of investment projects and the contribution of projects to global greenhouse gas emissions
- Delineate the roles and responsibilities of the Bank and its borrowers or clients in implementing projects, achieving sustainable outcomes, and promoting local participation; and
- Assist regional member countries and borrowers/ clients in strengthening their own safeguards systems and their capacity to manage environmental and social risks.

3.6.1 The 2013 Integrated Safeguards Systems (ISS) of the AfDB

Environmental and Social sustainability is a key to economic growth and poverty reduction in Africa. The Bank's Strategy for 2013-2022 emphasizes the need to assist regional member countries in their efforts to achieve inclusive growth and transition to green growth. In addition, the Bank is committed to ensuring the social and environmental sustainability of the projects it supports. The ISS is designed to promote the sustainability of project outcomes by protecting the environment and people from the potentially adverse impacts of projects. The safeguards aim to:

- To identify and assess the environmental and social impacts (including gender) and climate change vulnerability issues of Bank lending and grant financed operations in their area of influence;
- Avoid adverse impacts of projects on the environment and affected people, while maximizing potential development benefits to the extent possible;
- Minimize, mitigate, and/ or compensate for adverse impacts on the environment and affected people when avoidance is not possible;
- Ensure that affected communities have timely access to information in suitable forms
- About Bank operations and are consulted meaningfully about issues that may affect them; and
- Help borrowers/clients to strengthen their safeguard systems and develop the capacity to manage environmental and social risks.
- The Bank requires that borrowers/ clients comply with these safeguards' requirements during project preparation and implementation. The Integrated Safeguards Policy Statement sets out the basic tenets that guide and underpin the Bank's approach to environmental safeguards.

3.6.2 Operational Safeguard of African Development Bank

The AfDB (the Bank) has adopted five OSs, limiting their number to just what is required to achieve the goals and optimal functioning of the ISS.

3.6.2.1 Operational safeguard 1 (OS1):- Environmental and Social Assessment:

This OS1 is the overarching safeguard that governs the process of determining a project's environmental and social category and the resulting environmental and social assessment requirements. The objective is to mainstream environmental and social considerations— including those related to climate change vulnerability—into Bank operations and thereby contribute to sustainable development in the region. It also ensures that appropriate decisions are taken through a comprehensive analysis of various activities and their respective likely impacts.

The specific objectives are to:

- Mainstream environmental, climate change, and social considerations into Country Strategy Papers (CSPs) and Regional Integration Strategy Papers (RISPs);
- Identify and assess the environmental and social impacts and risks—including those related to gender, climate change, and vulnerability—of Bank lending and grant-financed operations in their areas of influence;
- Avoid or, if avoidance is not possible, minimize, mitigate and compensate for adverse impacts on the environment and affected communities;
- Provide for stakeholders' participation during the consultation process so that affected communities and stakeholders have timely access to information in suitable forms about Bank operations, and are consulted meaningfully about issues that may affect them;
- Ensure the effective management of environmental and social risks in projects during and after implementation; and
- Contribute to strengthening regional member country (RMC) systems for environmental and social risk management by assessing and building their capacity to meet AfDB requirements set out in the Integrated Safeguards System (ISS).

This section covers areas related to the general environment i.e., physical (land, water, air, climate,), socio-economic and cultural (occupational, gender, human well-being, and safety; physical cultural resources) of the community, transboundary, global impacts including pollution control (greenhouse gas (GHG) emissions), and vulnerability to climate-change effects. Environmental and Social Impact Assessment (ESIA) is conducted to identify the various hazards or risk assessments and recommended the respective mitigation measures to be included in the environmental and social management plan (ESMP). The Borrowers or clients are responsible for conducting the environmental and social assessment (Strategic Environmental and Social Assessment, or SESA, or Environmental and Social Impact Assessment, or ESIA) and for developing, as an integral part of project documentation, an appropriate plan for managing possible impacts and additional actions and assessments. These are Environmental and Social Management Plans; climate change vulnerability assessment; public consultation; community impacts; appraisal and treatment of vulnerable groups; and grievance procedures.

The Project has been subjected to full ESIA to meet this policy requirement which makes the proposed project eligible for the African Development Bank (AfDB) financing. The environmental and social impact assessment will include the project area of influence, a comprehensive scoping of the project's components, consideration of alternatives, assessment of impacts, including cumulative impacts, where relevant, mitigation and management measures, etc. In this regard, the Borrower or client (Oromia Water and Energy Bureau) is responsible for conducting the environmental and social assessment and developing and disclosing an Environmental and Social Impact Assessment (ESIA), acceptable to the bank standard before the commencement of project construction.

3.6.2.2 Operational Safeguard 2 (OS2): Involuntary Resettlement: Land Acquisition, Population Displacement, and Compensation

This safeguard consolidates the policy commitments and requirements set out in the Bank's policy on involuntary resettlement, and it incorporates refinements designed to improve the operational effectiveness of those requirements. In particular, it embraces comprehensive and forward-looking notions of livelihood and assets, accounting for their social, cultural, and economic dimensions. It also adopts a definition of community and common property that emphasizes the need to maintain social cohesion, community structures, and the social inter-linkages that common property provides. The OS2 aims to facilitate the operationalization of the Bank's 2003 Involuntary Resettlement Policy in the context of the requirements of OS1 and thereby mainstream resettlement considerations into Bank operations.

The specific objectives of this OS 2 are to:

- To avoid involuntary resettlement where feasible, or minimize resettlement impacts where involuntary resettlement is unavoidable, explore all viable project designs;
- To ensure that displaced people receive significant resettlement assistance, preferably under the project, so that their standards of living, income earning capacity, production levels, and overall means of livelihood are improved beyond pre-project levels; and
- To set up a mechanism for monitoring the performance of involuntary resettlement programs in Bank operations and remedying problems as they arise so as to safeguard against ill-prepared and poorly implemented resettlement plans.

The safeguard retains the requirement to provide compensation at full replacement cost; reiterates the importance of resettlement that improves standards of living, income-earning capacity, and overall means of livelihood; and emphasizes the need to ensure that social considerations, such as gender, age, and stakes in the project outcome, do not disenfranchise particular project-affected people

3.6.2.3 Operational Safeguards 3: Biodiversity and Ecosystem Services

The overarching objective of this safeguard is to conserve biological diversity and promote the sustainable use of natural resources. It translates into OS requirements the Bank's commitments in its policy on integrated water resources management and the UN Convention on Biological Diversity. The specific objectives of this OS 3 are:

- To preserve biological diversity by avoiding, or if not possible, reducing and minimizing impacts on biodiversity;
- In cases where some impacts are unavoidable, to endeavor to reinstate or restore biodiversity including, where required, the implementation of biodiversity offsets to achieve "not a net loss but net gain" of biodiversity;
- To protect natural, modified, and critical habitats; and
- To sustain the availability and productivity of priority ecosystem services to maintain benefits to the affected communities and to sustain project performance.

The safeguard reflects the importance of biodiversity on the African continent and the value of key ecosystems to the population, emphasizing the need to "respect, conserve and maintain the knowledge, innovations, and practices of indigenous and local communities to protect and encourage customary use of biological resources, in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements.

3.6.2.4 Operational Safeguards 4 _ Pollution Prevention and Control, Greenhouse Gases, Hazardous Materials, and Resource efficiency

This operational safeguard 4 outlines the main pollution prevention and control requirements for borrowers or clients to achieve high-quality environmental performance, and efficient and sustainable use of natural resources, over the life of a project (specifically to manage and reduce pollutants). It also covers the range of impacts of pollution, waste, and hazardous materials for which there are agreed-on international conventions and comprehensive industry-specific standards that other multilateral development banks follow. In addition, it introduces vulnerability analysis and monitoring of greenhouse gas emissions levels and provides a detailed analysis of the possible reduction or compensatory measures framework. The objectives of this OS are:

- To manage and reduce pollutants likely to be caused by a project so that they shall not pose harmful risks to human health and the environment, including hazardous, nonhazardous waste and GHG emissions; and
- To set a framework for efficiently utilizing all a project's raw materials and natural resources especially focusing on energy and water.

3.6.2.5 Operational Safeguards 5: Labor Conditions, Health and Safety

Labor is one of a country's most important assets in the pursuit of poverty reduction and economic growth. The respect of workers' rights is one of the keystones for developing a strong and productive workforce. This OS outlines the main requirements for borrowers or clients to protect the rights of workers and provide for their basic needs.

The objectives of this OS are to:

- Protect the workers' rights and establish, maintain, and improve the employee
- Employer relationship;

- Promote compliance with national legal requirements and provide due diligence in case national laws are silent or inconsistent with the OS;
- Provide broad consistency with the relevant International Labor Organization (ILO) Conventions, ILO Core Labor Standards, and the UNICEF Convention on the Rights of the Child in cases where national laws do not provide equivalent protection;
- To protect the workforce from inequality, social exclusion, child labor, and forced labor; and
- To establish requirements to provide safe and healthy working conditions.

The OS 5 establishes the Bank's requirements for its borrowers or clients concerning workers' conditions, rights, and protection from abuse or exploitation. It covers working conditions, workers' organizations, occupational health and safety, and avoidance of child or forced labor. It also ensures greater harmonization with most other multilateral development banks.

3.6.3 Environmental and Social Assessment Procedures of AfDB on Public Sector Operations

The AfDB Environmental and Social Assessment Procedures (ESAP) on Public Sector Operations of June 2001 main purpose Procedures is to improve decision-making and project results in order to ensure that Bank-financed projects, plans, and programs are environmentally and socially sustainable as well as in line with the Bank's policies and guidelines. The ESAP intends to replace the actual procedures and integrate all crosscutting considerations into the new assessment process. The ESAP describes the various steps that shall be followed to mainstream cross-cutting issues along the project cycle, from country programming to post-evaluation. The first step consists in developing and updating baseline data on Regional Member Country's environmental and social components, policies, programs, and capacities to better integrate environmental and social dimensions into lending priorities during country programming. During the project identification phase, the screening exercise focuses on the environmental and social dimensions of a project to categorize it in one out of the four following categories.

Category 1: Projects likely to cause significant environmental and social impacts: Category 1 projects are likely to induce significant and/or irreversible adverse environmental and/or social impacts or to significantly affect environmental or social components that the Bank or the borrowing country considers sensitive. Some program-based operations or other regional and sector program loans have significant adverse environmental or social risks and are deemed to be Category 1. In some cases, projects are included in Category 1 because of their potential cumulative impacts or the potential impacts of associated facilities. Any project requiring a Full Resettlement Action Plan (FRAP) under the provisions of the Bank's policy on involuntary Resettlement is also deemed to be a Category 1.

Category 1 program-based operations or regional and sector loans require a SESA, and Category 1 investment projects require an ESIA, both leading to the preparation of an ESMP. For a project requiring a FRAP, the ESIA includes, and-if there are no other issues requiring assessment—may be limited to, the social assessment needed to prepare the FRAP.

Category 2: Projects that likely cause less adverse environmental and social impacts than Category 1: Category 2 projects are likely to have detrimental site-specific environmental and/or social impacts that are

less adverse than those of Category 1 projects. Likely impacts are few in number, site-specific, largely reversible, and readily minimized by applying appropriate management and mitigation measures or incorporating internationally recognized design criteria and standards.

An operation that involves resettlement activity for which Resettlement Action Plan (RAP) is required under the ESAPs is classified as Category 2. Most programmed based operations and regional or sector program loans designed to finance a set of subprojects approved and implemented by the borrower or client are included in this category unless the nature, scale, or sensitivity of the intended pipeline of subprojects involves either a high level of environmental and social risk or no such risk.

Category 2 projects require an appropriate level of environmental and social assessment (ESA) for program operations, investment plans, and some corporate loans, or ESIA for investment projects tailored to the expected environmental and social risk so that the borrower will prepare and implement an adequate ESMP (for an investment project) or ESMF (for a program operation), to manage the environmental and social risks of subprojects in compliance with the Bank's operational safeguards.

Category 3: Bank operations with negligible adverse environmental and social risks: Category 3 projects do not directly or indirectly affect the environment adversely and are unlikely to induce adverse social impacts. They do not require an environmental and social assessment. Beyond categorization, no action is required. Nonetheless, to design a Category 3 project properly, it may be necessary to carry out gender analyses, institutional analyses, or other studies on specific, critical social considerations to anticipate and manage unintended impacts on the affected communities.

Category 4: Bank operations involving lending to financial intermediaries*:* Category 4 projects involve Bank lending to financial intermediaries (FIs) that on-lend or invest in Subprojects that may produce adverse environmental and social impacts. Financial intermediaries include banks, insurance, reinsurance, and leasing companies, microfinance providers, private equity funds, and investment funds that use the Bank's funds to lend or provide equity finance to their clients.

Financial intermediaries also include private or public sector companies that receive corporate loans or loans for investment plans from the Bank that are used to finance a set of subprojects. Financial intermediary subprojects equivalent to Category 1 and Category 2 are subject to the relevant OS requirements as if they were directly financed Category 1 or Category 2 projects. However, if a client will use a Bank corporate loan to finance high-risk investment projects known at the time of loan approval, the loan can be considered Category 1 or 4(1) requiring an ESMS as well as detailed ESA studies. In cases where a Bank corporate loan will be used by the client to finance low-risk investment projects known at the time of loan approval, the loan can be deemed to be Category 2 or 4(2) requiring an ESMS as well as a detail abbreviated ESA studies. In cases where a Bank corporate loan will be used by the client to finance no-risk investment projects known at the time of loan approval, the loan can be deemed to be Category 3 or 4(3) for which no ESA studies are required.

FIs are required to apply the Bank's OSs and equivalent procedures to their subprojects and to comply with local environmental and social requirements. The FI must demonstrate to the Bank that it has developed and will maintain an Environmental and

Social Management System (ESMS) is in line with the Bank's OSs and appropriate for the scale and nature of its operations – recognizing that FIs' operations vary considerably and, in some cases, may pose a minimal environmental and social risk. The FI must also demonstrate that it has the management

commitment, organizational capacity, resources, and expertise to implement its ESMS for its subprojects. The Bank shall carry out due diligence of the ESMS and the FI's organizational capacity before approving the loan. The FI shall make a summary of the ESMS available to the public locally, e.g. on its website, before the loan can be approved. In addition, for a category 1 project, if an OS is triggered, the requirements of this specific OS should be met by the project.

In view of the above categorization, a large water supply and sanitation project will possibly fall under Category I or II depending on the anticipated severity of impacts. Those projects assigned under category 1 usually require a full ESIA study. But those in category II pose medium impacts and require moderate environmental analysis. However, if a category II project is located in or close to environmentally sensitive areas it should be treated as equivalent to a Category I project.

The safeguard policies triggered by the Program are highlighted and described.

Safeguard Policies Triggered	**Yes**	**No**	**TBD**
Environmental and Social Assessment (OS 1)	**X**		
OS 1 is triggered because of the Program's planned construction activities which are likely to pose environmental and social risks associated with the physical, biological, socio-economic and health and safety profile of the sub-project areas. These risks will be managed through the implementation of mitigation measures resulting from site specific Environmental and Social Impacts Assessments (ESIAs) and/or Environmental and Social Management Plans (ESMPs).			
Involuntary Resettlement: Land Acquisition, Population Displacement and Compensation (OS2)	**X**		
The Program is expected to entail limited land acquisition and possible resettlement. Majority of the land in the affected project area are agricultural lands owned and managed by communities in the rural kebeles/Districts. The details of the land to be acquired and number of people to be compensated will be addressed in the site specific ESIAs, ESMPs and RAPs.			
Biodiversity and Ecosystems Services (OS 3)	**X**		
The planned construction activities may impact the ecosystem service on which the local population depend in terms of sustenance, livelihood and/or primary income. The associated risks will be avoided/mitigated in accordance to the measures elaborated in the site-specific ESMPs.			
Pollution Prevention and Control Hazardous Materials and Resources Efficiency (OS 4)	**X**		
Potential environment and social impact due to emissions of pollutants and waste is anticipated during the construction phase of the Program. These will be managed as per measures recommended in the site-specific ESMPs.			

Labour Conditions, Health and Safety (OS 5)	**X**		
The Program's construction works will require the establishment of workforce. The Contractor shall comply with the Labour laws and Best Practice Occupational Health and Safety requirements. Occupational safety risks will be mitigated through the selection and effective use of mechanical and protective equipment			

The Borana Resilient Water Development for Improved Livelihoods Program was assessed as category I according to the Climate Safeguard Screening tool because of the Program's vulnerability to climate risk. Following field assessment of climate risks and possible adaptation measures for each sub-project was undertaken using the Bank's Adaptation Review and Evaluation Procedures (AREP) under the Bank's Climate Safeguards System (CSS).

3.7 Regional and International Multilateral Agreement

In addition to national environmental legislations, Ethiopia is also a party to a number of regional and international conventions and protocols pertaining to the environment and which are of relevance to the project. The international agreement to which Ethiopia is a signatory include the following.

- **Convention on Biological Diversity, 1992:** The three goals of this convention are the conservation of biodiversity; the sustainable use of the components of biodiversity; and the fair and equitable sharing of the benefits arising from the use of genetic resources. The Convention was ratified by Ethiopia by Proclamation No. 98/94, on May 31, 1994. By Proclamation No. 362/2003; Ethiopia has ratified the Cartagena Protocol on Biosafety to the Convention on Biological Diversity.
- **United Nations Framework Convention on Climate Change (FCCC), 1992:** Ethiopia Ratified this convention through Proclamation No. 97/1994 on May 2/1994. This convention takes into account the fact that climate change has transboundary impacts. The basic objective of this convention is to provide for agreed limits on the release of greenhouse gases into the atmosphere so as to prevent the occurrence of climate change. It also aims to prepare countries to minimize the impact of climate change should it occur.
- **The Basel Convention, 1989:** The objective of the Basel Convention is to control and regulate the trans-boundary movement of hazardous wastes and their disposal adopted on 22 March 1989. The Bamako Convention of 1991 plays a similar role at the level of the African continent. Ethiopia ratified the Basel Convention through its Proclamation No. 357/2002. Its amendment was ratified through Proclamation No. 356/2002. The country has also ratified the Bamako Convention through Proclamation No. 355/2002.
- **The Stockholm Convention:** In the year 2002, Ethiopia fully accepted and ratified the Stockholm Convention on Persistent Organic Pollutants by proclamation No. 279/2002 was designed to ban the use of Persistent Organic Pollutants (POPs). The EPA has the full mandate to implement the Convention at the national level.
- **The Rotterdam Convention:** The Rotterdam Convention on Prior Informed Consent (PIC) relates to prior informed consent in the context of international trade in specific hazardous chemicals and

pesticides. The federal EPA is the organ responsible for the domestic implementation of this convention, which has been ratified by Ethiopia Proclamation No. 278/2002.

- **Convention on the protection of World Cultural and Natural Heritage:** Each state party to this Convention recognizes the duty of ensuring the identification, protection, conservation, preservation, and transmission to the future generation of the culture and natural heritage situated on its territory, belongs primarily to the state. Ethiopia has ratified this convention in 1997.
- Convention on the means of prohibiting and preventing the Elicit, Import, Export, and Transfer of ownership of cultural property: The states parties undertake to oppose such practices with the means at their disposal, particularly by removing their causes, putting a stop to current practices, and by helping to make the necessary preparations. Ethiopia ratified this convention in 2003.
- **UNESCO's Conventions and Recommendations:** Standards for the protection and management of cultural heritage, in general, have been issued by a variety of institutions; foremost among these are the United Nations Educational, Scientific and Cultural Organization (UNESCO); the International Council on Monuments and Sites (I COMOS); the Council of Europe (COE); and national governments. Most of these standards pertain to material culture, often termed 'tangible' cultural heritage; however, there is increasing attention also to 'intangible' heritage, including the products and processes of artistic and creative expression.

Of the above, the UNESCO standard-setting documents consist mainly of conventions and recommendations. The five UNESCO conventions regarding cultural heritage include armed conflict (1954); illicit trade (1970); world heritage (1972); underwater cultural heritage (2001); and intangible cultural heritage (2003). Of the five, the 1972 'World Heritage Convention,' which provides for the designation of World Heritage Sites, is by far the most popular and widely known. Ethiopia has been a member of UNESCO since 1976.

In addition to the conventions, from 1956 to 1980, UNESCO issued recommendations in order to encourage international and regional cooperation, and especially, improvement in the management of cultural heritage at the national level. Recommendations were issued on numerous subjects, including international competitions in architecture and town planning (1956); safeguarding the beauty and character of landscapes and sites (1962); prohibiting and preventing the illicit export, import, and transfer of cultural property (1964); preservation of cultural property endangered by public or private works (1968); protection, at the national level, of the cultural and natural heritage (1968); safeguarding and contemporary role of historic areas (1976) and protection of movable cultural property (1978).

4. ENVIRONMENTAL AND SOCIAL BASELINE

4.1 Physical Environmental profile of the project area

4.1.1 Topography

The *topography* of the project area is characterized by an expansive flat lowland spotted by hills at certain intervals with variation of ground elevations which range from 1,100 up to 2,495 m.a.s.l. The area is divided into three main physiographic regions; the eastern mountainous ridge and associated valleys, the central valley plain and inselbergs and the western warped plateau. Based on Digital Elevation Model (DEM) slope map analysis, about 60 percent of the project areas have slope class less than 5 percent slope gradient.

4.1.2 Geology

The *local geology* of Borana Zone in which the project found comprises four major geological formations; Precambrian basement complex/crystalline rocks (consisting granite, gneisses and magmatite), Sedimentary deposit (sand stone and lime stone), Volcanic (Tertiary and quaternary basalt and tuff) and Quaternary deposit (alluvial deposit, alluvial-in situ weathering rock). Of these, the geology of the Yabello, the project, area comprises of Precambrian basement complex, quaternary deposit and tertiary and quaternary volcanic are dominantly found followed one another.

4.1.3 Soils

As to the *major soils* of the project areas, eight major soils types are found in the project area; namely Cambisols, Vertisols, Luvisols, Fluvisols, Leptosols, Calcisols, Andosols, and Nitisols. Camisols, Luvisols, Vertisols, and Nitosols are the dominant soil classes found in the project area.

4.1.4 Climate

The *climate* of the project area is characterized by semi-arid to sub moist lowlands (hot to warm thermal zone). The rainfall pattern of the area is Bimodal Type II with two growing periods. There are four seasons observed in the area; long rainy season called Ganna (March-May), cool dry season Adoolessaa (June to August), short rainy season Hagayya (September to November) and the dry season called Bona (December to February). The annual mean average rainfall ranges from 450-650mm.The rainfall is not only in intensity and duration but also its distribution is uneven and varies in area coverage. The mean annual temperature of the project area ranges of 17.5-27.5^{0}C and this temperature is within the ranges of physiological requirement for most agricultural production.

4.1.5 Climate Change

With regard to *Climate Change*, impacts of climate change are manifested in the form extreme weather events like drought, heat waves, heavy rains, floods, storms, wildfire, etc. of which severe drought is repeatedly manifested in the project area. It affects all sectors indifferently, although agricultural activities especially sensitive to weather variability and that can result in the agricultural sector being extremely vulnerable to climate change.

4.1.6 Water resources

Water availability likely decreases by climate change and recurrent droughts. There is no permanent river available other than intermittent flashes in the area. Hence, adaptation to climate change resilient water

supply system is not only the matter of maintaining community, human and livestock, but also to reduce vulnerability of generations and ensuring sustainability.

Galchet-Sarite Water Supply Project is, therefore, planned to use groundwater source as it is relatively climate resilient compared to surface water sources although there is no potential surface water sources other than intermittent flash like the one shown in Figure4.1 below.

Figure4.1**:** Impacts of flash flood in ***Elwaya*** district

With regard to *groundwater*, as boreholes that draw water from large, permeable aquifers are the most resilient to all expected climate change impacts, the project is planned on groundwater source. Based on hydrogeological investigations of the project areas, ample groundwater potential exists within alluvial deposits, weathered and fractured volcanic rocks, weathered and/or fracture basement rocks of the area.

Piping and transmitting to booster reservoirs and the main reservoir networks may be vulnerable to contamination and will be at increased risk where more frequent flooding occurs the line crosses. But the ground water source of the area is potentially resilient to wide range of climate change impacts. In general, in order to manage impacts of climate related extreme weather events, *adaptation* of livelihood systems is very decisive. The adaptation mechanisms can include protecting ecosystems, improving agricultural methods, managing water sources, shifting settlements to relatively more safe areas, developing early warning systems, improving insurance coverage, developing social safety nets and enhancing public awareness and education. Technology to such climate change resilient water supply shall considered those shown in Table4.1 below.

Table4.1: Resilience of the water technology to climate change

S. N	Level of Resilience	Technology
1.	Category-1: Potentially resilient to all expected climate changes	• Utility piped water supply • Boreholes (tube Wells)
2.	Category-2: Potentially resilient to most expected climate changes	• Protected springs and • Small piped systems

3.	Category-3: Potentially resilient to only a restricted number of climate changes	• Dug wells • Water harvesting
4	Technologies categorized by JMP (Joint Monitoring Program on water supply and sanitation-WHO & UNICEF) as "not improved drinking water sources"	• Unprotected dug wells, • Unprotected springs, • Surface waters (Rivers, Dams, Lakes and Ponds), & • Bottled water

.

4.1.7 Drought

Drought is one of the major hydro-meteorological hazards often occurs in the project area. Based on information obtained from local elders, drought occurrence frequency of the Borana Zone is increasing from time to time and currently reached at the stage of threatening the livelihood of the community and resulted in migration of people because of increased pressure on water source and rangelands. As a result of mobility, lack of forage and water productivity and deaths livestock were realized. Hence, *interventions in water sector* will have immense contribution towards improving the livelihood of the local community.

4.1.8 Flooding

Flooding is another hydro-meteorological hazards in the project area. It occurs during rainy reasons from intense rains at relatively sloppy areas. Because of overstocking and overgrazing, the rangelands are degraded and little vegetation is left to resist the detaching power of raindrops. As a result, gulley erosion become a common form of land degradation in the project area (see Figure4.1). Besides this, the flash flood also affecting public infrastructures such as bridges, roads and homes of the pastoral/Agro-pastoral community.

There are no industrial pollution sources in the project area, no significant road traffic and transportation density that may cause air quality or pollution problems in the project areas. The ambient air quality of the Galchet Sarite Water Supply Project area, in general, has no major sources of greenhouse gas (GHG) emissions and potential impacts in the area and Borana Zone in general.

No data exist on the present noise levels in the area. But as it is in rural areas, apart from traffic noise along Addis Ababa-Moyale road and in Yabello Town, no noise problems as the noises from vehicles thus the noise levels are considered insignificant.

4.2 Biological Environmental profile of the project area

4.2.1 Vegetation

The major and *dominant plant type* identified in the project area is acacia species that is widely found in rangelands and almost everywhere in the project area. With acacia dominance, eight vegetation cover types have been identified in the project area. Open Shrub lands, Grasslands, cultivated land, Built-up area,

Exposed surface, Forest land, Riverine Forest, and Wood lands. *Shrub lands* are the dominant land cover in the project area.

4.2.2 Terrestrial Fauna

In the case of *Terrestrial Fauna*, the wild animals commonly observed in lowland areas of the country such as Bush-pig, Warthog, Anubis baboons, fox, hyena and other small wild animals are observed in the area. No park or wildlife reserved areas adjacent or across the raw water main transmission line from the well field to the main reservoir.

4.2.3 Birds

The project area hosts two endemic birds; the *Ethiopian Bush Crew* and *White-Tailed Swallow*. Various bird species were also recorded and they are the most diverse fauna group in the project area. Similar to the birds in different environments, the birds of the project area have ecological and economic importance. Apart from this, birds are also key component of the ecosystem and also considered as environmental indicators.

4.3 Socio-economic profile of the project area

4.3.1 Administrative area

The *administrative setting* of the phase-I Program area covers the well field, the main transmission line and main reservoir sites found in the two districts; Yaballo and Elweya districts. The other Program administrative areas includes Arero, Dire, Dubluk, Dugda Dawa, Gamole and Wachile districts of Borana Zone of Oromia National Regional State.

4.3.2 Human population

The *human population* projections for the phase-I area project of the Program areas indicates 101,730; 112,567; 123,103 and 132,923 peoples and also for the other Program areas indicates 134,232; 148,588; 161,582 and 175, 653 peoples for the years 2020, 2025, 2030 and 2035 respectively.

4.3.3 Livestock population

The livestock population of the Program area districts was also identified and projected. Based on the projection for the phase-I project area of the Program or of the 16 rural Kebeles of Elweya and Yabello districts indicate 335,267; 341,901; 371,973 and 399,146 and for the overall of Program districts including the phase-I indicates 790,948; 860,478; 923,351 and 975,730 for the years 2020, 2025, 2030 and 2035 respectively.

4.3.4 Land tenure

Being pastoral area, the *land tenure system* of the project areas belongs to clans. Every member of the pastoral community has the right to use the land collectively by clan under customary law. Villagers have rights to the land that their residents have traditionally used including grazing land, fallow land and free lands. They have a customary right to own the village land that they hold under customary law or have received as an allocation from the village council. Cultivation of cropland is a means used to put land under private holding as far as the individual tiller belongs to the same community. When he leaves the community, it becomes communal property.

4.3.5 Land Use Land Cover

The major *Land Use Land Cover (LULC)* identified for the Program project areas are described in the table below. The land use for each project of the Program shall be detailed in line with implementations of each project of the Program. Of the general Program areas, the dense shrub land, dense bush shrub land and open shrub land account for about 75% of the total 3,150,427 ha areas followed by grasslands which is estimated at about 228,623 hectares of land.

4.3.6 Settlement pattern

The *settlement pattern* in the project areas is generally seen as scattered villages, "Ollaa", which are sparsely setup or a mix of mobile and small sedentary clusters at some intervals. The majority of the settlements are found along roads.

4.3.7 Livelihood bases

The *livelihood base* of the Program area community is entirely depends on livestock husbandry (major) and crop farming (Maize, Teff, Haricot bean and sugarcane) which are grown in some pocket areas of the zone. The *main source of income* of the community, therefore, are livestock, livestock products and crop production. There are also significant numbers of the community engaged in pure pastoral way of life.

4.3.8 Community wealth status

Community *wealth status* depends on livestock production. It is the most important source of income and hence number of cattle, camels, goats or sheep is a good indicator of the wealth status in the project area community. The wealth status is also determined by sources of income and major occupations, which determine the livelihood of a household. Moreover, there are also people engaged in off farm activities such as petty traders, daily laborer, sales of Gum & incense, charcoal, fire woods and Sales of livestock products such as milk. The nature of occupation such as trading and the income generated through such an employment is also an indicator of wealth group.

4.3.9 Public Health

Although it is not satisfactory, there are heath institutions and professionals to provide basic health services in the project area. Based on data obtained from Borana Zone Health Office, there are 5 hospitals, 45 health centers, 175 health posts, 11 pharmacies and 63 private clinics in the zone. But the service delivery is very poor because of various factors. The most common diseases of the project area are Pneumonia, malaria, diarrhea, internal parasite and common cold. Internal parasite and diarrhea are the most prevalent disease as the local people use raw water from unprotected sources. In most cases they use same source with the livestock.

4.3.10 Livestock Health

Livestock *healthcare service* is of a major economic importance to the community of the Program areas. One of such services is veterinary service, which is carried out in the form of vaccination (pre-and-postrainseasons) and various treatments.

4.3.11 Water Supply Situations

The water supply situation of the Program areas is very dire. The community depends on unprotected water sources such as ponds (Haroo), traditional wells (Eelaa), water harvested from roof and underground cistron. Community members walk about 15 kilometres to get potable water per day if at all potable water source

exists in very limited district towns. Water collection is a major work burden on women and children as they spend several hours per day on fetching water from distances.

4.3.12 Hygiene and Sanitation

Most of the district capital towns of the Program areas presently do not have any sewerage system. Majority of the households in villages or settlement areas were also found having pit latrines although there are significant number of households that use open defecation. As most of their water sources are unprotected; flush flood can easily wash all the wastes and pollute the water sources which eventually increase exposure to diarrhea and other waterborne diseases. Provision of safe drinking water for better personal hygiene and sanitation is one of the prerequisites for addressing the diseases that appear to be common in the project area.

4.3.13 Road Networks

The Program area has different types of roads; all weather and dry weather roads. The all-weather roads include Asphalt Road from Addis to Moyale and the road from Yabello to Konso. The other road types are Gravel Road and the Cobblestones and dry weather road with lengths of 555.7 km, 2022.32 km, 3.27 km and 842 km respectively, with overall length of about 3423.29 km.

5. PROJECT SCREENING, APPRAISAL, APPROVAL AND IMPLEMENTATION

5.1 Guiding Principles

Due to the nature and type of the proposed BRWDLP project activities, the overall project environmental and social risk rating will be assigned as 'substantial". The potential adverse impacts that will be generated due to the implementation of these subproject activities are expected to be site-specific, temporary, reversible, and manageable with the application of appropriate environmental and social risk management (ESRM) tools and other applicable international best practices. Given the scale of the subproject activities under components 1 and 2 which is the construction of water supply projects, and integrated watershed development the risk category will be expected to remain substantial and will likely require a full ESIA, thus the Environmental and Social Assessment (ESA) is necessary for identification and development of measures aimed at avoiding, minimizing, compensating and/or offsetting of the anticipated environmental and social impacts during preparation, implementation, and operation of the proposed component 1 and 2 subproject.

The overall guiding principles of the proposed BRWDLP operations and implementations are the following, but not limited to: -

- The planning processes shall consider a complete understanding and prioritizing of the potential subproject sites.
- A detailed feasibility study of each subproject based on the potential survey.
- Proper stakeholder engagement process and implementation of environmental and social assessment studies for each respective subproject before the commencement of civil works.
- Conforming to specific national and AfDB relevant policy and standards requirements.
- Proposed subprojects will undergo environmental and social screening.
- Ensuring no harm or minimal impact to the nearby biophysical and social environment that can be mitigated easily by employing best practices.
- Ensuring sound implementation of the recommended mitigation measures.
- The planning and implementation process will integrate ESIA and/or ESMP or other relevant environmental and social safeguards instruments.
- Promoting adequate and timely technical support to OWEB, and other relevant, regional, zonal, and district offices, including environment offices which in turn will do the same to the other implementing partner.
- Promoting supervision and monitoring of the implementation of subprojects by all relevant parties including MoWE, OWEB, etc. with the support from the respective environmental offices at the national, regional, and local levels.
- Throughout the process, provide close attention to gender issues during the consultation, data collection, and design of opportunities and mitigation measures e.g., GBV plan.

The implementation of the subproject environmental and social screening and management process will be attained through the procedures and steps described below in section 5.2 and in Figure 5-1 along with the project implementation cycle.

5.2 Procedures and Steps

This subsection describes the steps and procedures to ensure the implementation of environmental and social risks and impacts are adequate and well addressed. This ESMF highlights the proposed subprojects mainly

under components 1 and 2, planning focus on ensuring the implementation of each subproject's activities are environmentally friendly and socially acceptable with no harm principle by applying best practices and sound mitigation measures, as it will be stipulated in the respective safeguards' instruments.

All subprojects to be funded under the BRWDLP will be subjected to the environmental and social screening process and per the result of the screening process, an environmental assessment (EA) will be conducted based on Ethiopian Environmental legislation and AfDB OSs to ensure that the anticipated adverse impacts and risks are efficiently managed, and all applicable international best practices are applied. The screening process will be used to determine the appropriate environmental and social management measures, depending on the nature, scope, and significance of the expected environmental and social risks and impacts associated with each subproject activity. The screening will be done using the Environmental and Social Screening Form (ESSF) annexed in this ESMF (Annex-2). The screening form is designed to provide the necessary information to the assessors and stakeholders, to determine whether or not activities of a sub-project would likely result in significant environmental or social risks and impacts during implementation. The Environmental and Social Screening Form (Annex-2) will be completed by trained and qualified frontline safeguards staff from OWEB, with the support from environmental offices at regional and local levels, as required. The screening form, when correctly completed, will facilitate the:

i. Identification of potential environmental and social impacts and their significance.
ii. Assignment of the appropriate environmental risk and impacts.
iii. Determination of appropriate environmental and social enhancement and mitigation measures.
iv. Need to conduct an assessment and prepare specific Environmental and Social (E&S) safeguards instruments which may include, but not limited to an ESIA, ESMPs, etc.

The screening checklist (Annex-2) guides the impact assessment in identifying key environmental and social issues and impacts associated with projects prior to the final subproject design. The Environmental and social screening asks key questions on matters that are of fundamental importance to the subproject and provides a response in the form of "Yes", "No", "Unknown" or "NA" (Not Applicable).

When planning a subproject under the BRWDLP, there will be list of issues that must be considered. Checklists are annexed with information identified E&S issues that need to be considered as part of the project planning and design. The list is intended to guide the environmental and social assessment (ESA) in identifying key environmental and social risks and impacts that may be associated with the subprojects under the respective components prior to the subproject design (Annex-2), as any identified adverse impacts of the subproject to the nearby environment or to the community may be minimized through changes to subproject design or with the consideration of mitigation measures to lessen negative effects.

When planning a subproject, among others the following list of issues must be considered. If these issues are considered early in the subproject cycle, it helps for sustainable implementation of the subproject and to be accepted by the local community and other beneficiaries. Some of the issues that might arise will include but not limited to:

- Natural hazards
- Preservation of cultural property, biodiversity and habitats
- Preservation of land use/impact of adjoining uses
- Preservation of species and natural spaces
- Community and gender equality issues

- Building and Construction issues
- Waste management issues – solid, hazardous, and sewage
- Location considerations
- Public and occupational health and safety, etc.

The following steps of the environmental and social screening process will lead towards the review and environmental approval by offices and bureaus in charge of environmental protection and management at various levels, which every potential subproject under each component of BRWDLP to be implemented by the main project implementing parties (OWEB).

