**THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA**

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**Ministry of INNOVATION AND TECHNOLOGY**

**eastern** AFRICA **regional digital integration project**

**SOP-II (p-180931)**

**Environmental and Social Management Framework (ESMF)**

**(Draft)**

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# **ACRONYMS**

|  |  |  |  |
| --- | --- | --- | --- |
| AWPB | Annual Work Plan & Budget | IGAD | Inter- Governmental Authority for Development |
| CRGC | Climate Resilient Green Economy | IMR | Infant Mortality rate |
| CSA | Central Statistics Agency | IPF | Investment Project Finance |
| CTE | College of Teachers Education | IRU | Indefeasible Right of Use |
| DBE | Development Bank of Ethiopia | ISP | Internet Service Providers |
| EARDIP | Eastern Africa Regional Digital Integration Project | IXP | Internet exchange Points |
| EAC | Eastern Africa Community | LMP | Labor Management Plan |
| ECA | Ethiopian Communication Authority | MDA | Ministries, Departments, Agencies |
| EDFP | Ethiopia Digital Foundation Project | M & E | Monitoring & Evaluation |
| EHS | Environment Health & safety | MInT | Ministry of Innovation and technology |
| EIC | Ethiopia Investment Commission | MoE | Ministry of Education |
| E & S | Environmental & Social | MoLS | Ministry of Labor and Skills |
| ESF | Environmental and Social Framework | MoTRI | Ministry of Trade and Regional Integration |
| ESIA | Environmental & Social Impact Assessment | NERN | National Education & Research Network |
| ESMF | Environmental & Social Management Framework | NID | National ID program |
| ESS | Environment and Social Standards | NPSC | National Project Steering Committee |
| EthERNet | Ethiopian Education & Research Network | NTC | National technical Committee |
| GBV/SEA | Gender Based Violence/Sexual Exploitation and Abuse | PIM | Project Implementation Manual |
| GHG | Green House Gas | PIU | Project Implementation Unit |
| GoE | Government of Ethiopia | RAP | Resettlement Action Plan |
| GRM | Grievance Redress Mechanism | REN | Regional Education Network |
| IDP | Internally Displaced People | TVET | Technical Vocational Education &Training |
| ICT | Information, Communication Technology | UCF | Unguaranteed Commercial Financing |

# 

# **EXECUTIVE SUMMARY**

1. **Introduction**

Ethiopia, located in the East of Africa Region in which around eighteen countries are included ranging from Sudan to Tanzania. But they are only capturing a fraction of the growth fueled by global digital transformation due to infrastructure deficits and a suboptimal enabling environment. The Eastern Africa region includes landlocked countries with some of the lowest connectivity rates in the world and the highest prices for internet bandwidth. Despite the nearby Red Sea being a thoroughfare for many major international cables and growth in mobile voice services, the average broadband connectivity in the Eastern African region is behind the rest of the African average which is (19 percent compared to 25 percent respectively). For instance, Ethiopia’s national broadband network largely relies mainly on just one international connection to the submarine fiber optic landing station in Djibouti making the Djibouti route vulnerable to a single point of failure which could lead to a nationwide internet blackout. The Eastern African Regional Digital Integration Project (EARDIP) SOP-I and SOP-II is intended to:

* Promote the expansion of an integrated digital market across Eastern Africa by increasing cross-border broadband connectivity, data flows and digital trade in the region; and
* Advance digital market integration in the Eastern Africa region by increasing affordable access to regional broadband connectivity and strengthening the enabling environment for cross-border digital services.

1. **Methodology**

The methodology adopted for preparing the ESMF included conventional methods which comprised reviewing relevant legislation, policies, and related documents, qualitative and quantitative data collection and analysis, and conducting consultations with project stakeholders: implementers, partners, beneficiaries, project affected communities. Appropriate federal level face-to-face consultative meetings with representatives of the lead project implementing and partner institutions such as MInT, ECA, MoE (EthERNet), and MoTRI and EIC, NID, MoLS, DBE, Ethio-telecom and Afar regional implementing and partner institutions were held. Further virtual consultations with the other two targeted regions, Somali and Gambella regional implementing and partner institutions and World Bank project development team members and Task Team Leader were held via Teams. The issues discussed in the initial meeting covered the identification of the main stakeholders at all levels and their involvement modalities in the project, as well as a description of EARDIP SOP II components and the potential for environmental and social risks emanated from physical construction activities and the nature of potential environmental and social risks, were discussed. Furthermore, this consultative meeting involves assessment of the existing institutional capacities for environmental and social management and to explore the gaps in capacity. During the consultation meeting, discussions were also held on devising feasible institutional arrangements necessary for the implementation of the present ESMF and recommendations necessary to close the capacity gap.

1. **Description of the Project**

**Overview of the Project:** Eastern Africa Regional Digital Integration Project (EARDIP) SOP-II is going to be implemented in Djibouti and Ethiopia and aims to advance the regional integration of digital markets in Eastern Africa through supporting cross-border connectivity, harmonization of data and e-commerce regulations and policies, and removal of trade barriers. Regional efforts to move towards digital market integration in the Eastern Africa region is envisioned to have economic and welfare gains for all participating economies and will be especially beneficial for smaller economies to tap larger regional markets for economic expansion. Establishing a critical mass of resources to achieve economies of scale, supporting cooperation and knowledge spillover by countries on different rungs of the digital development ladder, and strengthening market integration through the digital market integration framework are expected to support both national and regional objectives. This project sets out plans in the EARDIP series of projects (SOP-II) under which two more countries will be added the Republic of Djibouti and the Federal Democratic Republic of Ethiopia. As both are within the Horn of Africa sub-region, both the two initial phases of EARDIP are considered as part of the broader Horn of Africa initiative. Other countries may be added to subsequent phases of the project, and a preparatory study is currently underway to assess missing broadband links across Eastern and Southern Africa. SOP-II project is designed around three integrated and mutually reinforcing components, which reflect the distinct but interconnected layers of an integrated regional digital market. Components 1, 2 and 3 will support respectively Connectivity Market Development and Integration; Data Market Development and Integration; and Online Market Development and Integration.

1. **Environmental and Social Baseline**

**Overview of Biophysical Baseline:** Ethiopia found in the Horn of Africa is a large land-locked country occupying an area of over 1.1 million square meters. Ethiopia has a tropical climate that is strongly a function of altitude. The country is constituted of eleven regional states and two city administrations. The physiographic diversity of the country consists of rugged mountains, flat-topped plateaus, deep gorges, river valleys, and vast lowland areas. About 45% of the country is highland with an altitude of 1500 m or above, and 55% is lowlands with an altitude of less than reaches 130 m b.s.l. As a result of the contrasting physiographic and climatic features of the country, Ethiopia has diverse ecosystems, 10 major ecosystems, and 18 major and 49 minor agro-ecological zones, which are inhibited by a great diversity of animals, plants, and microbial genetic resources (FDRE, 2015, in EPA, 2019). Across all these different ecosystem types, there are 52 conservation areas with official protection status. These include 20 National Parks, 3 wildlife Sanctuaries, 2 Wildlife reserves, 17 controlled hunting areas, 7 open hunting areas, and 3 community conservation areas (EWCA, 2012). The country possesses twelve major river basins, which form four major drainages systems, i.e., the Nile basin, Rift Valley basin, Shebelle-Juba basin, and the North-East Coast. These four major drainage systems drain the entire rural and urban parts of the Country through its primary, secondary, and tertiary level tributaries. The geographical regions where the subproject activities are planned to be implemented are Gambella (Dima Woreda), Somali (Dollo Ado Woreda) and Afar (Halli Woreda) Beneshangul Gumuz (Bameza), and Tigray. Most of these areas are borderland and remote locations where lots of refugee/IDP camps are located, and the host communities are indigenous with pastoral and agro-pastoral livelihood and the areas contain the country’s rich in mineral and cultural heritage and biophysical resources.

**Overview of Social Baseline:** Ethiopia is the second most populous country in sub-Saharan Africa with a population of 117.88 million, based on projections of the census conducted in 2021. It has a high percentage of the young population with 46% of the population being under 15 years of age. Based on gender disaggregation it is 50% with slightly higher women (51%) in urban areas. The average household size in Ethiopia is 4.6 people. It is a diverse and multicultural nation and home to over 90 ethnic groups. The project targeted regions (Afar, Somali, Gambella, Benishangul Gumuz and Tigray) where the subproject 1,1 and 1.2, 2.1, 2.2, are planned to be implemented are categorized in Bereha Eco-climatic zones, where have low soil quality, high erosion potential and vulnerability to pastoral livelihood and where lots of Internally Displaced People and Refugees hosted. In all cases the host community is also underserved and unserved borderland community from the connectivity point of view.

Afar Regional State in Ethiopia is homeland of Afar people, and it is the region where lowest point of the country is located. The sensitive natural ecosystem, historical and heritage sites situated in this region are Awash National Park, Yangudi Rassa National Park, Afar Depression, Ert Ale Active Volcano, Hadar and Aramis areas which are which are historical and designated as tourist attraction points. Afar is a home to peculiar wildlife, which include African wild ass, Grevy’s Zebra, Wild Fox, Wild cat, Cheetah, and Ostrich. Based on the projection made in 2017 by CSA the Afar regional state population was 1,812,002 comprised of 991,000 men and 821,000 women; urban inhabitants’ number 346,000 of the population, the remaining 1,446,000 are pastoralists which is around 80% of the total population. This region has an estimated density of 14.38 people per square kilometer and the average household are counted 5.6 persons.

Gambella Regional State has a total land area of 29,782.82 km2, with a total population of 396,000 (207,000 males and 189,000 female) according to the CSA, 2013 national population projection data for 2014-2017. Of these, 68.7% inhabit in rural areas while 31. 3% live in urban areas. This region has an estimated density of 10 people per square kilometer and in average 4.6 persons to household.

Somali Regional State, according to CSA (2013) projection, the region has a population of 5.3 million with average household size of 6.6. The region consists of 11 zonal administration, 93 districts, 6 city administrations and 1,224 Kebeles. People are primarily dependent on pastoralism. Livestock in the region is both considered as social prestige and means of wealth accumulations. Thus, the region has livestock population of 30,536,000 million heads, encompassing (24%) of cattle, (36.5%) of sheep, (32.2%) of goat, (7.2%) of camel and (1%) of equines (CSA, 2014). The region has 17 rural livelihood zones, generally classified as pastoral, agro-pastoral, riverine sedentary farming and etc. Livestock are the main pillar of livelihoods in Somali region supporting about 86% of the people. It supplies milk and meat for home consumption, and live animals for sale.

**The Beneshangul Gumuz Regional State** is located in the north-western part of Ethiopia, shares border with Sudan in the north-east, with the regional state of Amhara in the east, and Oromia regional state in the south. The region comprises of three zones (Assosa, Kamashi and Metekel) and one special woreda Mao Komo and one town administration Assosa Town. Topographically the elevation ranges from 488-2752 m.a.s.l and maximum slope steepness reaches about 740. The region is generally lowland and dominated by flat terrain. Some higher elevations and steeper slope areas are apparent in the mid-East and North-East parts of the region. Based on the projection census from CSA, 2007, the total population is 1,157,000. It occupies an estimated total area with 50,380 km, and the population consists of indigenous ethnic minority groups of Berta, Gumuz, Shinasha, Mao and Komo. It is also inhabited by settlers with a diverse ethnic background from other regions. The region is perceived to have extensive and untapped land resources with a great potential for agricultural development and has vast vegetation cover of natural forests, bushes, and shrubs.

The EDHS 2016 shows a median age at first marriage of 17.1 years among women aged 20-49 year in Benishangul-Gumuz. While the average median age is still low, it has increased significantly since 2011 (age of 15.9). In 1991, Benishangul-Gumuz region had 62 per cent of women aged 20-24 who had been married before age 18; this had declined to 50 per cent by 2016.[[1]](#footnote-1) In comparison, the national average of child marriage in this age group is 40 per cent. The reduction in BenishangulGumuz has not been fast enough to eliminate child marriage by 2030 and achieve SDG 5; it needs to decline 14 times faster.[[2]](#footnote-2)

**Tigray Rregional State** is located at the northern most part of the country, laying roughly between 14.0323° N, 38.3166° E, at about 500Kms from the national capital Addis Ababa. Total population of Tigray is recently estimated to be about 7.1 million people based on the last recorded census from which the male population is estimated to be about 50.5% and the female population is 49.5%. The Physiography of Tigray extends from Tekeze gorge in the south to central Eritrean highlands. The Tigrian plateau is separated from the Eritrean plateau by Mereb River. The Tigray plateau consists of 13% of the area of the region. It is an elongated highland with most of the land being between 1000 and 2000 meters above sea level. Long period of denudation has created residual features of granite hills, rugged topography, and Ambas. There are high mountains in this plateau with elevations of over 3000 meters. Most of the region’s climate is characterized as semi-arid. The Tigray region is dependent on Belg rainfall (Jan-May), Azmera rainfall (April to end of May) and Tsedia rainfall, which is the main rain equivalent to the Kiremt rain.

Tigray region is located between latitude 12°15 2 N

and 14° 572 N and longitude 36° 27 2 E and 39° 592 E in

the northern part of Ethiopia. The temperature regime of the

region varies from hot to very cool temperature. Most part

of the region’s climate is characterized as semi-arid. The

geography of Tigray region constitutes lowlands, mid-

highlands and highlands

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Sexual and Gender Based Violence: In Tigray, the proportion of women (aged 15-49) who have ever experienced psychological, physical or sexual violence by their current or most recent husband/partner is 27 per cent, 19 per cent and 12 per cent, respectively.[[3]](#footnote-3) The percentage of women who believe that a husband is justified in hitting or beating his wife in various circumstances is 65 per cent, while 31 per cent of men share the same belief/opinion.[[4]](#footnote-4)

**Connectivity, Telecommunication, and Internet:** Regarding connectivity, The Eastern Africa region includes landlocked countries with some of the lowest connectivity rates in the world and the highest prices for internet bandwidth. Despite the nearby Red Sea being a thoroughfare for many major international cables and growth in mobile voice services, the average broadband connectivity in the region is behind the African average which is (19 percent compared to 25 percent respectively). For instance, Ethiopia’s national broadband network largely relies mainly on just one international connection to the submarine fiber optic landing station in Djibouti. Although routes through Sudan and Kenya are available, they currently carry relatively little traffic making the Djibouti route vulnerable to a single point of failure which could lead to a nationwide internet blackout.

1. **Relevant Policies, Legal and Institutional Framework of Environmental and Social Management**

The government of Ethiopia (GoE) has enacted the necessary legal frameworks for environmental and social management and institutions to support its implementation and enforcement. The primary legislation that supports environmental and social management in Ethiopia are the FDRE constitution, Environmental Impact Assessment Proclamation No. 299/2002, Solid Waste Management Proclamation No. 513/2007, E-Waste Management Regulation No. 425/2018 Proclamation No. 1161/2019 on Expropriation of Land for Public Purposes, Environmental Impact Assessment Procedural Guideline (2003); Environmental and Social Management Plan Preparation Guideline (2004); Labour Proclamation (No. 1156/2019) National Social Protection Policy (2012); Gender Mainstreaming Strategy and Guideline (2010), National Policy on Ethiopia Women (1993; Proclamation No. 568/2008 Rights to employment for Persons with Disabilities and other Laws, Strategies, and Guidelines Enforcing Special Support for Developing Regions and Vulnerable Groups. A review of the World Bank ESF and relevant Environmental and Social Standards (ESSs), as well as the EHS guidelines, was also carried out. Accordingly, it was noted that ESS 1, 2, 3, 4, 5, 6,7, 8, and 10 were potentially relevant and applicable to the EARDIP SOP II subprojects. In addition, the following EHS guideline appeared to be most relevant to the EARDIP SOP II subprojects.

* EHS Guideline for Telecommunication
* EHS General Guideline Sections 1 to 4
* EHS Guideline for Waste Management Facilities

**VI. ESMF Process and Implementation**

**Responsibilities for ESMF Implementation:** The lead responsibility for the overall coordination and implementation of EARDIP SOP-II lies on the Ministry of Innovation and Technology (MInT) where the Project Implementation Unit is established for Ethiopia Digital Foundation Project (EDFP). The same PIU is planned to be used for EARDIP SOP II implementation and management; its E & S safeguard staff will be in charge of implementing the ESMF in all applicable EARDIP SOP-II financed subprojects and TA activities. It is also important that EARDIP SOP-II implementing, partner and beneficiary government and public institutions, and the telecom operators who will be awarded Indefeasible Right of Use (IRU) contracts should also expected to assign focal persons for E & S risk/impact management. The PIU E & S risk/impact management specialists will coordinate with the assigned focal persons in each implementing institutions and will be responsible to ensure the implementation of subproject activities are in compliance with the requirements of the ESMF.

**Subproject Classification and the ESS Requirements:** The EARDIP SOP-II is currently classified as a “Substantial risk” project and hence MInT will be required to undertake the appropriate E & S assessment of subprojects to be conducted in accordance with the national law, regulation, and guideline and any requirement of the ESSs that deemed relevant to the subprojects. The national guideline categorizes subprojects into schedules I, II, or III. It is anticipated that the majority of EARDIP SOP II component 1, 2 and 3 subproject activities will fall into Schedule I or II subprojects where it is required to conduct full/preliminary ESIAs depending on the nature and scale of the subprojects. However, it is also possible that certain subprojects may fall under high risk according to WB categorization where the subproject activities crossing through environmentally sensitive areas and ecosystems like (forest reserves, parks, wildlife reserves, very important water bodies, historical and cultural heritage sites). Under such circumstances, re-sitting, re-designing, or re-routing of subproject sites should be made to avoid impacts on the sensitive ecosystems and MInT will apply the relevant requirements of the ESS and the ESCP will be updated as appropriate.

1. **Procedures of the ESMF: The steps to be followed in ESMF implementation are:**

**Step-1** Sub-project Identification

**Step-2** Sub Project Preparation

**Step-3** E & S Screening of Subprojects

**Step-4** Review and Appraisal by stakeholders and Regulatory Body

**Step-5** preparation of Sub-project Environmental and Social Instrument

**Step-6** Review and Appraisal of Subprojects E&S Instruments by Stakeholders and Regulatory Body

**Step-7** Disclosure of Subprojects

**Step-8** Subproject Implementation

**Step-9** Environmental and Social Management and Monitoring

**Step-10** Audit and Review

**Step-11** Environmental and Social Safeguards Report

According to Proclamation 299/2002, Environmental and Social Impact Assessment, procedures that need to be followed in the process of conducting an environmental impact assessment are described in the Proclamation and further elaborated in the National ESIA Guideline procedural guideline issued in 2020. Thus a project developer is expected to act as follows (Figure 5 shows the flow chart of ESIA process):

**VII. Potential Environmental and Social Risks and Benefits**

Overall, the subproject activities involved in EARDIP SOP-II will cross terrestrial and aquatic environment on long distance trench excavation, deployment of cross border fiber optics, five additional routes to the sea and rehabilitation of terrestrial cables subjected to frequent outage due to conflicts, last mile network expansion to remote rural borderland areas, strengthen data storage, fixed transmission tower construction, and access road construction to fixed digital facilities. All stated activities for the infrastructure development will involve civil works and lots of electric and electronic digital equipment installation. Thus, it is anticipated to generate significant risks/impacts and it is rated as “Substantial”. The E & S risk/impact assessment carried as part of the EARDIP SOP II ESMF has also confirmed that the risk rating is “substantial” for both environmental and social aspects of the project activities with all risk rating being substantial.

**Beneficial Environmental and Social Impacts:** The EARDIP SOP II will have an overall significant beneficial impact on the citizens, refugees and IDPs, businesses and public and private sectors through improved access to connectivity, enabling environment will be created for digital services and provision of digital skills and digital connectivity will ease the early warning system for any calamities due to climate change.

**Environmental Risk of Subprojects Financed by the EARDIP SOP-II:**

The environmental risks are rated substantial as the environmental risks are related to a) alteration of terrestrial and aquatic habitats which could have adverse impacts especially where digital infrastructure passes through environmentally sensitive habitats or biodiversity hotspots during construction period and possibly during maintenance (sub-components 1, and 1.2), b) The installation of fixed line components, including shore approaches for long-distance fiber optic cables, and access roads to transmission towers and other fixed infrastructure, may require construction of corridors crossing aquatic habitats with the potential to disrupt water courses, wetlands, and riparian vegetation (Sub-components 1.1 and 1.2) which will be restricted to urban areas where there are major load centers, existing road, energy corridors or Way Leave/ROW and within mini grids existing footprint and therefore impacts on natural and sensitive habitats are expected to be limited, c), construction work, and electronic waste management (components 1 and 2), d) localized greenhouse gas emissions (sub-component 2.2), e)Construction activities may also accounts for an increased demand for resources including water, energy and raw materials (sub-components 1.1, 1.2), and f) Occupational health and safety issues (sub-components 1.1, 1.2, 2.1, 2.2 and 3.1). There are also similar downstream EHS risks due to technical assistance activities to be financed by the project such as legal, policy and regulatory frameworks (Sub-components 1.1, 1.3, 2.1, 2.2, 3.1, & 3.2).

**Technical Assistance and Subproject Risks:** The EARDIP SOP II will provide technical assistance support for the digital sector as designed under Component 1 sub-components 1.1, 1.3, Component 2 sub-components 2.1 and 2.2, and Component 3, sub-components 3.1 and 3.2. All the technical assistance support provided by EARDIP SOP-II should consider downstream EHS risks. TA assistances on capacity building, detailed network design and technical specifications for prioritized routes and network architecture/configuration to telecom regulator ECA on developing climate smart infrastructure, plus e-waste management protocol and rollout guidelines is considered EHS guidelines as it will pose potential public health risks. Technical assistance activities will be undertaken following the requirements of OESRC’s Advisory Note Technical Assistance and the Environmental and Social Framework (2019).

**Indirect Environmental Risks of Activities Financed by EARDIP:** The activities in component 1 and 2 where the project will support regional and national connectivity market development and integration in which open access and interconnected national backbone networks as well as deployment of new cross boarder links and subcomponent 2.2 Data exchange, governance, and protection where the subprojectintroduce data infrastructure that helps facilitate reducing the costs and climate impact of data storage, processing, and sharing in the region. The process will lead to involve excavation of land, deployment of fiber optic networks, construction of fixed transmission center, access roads, deployment of data storage, repair and rehabilitation of terrestrial cables implemented through the Catalytic Infrastructure Finances. The environmental and social risks likely to arise from the digital sector construction activities include terrestrial and aquatic habitat alteration, use of hazardous materials, generation of construction wastes, noise and air emissions, visual impacts, electric and magnetic fields, occupational health and safety aspects including electric safety, fiber optics safety, elevated and overhead work, fall protection, confined space entry and motor vehicle risks as well as community health and safety aspects with a focus on structural safety issues. There are also potential environmental risks associated with towers and other fixed facilities, access roads and right-of-way maintenance. The details of these risks, its significance and recommended mitigation measures are presented in Table 6, the Environmental and Social management Plan (ESMP) of the main report.

**Adverse Social impacts:** Social risks of the project are anticipated to be a substantial risk and the risks are identified and are primarily linked to subcomponent 1.1 and 1.2 that will undertake construction of linear infrastructure, national backbone network, access roads to transmission towers and other fixed connecting stations which may result in a) acquisition of rights of way (such as existing roads or electricity distribution networks potentially to physical and/or economic resettlement which may differentially affect vulnerable groups, ESS7 communities, those with smaller land plots or informal rights to land use. This may lead to short-term disruption of income along roads, for instance where informal traders may be displaced for a few hours during construction[[5]](#footnote-5); b) construction of infrastructure resulting in labor influx. This may impact community health and safety including transmission of diseases (including STIs ), conflict between workers and the community as well as risks associated with sexual exploitation and abuse and sexual harassment (SEA/SH) (sub-component 1,1 and 1,2); c) Risks to project workers, and the need for using of security personnel on work sites; d) Risks to labor including the potential use of child or forced labor by contractors or in the supply chain, (sub-component 1.1 and 1.2). Contractors will be given clear instructions that this is not allowed; e) Risks of data security given investments in data infrastructure (IXPs, data centers, others) (sub-component 2.1 and 2.2), through investment this will reduce existing risks associated with a lack of data storage facilities e) Data protection risk, especially pertaining to rights of vulnerable groups and ESS7 communities to ensure inclusion and maintain that data collected cannot be used as a basis for discrimination is questionable (sub-component 2.1 and 2.2). Because different groups can manipulate the data about vulnerable groups in the interest of research or due to the vulnerable groups low capacity to safeguard their interest. On the other hand, the social impact related to technical assistance includes failure of compliance on meeting the ESS requirements; exacerbation of social inequality, limited local knowledge focused content production and cultural uprooting. Technical Assistance activities will also need to be developed in line with the requirements of the ESF to avoid downstream risks from these activities.

**Lack of Infrastructure and Weak Government Capacity:** Public institutions in targeted regions have poor infrastructure (such as unreliable power/electricity, poor roads), government offices lack decent office structures/buildings and basic ICT facilities and equipment. They lack sufficient budget to run day to day business. Local government offices suffer from poor leadership commitment, low motivation, low salary, and lack of capacity to plan and execute. Lack of infrastructure and weak capacity can lead the following risks, lack of trust between citizen and government, lack of security and privacy, absence of public interest in government socialization, and low penetration of personal computer and networking.

**Barriers to Benefits:** Underserved communities and vulnerable groups face many barriers that hinder their access to project benefits. These barriers include digital illiteracy; unavailability of power; lack of ICT; infrastructure; unaffordability of ICT technologies and services; unavailability of user-friendly devices for people with disability; lack of awareness of the digital services and technicalities; physical access problem for people with disabilities; and lack of awareness and readiness for the use of technology among the elderly. More specifically, lack of higher education, specific knowledge of technologies, as well as practical skills to deal with technology, and, when these aspects become endemic, the emergence of digital debt that increases the competence barrier to be covered. The risk of dependency from technology, the presence of hidden costs such as those related to maintenance of installed technology, and the privacy concerns related to data sharing can be one barrier to benefit from the project.

**Exclusion of Women:** Women and girls can be excluded from the project benefits due to embedded gender inequity, i.e., socio-economic, and cultural marginalization of women and girls. Women’s time poverty means they find it difficult to balance their triple roles computing for their equal attention. Female household heads may face the risk of not benefiting from the project in equal measure with male counterparts because of not being able to balance their domestic responsibilities with their other roles. The low level of literacy and education by women may put further barriers to access project benefits. Hurdles to access, affordability, (lack of) education and skills and technological literacy, and inherent gender biases and socio-cultural norms, are at the root of gender-based digital exclusion.

**Risk for Loss of Land and Other Assets:** Due to the nature of the sub-projects financed by the EARDIP SOP II, the infrastructure development, for national backbone network, tower transmission and other fixed connecting stations, construction of access roads to the fixed transmission towers and fiber optics rollout activities do require acquisition of land and potentially physical and /or economic resettlement which may differently affect vulnerable groups ESS7. Underserved traditional local communities as expressed in ESS7, their economic, social, and legal status frequently limits their capacity to defend their rights to, and interests in land, territories, and natural and cultural resources. The Communities with smaller land plots or informal rights to land use may be affected due to deployment of digital infrastructure and may face loss of assets or properties.

**Exclusion of Underserved Communities:** The project will be implemented in parts of the country’s borderland location, and encompasses regions where underserved refugees, IDPs and vulnerable host communities reside. There will be potential risk of social exclusion and inequitable distribution of project benefits to underserved and vulnerable. If the project use a conventional approach and given the socio-cultural condition of the underserved communities, which are marginalized from the main stream system, the following risks can manifest: 1) unequal access to benefits of the project, 2) less or limited participation throughout the project cycle and 3) denial of opportunity to benefits from the implementation process and outcomes of the project.

**Vulnerable and Disadvantaged Groups:** Women and female headed households have less time available for participation in project consultations and information sessions and can be missed during targeting for project benefits such as training and access to digital devices. Persons with disability have much lower access to digital services, accessible devices (for visual, hearing and speech impairment) and women with disability are even less opportunity in this respect. Poverty and illiteracy and lack of basic digital skills all are hindrance to benefiting from the project. In additions to that, IDPs and refugees are also exposed to the various risks; 1) Lack of ID or knowledge of new technologies e.g. mobile phone transfers leading to exclusion or misuse, 2) Lack of freedom of movement due to camp setting, confined or remote populations - beneficiaries will not be able to use digital platforms or devices, or will be at risk if they do so and 3) Sharing personal data of refugees, IDPs or other affected individuals or households with third parties, potentially putting them at risk of violence, detainment or discrimination.

**Gender Based Violence (GBV):** The project service such as improved internet access, Wi-Fi and broadband services can be misused and facilitate acts that may cause GBV/SEA through stalking, bullying, sexual harassment, defamation, hate speech and exploitation. In rural areas, there is a potential for increased misuse of digital technology for recruiting young boys, girls, and children for human trafficking. The GBV/SEA risk within the project scope is considered substantial. To mitigate these substantial risks, the MInT/PIU should prepare the required document and system to ensure close monitoring of GBV/SEA in project implementation. Thus, the project should develop a clear code of conduct and ensure that its staff and contracted workers sign to it. Construction workers are predominantly younger males. Those who are away from home on the construction job are typically separated from their family and act outside their normal sphere of social control. This can lead to inappropriate and criminal behavior, such as sexual harassment of women and girls, exploitative sexual relations, and illicit sexual relations with minors[[6]](#footnote-6) from the local community. A large influx of male labor may also lead to an increase in exploitative sexual relationships and human trafficking whereby women and girls are forced into sex work. On the other hand, Technology-facilitated gender-based violence (TF GBV) comprises a spectrum of behaviors, including stalking, bullying, sexual harassment, defamation, hate speech, exploitation, and is associated with misinformation and disinformation and violent extremism, which are perpetrated online or using technology. TF GBV not only reflects and further entrenches inequalities in the online world; it also increasingly interacts with and influences the offline world. Despite often being perceived as a less serious and less harmful form of GBV, TF GBV1 can have serious consequences on the health, life opportunities and right to expression of women and girls and increasingly manifests in and is a feature of offline gender-based violence.

**Other Community Health and Safety Risks:** The project involves construction and infrastructure development that can be a risk for the community health and safety. In line with this, ESS4 states that the borrower will evaluate the risks and impacts of the project on the health and safety of project affected communities in the project life cycle, and establish and implement appropriate quality management systems (particularly the development of adequate ES assessments and management plans in line with ESF and WB EHS Guidelines) to avoid, minimize and mitigate risks and impacts of project activities. The risks can manifest on community health, safety and/or security due to the influx of people, mainly project workers and other newcomers subsequent to the new economic activities resulting from the productive use of the ICT. Non-local workers who will be engaged in the construction activities may increase the community risk of sexually transmitted diseases and risks to women and girls if not adequately supervised and trained. If HUCs are viewed as lower social or economic status by neighboring ethnic groups, women and girls from the HUCs/ groups may face higher risks in this regard. As the project targeted sites are situated in borderland areas where the security is volatile as in the ESS4 in section B, paragraph 24 when the borrower provide security to safeguard its personnel and property it will assess risks posed by the security arrangements to those within and outside the project site The presence of security can result in risks to the community including undue use of force, inappropriate conduct to the community, increased risk of SEA/SH etc.