Step-1: Subproject identification

11.1.1. Subproject refers to the set of activities derived from the BRWDLP Components 1, 2, and 3 activities including construction of water development and Multi-Sector Uses, Integrated watershed development, Institutional Strengthening, and Project Management respectively. Under component 1, various types of investments will be implemented to improve the livelihood of the local communities within the program activity area of influence, which include: groundwater development in the Gelchet wellfield, construction of the wellfield area water supply route (including the backbone, water collection, and transmission to Simu Hilltop Reservoir and last-mile connectivity), livestock watering troughs, and associated infrastructure for smallholder agriculture. The transmission and distribution systems will include water mains, reservoirs, and distribution networks; water connections; macro and micro metering; and pressure monitoring systems. The program will include the use of smarter water systems (e.g., deployment of Supervisory Control and Data Acquisition (SCADA) system for strengthened efficiency. It will deploy climate-resilient water safety planning, including water quality monitoring, and explore private sector participation in the operation of the WSS facilities. The program will include the construction/rehabilitation of sanitation facilities for schools, public places like markets, and health facilities to contain/manage excreta safely. This component will also strengthen existing early warning systems and the information value chain, building on interventions carried out by the MoWE and those financed by bilateral DPs. Component 2: Integrated Watershed Management. Based on a micro-watershed approach, this component will finance community-led physical and biological soil and water conservation measures for protection of the water sources to reduce pollution. These will include: (i) development of community based micro watershed and source protection plans with climate adaptation mainstreamed (ii) establishment of watershed management committees, rangeland route delineation; social mobilization, and capacity building, (ii) rangeland management and (iii) technical support for target micro watershed/rangeland rehabilitation and livelihood activities, including tree planting and bee keeping. The program will emphasize the selection of technologies that do not encourage crowding to alleviate pressure on any single water point to avert degradation. Component 3: Institutional Strengthening and Project Management. A project implementation unit (PIU) will be established and staffed by experts at federal, regional and District levels. Financed activities will include: (i) operating costs of the PIU and the line departments responsible for program implementation; capacity building to address gender needs, strengthening utility management, including financial sustainability, through the introduction of affordable tariffs whilst ensuring sufficient cost recovery, equipment; staff costs for program coordinator, accountant, procurement, safeguards, climate change, and gender specialists; (ii) nutrition-sensitive communications to promote WaSH in schools, health facilities, and households using existing local delivery platforms will be undertaken (iii) knowledge management and outreach, (iv) supervision quality control, contract management and safeguard compliance; (iv) program audits, studies under components 1 and 2 and (v) improvement of monitoring and evaluation systems. An indicative

list of subproject menus for components 1, 2, and 3 subprojects as suggested by community consultation processes carried out so far and identified by the lead implementing agencies are shown in table 5.1 below.

Table5.1: Indicative subproject menu for components 1, 2 and 3

Components	Activities
Component 1	*Water Development for Multi Sector Use*
Component 2	*Integrated Watershed Management*
Component 3	*Institutional Strengthening and Project Management*

Step 2: Project preparation and application

During the planning and preparation of all projects under the BRWDLP, the main implementing party (OWEB) is required to identify and confirm the environmental and social impacts of the subprojects that would be mitigated and minimized through the implementation of mitigation measures and the relevant best-practice methods. Anticipated impacts and the respective mitigation measures under environmental and social impact and mitigation measures described in section 6 of this ESMF will be used by OWEB to contemplate potential environmental and social impacts emanated due to the implementations of each subproject, mainly under components 1, and 2, of the proposed BRWDLP.

Given the number of subprojects under BRWDLP, all interventions stated above are likely to undergo E and S screening and assessment of environmental and social impacts. Considering the scale and nature of these subprojects, the impact significance level of identified environmental and social impacts, and as per the result of the screening process, if the implementing part of the respective subprojects is required to carry out an environmental and social assessment and develop the applicable safeguards instruments, no subprojects will be approved and commenced, unless the required safeguards instruments are prepared, approved, and disclosed. After the preliminary project identification and or site assessment study, for the subproject which will be acquiring land, OWEB is responsible to secure land for their respective subprojects from the regional government to allow a subsequent technical and preliminary environmental and social examination to be carried out and the report to be prepared, accordingly.

Step Three: Desk appraisal

Prior to filed visit to proposed subproject sites, a desk appraisal of the proposed subproject activities will be carried out to confirm that all proposed subproject relevant documents contain the required information pertinent to the identification of environmental and social safeguards issues. Depending on the type of subprojects under each component, a desk appraisal will be conducted by the OWEB to ensure that all relevant environmental and social issues are properly identified. In addition, subsequent to the desk appraisal, the initial screening of the proposed project activities will be carried out in the field, using the Environmental and Social Screening Form (Annex-2), by the OWEB with the support from the zonal and local offices in charge environmental protection and management.

Step four: Screening

Screening is a key environmental and social management process aiming at determining appropriate studies and follow-up that might be required for sub-project activities. The screening aims at categorizing the sub-projects into one of the environmental and social risk categories consistent with the National EIA Guidelines and the AfDB OSs. The screening will be carried out on specific subproject activities once they have been identified during the annual planning phase of the BRWDLP. This screening will be carried out by using the Environmental and Social Screening Form (Annex-2), as stated above.

This ESMF requires that all BRWDLP Component 1, and 2 subprojects having specified site locations be screened for social and environmental impacts. The screening will be required where investments will be made on new components 1, and 2 subprojects included in the endorsed action plan of BRWDLP and for which specific sites are identified and designs prepared, but no construction has been commenced on the site.

In order to fulfill the requirements of AfDB ISS and ESAP as well as the national EIA guidelines, the environmental and social screening will follow both the national and AfDB OSs requirement. As per the AfDB Oss, screening of subprojects will be conducted to categorize the respective screened subprojects into one of the E&S categories "high, substantial, moderate or low risk". It is anticipated that activities under components 1 and 2, the risk category of subprojects will fall in one of the following categories "substantial" or "moderate" and "Low" Risk. In the event that a Components 1 and 2 sub-project screening results in a "High risk" rating it will be necessary to exercise re-sitting, redesigning, or rerouting of the subproject sites to avoid the adverse impacts and lower the risk rating to substantial or moderate risk or otherwise each subproject fall under risk rating of High and Substantial will be subject to the preparation of full ESIA to minimize or mitigate the anticipated impacts. As per the national EIA procedural guideline, the subprojects which are screened are possibly also classified under the national three schedules of activities (Schedule I,II and II), as required. Based on the nature and scale of the proposed BRWDLP Component 1and 2, subprojects it is expected that most of them will fall under schedule I or II which may require full or Preliminary ESIA.

Completion of this screening form will facilitate subproject assignment of environmental risk rating category, identification of potential environmental and social impacts, determination of impact significance, recommendation of appropriate environmental mitigation measures, and decide the need for any further environmental assessment work, as required. Suitably qualified environment and social experts from PIU of OWEB with the support from regional, or district offices in charge of environmental protection and management, as required will conduct the corresponding subproject screening process by completing the screening form annexed in this ESMF (Annex-2) and if none are available, training will be provided. The screening form helps the process to determine the characteristics of the prevailing local bio-physical and social environment with the objective of assessing the potential impacts of the construction and rehabilitation activities on the nearby biophysical and social environment due to the implementation of proposed subproject activities. The screening form encompasses information that supports the anticipated exercise to consider the cultural heritages and resettlement aspects of the subproject. While completing the screening form the assessor should undertake the assignment after:

- ✓ Gaining adequate knowledge of baseline information of the area.
- ✓ Gaining knowledge of proposed subproject activities for the area.
- ✓ Having been briefed/trained in environmental and social screening.

The Screening report to be produced will describe (i) The proposed subproject and its potential impacts, (ii) Characteristics of the location (sensitivity of the area), (iii) the Size (small, medium, and large scale) of the subproject, (iv) Degree of public interest, (v) Main environmental impacts and mitigation considerations, and (vi) Categorization of the subproject (High, Substantial, Moderate, Low risk and/or schedule I, II or III)

Given the scale of the subproject, some of the subproject activities particularly those under component 3, the environmental and social screening results may categorize the subproject as "Low Risk or schedule III" which implies such subproject activities will have limited or no environmental and social impacts. Therefore, apart from screening, the subproject may not require further environmental and social assessment and preparation of safeguards instruments. This is further demonstrated by the respective completed subproject screening form has only "No" entries, the proposed activity will not require further environmental assessment work, and the technical team of experts will recommend approval of the subproject and the implementation to proceed immediately.

Step Five: Submission of screening report to Regional Environmental Protection Authority (REPA)

After a thorough screening of proposed subprojects, the completed screening report will be submitted first to the PIU of OWEB for internal checking and approval. It will then OWEB will submit subproject safeguards screening results report with recommendations to the Oromia Regional Environmental Protection Authority (REPA) with an official application letter for review and approval (**Note**: for Components 1, and 2 subproject E&S screening reports will be submitted to REPA as appropriate for review and approval procedures.

Step Six: Review of screening report and appraisal by REPA

The REA at the regional level, (hereinafter "the approval entities") will review the Screening Report comprised of recommendations, potential indicative impacts, and the proposed mitigation measures, and provide feedback on the specific screening activities and broader issues. Considering the output of the screening process stipulated in the screening report, the reviewing process at this step will also consider the preparation of safeguards instruments, such as ESIA/ESMP for each subproject, as applicable.

After review of the subproject screening reports, the reviewer may require a field appraisal mission to the subproject implementation area to obtain additional or more detailed information, as necessitated. Moreover, if the desk appraisal and screening undertakings indicated that the proposed subproject encounters environmental and social concerns that are not adequately addressed in the current documentation, or if the report meets certain criteria (see Table 5-2 below), the REPA at the regional level will require a field appraisal before the subproject can be considered for further assessment. The filed appraisal will be arranged with OWEB.

Table5.2: Sample Criteria for Requiring a Field Appraisal

* **Criteria**	**Field Appraisal**
1. Land must be acquired for a project, an individual or community's access to land or available resources is restricted or lost, or an individual or family is displaced	Determines the number of affected/displaced people and level and scope of impact, as per the criteria and procedures detailed in the RF document Resettlement Action Plan/Abbreviated Resettlement Plan/ (RP) may then be required.
2. A project may affect a protected area or a natural habitat	Determines if the project will adequately avoid adverse effects on the protected area or natural habitat, as provided for in the ESMF

* **Criteria**	**Field Appraisal**
3. A project may have an impact on ecologically sensitive ecosystems (e.g. of impact on wetlands)	A field appraisal determines the scale and level of impact. The application may need to be revised to describe how the -project will avoid or minimize adverse impacts on ecologically sensitive areas. This may require a distinct Environmental and Social Management Plan (ESMP) as outlined in this ESMF
4. A project may involve or result in: Diversion or use of surface waters; Wells or water points.	A field appraisal determines the scale and potential adverse effects and may include an ESMP as outlined in Chapter Six of the ESMF

Note: these criteria should be updated based on field experience of related subproject implementing parties.*

Depending on the field appraisal mission, the assessment of the subproject may be reconsidered by the need for the development of safeguard instruments such as an ESIA/ESMP for the subproject. Oromia Water and Energy Bureau (OWEB), as a direct implementer of subprojects under the BRWDLP, will be responsible for the preparation of the required ESIA/ESMP as per the requirements of the national and AfDB OSs. For moderate and low-risk subprojects, the ESIA/ESMP will be possibly prepared by a team of experts from the OWEB, whereas for High and Substantial risk subprojects, the ESIA/ESMP will be possibly prepared by external independent environmental and social safeguards consultant/specialists recruited by the OWEB, as deemed necessary. If a team of OWEB has limited capacity, they have to be given the necessary training on ESIA/ESMP preparation and implementation guidelines, national policies and procedures, AfDB ISS, ESAP, and OSs, etc. before conducting the environmental and social impact assessment study.

At a minimum, the ESIA/ESMP report should consist of i) description of the project activity (with location), the environmental baseline, the impact identification, mitigating measures, and implementation and monitoring of the mitigating measures, responsible entities, budget, etc. (Annex-6) for detail information on the contents of the ESMP/ESIA report. The REPA at regional, Zonal, and District levels will also supervise further the environmental and social safeguards instruments preparation and implementation work by OWEB, which may be included in the preparation of subproject ESIA/ESMP, as the situation may require. A copy of the ESIA/ESMP report will also be submitted to the AfDB for review, approval, and clearance.

Step Seven: Review by the AfDB

The AfDB will review and provide comments and inputs to OWEB on the draft subproject safeguards instruments (ESMP/ESIA, etc.).

Step Eight: Submission of final ESIA/ESMP to the REPA

Once all the requisite safeguards documentation has been compiled, and after incorporating the AfDB comments and inputs, OWEB will make recommendations and submit the ESIA/ESMP to the REPA (the approval entity) for final clearance and approval.

Step Nine: Approval of subprojects by the REPA at the regional level

As stated in step five, the completed screening form along with any additional planning reports will be forwarded to the REPA. The first step in the approval process is to determine if all the relevant information has been provided in the document and is adequate. The REPA will check the documents submitted by the project proponent (OWEB) and/or screening team has thoroughly considered all environmental and social issues with

regards to the identification of potential adverse effects arising from the subproject implementation as well as proportionate mitigating measures are adequately spell out to address adverse impacts associated with the subprojects.

Subprojects under BRWDLP may not be eligible for implementation if they have a significant negative impact on physical cultural resources, natural habitats, biodiversity, forests, and others. Lists of such subprojects that may not be financed by the project are described in Annex-1 subproject exclusion list of this ESMF. Although the proposed subproject has no activity, which affects cultural resources, in case of any events of the potential chance find of physical cultural resources, the contract document for construction or rehabilitation of infrastructure works is required to include reference to a chance find procedures (Annex-7) to follow the procedures during the subproject implementation period.

The respective approval entity after reviewing the instruments (ESIA/ESMP) and will make the decision of subproject approval in various terms, i.e., i) approval of subproject activity (*with or without conditions relating to implementation*); ii) recommending to re-design the subproject (*with required and/or recommended amendments*), or iii) rejecting the subproject activity (*with comments as to what is required to submit as an acceptable report*). As part of the appraisal, the subproject's corresponding ESIA/ESMP has to be made publicly available in the country (OWEB website) and at a place accessible to local people (e.g., at a local government office i.e. District council, and relevant institutions) at the REPA, OWEB, MoWE website, etc.), and made available in a form, manner, and language they can understand and at the AfDB external website for public review

Steps Ten: Submission of approval decision report to OWEB by ERPA

ESIA/ESMP review of REPA should be done in the given period (shortest possible time) to avoid delays in subproject implementation. The result of the review and final approval will be submitted to OWEB as soon as completed[1]. The Review report to be submitted to OWEB should include but not be limited to-

- The decision on each project activity whether an ESMP/ESIA is required or not;
- If an ESMP is required, the recommended scope of the ESMP that clearly indicates the aspects to be seriously addressed, the skills required, and the duration of the ESMP;
- If an ESMP is not required, include guidance on special needs such as technical guidelines on any of the project activities; and
- Approval without conditions for those subprojects with no potential adverse impacts.

Step Eleven: Documentation and Projects Effectiveness

OWEB, after receiving the decision report from the REPA, will compile the documentation comprised of the decisions on environmental and social safeguards screening report for further processing of subproject effectiveness and implementation. Once the documentation is finalized, OWEB will communicate with the Contractor to notify the effectiveness of the project implementation with all requirements during project implementations.

[1] *(Note: The final documents will be disclosed at the OWEB website and AfDB external website as appropriate. The local level disclosure of the final ESIA/ESMP will be carried out using appropriate language and culturally sensitive manner.).*

Steps Twelve: Implementation

When approval has been given to the ESIA/ESMP, implementation of mitigation measures and systemic follow-up are needed for the sub-project. OWEB will inform the respective contractor to start the construction activities and implementation of the project, as per the proposal and decisions and requirements provided by approval entities. At the time of implementation of the proposed subprojects, the potential environmental and social impacts are clearly identified. A management plan will be formulated and implemented. In order to enforce the implementation of recommended mitigation measures, there is a need to include an environmental clause in the contract agreements to be signed with the construction contractors. The environmental clause (Annex-3) should demand the construction contractor to implement and monitor all proposed mitigation measures in the ESMP that are applicable during the construction phase and beyond. Implementation of environmental and social mitigation measures will be done concurrently with the other project activities and in line with sector guidelines and checklists that will be provided. In each subproject area, the PIU of OWEB will also be required to enforce the implementation of proposed mitigation measures as stated in the ESMP by all contractors as well as other relevant institutions and stakeholders, as their contribution to environmental and social mitigation measures upfront is required. As much as possible local communities will also participate fully in project implementation.

Steps Thirteen: Supervision and Monitoring

Internal monitoring to ensure the compliance of BRWDLP of Component 1, 2, and 3 subproject implementation activities against the mitigation measures set out in its ESMP, will be carried out by the environmental and social safeguards specialists of the PIU of OWEB who are responsible for environmental and social management as well as the supervisory engineer at the construction site. The relevant OWEB PIU environment and social risk management staff in collaboration with the design and supervision consultant will have the primary responsibility for carrying out this monitoring by regularly visiting the subprojects, and pursuing the corrective measures, as required. Periodic reports of internal monitoring should be prepared monthly and quarterly by the environment and social risk management staff of OWEB PMU and then submitted to OWEB respectively as part of the regular BRWDLP M&E process for Components 1, 2, and 3, accordingly.

The implementation of the recommended mitigating measures will also be monitored by the approval entity (REPA), as applicable. The OWEB PMU will have to collaborate in the planning for external compliance monitoring and inspections that will be conducted by the relevant REA. The planning for external compliance monitoring/inspection could be initiated by the REPA itself or if this is not feasible, the PIU of OWEB in line with the M&E system will initiate the collaboration for external monitoring with the approval entity (REPA).

Step Fourteen: Annual Auditing/Reviews

As stated in the ESMF, the Annual Auditing/Review is the responsibility of OWEB. The assignment of Annual Auditing/Review will be conducted by independent consultants or a joint team of experts from OWEB and REPA, as applicable. The ESMF implementation review will also be supported by conducting an annual environmental and social performance audit (including an audit of the implementation of ESIA/ESMP, as appropriate) that will be carried out by a third party. The third-party annual environmental and social performance audits will be conducted on the BRWDLP Component 1, and 2 subproject activities to evaluate the overall implementation of the ESMF. The annual environmental and social performance audits will be considered to be the principal source of information for program management for improving environmental and social performance. It is expected that these third-party annual performance audits will be carried out by a registered and licensed independent consulting firm that is not otherwise involved in the Project. The purpose

of the annual performance audit includes to assess the OWEB compliance with ESMF procedures, learning lessons, improving future ESMF implementation performance; and assessing the occurrence of, and potential for, cumulative impacts due to Program-funded and other development activities, as necessitated.

Steps Fifteen: End -of-Project Evaluation

End-of-Project evaluation is the responsibility of both OWEB. The assignment will be conducted at the end of the project life by an independent consultant or team of experts from REPA and OWEB, as required.

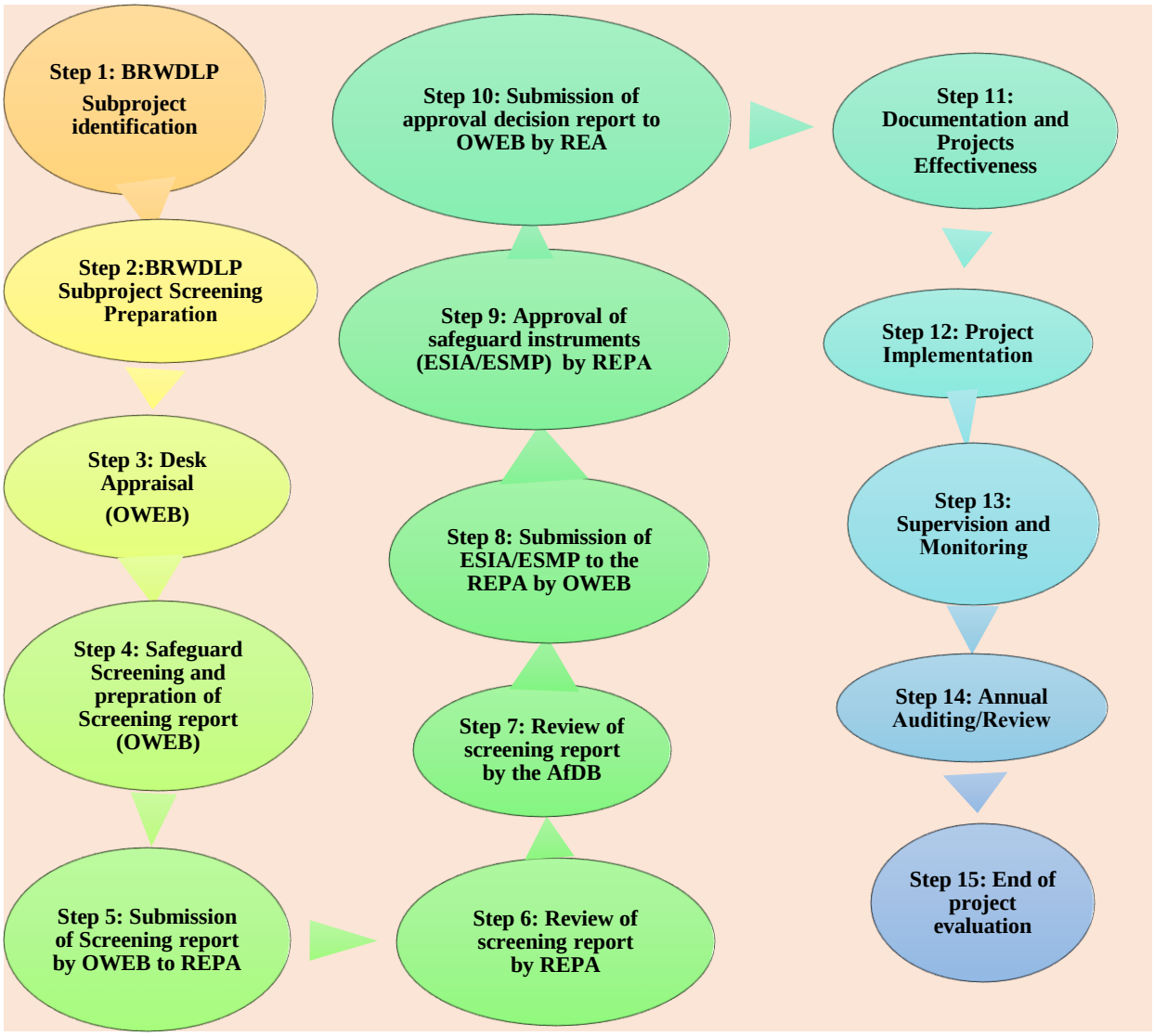


Table5.3: Typical Sub-Project Screening and Implementation cycle under the proposed BRWDLP

6. POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS, AND RISKS AND MITIGATION MEASURES

6.1 Introduction

The proposed program, i.e., Borana Resilient Water Development for Improved Livelihood Program (BRWDLP) is envisaged to contribute to the sustainable provision of improved water supply for the people and Livestock in Borana Zone, Oromia Region of Ethiopia in the country. The actual implementation sites of various projects under this program are not yet known. In this regard, the potential impacts described below are those anticipated at this time and indicative to serve as a guideline for a thorough assessment of environmental and social issues and to develop broader relevant safeguards instrument(s) (such as environmental and social management plan (ESMP), Environmental and Social Impact Assessment (ESIA), Resettlement Policy Framework (RPF), Resettlement Action Plan (RAP), etc.

Given the nature and scale of the proposed projects under the BRWDLP, and the respective activities over the construction and operation phases, both positive and negative impacts are expected to be generated and affect the nearby biophysical and social environment. In this regard, environmental and social impacts that could be emanated from program activities are expected to be limited. These may stem from ground disturbance due to the Construction activities of water supply infrastructure, which include groundwater source development (Drilling of boreholes), wellfield area water supply route (including the backbone, water collection, and transmission to Simu Hilltop Reservoir, other reservoirs, and last-mile connectivity), transmission and distribution systems, which will include water mains, reservoirs, and distribution networks; water connections; macro and micro metering; and pressure monitoring systems, public fountains and cattle and camel troughs, development of pressurized and gravity Water supply Collector, Conveyance, and distribution systems, scheme Administration Offices (office, shade, stores, garage, and compound works; auxiliaries structures at satellite offices), Livestock watering troughs, and associated infrastructure for smallholder agriculture, other auxiliaries (pump house, Generator, and guardhouses. operators' dwellings, Manager dwellings...), sanitation facilities in Primary Schools, public places like markets, and health facilities, latrine for Teachers, Girls & Boys students, public Shower Room with Septic Tank, etc.

Moreover, other potential impacts during the construction and operation period may include health and safety issues; air emissions, solid waste, and wastewater. The stated adverse effects associated with the construction and operation phases of the proposed program will be reversible in nature and no impact is anticipated that will lead to irreversible negative permanent change. It is foreseen that most of the projects under BRWDLP are category 2 with the above noted typical impacts which are assessed as localized; varying from small to moderate scale and mitigation measures could be readily designed. In any case, all projects will be screened carefully case by case, to determine the appropriate category and environmental safeguard instruments to manage the potential impacts, as stated in section 5 of this ESMF. The following potential environmental and social benefits and impacts of the program components were identified through reviewing relevant documents, a comprehensive stakeholder consultation process as well as field visits in selected locations.

6.2 Positive Impacts

The Borana Resilient Water Development for Improved Livelihoods Program is expected to bring considerable positive impacts to the population in the Program implementation area by contributing to increased and sustainable access to the water supply that will improve the health and socio-economic

livelihoods of the peoples, their livestock as well as address capacity constraints of water utilities that will facilitate improved governance and efficiency of sustainable service delivery. The anticipated major benefits of the program are indicated below.

6.2.1 Improved quantity and quality of drinking water

As it is already known, the program area is under chronic water shortage for humans and livestock. The local community have been using drinking water from unprotected sources such as ponds and shallow wells (*Eelaa*). Various attempts have been made by the government and NGOs to address the social drought; however, most the interventions are only for emergency purposes. Apart from solving the chronic water shortage, the availability of such a large and reliable water supply will also reduce further construction activities that come with developing many small sources. Therefore, the implementation of the proposed project is expected to have a positive impact to provide reliable and sustainable water supply to the target people and the livestock.

6.2.2 Improved health and Sanitation services

The availability of potable water is one of the major pillars to provide adequate health services at the level of institutions, including childbirth and other regular health services. Hence, water supply is a decisive social service required for health institutions to provide appropriate services for the community. The availability of water with quality and quantity also contributes by large to sanitation and hygiene activities of urban as well as rural settlements areas. The existence of a drinking water supply will obviously reduce water-related diseases such as diarrhea, thereby minimizing the cost of healthcare in households. In addition, it results in a reduction in infant, child, and maternal mortality and morbidity due to improved health and sanitation. At the household level, personal hygiene such as hand washing, bathing, and overall sanitation at home will be improved, if the proposed project is implemented. Therefore, the implementation of the project will have an enormous contribution to improving public health status, good hygiene, and improved standards of living for the project area community.

6.2.3 Increased productive time for Women and Girls

The burdens of water problems often fall on the shoulders of women and children. Children and women devote a significant share of their time to searching for water where the drinking water supply is inadequate. They also travel long distances which takes a significant part of their productive time. Therefore, the implementation of the proposed project helps children, especially girls, will have more time for school work.

6.2.4 Reduce the negative Consequences of mobility

Human and livestock mobility of the project area is basically for two basic things; one for water and the other is to search for natural pasture for their livestock. The availability of a clean and adequate water supply leads to a sedentary way of life (Reduce mobility for the search of water). During mobility, there are negative consequences such as resource competition, environmental degradation, the transmission of diseases, abandoning of farmland, incurring additional expenses, high livestock death, and ethnic conflict. Hence, the availability of water supply for Borana people will have significant social and environmental benefits as it alleviates the aforementioned demerits of searching water during the dry season.

6.2.5 Initiates improved Forage Development

Livestock feed is the other decisive factor for pastoral and Agro-pastoral community. With the introduction of water supply for humans and livestock, activities related to improved forage production will be a promising intervention area for government and NGO’s.

6.2.6 Increased opportunity for income diversification

Crop farming/forage production and participation in other income diversification activities such as petty trading are expected to expand with sedentary life and in response to declining means of indigenous livelihood system.

6.2.7 Employment opportunity

The project can create brief employment opportunity for the semiskilled and unskilled labor force of the area and helps in generating income that can support their livelihood. The construction phase will bring about job creation for a large number of skilled and unskilled laborers for vegetation clearing, menial works, drivers, and machine operators. In addition, the operation phase is also expected to create jobs for some semi-skilled individuals on the management of the water supply system

6.2.8 Improved Investment / Business Opportunity

Water is one of the basic social services required for development urban and rural areas. Borana has a lot of cattle, goat and sheep for export; meat, milk, cheese and livestock products. Also, it is a land of unique birds only found on the earth and can attract investors and trusts. Hence, the availability of potable water supply can create conducive environment for expansion of various domestic and foreign business opportunities to Borana area**.**

6.3 Negative Impacts and Mitigation Measures

6.3.1 Impacts on Aesthetic Value of Topography and Landscape

The aesthetic impact of infrastructure developments is largely a subjective matter determined by individual preferences. During the implementation of the proposed water supply project under the program, there will be a disturbance to the natural landscape, especially activities related to excavation work for groundwater source development (Drilling of boreholes), wellfield area water supply route (including the backbone, water collection, and transmission to Simu Hilltop Reservoir, other reservoirs, and last-mile connectivity), transmission and distribution systems, which will include water mains, reservoirs, and distribution networks; water connections; scheme Administration Offices (office, shade, stores, garage, and compound works; auxiliaries structures at satellite offices), etc. The impacts will be site-specific and limited. Among others, the anticipated impacts will be mitigated through the restoration of construction sites to pre-construction state, limiting vegetation clearance for the water pipelines to the required work strip, landscaping of the spoil tips should take advantage of the natural terrain, and removing the good topsoil first and stockpile it separately for use in replanting and restoration.

Mitigation Measures

Mitigation measures include, but not limited to:

- Restoration of construction sites to pre-construction state,
- Limit vegetation clearance for the water pipelines to the required work strip,
- Landscaping of the spoil tips should take advantage of the natural terrain, and
- Remove the good topsoil first and stockpile it separately for use in replanting and restoration.

6.3.2 Land Acquisition, Resettlement, and Compensation

The principal negative impact envisaged from the Program is connected with very limited land acquisition in district towns of the Program that may arise by distribution line during the construction phase of the water supply project of the Program. The proposed water infrastructures will be located on cultivated agricultural lands, which could adversely affect the individual family land use or homesteads, and thereby livelihood of these farmers and their families can somehow be affected although the significance is very low. The Government of Ethiopia has a comprehensive Land Tenure Policy that ensures full compensation for people affected by development projects. According to Zonal and District administrative officers, households displaced or may be economically affected by the Program's various activities such as main transmission lines, water supply distribution systems of the project, reservoir, cattle trough, pressurized and gravity Water supply Collector, Conveyance, and distribution systems or any other auxiliary investments auxiliaries (pump house, Generator, and guardhouses. operators' dwellings, Manager dwellings etc.), etc. are provided with not only financial compensation but also technical, regulatory and capacity building support to engage in alternative livelihood options. The Environmental Management Component for the proposed Program will ensure compliance with the GoE and the Bank's policies on resettlement and compensation. These and other impact mitigation measures will be reflected in the ESMP and RAPs if any to be developed and implemented in each of the Borana Resilient Water Development for Improved Livelihoods Program districts. These guiding documents will be developed before the commencement of any physical works of the sub-projects using a participatory community consultation approach. Although expected, the impact can be extremely low.

Mitigation Measures

Mitigation measures to reduce or prevent impact of land acquisition include:

- Provision of appropriate compensation to land lost and other properties,
- Land acquisition should be limited to only areas that are essential for the project activities, and
- Identify alternative road or detour where there are no residents or perennial crops.

6.3.3 Soil Erosion

During the construction phase, soils will be excavated by activities like soil removal, backfilling, compacting, excavation, and disposal of surplus soil, etc. Site clearing and vegetation removal precede construction activities. This makes the project sites soil susceptible to erosion. This applies to all project components but especially for the work that involves excavation and soil disturbance activities. But the majority of excavated materials will be used for refilling and revegetation. Failure to re-vegetate temporary used land may accelerate soil erosion. The anticipated impact will be mitigated by implementing the following mitigation measures. These include: No clearing of vegetation shall be undertaken outside of marked areas and Limit vegetation clearing as much as possible, Re-grading of slopes and re-vegetation of exposed areas, Any tunnels or erosion channels developed during the construction or maintenance period shall be backfilled and compacted and the areas restored to a proper condition, Areas where construction activities have been completed and where no further disturbance would take place are rehabilitated through re-vegetation, Ensure the construction crew is aware of remaining vegetation which must not be touched or damaged, Implement water and soil erosion conservation practices, as applicable, etc.

Mitigation measures
Mitigation measures include, but not limited to:

- No clearing of vegetation shall be undertaken outside of marked areas and Limit vegetation clearing as much as possible,
- Stabilise the soil mechanically to reduce erosion potential,
- Re-grading of slopes and re-vegetation of exposed areas,
- Use excavated materials for backfilling of the trench section around the pipes,
- Spoil earth/rock should be disposed of in appropriate approved area,
- Any tunnels or erosion channels developed during construction or maintenance period shall is backfilled and compacted and the areas restored to a proper condition,
- Areas where construction activities have been completed and where no further disturbance would take place are rehabilitated through re-vegetation, and
- Ground leveling is minimized and if possible concentrated only to the specific building foundation areas when it is necessary.
- Contain all solid wastes at designated location within construction sites.
- All removal of topsoil or vegetation should be kept to minimum to prevent erosion.
- Ensure the construction crew is aware of remaining vegetation which must not be touched or damaged.
- Implement water and soil erosion conservation practices, as applicable
- Proper location of material stockpiles, especially sand and soil downwind from the commercial, residential, and other settlements and receptors like schools and health facilities will be required.
- Frequent wetting of the stockpile and working area, and
- Screening of or providing wind breaks for stockpiles.

6.3.4 Land/Soil Contamination

During construction**,** accidental oil, lubricant or hydraulic fluids spills from construction equipment and discharge of wastewater from equipment washing to the nearby environment will result in contamination of the surrounding as well as downstream soil/land. Other hazardous components include paint and other chemicals used in the construction of the different water supply infrastructures of the proposed project under the program. If such hazardous materials are not contained and handled properly, eventually result in land/soil contamination. In order to minimize such impact sources, a number of mitigation measures should be implemented. These are Installation of oil separators and temporary or permanent secondary spill containment structures at fuel storage sites, Store hazardous materials in properly designed storage facilities, if any, Create awareness to all project workers to prevent unnecessary oil spills and ensure the protection of the environment in their daily duties is promoted, Instruct the construction workforce to safely dispose of used oils, hazardous chemicals and lubricants, Develop and implement a waste management plan, Emergency Preparedness and Response Plan, etc.

Mitigation Measures
The land contamination possible mitigation measures include, but not limited to:

- Installation of oil separators and temporary or permanent secondary spill containment structure at fuel storage sites,
- Store hazardous materials in properly designed storage facilities, if any,

- Prevent entrance or accidental spillage of solid matters, contaminants, debris and other pollutants and wastes into surface and ground water, and
- Create employees awareness to prevent unnecessary oil spills and ensure protection of environment in their daily duties is promoted.
- Provide initial and continuous construction workforce training in handling with waste segregation and appropriate waste disposal.
- Instruct the construction workforce to dispose spoil soils on approved fill /material disposal locations and strictly supervise the correct placement of fill, where possible, construction materials to be reused or recycled.
- Develop and implement a waste management plan, Emergency preparedness and Response Plan.
- Collect wastes and segregate at generation site in accordance with their types (hazardous, organic and inorganic waste), safely transport and disposed of at the final dumping or disposal site specified and approved by the local authority to avoid any adverse impact on health and well-being of people, and
- Locate disposal sites in areas of land, which, prior to the commencement of the construction works, were not used for agricultural and grazing purposes or designated for agricultural and grazing purposes.

6.3.5 Impact on Water Quality

During the construction activities, soil erosion from earthworks and runoff will have the potential to be drained into receiving water bodies causing increased turbidity of the surrounding water bodies, including streams, wetlands, and rivers. As there is no perennial river except for some ponds and shallow wells, hence the impacts low negative. But at the borehole compound, accidental fuel and oil spills from construction around the pump house and worker's camp will generate sanitary effluents which are potential sources of microbiological and organic pollutants in groundwater. Another source of water pollution is represented by batching plants and particularly by the effluent from concrete truck cleaning which consists of wastewater with high contaminants from the concrete additives. The potential mitigation measures will be to Avoid unnecessary soil erosion on the community water source and at stream crossings, Secondary containment to collect diffuse and accidental spills, Storage and handling of fuel should be kept away from the community water source, Installation of sanitary water treatment facilities in workers' camps, Contain all solid wastes at a designated location within construction sites to avoid contamination of water sources nearby, all removal of topsoil or vegetation should be kept to a minimum to prevent erosion that ultimately results in sedimentation effect of the nearby water sources, collect wastes and segregate at generation site in accordance with their types (hazardous, organic and inorganic waste), safely transport and disposed of at the final dumping or disposal site specified and approved by the local authority to avoid any adverse impact on health and well-being of people.

Mitigation Measures

The water pollution impacts possible mitigation measures include, but not limited to:

- Avoid unnecessary soil erosion on the community water source and at stream crossings,
- Secondary containment to collect diffuse and accidental spills,
- Storage and handling of fuel should be kept away from the community water source, and
- Installation of sanitary water treatment facilities in workers' camps.
- Contain all solid wastes at designated location within construction sites to avoid contamination of water sources nearby.