**VIII. Consultation and Findings**

The key informant interview with relevant federal level stakeholders has been conducted from October 10 to November 4, 2022; stakeholders in Afar region from November 09-13, 2022; and stakeholders Elidar *woreda* in Halli-Lofefele connectivity route in Afar region from November 18-21, 2022. The consultation with stakeholders in Somali region was conducted through video conference on October 28, 2022, whereas consultation with stakeholders from Gambella region was done on November 16, 2022 through virtual consultation using Microsoft Teams. Both the video conference and virtual consultation was facilitated by the MInT team. The Woreda level stakeholder consultation in Ellidar Woreda was conducted starting from November 15, up to November 23, 2022. As planned, the community consultation in Haweli Kebele along the Halli-Ellidar-Lofefelo connectivity route in Afar region has been conducted. It was held at the Galafi village on November 18, 2022 in which 18 participants took part.

All stakeholder comments were noted and were considered in the assessment of the Project at all phases. Where necessary, responses were given by both the safeguards team present in the various meetings. The outcomes are:

1. **Potential Benefit**

In general, promote the digital market within and among the target countries of the EARDIP SOP II, remove cross-border barriers, and create enabling environment. Specific potential positive socio-economic impacts of the project include:

1. General Benefits

* Single connectivity market created due to infrastructure (Terrestrial Fiber, Submarine Cables, Bulk Purchase) and services (Fixed and Mobile Broadband Internet) infrastructure development. Support connectivity to facilitate technical interoperability of systems, data portability and data provenance both within and among the target countries of the EARDIP SOP II,
* Single data market enhanced through implementing data protection and privacy, cyber-security and content regulation. Thus, enabled cross-border trusted free flow, storage, and processing of data,
* Single online market created including digital ID, digital payments, E-transactions, consumer protection, digital public services, trade and customs, and logistics,
* E-commerce, digital services and the functions that support them ensured across the borders of the target countries of the EARDIP SOP II,
* Trade and customs barriers removed among the target countries of the EARDIP SOP II for goods purchased online,
* The data protection and privacy laws ensured among the target countries allow for cross-border data transfers and share cyber-security resources in the region,
* Interoperability and mutual recognition encouraged for data protection, and data exchange flows through national and regional legal frameworks,
* Cross-border barriers removed among the target countries of the EARDIP SOP II to infrastructure and connectivity (wholesale and retail), and
* Digital skills and innovative environment enhanced.

1. **Social Benefits**

The following are the social benefits identified from the stakeholder and community consultation sessions carried out during the preparation of the SA.

* If women are provided with the required support in the ICT sector, they are active and effective in transforming their life and changing the fate of a given household and country,
* Private market is efficient in transforming women, thus the EARDIP II can benefit from exploiting the private sector/market,
* TVET and ETHERNET can contribute on providing TA to women and their enterprises,
* Local coordinators at rural and urban areas can be women and can drive the women owned enterprises in a positive direction, MIS, training, providing ID to beneficiaries, follow-up and designating a hotline for GRM can help to prevent or mitigate potential impacts,
* The project will benefit women, given that it is innovation and technology focused. Since it is linked with Djibouti, it will help to strengthen the existing socio-economic tie and helps to enhance cross-border data market and online market integration,
* Being supported with sufficient training, involving women unions or associations and working on market network can provide a better probability of implementing the project component related to women-owned enterprises promotion,
* Digitalized service platforms save transportation costs and time when accessing government services,
* Digitalized service platforms add another layer of privacy by avoiding middlemen,
* Digitalized facilitated informal workers’ access to pandemic relief after the onset of disasters like drought, flood or man-made disasters,
* The mix of social media platforms will keep beneficiaries informed and enable them to share information, and
* GRMs will be available through multiple channels, such as telephone hotlines, email and SMS.

**IX. Grievance Redress Mechanism (GRM)**

The main objective of Grievance Redress Mechanism (GRM) is to assist and to resolve complaints and grievances in a timely, effective, and efficient manner that satisfies all parties involved, Grievance mechanism for the project should be adapted to the specific contexts of project implementation. The project implementation takes place at Federal level, in selected public institutions, at woreda level with woreda offices as well as community youth association. The GRM needs to be integrated with the existing grievance mechanism in the context of underserved communities requires an approach that considers the existing community institutions and local mechanisms. The EARDIP SOP II could use the already developed GRM procedure and Code of Conduct established, and the Digital Complaint Management System developed for EDFP. The GRM should be close to the potentially affected communities. The GRM will have three pathways for grievance redress.

***Pathway – 1:*** Is for grievances related to expansion of services to underserved communities and rural areas. Grievances related to component 1 and 2 by individual underserved (IDP and Refugee) and local host communities. The first point of complaints under pathway 1 should be received by the existing GRMs if any in the kebele where the complainants reside.

***Pathway – 2:*** Grievances related to federal or regional government offices and institutions targeted by the project at any level. The first point of grievance under pathway 2 is GRM of the targeted implementing/beneficiary institution, public institution, city administration or woreda office.

The PIU may provide mediation as an option where users are not satisfied with the project’s resolution. PIU must establish and implement a GRM to receive and facilitate resolution of such concerns and grievances. Based on ESS 2 , there must also be a separate GRM for direct and contract workers , separate from the main GRM, for those workers to raise workplace related concerns. Those workers will be informed of the GRM upon their recruitment, as well as the measures put in place to protect them against any reprisal for its use.

It is noted that ESS2 prohibits the employment of forced labour and child labour with an age of less than 14 year (the project will not engage anyone under the age of 18) and also requires the application of occupational health and safety (OHS) measures to be designed and implemented to address; (a) identification of potential hazards to protect worker, particularly those that may be life threatening; (b) provision of preventive and protective measure, including modification, substitution, or elimination of hazardous conditions or substances; (c) training of project workers and maintenance of training records; (d) documentation and reporting of occupation accidents, diseases and incidents; (e) emergency prevention and preparedness and response arrangement to emergency situation; and (f) remedies for adverse impact such as occupational injuries, death, disabilities, and disease.

The GRM should be designed to include grievances related to more sensitive types of grievances such as Gender Based Violence and sexual Exploitation and Abuse. The project needs to identify GBV service providers or use the existing one in the ministry to effectively respond in case of incidents of SEA/SH and build this into the existing GRM with all its specification and requirements. All prevention and responses action will need to balance the respect for due process with the wellbeing remain at the center in all matters and procedures. The GRM approaches are designed to approach E and S affected communities, GBV related cases, labor related cases and HUCs related cases differently, based on their nature, the types of actors involved, safeguarding the right privacy and right of the victim and potential consequences that the GRM have on the victim and the project. The Labor Management Procedure (LMP); Social Assessment Report (SA), Gender Based Violence (GBV) Risk Assessment and Action Plan and e-waste Management Plan, Security Risk Assessment and Management Plan (SRAMP) and Resettlement Framework (RF) will be used as a basis for some of the project risks and are annexed to the ESMF for further reference.

**IX. Training and Capacity Building**

Effective implementation of ESMF will require technical capacity within the PIU, implementing, partner and beneficiary institutions as well as other institutions responsible for monitoring EARDIP SOP II activities including regional line ministries, departments, and agencies (MDAs). The existing capacities and practical experiences of the main EARDIP implementing, beneficiary and partner institution carried with the main implementing agency (MInT) it was learned that its existing organizational structure does not constitute an environmental and social unit and have no E & S staff deployed. A general E&S site induction should be mandatory for all workers, with specialized technical E&S training delivered to staff. The degree of training should be based on the project’s E&S risks, on the tasks that will be performed, the CoC, including the SEP, and SMP, and on the general E&S provisions that are applicable for all personnel, including contractors and subcontractors. All workers should be made aware of the worker GRM and Project GRM and how to access them. In particular, security contractors should be given detailed training on community engagement and the grievance mechanism, as complaints may be brought to their attention in the first instance, and as contractors are not often included in employee training. Contractors should develop and implement SEA and GBV awareness training for staff at all levels, from contract management to day laborers. Additional training may be needed for staff that will be responsible for implementing, monitoring, and reporting E&S performance. Once the general E&S induction is defined, a series of specific trainings may be required in order to ensure that the requirements, controls, and mitigation measures are well communicated and understood. On the other hand, the consultation, discussion, and assessments held with the various institutions have shown that there are huge capacity gaps in environmental and social management which needs to be filled through deploying human resources and regular training. As a result, it is recommended that the capacity gap in environmental and social risk management should be filled in as follows.

* Deploy two full time professional environment and social safeguard specialists in the PIU at the earliest possible. These specialists should be deployed prior to the start of the project implementation.
* Use the already assigned Environmental and Social focal persons in the implementing and beneficiary institutions assigned for EDFP and for those who are new required to be assigned.
* The GBV specialist will be hired to oversee gender/SEA/SH related issues.
* Assign qualified Environment and Social focal persons at the implementing agencies at regional level who are expected to implement multiple subprojects. (Regional MInT line ministries or use the expertise at regional EPA).
* Assign qualified environmental and Social Focal persons at private sectors operators (Telecom operators) that will enter into contractual agreement with EARDIP for construction activities and pre-purchase of internet connectivity under Indefeasible Rights of Use. This requirement together with the need to comply with the ESMF procedures during subproject implementation should be included in the “environmental clauses” of the main contractual agreement.

One of the capacity building areas sought for by the lead implementing institution (MInT) and the other implementing partners (ECA, MoE (EthERNet), MoTRI,) involved in the implementation of EARDIP SOP II subprojects is the provision of training. The training to be offered will also need to address target groups from different implementing partners (e.g., focal persons from regional implementing/beneficiary institutions) and stakeholder institutions (e.g., private sector operators and contractors) who will have a role in the implementing the ESMF at various levels. The training is also necessary for high level project coordination and management groups, (such as members of project steering committee and technical committee) as well as to relevant members of the borderland beneficiary communities to create awareness on environmental management aspects of EARDIP SOP-II. The total estimated costs for mainstreaming environment into the EARDIP SOP-II subcomponents are **USD 1,160,000**. The budget is not only for training but for overall ESMF implementation over the project period of five years. This includes cost for implementation of GBV action plan. The above cost will be funded from EARDIP SOP-II project. The PIU Environmental and Social Specialists will report on the EARDIP SOP-II ESMF expenditure. Costs related to the required mitigation measures for EARDIP SOP-II subprojects are not set out in the budgets presented here. This will be assessed and internalized by beneficiary institutions as part of the overall EARDIP SOP-II subproject costs.

# **INTRODUCTION AND BACKGROUND**

The proposed SOP-II project focuses its physical investments in across boarder areas in Ethiopia and Djibouti and other targeted areas where connectivity is possible and where refugees and IDPs are located. It follows the Eastern Africa Regional Digital Integration Project (EARDIP) SOP-I (P176181) in which (Somalia, South Sudan, EAC and IGAD) are involved, bringing the total to five countries, including Kenya. Hence, countries included under SOP I are Somali and South Sudan and those countries considered under SOP II P180931 are Ethiopia and Djibouti, Kenya is also treated under SOP II but through KDEAP. The region’s population is growing rapidly at 2.4 percent annually and is expected to increase by 30 percent by 2030 and double by 2050. Ethiopia, a country with a total area of 1.1 million km2 consisting of diverse topography including rugged mountains, flat-topped plateaus, deep gorges and river valleys and vast lowland areas. About 45% of the country is highland with an altitude of 1500m or above, and 55% is lowlands with an altitude of less than 1500m. Ethiopia has also diverse ecosystems including national parks, high forest priority and protected areas, which are inhabited by a great diversity of animals, plants, and microbial genetic resources; and this makes Ethiopia one of the biodiversity hotspots of the world. Ethiopia’s population is highly diverse, containing over 80 different ethnic groups, including historically underserved regions.

Djibouti, with an area of 23,200 km2 and 370 kms long coastline, has less than one million of the population. Majority of them live in the capital while most of them lives in different parts of the country are sparsely populated and characterized by semi-nomadic pastoralist production system. Djibouti has a landscape which is largely made up of volcanic formations molded by tectonic plate movements/separation. It is also one of the most water scarce countries in the world. Limited arable land and potable water, as well as increasing desertification, remain significant challenges for the country. The region is highly vulnerable to the effects of climate change.

The 2019 Notre Dame Global Adaptation Index indicated that most countries in the region have high vulnerability and low readiness to combat the effects of climate change (e.g., Ethiopia is ranked as the 163/182 most vulnerable country to climate change and 151/192 least ready to support needed adaptation). Rising temperature and unpredictable rain patterns have resulted in both severe flooding and extreme droughts. Lack of climate resilient digital infrastructure, limits digitally enabled responses to climate events, exacerbating existing vulnerability and limiting adaptation capacity. As a landlocked country, Ethiopia is fully dependent on cross-border links to neighboring countries for access to submarine cables, international internet capacity through one primary set of routes (to Djibouti) and two secondary routes (to Sudan and Kenya) exposed to frequent outage. It’s reliance on the Djibouti link makes it vulnerable to a single point of failure for international internet connectivity.

The eastern Africa region includes countries with a history of conflict, fragility and is characterized by widespread disparities in relation to key socio-economic indicators. Approximately half the countries in the sub-region (HoA) are categorized as countries afflicted by fragility, conflict, and violence (FCV) on account of prolonged periods of civil war, the presence of powerful non-state actors and characterized by weak political and governance capacity. Successive shocks and intensity (including recent conflicts in Tigray region in Ethiopia (2020-2022) and onset of natural calamities such as droughts and floods prevalent in the Horn of Africa (HoA) region have led to a record number of internally displaced people (IDPs) and refugees, particularly in borderland areas, Djibouti has graduated from the FCV list in 2020. Persistent security concerns have created a high-risk operating environment, limiting investment in infrastructure deployment in the absence of de-risking efforts. Local conflicts, notably in the Tigray region Ethiopia, and border disputes have created a highly risky operating environment in the Horn of Africa. Although limited information is available on the impact of this internal conflict, estimated fiber damage is around 2,949 km (in Afar and Amhara), or 14 percent of the national total. Relatedly, approximately 34 per cent (3,473) of the total cell towers and 3,000km of optical fiber have been damaged by the conflict in the Tigray, Afar, Amhara regions, and elsewhere and around one third of these facilities being still not functional. This conflict has also displaced over 5 million people[[7]](#footnote-7) in the year 2021 alone resulted in lost revenue in the telecom sector.

Ethiopia’s 21,178km inland fiber network[[8]](#footnote-8) is relatively dense but the overall volume as well as the capacity of the existing network can carry is inadequate for a country of Ethiopia’s population size. Borderland areas are poorly served, especially along the border with Somalia, South Sudan, and Djibouti. Over the last decade, an increasing number of refugees, and IDPs (5.1m conflict induced displaced and 3.6m other IDPs, 2021[[9]](#footnote-9)) are estimated to have clustered in these borderland areas, with poor or no connectivity where several of the fiber routes have been damaged due to conflict and require rehabilitation and repair. Many countries in the region, particularly those in the HoA, still lack the requisite data infrastructure allowing data to be exchanged locally (e.g., via data centers and internet exchange points (IXP). Instead, they depend on overseas facilities requiring them to transfer and store large amounts of data internationally, adding transit costs and causing latency issues. Introduction of green data infrastructure and cloud capabilities in parallel to introduction of robust data governance and data protection frameworks is needed ensure safe and efficient storage, as well as management and public disclosure of data. Djibouti is an exception here because it acts as a natural regional transit hub for traffic because of its excellent connectivity from undersea cables, and it is in a position to exploit that position through improved data centers, primarily driven by private players, and content hosting facilities for the region.