- All removal of topsoil or vegetation should be kept to minimum to prevent erosion that ultimately result in sedimentation effect of the nearby water sources.
- Proper location of material stockpiles, especially sand and soil downwind from the commercial, residential, and other settlements and receptors like schools and health facilities will be required.
- Provide initial and continuous construction workforce training in handling with waste segregation and appropriate waste disposal.
- Instruct the construction workforce to dispose spoil soils on approved fill /material disposal locations and strictly supervise the correct placement of fill, where possible, construction materials to be reused or recycled.
- Collect wastes and segregate at generation site in accordance with their types (hazardous, organic and inorganic waste), safely transport and disposed of at the final dumping or disposal site specified and approved by the local authority to avoid any adverse impact on health and well-being of people.
- Locate disposal sites in areas of land, which, prior to the commencement of the construction works, were not used for agricultural and grazing purposes or designated for agricultural and grazing purposes.

6.3.6 Air Quality

Dust nuisance and gas emissions will be generated from excavation activities, cement mixing, road transport, and increased traffic and diesel generators used to supply construction machinery during the construction phase, respectively. The anticipated impacts will be intermittent and short-term. The possible mitigation measures will be, Spray water on construction sites in order to minimize or avoid dust, Minimize exhaust fumes, machinery and equipment shall not be running when not in use while ensuring that they are regularly serviced, Enforce onsite speed limit regulations, using bumps and/ or clearly marked road signs and employ adequate traffic safety risk management, including code of conduct to truck drivers to avoid impact on the community residing within and nearby the project area, community members and contractor's staff shall be advised and enforced to avoid open burning of materials such as tires, plastic, rubber products or other materials that create heavy smoke or nuisance odor. Construction machinery should be well maintained to minimize excessive gaseous emissions, the engines of construction machinery and vehicles will be inspected and adjusted as required to minimize pollution levels, Prohibit plant operators and drivers of construction vehicles from unnecessary revving and idling, and limit construction traffic movement and operations to the most necessary activities through adequate planning, etc.

Mitigation Measures
Mitigation measures include, but not limited to:

- Spray water on construction sites in order to minimize or avoid dust,
- Tarp trucks transporting loose/friable materials to minimize loss during transportation,
- Consider covering stockpiles of excavated soils in areas near houses and shops,
- Maintain and stockpiles of loose/friable materials and soil in a suitable manner to minimize dust dispersion as well as frequent wetting of the stockpile and working area.
- Minimize exhaust fumes, machinery and equipment shall not be running when not in use while ensuring that they regularly serviced, and
- Equip construction vehicles and machinery with standard pollution-control devices to minimize dust emissions.

- Dust control measures should be adopted, which the dirt roads and exposed construction areas should be moisturized during the dry season to prevent or minimize the fugitive dust emissions.
- Provide adequate PPE to workers; comply with personal protective clothing requirement for dusty areas such as dust masks and protective glasses.
- Undertake the vehicle movement according to the contractor plan.
- Enforce onsite speed limit regulations, using bumps and/ or clearly marked road signs and employ adequate traffic safety risk management, including code of conduct to truck drivers to avoid impact on the community residing within and nearby the project area.
- Community members and contractor's staff shall be advised and enforced to avoid open burning of materials such as tires, plastic, rubber products or other materials that create heavy smoke or nuisance odour.
- Construction machinery should be well maintained to minimize excessive gaseous emissions, the engines of construction machinery and vehicles will be inspected and adjusted as required to minimize pollution levels.
- Proper location of material stockpiles, especially sand and soil downwind from the commercial, residential, and other settlements and receptors like schools and health facilities will be required.
- Routing of the access roads should preferably not be in close proximity to residential dwellings and other sensitive receptors, including offices, schools and health facilities.
- Special consideration shall be given sensitive receptors such as schools, hospitals, markets, etc., and the contractor should prioritize project construction activities in townships and schedule the construction activities with consideration of non-school period (vacation, holidays, weekends, etc.).
- Dust control measures should be adopted at concrete batching plants, canopying loading points, and erecting dust screens around the plant
- Dust control mechanisms at the gravel borrow sites through extraction in wet conditions and transport in covered trucks.
- Implement dust control measures at the quarry sites and aggregate crushing sites.
- Covering heaps and berms of soil.
- To mitigate exhaust air emissions, it will be mandatory to procure machines, equipment and vehicles which are environmentally friendly.
- Construction machinery should be well maintained to minimize excessive gaseous emissions.
- The engines of construction machinery and vehicles will be inspected and adjusted as required to minimize pollution levels, and
- Prohibit plant operators and drivers of construction vehicles from unnecessary revving and idling and limit construction traffic movement and operations to the most necessary activities through adequate planning.

6.3.7 Noise Impacts

The level of noise and vibration is likely to increase during the construction phase. The noise will mainly come from generators, vehicles, and equipment operations during construction activities. This is a short-term impact and it will be felt mostly around construction sites and its peripherals. The noise will have a temporary impact which can be significant if next to settlements. As most of the construction activities are far from settlement areas, the magnitude of the impact is low. The anticipated impact will be implemented through the implementation of the following mitigation measures. These are Scheduled noisy activities to

daytime hours, Instruct the workforce to avoid unnecessary noise, All vehicles and equipment shall be turning off their engines during rest time, reduce nighttime disturbance from construction noise, which is unavoidable, the practice of conducting construction activities should be limited between the hours of 2100 and 0600 in areas which are within 500 meters of residences, Ensure that all workers wear earmuffs and other personal protective gear/equipment when working in noisy sections, Appropriate vehicle maintenance to reduce noise emissions, etc.

Mitigation Measures

The noise pollution impacts possible mitigation measures include, but not limited to:

- Schedule noisy activities to daytime hours,
- Locate noisy installations in adequate distance to residential areas to meet noise limit values,
- Install noise control devices in construction equipment if noise levels exceed existing guidelines limit, and
- Instruct the workforce to avoid unnecessary noise.
- All vehicle and equipment shall be turning off their engines in rest time.
- Appropriate vehicle maintenance to reduce noise emissions.
- To reduce nighttime disturbance from construction noise, that is unavoidable, the practice of conducting construction activities should be limited between the hours of 2100 and 0600 in areas which are within 500 meters of residences
- Ensure that all workers wear earmuffs and other personal protective gear/equipment when working in noisy sections, and
- Equipment normally producing high levels of noise should be suppressed and screened when working within a distance of 200 meters from any settlement, clinic, religious places or other sensitive noise receptors.

6.3.8 Solid waste generation impacts

Solid wastes including packaging and extra construction materials such as timber, concrete, gravel, metals and plastics, broken equipment and miscellaneous debris usually found near workers ‘camps, staff houses and offices during construction phase activities. If all these are left behind without being cleaned and properly disposed of, the environmental impact can be serious. The impact is also certain and moderately significant at the wellfield and along the pipeline routes. The possible mitigation measures include, but are not limited to: Ensuring detailed design and specifications are undertaken so as to minimize solid waste generation of waste during construction, Locate material and stockpiling areas within the project construction corridor until its ultimate destination is determined, Managing stockpile areas and storage areas properly, Dispose of non-recyclable construction materials at a licensed waste facility and avoid fly-tipping, Provide recycling bins around workers ‘camps, offices and amenities, properly segregate wastes at generation site, safety transport and dispose at the designated disposal site approved by the local administration, develop and implement a waste management plan.

Mitigation Measures

Impacts of solid wastes possible mitigation measures include, but not limited to:

- Ensure detailed design and specifications are undertaken so as to minimize solid waste generation of waste during construction,
- Locate material and stockpiling areas within the project construction corridor until its ultimate destination is determined,
- Manage stockpile areas and storage areas properly,
- Dispose non-recyclable construction materials at a licensed waste facility and avoid fly-tipping,
- Ensure used furniture and equipment from decommissioning is sold off/reused where possible, otherwise, dispose of at an appropriately recognized landfill,
- Recycle any ballast that cannot be reused as ballast and remove excess ballast and clean fill off site for reuse, as possible Sustainable use of resources (to reduce the consumption of resources and to adopt recyclable materials where possible. Water systems comprise significant number of structures and mechanical fittings),
- Optimize the water supply structures sizes to reduce the volume of construction materials used and soils to be disposed tore recyclable waste separately from residual/non-recyclable waste, and
- Provide recycling bins around workers 'camps, offices and amenities.

6.3.9 Vegetation clearing impacts

Vegetation clearing during construction to leave space for the construction of water supply infrastructures and ancillary facilities such as, compounds, access roads, and other building facilities is unavoidable. The largest area to be impacted is the work strip for access roads, wellfield facilities and the water main transmission pipeline. However, as most of the land is covered by open shrublands, the overall loss of vegetation by land clearing is limited. Hence, the magnitude of the impact on the vegetation is low negative. The mitigation measures are Vegetation clearing should be minimized as much as possible, Limit vegetation clearing for water pipelines required work strip, Use indigenous plant species for re-vegetation, as much as possible, The tree planting program shall be planned and implemented with locally adoptable species in the project areas to replace species that are likely to be affected, Awareness campaigns and enforcement of a worker's code of conduct for the protection of biodiversity, Include vegetation rehabilitation techniques to recover lost plant cover such as reforestation, afforestation of terrestrial fauna.

During the construction phase, noise is generated from vehicular movements, sand and aggregate processing, concrete mixing, excavation machinery, etc. The presence of the construction workforce will result continuous disturbance of wildlife and other fauna species. The disturbance is likely to affect wildlife in general by triggering them to avoid or escape the project area. However, most of the animals and avian diversity found in the project area can easily adapt the construction site and find equally suitable habitats nearby. The construction activity and associated movements shall adhere to the rules and regulations so as to limit vehicle speed, avoiding unnecessary noise and limiting movement of the workforces of the working area., Posting signposts especially in and around the buffer zone of the National Park and other sensitive habitats, etc., Create awareness campaigns and for drivers, pedestrians, community members and other passer-by on wildlife safety, Consider the location of mature trees during site selection for the transmission line construction and land clearing for borehole, reservoir or other project component activities, Minimize clearing and disruption of riparian vegetation. Avoid excessive destruction of trees and other vegetation and

minimize clearing of indigenous plant species, and replanting of indigenous plant species in disturbed areas, Enforcing speed reducing mechanisms (including limiting the vehicle speed to 20 km/hr maximum, placing speed bumps, rumble strips, etc.) to avoid or minimize collisions with wildlife and speed reducing mechanisms around the project area along the buffer zone, Avoiding blowing horns in the forest section, establishing wildlife passes, an animal detection system within the project area, Support for local environmental education and wildlife organizations, etc., will be the potential mitigation measures to manage the anticipated impacts on disturbance of fauna speciesstation, offset planting, etc.

Mitigation Measures
Vegetation clearing impacts possible mitigation measures include, but not limited to:

- Vegetation clearing should be minimized as much as possible,
- Limit vegetation clearing for water pipelines required work strip,
- Use only indigenous plant species for re-vegetation.
- The tree planting program shall be planned and implemented with locally adoptable species in the project areas to replace species that are likely to be affected.
- Awareness campaigns &enforcement of a worker's code of conduct for the protection of biodiversity,&
- Include vegetation rehabilitation techniques to recover lost plant cover such as reforestation, afforestation, offset planting, etc.

6.3.10 Disturbance of terrestrial fauna

During the construction phase, noise is generated from vehicular movements, sand and aggregate processing, concrete mixing, excavation machinery, etc. Presence of workforces result in continuous disturbance throughout the construction phase. The disturbance is likely to affect wildlife in general by triggering them to avoid or escape the project area. However, most of the animals and avian diversity found in the project area can easily adapt the construction site and find equally suitable habitats nearby. Apart from this, the construction activity and associated movements shall adhere to the rules and regulations so as to limit vehicles speed, avoiding unnecessary noise and limiting movement of the workforces of the working area. The magnitude of the impact on terrestrial fauna/avian diversity during the construction phase is medium negative.

Mitigation Measures

The impacts on terrestrial fauna possible mitigation measures include, but not limited to:

- Schedule noisy activities to daytime hours, and
- Instruct the workforce to avoid unnecessary noises.
- Posting signposts especially in and around the buffer zone of the National Park and other sensitive habitats, etc.
- Create awareness campaigns and for drivers, pedestrians, community members, and other passerby on wildlife safety.
- Consider the location of mature trees during site selection for the transmission line construction and land clearing for borehole, reservoir or other project component activities.
- Design and construction of wildlife access to avoid or minimize habitat fragmentation.

- Minimize clearing and disruption of riparian vegetation. Avoid excessive destruction of trees and other vegetation and minimize clearing of indigenous plant species, and replanting of indigenous plant species in disturbed areas.
- Enforcing speed reducing mechanisms (including limiting the vehicle speed to 20 km/hr maximum, placing speed bumps, rumble strips, etc.) to avoid or minimize collisions with wildlife and speed reducing mechanisms around the project area along the buffer zone
- Support for local environmental education and wildlife organizations can also be considered in the contractor ESMP.
- Restoration activities should not include potentially invasive species of trees and grasses with a preference for native species as possible.
- Avoiding blowing horns in the forest section, establishing wildlife passes, an animal detection system within the project area.
- Organizing awareness campaigns for drivers and workers on the protection of wildlife.
- Support for local environmental education and wildlife organizations, etc.

6.3.11 Population Influx

It is expected that workforce from different parts of the country can concentrate at the project area during construction phase. The construction activities usually attract job seekers and potential suppliers. Even though temporary, the population influx can put considerable pressure on resources and social services, especially on health and sanitation. Although expected minimum, increased risk of exposure to COVID-19, HIV/AIDS and other STDs can be aggravated as are the result of population influx. The impacts can be managed by establishing a recruitment policy that gives priority to local residents for less specialized services and conduct public health follow-ups of the Program areas by addressing issues of behavioral change, water and sanitation, COVID-19 control, malaria, HIV/AIDS, etc. Develop and Implement Labor Influx Management Plan, cases awareness creation and strengthen follow-ups.

Mitigation Measures

Impacts of population influx possible mitigation measures include, but not limited to:

- Establish transparent recruitment procedures to avoid camp followers in form of job-seekers,
- Establish a recruitment policy that gives priority to local residents for less specialized services,
- Recruitment procedures to be shared with the local authorities for further dissemination,
- Award opportunities for sub-suppliers and sub-contractors of local firms which in turn employ local labour, and
- Conduct public health campaigns addressing issues of behavioral change, water and sanitation, COVID-19, malaria, HIV/AIDS, etc.
- Develop and Implement Labour Influx Management Plan.

6.3.12 Public and Occupational health and safety impacts

Construction workers are prone to accidents resulting from construction activities. These accidents may have acute or chronic impacts depending on nature, severity, and intensity. The construction and mobilization activities of the proposed water supply program, such as extraction of groundwater, working

at height, accidental falls from high elevations, injuries from hand tools and construction equipment cuts from sharp edges of metal sheets, and falling in trenches, from operating machinery and moving vehicles, exposure to weather elements, noise, work in confined spaces, trenching, risk of falling objects, injuries from fires, and accidents by vehicles, motorcycles, and bicycles, etc. will result in accidental injuries and hazards, etc. In addition, health risks include disease hazards due to the lack of sanitation facilities (water supply and human waste disposal) for the workers at the construction site, indiscriminate disposal of waste from the construction site and camps/guard houses/generator houses can lead to contamination of both ground and surface water. This could lead to outbreaks of waterborne diseases such as diarrhea, dysentery, typhoid, etc. which potentially affect the workers as well as the community residing nearby. The potential impact on public health and safety will also be related to open trenches, excavated materials along the main transmission line trench, trucks, or construction machinery movement along residential and/or access roads. The impact is related to increased traffic on the main roads for the entire duration of the pipe installation works. Additionally, there is a risk that people fall into trenches or excavations or slide from the trench when the slope is not properly secured. The recommended mitigation measures are Ensure compliance to occupational health and safety standards, Maintain safe workplaces, plant and working systems, Providing information, instruction and training enabling employees to work without risks, Consulting with employee-elected health and safety representatives and/ or other employees about occupational health, safety and welfare, Ensure workers' camp standards, quality and provision of basic social services based on existing standards, guidance on workers' accommodation, Make an awareness campaign for workers as well as public about the safety issues related to their activities, provide frequent training about the use of PPE to workers, Ensure safe and good working conditions at the workplace, Enclosure the area around which work is taking place to prevent unauthorized access, Hoisting and lifting equipment should be rated and properly maintained, and operators trained in their use, Frequent maintenance of project vehicles and machinery to minimize air emissions., develop and implement a Public and Occupational Health and Safety Management Plan (POHSMP) comprises of monitoring and reporting mechanism of occupational accidents and diseases, dangerous occurrences, and incidents Increased COVID- 19, STDs and HIV/AIDS Cases.

The project is expecting to employ project staff and casual laborers during construction. Social interactions among staffs and with locals cannot be avoided. Considering the nature with which COVID-19 and HIV/AIDS is contracted and spread, workers' number is significant to make a serious contribution to COVID-19 pandemic and other communicable diseases. The presence of monetary strength will act as a catalyst and thus enhance such social interactions between the project workers and people of the nearby centers. The extent of this impact is localized with a medium intensity. The impact can be highly improved/eliminated with mitigation. The possible mitigation measures include, but not limited to: Undertaking periodic awareness creations for the workforce on safe working practices, Promoting health education and awareness creations, Instilling proper code of conduct and work ethics among construction workers and ensuring that they are observed, and workers should be awared on their own safety and safety of others, Develop a comprehensive STDS, HIV/ AIDs and COVID 19 awareness for both workers and local community, Provision of STDs, HIV and AIDS prevention measures such as distribution of condoms to workers/local people both male and female, Creation of awareness of STDs, HIV/AIDS, COVID 19 in worker's camps through training and installation of posters, Promote continuous sectoral, gender related Information, Education and Communication (IEC) messages about HIV/AIDS, STDS, COVID 19 infection, protection, counseling and care, Increase availability and accessibility of condoms, Establish a sectoral

policy that will safeguard human and civil rights and avoid discrimination of workers and community members who are infected with HIV/AIDS.

Mitigation Measures

The possible mitigation measures include, but not limited to:

- Ensure compliance to occupational health and safety standards,
- Maintain safe workplaces, plant and working systems,
- Providing information, instruction and training enabling employees to work without risks,
- Consulting with employee-elected health and safety representatives and/ or other employees about occupational health, safety and welfare,
- Ensure workers' camp standards, quality and provision of basic social services based on existing standards, guidance on workers' accommodation and
- Establish workers grievance mechanisms.
- Make awareness campaign for workers about the safety issues related to their activities hence provide frequent training about the use of PPE
- Ensure safe and good working conditions at workplace.
- Enclosure the area around which work is taking place to prevent unauthorized access.
- Hoisting and lifting equipment should be rated and properly maintained, and operators trained in their use.
- Frequent maintenance of project vehicles and machinery to minimize air emissions.
- Reduction of engine idling time in construction sites.
- Use of extenders or other means to direct diesel exhaust away from the operator.
- The project shall develop and implement Public and Occupational Health and Safety Management Plan (POHSMP) comprises of monitoring and reporting mechanism of occupational accidents and diseases, dangerous occurrences and incidents.
- Undertaking periodic awareness creations for workforce on safe working practices,
- Promoting health education and awareness creations,
- Instilling proper code of conduct and work ethics among construction workers and ensure that they are observed, and workers should be aware on their own safety and safety of others
- Develop a comprehensive STDS, HIV/ AIDs and COVID 19 awareness for both workers and local community
- Provision of STDs, HIV and AIDS prevention measures such as distribution of condoms to workers/local people both male and female
- Creation of awareness of STDs, HIV/AIDS, COVID 19 in worker's camps through trainings and installation of posters.
- Promote continuous sectoral, gender related Information, Education and Communication (IEC) messages about HIV/AIDS, STDS, COVID 19 infection, protection, counseling and care.
- Increase availability and accessibility of condoms.
- Establish a sectoral policy that will safeguard human and civil rights and avoid discrimination of workers and community members who are infected with HIV/AIDS.

6.3.13 Gender Based Violence (GBV), Sexual Exploitation Abuse (SEA)/Sexual Harassment (SH), Violence Against Children (VAC

Favoritism based on gender, forced/unforced sexual roles in response/condition of being hired, employing Children for physical works may be among the Phase 1 project associated adverse impacts. High gender disparity is also believed to be one of the major bottlenecks for development. This high gender disparity between men and women negatively affects the development of a nation and its wealth distribution. Experiences from other projects show that construction works attract the local population and in particular women and children below 18 years of age seeking employment opportunities. Therefore, the risk of Violence Against Children (VAC) Gender-Based Violence (GBV) will increase in the construction area.

If children below the age of 18 are employed in construction works, it may lead to the exploitation of children and, at the same time, it is a violation of National Law. Child labor is illegal and considered harmful and creates psychological and social problems in the community. The Contractor is required to be non-discriminatory regardless of race, religion, gender, age, or disability. The Contractor is also expected to commit itself to identify group of employees or societies that need special labor-management practices based on their diverse nature; and can give special protection, support, or execute an affirmative action inlabor-management practice.

Women always do not receive equal employment opportunities; and the contractors, in most cases, favor to employ men rather than women, and female workers do not obtain particular attention due to their biological and physical condition. Hence, the discrimination against women will negatively affect those women who want to work in the proposed phase 1 project. Such discriminatory acts and lack of other employment opportunities may force women to carry out other marginal activities and to be engaged as sex workers for survival, which exposes them to increased risk of sexually transmitted diseases, HIV/AIDs and unwanted pregnancies. The perceived negative impacts of the project on women include: increased risk of exposure to sexually transmitted diseases and unwanted pregnancies; price increase of consumer goods due to the coming of large number of work force to the area in particular will make Female Headed Households vulnerable to economic crisis; and most construction companies prefer to employ only men, and this will lead to unequal treatment women during employment of the construction workforce.

The construction of the project attracts the local population and in particular young people seeking employment opportunities. It is also true that construction works generate good employment opportunities for the local population. However, sometimes it would negatively influence and attract the young to drop out of school. Similarly, children who are below the age of 14 might also be attracted by the availability of employment opportunities in the locality. If children below the age of 14 are employed in the construction works, it may lead to the exploitation of children which violates the National law. Child labor can be harmful and create psychological and social problems in the community. The impact is low.

Mitigation Measure
The possible mitigation measures include, but not limited to:

- Management measures including proper sanitation, waste disposal facilities, awareness campaigns for the prevention of AIDS/HIV, sexually transmitted diseases and other communicable diseases, sensitization for health insurance will be needed at the project site.
- The reinforcement of laws on child labour, sexual harassment/prostitutions and gender equity should be done.

- The Contractor is required to develop and implement the project's Codes of Conduct (COC), GBV Action Plan, Grievance Redress Mechanism (GRM) and implement accordingly throughout the project implementation period.
- All employees attend an induction training course prior to commencing work on site to ensure they are familiar with the Contractor's commitments to the project's Codes of Conduct., and other standards, such as ESHS and OHS standards.
- Ensure that posted and distributed copies of the Contractor and individual Codes of Conduct are translated into the appropriate language of use in the worksite areas as well as for any international staff in their native language.
- All employees should sign the project's 'Individual Code of Conduct' confirming their agreement to comply with ESHS and OHS standards. This sets stringent standards for personal behavior by those working on the project so as to avoid GBV, SEA, VAC, and workplace sexual harassment.
- Contractor shall enter into agreement with local recognized NGO to develop training topics and materials on the mechanism to manage GBV, VAC, SEA, risks and carry out training on GBV, VAC,SEA for both workers and local people as per the plan, conduct services provider mapping in the project area, develop a clear referral pathway.
- All forms of SEA, VAC and sexual harassment are unacceptable, regardless of whether they take place on the work site, the work site surroundings, at worker's camps or within the local community. Therefore, the Contractor is required to put in place administrative measures to prevent and minimize Gender Based Violence (GBV) and Violence Against Children (VAC) with proposed preventive and mitigation strategies.
- Develop and Implement GBV Action Plan,
- All employees, including volunteers and sub-contractors are highly encouraged to report suspected or actual acts of SEA, VAC and sexual harassment by a fellow worker, whether in the workplace or not. Reports must be made in accordance with project's SEA, child sexual exploitation and abuse and sexual harassment Allegation Procedures.
- The Contractor is required to strengthen grievance redress and other monitoring mechanisms to ensure safe and ethical reporting systems to alert cases of GBV and VAC and assure them to access adequate response.
- Take strict measures against children employment and managers are required to report and act to address suspected or actual acts of GBV and/or VAC as they have a responsibility to uphold Contractor commitments and hold their direct reports responsible.
- Contractor social safeguard specialist will monitor provision to mitigate and respond to suspected case of GBV, VAC, and SEA in workplace.
- In case of SEA, VAC and Sexual harassment acts suspected in the workplace constitute gross misconduct and are therefore grounds for sanctions, which may include penalties and/or termination of employment. In addition to Contractor sanctions, legal prosecution of those who commit acts of SEA or VAC will be pursued if appropriate.
- Prepare and implement action plan for managing GBV, SEA, VAC impact
- Work closely with local authorities to stop recommending underage children for the project construction works.
- The GBV Action Plan shall reflect adequately
    - Existing country gender diagnostics.

- Country-wide and region-specific/District data on violence against women.
- Data and/or information on cultural practices vis-à-vis women (early marriage, physical practices);
- Existing services available from GBV Services Providers (Health care for GBV survivors, Psychosocial support, women's and girls' safe spaces, justice and legal aid, referral systems) quality, accessibility and gaps.

- The grievance mechanism shall ensure safe, confidential, non-judgmental and ethical reporting systems on GBV, sexual abuse and child labor as well as service referral to survivors to alert cases of prevalence and assure them to access adequate response.

6.3.14 Inefficient Pump Service Impacts

Pumps of the boreholes and water supply schemes to the main reservoir and also those distribution lines expected under the phase-1 project of the program may damage and sometimes work under the project design capacities.

Mitigation Measures
In order to eliminate or control pump related serious problems:

- Change the damaged pumps as soon as possible and if not changed, maintain and all pumps should work as per their design capacities.
- Give especial attention on pump types, capacity and originality during purchase.
- Strengthen monitoring and follow up and bring issues for decisions as soon as possible for timely solutions.

6.3.15 Electricity and Road inaccessibility impacts

Power supply is basic in the intended project implementations for borehole, booster stations. Beside this access road is needed to reach each pump

Mitigation Measures
In order to eliminate or control such water supply source shortages:

- Construct access roads to access each borehole sites.
- Ensure reliable power supply sources to overcome problems on water pump stations and overall the supply systems.

6.3.16 Water supply line leakage impacts

Whenever there is water supply line leakages, contamination risks when the water pressure drops due to a leak, there's the possibility that contaminants in the ground can get sucked into the pipe and travel through the pipe network. Contaminants can include bacteria and viruses, obviously not safe for consumption. Beside this, water shortage can exist as a result of the leakages. Leakages may exist on main transmission line to the main reservoir and sometimes at pipelines junctions that can influence and interrupt water supply system and may play significant roles in creating water shortage and health risks.
Mitigation measures

In order to eliminate or control the problem ensure:

- Regular follow up and monitoring of transmission and distributions lines, and
- Immediate maintenance and replacing lines whenever there are leakages.

7. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

7.1 Introduction

An Environmental and Social Management Plan (ESMP) which is discussed in this section is a key generic document focused on the identification of impacts and the respective measures to be implemented over the program implementation phase. The ESMP ensures the project impacts are minimized to an acceptable level during the implementation of the project designed under the BRWDLP. Thus, ESMP becomes the document for warranting that all the preceding analysis is used to preserve/improve the quality of the overall biophysical and socio-economic environment within the program influence area. The general objective of the ESMP is to develop procedures and plans to ensure that the mitigation measures will be BRWDLP out during the preconstruction, construction, operation, and decommissioning phases of the proposed BRWDLP.

The purpose of the ESMP is to identify and document environmental and social impacts, mitigation and enhancement measures and monitoring procedures to be undertaken. This safeguards instrument allows the proposed programs to reduce potential impacts generated from the implementation of projects by integrating environmental and social procedures and mitigation plans in the project implementation programs. The ESMP should be project-specific, clearly and concisely describing adverse impacts, selected management measures to bring it to an acceptable level, and timelines for implementing these measures. It should also clarify roles and responsibilities among the various stakeholders including OWEB, Contractors etc.

This generic ESMP serves as a pertinent instrument to guide the project proponents (OWEB) and other implementers to develop and carry out effective mitigation measures, design, and conduct sound environmental and social monitoring programs. The ESMP describes the probable adverse impacts, selected management measures to bring it to an acceptable level, and timelines for implementing the defined measures. Moreover, it plays a vital role in identifying the roles and responsibilities of each institution, stakeholders including power developer, contractors, etc., and the required capacity-building components for implementing parties that warrants sustainable developments of the proposed projects. In accordance with the above objectives, the ESMP should be prepared and adopted in the following approach:

- Examine the project in terms of its major activities and identify the aspects associated with the project construction which generate environmental impacts;
- Identify the environmental issues associated with the major activities;
- Develop mitigation measures for the aspects identified as having environmental impacts;
- Incorporate environmental mitigation measures into construction/installation and operation schedules and activities, develop corrective actions and ensure monitoring;
- Develop further environmental provisions through a series of project Site Environmental and Social Management Plans and procedures;
- Define the specific actions required, roles and responsibilities for these actions, the timetable for implementation, and associated costs;
- Describe capacity building and training requirements for the implementation of the ESMP; and
- Define a proposed institutional structure to govern the implementation of the ESMP.

A project-specific ESMP will be prepared once projects under the BRWDLP are identified and that must be integrated with the bidding document. The building blocks of an ESMP are:

- Potential adverse impacts identified and mitigation measures to be adopted, together with conditions within which one or other measure would apply and their integration with phases – Pre-construction, Construction/ Implementation and Operation;
- Enhancement plans for positive impacts;
- Monitoring Plan with indicators, mechanisms, frequency, locations;
- Budgetary allocations for all the above activities;
- Institutional arrangements for each activity and mitigation measures;
- Implementation schedules for each activity and its integration with the project implementation timelines; and
- Reporting procedures, including for redressing grievances related to environmental & social issues.

The site specific ESMP would need to be prepared for specific projects as and when identified based on ESIA. An ESMP document should include:

- Lists of all project-related activities under the program and impacts, for each stage of the development of Projects, i.e., for the design, construction and maintenance stages;
- A list of regulatory agencies involved and their responsibilities;
- Specific remedial and monitoring measures proposed for each stage;
- A clear reporting schedule, including discussion of what to submit, to whom, and when;
- Cost estimates and sources of funding for both one-off costs and recurring expenses for implementation of the ESMPs.

ESMP shall deal with the construction, operations, and decommissioning stage of the project under the BRWDLP. The extent and timing of mitigation actions should be based on the significance of the predicted impacts. Some mitigation measures can be incorporated into the design of the project under the program and can largely resolve the potential anticipated impacts. Other measures require an ongoing implementation plan to ensure that proposed actions are carried out at the correct times, that environmental and social safeguards measures such as slope protection, borrow area reclamation, are maintained, and that prompt remedial actions are taken when the initial measures are not fully effective.

Environmental and social management activities during the implementation of the project of the BRWDLP will be governed by the possible negative impacts associated with the program's respective project construction and operation activities and the corresponding mitigation measures stated under the environmental and social impact and mitigation measures section of this ESMF. These mitigation measures could be used as either safety, social or physical measures to avoid/mitigate the anticipated impacts on the biophysical and social environment within and around the project area. The Environmental, social, and safety management specification as part of the proposed project under the BRWDLP contract document shall contain all the necessary clauses relevant to the respective projects financed under the BRWDLP. The contract document shall be a binding legal document to be signed by the contractor and OWEB.

Table7.1 presents an indicative environmental and social management and monitoring plan, which can be used to adapt in the preparation of ESMP during the implementation of the proposed Projects under the BRWDLP. A summary of the likely issues and potential impacts & mitigation measures is presented in the following Table7.1 to guide the preparation of upcoming ESMPs as more projects get identified. The generic ESMP is only a guideline document and would require addressing the program activities anticipated impacts & proposing mitigation measures. A template for the preparation of ESMP is annexed in this ESMF (See Annex-4).

Table7.1: Environmental and Social Management plan

Potential Impacts	Proposed Mitigation and/or Enhancement Measures	Implementation period	Responsible Institution	Estimated budget (Birr)	Budget (USD) (1USD=51 ETB
Design Phase					
Land acquisition, Resettlement and Compensation	• Provision of appropriate compensation to land lost and other properties, • Land acquisition should be limited to only areas that are essential for the project activities, and • Identify alternative road or detour where there are no residents or perennial crops.	Design phase	Proponent	Project budge	Project budge
Construction Phase-Physical environment					
Visual impact on Aesthetic Values of Topography and Landscape	• Restoration of construction sites to pre-construction state, • Limit vegetation clearance for the water pipelines to the required work strip, • Landscaping of the spoil tips should take advantage of the natural terrain, and • Remove the good topsoil first and stockpile it separately for use in replanting and restoration.	Construction Phase	Contractor	Included in the construction cost contract requirement	Included in the construction cost contract requirement
Soil Erosion	• Limit vegetation clearing as much as possible, • Stabilise the soil mechanically to reduce erosion potential, • Re-grading of slopes and re-vegetation of exposed areas, • Use excavated materials for backfilling of the trench section around the pipes, • Spoil earth/rock should be disposed of in appropriate approved area, • Any tunnels or erosion channels developed during construction or maintenance period shall is backfilled and compacted and the areas restored to a proper condition,	Construction Phase	Contractor/ Supervising Engineer	Included in the construction cost contract requirement)	Included in the construction cost contract requirement)

Potential Impacts	Proposed Mitigation and/or Enhancement Measures	Implementation period	Responsible Institution	Estimated budget (Birr)	Budget (USD) (1USD=51 ETB
	• Areas where construction activities have been completed and where no further disturbance would take place are rehabilitated through re-vegetation, and • Ground leveling is minimized and if possible concentrated only to the specific building foundation areas when it is necessary.				
Land Contamination	• Installation of oil separators and secondary containment at fuel storage sites, • Store hazardous materials in properly designed storage facilities, if any, • Prevent entrance or accidental spillage of solid matters, contaminants, debris and other pollutants and wastes into surface and ground water, and • Create employees awareness to prevent unnecessary oil spills and ensure protection of environment in their daily duties is promoted.	Construction phase	Contractor	Included in the construction cost contract requirement)	Included in the construction cost contract requirement)
Water Source Pollution Impacts	• Avoid unnecessary soil erosion on the community water source and at stream crossings, • Secondary containment to collect diffuse and accidental spills, • Storage and handling of fuel should be kept away from the community water source, and • Installation of sanitary water treatment facilities in workers' camps.	Construction phase	Contractor	Included in the construction cost (contract requirement)	Included in the construction cost contract requirement)
Climate change and air quality	• Spray water on construction sites in order to minimize or avoid dust, • Tarp trucks transporting loose/friable materials to minimize loss during transportation, • Consider covering stockpiles of excavated soils in areas near houses and shops,	Construction phase	Contractor	Included in the construction cost (contract requirement)	Included in the construction cost contract requirement)

Potential Impacts	Proposed Mitigation and/or Enhancement Measures	Implementation period	Responsible Institution	Estimated budget (Birr)	Budget (USD) (1USD=51 ETB
	• Maintain and store piles of loose/friable materials and soil in a suitable manner to minimize dust dispersion. • Minimize exhaust fumes, machinery and equipment shall not be running when not in use while ensuring that they regularly serviced, and • Equip construction vehicles and machinery with standard pollution-control devices to minimize dust emissions.				
Construction Activities Noise and Vibration Impacts	• Schedule noisy activities to daytime hours, • Locate noisy installations in adequate distance to residential areas to meet noise limit values, • Install noise control devices in construction equipment if noise levels exceed existing guidelines limit, and • Instruct the workforce to avoid unnecessary noise.	Construction phase	Contractor	Included in the construction cost (contract requirement)	Included in the construction cost contract requirement)
Solid waste generation impacts	• Ensure detailed design and specifications are undertaken so as to minimize solid waste generation of waste during construction, • Locate material and stockpiling areas within the project construction corridor until its ultimate destination is determined, • Manage stockpile areas and storage areas properly, • Dispose non-recyclable construction materials at a licensed waste facility and avoid fly-tipping, • Ensure used furniture and equipment from decommissioning is sold off/reused where	Construction phase	Contractor	Included in the construction cost (contract)	Included in the construction cost (contract)

Potential Impacts	Proposed Mitigation and/or Enhancement Measures	Implementation period	Responsible Institution	Estimated budget (Birr)	Budget (USD) (1USD=51 ETB
	possible, otherwise, dispose of at an appropriately recognized landfill, • Recycle any ballast that cannot be reused as ballast and remove excess ballast and clean fill off site for reuse, as possible Sustainable use of resources (to reduce the consumption of resources and to adopt recyclable materials where possible. Water systems comprise significant number of structures and mechanical fittings), • Optimize the water supply structures sizes to reduce the volume of construction materials used and soils to be disposed tore recyclable waste separately from residual/non-recyclable waste, a • Provide recycling bins around workers 'camps, offices and amenities.				
Construction Phase-Biological Environment					
Vegetation clearing	• Vegetation clearing should be minimized as much as possible, • Limit vegetation clearing for water pipelines required work strip, and • Use only indigenous plant species for re-vegetation.	Construction Phase	Contractor	Included in the construction cost (contract requirement)	Included in the construction cost (contract requirement)
Impacts on Terrestrial Fauna	• Schedule noisy activities to daytime hours, and • Instruct the workforce to avoid unnecessary noises.	Construction phase	Contractors	Included in the construction cost (contract)	Included in the construction cost (contract)

Potential Impacts	Proposed Mitigation and/or Enhancement Measures	Implementation period	Responsible Institution	Estimated budget (Birr)	Budget (USD) (1USD=51 ETB
Construction Phase - Socioeconomic Environment					
Population influx	• Establish transparent recruitment procedures to avoid camp followers in form of job-seekers, • Establish a recruitment policy that gives priority to local residents for less specialized services, • Recruitment procedures to be shared with the local authorities for further dissemination, • Award opportunities for sub-suppliers and sub-contractors of local firms which in turn employ local labour, and • Conduct public health campaigns addressing issues of behavioral change, water and sanitation, COVID-19, malaria, HIV/AIDS, etc.	Pre-construction & construction phase	Project Owner/ Contractors	Included in the construction cost (contract) Project Owner Owner's cost - part of public health and safety 500,000.00	Included in the construction cost (contract requirement) 9,803.95 USB
Impacts on roads	• Use culverts and any other crossing structure, if available, to cross the canal, and • Negotiate with road Authority and compensate for the unavoidable impact.	Construction phase	Project owner	To be estimated after consensus with road authority	Included in the construction cost (contract)
Public and occupational health and safety impacts	• Ensure compliance to occupational health and safety standards, • Maintain safe workplaces, plant and working systems, • Providing information, instruction and training enabling employees to work without risks, • Consulting with employee-elected health and safety representatives and/ or other employees about occupational health, safety and welfare, • Ensure workers' camp standards, quality and provision of basic social services based on existing standards, guidance on workers' accommodation and • Establish workers grievance mechanisms.	Construction phase	Contractor	Included in the construction cost (contract)	Included in the construction cost (contract)

Potential Impacts	Proposed Mitigation and/or Enhancement Measures	Implementation period	Responsible Institution	Estimated budget (Birr)	Budget (USD) (1USD=51 ETB
	• Make awareness campaign for workers about the safety issues related to their activities hence provide frequent training about the use of PPE • Ensure safe and good working conditions at workplace. • Enclosure the area around which work is taking place to prevent unauthorized access. • Hoisting and lifting equipment should be rated and properly maintained, and operators trained in their use. • Frequent maintenance of project vehicles and machinery to minimize air emissions. • Reduction of engine idling time in construction sites. • Use of extenders or other means to direct diesel exhaust away from the operator. • The project shall develop and implement Public and Occupational Health and Safety Management Plan (POHSMP) comprises of monitoring and reporting mechanism of occupational accidents and diseases, dangerous occurrences and incidents. • Undertaking periodic awareness creations for workforce on safe working practices, • Promoting health education and awareness creations, • Installing proper code of conduct and work ethics among construction workers and ensure that they are observed, and workers should be aware on their own safety and safety of others • Develop a comprehensive STDS, HIV/ AIDs and COVID 19 awareness for both workers and local community				

Potential Impacts	Proposed Mitigation and/or Enhancement Measures	Implementation period	Responsible Institution	Estimated budget (Birr)	Budget (USD) (1USD=51 ETB
	• Provision of STDs, HIV and AIDS prevention measures such as distribution of condoms to workers/local people both male and female • Creation of awareness of STDs, HIV/AIDS, COVID 19 in worker's camps through trainings and installation of posters. • Promote continuous sectoral, gender related Information, Education and Communication (IEC) messages about HIV/AIDS, STDS, COVID-19 protection, counseling & care. • Increase availability and accessibility of condoms. • Establish a sectoral policy that will safeguard human and civil rights and avoid discrimination of workers and community members who are infected with HIV/AIDS.				
Gender Based Violence (GBV), Sexual Exploitation Abuse (SEA)/Sexual Harassment (SH), Violence Against Children (VAC	• Management measures including proper sanitation, waste disposal facilities, awareness campaigns for the prevention of AIDS/HIV, sexually transmitted diseases and other communicable diseases, sensitization for health insurance will be needed at the project site. • The reinforcement of laws on child labour, sexual harassment/prostitutions and gender equity should be done. • The Contractor is required to develop and implement the project's Codes of Conduct (COC), GBV Action Plan, Grievance Redress Mechanism (GRM) and implement accordingly throughout the project implementation period. • All employees attend an induction training course prior to commencing work on site to ensure they are familiar with the Contractor's commitments to the	Construction phase	Contractor	Included in the construction cost (contract)	Included in the construction cost (contract)

Potential Impacts	Proposed Mitigation and/or Enhancement Measures	Implementation period	Responsible Institution	Estimated budget (Birr)	Budget (USD) (1USD=51 ETB
	project's Codes of Conduct., and other standards, such as ESHS and OHS standards. • Ensure that posted and distributed copies of the Contractor and individual Codes of Conduct are translated into the appropriate language of use in the worksite areas as well as for any international staff in their native language. • All employees should sign the project's 'Individual Code of Conduct' confirming their agreement to comply with ESHS and OHS standards. This sets stringent standards for personal behavior by those working on the project so as to avoid GBV, SEA, VAC, and workplace sexual harassment. • Contractor shall enter into agreement with local recognized NGO to develop training topics and materials on the mechanism to manage GBV, VAC, SEA, risks and carry out training on GBV, VAC,SEA for both workers and local people as per the plan, conduct services provider mapping in the project area, develop a clear referral pathway. • All forms of SEA, VAC and sexual harassment are unacceptable, regardless of whether they take place on the work site, the work site surroundings, at worker's camps or within the local community. Therefore, the Contractor is required to put in place administrative measures to prevent and minimize Gender Based Violence (GBV) and Violence Against Children (VAC) with proposed preventive and mitigation strategies.				
Operation phase					

Potential Impacts	Proposed Mitigation and/or Enhancement Measures	Implementation period	Responsible Institution	Estimated budget (Birr)	Budget (USD) (1USD=51 ETB
Impacts on water and Sanitation Facilities	• Ensure early start of the project's sanitation component to cater for influx of workers and job seekers, and • Provide sufficient water supply & sanitation facilities to workers at all work sites.	Operation Phase	Proponent	Part of Community health &safety 1,750,000.00	 34,313,73 USD
Inefficient Pump Service Impacts	• Change the damaged pumps as soon as possible and if not changed, maintain and all pumps should work as per their design capacities. • Give especial attention on pump types, capacity and originality during purchase. • Strengthen monitoring and follow up for efficient timely decisions as soon as possible for timely solutions.	Operation phase	Proponent or the water supply Office	Operation budget	Operation budget
Electricity & Road inaccessibility impacts	• Construct access roads to each borehole sites. • Ensure reliable power supply sources to overcome problems on water pump stations and overall the supply systems, • Ensure reliable access roads to each boreholes and the main reservoir.	Operation phase	Yabello area ELPA, Water supply Office, Oromia Rural Roads	Sectoral Budgets	Sectoral Budgets
Water supply line potential leakages	• regular follow up and monitoring of transmission and distributions lines, • Immediate repair and line replacement of lines whenever there are leaks or breaks.	Operation phase	Proponent or the water supply Office	Operation budget	Operation budget
	Grand Total			**2,250,000.00 Birr**	**44,117.65 USD**

8. ENVIRONMENTAL AND SOCIAL MONITORING PLAN

8.1 General

The environmental and social monitoring program is an important tool for the monitoring process of environmental and social management activities of the proposed program as it provides the basis for rational management decisions regarding impact control. In this water supply program, the environmental and social monitoring plan will help to ensure that the proposed mitigation measures for identified impacts and risks are being implemented effectively to fix the issues they have been designed for. The environmental and social monitoring parameters, processes, and activities discussed under this plan are indicative and help to be used as a guide during the development of the monitoring plan for future proposed projects under BRWDLP. The monitoring program for the proposed project under the program will be undertaken to meet the following objectives to:

- Check on whether mitigation and benefit enhancement measures have been adopted, and are proving effective in practice;
- Provide a means whereby any impacts which were subject to uncertainty at the time of ESIA preparation or which were unforeseen, can be identified to provide the basis for formulating appropriate additional impact control measures, and
- Provide information on the actual nature and extent of key impacts and the effectiveness of mitigation and benefit enhancement measures which, through a feedback mechanism, can improve the planning and execution of future, similar projects.

There are two basic forms of monitoring:

- ***Compliance monitoring,*** which checks whether prescribed actions have been carried out, usually by means of inspection or inquiries.
- ***Effects monitoring,*** which records the consequences of activities on one or more environmental components, and usually involves physical measurement of selected parameters or the execution of surveys to establish the nature and extent of induced changes.

Compliance monitoring is usually given more emphasis in the case of the proposed program designs and contract documents, and the extent to which recommendations on these matters, as set out in the respective ESIA which will be prepared for the project under the BRWDLP, will be complied with, plays a major part in determining the overall environmental performance of the Program

Environmental and social monitoring during the construction phase of each project under the program will comprise two principal groups of activities:

- Review of the Contractor's plans, method statements, temporary works designs, and arrangements relating to obtaining necessary approvals from the Supervisor Engineer, so as to ensure that environmental and social protection measures specified in the contract documents are adopted and that the Contractor's proposals provide an acceptable level of impact control, and
- Systematic observation on a day-to-day basis of all site activities and the Contractor's offsite facilities including quarry and borrow areas, as a check that the contract requirements relating to

environmental and social matters are being complied with and that no impacts foreseen and unforeseen are occurring.

Monitoring is the long-term process that normally begins at the start of the program and should continue throughout the life of the program. Its purpose is to establish benchmarks so that the nature and magnitude of anticipated environmental and social impacts are continually assessed. Therefore, monitoring involves the continuous or periodic review of mitigation activities to determine their effectiveness. Consequently, trends in environmental degradation or recovery can be established and previously unforeseen impacts can be identified and dealt with during the project's life.

This section discusses the need for programs covering both internal and periodic external monitoring. The overall objective of environmental and social monitoring is, therefore, to ensure that mitigation and enhancement measures should be implemented effectively. Indicative activities and indicators that have been possibly recommended for the monitoring of the environmental and social management activities are presented in the below Environmental and Social Monitoring Plan (Table8.1).

The Environmental and Social Monitoring will be carried out for each future project under the program in order to ensure that all construction activities comply and adhere to environmental provisions and standard specifications of the Environmental Protection Authority of the country as well as the AfdB Operational Safeguards so that all mitigation measures are implemented timely and effectively. Such monitoring can act as an early warning system to management, providing feedback mechanisms to enable damaging practices to be altered.

The monitoring activities should be fully integrated with other construction supervision and monitoring activities to be carried out by the construction supervision consultant. The primary responsibility of ensuring the implementation of sound environmental and social monitoring will rests on Supervision Engineer (SE), as part of his duties connected with general site supervision. Actual monitoring on a day-to-day basis will be carried out by the site staff from the construction supervision consultant, under the direction of the SE. The majority of monitoring will comprise visual observations and will be carried out at the same time together with the engineering monitoring activities.

A proposed project under the BRWDLP Monitoring Plans will be included in the respective ESMP specifying the type of monitoring, who will do it, how much it will cost to carry out monitoring, and what other inputs, such as training, are necessary. Environmental and social monitoring which will be required to be designed for the future subproject under the program by the respective proponent will focus on the activities and/or mitigation measures prescribed for the identified environmental and social impacts in the subproject ESIA/ESMP. Specifically, the monitoring process will include:

- Selection of environmental and social parameters at specific locations and for specific environmental components, in line with the Program’s respective project ESMPs;
- Visual observations of impacts on environmental and social components;
- Consultation with the key stakeholders and communities; and
- Sampling and regular testing of the key parameters for which appropriate indicators are provided in the Monitoring Plan.

Monitoring will be undertaken at different levels as follows:

- The Supervision Engineer (SE) will monitor the project in line with the ESMP at the worksites during project implementation.
- OWEB-PIU, MoWE, and Regional EPAs may also monitor the projects in conjunction with the district level environmental protection offices and compile a monitoring report that will be sent to the contractor of the concerned sub-project, as applicable

Site inspections will take place with an emphasis on early identification of any environmental problems and identifying implementations of recommended remedial actions. Where remedial actions have been required on the part of the Contractor, further checks will need to be made to ensure that these will be actually being implemented to the agreed schedule and in the required form. Each part of the site where construction is taking place needs to be formally inspected from an environmental and social management viewpoint on a regular basis.

The SE will decide on the appropriate course of action to be taken in cases where unsatisfactory reports are received from his field staff regarding Environmental, Social, Health, and Safety (ESHS) matters. In the case of relatively minor matters, advice to the Contractor on the need for remedial action may suffice, but in all serious cases, the SE should either recommend an appropriate course of action to the contractor or should issue a formal instruction to the Contractor to take remedial action, depending on the extent of his delegated powers.

Monitoring systems should be set up during construction by the Supervising Engineer (SE) and Contractor and by the Proponent during construction activities of the program so that potentially environmentally and social safeguards problematic areas will be detected well in advance for the appropriate remedial action to be taken. This could simply be a checklist of items that need to be inspected as a matter of routine, or periodically, depending on the nature of the aspect.

Check monitoring will be carried out on an intermittent basis by the Environmental Specialist of the PIU. Monthly reports prepared by the SE should contain a brief section referring to environmental and social matters, which summarizes the results of site monitoring, remedial actions which have been initiated, and whether or not the resultant action is having the desired result. The report will also identify any unforeseen environmental, social, health, and safety risks and impacts and will recommend suitable additional action items. Progress meetings with the contractor will also include a review of ESHS aspects.

Monitoring of construction activities and mitigation measures implementations will be based on visual inspections at the construction sites. In addition, the contractors will be responsible for monitoring the outcome of their management actions on the physical, biological, and human environment. The proposed performance indicators, means of verifications, responsible body, monitoring frequency, and respective indicative budget for each activity are described in Table8.1.

8.2 Parameters to be monitored

The implementation of Component 1, 2 and 3 projects activities under BRWDLP activities will affect some parameters that need to be monitored throughout the program period. Specific parameters will have to be developed for each subproject once the project activities and sites have been defined. As stated above, one of the major approaches to carrying out monitoring activities is visual observation. However, apart from visual observations, particularly it is important that monitoring should also include limited informal

questioning of people and local community leaders who live near the project, since they may be aware of matters which are unsatisfactory but may not be readily apparent or recognized during normal site inspection visits.

A summary of the most important parameters to be monitored is presented below and an indicative project Environmental and Social Monitoring Plan for identified impacts is indicated in Table8.1 below.

a. Soils

Soil excavation during the construction of activities of the program may lead to soil erosion. Monitoring of the soils being eroded will be through visual inspection of eroded sites and measurement of gullies formed.

b. Water Quality Monitoring

Both project core activities and ancillary facilities construction activities are often a source of significant surface and groundwater pollution if not sited and managed properly. It is recommended therefore that the project should monitor both point and non-point source pollution such as effluent, wastewater, or rainfall-runoff discharged from construction sites, generators and pumping stations, and campsites, as applicable to ensure that the Contractor establishes appropriate pollution prevention mechanisms and wastewater treatment facilities. The parameters to be analyzed for water monitoring may include Temperature, pH, Electrical Conductivity (EC), Suspended Solids (SS), Turbidity, Ammonia (NH_4^+), Nitrates (NO_3^-), Total Nitrogen, Total Phosphorus, Filterable Iron (Fe), Dissolved Oxygen (DO), Biological Oxygen Demand (BOD), Grease and oil and e-coli. Where the discharged effluent does not meet the National standards or the World Health Organization (WHO) standards, the Contractor must take further treatment measures before discharging effluent into nearby watercourses.

c. Vegetation

The construction activities of the proposed program under each component will result in limited clearance of the existing vegetation will be cleared. Vegetation cover in these areas will be monitored over time using photographs or if possible, establishing GPS monitoring points and will be taken during the same season and on approximately the same dates. In addition, the general species composition, plant height, plant distribution, and species composition should be recorded for each monitoring site, as required.

d. Resettlement and Compensation

Monitoring should be undertaken in accordance with the requirements of RAPs, which will be prepared for the projects, as required. Some of the parameters to be measured include the number of people adequately compensated for the loss of property, the number of complaints against compensation amounts and the size of land acquired, etc. Specific parameters will be provided in future RAPs.

e. Community and occupational Health and Safety

In addition to the Contractor's responsibility, Health monitoring shall be carried out by the staff from the District Health Offices that will have the overall responsibility to ensure that all health-related measures are put in place and that appropriate mitigation measures are enforced. The project will assist the District Health Offices to ensure that the contractors fulfill the health requirements. The following parameters are examples of proposed indicators for monitoring health-related impacts of the Project: i)Number of cases of STI seen at the facilities, by sex, age groups, and types; ii)Knowledge of key HIV/AIDS issues among the young and adult population; iii) Number of people counseled for HIV/AIDS; iv) Number of cases of work-

related accidents by sex and age groups and types; v) Number of cases and types of work-related injuries seen in the health facilities; vi) Number of posted warning signs at work sites compared with the recommended; vii) Availability of adequate sanitary facilities at campsites, and viii) Level of community awareness on dangers/risks associated with Project activities

f. Gender-Based Violence

GBV/SEA issues will be monitored on all BRWDLP projects through the set Grievance Redress Mechanisms for the projects. Indicators for GBV/SEA will include the number of registered GBV/ SEA cases in the respective project area.

g. Monitoring of Accidents

The contractor must make sure that appropriate signs are posted at appropriate locations /positions to minimize /eliminate the risk of accidents /incidents and electrocutions. In addition to this, the contractor should make sure that: i) Measures to create awareness regarding traffic safety, sexually transmitted infections (STIs), HIV/AIDS, and others such as malaria, schistosomiasis, etc. are taken, ii) Preventive measures to reduce /eliminate malaria, schistosomiasis, etc. infections wherever and whenever appropriate and measures are put in place, and iii) Periodic traffic incident prerequisite and occurrence survey, as well as health survey, should be carried out during the project implementation period. In addition, the air quality and noise quality monitoring will be considered as a parameter for the monitoring program, as applicable.

Table8.1: Proposed Environmental and Social Monitoring Plan

Ser. No	Major Impacts	Performance indicators	Responsible body for monitoring	Frequency of measurement	Frequency of reporting	Cost in Birr per year	Budget (USD), 1USD=51 ETB
1.	Land Acquisition and loss of income	On time payment of compensation before construction	District and Kebele administrations.	Two to three times before the initiation of construction	At of every assessment	100,000.00	1,960.78
2.	Ground water pollution from spillage of fuel, oil, grease, etc.	Water quality analysis of the nearby streams/ surrounding water bodies especially groundwater	• Regional Water & Energy Bureau, • Zone and Districts Water & Energy Offices	Any time such problem is anticipated or occurs or biannually during the rainy and dry seasons.	During project construction	20,000.00	392.17
3.	Water table drawn and depletion	Changes to results of water table level and amount produced from well	• Regional Water & Energy Bureau, • Zone and Districts Water & Energy Offices	Every 6 months (during rainy and dry season)	Twice a year	100,000.00	1,960.78
4.	Soil erosion and degradation enhancement caused by construction work	Erosion rate Formation of gullies Silt accumulation	• Oromia Agriculture& Natural Resources Bureau, • Oromia EPA, and • OWEB Environmental & Social experts.	At the time of heavy rain during construction and operation	After every rainy season.	100,000.00	1,960.78

5.	Clearances of vegetation cover due to construction work.	Change in type and diversity of flora and fauna species and the implementation of reforestation Program.	EPAs and Agriculture offices of each districts	Once a year	Once a year	100,000.00	1,960.78
	Total					**420,000.00**	**8,235.29**

9. ESMF MONITORING, EVALUATION, ANNUAL AUDIT, AND REPORTING

This chapter sets out requirements for monitoring, evaluation, annual audit, and reporting of this ESMF implementation. Monitoring of the indicators set out here will be mainstreamed into the overall monitoring and evaluation system for the project.

9.1 Monitoring

Monitoring is a continuing process throughout the life of the proposed BRWDLP from subproject design and construction phases, up to operation and decommissioning phases. Its purpose is to establish benchmarks so that the nature and magnitude of anticipated environmental and social impacts emanated from subproject activities under BRWDLP can be continually assessed ensuring the achievement of the ESMF objectives. Monitoring of ESMF as a continuous activity during the proposed program implementations and/or periodic review as annual monitoring/auditing is used to determine and guarantee the effectiveness of ESMF measures and procedures. The requirements for monitoring ESMF implementation are discussed below.

The objectives of ESMF monitoring are:

i) To alert the Program implementer (OWEB) and other relevant counterparts of the program (MoWE, REA, etc.) by providing timely information about the success or otherwise of the environmental and social impact management process outlined in this ESMF in such a manner that changes can be made as required to ensure continuous improvement to proposed program environmental and social management process (even beyond the project's life).

ii) To make a final evaluation that helps to determine whether the mitigation measures incorporated into the technical designs and the project ESMPs have been successfully annexed in the contract document and implemented. In addition to ensuring the pre-project environmental and social settings have been restored, improved upon, or if worse than before, to determine what level and type of further mitigation measures are required.

A number of indicators are presented below as part of the ESMF implementation which will be included in the overall project monitoring. In addition, an Annual Audit of ESMF Implementation will be conducted by the OWEB, and other relevant program implementing entities (MoWE), and the report will be delivered to the REPA, and the AfDB. Any High or substantial-Risk project financed by BRWDLP that has been subject to an ESIA study will also be required to produce an annual audit report, for delivery to REPA, and the AfDB. Indicators which will be used during monitoring of the performance of ESMF implementation include:

- Number of field appraisals conducted;
- Number of ESIA/ESMPs, RAPs and other MSIPs developed;
- Number of written warnings of violations of ESMPs issued to subproject contractors in case of non-compliance;
- Number of recommendations from the AfDB missions, an Annual audit/review that has been implemented at the beginning of the following year and Quarterly performance monitoring report;
- Number of staff at all levels trained in the implementation of this ESMF;

- Number of chances find procedures for physical cultural resources invoked, if applicable; and,
- Number of staff and other stakeholders at all levels attending a training course, raising awareness and sensitization program in environmental and social policies and safeguards instruments, ESMF, RAP, ESMP, ESIA, and other MSIPs.

The indicators are deliberately very simple. Despite their simplicity, the integration of these indicators into the proposed project planning and its subprojects M and E system provides a guarantee that the ESMF will be implemented in full.

9.2 Annual Audit

The program Annual Audit is an independently commissioned environmental and social audit that will be carried out on an annual basis, as required to ensure sound implementation of ESMF. The Annual Audit will be undertaken by external consultants or otherwise by a team of experts from OWEB, as applicable. The Audit amongst other things will assess the performance of projects under BRWDLP against the procedures described in this ESMF, the need for future training, awareness creation and sensitization, and the implementation of environmental and social impacts of the proposed BRWDLP and its projects. Guidelines for annual reviews is depicted in Annex-8.

The Annual Audit also provides a strong incentive for OWEB, REPA, MOWE, etc., and other relevant implementing parties to ensure that the ESMF is implemented and the project ESMPs and other required safeguards instruments are developed and implemented, as recommended. As applicable, the Audit Team will report to OWEB as well as to the MoWE, REPA, EPA, as required and the AfDB, to lead the implementation of any corrective measures, as required. An Annual Audit Report will include a summary of the environmental and social safeguards performance of the projects under the proposed program, based on the project ESMPs and measures indicated in the ESMF; presentation of compliance and progress in the implementation of the project ESMPs; and a synopsis of the environmental and social monitoring results from individual project monitoring measures (as set out in the respective project ESMPs), at local/district level.

The main tasks of the audit study will be, but are not limited to:

- Description of the project, objective, scope, and criteria of the audit;
- Verify the level of compliance by the proponent (OWEB) with the conditions of the environmental and social management plan and MSIPs, as applicable;
- Evaluate the proponent's knowledge and awareness of and responsibility for the application of relevant legislation;
- Review existing project documentation related to all project 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;
- Inspect areas where project equipment and materials are stored and disposed of and give a record of all significant environmental risks associated with such activities;

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

The suggested annual report template for a Project is depicted in Annex-9. OWEB must submit the annual audit report to REPA, and the AfDB on time.

9.3 End-of-project evaluation

As stated in section 6 of this ESMF, based on the comprehensive annual reviews, an end-of-project evaluation will be conducted, going into more detail with some of the issues raised in the annual audit and the impact of the capacity development activities provided to the relevant officials and staffs under the GoE Ministries and Institutions. The evaluation will be conducted by an independent consultant and performed as per the OECD/DAC criteria of relevance, effectiveness, efficiency, impact, and sustainability[2].

9.4 ESMF Reporting Procedures and Requirements

Regular Quarterly, Biannual, and Annual Internal Environmental and Social performance monitoring reports on ESMF implementation will be prepared by the OWEB -PIU Environmental and Social Specialists and shall be delivered to the OWEB, REPA, and the AfDB. In addition, any "Substantial Risk" subproject financed by BRWDLP that has been subject to an ESIA study will also be required to produce an annual audit report, for delivery to REPA and the AfDB.

To monitor the progress of the implementation of the measures that have been identified in this ESMF, annual audit/reviews will be carried out as outlined in Annex-8. The principal output of the annual Audit/reviews is a comprehensive report that documents the Audit/review methodology, summarizes the results, and provides practical recommendations and more specifically a section referring to the overall ESMF performance, and mitigation measures, etc. Annexes should provide the detailed results of the fieldwork and summarize the number of approved projects by the respective national and regional teams and their characteristics according to the annual audit report format (see Annex-9).

During the implementation of the Project, reports mainly originate from the Supervision Engineer (SE) on the day-to-day progress of the works. The SE submits reports to the Project office for their follow-up and review and comments on the reports and subsequently, the project office will submit copies of reports to the OWEB for action, as applicable. The feedback of reports from the Project office, OWEB should be provided to the SE within the time stipulated in the contract document. OWEB will also submit copies of reports to the AfDB. To ensure early detection of critical environmental and social conditions and to provide information on the mitigation progress and results, reporting deadlines have been specified in the ESMF implementation schedule.

9.5 Submission for Clearance and disclosure of ESMF

The ESMF document will be submitted to the REPA, and the AfDB parallel for their comments and approval. The disclosure of ESMF will be disclosed on the OWEB website and on the AfDB's external website and announced in the Ethiopian newsletters or mass media to the public, as applicable.

[2] *for more information on the OECD/DAC criteria, please refer to http://www.oecd.org/dac/evaluationofdevelopmentprograms/daccriteriaforevaluatingdevelopmentassistance.htm*

10. PUBLIC CONSULTATIONS AND PUBLIC DISCLOSURE

10.1 Public Consultation and Public Disclosure Plan

10.1.1 Public Consultation Plan

For the successful identification and assessment of project-specific environmental and social impacts, implementation, and monitoring of the respective mitigation or enhancement measures, a continuous consultative process is required. MoWEB has the responsibility to ensure the implementation of the required public and stakeholders' consultation with all relevant parties to achieve the program objectives that benefit the beneficiaries and other stakeholders. Through consultations, all implementing parties will create a bridge of communication among the various actors, the Public, project beneficiaries, and the Government, and contributes to the efficiency and transparency of the execution of the program. This public consultation plan (PCP) forms part of the ESMP that will be prepared by OWEB and is the same for projects under the BRWDLP.

10.1.2 Objectives of the Pubic Consultation Plan

This plan provides a framework for achieving effective stakeholder involvement and promoting greater awareness and understanding of issues so that the program is carried out effectively within budget and on-time to the satisfaction of all concerned parties. The objectives of the public consultations are to provide MoWE, OWEB, etc. with:

- Status of implementation of the identified measures;
- A sense of the concerns, priorities and aspirations of the stakeholders and implementing parties as they implement the measures;
- Information to shape the program as it progresses;
- Whenever possible, to recommend and implement specific recommendations and proposals; and,
- Provide the participating regions including districts with a forum to interact constructively and make progress towards solutions and actions; and feedback from MoWE, OWEB on information received and steps to follow.

OWEB that will be involved in program implementation shall establish a platform for coordination among stakeholders to strengthen and improve the efficiency and transparency of the execution of the planned project activities, which is supported by the Constitution and other proclamations of the country.

It is also a plan within BRWDLP implementation, to improve consultation for the most vulnerable groups and their communities so that they could benefit even more from the program's activities. More effective use can be made of women's groups, youth groups, and community conversations targeting women, traditional leaders, and other vulnerable groups. Involving these groups, with meaningful representation and participation in public forums will be endorsed as part of program implementation.

Generally, public and stakeholders' consultation anticipates attaining the following:

- Develop and maintain avenues of communication between the program and stakeholders to ensure that their views and concerns are incorporated into program design and implementation with the objectives of reducing or offsetting negative impacts and enhancing benefits from the program;
- Inform and discuss the nature and scale of adverse impacts and identify and prioritize the remedial measures for the impacts in a more transparent and direct manner;
- Include the attitudes of the community and officials who will be affected by the program so that their views and proposals are mainstreamed to formulate mitigation and benefit enhancement measures;
- Create a sense of the concerns, priorities, and aspirations of the stakeholders and implementing parties as they implement the proposed measures and actions;
- Increase public awareness and understanding of the program, and ensure its acceptance; and
- Inform relevant authorities of the impacts, solicit their views on the program and discuss their share of the responsibility for the smooth functioning of the overall projects activities.

10.1.3 Guiding Checklist for Consultation and Participation during BRWDLP Implementation

- Identify and involve all stakeholders, especially people affected, in the consultative and participative process.
- Develop a participatory strategy for project activities planning, implementation, and M&E.
- List detailed requirements for information campaigns and dissemination and develop procedures for PAPs to negotiate their entitlements.
- Involve stakeholders in decision-making at all stages of program implementation.
- Establish a timeline to complete activities such as an information campaign, compensation types and levels, entitlements, and relocation sites and schedules.
- Establish a participatory compensation and resettlement management strategy.
- Use and support Community Based Organizations (CBOs), and be sensitive to issues concerning community consultation and participation.
- Establish procedures for grievance redress.

Some conflict management strategies during the consultation process:

- outline the mandate and authority for consulting;
- validate objectives and problem definition with participants;
- describe the level and type of participation and consultation process to participants;
- share expectations for the consultation process with participants and encourage participants to share their expectations;
- determine the potential for a satisfactory resolution of the problem;
- let participants express their points, without telling them what they think, know or feel (e.g., do not say “I know how you feel”, but rather say “I can see this is something that concerns you”);
- understand how important the issue is for participants, and whether the conflict needs to be resolved or can be set aside momentarily;
- separate the problem into components and develop solutions for each;

- see if participants should be directed to the proper authority, such as in another government department or a provincial agency;
- determine whether the department has made a commitment to work with the other authorities on the issue; and
- Determine whether participants are willing to explore alternative solutions.

10.1.4 Public Disclosure Plan

A variety of methods of communication should be used to reach the majority of stakeholders. The project should select those that are most appropriate and have a clear rationale for their choices. The plan should include a statement welcoming comment on the proposed engagement plan and suggestions for improvement. For remote stakeholders, it may be necessary to provide for an additional newspaper outlet or separate meeting, or additional documents that should be placed in the public domain. The public domain includes:

- Newspapers, posters, radio, television;
- Information centers and exhibitions or other visual displays;
- Brochures, leaflets, posters, nontechnical summary documents and reports;
- Official correspondence, meetings;
- Website, social media.

The strategy should include means to consult with project-affected stakeholders if there are significant changes to the project resulting in additional risks and impacts. Moreover, the AfDB ISS policy requires the disclosure of relevant information regarding all the safeguard reports i.e., ESIA, RAP, and ESMP reports to make available to any affected communities and stakeholders. Therefore, the program safeguards instruments are required to be approved and disclosed prior to appraisal according to Bank policies and normal procedures. The Bank disclosure of the document will be after the in-country disclosure of the same by OWEB. The disclosure should be OWEB, and if necessary MoWIE's website and other relevant sites where it can be accessed by the public, including affected groups and NGOs, and subsequently at the AfDB external website.

10.2 Public Consultation during ESMF Preparation

Consistent with the African Development Bank and Government of Ethiopia's consultation requirements, the project preparation and appraisal as well as initial ESIA preparation studies have involved consultation with different stakeholders and potential project affected populations (See Annex13.1 to Annex 13.6).

Consultations were based on stakeholder analysis and were preceded by disclosure of adequate project information and environmental and social information to ensure that participants are fully know the project and accept it. Specifically, the stakeholder consultation process aimed at (i) disseminating information about the scale and scope of the project to ensure all stakeholders have a good understanding of the project, (ii) to enhance ownership of the project by the community, and local leadership, (iii) to understand the concerns and expectations of all affected and interested parties, and (iv) to understand and characterise potential environmental, social and economic impacts of the project. The findings of the stakeholders consultation is summarized as presented in Table10-1.

10.2.1 Findings of stakeholders Consultations

The general findings of the key stakeholders and community representatives' focus group discussions are listed in Table10-1 below. The table presets identified key issues, concerns, expectations and opinions of the consulted stakes. Hoping that the project would be a major milestone towards the end of the water crisis in Borana Zone, the stakes raised and recommended ideas presented in the table below.

Table10- 1: Findings of ESMF preparation and initial ESIA study

Findings	Recommended ideas
Issues and threats	• Water availability and potential, distribution as soon as possible the communities of the Phase-I project of the program areas do not have reliable potable water, • Fund availability for the project implementations, • Presence of serious and critical water supply shortages for human and their livestock at some areas there is no water and the government is supplying by vehicles which is very hard and uneconomical although it is not adequate also. . • Lack of trusts on this project as repeated previous promises were not met. Hence, still the community is highly suspicious about the intended project implementations. • Because of recurrent climate changes and drought of the area, shallow wells (Eelaa) are becoming unproductive. • The Consulted stakes also raised Climate change manifestations in the form increased frequency of extreme weather events such as recurrent flood and flooding events.
Expectations	• The communities of the area are expecting to get reliable water supply system for the communities and their livestock as soon as possible, • The water supply project helps in reducing or avoiding incidences of waterborne diseases observed in the zone. • The project shall include cattle trough for their livestock to protect the existing critical water shortage for livestock problems.
Concerns	• Catchment natural resource protection activities should be strengthen which is roles and responsibilities of all zone stakeholders, • The funding agencies, NGOs and the government has to reach the immediate water supply need of the Borana Zone communities.
Opinions	• It was recommended that water pipelines be extended to all schools, health centers (as social services are in critical shortage potable water). • Operation and maintenance- project area community and stakeholders advocated for a comprehensive and customized plan for operation and

	maintenance of the project as that has been a major challenge for many of the existing facilities. • Recurrent drought and critical shortage of livestock feeds are the two major areas of intervention that require immediate responses, • Ongoing migration of significant number of livestock to relatively better places in neighboring districts/Zones can also expose to more disastrous damage and animal deaths due to long distances travels for feed and water, • Women and Children are disproportionately affected by lack of water supply and recurrent drought (exposed to physical damage and affecting their productive time waiting long queue at water sources), • The natural resource protection activities which are not considered serious in Borana Zone should get attentions as the existing interventions are only for Emergency Measures. The rangeland is no more productive as a result of degradation and termite infestation.

Generally, the stakeholders have expressed broad support and positive attitudes towards the Program, as the proposed interventions will address the poor water supply, health and economic challenges faced in the seven districts capital towns and inhabitants. Some of the concerns raised by stakeholders included (i) compensation for land loss due to construction activities, (ii) the need for districts affected by construction activities, to benefit from the water supply interventions, among others. The recommendations of the consultations were adequately reflected in the project design and in the project documentation.

Consultations have been held with various stakeholders including relevant government agencies, development partners, and officials at the regional and national level throughout the development of the Program. The key stakeholders of the Program include Oromia WEB, Oromia EPA, Borana Zone Water and Energy, the seven districts administrations and line water and energy offices, districts EPAs, each town Water utilities, local officials and representatives of project Kebele and the AfDB or the financer of the Borana Resilient Water Development for Improved Livelihoods Program in Ethiopia.

The consultation and public participation is a continuous process during the project cycle, further consultations will be held accordingly throughout the Program implementation.

11. INSTITUTIONAL RESPONSIBILITY AND IMPLEMENTATION ARRANGEMENT

Different institutions and stakeholders at the National, Regional, District, and Local levels will be responsible and play a role during the design and implementation of the projects under the proposed BRWDLP. It should, however, be noted that the degree of influence of the various actors does vary both in terms of the spatial and temporal dimensions. The different actors expected to be the major players during the design and implementation of the proposed program as well as the implementation of this ESMF are the Ministry of Water and Energy (MoWE), the national Environmental Protection Authority (EPA), the Ethiopian Wildlife Conservation Authority (EWCA), the Oromia Regional State Water and Energy Bureau (OWEB), the Oromia Regional State Environmental Protection Authority (REPA), Ministry of Women, Children and Youth Affairs (MoWCYA) /Regional Women, Children and Youth Bureaus (RWCYB)the district administration, Community members, etc.

11.1 National and Regional Levels

At the national level, the Ministry of Water and Energy (MoWE), will be involved directly or indirectly in the implementation of the proposed project under BRWDLP as well as this ESMF, and the Environmental Protection Authority will be responsible for the implementation of this ESMF and ESMP, particularly ensuring the program implementation without any impact to the nearby environment and oversee the program compliance to the national environmental policy and legal framework. At the regional level, the Oromia Regional State Water and Energy Bureau (OWEB), as the proposed BRWDL program implementer will be the main responsible for the implementation of this ESMF as well as the projects under the BRWDLP as well as the Oromia Regional State Environmental Protection Authority (REPA) also responsible for the implementation this ESMF and ESMP, mainly from ensuring sound implementation of the environmental and social risk management measures as well the program compliance to the regional environmental policy and legal framework. Given the nature of the program the Ethiopian Wildlife Conservation Authority (EWCA), Ministry of Women, Children and Youth Affairs (MoWCYA) will also have a responsibility as per their roles and responsivities vowed by law.

11.2 Zonal, District levels, Community members, Contractor, Supervision Engineer, and other stakeholders

At the Zonal and district levels, the respective water bureau and administration offices and regional Women, Children and Youth Bureaus (RWCYB) will be responsible for the implementation of the proposed Program. In addition, the Community members, Contractor, Supervision Engineer (SE), and other stakeholders like NGOs will have direct and indirect responsibility for the sound implementation of projects under the proposed program.