There is also significant disparity in the national regulatory frameworks for conducting cross-border transactions. For example, there is no framework currently in place to provide for the mutual recognition of digital signatures, requiring travel to sign international contracts in person. Other important regulations, such as on intermediary liability, are mostly absent in the region, creating uncertainty about the rights and obligations of cross-border services providers. Expanding trade, particularly e-commerce, and digital services delivery will require investments in key online service enablers such as DFS and harmonization of e-transaction frameworks. Moreover, many of the region’s educational institutions, including universities, TVETs and schools, are not equipped to produce the requisite skills base to expand use of online services and fuel the development of the online market. presently, both the availability and quality of digital literacy and skills training in the region is limited, and universities across the region are ill-equipped with the requisite infrastructure, curricula, and trainers to delivery effective training, as well as leverage online platforms to enhance training delivery.

The proposed EARDIP SOP-II aims to advance the regional integration of digital markets in Eastern Africa through supporting cross-border connectivity, harmonization of data and e-commerce regulations and policies, and removal of trade barriers, with the vision of establishing a Single Digital Market (SDM). Regional efforts to move towards SDM are envisioned to have economic and welfare gains for all participating economies and will be especially beneficial for smaller economies to tap larger regional markets for economic expansion. Establishing a critical mass of resources to achieve economies of scale, supporting cooperation and knowledge spillover by countries on different rungs of the digital development ladder, and strengthening market integration through the SDM framework are expected to support both national and regional objectives. The EARDIP SOP-II aims to advance digital market integration in the Eastern Africa region by increasing affordable access to regional broadband connectivity and strengthening the enabling environment for cross-border digital services as well. EARDIP SOP-II has four integrated and mutually reinforcing components, and seven interconnected layers of sub-components. In which the participating countries (Ethiopia and Djibouti) to select activities to be implemented under SOP-II, based on their most pressing needs and their regional interaction.

This document provides an Environmental and Social Management Framework (ESMF) for EARDIP SOP-II. This ESMF is prepared for Ethiopia and a separate one will be developed for Djibouti. The main objective of the ESMF is to establish an environmental and social management process that meets the National Environmental requirements and the World Bank ESF standards (ESSs) as well as WB EHS Guidelines applicable to addressing the environmental and social risks of the EARDIP SOP-II subprojects. The ESMF sets out the principles, rules, guidelines, and procedures to assess the environmental and social risks and impacts of the EARDIP SOP-II. Its purpose is to provide general guidance to the project implementers found in participating institutions on the implementation of environmental and social standard requirements and associated procedures that should be accomplished prior to the commencement of the ERRDIP subprojects on the ground.

The ESMF contains proposed mitigation measures to avoid, reduce, mitigate and/or offset adverse risks and impacts and information on the institutions responsible for addressing project risks and impacts. The ESMF also consists of the country’s policy, legal and institutional framework including its national, regional, and sectoral implementing institutions and associated implementation capacity relevant to the environmental and social risks and impacts of the project. The ESMF is complemented by the e-waste Management Plan, Social Assessment (SA) and labor management Procedure (LMP) and Gender-Based Violence Risk Assessment and Action Plan (GBV& RA & AP), Resettlement Framework (RF), Security Risk Assessment and Management Plan (SRAMP) and Stakeholder Engagement Plan (SEP) all are annexed as part of the ESMF.

Chapter One outlines the background, borrower’s institutional capacity, purpose and objectives, justification, and potential users of the ESMF and methodologies used to prepare the ESMF. A description of the EARDIP SOP II, including project development objectives, project beneficiaries, locations, anticipated subproject and its components and implementation arrangement is outlined in Chapter Two. Chapter Three addresses project target regions while Chapter Four addresses a review of applicable policies, legislations, institutional frameworks and World Bank ESSs. Chapter Five deals with ESMF implementation process whereas Chapter Six talks about potential environmental & social risks and benefits of the project comprising adverse environmental, social, health and safety risks and impacts along with corresponding mitigation measures while Chapter Seven covers the details on stakeholder consultations and ESMF disclosure. , Chapter Eight is about Grievance Redress Mechanism of the project along with required institutional arrangement whereas Chapters Nine and Ten outline the environmental & social risk management and monitoring instruments, and required training and capacity building for ESMF implementation, respectively. Chapters Eleven and Twelve present proposed ESMF implementation budget, and monitoring, evaluation and reporting system for ESMF implementation, respectively.

## **Purpose and Objective of the ESMF**

The objective of the Environmental and Social Management Framework (ESMF) is, among others, to provide an environmental and social management processes and procedures for Eastern Africa Regional Digital Integration Project (EARDIP) SOP-II. The ESMF is prepared to serve as an instrument for E&S safeguards to ensure that the environmental and social impacts of EARDIP SOP-II are properly considered during project design and implementation. The ESMF provides guidance for designing appropriate measures and plans to avoid, reduce, mitigate and/or offset adverse impacts and enhance positive outcomes including benefits for project beneficiaries and the environment. It also provides guidance to main stakeholders implementing agencies, beneficiary institutions, and partners, and communities to ensure project activities are implemented in an environmentally friendly and sustainable manner as required by the World Bank Environmental and Social Standards (ESSs) and the national environmental policies and relevant legislations pertaining to sustainable environmental and social management of sub project activities.

The specific objectives of the ESMF are to:

* Establish clear procedures and methodologies for integrating environmental and social issues in planning, review, approval, and implementation of subproject to be financed under the EARDIP SOP-II;
* Identify the main potential project risks and impacts and associated mitigations;
* Determine the training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF;
* Provide practical resources for implementing the ESMF,
* Provide generic/indicative Environmental and Social Management Plan (ESMP) and reporting forms under the project to ensure that environmental and social issues will be managed effectively; and
* Specify appropriate roles and responsibilities of lead agencies and government regulatory departments, and outline the necessary reporting procedures, for managing and monitoring environmental and social concerns related to the project subcomponents.

## **Justification of the ESMF**

The Environmental and Social management Framework (ESMF) is being prepared to ensure that digital infrastructure developments and digital facility installation under the proposed EARDIP SOP-II are implemented in accordance with World Bank’s Environmental and Social Standards and GoE’s national legislations that require the development activities should be implemented in an environmentally friendly and socially acceptable manner. The National EIA proclamation No. 299/2002 under Article 3.1 states that a project that requires environmental impact assessment shall not commence implementation without approval from the competent Federal/Regional Authorities. According to the World Bank Environmental and Social Policy for Investment Project Financing (IPF), projects supported by the Bank through IPF are required to meet the ten Environmental and Social Standards outlined in the Bank’s ESF. The Bank also supports the use of the borrower’s (in this case MoFED and MInT) ES Framework in the assessment, development and implementation of projects supported through IPF. Environmental and Social Management Framework (ESMF) is an instrument that examines the potential risk and impacts when a project consists of a series of subprojects, and the risks and impacts cannot be determined until the subproject details have been identified.

The EARDIP SOP II will be implemented in the borderland areas of the country where unserved, underserved, refugee camps, IDP and host communities resides and where the sub-projects are implemented on fiber between Halli and Balho (74 km), fiber between Adwa-Mitsiwa-Asmara (275 km) and Halli to Assab (207 km), fiber between Imi to Dolo (300 km) and fiber between Gode to Beledweyne (210 km). They are also implemented on cell sites covering 9 refugee camps in Jiljiga and Melkidia and cell sites covering 14 camps in Gambela. Furthermore, for repairing and rehabilitating damaged terrestrial fiber optic cables in the conflicting areas of the country such as Tigray and to construct and install fixed digital last mile facilities, fixed transmission tower, data storage and exchange facilities, payment and service enablers, and network expansion for NERN. The EARDIP SOP-II also involves federal and regional public institutions with different support. However, the specific locations where the project activities will be implemented have not been identified. The project activities will be implemented under different environmental conditions. As part of the project preparation, MInT has prepared this Environmental and Social Management Framework (ESMF) which will serve as a basis for management of any potential environmental and social risks originated from the project.

The EARDIP SOP-II could stimulate public/private sector investment through Catalytic Infrastructure Financing in new infrastructure, notably laying of back bone optical fibers and transmission towers, fixed transmission and connecting stations, cyber security infrastructure, construction of data storage and exchange, 4G broadband Radio Access Network. Terrestrial and aquatic habitats may be altered during the construction of such communications infrastructure depending on the proposed location. High risks to biodiversity will be excluded during screening and analysis of alternatives. Potential impacts to habitats may be more significant during construction and installation of linear infrastructure development, such as long-distance excavation, rollout of optical fiber cables, and Infrastructure development on fixed transmission tower, and other types of fixed connecting stations as well as access roads to this infrastructure along previously undeveloped land. In general, activities involving construction of connectivity network infrastructure and related equipment and implementation of data storage and exchange infrastructures and repair rehabilitation of damaged and rehabilitation of fiber optics in conflicting areas of the country, cyber security infrastructure and TA services are likely to generate adverse environmental and social impacts. Any infrastructure subprojects consisting of physical works could trigger one or more of the ESSs in line with the World Bank ESF. On the other hand, by providing catalytic funding to stimulate demand by key user groups and in low-income market segments (including in refugee/IDP camps, conflict affected areas in Tigray in Ethiopia and locations in rural and borderland areas), this subcomponent will follow an MFD approach to unlock further private sector infrastructure investment in unserved or underserved areas. At this point these indirect consequences and/or downstream activities are not considered as Associated Facilities, assessing the criteria outlined in the ESS1, Para 11. The importance of this ESMF, therefore, emanates from the need to fulfill both the World Bank ESSs and national environmental requirements throughout the process of EARDIP SOP-II design and implementation.

## **Potential Users of the ESMF**

This ESMF has been prepared for use by the lead project implementing agency, partner institutions as well as key stakeholders to be involved in the planning, implementation, and management of the proposed EARDIP. As such, the ESMF will be useful to the following stakeholders:

* Project Financer
* MInT and Project Implementation Unit (PIU)/Regional Line bureaus.
* Ethiopian Communication Authority
* Ministry of Education/ Ethiopian Education and Research Network/
* Ministry of Trade and Regional Integration (MoTRI)
* Federal and Regional Environment Protection Authorities
* Service providers, Contractors, and Consultants to be engaged under EARDIP SOP-II

## **Methodology**

The methodology adopted for preparing the ESMF includes conventional methods which are briefly discussed below.

1. ***Review of relevant literatures, policies, and other documents***

Relevant literatures that consist of the following were reviewed for the ESMF preparation:

* Review of the existing national and regional policies and legal documents, regulations, and guidelines on environmental management.
* Existing ESMFs for similar World Bank projects such as the EDFP- ESMF.
* Project Appraisal Document (PAD).
* WB EHS guidance materials
* WB environmental and social standards for IPF projects as outlined in the Environmental and Social Framework. The new ESF of the World Bank (2017) was reviewed and applied for preparation of the current ESMF.
* References from different websites.

1. ***Data Collection and Analysis***

Both qualitative and quantitative approaches were used to collect valid and reliable data from different federal and regional implementing, beneficiary, or partner government institutions/offices of the project. Secondary data were collected, analyzed, and applied to compile the environmental and social baseline of the ESMF.

1. ***Consultation with project stakeholders: Implementers, beneficiaries, and partners (discussed in detail under chapter 7).***

As part of the ESMF preparation process face to face and virtual consultations with federal/regional stakeholders involved in project implementation and regulatory function as well as with project beneficiaries were conducted. One appropriate consultative meeting with the project implementers and beneficiary institutions at federal level (MinT, MoE (EthERNet), DBE, MoWSA, NID, EIC, MoTRI, EPA, ECA) was conducted. Due to the security situation in the project target areas the team could not get security clearance to all the project target areas however, the team is provided with security clearance to Afar region and able to travel to Afar regional city Semera and conduct consultation with the Afar regional implementing /beneficiary and partner institutions but for the zonal and woreda level consultation the team used local experts from the main regional implementing agency (R/MInT) to conduct the consultation with the zonal and woreda implementing/beneficiary or partner institutions and the local community. The regional local team is made aware about the project by the consulting team and provided with the checklist to be used as guideline. For the regions (Somali and Gambella) where security clearance is not provided, virtual meeting with regional implementing and regulatory agencies have been conducted. For the assessment purpose checklists containing both environmental and social data collection questions have been utilized and please refer the checklist attached with the Social Assessment documents at Annex K.

## **Spatial Scope of the ESMF**

For Ethiopia, there are six main sub-projects, as follows:

* 1. Fiber between Halli and Balho (74 km)
  2. Fiber between Adwa-Mitsiwa-Asmara (275 km) and Halli to Assab (207 km)
  3. Fiber between Imi to Dolo (300 km)
  4. Fiber between Gode to Beledweyne (210 km)
  5. Cell sites covering 9 refugee camps in Jiljiga and Melkidia
  6. Cell sites covering 14 camps in Gambela

On the other hand, funds received from the project will be used together with funds from the mobile network operators and ISPs that are investing (i.e., project funds will be a subsidy to private investment. Thus, UCF is covered alongside project funds in the ESMF.

# **DESCRIPTION OF THE PROJECT**

The proposed project follows EARDIP SOP-I (P176181) (Somalia, South Sudan, the Eastern Africa Community (EAC) and the Intergovernmental Authority of Development (IGAD) and will include Djibouti and Ethiopia. Together with SOP-I, it will support the advancement of the integration of digital markets in the Eastern Africa region. The Region has made strides to enable free movement of goods and services; the next challenge for the region will be enable cross-border flows of digital services. The Project takes a holistic approach to supporting simultaneous integration of the connectivity (broadband services), data (enabling of cross-border flows of data), and online (enabling of cross-border digital payments trade and commerce) markets across the region. Advancement in each district market layer is expected to create a virtuous cycle as each segment builds on another, reinforcing the development, expansion, and integration of the region’s digital market. As part of EARDIP SOP-II, the project will not finance the construction of undersea cables and submarine landing stations as Djibouti is already connected with nine submarine cables currently in service which provide plenty of capacity. Thus, there is no requirement to use capacity on any other cables that are planned or under construction in Djibouti, which implies that there are no associated facilities with SOP-II.

The following components are proposed for the project, which would consist of a menu of activities from which participating countries and entities could choose based on their pressing needs. Interventions under each component would target both relevant regional bodies and individual countries and would be tailored to the needs of each individual recipient, considering the different stages of development within the region, The trajectory of the participants; however, would remain the same, e.g. moving towards the creation of a digitally enabled environment for regional integration and development. The project will also in detail contribute to GCRF’s Pillar 4 (Strengthening policies, institutions, and investments for rebuilding better) through investments in resilient infrastructure (Component 1) and digital solutions for government (Component 2) that can allow for continuity of operations in times of crisis. In addition, the project will contribute to Pillar 2 (Protecting people and preserving jobs) through the provision of digital skills training (Component 3).

The project will support Green, Resilient, and Inclusive Development through efforts on climate adaptation, mitigation, and furthering digital inclusion, and the project will address climate risks specific to physical digital infrastructure and regulatory environment. The project will also apply the World Bank’s Gender Strategy 2016–23by improving women’s access to broadband service, addressing key barriers linked to low skills attainment, establishing mitigation measures for GBV and sexual exploitation at work, and enhancing women’s voice and agency through developing national ICT sector strategies and data collection efforts with a gender aggregation. The project will also have synergies with other ongoing World Bank national projects that will support country participation in the regional activities, including Ethiopia Digital Foundations Project (P171034), and the Djibouti Digital Foundations Project (P174461). Here, links will be made between the REC-level activities with the national projects in the member states, providing parallel support to countries in their efforts to participate in and transpose the regional harmonization initiatives within their country systems. The project is five years project from 15-Nov-2023-20 to Dec-2028 and implemented in Djibouti and Ethiopia with a budget of USD 130 million (USD 100 million from IDA + 30 million from unguaranteed commercial financing -- UCF). For the Ethiopian components, the project budget is USD 80 million + US$30m in UCF. The EARDIP SOP-II project has four main components, and seven subcomponents as described below:

**Component 1:** Connectivity Market Development and Integration: will bridge existing network coverage and access gaps through infrastructure financing and support for an enhanced enabling environment to develop the regional broadband connectivity market.Under:

**Sub-component 1.1:** This subcomponent will support the deployment of key missing cross-border and backbone fiber links to improve the resilience, coverage, and integration of regional connectivity networks.Supportwill be provided to deploy upwards up to 1,500 kms of fiber network in Ethiopia and up to 300 kms in Djibouti, covering strategic cross-border and national backbone network links as well as their extension into borderland areas, with a view to creating an integrated regional backbone network allowing for reduced cost and improved quality of transmission of capacity throughout the region. Financing support will be provided to operators who will be expected to co-finance, design, build, and operate the network infrastructure. This subcomponent also supports TA activities.

**Sub-component 1.2:** Last Mile Connectivity, including in the border areas: This subcomponent will connect rural, borderland areas, where the commercial incentive for last-mile network expansion is insufficient to propel further infrastructure investment. By providing catalytic funding to stimulate demand by key user groups and in low-income market segments (including in refugee/IDP camps, conflict affected areas in Tigray in Ethiopia and locations in rural and borderland areas), this subcomponent will follow an MFD approach to unlock further private sector infrastructure investment in unserved or underserved areas.

**Sub-component 1.3:** Enabling Legal, Regulatory and Institutional ICT environment: This subcomponent will provide upstream enabling policy, legal and regulatory support, as well as capacity building to stimulate broadband market development and harmonization at the national and regional level. Building on the regional harmonization efforts under SOP-I, activities under this sub-component will support the strengthening, modernization, and regional harmonization of the legal, regulatory, and institutional frameworks governing the telecom sector to foster competition and private sector investments and unlock the potential of the ICT sector nationally and across borders. Support will also be provided to increase capacity at the national level to implement these initiatives, working with national ICT regulatory authorities, agencies, and line ministries for ICT at the national level and through the RECs at the regional level. Project financing will also cover TA activities.

**Component 2:** Data Market Development and Integration, this component seeks to foster the development of a regional data market by enabling more affordable, secure, and seamless data management and sharing across borders. It will finance data infrastructure to reduce the latency and costs of data sharing within the region, as well as build on the regional harmonization efforts under SOP-I and enhance and harmonize data governance through improved national and regional frameworks, including in areas such as data protection, to support secure data processing and prevent misuse. Financing will also be provided to strengthen cybersecurity incident response, including through regional partnerships and frameworks. Support will be provided to enhance data management and hosting infrastructure, with a view to achieving economies of scale and strengthening climate resilient data management. Capacity building workshops and training will be supported for representatives of the public and private sector.

**Sub-component 2.1:** Cyber-security framework, infrastructure, and capacity:this subcomponent seeks to strengthen cyber-security and incident response capabilities in the region. It will do so both by strengthening basic national frameworks and through coordination at the regional level, with a strong focus on skills development and pooled resources. The financed activities will support the development of best practice frameworks, enhanced technical and operational capabilities, as well as capacity building, grounded in an understanding of the regional and national cyber threat landscape and regional knowledge sharing, to help create a trusted online transaction environment and safeguard digital infrastructure and services. Project financing will also cover TA activities.

**Sub-component 2.2:** Data exchange, governance, and protection, this subcomponent will support investments in enabling data infrastructure and governance frameworks that facilitate cost-effective and secure data exchange in the region. It will build on the regional harmonization efforts under SOP\_I and focus on adopting common frameworks for data protection and data governance, reducing barriers for data sharing within and across borders, and enabling and promoting interoperability. It will also introduce data infrastructure that helps facilitate reducing the costs and climate impact of data storage, processing, and sharing in the region. The approach taken under 1.1 and 1.2, financing of data infrastructure will go through a competitive tender to encourage private sector participation, unless there is restricted private sector interest or if there is justification of government ownership of that infrastructure. Project financing will TA Activities.

**Component 3:** Online Market Development and Integration: this component aims to build the regional online market by removing barriers to cross-border trade and payments, as well as investing in key enablers for expanded digital service delivery. Leveraging the regional harmonization efforts under SOP-I, it will support the development of regional and national legal and governance frameworks on e-commerce, trade, and payment systems to improve and expand national governments’ capacity to support growth of cross-border services, payments, and trade. Financing support will be provided to deploy digital public infrastructure and TA to ensure its adoption across ministries, departments, and agencies (MDAs) through targeted digital skills training. By enhancing the digital capabilities of public administrations, the project will expand government capacity to provide e-services and implement regional-level agreements and systems.

**Sub-component 3.1:** Digital enablers for cross-border trade and service delivery, this subcomponent aims to enhance readiness to expand digitally enabled cross-border trade and service delivery, by introducing key enablers, will also enable and facilitate cross-border transactions for goods and services by developing the mutual recognition of e-signatures and supporting regional standardization and consensus-building efforts to deepen the integration of regional payment systems. Support will also be provided at the national level to develop shared digital public infrastructure for scaled digital service delivery and e-commerce. Project Financing will also cover TA activities.

**Sub-component 3.2:** Research and education networks and training for digital skills: this subcomponent will support the development of the digital skills base through foundational support to the establishment of a National Research and Education Network (NREN) in Djibouti and assistance to the regional activities of EthERNet, the Ethiopian NREN. It will enable the expansion and strengthening of the regional infrastructure supporting higher education by establishing regional collaboration among NRENs, allowing for economies of scale and knowledge transfer. Support will be provided to enhance the capacity of universities and TVETs, in partnership with NRENs and governments, to deliver digital skills programs for civil servants and university faculty and students. Project financing will also cover TA activities.

**Component 4:** This component will finance project management and implementation of project-associated activities. It will cover the additional operating costs of the project implementation units (PIUs) in Djibouti and Ethiopia generated by the project. This component will help strengthen the technical and functional capacity of the PIUs, including through the recruitment of expert consultants in key areas and the facilitation of on-the-job learning and competency transfer. It will support independent audits, monitoring, and evaluation (M&E) (including collecting gender-disaggregated data), and quality assurance to ensure compliance with best procurement and financial management (FM) practices. Support will be provided to enable collaboration between regional and national PIUs. This component will also support Environmental and Social Framework (ESF) compliance, with a particular emphasis on addressing the high security- and GBV-related risks associated with the deployment of infrastructure and civil works, including stakeholder consultation, a robust grievance redress mechanism, and development of site-specific assessments and plans. In Djibouti, the project will work with an existing PIU, at the Ministry of Communications, with responsibility for Postal Services and Telecommunications (MCPT), which has been serving the Digital Djibouti project since 2021 while in Ethiopia, the PIU will be at the Ministry of Innovation and Technology (MInT), serving the Ethiopia Digital Foundation Project since 2021.

**Component 5:** This component will allow for rapid reallocation of uncommitted national IDA funds in the event of an eligible emergency declared in one of the participating countries. A Continency Emergency Response Component (CERC) annex to the Project Implementation Manual (PIM) will be prepared to guide the activation and implementation of the CERC. For the CERC to be activated and financing to be provided, the recipient will need to (a) submit a request letter for CERC activation, and the evidence required to determine eligibility of the emergency, as defined in the CERC annex; (b) submit an Emergency Action Plan, including the emergency expenditures to be financed; and (c) meet the environmental and social requirements as agreed in the Emergency Action Plan and Environmental and Social Commitment Plan. By having Emergency Action Plan and allocating related budget, CERC will help strengthen the institutional capacity to respond to emergencies caused by climate and natural disasters, and support reinforcing the country’s resilience to climate and natural risks identified above.

## **Project Development Objective**

The Series of Projects (SOP-II) development objective are to advance digital market integration in the Eastern Africa region by increasing affordable access to regional broadband connectivity and strengthening the enabling environment for cross-border digital services.

## **Project Target Beneficiaries**

The project will benefit citizens targeting specifically women, persons with disabilities, refugees, IDPs, businesses, public sector MDAs, and RECsthrough improved access to connectivity and an environment enabling digital services and digital skills:

1. **Citizens:** Citizens will benefit both indirectly and directly from wider opportunities to participate in an expanding regional digital market, which offers new employment opportunities and access to new public and commercial services online. Expansion of network coverage will directly benefit unserved or underserved communities, particularly in rural and borderland areas, where new networks are deployed or upgraded, supporting greater digital access and inclusion. Network coverage (of the population) is expected to increase from 90 to 94.01 (World Average) percent and 55.7 (internet penetration) to 64.4 (World Average) percent in Ethiopia and Djibouti, respectively, on the back of the supported infrastructure investments. Approximately 5,000 citizens, of which at least 30 percent are women, including persons with disabilities, will also benefit directly from digital skills trainings (conducted using accessible techniques and tools), which will increase their readiness to access online service and contribute to the development of the digital market.

**Refugees and IDPs:** Refugees, IDPs, and people in host communities will directly benefit from enhanced network coverage and new access to mobile and emergency response ICT infrastructure, for example, boosting their resilience to withstand climate shocks.

**Businesses:** ICT service providers, including mobile network operators and internet service providers, will directly benefit from the project through contracts for infrastructure deployment and capacity purchase as well as local procurement of IT, awarded on a competitive basis. The wider business community will also benefit indirectly from reforms supported and investments made, including a more secure and cost-effective environment for conducting business online, on the back of more reliable, better quality, and low-cost broadband services; more seamless data exchange within and across borders; and the deployed enabling digital public infrastructure that facilitates online services, which boosts e-commerce. The creation of a regional digital market will provide local businesses with opportunities to scale within the region and access larger markets more easily.

1. **Public Sector:** MDAs, particularly line ministries for ICT and trade, as well as ICT industry regulatory bodies in participating countries, will directly benefit from targeted financial and TA. Public institutions (including unconnected government offices, health care centers, schools, universities, and TVETs) will also benefit from improved access to connectivity and access to shared digital infrastructure (for example, IXPs and data hosting solutions). In Ethiopia, the main direct implementing agencies of the project include the Ministry of Innovation and Technology (MInT), the Ethiopian Communications Authority (ECA), Ministry of Education (MoE) through the Ethiopian Education and Research Network (EthERNet), and Ministry of Trade and Regional Integration (MoTRI) which will receive targeted financial and technical assistance. Furthermore, main direct beneficiary institutions are Ministry of Health (MoH), Ministry of Labor and Skills (MoLS) and Ministry of Women and Social affairs (MoWSA) and National ID Program (NID) and regional line ministries, authorities and bureaus moreover, public institutions (including unconnected government offices, healthcare centers, schools, universities, TVETs) will also benefit from improved access to connectivity and access to shared digital infrastructure (e.g. IXPs, data hosting solutions and, civil servants including female staff will be trained in the management or use of digital systems and digital skills as well.

## **Project Location/ Coverage**

The first phase of the Eastern Africa Regional Development Integration Project series of project (EARDIP SOP-1; P176181provides financing for Somalia and South Sudan and grants to two RECs, the, East Africa Community (EAC) and Intergovernmental Authority on Development (IGAD). In addition, the Kenya Digital Economy Acceleration Program (KDEAP) will be supported to enhance Kenya’s participation in these activities in parallel with EARDIP series of projects. This project concept note sets out plans for the second in the EARDIP series of projects II (SOP-II) under which two more countries will be added – the Republic of Djibouti and the Federal Democratic Republic of Ethiopia. The project to be implemented in respective country and in cross border areas and in conflict-stricken areas like, Somali, Gambella, Tigray, Beneshangul Gumuz, and Afar where cross border backbone fiber network development with Djibouti. The project will focus on the development of regional connectivity market, given lingering in Ethiopia, and infrastructure deficits that still exist at nation level in these countries. In Ethiopia the sub-component 1.1 that require civil works, upwards deployment of 1,500 km fiber network and 300km in Djibouti covering strategic cross border and national network backbone links and as well as their extension into borderland area, rehabilitation of long distance terrestrial fibers subject to frequent outage and damaged fiber optics due to recent conflict Tigray (sub-component 1.2) and the implementation of sub-component (1.2) to connect remote, rural, borderland areas where last mile network expansion is insufficient (IDPs/refugee camps in boarder lands) with the sub-project activities detailed under section 2.4. These components and subprojects will be implemented in the proposed geographic coverage of Gambella, Somali and Afar, Tigray, Beneshangule Gumuz regions where remote, rural, areas and number of refugee camps and IDPs and indigenous host communities located.

* Gambella Region: Northwest boarder with South Sudan there are 14 refugee camps and most of the refugee camps in Gambella are in proximity for 3G broadband sites and to the fiber backbone, only one of the camps in Dima Woreda is very remote and will require 80 km of fiber extension and/or multiple hopes of IP microwaves. This Woreda is selected as link or connection point. This area is also prone to conflicts as several armed clashes that have led to fatalities and displacement of people have been seen recently.
* Somali Region: Jigjiga refugee camps northeast and Melkidia refugee camps south boarder with Somalia there are nine camps in total, a Woreda called Dolo Ado here the refugee camps are in close range to existing cell towers and are established along backbone fiber route to the boarder. So, the connection to the fiber nods is expected to be relatively inexpensive and conversion of the RANs to 4G sites is straight forward. A Universal Access expansion project in Dollo Ado Woreda to cover population to the boarder will be considered.
* Afar Region: Western boarder to Djibouti, (Halli-Dalho 74km) near to the boarder is selected as link or connection point.
* Tigray: the internal conflict has displaced over 5 million people in the year 2021 alone. There has also been significant damage to infrastructure including telecommunications infrastructure with at least 3,473 cell towers and almost 3,000 km of optical fiber being damaged during the conflict and around one third of these being still out of action. Lost revenue in the telecom sector during the conflict is estimated to have exceeded US$150 million according to the World Bank Conflict Impact Assessment and Recovery Reconstruction Planning (CIARP) study.
* Beneshangule Gumuz: Bameza to Ad Amazin 130km priority fiber optic link.

## **EARDIP SOP-II Sub-projects**

***Sub-component 1.1: Cross-border and backbone network connectivity and Sub-component 1.2: last mile connectivity including in boarder land Area.***

* Deployment of up to 1,500 km of new fiber network including (i) if terrestrial/underground deployment - RoW clearing, trench excavation, fiber installation, backfilling, power source (grid connections, generators, PV systems, batteries, etc.) installation, chambers, access points, and cabinets installations; (ii) if aerial deployment - pit excavation, installation of poles/towers, or using existing poles/towers, fiber stringing, power source installation, access points and cabinets installations; etc. (Sub-component 1.1)
* Rehabilitation of damaged existing terrestrial cables involving trench excavation, cable installation, backfilling, tower/pole installations, power source rehabilitations, etc. (Sub-component 1.1)
* Leads to acquisition of land that may lead to economic and physical resettlement on vulnerable groups and historically underserved communities.
* Construction of access roads, if required, to transmission towers and other fixed connecting station may lead land clearing, cross ecologically sensitive areas and crossing aquatic habitats, disrupting watercourses, wetlands, riparian vegetation. High risks to biodiversity will be excluded during screening and analysis of alternatives. But, their individual and cumulative impact will be minimal. In general, cell tower sites will NOT be chosen in areas that do not have existing access roads. In the unlikely event that access roads do not exist, but there are nevertheless communities to be served, and alternative technology that does not require road access will be used, such as low-earth orbit satellites, with WI-FI access points. Hence, the rating of the project in this regard is still substantial.
* The sub-projects also leave behind domestic, construction and electronic wastes.
* Construction activities may increase resource demand such as water and energy, and raw materials.
* Construction activities under these sub-projects also lead to OHS issues.
* Connect remote, rural, and borderland locations involving excavation and installation activities that will lead to RoW clearing, trench/pit excavations, for poles/towers installations, cable stringing/laying, access points and cabinets installations, connection to power source (grid, generators, PV systems, batteries), etc. (sub-component 1.2)
* Establishing/upgrading broadband radio access networks (RANs, minimum 4G technology) which involves installation of antennas, radios, and baseband units. Antenna installation involves land clearing, foundation pit excavation, foundation concrete work, steel frame towers installation, and installation of the RAN. The RAN installation also includes installation of power sources, operation building, fences, etc. (Sub-component 1.2)
* Labor influx may impact Community Health and Safety and disease transmission (STIs) and create conflict between community and workers and sexual exploitation (SEA/SH).
* Land requirement due to these subprojects will have adverse impacts on the land used by traditional local communities if siting or rerouting is not revised. Alternative options will be sought to sort this issue like avoiding using land which have adverse impact on local communities and rerouting intervention sites.
* Local Green House Gas emissions due to the construction machineries, cars, backup generators, cooling and fire suppression systems, and vegetation clearing during construction/installation of fiber optic cables, access roads and other infrastructures.
* Scrap of electronic materials during construction will be domestic and electronic waste sources.