11.3 The Ministry of Water and Energy

The Ministry of Water and Energy (MoWE) is an apex institution at the national level and will have a responsibility to oversee the effective implementation of the program. In addition, the Environment and Climate Change Directorate (ECCD) was established under the MoWIE in 2011 to bring environmental protection and sustainable development, secure public welfare, benefit, and participation, and facilitates

development activities within the scope of the program. The Directorate is also responsible to ensure the enactment of environmental and social safeguards legal frameworks and adequate care has been taken by the OWEB at all phases of the program execution. The ECCD has two sections (Climate Change and EIA unit) and both units are staffed with experts like environmentalists and sociologists, etc. Concerning the proposed BRWDLP, the Ministry is responsible to check and oversee the program activities' compliance with the environmental and social safeguards policies of the country, through the ECCD. Major responsibilities but are not limited to:

- Establishes and leads steering committee at the federal level pertaining to the BRWDLP.
- Provides training and undergoes awareness-raising campaigns through various forms of media and other means.
- Provides overall technical support/assistance for projects under the proposed program
- Review and provide comments on the safeguard instruments prepared for the proposed program
- Oversee all the environmental and social activities related to the project.
- Collects reports from OWEB and closely works with them for the successful implementation of the program.

11.4 National Environmental Protection Authority (EPA)

The Environmental protection Authority (EPA) to reach its current existence, the former Ministry of Environment, Forest and Climate Change has passed through different institutional restructuring and changes in its legal formation. The Environmental Protection Authority (EPA), Ministry of Environment and Forest and Ministry of Environment, Forest and Climate Change were key stepping institutions for the establishment of the Environment, Forest and Climate Change Commission Environmental Protection Authority (EPA) was established as an autonomous government agency at the Federal level by Proclamation 9/1995 in 1995. The institution was accountable to the prime Minister. Along with EPA, the Environmental Protection Council was also established to oversee the tasks and activities of EPA as well as the activities of sartorial environmental agencies and units responsible for environmental management. The proclamation establishing EPA also stipulated the need for the establishment of environmental organs by region. In 2021, the former Environment and Forest and Climate Change Commission was renamed and restructured into the Ethiopian Environmental Protection Authority by Promotion No 1263/2021. The Ministry has, the following powers and duties

The major powers, duties and responsibilities of the Ministry of Environment, Forest and Climate Change as stated in the Proclamation No. 916/2015 are as follows:

- Coordinate activities to ensure that the environmental objectives provided under the Constitution and the basic principles set out in the Environmental Policy of the Country are realized.
- Establish a system and follow up implementation for undertaking environmental impact assessment or strategic environmental assessment on social and economic development policies, strategies, laws, programs, and project set by the government or Private.
- Prepare a mechanism that promotes social, economic, and environmental justice and channel the major part of the benefit derived thereof to the affected communities to reduce emissions of greenhouse gases that would otherwise have resulted from deforestation and forest degradation.

- Coordinate actions on soliciting the resources required for building a climate-resilient green economy in all sectors and at all Regional levels; as well as provide capacity building support and advisory services.
- Establish a system for evaluating and decision making, in accordance with the Environmental Impact Assessment Proclamation, the impacts of implementation of investment programs and projects on the environment prior to approvals of their implementation by the concerned sectoral licensing organ or the concerned regional organ.
- Prepare programs and directives for the synergistic implementation and follow up of environmental agreements ratified by Ethiopia pertaining to the natural resources base, desertification, forests, hazardous chemicals, industrial wastes, and anthropogenic environmental hazards with the objective of avoiding overlaps, wastage of resources, and gaps during their implementation in all sectors and at all governance levels.
- Take part in the negotiations of international environmental and climate change agreements and, as appropriate, initiate a process of their ratification; play a key role in coordinating the nationwide responses to the agreements.
- Coordinate, and as may be appropriate, carry out research and technology transfer activities that promote the sustainability of the environment and the conservation and use of the forest as well as the equitable sharing of benefits accruing from them while creating opportunities for green jobs.
- Establish a system for development and utilization of small and large scale forests including bamboo in private, communal, and watershed areas, and ensure implementation of same.
- Establish a system to rehabilitate degraded forest lands and ensure its implementation to enhance their environmental and economic benefits.

11.5 Ethiopian Wildlife Conservation Authority (EWCA)

Ethiopian Wildlife Conservation Authority (EWCA) is a governmental organization under the Ministry of culture & tourism given the authority to undertake conservation and sustainable utilization of wildlife in Ethiopia. It was created in 2008, and manages 13 National Parks, Wildlife Reserves, and Sanctuaries, measuring over 3.75 million hectares of natural habitat, including 1.8 million hectares of forest and woodlands. This represents almost 20% of the total remaining natural forest cover in Ethiopia. Much of the remaining forest is found in Forest Priority Areas and Controlled Hunting Areas, managed by various regional authorities. In protected areas managed by regional authorities, EWCA retains a regulative authority in terms of wildlife utilization (e.g.: quota setting, licensing, issuing permits, etc.).

11.6 Oromia Regional State Water and Energy Bureau (OWEB)

Oromia Water and Energy Bureau (OWEB) is one of the executing bureaus of Oromia Regional State, Ethiopia. The Bureau is mandated to manage, develop and control all water, mineral and energy resources of the region in support of socio-economic development. This governmental body regulates all water suppliers in the Oromia regional state. In the smaller settlements so called District Water Teams (WWTs) are responsible for the operation and maintenance of the water infrastructure. In the larger towns more autonomous Town Water Supply and Sanitation Services Enterprises (TWSSSEs) are responsible. Aside

from its regulatory function OWEB is also often directly involved in technical and financial support of both the WWTs and the TWSSSEs, thus forming a key actor in the region

The responsibilities of the OWEB

- Contract consultants for ESIAs of subprojects based on ToRs prepared for each subproject and reviewed by the relevant institutions.
- Designate focal staffs (at least 2 in each region and in the two city administrations) that will take responsibility for environmental screening and generally for environmental management and get trained accordingly- this staff will ultimately prepare Environmental and Social Screening Forms and supervise the implementation by contractors of the Environmental Guidelines for Construction Contractors
- Designate technical supervisor of works, who, in the absence of the environmental focal staff mentioned above, will supervise the implementation by contractors of the Environmental Guidelines for Construction Contractors,
- Prepare (see above) environmental screening forms for all sub-programs and submit them to the Ministry of Water and Energy and to the African Development Bank,
- Supervise the implementation of environmental mitigation measures at construction and operation phases, including those related to land occupation and compensation
- Supervise the implementation of monitoring measures
- Provide an annual environmental monitoring report to the review of the Ministry of Water and Energy

The Project Implementation Unit (PIU) to be established under the OWEB, which will be staffed with E&S risk management specialists, will be directly responsible for the ESMF implementation for projects under the program and it will be supported as necessary by the existing Environment department of OWEB or otherwise ECCD of the MoWE. During the course of ESMF implementation, the reporting arrangement for Environmental and Social Performance will follow the ESMF, which MoWEB -PIU will prepare and submit regular E and S performance reports for all the projects under the program.

11.7 Regional Environmental Protection Authority

EPA proclamation No.295/2002 states that each National Regional state shall establish an independent Regional Environmental Agency or designate an existing agency based on the Ethiopian Environmental Policy and Conservation Strategy to ensure the environmental protection activities and environmental impact assessment. The national provisions indicate that the Federal EPA devolves responsibilities to the regional environmental body, especially for projects that fully fall under the jurisdiction of the Regional Governments.

In the light of this, the Oromia environmental line sector is structured under the Regional Council. The regional environmental body is entitled to coordinate the formulation, implementation, review, and revision of regional conservation strategies, as also environmental monitoring, protection, and regulation. The proclamation also states that regional environmental agencies shall ensure implementation of federal

environmental standards or as may be appropriate, issue and implement their own no less stringent standards.

As this project influences 8 Districts in Borana Zone; Oromia REPA and Climate change Authority is responsible for environmental protection matters in the region together with zonal level line sectors. REPA is responsible for the review and approval of ESIA of development proposals under the mandate of the Federal State and follow-up of the implementation of ESIA recommendations of such proposals. Hence, the project proponent (OWEB) should work in close cooperation with the environmental bodies (At the Regional and Zonal level) to ensure that the adverse environmental and social risks of development proposals are properly identified and their mitigation or management actions incorporated into the project design under the program or planning and implementation at the right time.

11.8 Zone and District Environmental Protection Authorities

Similar to the regional environment sector, the Borana Zone Environmental Protection Authority is structured under the Borana Zone Council and each project Districts Environmental Protection Authorities are structured under each District Councils. The District administration is a major decision-making government organ. The District administration has the following duties and responsibilities, among others:

- Implementation of the policies, laws, and directives of the state.
- Coordination of the activities of various offices in the district.
- Maintenance of peace and security in the district, directing the police and security forces.
- Ensure participatory Planning and implementation of projects which allows different stakeholders and the people of the district to take part from planning to the last evaluation process.
- Supervision of development programs within the district.
- Preparation and approval of the district budget
- Proper use and accounting for the annual budget.
- Administering and protecting the natural resources of the district.
- Ensure good governance by improving public service delivery, and
- Ensuring grassroots participation maintaining upward and downward accountability,

The district administration has been given some discretionary powers and functions by the regional government which includes approval of the district's social service, economic development, and administrative plans and programs, levying and collecting land-use taxes, agricultural income revenues, and other local taxes, utilizing the district source of revenues, excluding such other revenue allocated and administered by regions. They are the key focus of the government's commitment to decentralized delivery of services. At this level, various offices accountable to the administration have been established to perform and ensure the wellbeing of the socioeconomic, environmental, good governance, and peace and stability of the respective District. Following the district, Kebele is the lowest administrative level structure. It generally com prises sub-kebeles and is headed by an elected chairman. The main responsibilities of the Kebele administration include:

- Preparation of an annual Kebele development plan; ensuring the collection of land and agricultural income tax;
- Organizing local labor and in-kind contributions for development activities; and
- Resolving conflicts within the community through the social courts.
- Regarding this specific proposed project where the power line runs through Districts and kebeles will have a great role and interest in the implementation of the project.

11.9 Ministry of Women, Children and Youth Affairs (MoWCYA) /Regional Women, Children and Youth Bureaus (RWCYB)

MoWCYA has the responsibility to ensure that women and children are benefiting from development activities and are protected from harm. Its main area of responsibilities focus on awareness creation and compilation and dissemination of data and information on woman and children; ensuring opportunities are created for a woman to participate in political, economic, and social affairs; ensuring woman and children are not discriminated against and devising strategies for the proper application of affirmative actions; encourage and support women to organize and ensure their agenda (including children) are mainstreamed in to national and regional policies, legislations and programs.

Regional governments have also established the Woman, Children and Youth Affairs Bureau (RWCYB) responsible to implement national visions and objectives at the region level. All urban administrations have offices responsible to promote women, children and youth agendas. Woman, child, and youth affairs offices also provide legal support to children and women victims of physical and sexual abuse by offering free legal counsel. The offices work in close collaboration with Labor and Social Affairs, Justice Department, the Police, and the court to ensure perpetrators get appropriate punishment. Efforts to rehabilitate victims are however hindered due to capacity limitations.

11.10 The Contractor

The Contractor is responsible to incorporate environmental and social safeguards management measures stated under the project ESMP. The pertinent information from the ESMP will be included in the project contract under the environmental and social clauses and the ESMP document will be annexed and part of the bidding and contract agreement document. The contractor will also require preparing the contractor's Environmental and Social Management Plan (CESMP) in line with the recommendations of the respective project ESIA, ESMP. The Contractor is accountable for the implementation of these instruments (CESMP/ESMP/ESIA) and is required to establish an EHS unit staffed with qualified environmental and/ or social safeguards specialists. After preparing the ESMPs it needs to be approved by the Supervision Engineers and submitted to the Bank of clearance and public disclosure before starting physical activities. OWEB shall also provide training and undergoes awareness-raising campaigns on safeguards management for crew members and staff.

11.11 The Supervision (SE)

The Supervision Engineer (SE) is responsible for the day-to-day monitoring of the Program implementation, including the implementation of environmental and social management during construction. By contractual arrangement, the Supervision Engineers will be responsible for adequate inclusion implementation of the environmental and social safeguards clauses in the contract document and the corresponding supervisory responsibility to confirm the sound implementation of all sites' environmental and social management and monitoring recommendations. The SE approves or rejects the proposals and undertakings of the contractor in relation to the requirements of the contract documents.

11.12 District Administration

The institutional responsibilities of the project areas districts are listed as follows.

- Assist the OWEB-PIU and the water office at the district level in the implementation of the program.
- Establish a task force/steering committee at the District level.
- Organize the District taskforce/steering committee and chair the meeting related to the implementation of the programs; and,
- In cases of land expropriation, facilitate the process of valuation and compensation committee meetings and payment of compensation.
- 6.2.9 Authority for Research and Conservation of Cultural Heritage (ARCCH)
- The Authority will be informed whenever there are significant known or unknown cultural heritage sites in the project areas for further investigation, recommendation, and management, particularly for chance find cultural resources.

11.13 The Community

The Community has the right to be consulted to ensure the overall project acceptability and sustainable implementation of the program. In general, the community should be involved at different stages of the Project.

11.14 Authority for Research and Conservation of Cultural Heritage (ARCCH)

The Authority will be informed whenever there are significant known or unknown cultural heritage sites in the project areas for further investigation, recommendation, and management, particularly for a chance find cultural resources.

12. CAPACITY BUILDING AND TRAINING REQUIRNMENT

12.1 General

Effective implementation of the Environmental and Social Management Framework will require the technical capacity of implementing institutions and there is a need to have people with the right skills and knowledge. The ESMF success depends on effective capacity building through the training of staff and all other parties involved in this ESMF, including the construction contractor and all subcontractors. Project implementing bodies need to understand the inherent social and environmental issues and values of the proposed projects under the BRWDLP and be able to identify the indicators. The BRWDLP will therefore be required to carry out a capacity needs assessment to ensure that the capacity gaps for successful implementation of this ESMF are identified. This capacity needs assessment will be inbuilt to identify strengthening needs on social and environmental evaluation, screening, mitigation, and monitoring during the preparation of this ESMF. The suggestions on training and capacity development requirements under this section are based on the recent observations on similar programs and projects and consultations, which were conducted as part of the preparation of this ESMF.

All those responsible for the management, implementation, and operation of any aspect of the ESMF shall be adequately trained in their role. In addition, before an individual is allowed to work, he/she must be trained and educated on the program's E&S needs. During the duration of the contract, this shall be both assessed and audited regularly, and if identified corrective measures shall be put into place. It is therefore proposed that a comprehensive induction and training program is established that prepares the employees for working on the job.

This chapter also sets out training and capacity building that is required to support the implementation of this ESMF. It states the detailed training and capacity development requirement for OWEB, MoWE, and other relevant parties' staff at all levels, who are directly or indirectly engaged in the proposed program implementation. This capacity development and training plan support implementing institution, OWEB, to develop its capacity to sufficiently screen, monitor, evaluate, and assess the environmental and social impact of the proposed BRWDLP and any future proposed project under the program.

12.2 Capacity Building

Building capacity is about increasing the knowledge and skills of individuals and strengthening OWEB organizational structures and systems that are needed to effectively implement this ESMF. The program will assess environmental and social capacity and prepare a training program to strengthen capacity in coordinating, planning, implementing, and monitoring environmental and social issues. For the successful implementation of this ESMF, the capacity building requirements will mostly be in the form of training programs and sensitization workshops for staff drawn from OWEB, MoWE, and other relevant institutions at National, Regional, Zonal and district levels.

Lessons learnt from other similar water supply projects of the Oromia Water and Energy Bureau and preliminary capacity needs assessments undertaken during project preparation and appraisal can suggest and taken as startup step for significant shortcoming in capacities of Regional Water and Energy Bureau, Borana Zone Water and Energy and the Program district offices water supply officers to effectively implement the ESMF.

Accordingly, the Borana Resilient Water Development for Improved Livelihoods Water Supply Sector Improvement Program will: (i) conduct capacity assessment of each district implementing bodies at each level (district and kebele) to take inventory of existing capacity and identify gaps and (ii) based on the findings of the assessments tailored capacity building packages will be provided.

Capacity building and technical assistance for appointed safeguard staffs will be valuable in strengthening their skills to screen, review and monitor environmental issues in the sub-projects in compliance with requirements of the Ethiopia's legislations and the AfDB safeguard policies. The capacity building Program is also important in relation to the development of general environmental management and monitoring capabilities within the Region.

12.3 Training

In many institutions, staff members have been retained for core activities of their profession whereas little consideration to directly oversee environmental and social risk management activities has been taken. In some cases, environment and social safeguards personnel are present but their level of training and technical capacity on environmental and social safeguards principles and tools is not sufficient. Training and awareness creation will be undertaken at different levels of project implementation. As stated above, these levels will entail the national institutions, local authorities, contractors, Consultants, NGOs, community members, and other grassroots stakeholders. The exercise will be customized according to each level's needs to ensure adequacy in the implementation of the ESMF and therefore, it is required to indicate detailed capacity development requirements and recommendations in this ESMF, through customizing several water and other infrastructure development projects experiences to identify the capacity gap and propose project-specific training and other capacity development program.

The OWEB-PIU safeguards specialists will require induction training on AfDB and GoE environmental and social safeguards policies, applicable to the BRWDLP, regarding the use of the screening and other pertinent checklists, and identification of impacts and development and implementation of relevant safeguards instruments. Annual follow-up training is anticipated. The training will take place in areas accessible to all participants at national, regional, and/or local levels, as applicable.

Therefore, to ensure proper implementation of environmental and social screening, and mitigation measures, as well as the implementation of the subprojects in a sustainable manner, OWEB and other relevant respective project proponents, if applicable will undertake a project of environmental and social safeguards management training and institutional capacity building. The objective of the training stated under this ESMF is to:

- Ensure that staff from OWEB, MoWE, and other relevant institutions can assist District staff at the local level, contractors, and communities to appraise, and supervise the implementation of subprojects, accordingly;
- Representatives and leaders of community members, Institutions, and associations at local levels to prioritize their needs, and to participate in the identification of impact and implementation and management of the environmental and social risks of program activities; and
- Support local representatives, and relevant committees to have a sensitization and awareness regarding environmental and social aspects indicated in safeguards instruments such as ESIA, ESMP, ESMF, RPF, and RAP and other relevant management strategies implementation plans (MSIPS), such as MWMP, IPMP, POHSP, etc. and the implementations of these instruments that

ultimately contribute to ensuring the implementation of the program in an environmentally friendly and socially acceptable manner.

The anticipated capacity building demand of the various stakeholders, experts, and officials relevant to the implementation of this ESMF will be managed in terms of technical training, awareness creation, and sensitization for those who will be drawn from the following institutions, but not limited to:

- Environmental and Social Experts of implementing institutions (OWEB) and MoWE, other pertinent parties;
- Relevant experts and officials from Borana Zone (Water Boards Utility), and district Water and environment bureau,;
- Local district office relevant experts and officials; and
- Representatives from community members, clan leaders, elders, etc.

The first step in pursuing capacity building will be to identify the capacity building needs of the various stakeholders. However, in addition to the needs identified, an indicative list of areas of training relevant to the implementation of this ESMF has been proposed which includes:

- National and AfDB Operational Safeguard as well as implementation and enforcement;
- Project cycle and ESIA/ ESMF (including E&S clauses in the project under the program contracts), national EIA law, procedures, & guidelines, and enforcing mechanisms;
- Stakeholder engagement, consultation, and partnerships;
- Application of ESMF tools (Screening checklists, ESIA/ESMP), ESIA process, their review, implementation, Assignment of environmental categories, and enforcement
- Environmental guidelines applicable to construction contractors,
- Environmental monitoring and evaluation in the context of the Resilient Water Development for Improved Livelihoods Program
- Development of mitigation measures and Environmental and Social Management Plans (ESMPs), RAP; other instruments, such as, Labor laws and working conditions (LLWC); Biodiversity conservation (BC); Traffic Management Plan (TMP); Waste Management Plan (WMP), including Medical and Hazardous Waste Management Plan; Grievance Redress Mechanism; Stakeholder engagement; and Public and Occupational Safety and Health Plan (POHSP), etc.; and
- Environmental reporting, monitoring, annual auditing, and follow-up of ESMF.

Table 12.1 sets out indicative specific training requirement for the respective stakeholders under different category:

1) ***Technical training (T)-In -depth training*** to a level that allows trainees to go on to train others, including technical procedures where relevant;
2) ***Sensitization (S),*** in which the trainees become familiar with the issues to a sufficient extent that it allows them to demand their precise requirements for further technical assistance; and
3) ***Awareness creation training (A),*** in which the participants acknowledge the significance or relevance of the issues, though they do not have in-depth technical knowledge of the issues.

Training for safeguards officers and other relevant staff drawn from OWEB, MoWE, and other institutions and parties, etc. will be required, both on general environmental and social safeguards issues, on the specific screening procedures, and on Impact identification and mitigating measures described in this ESMF. Initial as well as on job and annual follow-up training is anticipated. This staff training will provide a good opportunity to conduct the required monitoring and evaluation of the performance of the project.

Table12.1: Indicative Training and Sensitization Requirements

Topics or Training Need Areas	**Participants**			
	E&S specialists & related experts from OWEB. MoWE, etc.	**Zonal and District level Environmental team and officials**	**Staff from the contractors, consultants, District offices**	**Elders, clan leaders, affected people, Representatives from community members**
National and AfDB Operational Safeguard as well as implementation and enforcement	T	T	S	A
Project cycle and ESIA/ ESMF (including E&S clauses in project contracts EIA law, procedures, & guidelines and enforcing mechanisms	T	T	S	A
Applying ESMF and Application of ESMF tools (Screening checklists, ESMP, EA), their review, implementation, and enforcement.	T	T	S	A
ESIA/ESMP Procedure guideline preparation and implantation of ESMP	T	T	S	A
Technical and operational aspects of the subproject, Road network, examination centre, etc.	T	T	S	A
Identification of impacts and development of mitigation measures, preparation of Environmental and Social Management Plans, A/RAP; Other specific instruments, such as LLWC, BCSMNR, IPMP, MWMP, GRM, TMP, WMP, POHSP, etc.	T	T	S	A
Stakeholders' Engagement, consultation, and partnerships	T	S	S	A
Environmental reporting, monitoring, and follow-up of ESMF	T	T	T	A

Key: T = detailed training, S = sensitization to the issues, A = raised awareness, NA=not applicable

As a general guideline, training, awareness creation, and sensitization of environmental and social experts, officials from relevant stakeholders (OWEB, MoWE, REPA, RWB, etc.) at the national, regional, zonal and district levels, and community members and affected groups on issues of environmental and social impacts are required. The sensitization/awareness/training will aim to build the capacity, create awareness, and sensitize on the requirements and key aspects of ESMF for a broad audience comprises of experts and officials from various implementing institutions listed above. In addition, a more detailed and specific training module will be developed and delivered to the OWEB and other direct implementing parties who are responsible and involved in the implementation of E&S safeguards and implementation of the proposed program. The project will develop a training plan based on needs identified that includes regular updates and refresher modules which will be delivered during ESMF implementation. Table12.2 below indicated proposed training package.

Table12.2: Proposed Training Packages

Audience	Training Component	Duration	Potential Trainers
E&S specialists & related experts from OWEB. MoWE, etc.	All training topics are listed under table 12.1	2-day workshop for the first year and 1-day refresher courses annually	• Consultant • REPA • AfDB safeguard Team • Ministry of Labor (Department of Occupational Health and Safety), • Addis Ababa University • Other relevant institutions.
Zonal and District level Environmental team and officials	All training topics listed under table 12-1 except sensitization on Stakeholders Engagement, consultation and partnerships	1-day workshop for the first year and 1/2-day refresher courses annually	• Consultant • OWEB • REPA • AfDB safeguard Team if requested and applicable.
Staff from the contractors, consultants, District offices	Attend sensitization for all training topics listed under table 12-1,	1-day workshop for the first year and 1/2-day refresher courses annually	• OWEB • REPA • Consultant
Elders, clan leaders, affected people, Representatives from community members	Raised awareness on relevant topics stated under table 12-1.	1-day awareness creation workshop as required	• OWEB, District environmental office, • Consultant

An example of an agenda for a proposed one (1) day training on ESMF implementation and integration of environment and social management concerns into development planning, which is further amended before implementation of the training and during preparation of the training plan is provided in Table12-3.

Table12.3: Sample training agenda for a one day

Session	Content
Introduction to Environmental and Social Management Plans	This session will introduce participants to the theory and application of ESMF as a decision-making tool. It will outline the principles of ESMF and provide clear definitions on ESMP practice terminology (e.g. classification of impacts, natural resource base (water, soil, land, biodiversity, air, etc., mitigation and monitoring) and social baseline (employment, social, health, etc.).
AfDB Operational Safeguard and national legislation	This section will discuss the relevant principal AfDB Operational Safeguard and their application to subprojects under the sub-projects under discussion. In addition, the applicable GoE legislation will be discussed in terms of the relevant environmental and social laws and policies, which apply to activities under the program.
Screening of the proposed BRWDLP's projects	A list of potential activities to be financed under the projects will be discussed. The application of the screening checklist will be explained using case studies.
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).

Overall, the training will be conducted by OWEB, REPA, Consultant, District environmental office, Ministry responsible for Gender, Ministry of Labor (Department of Occupational Health and Safety), etc. The training activities in Environmental and Social Impact Assessment including environmental project screening and implementation of ESMF can be conducted by OWEB, REPA, other program proponents, or Consultants. This will be done before the implementation of the project, to apply the knowledge/skills during the implementation of the program. Skills in the screening process will be very useful for assessing the environmental implications of the Project activities at the outset.

Table 12-4 sets out the estimated budget requirements which will be updated by OWEB PIU and relevant experts from the Environment offices of OWEB. A contingency is included to cater for the training of new staff from OWEB and other E&S for various relevant water and environment offices at regional, zonal, and district levels as required, on occasions where the first appointed team member has resigned and for re-training of non-performers.

Table12.4: Estimated Budget for training activities

Training activity	Duration [days]	Cost/participant/day* [USD]	No. of participants	Estimated Total Cost
Safeguards Specialists and other related experts at OWEB, MoWIE etc.				
National training course	2	100	10	2000
Annual follow up training for year two	1	100 each	10 each	2000
Regional and District Water teams				
Initial training	1	50	50	2500
Annual follow up training	1/2	50	50	2500
Line and sector Ministries and community representatives from implementing Districts				
Initial training/Workshop	1/2	50	100 (2 round)	5000
Trainers				
National and Regional level trainings	2	100	3	600
Lump sum cost for District and Kebele level trainings				2000
Training facilities				
**Lump sum stationery, banner, hall rent, entertainment, facilitator and others				7000
Total				**23600**
Contingency 10%				**2,360**
Grand Total				**25,960**

** Inclusive of participants' transport and per Diems and, if applicable, trainers' (regional water experts and in the case of initial training of District water team members transport and per Diems.*

***The lump sum cost which will be described later during preparation of training proposals should also include costs of stationery materials, handouts, refreshments, and if there are costs for facilitators.*

At the national level, the training activities in Environmental and Social Impact Assessment including environmental project screening and implementation of ESMF can be conducted by Ministry of Environment, Forest and Climate Change or private consultants under the supervision of the OWEB with the support of the MoWIE. This will have to be done before the implementation of the project, so as to apply the knowledge/skills during implementation of the projects. Skills in the screening process will be very useful for assessing the environmental implications of the Project activities at the outset.

12.4 Technical Assistance

As suggested in the institutional responsibility Chapter 11, it is proposed that OWEB will have one environmental specialist and one social safeguards specialist for the BRWDLP who will ensure fully implementation of ESMF and have the responsibility to address the implementation and supervision of E&S mitigation measures under the ESMF, as well as development of the required E&S safeguards instruments, as required. The draft Terms of reference for the E&S safeguards specialists are outlined below:

Draft Preliminary Terms of Reference for Environmental and Social Specialists

OBJECTIVE: To provide technical advice on environmental and social management and mitigation and ensure that the BRWDLP ESMF is fully implemented.

Tasks: The major tasks of the E&S safeguards specialists will be, but are not limited to:

- Coordinate and support the system of E&S screening, review, and approval process set out in this ESMF, and oversee its smooth implementation including advice to Partner and beneficiary institutions on the procurement of consultants for any required ESIA studies and other E&S safeguards instruments;
- Liaise with the Federal and Regional environmental protection offices (EPA and REPA) on a regular basis to support the implementation of the ESMF;
- Ensure ESIAs/ESMPs are carried out, as required, to meet the National and AfDB requirements
- Develop a training plan and lead the delivery of capacity building programs on project environmental and social risk and impacts management for lead and partner implementing institutions, as well as beneficiary and other stakeholders.
- Provide technical advice and support to beneficiary institutions on all technical issues related to natural resources and environmental and social risk management. These issues will relate to impacts on surface water, groundwater, biodiversity, natural habitats, soil, vegetation, human safety and health, ecology, and protected areas, land and soil degradation;
- Organize training workshops to raise awareness among officials of project implementation parties and stakeholder institutions, technical and management officers;
- Liaise with the project beneficiary and stakeholder institutions to ensure the project's compliance with the ESMF, RAP, ESMP, and all resettlement aspects of the project;
- Liaise with the project beneficiary and stakeholder institutions to ensure gender mainstreaming, GBV action plan implementation, GRM and Stakeholder Engagement Plan (SEP), WMP, etc.;
- Provide specific technical advice on mitigation measures for subprojects as necessary;
- Spearhead/coordinate the commissioning of an independent consulting firm to carry out an environmental and social safeguards implementation performance audit of the projects under BRWDLP on an annual basis;
- Undertake a review of ESIA/ESMP/RAP to ensure compliance with the ESMF and national and AfDB environmental policies; and in collaboration with the appropriate bodies initiate and carry out periodic environmental and social monitoring and inspection on selected subprojects; and
- Compile and submit quarterly, biannual, and annual E&S performance reports of the project under BRWDLP to the OWEB, MoWE, REPA, EPA, as appropriate.

13. ESMF IMPLEMENTATION INDICATIVE SCHEDULE

This section of the ESMF describes the process for ensuring that environmental and social concerns are adequately addressed through the institutional arrangements and procedures used by the program for the identification, preparation, approval, and implementation of projects. This section sets out the schedules for ESMF implementation adherence to the program implementation period.

To comply with various technical and performance standards, the proposed project activities to be supported under BRWDLP shall comply with this Environmental and Social Management Framework. The implementation, monitoring, and reporting arrangements for the ESMF have been worked out within the overall institutional structure for the implementation of the proposed program. The indicative implementation schedule for the ESMF, which will be further amended before project implementation is outlined in Table13-1 and takes into account all activities related to the proposed measures (enhancement and mitigation), the monitoring program, consultations, and institutional arrangements.

Table13-1: Implementation schedule for ESMF

No.	PROJECT ACTIVITIES	2023-2024				2024-2025				2025-2026				2026-2027				2027-2028				REPORTING DEADLINES AND OUTCOMES
		Quarter				Quarter				Quarter				Quarter				Quarter				
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
1	Recruitment of safeguards specialists by OWEB																					• Immediate after contract signing staff are recruited and before the commencement of program activities
2	Various Capacity Development Programs, as stated in this ESMF																					• ESMF before project approval and/or after finalizing screening of projects. • Annually at every year of 4th quarter
3	Development of Site-specific ESMPs/MSIPs																					• Developed ESMP and site management plans • Report immediate after the plans completed and before the civil work started or otherwise, when the need arise during the project implementation period • Quarterly Report for The Implementation Of ESMP
4	Development of Site-Specific Work plans																					• Work plans • Before the commencement of civil works
5	Technical Assistance																					• Annually • Not later than 15 days after completion of the technical assistance performed, including training
6	ESMF implementation, monitoring and supervision																					• Day to day activities • A detail monthly and Quarterly progress report shall be submitted at Every month and Quarter, respectively within the first 10 days of the next reporting period
7	Annual Audit/ reviews of ESMF																					• Annually by the end of 4th quarter • Not later than 15 days of after Audit completion
8	End-of-Program evaluation																					• Annually at the end of 5th year of 4th quarter • Within one month after end of project evaluation completed

14. INDICATIVE BUDGET REQUIREMENT FOR ESMF IMPLEMENTATION

The summary of the estimated budget requirement for the implementation of ESMF is provided in Table14-1 below. The environmental and social management cost is not included in the ESMF budget, as it will be covered directly or indirectly by the respective subproject budget, i.e., through allocation for project's administrative and logistical expenses or through the inclusion of cost for E&S management and mitigating measures in the subproject contracts documents.

Given the nature of the proposed program sites and the significance and scale of anticipated impacts that will be identified during the screening of each project, site-specific ESMPs (MSIPs) will be prepared. This ESMP will use the information and template stated under the environmental and social impacts, management, and monitoring sections of this ESMF. Recruitment of environmental and social specialists or consideration of other alternative means is required to develop site-specific Environmental and Social Management Plans (ESMPs) for all projects under the program as required. Every year an independent consultant is required for a period of at least one month to undertake an annual environmental and social audit that will be mainstreamed within the scope of the Program's Annual Audit.

The costs for the capacity building, the training as well as Recruitment of safeguards specialists, annual audit and end of project evaluation, etc. will be an estimated amount of USD 153,200. Costs related to the required Environmental and Social risk mitigation and monitoring will be 52,354 USD altogether 205,553 and with 10% contingency is estimated at 226,108 USD as detailed in Table14.1 below.

Table14-1: Indicative summary of estimated ESMF budget

Activity	Description	Total cost [USD]
Capacity development	As per table 12-4	23,200
ESMF management and Monitoring	Lump sum for five years quarterly monitoring (as per Table7-1 and Table 8-1.of chapter 7 and 8)	52,353
Annual Audit /reviews of ESMF	Based on four annual reviews (the last annual review is replaced by the end-of-program evaluation) (as per chapter 9).	40,000
GRM implementation	Lump sum for five years	20,000
Recruitment safeguard staffs	Lump sum for two safeguards specialists for five years	50,000
End-of-Program evaluation	An evaluation of the impact of the ESMF and the projects (as per chapter 9)	20,000
Total		**205,553**
Contingence (10%)		20,555
Grand Total		**226,108**

The budget shows estimates as the actual budget will be determined during the implementation phase, when the specific number of people required for training will be identified and the level of technical assistance required.

15. FEEDBACK AND GRIEVANCE REDRESS MECHANISM (GRM)

Grievance redressing mechanism is designed in view of the fact that BRWDLP program activities may upset the existing balance in society. The resettlement operation will touch upon property issues, means of livelihood, and organization of social and spatial aspects that influence proximity to a set of environmental, economic, social, and spiritual assets. Therefore, the grievance redressing system has been designed in such a way that it functions in a flexible manner and the implementing agency has to incline to a pro-poor approach in all its decisions. The GRM will have a working place and adequate budget for implementation.

Grievances will be actively managed and tracked to ensure that appropriate resolution and actions are taken. A clear time schedule will be defined for resolving grievances, ensuring that they are addressed in an appropriate and timely manner, with corrective actions being implemented if appropriate and the complainant being informed of the outcome.

The purpose of a Grievance redressing mechanism is to establish a way for individuals, groups, or communities affected by the program activities to contact responsible body if having an enquiry, a concern, or a formal complaint. Grievance handling mechanism should address affected persons' concerns and complaints promptly, using an understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to all segments of the affected persons.

Grievances may arise from members of communities who are dissatisfied with (i) the eligibility criteria, (ii) community planning and resettlement measures, (iii) actual implementation, or (iv) issues related to environmental and social concerns and (v) GBV related aspects. This chapter sets out the measures to be used to manage grievances.

The grievance procedure does not replace existing legal processes. Based on consensus, the procedures will seek to resolve issues quickly to expedite the receipt of entitlements, without resorting to expensive and time-consuming legal actions. If the grievance procedure fails to provide a result, complainants can still seek legal redress procedure.

A local Grievance Redress Committee (GRC) will be established, consisting of representatives from OWEB, City Municipality/ Zonal/District/ Kebele Administration, District Justice Office, elders or influential personalities other than the displaced persons, and the Church/Mosque Administration. The Committee will be headed by City/District/Zonal Administrator. Grievances should be settled amicably whenever possible. That is, positive discussions are made to convince the affected PAPs in the presence of the GRC. However, if the resolution of a case requires additional payment or any form of relocation of resources, the report shall be sent to the appropriate administrative executive for consideration. If the administrator agrees to the recommendation, he/she shall instruct the resettlement Unit to implement the amended provision; on the other hand, if the recommendation of the GRC is such that it upsets legal frameworks, the aggrieved party may be advised to pursue the case in a normal law court.

According to Proclamation No.455/2005, Article11, subarticle1: *"In rural areas and in urban centers where an administrative organ to hear grievances related to urban land holding is not yet established, a complaint relating to the amount of compensation shall be submitted to the regular court having jurisdiction."*

In urban areas, a PAP who is dissatisfied with the amount of compensation may complain to an administrative organ and if the PAP is still not satisfied, may appeal to the regular appellate court or municipal appellate court within thirty days from the date of the decision.

The grievance redressing procedure is developed to meet AfDB and Ethiopian government legal requirements relating to grievance resolution and international requirements.

A set of forms which will be used for recording grievances and the actions taken are prepared for the proposed program as listed below (shall be translated in local language).

a) Grievance Statement Form
b) Grievance Receipt Acknowledgement Form
c) Grievance Investigation Form
d) Grievance Investigation Outcome Form

The grievance mechanism applies to all complaints related to Borana Resilient Water Development for Improved Livelihood Program (BRWDLP) activities; and is comprised of the following steps:

Outline of BRWDLP Grievance Redress Mechanism Steps

- ***Step 1 – Receive and Record Compliant*** (using the Grievance Receipt Standard Form)
- ***Step 2 – Review Complaint and Allocate Actions*** (Complaints are screened, and actions then be allocated to investigate and resolve grievance or refer matter to next level)
- ***Step 3 – Notify Complainant of Proposed Resolution*** (notify the complainant that the complaint has been received (this must happen within 7 days), how it is being dealt with, by whom and an approximate estimate of how long the process might take.
- ***Step 4 – Take Action and Update Complainant*** (undertake the proposed actions for resolution and update complainant when it is complete).
- ***Step 5 – Close out & Lessons Learnt*** (occurs when both parties are happy with proposed solution).
- ***Step 6 – Update Project Grievance Records (ongoing)*** (using standard forms, grievances will be maintained and stored including for information for any outstanding actions)
- ***Step 7 – Reporting*** (to concerned/ defined parties.