The subproject activities stated above under component 1.1 and 1.2 will be implemented through financial support will be provided to operators who will be expected to co-finance, design, build, own and operate the network infrastructure through matching investments. MInT and Ethiopian Communication Authority will provide advice through the development of a commercial transaction manual, conducting feasibility studies, guide on modalities of public financing /Capital expenditure (CAPEX) on establishing/ upgrading broadband radio access networks, transmission augmentation through fiber extension, emergency response facilities, and establishing a range of low-cost online access facilities for activities related sub-component 1.2. It is envisioned to be implemented by the public/private telecom service providers functioning in the country. The TA activities under subcomponent 1.1 will result in EHS risks.

***Sub-component 1.3: Enabling legal, regulatory, and institutional ICT environment.***

* The subproject activity under this sub-component is hiring Technical Assistance (TA), for legal, policy and regulatory framework and on capacity building to implementers is anticipated to have downstream EHS risks.

***Sub-component 2.1: Cyber-security frameworks, infrastructure, and capacity, and***

***Sub-component 2.2: Data exchange, governance, and protection*.**

The sub-project under these sub-components leads to:

* Equipment and services will be purchased and installed to establish regional level cyber security (2.1). The equipment will be e-waste sources after end-of-life.
* Data protection risk, especially pertaining to rights of vulnerable groups and ESS7 communities. (2.2)
* Data collected could be used as a base for discrimination. (2.2)
* The technical assistance in (2.1 and 2.2) may result in to downstream EHS risks.

***Component 3: Online Market Development and Integration*.**

***Sub-component 3.1: Digital enablers for cross-border trade, and service* *delivery*.**

***Sub-component 3.2: Research and education networks (RENs), and training for digital skills*.**

* The project financing support for cross border trade payment and it will enable the expansion and strengthening of the regional infrastructure supporting higher education by establishing regional collaboration among NRENs. As well as Support will be provided to enhance the capacity of universities and TVETs, in partnership with NRENs and governments, to deliver digital skills programs for civil servants and university faculty and students. In the course of the subproject, purchase of electronic equipment will add up e-waste sources.
* Connectivity expansion and development among the educational institutions may create a fertile ground for the more advanced GBV, SEA/SH. (3.2)
* The Technical Assistance activities to be financed by the project for TA to ensure its adoption across ministries, departments, and agencies (MDAs) through targeted digital skills training extends to EHS risks.
* TA in both subcomponents 3.1 and 3.2 may lead to EHS risks.

***Component 4: Project Management and Implementation Support.***

This component will finance project management and implementation of project-associated activities. It will cover the additional operating costs of the project implementation units (PIUs) in Djibouti and Ethiopia generated by the project. This component will help strengthen the technical and functional capacity of the PIUs, including through the recruitment of expert consultants in key areas and the facilitation of on-the-job learning and competency transfer. It will support independent audits, monitoring, and evaluation (M&E) (including collecting gender-disaggregated data), and quality assurance to ensure compliance with best procurement and financial management (FM) practices. Support will be provided to enable collaboration between regional and national PIUs. This component will also support Environmental and Social Framework (ESF) compliance, with a particular emphasis on addressing the high security- and GBV-related risks associated with the deployment of infrastructure and civil works, including stakeholder consultation, a robust grievance redress mechanism, and development of site-specific assessments and plans. In Djibouti, the project will work with an existing PIU, at the Ministry of Communications, with responsibility for Postal Services and Telecommunications (MCPT), which has been serving the Digital Djibouti project since 2021 while in Ethiopia, the existing PIU under Ministry of Innovation and Technology (MInT) will serve as the main implementing body. This PIU was originally set up in 2021 to manage the *Ethiopia Digital Foundations Project* (P171034), which has been effective since July 23, 2021, and for which project implementation is rated as “*Satisfactory*” (as of August 2022).

## **2.5 Implementation Arrangement**

The project targets federal, regional, and local (Woreda and city) level institutions for implementation. The project activities would be implemented directly by federal level agencies in cooperation with regional counterparts and local institutions and grass root level communities. The large portions of project activities are expected to be implemented at regional level due to the focus of the activities involve digital infrastructure development and at federal level the project involve Technical Assistance for standard, plan, policy and regulatory tasks and capacity building of federal/regional institutions and feasibility study. Subcomponents 1.1 and 1.2 will be implemented through catalytic infrastructure financing to public/private operators. Project activities at regional agencies, public institutions and *Woreda* offices will also be implemented through private sector operators contracted by federal level implementing agency and partners. Regional level agencies are also important stakeholders as target institutions as project implementation partners (components 1.1 and 1.2, 2.1, 2.2 and 3.1 and 3.2), facilitation and monitoring support to project activities.

### **2.5.1. Borrower’s Institutional Capacity**

The regional level support through SOP-I is being provided to set-up Project Implementation Units (PIUs) and Project Steering Committee (PSCs) at the Regional Economic Communities (RECs) level in both EAC and IGAD. A Project Coordination Committee (PCC) will also be set up to facilitate interaction, including ESF aspects, PCC encourage coordination between the two RECs and the national level PIUs set up in the countries through SOP-I (Somalia, South Sudan), and SOP-II Ethiopia and Djibouti.

National level, in line with implementation arrangements for SOP-II, will work with two separate PIUs, hosted by the Ministry of Innovation and Technology (MInT) in Ethiopia. Ethiopia have just about two years’ experience in implementing World Bank supported project, EDFP and rated Moderately Satisfactory (MS) both in Program Development Objective (PDO) and Implementation Progress (IP). The Ministry will also interact with IGAD, at the regional level, as Ethiopia is IGAD member (though not yet EAC member) . MInT will play a key role in technical oversight of the project/SOP II including environmental and social risk management activities. In Ethiopia, high staff turnover at the PIU including E & S and other due to significant salary cut following Ministry of Finance guideline. However, currently it is recovering, and the E & S experts were hired by April , 2023, though they subsequently left due to the Governmental salary restrictions and the positions have been re-advertised. The E & S staffing requirement for SOP II were assessed during the preparation phase and incorporated in relevant documents, including ESCP and ESMF.

It is expected that the MInT’s capacities to understand and address E & S risks related to digital integration including issues such as data privacy, data protection and security, cyber security and e-waste are likely to be limited. Hence, there should be technical assistance embedded in the project design to ensure that individual borrower countries will develop appropriate policy and regulatory frameworks related to e-waste management and data privacy, protection, and security (where such legal frameworks have not been enacted) and implemented. Regional-national level collaboration at the PIU, PCC and PSC levels, key channels will be set up to ensure collaboration between the regional and national level, including (a) at the PIU level, where focal points in national PIUs will liaise with the regional PCC on implementation of activities requiring country-level inputs; (b) PCC at the regional level will comprise experts from national member states who will interact with the regional PIUs on operational issues and ESF aspects affecting their respective countries; (c) PSCs for the region will include national member state representatives to ensure their involvement in decision-making and supervision; and (d) similarly, representatives from IGAD will be represented in the national PSCs.

Under component 4 of this SOP-II phase, support will be provided to enable collaboration between regional and national PIUs to ensure Environmental and Social Frameworks (ESF) compliance, with a particular emphasis on addressing the substantial security-and GBV- related risks associated with the deployment of infrastructure and civil works, including stakeholder consultation, a robust Grievance Redress Mechanism, and development of site-specific assessments and plans. Most of his along with the capacity building requirements of the implementing entities was completed during preparation while development and implementation of site-specific assessments and plans will be carried out during implementation.The PIU is well staffed, and an additional Social and GBV specialists will be hired. The available staffs includes; project manager, environmental specialist, M and E specialist, financial management specialist, procurement specialist, contract management specialist, office assistant, finance officer and driver. Based on the institutional capacity assessment, training may be required for PIU staff on:

- Environmental and Social Management Framework (ESMF) including Labor Management Procedures (LMP) consisting of Code of Conduct for project workers in relevant languages and Labor Specific GRM

- Security Risk Assessment and Management Plan

- Environmental and Social Management Plans (ESMPs)

- GBV Action Plan

- Social Assessment

- Stakeholder Engagement Plan

- Project wide GRM

- Occupational Health and Safety (OHS) Plan

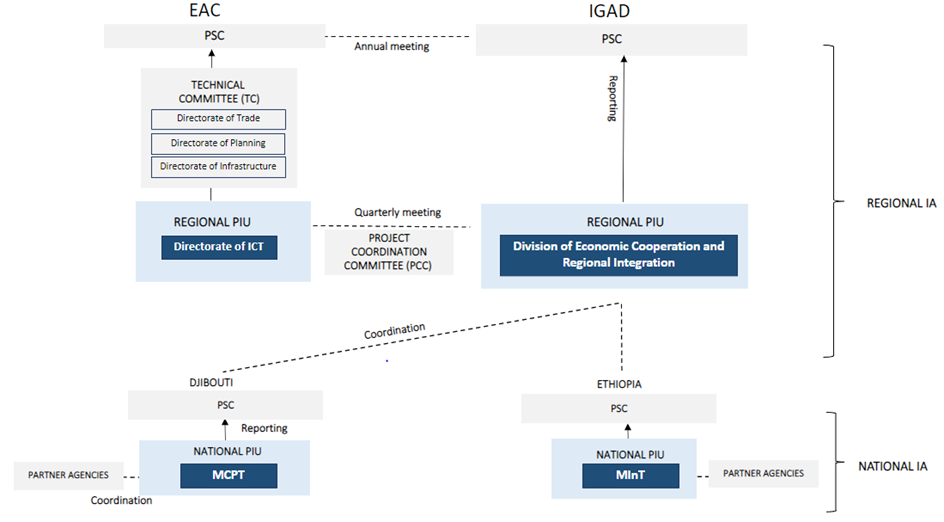
- RPF and

- Training on requirements of applicable WBG EHS Guidelines

### **2.5.2. The project implementation arrangement for EARDIP SOP II**

**Implementation phase:** At regional level through SOP-I support is being provided to set-up PIUs and PSC at the REC level in both EAC and IGAD. A Project Coordination Committee (PCC) will be set up to facilitate interaction between the two RECs, and to encourage coordination between the RECs and the national level PIUs set up in the countries through SOP-I (Somalia, South Sudan), and SOP-II Ethiopia and Djibouti. National level in line with implementation arrangements for SOP-1, phase 2 will work with two separate PIUs, hosted by MCPT in Djibouti and MInT in Ethiopia. Both have just under two years’ experience in implementing World Bank projects, and they are both rated *Moderately Satisfactory* (MS) for both Program Development Objective (PDO) and Implementation Progress (IP). PIUs will be primarily responsible for project implementation, including overseeing project-related fiduciary functions, M&E, and E&S commitments. Each PIU will also work with (a) its respective Technical Committee, comprising selected MDAs and technical experts for resolving any technical issues or related decision-making for implementation and supervision, and (b) the regional-level PCC. The PIUs will report to their PSC in each country, which will provide the function of oversight and supervision. The ToR for the PIU, Technical Committee, and PSC will be detailed further in the PIM to be prepared by the recipient countries by effectiveness. The PIUs will also interact with IGAD, at the regional level, as both Djibouti and Ethiopia are IGAD members (though not yet EAC members). The PIUs will also interact with IGAD, at the regional level, as both Djibouti and Ethiopia are IGAD members (though not yet EAC members) Regional-national level collaboration at the PIU, PCC, and PSC levels. Key channels will be set up to ensure collaboration between the regional and national level, including (a) at the PIU level, where ES specialists in national PIUs will liaise with the regional PCC on implementation of activities requiring country-level inputs; (b) PCC at the regional level will comprise experts from national member states who will interact with the regional PIUs on operational issues affecting their respective countries; (c) PSCs for the region will include national member state representatives to ensure their involvement in decision-making and supervision; and (d) similarly, representatives from IGAD will be represented in the national PSCs. As illustrated in Figure 1.

Figure 1: Illustration of proposed regional project implementation arrangements

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1. **Reporting**

*Note:* EAC = East African Community; ICT = information and communications technology; IGAD = Intergovernmental Authority on Development; MCPT = Ministry of Communications, with responsibility for Posts and Telecommunications; MInT = Ministry of Innovation and Technology.

Figure 2: Illustration of proposed national project implementation arrangement

**Project Steering Committee**

MInT ECA MoTRI EthERNet IGAD

Regional PIU

IGAD

Project Implementation Unit

MInT

Technical Committee

TC

MInT ECA EthERNet

**Supervision and strategic orientation**

**b**

**a**

# 

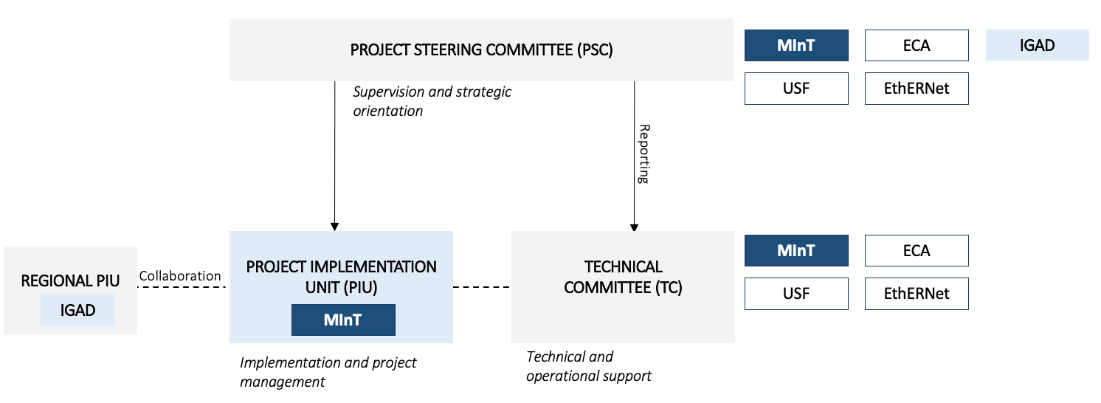
* 1. **Collaboration**
  2. **Reporting**

### **2.5.3. The Project Implementation Arrangement of EARDIP II for Ethiopia**

The following section briefly summarized relevant institutional arrangement of federal and regional institutions responsible for EARDIP II Project for Ethiopia.

The existing PIU under the MInT will serve as the main implementing agency in Ethiopia. This PIU was originally set up in 2021 to manage the Digital Ethiopia Foundations Project (P171034), which has been effective since July 23, 2021, and for which project implementation is rated as “Satisfactory” (as of August 2022). The PIU is fully staffed with a Project Coordinator, Procurement Specialist, FM Specialist, E&S Specialist, M&S Specialist, GBV specialist, and others. The PIU shall hire social specialist not later than two months from project effectiveness (see also ESCP). Additional support will be provided towards i) hiring key technical specialists, with subject matters expertise in connectivity infrastructure, cyber-security etc; ii) key equipment, material, and logistics related requirements for the PIU staff, shared with the existing project. The PIU staff would be hired no later than two months after effectiveness. The ES staffing shall include one environment specialist (with OHS experience) and one social specialist (with gender and social inclusion experience). The detailed composition and role of the PIU will be set forth in the Ethiopia PIM. The PIU will be primarily responsible for project implementation, including overseeing core project-related fiduciary functions, M&E and E&S commitments in Ethiopia. In addition, the PIU will also act as the single point of contact for the regional PIU at IGAD (where Ethiopia is a member) to facilitate collaboration on designing and implementing specific activities. The PIU will submit project reporting to the National Project Steering Committee (NPSC), the National Technical Committee (NTC) and engage with the NTC on specific matters requiring technical expertise/input on an ad-hoc basis. Figure 1 depicts the main reporting lines.