16. CONCLUSION

The proposed Borana Resilient Water Development for Improved Livelihoods Program Water Supply Project is expected to bring considerable benefits to communities within the sub-project districts capital towns, areas as well as adjoining settlements and the district communities in general. Anticipated benefits include increased access to safe water supply, improvement in public health status and sanitation conditions, time and energy savings particularly for women and children, among others.

This Environmental and Social Management Framework (ESMF) is meant to ensure that the implementation of the Program will be carried out in an environmentally and socially sustainable manner. The ESMF provides the project implementers with an environmental and social screening process that will enable them to identify, assess and mitigate potential environmental and social impacts of sub-project activities, including the preparation of site-specific Environmental Assessments (EIA) and Environmental and Social Management Plans (ESMP) where applicable, in accordance with Ethiopia's proclamations and policies, as well as AfDB safeguard policies particularly Environmental Assessment (OS1).

The ESMF recognizes existing gaps and weaknesses for implementing the ESMF under this project and realizes the importance of strengthening the capacity of key implementing institutions. The capacity development will provide an enabling environment to address environmental and social issues by OWEB, Regional EPA and line sectors down to districts and kebele levels in implementing the e ESMF.

Consequently, in view of the long-term socio-economic benefits that can be gained, there are no significant environmental and social justifications for not proceeding with the proposed Program in the form in which has been presented. The potential benefits from the Program far outweigh the negative impacts and inconveniencies that accompany project implementation in as much as the recommended mitigation measures and mechanisms are duly considered and implemented.

ANNEXES

Annex-1: List of Subprojects that are not eligible for Funding

Projects under BRWDP that are not eligible for funding
Block the access to water points etc. used by others
Cause encroachment to, and adversely affect, important natural habitats (e.g., wildlife reserves; parks or sanctuaries; protected areas; natural habitat areas, forests and forest reserves, wetlands, national parks or game reserves; any other ecologically/environmentally sensitive areas)
Impact on physical cultural resources (archaeological sites; religious monuments or structures; natural sites with cultural values; cemeteries; graveyards; graves; and other sites of significance)
Located in protected areas and ecologically sensitive sites
Would not disadvantage or give advantage to community members.
Contravene international and regional conventions on environmental and social issues
Cause large-scale physical disturbance of the site or the surroundings

Annex-2: Environmental and Social Screening Form

Introduction

This Environmental and Social Screening Form (ESSF) has been designed to assist in the evaluation of construction and refurbishment/rehabilitation activities under **BRWDLP**. The form will assist the project implementers and reviewers to identify environmental and social impacts and their mitigation measures if any. It will also assist in the determination of requirements for further environmental work (such as environmental and social management **plans**) if necessary.

The form helps to determine the characteristics of the prevailing local bio-physical and social environment with the aim of assessing the potential impacts of the construction and rehabilitation activities on the environment by the sub-project. The ESSF will also assist in identifying potential socio-economic impacts that will require mitigation measures and/or resettlement and compensation.

Annex 2.1: Project information for screening potential safeguards impacts (Form 1)

I: Basic Data:

Project Name:	**District/City:**
Project Location:	**Nature/Size:**
Type and Name of civil work activity: (e.g. new construction, rehabilitation, periodic maintenance):	
Proposed date for Commence of Work:	
OWEB/relevant institution representative	
Name & Signature of Evaluator: **1……..** **2. ……**	**Date of Field Evaluation:** **…….** **……**

II: Site Description

Site Features	**Description**
Physical description of the site (Easting, Northing, Alt, etc.	
Proximity to existing water points, wells and other water resources	
Presence and type of vegetation	
Description of current land use	
Name of owner or user of the land/project site	

Completeness of project Application: Does the project application document contain, as appropriate, the following information?

No	**Issues to be considered under AfDB OSs**	**Appraisal**	**Risk / Significance rating**					
		Yes/No	**.520None**	**Low**	**Moderate**	**Substantial**	**High**	**unknown**
1	**Environmental Screening**							

No	Issues to be considered under AfDB OSs	Appraisal	Risk / Significance rating					
		Yes/No	.520None	Low	Moderate	Substantial	High	unknown
	Will the project generate the following impacts?							
1.1	Loss of trees							
1.2	Soil erosion/siltation in the area							
1.3	Pollution to land-diesel ,oils							
1.4	Dust emissions							
1.5	Solid and liquid wastes							
1.5	Borrow pits and pools of stagnant water							
1.6	Rubble/heaps of excavated soils							
1.7	Demolishing waste from buildings							
1.8	Long term depletion of water							
1.9	Nuisance from noise or smell							
1.11	Incidence of flooding							
1.12	Cross through, located within or nearby environmentally sensitive areas (e.g. national parks, intact natural forests, wetlands, e.t.c.)?							
1.13	Cause poor water drainage and increase the risk of water-related diseases such as malaria or bilharzias?							
1.14	Will certain ES risks and adverse impacts be difficult to avoid, or minimize, or mitigate because the project involves a technology that is new and/or complex, and the risks and/or impacts of this technology are not fully understood, and/or (ii) the project involves (a) complex mitigation							

No	Issues to be considered under AfDB OSs	Appraisal	Risk / Significance rating					
		Yes/No	.520None	Low	Moderate	Substantial	High	unknown
	measure(s) that its implementation success is not fully assured?							
1.15	Does the scale of the project have the potential to cause diverse and multiple ES risks and impacts extended over a large area? This applies to both direct and indirect risks and impacts.							
1.16	Does the project have associated facilities that could lead to wide-ranging ES risks and impacts? Does the project design take into consideration such associated facilities?							
2	**Labor and Working Conditions and Community safety**							
2.1	Risk of exposing the workers to extremely hazardous working conditions including concerns of structural safety.							
2.2	Will the development of the project have the potential for immigration of workers and persons seeking employment (e.g. seasonal, transient)? Is there potential for employment of community workers?							
2.3	Is there any institutional impediment to fair treatment, non-discrimination and/or equal opportunity?							
2.4	Is there risk or potential for the employment of child labor and/or forced labor?							
2.5	Could the project expose communities to emergency events or hazards that involve health or safety risks and impacts?							

No	Issues to be considered under AfDB OSs	Appraisal	Risk / Significance rating					
		Yes/No	.520None	Low	Moderate	Substantial	High	unknown
2.6	Are project activities, civil works or buildings located in areas prone to natural disasters or extreme weather events?							
2.7	Will the project result in potential traffic and road safety risks to workers, communities and road users throughout the project life cycle?							
2.8	Does the project involve a potential for community exposure to water-borne, water-based, water-related and vector-borne diseases, and communicable and non-communicable diseases?							
2.9	Risk of workers to extreme exposure for GBV							
2.10	Spread of HIV/AIDS and other STI							
3	**Resettlement Screening**							
	Will the project generate the following negative social and economic impacts?							
3.1	Loss of land to households							
3.2	Loss of properties –houses, structures							
3.3	Loss of trees, fruit trees by households							
3.4	Loss of crops by people							
3.5	Loss of access to river/forests/grazing area							
3.6	Conflicts overuse of local water resources							
3.7	Disruption of important pathways, footpaths/roads							
3.8	Loss of communal facilities –churches							

No	Issues to be considered under AfDB OSs	Appraisal	Risk / Significance rating					
		Yes/No	.520None	Low	Moderate	Substantial	High	unknown
3.9	Loss of livelihood system							
4	**Gender, Vulnerable and disadvantaged group screening**							
4.1	Does the project present risks to and impacts on individuals or groups who, because of their circumstances, may be disadvantaged or vulnerable due to their: - Age, gender, ethnicity, or race - Religion and belief systems - Socio-cultural grouping or nationality - Sexual orientation and identity - Climate change and seasonal factors							
4.2	Is the project likely to affect disadvantaged or vulnerable individuals or groups who would require specialized approaches to participation or consultation for the project?							
4.3	Is the project likely to face any barriers to information disclosure, transparent sharing of project information among stakeholders, or other aspects that could affect meaningful consultations?							
4.4	Is there a potential for prejudice or discrimination in accessing project benefits for those who may be disadvantaged or vulnerable?							
5	**Cultural Heritage Screening**							
5.1	Impact heritage site, graveyard land							
5.2	Will the project activities involve excavations, demolitions, earth movements, flooding or							

No	Issues to be considered under AfDB OSs	Appraisal	Risk / Significance rating					
		Yes/No	.520None	Low	Moderate	Substantial	High	unknown
	changes to physical environment that could affect cultural heritage values?							
5.3	Are project activities likely to affect tangible and/or intangible cultural heritage (e.g., archaeological sites that comprise any combination of structural remains, artifacts, human or ecological elements, and may be located entirely beneath, partially above, or entirely above the land or water surface)?							
5.4	Are project activities located in legally recognized and/or legally protected areas or defined buffer zones designated for the protection of cultural heritage?							
5.5	Will the project activities affect cultural heritage in non-designated or legally recognized areas or protection zones?							
5.6	Will the project affect cultural heritage assets that are movable (i.e., rare books, manuscripts, paintings, etc.) that could be endangered by the project?							

Categorization & Recommendations:

After compiling the above, if the project under BRWDLP falls under "High, Substantial, Moderate or low" risk, proceed to determine the environment category of the project based on the environmental categories of AfDB ISS (Category 1, Category 2, Category 3, Category 4) and (Schedule I, II or III) based on the National and Regional EIA procedural guideline issued by the EPA and REPA.

a. AfDB OSs Categorization

Category 1	If the Bank operations are likely to cause significant environmental and social impacts – Category 1 projects are likely to induce significant and/or irreversible adverse environmental and/or social impacts or to significantly affect environmental or social components that the Bank or the borrowing country considers sensitive. Some programme-based operations or other regional and sector programme loans that have significant adverse environmental or social risks and are deemed to be Category 1. In some cases, projects are included in Category 1 because of their potential cumulative impacts or the potential impacts of associated facilities. Any project requiring a Full Resettlement Action

	Plan (FRAP) under the provisions of the Bank's policy on involuntary resettlement is also deemed to be Category 1.
Category 2	If the Bank operations likely to cause less adverse environmental and social impacts than Category 1 – Category 2 projects are likely to have detrimental site-specific environmental and/or social impacts that are less adverse than those of Category 1 projects. Likely impacts are few in number, site-specific, largely reversible, and readily minimised by applying appropriate management and mitigation measures or incorporating internationally recognized design criteria and standards. An operation that involves resettlement activity for which an Abbreviated Resettlement Action Plan (ARAP) is required under the ESAPs is classified as Category 2. Most programme based operations and regional or sector programme loans designed to finance a set of subprojects approved and implemented by the borrower or client are included in this category unless the nature, scale or sensitivity of the intended pipeline of subprojects involves either a high level of environmental and social risk or no such risk
Category 3	If the Bank operations with negligible adverse environmental and social risks – Category 3 projects do not directly or indirectly affect the environment adversely and are unlikely to induce adverse social impacts. They do not require an environmental and social assessment. Beyond categorisation, no action is required. Nonetheless, to design a Category 3 project properly, it may be necessary to carry out gender analyses, institutional analyses, or other studies on specific, critical social considerations to anticipate and manage unintended impacts on the affected communities
Category 4	If the Bank operations involving lending to financial intermediaries. Financial intermediaries also include private or public sector companies that receive corporate loans or loans for investment plans from the Bank that are used to finance a set of subprojects. Financial intermediary subprojects equivalent to Category 1 and Category 2 are subject to the relevant OS requirements, as if they were directly financed Category 1 or Category 2 projects. However, if a client will use a Bank corporate loan to finance high-risk investment projects known at the time of loan approval, the loan can be considered Category 1. Financial intermediary operations are further classified3 as FI-A, FI-B, and FI-C to reflect the potential environmental and social impacts and risks of the financial intermediary's existing or proposed portfolio of subprojects, based on the nature, type, scale and sector exposure. Subcategory FI-A: the financial intermediary's portfolio is considered high risk, and it may include subprojects that have potential significant adverse environmental, climate change, or social impacts and that are equivalent to Category 1 projects. • Subcategory FI-B: the financial intermediary's portfolio is deemed to be medium risk, and may include subprojects that have potential limited adverse environmental, climate change, or social impacts and that are equivalent to Category 2 projects.

	• Subcategory FI-C: the financial intermediary's portfolio is considered low risk and includes subprojects that have minimal or no adverse environmental or social impacts and that are equivalent to Category 3 projects.

***Place tick in applicable box**

b. National EIA Procedural Guideline (2003) Categorization

Schedule I	BRWDLP project highly unlikely to fall under "Schedule-I" Category. In the unlikely event that subproject falls under "Schedule-I" the subproject is to be fed into the standard ESIA process determined by the Federal or Regional EPA
Schedule II	BRWDLP project will require a partial/preliminary ESIA, and will necessitate the preparation of a Preliminary ESIA / ESMP.
Schedule III	BRWDLP project is not subject to environmental assessment as no potential impacts are anticipated.

***Place tick in applicable box**

Summary of assessment (based on field visit):

Environmental Category (1, 2 or 3) of the project activity/ project (with justification):

Recommendation

☐ **The Project can be considered for approval.** The application is complete, all significant environmental and social issues are resolved, and no further Project planning is required: **Approved without condition** (*Project activity is not of environmental and social concern and approved*)

☐ **Safeguards instrument(s) required: Partial ESIA, ESMP or others (please specify)**

☐ **ESMP required:**

☐ **Rejected; reasons for rejection:**

☐ **Others (specify):**

☐ **A field appraisal is required.**

CERTIFICATION

I/We certify that I/we have thoroughly examined all the potential adverse effects of this Project. To the best of our knowledge, the Projects plan as described in the application and associated planning reports (e.g. ESMP, RAP/ARAP/WMP/SMP,), if any, will be adequate to avoid or minimize all adverse environmental and social impacts.

A Field Appraisal report will be completed and added to the Project file.

Name of desk appraisal officer (print): ……...

Signature: ……Date: ……

OWEB/MoWIE/Regional Environmental offices representative

Name: ……..

Position:……

(signature): **……**

Date: ……

Desk Appraisal by Review Authority:…….

Note: *A field appraisal must be carried out if the Project:*

- *Needs to acquire land, or an individual or community's access to land or available resources is restricted or lost, or any individual or family is displaced.*
- *May restrict the use of resources in a park or protected area by people living inside or outside of it.*
- *May affect a protected area or a critical natural habitat.*
- *May encroach onto an important natural habitat, or have an impact on ecologically sensitive ecosystems (e.g. rivers, streams, wetlands)*
- *May adversely affect or benefit an underserved and vulnerable people.*
- *Involves or introduces the use of pesticides.*
- *Involves, or results in: a) diversion or use of surface waters; b) construction or rehabilitation of latrines, septic or sewage systems; c) production of waste (e.g. slaughterhouse waste, medical waste); d) new or rebuilt irrigation or drainage systems; or e) weirs, reservoirs or water points.*
- *Any others to be clarified/checked at the project site (please mention them):*

……

Annex-3: Suggested Environmental and Social Field Appraisal Form for a Subproject

NAME OF THE PROJECT: _____

NAME OF SUBPROJECT: _____ Application Number: _____

PART 1: IDENTIFICATION

1. Subproject Name: (…….)

2. Subproject Location: (……)

3. Reason for Field Appraisal:

4. Date(s) of Field Appraisal:

5. Field Appraisal Officer and Address:

6. Extension Team Representative and Address:

7. Community Representative and Address:

PART 2: DESCRIPTION OF THE SUBPROJECT

8. Project Details: _____

_____

PART 3: ENVIRONMENTAL AND SOCIAL ISSUES

9. Will the Subproject:	Yes	No
• *Need to acquire land?*	☐	☐
• *Affect an individual or the community's access to land or available resources?*	☐	☐
• *Displace or result in the involuntary resettlement of an individual or family?*	☐	☐

If "Yes", tick one of the following boxes:

☐ The Resettlement Action Plan (RAP) included in the Project application is adequate. No further action required.

☐ The RAP included in the Project application must be improved before the application can be considered further.

☐ An RAP must be prepared and approved before the application can be considered further.

10. Will the subproject:	**Yes**	**No**
• Encroach onto an important natural habitat?	☐	☐
	☐	☐

- Negatively affect ecologically sensitive ecosystems?

If "Yes", tick one of the following boxes:

☐ The Environmental and Social Management Plan (ESMP) included in the Project application is adequate. No further action required.

☐ The ESMP included in the Project application must be improved before the application can be considered further.

☐ An ESMP must be prepared and approved before the application can be considered further.

11. Will this subproject involve or result in: **Yes** **No**

- Diversion or use of surface waters? ☐ ☐
- Production of waste? ☐ ☐
- New or rebuilt irrigation or drainage systems? ☐ ☐

If "Yes", tick one of the following boxes:

☐ The application describes suitable measures for managing the potential adverse environmental effects of these activities. No further action required.

☐ The application does not describe suitable measures for managing the potential adverse environmental effects of these activities. An ESMP must be prepared and approved before the application is considered further.

12. Will this subproject rely on water supplied from an existing reservoirs or weir?

Yes ☐ **No** ☐

If "Yes", tick one of the following boxes:

☐ The application demonstrates that a dam safety report has been prepared, the dam is safe, and no remedial work is required. No further action is required.

☐ The application does not demonstrate that a dam safety report has been prepared, the dam is safe, and no remedial work is required. A dam safety report must be prepared and approved before the application is considered further.

15. Are there any other environmental or social issues that have not been adequately addressed?

Yes ☐ **No** ☐

If "Yes", summarize them:

.....

And tick one of the following boxes:

☐ Before it is considered further, the application needs to be amended to include suitable measures for addressing these environmental or social issues.

☐ An ESMP needs to be prepared and approved before the application is considered further.

PART 4: FIELD APPRAISAL DECISION

- **The Subproject can be considered for approval.** Based on a site visit and consultations with both interested and affected parties, the field appraisal determined that the community and its proposed project adequately address environmental and/or social issues as required by the ESMF.
- **Further Project preparation work is required before the application can be considered further.** The field appraisal has identified environmental and/or social issues that have not been adequately addressed. The following work needs to be undertaken before further consideration of the application:

All required documentation such as an amended application, ESMP, RAP//WMP/SMP, etc. will be added to the Subprojects file before the Subprojects is considered further.

Name of field appraisal officer (print): .....

Signature: .....**Date:** ……

Annex-4: Guideline for the preparation of site specific ESMP

ESMPs should demonstrate that proposed environmental and social management and monitoring activities will encompass all major impacts and how they will be integrated into project supervision. The ESMP should also describe proposed measures, methods, and actions to facilitate public consultation. It is important that the ESMP identify linkages to other social and environmental safeguards plans relating to the project, such as plans to deal with resettlement issues. Given the scale and nature of the project and the significance of the potential anticipated impacts, OWEB in collaboration with Regional Water and Energy Bureaus are responsible for preparing a project-specific ESMP for identified projects in a format suitable for inclusion as technical specifications in the contract of each project beneficiaries, if applicable and required. ESMPs should be finalized and approved after considering comments from the Ministry of Water, and Energy (MoWIE) at the national level and from Regional Environmental offices at regional level. The AfDB safeguards team will review and provide comments on draft site-specific instruments (if required) and monitor safeguards compliance, among others. Given below are the important elements that constitute an ESMP:

i) **Description of the project under BRWDLP**: Scale nature and type of projects implemented under the proposed programs are summarized.

ii) Description of Project implementation area: The Biophysical and social environmental setting of the specific project implementation area are summarized

iii) **Impacts:** Predicted adverse environmental and social impacts (and any uncertainties about their effects) for which mitigation is necessary should be identified and summarized.

iv) **Description of Mitigation Measures**: Each measure should be briefly described in relation to the impact(s) and conditions under which it is required. These should be accompanied by and/or referenced to designs, development activities, operating procedures, and implementation responsibilities. Proposed measures and actions to facilitate public consultations should be clearly described and justified. Feasible and cost-effective measures to minimize adverse impacts to acceptable levels should be specified with reference to each impact identified. Further, the ESMP should provide details on the conditions under which the mitigation measure should be implemented. The ESMP should also indicate the various practicable measures applicable to the proposed projects at each project phases (design, construction and/or operation). Efforts should also be made to mainstream environmental aspects wherever possible.

v) **Description of monitoring program:** The ESMP identifies monitoring objectives and specifies the type of monitoring required; it also describes performance indicators which provide linkages between impacts and mitigation measures identified in the ESA report, parameters to be measured (for example: national standards, extent of impacted area to be considered, etc.), methods to be used, sampling location and frequency of measurements, and definition of thresholds to signal the need for corrective actions. Monitoring and supervision arrangements should be agreed by the Bank and the borrower to: ensure timely detection of conditions requiring remedial measures in keeping with best practice; provide information and the progress and results of mitigation and institutional strengthening measures; and, assess compliance with National and AfDB environmental safeguard policies and IFC performance standards

vi) **Institutional arrangements**: Institutions responsible for implementing mitigation measures and for monitoring their performance should be clearly identified. Where necessary, mechanisms for institutional coordination should be identified, as often, monitoring tends to involve more than one institution. This is especially important for projects requiring cross-sectoral integration. The ESMP specifies who is responsible for undertaking the mitigation and monitoring measures, e.g., for enforcement of remedial actions, monitoring of implementation, training, financing, and reporting. Institutional arrangements should also be crafted to maintain support for agreed enforcement measures for environmental protection. Where necessary, the ESMP should propose strengthening the relevant agencies through such actions as: establishment of appropriate organizational arrangements; appointment of key staff and consultants.

vii) **Implementing schedules:** The timing, frequency and duration of mitigation measures and monitoring should be included in an implementation schedule, showing phasing and coordination with procedures in the overall project implementation/operations manual. Linkages should be specified where implementation of mitigation measures is tied to institutional strengthening and to the project legal agreements, e.g. as conditions for loan effectiveness or disbursement.

viii) **Reporting procedures**: Feedback mechanisms to inform the relevant parties on the progress and effectiveness of the mitigation measures and monitoring itself should be specified. Guidelines on the type of information required and the presentation of feedback information should also be highlighted.

ix) **Cost estimates and sources of funds:** Implementation of mitigation measures mentioned in the ESMP will involve an initial investment cost as well as recurrent costs. The ESMP should include cost estimates into the Project design, bidding and contract documents to ensure that the contractors will comply with the mitigation measures. The costs for implementing the ESMP will be included in the Project design, as well as in the bidding and contract documents. It is important to capture all costs – including administrative, design and consultancy, and operational and maintenance costs – resulting from meeting required standards or modifying project design.

To ensure unique identification and to cater for changes in administrative borders or names, the ESMP further requires entering of GPS coordinates of the location, if applicable.

For each potential impacts of the project, corresponding mitigation measures, and who is responsible for implementation is indicated. For each potential environmental and social impact, there can be more than one mitigation measure. Responsibility for implementation of mitigation measures will typically rest with the contractors during construction and operation phase.

The monitoring section of the ESMP prescribes indicators for monitoring the environmental and social impact and the effects of mitigation measures. The responsibility for this will typically rest with the OWEB. A template for ESMP is depicted in annex 5.

Annex-5: Suggested Environmental and Social Management Plan (ESMP) Template for a Project

Project identification					
Project title/Name					
Region		***Zone***		***District***	
Kebele/community		***Location GPS coordinates***			

Description of the project activity
Description of potential environmental and social impacts;
Description of planned mitigation measures and monitoring along with institutional responsibilities and capacity/training requirements

Environmental and Social Management Plan-Mitigation					
Project Phase	**Project activity**	**Environmental Impacts**	**Mitigation/ enhancement measures**	**Institutional responsibilities**	**Cost**
Pre-construction					
Construction					
Operation and maintenance					
Total mitigation costs					

Environmental and Social Management Plan-Monitoring							
Project Phase	**Mitigation measures**	**Parameters to be monitored**	**location**	**measurements**	**frequency**	**Institutional responsibilities**	**Cost**
Pre-construction/ activities							
Construction/ activities							
Operation and maintenance/ activities							
Total monitoring costs							

Annex-6: Sample Terms of Reference (ToR) for ESIA Preparation

Based on the screening and scoping study results, ESIA terms of reference will be prepared. The terms of reference will have the following contents. *Please refer to "Ethiopia's Environmental and Social Safeguards Framework for the CRGE Initiative" (MEF, 2015) for detail information on the ESIA process steps (Screening, Scoping, Impact study, Reviewing, Decision-making, Monitoring and reporting, and Auditing and Reporting). Further, please refer to the Guideline Series Documents for Reviewing Environmental Impacts Study Reports (EPA, 2003) for detail information on contents and descriptions of ESIA report (EPA, 2003).*

I. **Objective of the TOR:** This section should state the scope of the ESIA in relation to the screening category and the proposed program activities. It needs to stipulate the process and the timing of the ESIA preparation and implementation stages in order to adequately address the safeguards requirements of the GoE and the AfDB.

II. **Introduction and Context:** The ToR needs to provide information on program activity objective, the name of the program activity proponent, the rational for conducting the ESIA, specific components of the program activity, program activity area with location map, short briefing of social and environment of settings and applicable national and international safeguard policies.

III. **Location of the study area and likely major impacts:** State the area involved and the boundaries of the study area for the assessment. Identify adjacent or remote areas which should be considered with respect to impacts of particular aspects of the program activity.

IV. **Mission/Tasks:** The ESIA study team/consultant should clearly execute the following tasks.

Task A: Description of the proposed program activity: Describe the location, size and nature of the program activity, environmental assessment category, brief description of program activity alternatives, time schedule for phasing of development (i.e. preconstruction, construction, operation/maintenance, decommissioning), and resources (finance, human, material and technology) required for the program activity, among others.

Task B: Baseline information/Biophysical and social-economic description: Describe the baseline/biophysical and socio-economic characteristics of the environment where the program activity will be implemented; and area of influence. Include information on any changes anticipated before the program activity commences.

Task C: Administrative and legal Policy framework: In addition to the required administrative and institutional setup for the implementation of the program activity, this part needs to identify pertinent policies, regulations and guidelines pertinent to the study that include:

- ✓ National laws and/or regulations on environmental and social assessments;
- ✓ Regional environmental and social assessment regulations;
- ✓ Environmental and social assessment regulations of any other financing organizations involved in the program activity;
- ✓ Relevant international environmental and social agreements/conventions to which
- ✓ Ethiopia is a party;
- ✓ AfDB safeguards policies; and
- ✓ IFC performance standards applied to the Program

Task D: Identification of potential impacts of the program activity: Identify all potential significant impacts that the program activity is likely to generate. Assess the impacts from changes brought about by the program activity on baseline environmental conditions as described under Task B. The analysis should address both the positive and negative impacts of the program activity. Wherever possible, describe impacts quantitatively, in terms of environmental and social costs and benefits.

Task E: Propose Program activity alternatives: Alternatives extend to site, design**,** technology selection, construction techniques and phasing, and operating and maintenance procedures. Compare alternatives in terms of potential environmental and social impacts; capital and operating costs; suitability under local conditions; and institutional, training, and monitoring requirements.

Task F: Preparation of an Environmental and Social Management Plan (ESMP): Describe the mitigation measures for adverse environmental and social impacts, staffing/institutional and training requirements, schedules, and other necessary support services to implement the mitigating measures. Provide environmental and social protection clauses for application by contractors and consultants, if any. The ToR should state that the concerned and affected parties should agree on the proposed mitigating measures before they are included in the ESMP.

Task G: Monitoring Plan: This organizes a comprehensive plan to monitor the implementation of mitigating measures and the impacts of the program activities. It should also address an estimate of capital and operating costs and a description of other inputs (such as training and institutional strengthening) needed to implement the plan.

V. Qualification of the ESIA study team/Consultant: The ToR should provide clear guidance on the qualification of the ESIA study team.

VI. Duration of the ESIA Study: This should be determined according to the type of the program activity.

VII. Preparation of the final Report: The ESIA study team/consultant will produce the final report one week after receiving comments from program activity proponent and concerned stakeholders. The final report will include comments from these institutions.

VIII. Suggested Contents of the ESIA Report: *Please refer to the "Guideline Series Documents for Reviewing Environmental Impacts Study Reports" (EPA, 2003) to get detail information on the contents of ESIA report (EPA, 2003). The contents of the ESIA report should contain the following elements.*

- Executive Summary
- Introduction
- Methodology
- Administrative, legal and policy requirements
- Description of program activity (need, objectives, technical details, size, location input and other relevant requirements)
- An outline of the main development alternatives
- Description of baseline information/environmental and socio-economic conditions
- An account of the prediction and assessment of each impact at all stages of the program activity cycle for each alternative

- Description of the methodology and techniques used in assessment and analysis of the program activity impacts
- Description of environmental and social impacts for program activity
- Environmental and Social Management Plan (ESMP) for the project including the proposed management and mitigation measures and the respective costs**;**
- Environmental and Social Monitoring Plan for the project including the proposed monitoring measures and the respective costs**;**
- Institutional responsibilities for monitoring and implementation; Summarized table for ESMP.
- Conclusions and recommendations
- References
- Annexes
  - ✓ **List of Persons/Institutions met**
  - ✓ **Minutes of consultations**
  - ✓ **List of ESIA report preparers** – individuals and organizations.
  - ✓ **Record of stakeholder and community 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.
  - ✓ **Tables presenting the relevant data** referred to or summarized in the main text.
  - ✓ **List of associated reports** (e.g., ESMP, RAP, socio-economic baseline survey, WMP, SEP, etc.)
  - ✓ **List of the ESIA study team members**

Note:

The above ToR outlines the minimum content that should be included in a full-fledge ESIA report (i.e. Schedule–I sub-projects). For Preliminary ESIA report (i.e. Schedule-II subprojects), early consultations would need to be carried with the relevant federal, regional or zonal EPA offices to determine the minimum content for such report.

Annex-7: Procedures for Chance Finds of Physical Cultural Resources

Given the proposed project activities under the BRWDLP are implemented in areas where potential land acquisition is required, the project activity may have an impact on cultural resources, particularly for unknown cultural heritage. The Project activities are required to comply with all the requirements under the Bank policy throughout the program implementation period, expecting that unforeseen impacts might occur during the construction activities of projects. Within the scope of the proposed Programs, any project activities that will impact the cultural resources are not eligible for funding (for a list of projects that are not eligible for funding, please refer to Annex 1). In case of any possibility of the chance find of physical cultural resources, most notably during excavation as part of construction activity, the chance finds procedures is one of the instruments to be used during the Program implementation period.

Such physical cultural resources may take the form of works of art, building structures, graves or other sites of importance, including sites of archaeological, historical, or religious significance.

All chance finds of such physical cultural resources will lead to the temporary suspension of all activity that will adversely impact the cultural resource. Contractors will include detailed procedures for ensuring the protection of the cultural resources, including cessation of activities until the significance of the find has been determined and until appropriate mitigating measures has been implemented. This Annex contains standard provisions to be annexed to contract documents that potentially will lead to chance finds of physical cultural resources, as required. Therefore, the attachment outlined below will be annexed to the contract document to manage in case there is the possibility of chance find of physical cultural resources.

Attachment to contracts in case of potential chance find of physical cultural resources

If the Contractor discovers archaeological sites, historical sites, remains and objects, including graveyards and/or individual graves during excavation or construction, the Contractor shall:

1: Excavation in sites of known archaeological interest should be avoided and as stated in annex 1, such projects are not eligible for funding. Where historical remains, antiquity or any other object of cultural, historical or archaeological importance (including graveyards) are unexpectedly discovered during construction in an area not previously known for its archaeological interest, the following procedures should be applied:

   a) Stop the construction activities in the area of the chance find.

   b) Delineate the discovered area.

   c) Secure the area to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be present until the responsible national and regional authorities and the Ministry of Culture and truism to take over.

   d) Notify OWEB environmental and social safeguards specialist who in turn will notify the MoWIE and OWEB respective relevant institutions to contact the responsible local authorities and the Ministry of Culture and Tourism immediately (less than 24 hours).

   e) The Ministry of Culture and Tourism will be in charge of protecting and preserving the area until deciding on the proper procedures to be carried out. This might require an evaluation of the findings to be performed by the archaeologists of the relevant Ministry Culture, and Tourism (within 1 week).

The evaluation of the findings will take in consideration various criteria relevant to cultural heritage, including the aesthetic, historic, scientific or research, social and economic values as decided by the Ministry of Culture and Tourism.

f) Decisions on how to handle the finding are taken by the responsible authorities and the Ministry of Culture and Tourism (within 2 weeks). This could include changes in the location of the project layout (such as when the finding is irremovable remains of cultural or archaeological importance), conservation, preservation, restoration and salvage.

g) Construction or rehabilitation work will resume only after authorization is provided by the responsible local authorities and the Ministry of Culture and Tourism concerning the safeguard of the heritage.

h) Authorization to resume work shall be communicated to the contractor and/or regional and District energy experts in writing by the Ministry of Culture and Tourism.

2: In case of delays incurred indirect relation to any physical cultural resources findings not stipulated in the contract (and affecting the overall schedule of works), the contractor/masons may apply for an extension of time. However, the contractor will not be entitled to any kind of compensation or claim other than what is directly related to the execution of the physical cultural resources findings works and protections.

Annex-8: Guidelines for Annual Reviews and Audit

Objectives:

The objectives of annual reviews of ESMF implementation are two-fold:

a) To assess the BRWDLP performance in complying with ESMF procedures, learn lessons, and improve future performance; and

b) To assess the occurrence of, and potential for, cumulative impacts due to scaling solar and wind energy development projects.

The Programs management is expected to use the annual reviews to improve on procedures and capacity for integrating natural resources and environmental/social management into proposed program operations. It is also be a principal source of information to Bank supervision missions.

Scope of Work:

ESMF Performance Assessment

The overall scope of the performance assessment work is to:

a) Assess the adequacy of the project approval process and procedures based on interviews with Project participants, Project records, and the environmental and social performance of a sample of approved projects;

b) Assess the adequacy of ESMF roles and responsibilities, procedures, forms, information resource materials, etc.;

c) Assess the needs for further training and capacity building;

d) Identify key risks to the environmental and social sustainability of projects; and

e) Recommend appropriate measures for improving ESMF performance.

The following tasks will be typical:

a) Review project preparation and approval (e.g. applications; management; screening checklists; ESMPs, A/RAPs, appraisal forms; approval documents), as well as related studies or reports on wider issues of natural resources and environmental management in the country.

b) On the basis of this review, conduct field visits of a sample of approved projects to assess the completeness of planning and implementation work, the adequacy of environmental/social design, and compliance with proposed mitigation measures. The sample should be large enough to be representative and include a substantial proportion of projects that had (or should have had) a field appraisal according to established ESMF criteria. Projects in sensitive natural or social environments should especially be included.

c) Interview national, regional and District officials responsible for project appraisal and approval to determine their experience with ESMF implementation, their views on the strengths and weaknesses of the ESMF process, and what should be done to improve performance.

   Improvements may concern, for example, the process itself, the available tools (e.g. guidelines, forms, and information sheets), the extent, and kind of training available, and the amount of financial resources available.

d) Develop recommendations for improving ESMF performance.

Cumulative Impacts Assessment

This part of the annual review assesses the actual or potential cumulative impacts of projects with other projects or development initiatives on the environment, natural resources and community groups, if applicable. Cumulative impacts result from a number of other activities that, on their own, have minimal impacts, but over time and in combination generate a significant impact. For example:

a) Decline in groundwater levels or quality due to the abstraction of waters from limited natural water sources or wells and the introduction of numerous other small-scale project affecting the available water potential in the area;

b) Overwhelmed or illegal waste and dumping sites due to the inappropriate disposal of increasing amounts of waste materials; and

c) Attraction of migrant populations to communities that have successfully introduced improved social infrastructure (such as schools, health facilities or water sources) resulting in depletion of resources (e.g., supplies, water), etc.

The function of this assessment is primarily as an "early warning" system for potential cumulative impacts that might otherwise go undetected and unattended to. It will be largely based on the observations of people interviewed during the fieldwork, and trends that may be noticed by regional or District officials. Where cumulative impacts are detected or suspected, recommendations will be made to address the issue, perhaps through more detailed study to clarify matters and what should or can be done about them.

Qualifications for Undertaking Annual Reviews:

The annual reviews shall be undertaken by an individual consultant, or small team, with experience relevant to the likely issues to be encountered (e.g. environmental and natural resources management, land acquisition and resettlement, livelihood restoration, community and occupational safety issues). They should also be familiar with the methods and practices of effective community consultation, and with typical methods and processes for preparing, appraising, approving, and implementing small-scale community development projects.

Timing:

Annual reviews should be undertaken after the annual ESMF report has been prepared and before AFDB supervision of the Project, at the closing of each year of the programs. It is expected that each review would

require 3 to 4 weeks of work (interviews, examination of projects), and that the review report would be completed within 2 weeks of completing the fieldwork.

Outputs:

The principal output is an annual review report that documents the review methodology, summarizes the results, and provides practical recommendations. Distinct sections should address;

a) ESMF performance and

b) Cumulative impacts.

C) Measures to be taken

Annexes should provide the detailed results of the fieldwork, arid summarize the number of approved projects by state and their characteristics according to the annual report format.

Copies of the annual review report should be delivered to the OWEB management, MoWIE, to each national and regional office directly or indirectly responsible for appraisal, approval, and implementation of projects, and to the AfDB. The project management (OWEB) may also want to host national or regional workshops to review and discuss the review findings and recommendations.