Figure 3: National implementation arrangements for EARDIP in Ethiopia



At the region level, EARDIP SOP II project implementation is led by regional institutions such as Science, Innovation and Technology Commission in Afar, Innovation and Technology in Gambella and Innovation and Technology Bureau in Somali region, with the involvement of relevant institutions at the state, Zonal, Woreda, Kebele and community levels with specific accountabilities and decision-making roles based on existing mandates. Also, it will take the leading responsibility to establish the Regional Project Steering Committee (RPSC) and Regional Project Technical Committee (RPTC). The constituency and role of the RPSC and RPTC resemble the NPSC and NPTC but at the regional level.MInT will hire Cluster Area Project Personnel (CAPP) comprising competent Environmental Safeguards Specialist, Social Safeguards Specialist and GBV Specialist that base the project office at the respective regions but coordinate and oversee the overall implementation of the ESMPs across the Project Operation Areas (POAs) in their respective regions. The number of the CAPP will depend on the number of POAs in the respective target regions. The CAPP will closely work with the PIU, RPSC, RPTC and Woreda Project Task Force (WPTS). Likewise, MInT will hire Project Area Focal Person (PAFP) who will take the leading role for the overall coordination and implementation of the project’s ESMPs including the ESMF at the Woreda level. Besides, the implementation arrangement will establish Woreda Project Task Force (WPTF) comprising the Heads and Experts from Woreda Rural Land Use and Administration Office, Woreda Environmental Protection Office, Woreda Women and Children Affairs Office, Woreda Trade and Industry Office, and Woreda Peace and Security Office. The WPTF will closely work with Cluster Area Project Personnel (CAPP) and Project Area Focal Person (PAFP) to oversee the day-to-day E&S performance of the project as compliance with the ESMPs specified in this ESCP.

Table 1: Roles and responsibilities of the implementers and partners

|  |  |  |
| --- | --- | --- |
| Administrative level | Organizations | Roles and responsibilities |
| Federal Level | MoF | * Responsible for financial management, budget managing payments (which are delivered through Commercial Banks and Financial Institutions) |
| MInT | * MInT, a federal ministry organ, is empowered mainly to ensure and set general policy framework for the provision of quality, reliable and secure information technology service and oversee the implementation thereof; * Supports PIU through the National EDFP Steering Committee with an oversight on the implementation of the Environmental and Social safeguards of the EARDIP SOPII project. * Leads the overall digital integration undertakings of the EARDIP SOP II through its dedicated Digital Transformation Program Office/Digital Infrastructure Unit, including collection of regional level digital infrastructure development performance data, analyzing the same and reporting to the WB/Mint-PIU. |
| ECA | * the Ethiopian Communication Authority, a regulator of the telecommunication sector, is empowered, among others, to 'promote information security, data privacy, and protection'; * In line with this the Universal Service Fund (USF) has been established at the ECA and with support of the Digital Foundations Project (P171034). General capacity building and regulatory strengthening and adopt regulatory standards on siting, design, construction and operation of digital infrastructure in response to climate risks. * ECA will provide Technical Assistance (TA), Transaction Advisory Services, conducting feasibility studies, guide on modalities of public financing /Capital expenditure (CAPEX) on connectivity work, upgrading, repairing and rehabilitation for activities related sub-component 1.1. * ECA will provide Transaction Advisory Services, conducting feasibility studies, guide on modalities of public financing /Capital expenditure (CAPEX) on establishing/ upgrading broadband radio access networks, transmission augmentation through fiber extension, emergency response facilities, and establishing a range of low-cost online access facilities for activities related sub-component 1.2. * Works on achieving targets set on sub-component 1.3. * Operationalize gender-specific recommendations outlined in Ethiopia’s (forthcoming) ‘National Digital Inclusion Strategy’. |
| MoTRI | * Will support realization of regional trade initiatives, and facilitating participation in regional trade agreements and expanding cross-border e-services (related to sub-component 3.1.). |
| MoE | * MoE will provide TA on activities related to sub-component 1.1.-c., related to radio access networks for schools and sub-component 1.1.-f., related to low- cost online access facilities, particularly related to school computer lab units. * MoE in collaboration with EthERNeT will provide TA, financing modality and collaboration for activities identified under sub-component 3.2. |
| MoH | * MoH will provide TA on activities related to sub-component 1.1.-c., related to radio access networks for health care facilities |
| MoLS | * MoLS will work in collaboration with Job Creation Commission, to recruit, train and link local community members with both international and national suppliers. |
| MoP | * Will handle issues related to emergency response and benefit of pastoral and communities living along the border line of the beneficiary countries. |
| MoWSA | * MoWSA provides support on validating provisions are embedded related to protections from GBV and incentives for women –owned business in sub-contracting in both component 1.1.-b and 1.2.-b. |
| NIDPO | * National ID Program Office will be involved to support in achieving targets stated under sub-component 3.1. which deals with TA to develop regional guidelines and capacity building for national authorities to design and implement digital ID and civil registration systems, in line with Principles on Identification for Sustainable Development, as well as to facilitate regional cooperation for cross-border mutual recognition and interoperability (including to identify priority use cases). |
| FCSC | * Federal Civil Service Commission will be involved on supporting the recruitment and administration of training for civil servants (the number is including civil servants from Ethiopia and Djibouti) civil servants, including female staff will be trained in management or use of digital systems and digital skills |
| EPA | * Environmental Protection Authority –play a regulatory role on the preparation and implementation of E & S safeguards tools, particularly E and S safeguard related matters. |
| NLAU | * National Land Administration and Use, addresses issues related to involuntary land expropriation, resettlement and upholding land rights. |
| DBE | * Development Bank of Ethiopia will provide support on achieving set on sub-component 1.1., including the use of Public Private Partnerships (PPPs), investment guarantees and sub-component 1.2., incentivize private sector CapExand OpEx investment in the roll-out and maintenance of last-mile access networks that connect targeted locations/areas, but also benefit the wider consumer base in the vicinity of connected sites, with national governments serving as the anchor tenant required for enhanced service provision. |
| EIC | * Ethiopia Investment Commission- supports in creating enabling environment to attract external and internal investment actors to achieve targeted activities identified under sub-components 1.1., 1.2., and 1.3. |
| EED | * Ethiopia Enterprises Development will support the promotion of women-owned enterprises and the transition of the enterprises from small scale level engagement to progressively large scale development and contributes to supply goods and services for the digital industries. |
| Ethio-Telecom | * Ethio-telecom supports on resource sharing for digital sector development and in realizing targeted activities listed under sub-components 1.1., 1.2., and 1.3. * According to “Telecommunications Infrastructure Sharing * and Collocation Directive No. 793/2021”, Ethio-Telecom will share an Access Provider’s active and passive infrastructure, including, but not limited to, the sharing of network elements, systems, equipment, facilities, premises or rights of way, with an Access Seeker, subject to an agreement between the parties; and * Will allow the placement of network equipment or systems that are used for service provision by a Telecommunications Operator together with network equipment or systems installed at premises of other Telecommunications Operator at a technically feasible location on the basis of agreement reached between them. |
| Safaricom | * will provide TA on activities related to sub-component 1.1.-f., related to low- cost online access facilities, particularly related to school computer lab units. |
| UNHCR | * Will work on benefit packages related to IDP/refugees and host communities. |
| Regional | Innovation and Technology Commission-Gambella  Innovation and Technology Bureau-Somali  Science, Innovation and Technology Commission-Afar | * Governs the ICT, Innovation, technology and digital sector in the region. * Coordinates with regional government line institutions, ICT & digital sector-based unions, the private sectors, the civil societies and research & academia, by (i) providing services of implementing program activities directly financed by the EARDIP SOP II; and (ii) implementing their own project activities financed by themselves contributing to the overall project objectives. * Responsible for policy development and enforcement related to digital sector development; utilization and management of government, private and community forest. * Provides expert advice for digital expansion including on topics such as backbone connectivity, last mile connectivity, establishing enabling ICT institutional environment, data and online market development. * Coordination of EARDIP SOP II activities and projects in the regional state; ensuring environmental and social integrity; jointly resolving digital sector resource related disputes with relevant institutions. * leads implementation of the digital integration initiative. |
| Regional PIU | * Coordinates overall implementation of the EARDIP SOP II project activities, administratively supported by the regional innovation and technology commissions or bureaus. * Receives strategic guidance from the Afar Regional State vice president. |
| Multi-sector Steering Committee and Technical Committee | * Provide strategic guidance and technical inputs respectively, to guide the EARDIP SOP II project implementation. |
| Regional bureaus or offices of BoWSA, BoTI, BoEPA, BoLS, BoH, BoE, BoPD and BoLAU | * Support the EARDIP SOP II project implementation and coordinate activities on the ground through their decentralized staff, particularly those activities potentially conducive to produce more USF financed from own sources or from private sector. * Specific activities to be implemented by the relevant bureaus will be defined with specific accountabilities, including lead and supporting roles and budgets, in the joint annual work program and budget and joint procurement plan. * Involve in joint work planning, budget formulation and reporting for the EARDIP SOP II and ICT related policy development/harmonization. |
| Zonal | Cluster based safeguard coordinators | * Oversee the safeguards work of the EARDIP SOP II woreda coordinators and ensure that environmental and social risk managements are implemented according to the EARDIP SOP II environmental and social risk management instruments. |
| lead facilitators hosted at Communication Office | * Provide technical and operational support to EARDIP SOP II woreda coordinators and EARDIP SOP II safeguards coordinators to ensure satisfactory implementation. |
| Woreda | Cluster Area Project Personnel (CAPP) with Woreda administration office, sector experts | * Support on different activities of the EARDIP SOP II project activities * EARDIP SOP II woreda coordinators will: (a) reinforce woreda capacity to coordinate implementation of EARDIP activities, related projects and operations, (b) lead implementation of activities directly funded by EARDIP SOP II financing, and (c) support fiduciary aspects of EARDIP SOP II including E & S Safeguards, activity reporting, financial management and procurement. |

### **2.5.4. Roles and responsibilities of the Project Implementation Unit (PIU)**

The PIU is responsible for the overall coordination and management of project implementation activities, including the day-to-day fiduciary requirements, liaising technically with all partner agencies, NGOs and the private sector actors involved in the EARDIP SOP II implementation. With the support from MInT, the PIU carries out the following tasks and is responsible for:

* Safeguards implementation and reporting,
* Supervision and training on ESF’s ESSs and EHS guidelines
* Financial management and reporting,
* Procurement management and reporting,
* Monitoring and evaluation for EARDIP SOP II as per each defined indicator in the results framework and others as required by government and desired by the program team,
* Direct implementation of specific technical assistance activities financed by the EARDIP SOP II,
* Joint annual work programming and budget preparations, with inputs from MInT, ECA, MoTRI and regional bureaus and other relevant entities; and preparation of the annual procurement plan,
* Local level PIU team engage and work with Woreda and Kebele officials (Woreda administrators and experts) and other actors to coordinate EARDIP SOP II interventions and related initiatives across sectors that have an impact on digital sector (promoting inclusive digital service approach),
* Facilitating coordination with EARDIP SOP II related initiatives, i.e., liaising with executive-level focal points and regional innovation and technology bureaus or commissions, as required,
* Ensures that services funded by USF verification are carried out through a third party,
* Ensuring the delivery, implementation and reporting on the agreed SEP for the EARDIP SOP II,
* Conducting strategic communication through MInT, and
* Serving as secretariat for the National EARDIP SOP II Steering Committee and National EARDIP SOP II Technical Working Group and actively participating in meetings.

# **PROJECT TARGETED REGIONS**

Most of the project targeted regions (Afar, Somali, Gambella, Tigray and Beneshangule Gumuz) where the subprojects for 1.1 and 1.2, are planned to be implemented are categorized in Semi-Arid and Arid Eco-climatic zones, where they have low soil quality, high erosion potential and vulnerability to pastoral and semi pastoral livelihood and where lots of Internally Displaced People and Refugees hosted. In all cases the host community is also underserved and unserved borderland community from the connectivity point of view. These regions are very important environmentally and socially as most of the country’s protected areas and wildlife reserves and migratory wildlife are situated and the river basins are also passing or originated in these regions. Furthermore, these areas are known for their rich minerals and oil (Gold, natural gas etc) and the people who reside in these regions also are either indigenous for the country and or from mixed cultural and historical heritages. Furthermore, these regions are known for their water resources and almost all the river basins are either sourced from or passing through these regions. The regions where subproject activities are located are prone to conflict, ethnic clashes/ tensions, flood, and droughts Gender Based Violence.

## **3.1** **Afar Region Ellidar Woreda (Hali Local Area)**

**General Overview and Topography and Terrain:** Afar region is located in the northeastern Ethiopia and a homeland of Afar people with an estimated population of two million. Its capital is Semera, which lies on the paved Awash -Assab highway. It is boarder to Eritrea to the north and Djibouti to the northeast and shares regions boarder with Amhara, Tigray, Oromo, and Somali. As elsewhere, in the country the population of Afar is young, 12% is under 5 years of age, 39.5% is under 18 years of age and total fertility rate is high which is 5.5. Based on the 2007 census, the ethnic composition of Afar region residents is, 90.03% Afar, 5.22% Somali, 1.55% Argoba, 1.15% Tigre, 0.61% Amhara, 0.59% Wolayta, 0.18% Hadiya. Much of Afar region is below sea level, where lowest point of the country is located and the northern part of which is the Danakil depression, is part of the great rift valley of Ethiopia. The southern parts of the region consist of the valley of Awash River which empties to a string of lakes along Ethiopia-Djibouti border. Afar is one of the hottest and driest places on earth. Although it is severely affected by climatic variability, it is an area where the population has been living there adapting its pastoralist activities changing environmental conditions. The soil type of this region is sandy and rocky soil. Though the area is mostly flat topography, the area located in southern part of the region located around Awash River Basin was exposed for frequent heavy flooding and erosion. Recurrent drought, disease outbreak locust infestation and conflict affect the Afar communities, chronic water shortage in the region also forces the population and their livestock to move from place-to-place affecting children education, health and wellbeing, their livestock are source for livelihood. The region faces drinking water shortage due to the salinity and fluoride content of the water in the region. Whereas in the southern part of the region, seasonal flooding due to the Awash River overflow, is an issue.

**Biophysical Environment:** Other notable landmarks, sensitive natural ecosystem, situated in this region are some part of Awash National Park, Yangudi Rassa National Park and Mille Serdoo and Gewane wildlife reserve. The parks are rich in biodiversity (flora and fauna), and home for 36 species of mammal and 200 species of birds. The large animals native to the park include gerenuk, Soemmerring’s, Beisa Oryx. Line, Grevy’s Zebra, Cheetha, and leopard. Other animals that live within the protected areas includes Dorcas’s gazelle, Hamadryas Baboon, Bateard Fox, Black-Backed Jackal, Striped Hyena and Aard Wolf. Bird species of interest include Lesser Flamingo, Pale Rockfinch, and pallid Harrier are only Somali-Masai Biome species in the parks that considered globally threatened. Other bird species that roam is Terek Sandpipers, Common Sandpipers, Common Redshank, Woodchat Shrike, Lesser Grey Shrike, Eurasian Blackcap and Ortolan Bunting. Regarding Flora biodiversity, the parks contain Sandy semi-desert and wodded grassland cover the majority of the park’s area, native grasses including Aristdia sp., Chrysopogon plumulosus, Dactyloctenium scindicum, Digitarian, sp., Lasiurus scindicus, and Sporobolus joclados, that will provide fodder for wild grazing animals and livestock. There are marshes and riverain forests along the awash river.