Annex-9: Suggested Annual Review Report Template for a Project

Name of the Program:

Name of the Project: Application Number:

1. Name of Project site, Region, District or Local Government:

2. **Name and Position of Authority or person prepare annual review report:**
3. **Reporting Year:**
4. **Date of Report:**
5. **Project (s):**

Please enter the numbers of Subproject activities in the following table.

Types of Project Activities	Approved this year	Application included an ESMF checklist	Field Appraisal	ESMP	RAP	Specific TA	Remark
Auxiliary Market Facilities							

6. Were there any unforeseen environmental or social problems associated with any Project approved and implemented this year? If so, please identify the Project (s) and summarize the problem (s) and what was or will be done to solve the problem (s). Use a summary table below.

Project	Problem(s)	Actions taken	Actions to be taken

7. Have any other environmental or social analyses been carried out by other public or private agencies in your District/region? If so, please describe them briefly.

……
……
……

8. Have you noticed any problems with implementing the ESMF in the past year (e.g. administrative, communications, forms, capacity)? If so, please describe them briefly.

……
……
……

9. Training: Please summarize the training received in your Institution, District/Region in the past year, as well as key areas of further training you think is needed.

Group	Training Received	Training Needed
OWEB		
MoWE		
Zonal Water Board Unit		
Regional Zonal and District environment team		
Community Members, elders, clan leaders		
NGOs/Associations		
Etc.		

Annex-10: Suggested Forms for ESMF Reporting, Training and Follow-up

This annex contains three templates to be used in conjunction with monitoring and reporting and follow for ESMF implementation.

ESMF reporting form

Project title	Application received (date)	Field appraisal undertaken (date if undertaken)	Application approved (date if approved)	ESMP and A/RAP developed (yes or no)	Written warnings of violation of ESMP and A/RAP issued (yes/no)	Chance find procedures invoked (yes or no)

ESMF training form

Personnel	No. of people trained	Training received
OWEB, MoWIE, Safeguard specialist/officer		
OWEB, MoWIE, officials and engineers		
Regional Energy and safeguards specialist		
District staffs		
Community members, clan leaders, elders etc.		

Follow up on previous recommendations

Recommendation	Date of recommendation	Action taken	Recommendation implemented (yes/no)

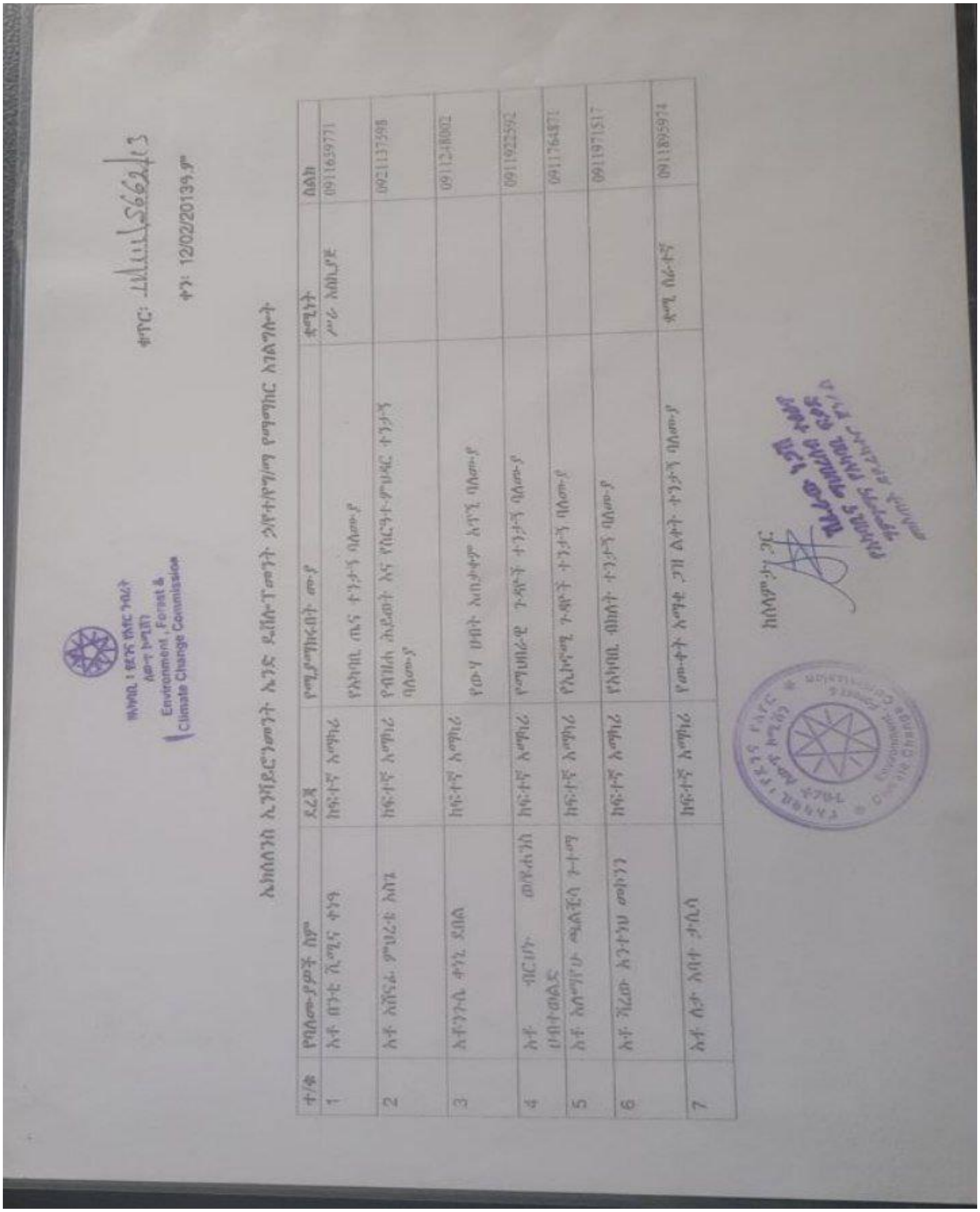
Annex-11: List of Persons contacted and Institutions met

1. Mr. Mohammed Geleto – Regional State of Oromia Bureau of Water and Energy, Deputy Head, Tel. (Mob.): 0911447732,
2. Mr. Wako – Head, Borana Zone Water and Energy, Mob. 0911805690,
3. Mr. Tesfaye - Borana Zone Water and Energy Geologist and the study facilitator, " Mob.0913633553

Annex-12: List of the ESIA study team members

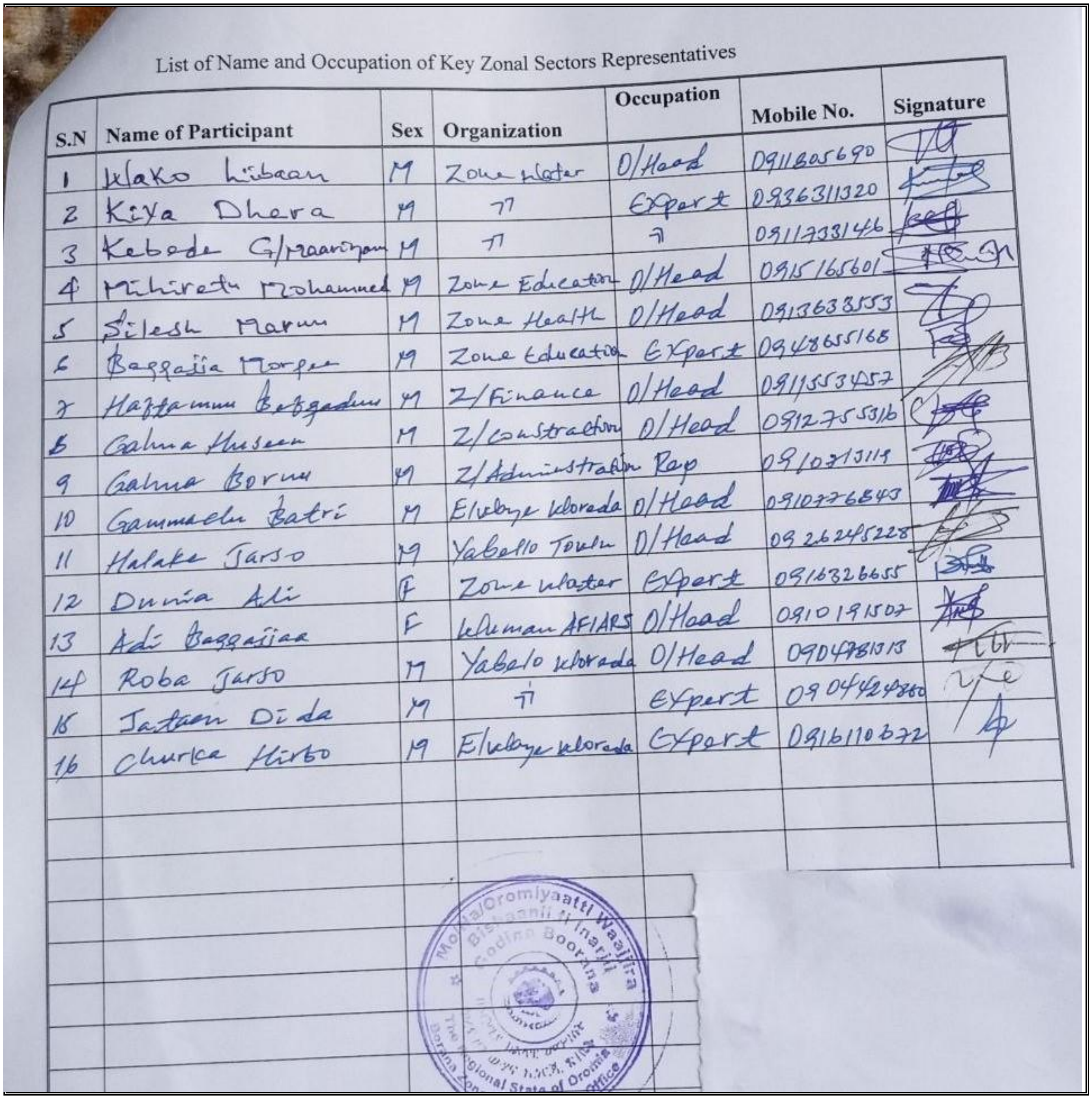
Excellence Environment and Development PLC, Level-1 Consulting Firm

Lead Consultant and General Manager – Mr. Benti Shimina 0911 65 97 71



Annex-13: Record of stakeholder and community consultation meetings

Annex-13.1: Borana Zone key stakeholders' consultation participants



List of Name and Occupation of Key Zonal Sectors Representatives

S.N	Name of Participant	Sex	Organization	Occupation	Mobile No.	Signature
1	Wako Libaan	M	Zone Water	D/Head	0911805690	[signature]
2	Kiya Dhera	M	"	Expert	0936311320	[signature]
3	Kebede G/maariyam	M	"	"	0911733146	[signature]
4	Mihiretu Mohammed	M	Zone Education	D/Head	0915165601	[signature]
5	Silesh Marun	M	Zone Health	D/Head	0913633553	[signature]
6	Baggajja Morgaa	M	Zone Education	Expert	0948655168	[signature]
7	Hajjamuu Bakgadu	M	Z/Finance	D/Head	0911553457	[signature]
8	Galma Husaen	M	Z/construction	D/Head	0912755316	[signature]
9	Galma Boru	M	Z/Administration	Rep	0910713119	[signature]
10	Gammachu Batri	M	Eluaye Woreda	D/Head	0910776843	[signature]
11	Halake Jarso	M	Yaballo Town	D/Head	0926245228	[signature]
12	Dunia Ali	F	Zone Water	Expert	0916326655	[signature]
13	Adi Baggajjaa	F	Women AFIARS	D/Head	0910191507	[signature]
14	Roba Jarso	M	Yabelo Woreda	D/Head	0904981313	[signature]
15	Jataan Dida	M	"	Expert	0904424860	[signature]
16	Churka Hirbo	M	Eluaye Woreda	Expert	0916110672	[signature]

Annex-13.2: Minute of Borana Zone key stakeholders' consultation meeting

Stakeholders Consultation Agenda

Regional State: Oromia Zone: Borana

Town: Yaballo: Venue : Borana Zone Water and Energy Office

Project Name: Borana Resilient Water Development for Improved Livelihood Program, Phase-1 Project of the Program.

Environmental and Social Impact Assessment Consultation

Date: 14/04/2022 Time:4:30

Participants: key zone sectors representatives.

Points of Discussions

1. Briefing objectives of the Environmental &Social Impact Assessmentof the project.
2. Major Environmental &socio-economic problems.
3. Benefits of the upcoming project at local and beyondthe area.
4. Main problems and threats related to the project.
5. Measures to be taken to mitigate the negative impacts and optimize the benefits.
6. Acceptance of the project by the society.

After the study document explained to the participants the detail discussion was held on the above major agendas and all participant conclude that the project have no significant Environmental Impacts

Social and **Economic Benefit** of the project is very great to change the livelihood of the Community and the participant agree on the project and requested the donor and concerned bodies to approve the project and star up in a short period of time.

Borana-Resilient Water Development for Improved-Livelihoods Program (BRWDLP) Community Consultation Minute

Participants list is attached.

Mr. Wako Liban – Chairman (Head of Borana Zone Water and Energy Office)

Mr. Silashi Maru: Secretary

Meeting Place : Borana Zone Water and Energy Office.

Meeting Time : 9:00-11:30

Meeting Date : 16/04/2022

Discussion Points or Agenda

The discussion points or agenda is attached.

Discussions and Decisions

Based on the meeting agenda, the Borana Zone key sectors representative consultative focus group discussion was conducted chaired by the Zone Water and Energy Deputy Head. Issues raised and views and concerns of the participants are detailed here under.

The participants were expressed that it is an opportunity for Borana Zone populations if the intended project enters into implementations as the recurrent drought not only called upon the zone and Oromia Regional State populations, but also the case called national and international communities, NGOS and other funding agencies support through the regional government and the country. These all had been trying to support the people who had been affected by the drought and also shortage of water for domestic and livestock populations of the zone. Therefore, we all would like to thank the funding agency, the AfDB, for the initiation and startup of the water supply project which the zone and Oromia Water and Energy Bureau had been trying to implement the project and took years by promising the people which did not implemented until now.

Based on the environmental and social baseline conditions of the project areas, it has no significant impacts that can hinder its implementations as the settlements are very scattered and no potential developments that can be affected by the project

construction and implementation activities. It has no potential influences on natural resources as expected transmission lines and borehole areas are within and along open bush lands at most.

By implementing the project, the existing serious and critical water supply shortages for human and their livestock population will get solutions and the community overcome the commonly observed waterborne diseases problems and their livestock also can get water. Human and their livestock migration and exposure to different social and climatic problems. It also helps in attaining the community livelihood which has been affected by the recurrent drought and livestock deaths.

The zone stakeholders and populations now expect from the project that they get reliable water supply system for the communities and their livestock as soon as possible, the project shall include cattle troughs for livestock in order to protect the existing critical water shortage on livestock, avoid or reduce incidences of waterborne diseases observed on human and above all as water is basic life necessity, we strongly request and assure our commitment and support for the fulfilment of the project implementations.

The participants also raised issues of focus areas such as water supply distributions for all schools, health centers (as social services are in critical shortages of potable water) as commonly considered. The recurrent drought and critical shortage of livestock feeds are the two major areas that need intervention and require immediate responses.

Finally, the zonal key stakeholders representatives consultation meeting participants were expressed their promise to participate and involve in activities that need their participations. It was concluded from the meeting that they have positive attitudes and concerns on the project. At the end, they also strongly requested implementations of the project, as lack of trusts on project implementationspromises were repeatedly observed and the community and all the stakes are eager for the project implementations.

Annex-13.3: Borana Zone Wellfield kebele key stakeholders' consultation participants

Stakeholders Consultation Participants Registration

Regional State: Oromia **Zone:** Borana

Town: _____ **Wereda:** Yabello **Kebele/s:** Dharito

Date: 16/04/2022 **Time:** 3:00

Project Name: Borana Resilient Water Development for Improved Livelihood Program, Phase-1 Project of the Program

S.N	Name of Participant	Sex	Occupation	Village	Mobile No.	Signature
1	Liban Duba	M	Chairman	Dharito	0932641801	
2	Kabale Boru	F	Woman AFAIRS	〃	0956045569	
3	Wario Dika	M	Manager	〃		
4	Sadia Kamphe	F	Member	〃		
5	Godana Arero	M	〃	〃		
6	Tashi Garbicha	M	〃	〃		
7	Godana Malicha	M	〃	〃	0900521495	
8	Bara Dhara	M	〃	〃		
9	Galgalo Duba	M	〃	〃		
10	Galma Boru	M	〃	〃		
11	Dalicha Arero	M	〃	〃		
12	Tuma Godana	F	〃	〃		
13	Roba Halake	M	〃	〃	0938361450	
14	Kanu Jirma	M	〃	〃		
15	Roba Halake	M	〃	〃		
16	Jaldaan Huka	M	〃	〃		
17	Abdi Wario	M	〃	〃		
18	Gobu Nura	M	〃	〃	0946531472	
19	Daba Malicha	F	〃	〃		

Mo/Na/Or/Go/Booranaatti Waajira Misoon Qabeenya Bishaan fi Inarjii Aanaa Yaaballoo

Annex-13.4: Minute of Wellfield kebele key stakeholders' consultation meeting

Borana-Resilient Water Development for Improved-Livelihoods Program (BRWDLP) Community Consultation Minute

Participants list is attached.

Chairman	: Mr. LibanDuba – Chairman of DheritoKebele of Yabello District
Secretary	: Mr. WariyoDika, Manager of the kebele
Meeting Place	: Dharito village – Main Reservoir in Yabello.
Meeting Time	: 9:00 -10:30
Meeting Date	: 16/04/2022

Discussion Points or Agenda

The discussion points are attached. The Minute was translated by the consultant.

Discussions and Decisions

The discussion points were briefly highlighted by the facilitator and the chairman. They addressed the objective of the ESIA study by saying that the study is to harmonize, if any, impacts of the intended Phase-1 project of the program construction and implementation activities to ensure the project harmony with the project area. Then after, participants raised their opinions and ideas they have on the project and the plan as a whole.

All the participants had started their opinions by expressing their deep thankfulness for the financer and the government of Ethiopia and the region for the attention given for the people who had been suffering by severe droughts and lack of water for human and their livestock. They also raised that same discussions have been conducted before, probably two to three months ago and this is the second cycle on the same issue. Our idea then and now is the same, our critical problem is lack of water for our people and livestock. This critical problem is not solved so far.

With regard to environmental and social problems of the area, the participants replied that, we the Borana people, have serious and serious water problem. We do not have potable water for our family and even for our livestock. The repeated droughts in the

area also aggravated the problem. As a result of the drought many of our people livestock died and the people became poor and poor as the livelihood of our people is at most depends on our livestock. Therefore, the major problems of the people of the district and the zone in general are lack of water for ourselves and our livestock and recurrent drought.

With regard to any problem the project implementation may have, the participants said that the project fully does not have any negative impact or problem upon our communities other than benefiting us. As it is known, we, the Borana People, have large area of land with very few settlements. Most of our people are agro pastoralists and they make use of migrating from place to place for searching for water and grasses for our livestock. Even,if there is permanent settlement, since water is life and we have faced serious animal deaths and peoples migrations by repeated droughts and lack water for human and livestock, the problem we faced cannot be greater than any problem the project may have. Therefore, we guaranteeor assure any one in need that no and no problem the project has upon our people other than benefiting us and our livestock. If there be anyproblemduring the project implementation we solve among ourselves.

Finally, the participants of the consultative meeting told the team that as the project benefits are much, much more than any problem and also as the water supply request is our long years and repeated requests for many years, the project acceptance is very high and we, the representatives of our peoples, all accepted the project and assure that we fully support the implementations of the project. Therefore, we strongly request the project implementation as it solves our critical social and livelihood problems and helps us to stand against any climatic changes and disasters we were facing so far by the recurrent droughts in the area.

Note:
The core ideas expressed in previous consultative meetings of the community conducted before three months are similar to this minute ideas.

Annex-13.2: Minute of Ade-Galchet/Wellfield kebele community representatives' consultation meeting (October 2021)

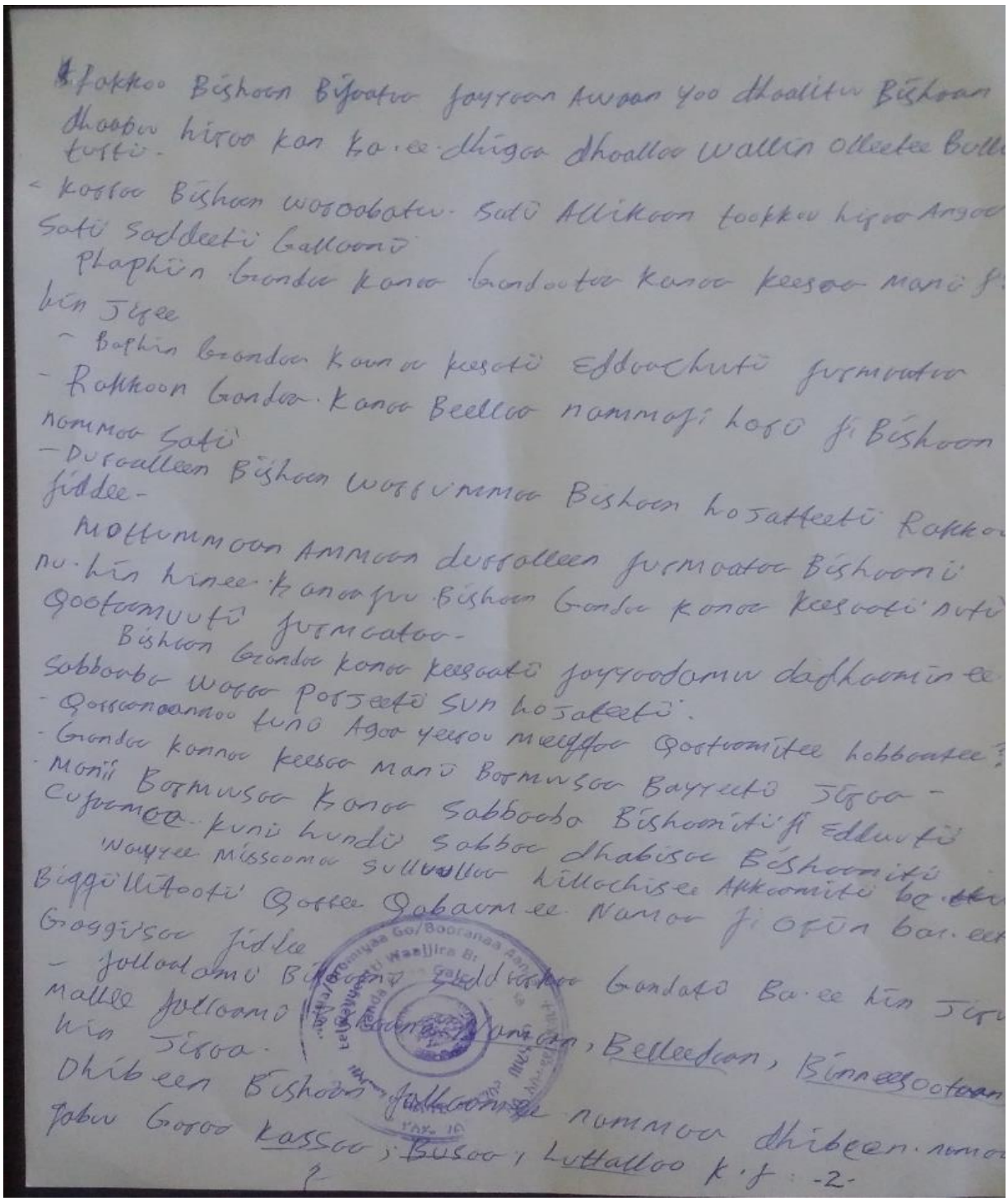
Guyyaa 15/02/2014

Gandaa Addee Galchetti mari waliin Bishaanii
Qabbo yaayyii Gandaa Pirojeektii Bishaan Oromiyaatiin.

Yaada ummataa: Rakkoo Bishaan Gandaa kanaa keessatti Maal jirtu?

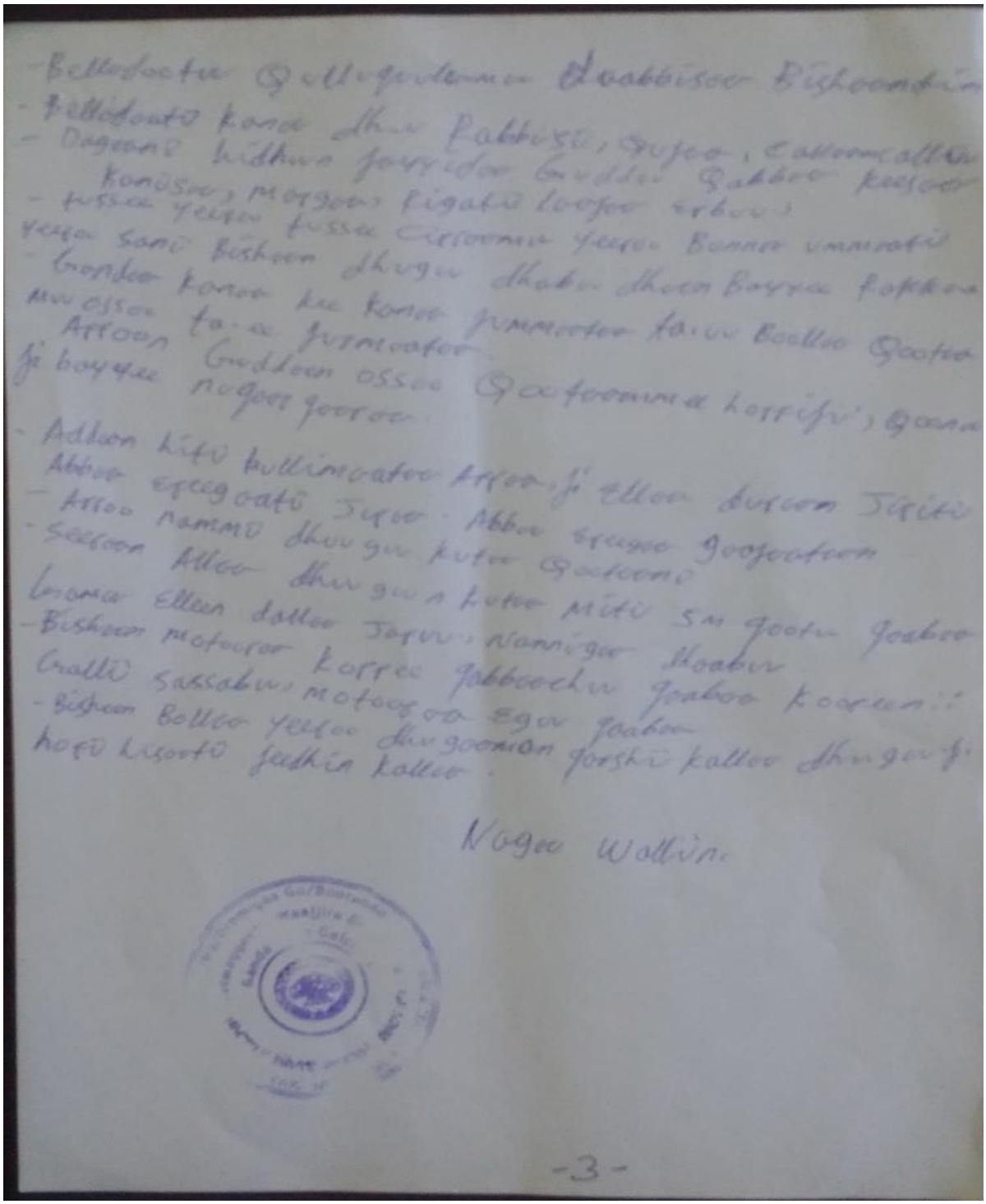
Rakkoon Bishaan Bishaan Gandaa kanaa keessa hin jiraa.
- Bonni Gandaa kanaa keessattii baayyee. Ammoo. Bishaan duraa Gandi kun qaa Gandi kun dhabatee. Bishaan Gandaa kanaa keessaa ba.aan
Bishaan Gandaa kanaa keessaa Annoon ba.ee hin dhabne qaban jedhan yaada takkaa dhiyeessee hin beenu.
Addi Phoonphi Nammoota hundi Kanaani Jiraa
- Bishaan Gandaa kan Booranii yeeroo ofii Egaattee dhiyeessee. Nutti Bishaan dhuddaa dheeroo Argii waggaa. Garaa nuuti dhiisaan Sunnuu Kadhaanii.
Karraa kana hiraatti loowoon kanaa dhummaatooj: Sabbaa dheebuun Loon dhisii namminuu Akkaa dhumaa Jiraa. Bishaan dudda dheeroo Ammaalee Abbii hiisaanii hin qaabinnu boruullee
Bishaan Gandaa kanaa keessaa yo.oo Anna dilloo waggaa Saddii fi Afurii dhu goo Jiraanii
- Bishaan Bsoorroo Caphee waraabaachaa turree
Bishaan yoo [illegible] Ummataa kanaa wanii kojachuu qaaban Qorannoon Bishaan Akkaa Qootoomuu qaabbaa.

-1-



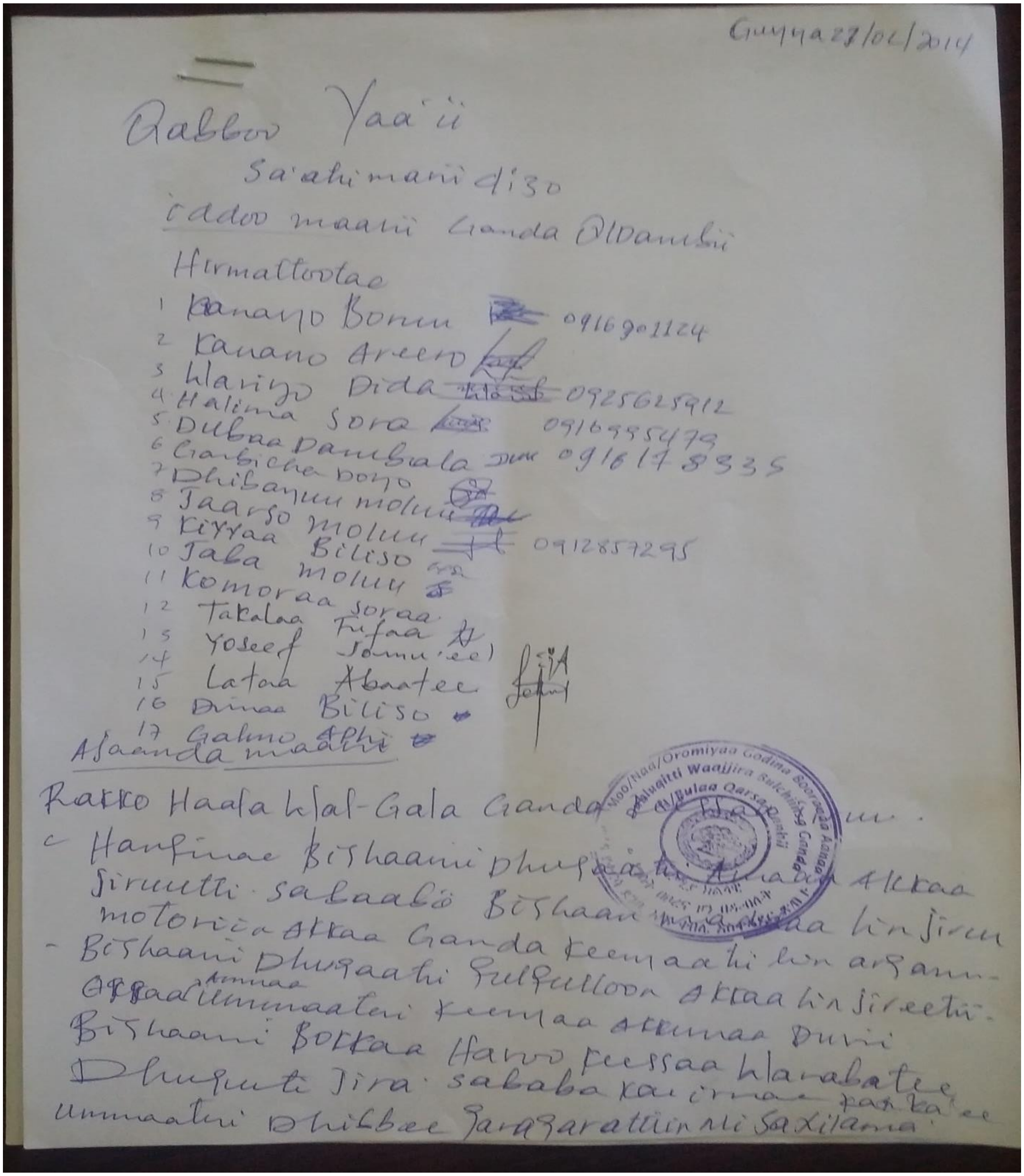
Excellence Environment and Development PLC
Level-I Consultancy Service Firm, Addis Ababa

April, 2022



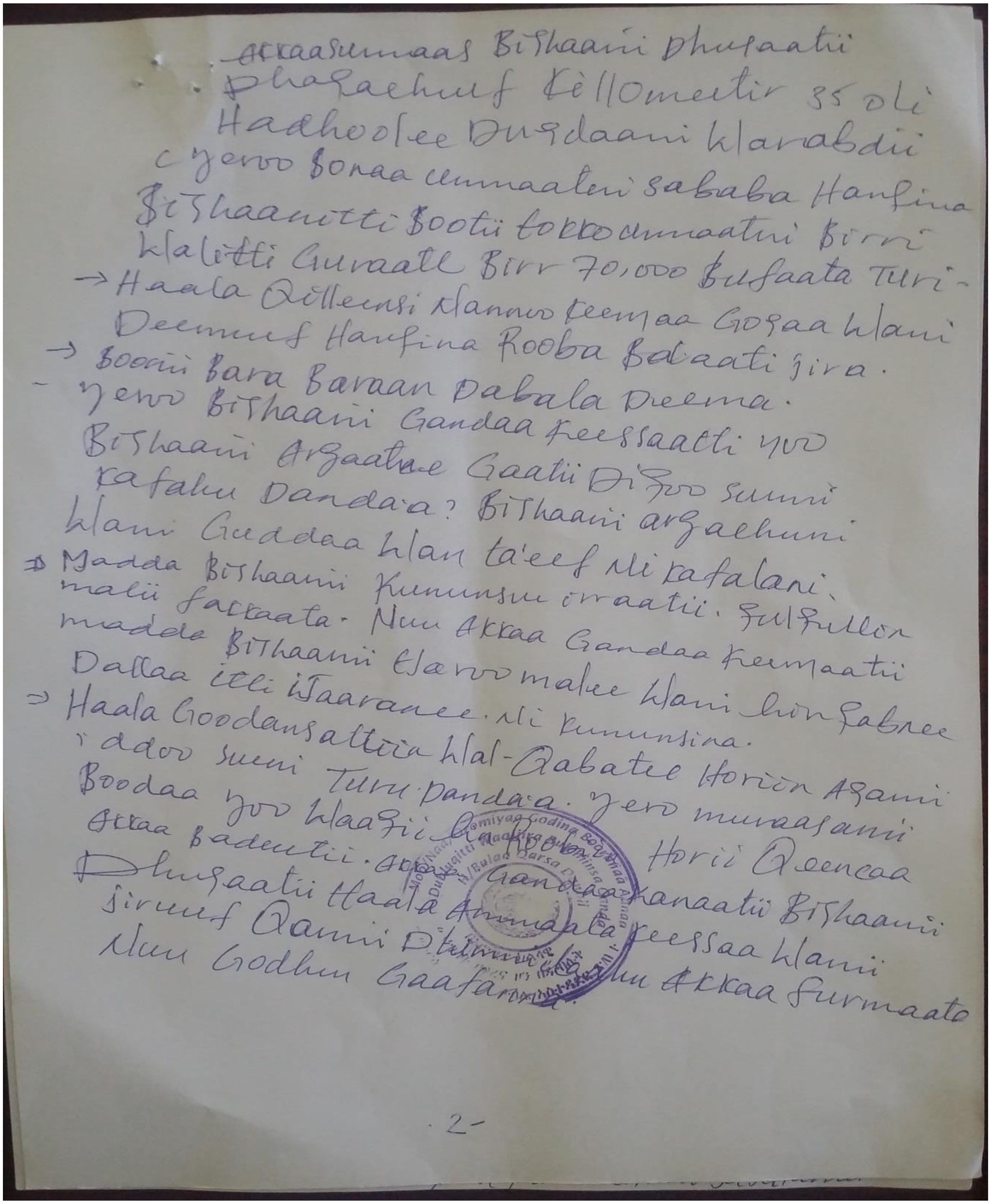
-3-

Annex-13.5: Minute of Kersa Dembi kebele community representatives' consultation meeting



Guyya 27/06/2014

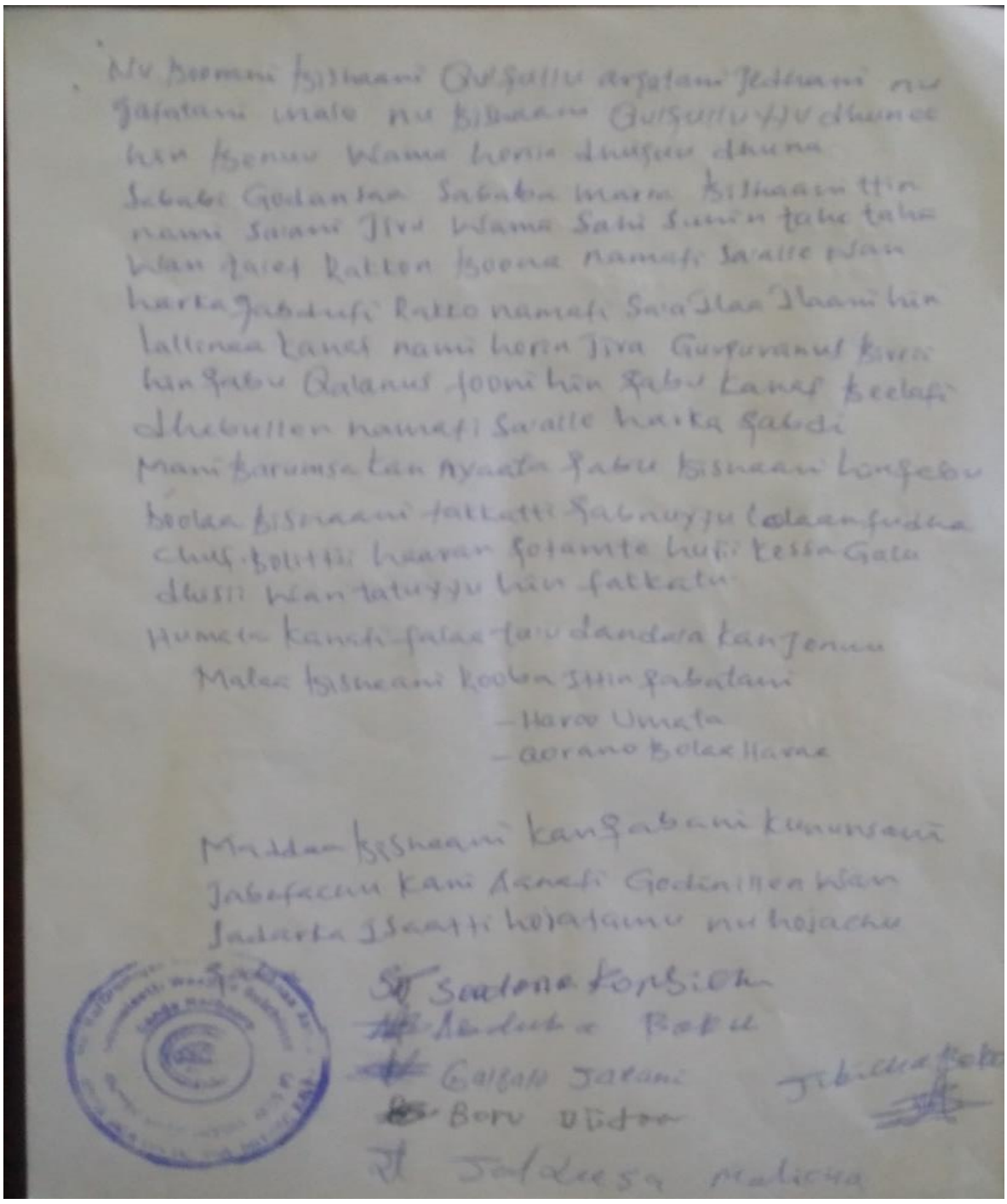
Qabxii Yaa'ii
Sa'aatii maanii 4:30
Iddoo maarii Ganda QDambii
Hirmaattootaa
1 Kanano Boruu 0916901124
2 Kanano Areero
3 Wariyo Dida 0925625912
4 Halima Sora 0916955479
5 Dubaa Dambala
6 Garbicha Dambala 0916178335
7 Dhibayuu Dojo
8 Jaarso Moluu
9 Kiyyaa Moluu 0912857295
10 Jaba Biliso
11 Komoraa Moluu
12 Takalaa Soraa
13 Yoseef Tufaa
14 Latoa Jomu'eel
15 Latoa Abaatee
16 Dimaa Biliso
17 Galmo Abii
Ajaanda maarii
Rakko Haala Walf-Gala Ganda [illegible]
- Hanfinaa Bishaanii Dhugaatii [illegible] Akkaa Siruutti sababa Bishaan [illegible] motorii Akkaa Ganda keenyaa hin jiru
- Bishaanii Dhugaatii qulqulluu Akkaa hin argannu Ogeessa ummaataa keenyaa Akkumaa Dur
Bishaanii Borkaa Harroo Kessaa Warabatee Dhuguti Jira sababa kanaa fayyaa ummaatii Dhibbee garagaraatiin ni saxilamaa.



Akkaasumaas Bishaanii Dhugaatii
Dhabachuuf Kiilomeetir 35 oli
Hadhoolee Dugdaani Waraabdii
Yeroo Bonaa ummaatni sababa Hanqina
Bishaanitti Booti tokko ummaatni Birrii
Walitti Guraale Birr 70,000 Bufaata Turi-
→ Haala Qilleensi Nannoo keenyaa Gogaa Wani
Deemuuf Hanqina Rooba Baldaati jira.
→ Boonii Bara Baraan Dabala Deema.
- Yero Bishaanii Gandaa keessaatti yoo
Bishaanii Argaatee Gaatii Dhiyoo Sumii
kafalu Danda'a? Bishaanii argachuuni
Wani Guddaa Wan ta'eef Ni kafalani.
⇒ Madda Bishaanii Kununsuu irraatii. Gulgullon
malii fakkaata. Nuu Akkaa Gandaa keenyaatii
madda Bishaanii Eegumoo malee Wani hin qabnee
Dallaa itti Waaranee. Ni kununsina.
⇒ Haala Goodansaltiin Wal-Qabatee Horiin Aganii
iddoo Suumii Turu Danda'a. Yero muraasanii
Boodaa yoo Waaqiin Rooba ... Horii Qeencaa
Akkaa Badeetii. Akkaa Gandaa keenaatii Bishaanii
Dhugaatii Haala Ammaala keessaa Wanii
Sirnuf Qamnii Dhimma ... Akkaa furmaata
Nuu Godhu Gaafanna.

- 2 -

Annex-13.6: Borbor Kebele community representatives' consultation minute



Annex-14: Minutes of consultations

Record of stakeholder and community 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.

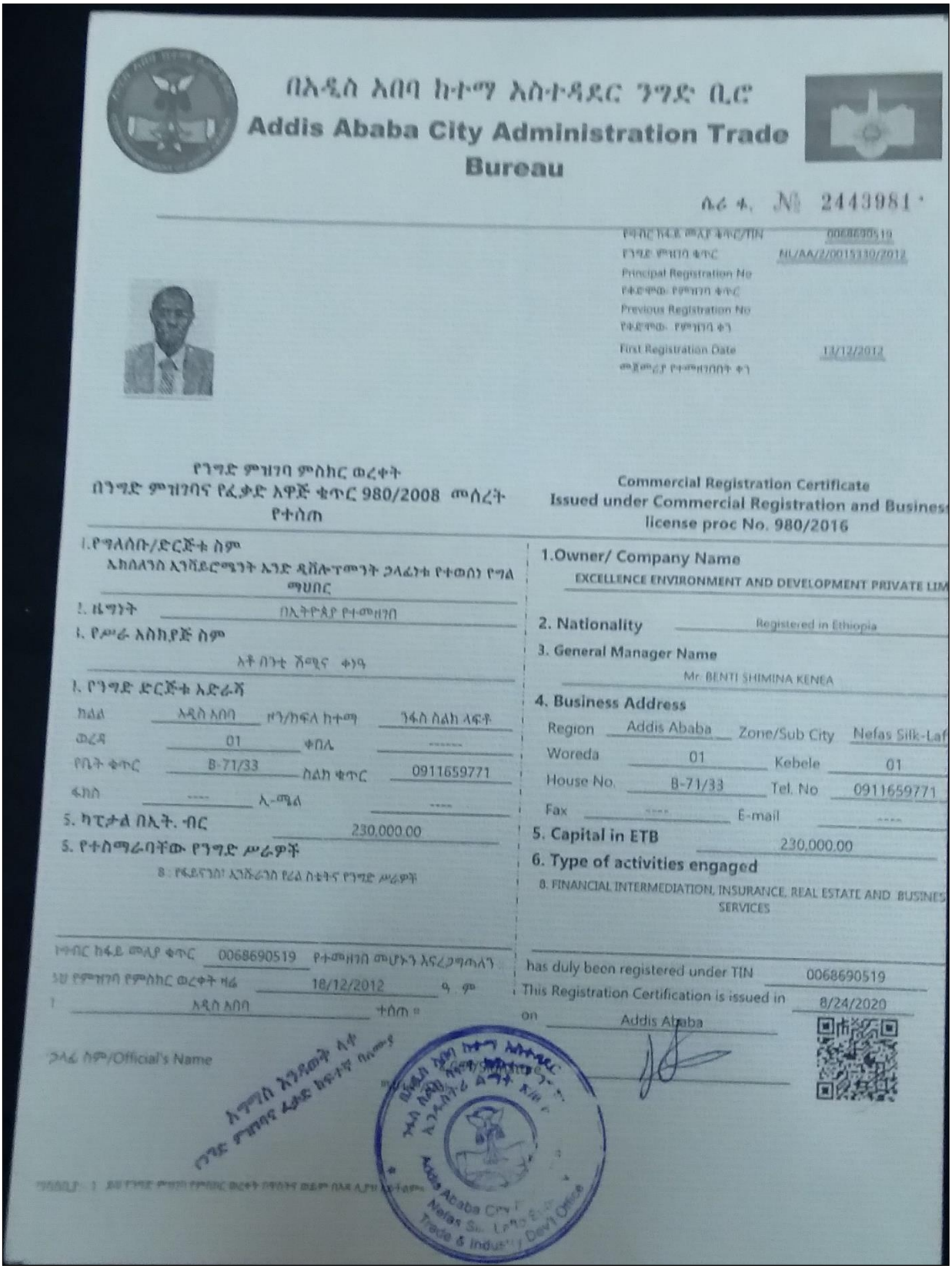
Annex-15: List of associated reports

The list of associated reports used along with this report is the ***socio-economic baseline survey*** of the project.

1. Environmental and Social Impact Assessment Report for Borana-Resilient Water Development for Improved-Livelihoods Program (BRWDLP), Phase-I Project of the Program, May, 2022.

Annex-16: Consulting firm legal documents

- Commercial Registration
- Trade License
- TIN Number
- VAT Registration
- Level-1 Firm Competence Certificate of the Federal EPA
- 2013 E.C Clearance Certificate



በአዲስ አበባ ከተማ አስተዳደር ንግድ ቢሮ
Addis Ababa City Administration Trade Bureau

ሰሪ ቁ. № 2443981

የግብር ከፋይ መለያ ቁጥር/TIN 0068690519
የንግድ ምዝገባ ቁጥር ET/AA/Z/00153330/2012
Principal Registration No
የቅድሞው የምዝገባ ቁጥር
Previous Registration No
የቅድሞው የምዝገባ ቀን
First Registration Date 13/12/2012
መጀመሪያ የተመዘገበበት ቀን

የንግድ ምዝገባ ምስክር ወረቀት
በንግድ ምዝገባና የፈቃድ አዋጅ ቁጥር 980/2008 መሰረት የተሰጠ

Commercial Registration Certificate
Issued under Commercial Registration and Business license proc No. 980/2016

1.የግለሰቡ/ድርጅቱ ስም
አክሰለንስ ኢንቫይሮሜንት እንድ ዲቨሎፕመንት ኃላፊነቱ የተወሰነ የግል ማህበር

1.Owner/ Company Name
EXCELLENCE ENVIRONMENT AND DEVELOPMENT PRIVATE LIM

ፆ. ዜግነት በኢትዮጵያ የተመዘገበ
2. Nationality Registered in Ethiopia

ፋ. የሥራ አስኪያጅ ስም
አቶ በንቲ ሽሚና ቀነዓ
3. General Manager Name
Mr. BENTI SHIMINA KENEA

ፈ. የንግድ ድርጅቱ አድራሻ
4. Business Address

ክልል አዲስ አበባ ዞን/ክፍለ ከተማ ንፋስ ስልክ ላፍቶ
Region Addis Ababa Zone/Sub City Nefas Silk-Laf
ወረዳ 01 ቀበሌ ------
Woreda 01 Kebele 01
የቤት ቁጥር B-71/33 ስልክ ቁጥር 0911659771
House No. B-71/33 Tel. No 0911659771
ፋክስ ---- ኢ-ሜይል ----
Fax ---- E-mail ----

5. ካፒታል በኢት. ብር 230,000.00
5. Capital in ETB 230,000.00

5. የተሰማራባቸው የንግድ ሥራዎች
8. የፋይናንስ፣ ኢንሹራንስ የሪል ስቴትና የንግድ ሥራዎች
6. Type of activities engaged
8. FINANCIAL INTERMEDIATION, INSURANCE, REAL ESTATE AND BUSINES SERVICES

የግብር ከፋይ መለያ ቁጥር 0068690519 የተመዘገበ መሆኑን እናረጋግጣለን
has duly been registered under TIN 0068690519

ይህ የምዝገባ የምስክር ወረቀት ዛሬ 18/12/2012 ዓ.ም
This Registration Certification is issued in 8/24/2020

አዲስ አበባ ተሰጠ
on Addis Ababa

ኃላፊ ስም/Official's Name

አምባሳ አንዳርጋቸው ላሞ
የንግድ ምዝገባና ፈቃድ ክፍተት ባለሙያ

Addis Ababa City ... Nefas Si... Trade & Indus... Devt Office

በአዲስ አበባ ከተማ አስተዳደር ንግድ ቢሮ
Addis Ababa City Administration Trade Bureau

ሴሪ ቁ. № 2906872

የግብር ከፋይ መለያ ቁ /TIN 0068690519
የንግድ ምዝገባ ቁ. NL/AA/2/0015330/2012
Principal Registration No.
የቀድሞው ንግድ ፈቃድ ቁጥር
Previous License No.
የንግድ ሥራ ፈቃድ ቁጥር NL/AA/14/666/3702961/2012
Business License No.
ቀድሞ ተሰጠበት ቀን
Previous Date of issuance
የተሰጠበት ቀን 13/12/2012
Date of issuance
የታደሰበት ቀን: 25/2/2014
Renewal Date

የንግድ ሥራ ፈቃድ
በንግድ ምዝገባና ፈቃድ አዋጅ ቁጥር 980/2008 መሰረት ተሰጠ

1. የግለሰቡ/ድርጅቱ ስም: ኤክሰለንስ ኢንቫይሮሚንት ኤንድ ዲቨሎፕመንት ኃላፊነቱ የተወሰነ የግል ማህበር
2. ዜግነት: በኢትዮጵያ የተመዘገበ
3. የንግድ ስም
4. ሥራ አስኪያጅ ስም: አቶ በንቲ ሽሚና ቀነዓ
5. የንግድ ድርጅቱ አድራሻ
   ክልል: አዲስ አበባ ዞን/ክፍለ ከተማ: ንፋስ ስልክ ላፍቶ
   ወረዳ: 01 ቀበሌ: -----
   የቤት ቁጥር: B-71/33 ስልክ ቁጥር: 0911659771
   ፋክስ: ---- ኢ-ሜይል: ----
6. የንግድ ሥራ መስክ
   (86313)በአግሮ ኢኮሲስተም ልማት እና በእርሻና ተፈጥሮ ሃብት ዙሪያ የማማከር አገልግሎት
   (86312)በአካባቢ እዳትና አካባቢ አጠባበቅ የማማከር አገልግሎት
7. ካፒታል በኢት ብር: 230,000.00
   ይህ የንግድ ፈቃድ ዛሬ 25/2/2014 በ አዲስ አበባ ተሰጠ ።

የሃላፊ ስም/Name of Official
ፊርማ/Signature
ማህተም Seal

ማሳሰቢያ- 1. ይህ የንግድ ፍቃድ በዓዋጅ ፈቃድ ቁጥር 980/2008 መሠረት አንደ የበጀት ዓመቱ በተወሰነው መሰረት መታደስ አለበት።
N.B. This License Shall be renewed in accordance with Proclamation No. 980/2008 as per the fiscal year.
2. ይህ የንግድ ፈቃድ የምስክር ወረቀት በዋስትና ወይም በእዳ ሊያዝ አይችልም።
The holder of this License is forbidden for surety ship or debt

Business License
Issued Under Commercial Registration and Business license proc.No 980/2016

1. Owner/Company Name: EXCELLENCE ENVIRONMENT AND DEVELOPMENT PRIVATE LIM
2. Nationality: Registered in Ethiopia
3. Trade Name
4. General Manager Name: Mr. BENTI SHIMINA KENEA
5. Business Address
   Region: Addis Ababa Zone/Sub City: Nefas Silk-Lafto
   Woreda: 01 Kebele: -----
   House No: B-71/33 Tel.No: 0911659771
   Fax: ---- E-mail: ----
6. Field of Business
   (86313)Agro ecosystem development consultancy service
   (86312)Environmental auditing and environmental protection consultancy service
7. Capital in ETB: 230,000.00
   This Business License is issued in Addis Ababa this day 11/4/2021

ለ2014 ታድሷል

የኢትዮጵያ ፌዴራላዊ ዲሞክራሲያዊ ሪፐብሊክ
የኢትዮጵያ ገቢዎችና ጉምሩክ ባለሥልጣን
Federal Democratic Republic of Ethiopia
ETHIOPIAN REVENUES AND CUSTOMS AUTHORITY
የግብር ከፋይ ምዝገባ ሰርተፊኬት
TAXPAYER REGISTRATION CERTIFICATE

የግብ ከፋይ መለያ ቁጥር:
Taxpayer Identification Number:
0068690519

የድርጅት/የግለሰብ ሥም:
Name of Business/Individual:
EXCELLENCE ENVIRONMENT AND DEVELOPMENT PLC

የተመዘገበ አድራሻ/Registered Address:

ክልል:
Region:
ADDIS ABABA

ዞን/ክ/ከተማ:
Zone/Sub City:
NEFAS SILK LAFTO

ወረዳ:
Woreda:
WOREDA 01

ቀበሌ /አነሳሪኛ/:
Kebele/Farmer's Assoc.:
WOREDA 01

የቤት ቁጥር:
House No.:
B-71/33

ESIC Sub-group:
ESIC Sub-group:
86312 - Environmental auditing and environmental protection consultancy servic

የሰጠው ተቋም:
Issuing Authority:
ETHIOPIAN REVENUES AND CUSTOMS AUTHORITY

የተሰጠበት ቀን:
Date of Issuance:
11 NEHASIE 2012
17-AUG-20

ይህ የምስክር ወረቀት የግብር ከፋዩን ብቸና የግብር ከፋይነት ምዝገባ ለሠን በፊት ተሰጥ የነበሩ የግብር ከፋይነት ምዝገባ ሰነዶች ከላ በሙሉ ብቸኛ መረጃ ላይ ማንኛውም አይነት ለውጥ ቢደረግ ግብር ከፋዩ ለሚመለከተው የግብር ሰብዓ ጽ/ቤት የማሳወቅ ግዴታ አለበት።
This certificate represents the sole and only registration as a taxpayer and supersedes all prior registration documentation.
The taxpayer is responsible for notifying the appropriate Tax Office of any changes to the above information.

የሰርተፊኬት ቁ.:
Certificate No.: 1508676680002

1508676680002

የሰጪ ባለሥልጣን ማህተም
Seal of Issuing Authority

የኢትዮጵያ ፌዴራላዊ ዲሞክራሲያዊ ሪፐብሊክ
የኢትዮጵያ ገቢዎችና ጉምሩክ ባለሥልጣን
የተጨማሪ እሴት ታክስ
የምዝገባ የምስክር ወረቀት

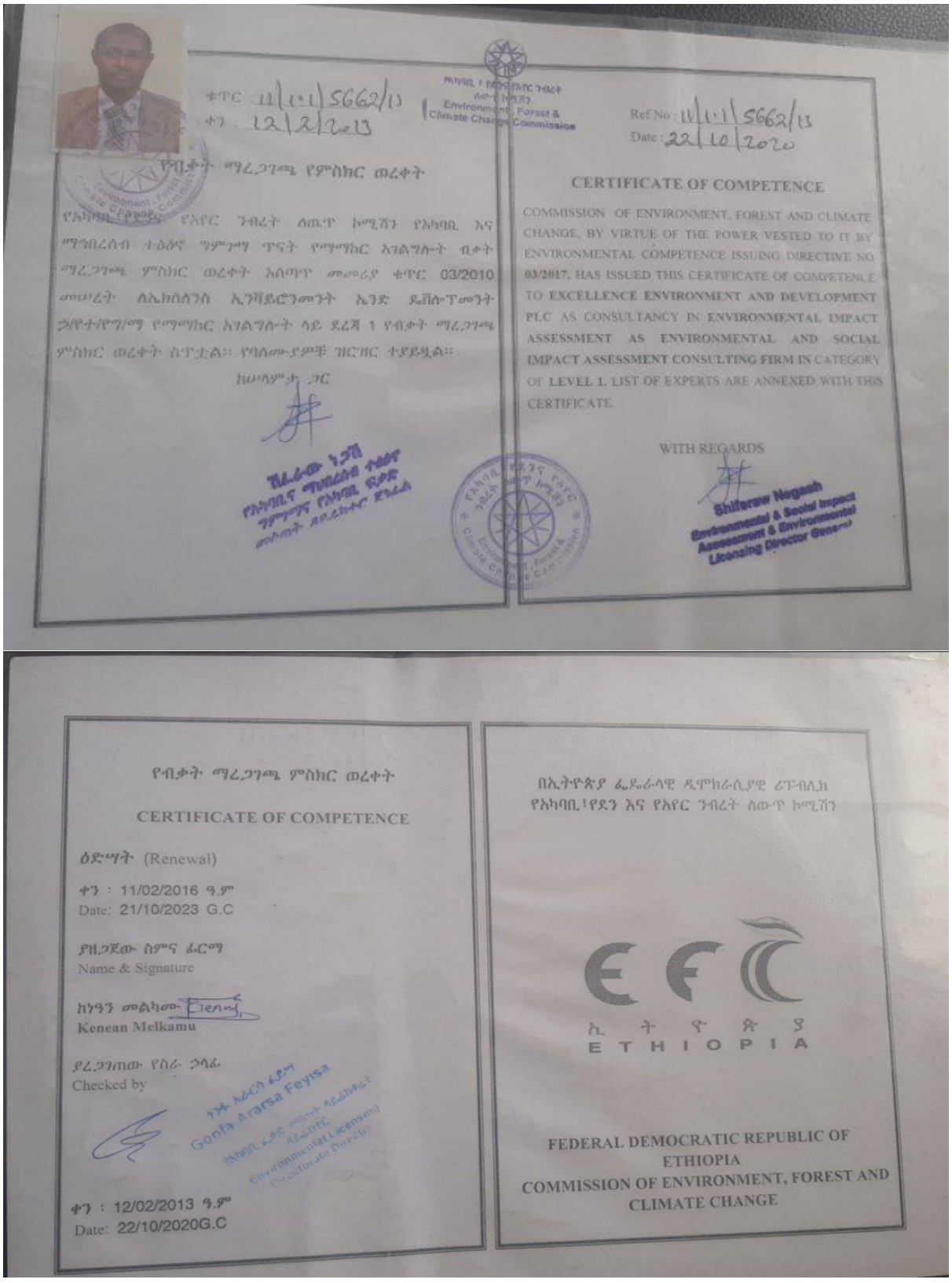
The Federal Democratic Republic of Ethiopia
Ethiopian Revenues and Customs Authority
Value Added Tax
Registration Certificate

አቶ/ወ/ሮ ወይም የድርጅት ስም: አክሰለንስ ኢንቫይሮንመንት ኤንድ ዴቨሎፕመንት
የንግድ ስም (ካለዉ): አክሰለንስ ኢንቫይሮንመንት ኤንድ ዴቨሎፕመንት
አድራሻ/ክልል/: አዲስ አበባ ዞን/ ክፍለከተማ: ንፋስ ስልክ ላፍቶ ወረዳ: 01
ተቢያ/ሀምክበር: የቤት ቁጥር: B-71/33 ስልክ ቁጥር: ፖ.ሣ.ቁ:
የሆነና በተጨር ከፋይ መለያ ቁጥር 0068690519 የሚታወቅት በተጨማሪ እሴት ታክስ አዋጅ ቁጥር 285/ 1994
አንቀጽ 16 ወይም አንቀጽ 18 መሰረት በተጨማሪ እሴት ታክስ 16582550002 ከ ጥቅምት 01 ቀን 2013 ዓ.ም ጀምሮ ስለተመዘገበ
ደብ የምዝገባ ሰርተፊኬት ተሰጥቶቶል::

Mr./s or Company Name: EXCELLENCE ENVIRONMENT AND DEVELOPMENT PLC
Trade name /If any/: EXCELLENCE ENVIRONMENT AND DEVELOPMENT PLC
Address (Region): ADDIS ABABA Zone / Sub city: NEFAS SILK LAFTO Woreda NO WOREDA-146
Kebele/Farmers Ass. WOREDA 01 House No. B-71/33 Telephone No. P.O. Box
Whose Taxpayer Identification Number (TIN) is 0068690519 has been registered in accordance with VAT Proclamation No. 285/2002
Article 16 or Article 18 and he/she/it is VAT registration Number 16582550002 has been issued starting from 11-OCT-2020 .

16-NOV-2020/ 5793690002

የደንበኞች አገልግሎት ዳይሬክተር ዳይሬክተር
Customers' Service Directorate Director



የብቃት ማረጋገጫ የምስክር ወረቀት

የአካባቢ ደንና የአየር ንብረት ለውጥ ኮሚሽን የአካባቢ እና ማኅበረሰብ ተፅዕኖ ግምገማ ጥናት የማማከር አገልግሎት ብቃት ማረጋገጫ ምስክር ወረቀት አሰጣጥ መመሪያ ቁጥር 03/2010 መሠረት ለኤክሰለንስ ኢንቫይሮንመንት ኤንድ ዴቨሎፕመንት ኃ/የተ/የግ/ማ የማማከር አገልግሎት ሳይ ደረጃ 1 የብቃት ማረጋገጫ ምስክር ወረቀት ሰጥቷል። የባለሙያዎቹ ዝርዝር ተያይዟል።

ከሠላምታ ጋር

Ref No: 12/1/1/5662/13
Date: 22/10/2020

CERTIFICATE OF COMPETENCE

COMMISSION OF ENVIRONMENT, FOREST AND CLIMATE CHANGE, BY VIRTUE OF THE POWER VESTED TO IT BY ENVIRONMENTAL COMPETENCE ISSUING DIRECTIVE NO 03/2017, HAS ISSUED THIS CERTIFICATE OF COMPETENCE TO EXCELLENCE ENVIRONMENT AND DEVELOPMENT PLC AS CONSULTANCY IN ENVIRONMENTAL IMPACT ASSESSMENT AS ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT CONSULTING FIRM IN CATEGORY OF LEVEL 1. LIST OF EXPERTS ARE ANNEXED WITH THIS CERTIFICATE.

WITH REGARDS

Shiferaw Negash
Environmental & Social Impact Assessment & Environmental Licensing Director General

የብቃት ማረጋገጫ ምስክር ወረቀት

CERTIFICATE OF COMPETENCE

ዕድሣት (Renewal)

ቀን : 11/02/2016 ዓ.ም
Date: 21/10/2023 G.C

ያዘጋጀው ስምና ፊርማ
Name & Signature

ከነዓን መልካሙ
Kenean Melkamu

ያረጋገጠው የስራ ኃላፊ
Checked by

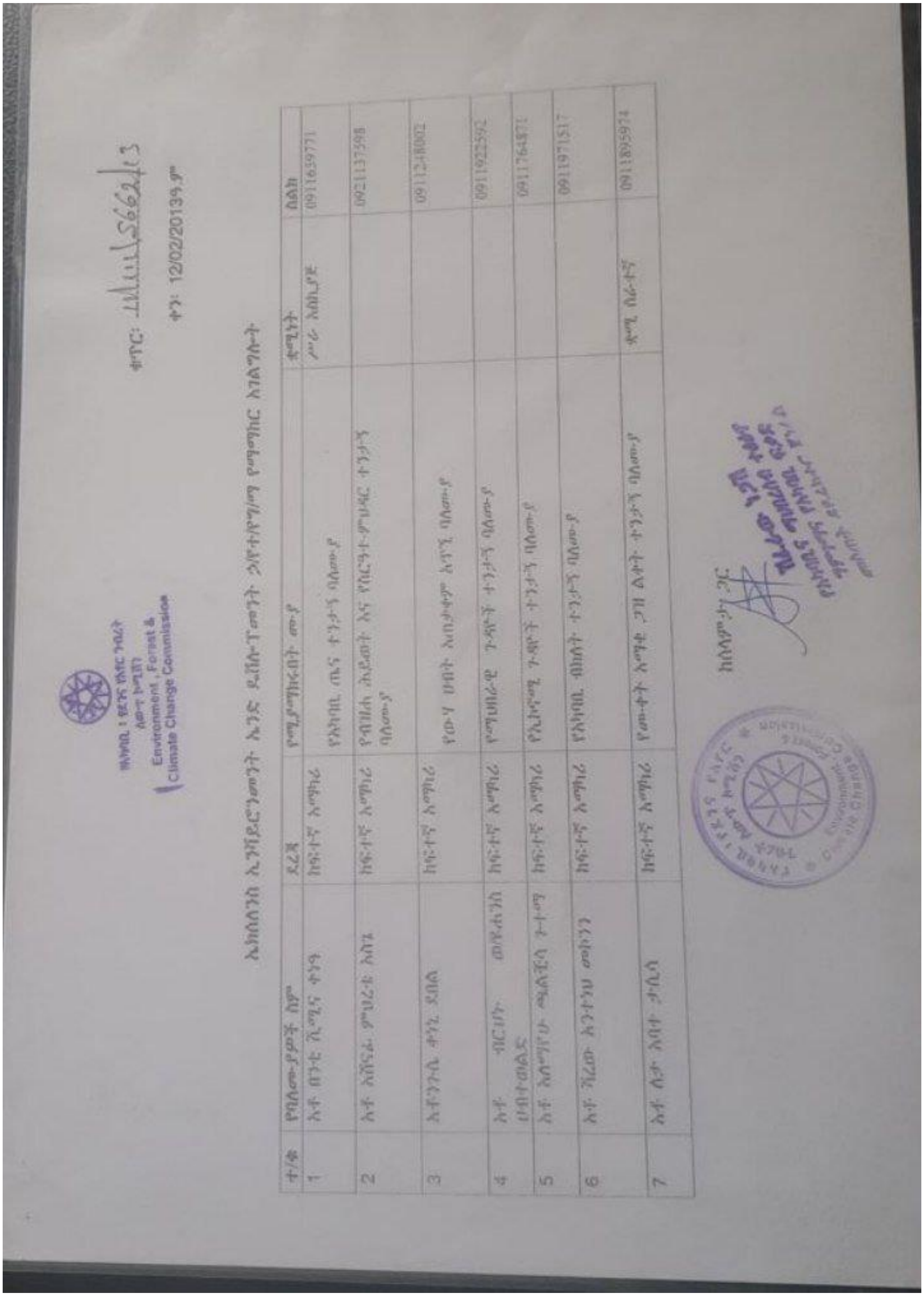
Gonfa Ararsa Feyisa

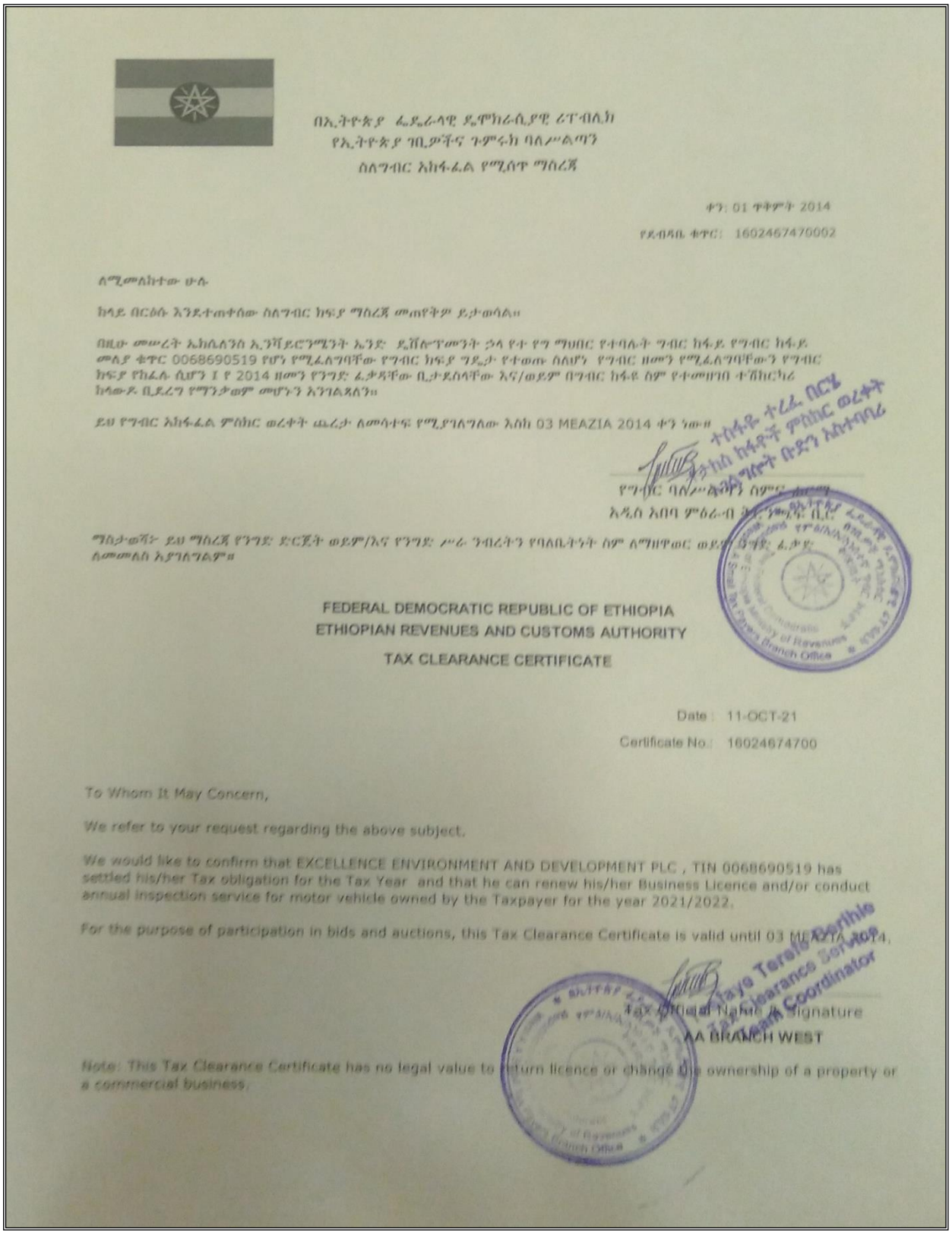
ቀን : 12/02/2013 ዓ.ም
Date: 22/10/2020G.C

በኢትዮጵያ ፌዴራላዊ ዲሞክራሲያዊ ሪፐብሊክ
የአካባቢ፣የደን እና የአየር ንብረት ለውጥ ኮሚሽን

ኢ ት ዮ ጵ ያ
ETHIOPIA

FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
COMMISSION OF ENVIRONMENT, FOREST AND CLIMATE CHANGE


Environment, Forest &
Climate Change Commission
12/02/2013 ዓ.ም
0911659771
0921137598
0911248002
0911922592
0911764871
0911971517
0911895974



በኢትዮጵያ ፌዴራላዊ ዴሞክራሲያዊ ሪፐብሊክ
የኢትዮጵያ ገቢዎችና ጉምሩክ ባለሥልጣን
ስለግብር አክፋይል የሚሰጥ ማስረጃ

ቀን: 01 ጥቅምት 2014
የደብዳቤ ቁጥር: 1602467470002

ለሚመለከተው ሁሉ

ከላይ በርዕሱ እንደተጠቀሰው ስለግብር ከፍያ ማስረጃ መጠየቅም ይታወሳል።

በዚሁ መሠረት ኤክሴለንስ ኢንቫይሮንሜንት ኤንድ ዴቨሎፕመንት ኃላ የተ የግ ማህበር የተባሉት ግብር ከፋይ የግብር ከፋይ መለያ ቁጥር 0068690519 የሆነ የሚፈለግባቸው የግብር ከፍያ ግዴታ የተወጡ ስለሆነ የግብር ዘመን የሚፈለግባቸውን የግብር ከፍያ የከፈሉ ሲሆን I የ 2014 ዘመን የንግድ ፈቃዳቸው ቢታደስላቸው እና/ወይም በግብር ከፋዩ ስም የተመዘገበ ተሽከርካሪ ከላውዶ ቢደረግ የማንቃወም መሆኑን እንገልጻለን።

ይህ የግብር አክፋይል ምስክር ወረቀት ጨረታ ለመሳተፍ የሚያገለግለው እስከ 03 MEAZIA 2014 ቀን ነው።

የግብር ባለሥልጣን ሰም
አዲስ አበባ ምዕራብ

ማስታወሻ፦ ይህ ማስረጃ የንግድ ድርጅት ወይም/እና የንግድ ሥራ ንብረትን የባለቤትነት ስም ለማዘዋወር ወይ
ለመመለስ አያገለግልም።

FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
ETHIOPIAN REVENUES AND CUSTOMS AUTHORITY
TAX CLEARANCE CERTIFICATE

Date: 11-OCT-21
Certificate No.: 16024674700

To Whom It May Concern,

We refer to your request regarding the above subject.

We would like to confirm that EXCELLENCE ENVIRONMENT AND DEVELOPMENT PLC , TIN 0068690519 has settled his/her Tax obligation for the Tax Year and that he can renew his/her Business Licence and/or conduct annual inspection service for motor vehicle owned by the Taxpayer for the year 2021/2022.

For the purpose of participation in bids and auctions, this Tax Clearance Certificate is valid until 03 MEAZIA 2014.

Tax Official Name & Signature
AA BRANCH WEST

Note: This Tax Clearance Certificate has no legal value to return licence or change the ownership of a property or a commercial business.