**Cultural and Heritage Resources:** Afar people have a distinct cultural and linguistic identity of their own and inhabit a well-defined territory in the Horn of Africa Afar is also rich in natural heritage sites Afar Depression, Ert Ale Active Volcano, Hadar and Aramis areas which are historical and designated as tourist attraction points, they are home for Lucy and Ardi. The Afar region is the earth’s hottest and driest spots, where temperatures in the naked plains frequently soar above 50 degrees centigrade. Much of the territory is desert, and salt flat. Such inhospitable conditions haven’t stopped the Afar, who regards themselves as the oldest of Ethiopia’s ethnic group occupying their homeland. The Afar are traditionally pastoralists, raising goats, sheep, and cattle in the desert. Socially, they are organized into clan families and two main classes: the Asaimara (reds) who are dominant class politically, and the Adoimara (whites) who are a working class and are found in the Mabla Mountains. Afar people are predominantly Muslim; however, unlike most Muslim communities are monogamous group. The Afar tribe has two distinctive hairdos for men, “asdago” and “dayta” hairstyles. Men dressed a light cotton toga and carry large, curved dagger. The Afar women often have intricate frizzed and braided hairstyles, and wear bright colored beard necklaces, heavy earrings, and brass anklets many Afar women cover their heads in public. Modern social services such as telephone facilities are lacking the Afar. An important traditional mechanism that the people use as a replacement for modern communication technology is the Dagu. This is the way of information exchange through the relaying of news about important events from one person to another.

**Land use and Settlement Pattern:** Historically, the Afar region is populated by pastoralist communities and peoples who depend on the rainy seasons that flood perennial and seasonal rivers and create large expenses of flooded basins and pastures. These seasonally flooded riverine areas which Afar and their herds depend upon, also are of interest to government and private investors for their irrigation potential. To date, several thousand hectares of riverine grazing lands already have been converted to irrigated agriculture both by government and private commercial interests, including Ethiopian and foreign companies. These outside pressers from commercial farms and land encroachment continue to diminish land availability (Beyene, 2012). Internally, wealthy pastoralists are enclosing large areas for cultivation. In addition, the expansion of protected areas in vital flood plains has diminished the amount of land for herding. As a result, pastoralist livelihoods are beginning to fail, and herders are increasingly turning to agro-pastoral sedentary lifestyles (Reda,2014)

Based on the projection made in 2017 by CSA the Afar regional state population was 1,812,002 comprised of 991,000 men and 821,000 women; urban inhabitants’ number 346,000 of the population, the remaining 1,446,000 are pastoralists which is around 80% of the total population. This region has an estimated density of 14.38 people per square kilometer and the average household is counted 5.6 persons.

**Sexual and Gender Based Violence:** In Afar, the percentages of women (ages 15-49) who have ever experienced psychological violence, physical violence or sexual violence committed by their current or most recent husband/partner are 13 percent, 12 percent and three percent, respectively; this lower than in any other region except Somali.18 However, the percentage of women who believe that a husband is justified in hitting or beating his wife in various circumstances is 69 percent and 16 percent of men believe that wife beating is justified in some circumstances,[[10]](#footnote-10) so there may be underreporting of violence against women.

**Health:** While Ethiopia experienced a significant decline in the fertility rate from 5.9 children per woman in 2000 to 4.3 children in 2016, in Afar, that number has increased from 4.9 to 5.5 during the same period. Similarly, while nationally early childhood mortality rates are decreasing, in Afar these rates are increasing, particularly the infant mortality rate which increased from 64 deaths per live 1,000 births in 2011 to 81 deaths per 1,000 live births in 2016. Moreover, vaccination coverage at only 20 per cent is the second lowest coverage of children in the country as the community move from place to place. Large numbers of pregnant women who do not have any antenatal care and do not deliver in a health facility contribute to the many infants who die during the first 28 days of life.[[11]](#footnote-11)

**Education:** The school enrolment rates in Afar are among the lowest in the country. The Net Enrolment Ratio (NER) for pre-primary education in Afar was the second lowest in the country at 5.8 per cent; the NER for primary schools was 46 per cent, and the NER for Grades 9 and 10 at 6 per cent, and Grades 11 and 12 at 2 per cent in secondary school are the lowest in the country. The Gender Parity Index (GPI) for Afar primary schools is 0.87 meaning more boys are enrolled. However, those children who attend school often fail to acquire basic skills, such as literacy and numeracy due to unskilled teachers, irrelevant curriculum, and inadequate learning materials.[[12]](#footnote-12)

## **3.2** **Somali Region (Dollo Ado Woreda)**

**General Overview and Topography and Terrain:** The Somali regional state located in the eastern Ethiopia. The Somali region encompasses about 300,000 km2 and has a population of 5 million. The population is predominantly Somali and Oromo clans, with each constituting near 90% of the population in their state (Ethiopian Government Portal, 2014). As of 1997 census, the ethnic composition of the region was 95.67% Somali, 0.70% Amhara, 2.25% Oromo; all other ethnic groups made up 1.38% of the population. The region has altitude of below 1500m a.s.l, the climate is hot, and arid to semi-arid corresponding to Ethiopian Bereha and Kolla climatic zones. Three basic physiographic basins are recognized: the Genale and Shebele drainage Basins and the eastern slope and plains. The two drainage basins include spectacular upstream canyons that witness the vertical movement that have accompanied the succession of rifting events in the Ethiopian Rift, Afar and the Gulf of Eden. Based on the 2007 census conducted by CSA, the Somali Region has a total population of 7,445, 219, consisting of 3,472,490 men and 3,972, 729 women. Urban inhabitants’ number 1,489,044 or 20% of the population, 5, 956,175 or 80% were pastoralists and farmers. The estimated density is 20.9 people per square kilometer and 6.8 persons to a household. With respect to natural resource base the region rich potential in crude oil and gas, national park, migratory wildlife and potential for vast irrigated agricultural land and water resources and it is known by its rivers Shebelle, Erer and Genale, and Dawa.

**Biophysical Environment:** According to the study conducted in 2022, by Acacia Water, Cordaid and RACIDA, the project implementing Woreda Dollo Ado, has arid to semi-arid lands and it is a disaster-prone area where the rural community heavily depending on natural resources, communities in this area are troubled by frequent droughts, flood, and diseases. The hydro-metrological hazard, droughts, and flood risks and diseases (human and livestock) affecting daily life in Dollo Ado. Due to this focus area needs strategic ecosystem restoration and implementing landscape interventions targeting water and food security and disaster risk reduction is key to build community resilience.

The total population of Dollo Ado woreda 150,100 in 2011 of which 37,00 living in Dollo Ado town, this population number does not include the refugees living in the refugee settlements along Genale river.

**Land use and settlement Pattern:** Somalis have a pastoral heritage,and most people keep small livestock (goats and sheep). An estimated 30% of the people are pastoralists, 50% are agro-pastoralists, 15% lives in urban areas and 5% is a sedentary farmer. For most households, livestock ownership is an additional livelihood activity and source of food and savings. Uncontrolled grazing, tree cutting, land clearing for crop production and charcoal making is intensifying land degradation resulting in decreasing vegetation cover. In the central rangelands rainfed agriculture is practiced on small pieces of land. Rain fed crops include maize, sorghum watermelon as well as seasonal maize and sesame. During the periods of drought sesame is used as livestock fodder. Most of the refugees are fled due to conflicts and droughts from neighboring Somalia; they are poor and dependent upon food aid. Dollo Ado town is also known for hosting livestock market and agricultural seeds provide health and major education services. It is estimated that 30% of the population are pastoralists and 50% are agro-pastoralists. Livestock ownership is a livelihood activity and source of food and savings. The community also practices irrigated agriculture (tomato, onion, watermelon, and chili pepper) along Dawa and Genale Rivers with the support of NGOs. In this agricultural activity the refugees are also benefited 50%. Due to flat landscape of the area flash flood poses major treat to the infrastructure, livestock, and agricultural land. Reforestation is ongoing with support from the government, with a focus on Hilaweyn refugee settlement. Expansion of irrigated agricultural land is also ongoing. According to the agricultural office of the Woreda, the government used to support resettlement towards the Dawa and Genale Rivers. The regional government through the woreda agricultural office is providing support to resettlement of former pastoralists to agro-pastoralists. The people who are living in pastoralist community, who have been facing lack of water, education, health, nutrition etc. are willing to resettle along the River Dawa or the River Genale. To this effect 17,200 households (from 15 Kebele) have been supported and resettled over a period of 7 years. This change has been voluntary, and each household will be given with 0.5 ha of land. In the resettlement area there are farmer training centers where training will be conducted and generators for irrigation, fertilizer, and pesticides are provided.

**Water Resources:** The rivers, Genale, Dawa and the seasonal rainy season are the source of surface water for Dollo Ado, which is the project targeted area. Besides Genale which is perennial river there is no natural surface source of water during dry season in the area.

**Cultural and Heritage Resources:** The Somali people are traditionally semi-nomadic, having lived subsistence lifestyles as agro-pastoralists livestock herders. Somali pastoralists typically live in domed structures (agal) made of branches, mats and/or animal skins that can easily be taken down and moved to another area. There are four major clans in Somali (Darod, Hawiye, Dir and Rahaweyn) and a number of medium-to-small groups. Each clan can be further divided into numerous sub-clans that can consist of tens of thousands of people alone. Within these sub-clans, there are even more group divisions based on kinship alliances of smaller extended families. The group divisions within the clan system are not necessarily based on geographic differences. It is common for a variety of sub-clans to live within the same area. Socially the Somali men may be able to maintain a healthy social life simply by sitting at tea shops on popular streets, watching locals and waiting to be spoken to by those passing. Meanwhile, women often make spontaneous visits to their neighbors and friends. It is common for people to meet friends without having to organize to do so. Generally, people tend to be very social, friendly, and open.

**Sexual and Gender Based Violence:** Situations such as early and forced marriages, female genital mutilation/cutting and domestic violence are frequent in the Somali region due to cultural norms and economic reasons. Girls have to assist parents in raising the younger siblings, participate in domestic chores and get married at an early age. Cases of rape and other sexual violence have also been reported in Jarar zone, whilst the highest rate of FGM/C is reported in Afder zone. There is a One-Stop-Centre in Jijiga to which SGBV survivors can report incidents. In areas, where One-Stop-Centres have not been established, survivors can report to the Bureau of Women, Children and Youth Affairs or its representation at the zone level.

**WASH:** The In terms of access to water, available information on Afder, Fanfan, Jarar and Nogob zones indicate the following functional accessible sources : 100 boreholes (most of them in Fafan zone), 453 hand dug wells (most of them in Jarar zone), 1166 birkas (most of them in Jarar), 69 dams (mostly in Jarar zone). People also resort to fetching water from the rivers and springs in Afder zone. Deep boreholes represent only 6% of all water sources, iwhich means the region depends solely on unsustainable water sources that can easily be impacted by rainfall patterns. Overall, 32% of all existing water sources need urgent rehabilitation to alleviate suffering and reduce the risk of overstretching those functioning, as well as costly water trucking needs, particularly in Fafan, Jarar and Korahey zones. In terms of sanitation, there is a very poor coverage of latrine facilities across the region

**Employment and Labor Market:** The Efforts to generate job is also one key goal of GTP II. At the end of plan period, jobs that benefit some 1 million people in the region will be created. The government of Somali Regional State believe that creating job opportunities of the strategies that the unemployment is to be declined in particular for youth. Urban Unemployment Survey conducted by CSA in 2018, shows that the overall unemployment rate in the urban dwellers of the region is 18.9% (female 29.8%) and male 9.9%). Compared to the neighboring regions, Somali region is the highest with the exception of Dire Dawa. It is also above the national average. The government also focuses on the employment status of the age 15 – 29, which has it’s important from different aspects. However, Somali region (28%) is above the national average and the second compared to all region (Dire Dawa 32.9%).[[13]](#footnote-13)

## **3.3 Gambella (Dima)**

**General Overview, Topography and Terrain:** Gambella regional state is located in western Ethiopia bordering South Sudan. In the Region, five ethnic groups are considered indigenous. These are the Anywaa (or Anyuak), Komo, Majanger, Nuer, and Opo. There are also people from other ethnic groups of the country living in the Region, often called “highlanders” (“Degenga”). Among these inhabitants of the Region, the Nuer and the Anywaa are the two largest groups in the Region, followed by the “highlanders”. The Nuer ethnic group is primarily agro-pastoralist, while the Anywaa ethnic group engages in cultivation. As of 31 July 2020, the region hosts 321,014 refugees from South Sudan ([UNHCR Gambella Information Management Unit, 2020](https://data2.unhcr.org/en/documents/details/78175)). The Region’s working language is Amharic, but Nuer, Anywaa, and Afan Oromo languages are spoken too.

The climate condition of the project targeted area is characterized by arid and semi-arid with the current average maximum temperature of 40.4oC midday and 16.6 oC at night stated by national meteorological agency of Ethiopia. The area gets high rain from June to October with maximum average annual rainfall of 400mm (Selam, 2021). The topography of the area is differentiated by the rugged terrain of GuraFerda in the North Shoa Gimira in the East, Magi in the South and flat morphology in west bordering South Sudan. The altitude of Dima Woreda where the subproject activities are implemented ranges from 412m to 2063m above sea level. Based on the census conducted by CSA, 2007 the region has the population of 307,096, consisting of 195,787 men and 147,309 women: urban inhabitants’ number 77,925 or 25.37% of the population. This region has an estimated density of 10 people per square kilometer and in average 4.6 persons to household.

**Bio-physical Environment:** From the natural resources base point of view the region is rich in water resources and arable land and people mostly dependent on subsistent farming, pasture, beekeeping and haunting, the agricultural products are cotton, coffee, and mango and fishing is an important source of income for many people, the three major rivers (Akobo, Baro, and Gilo) and the various lakes provide significant potential for small and commercial irrigation based farming. The region is also blessed with mine (Gold) resources, national park, and migratory wildlife. The project target area where the subproject is going to be implemented Dima Woreda is found in the southwestern part of the region bordering South Sudan. Th vegetations that exists in the study area includes savanna trees, scattered trees and shrubs grown during rainy season and reed grasses. The wildlife resources include mammal’s lion, leopard and hyena, birds, reptiles like snake, lizard and python, crocodile, and endemic animal such as red monkey.

**Land Use and Settlement Pattern:** Gold mining plays a significant economic role in Dima Woreda, around Akobo River but the rudimentary nature of the mining activities causes environmental and social degradation (deforestation, loss of biodiversity and water pollution) as the mining activities include land clearing, digging, and transporting gold rich soil to the river for recovery. Due to land clearing extensive forest, grazing and agricultural lands are changed to useless land. (Selam, 2021). According to Addis Standard report sourcing UN, 2022, at least 185,200 people (37,040 households) were internally displaced and an additional 79,631 people (15,927 households) were affected by flooding that occurred across 12 woredas as well as in the capital city of Gambella regional states following heavy rains from early August to October this year. Large part of the Gambella region is prone to perennial flooding. The major Rivers Akobo, Alworo, Baro and Gilo and their tributaries, often burst their banks during the rainy season and flood communities along the riverbanks, causing loss of life and livelihoods, displaced people and leading to waterborne diseases.

**Water Resources:** The Akobo River is the surface source of the project implementing area. The place where this river is flowing gentle and holds much water during rainy season (June-October) it is also sources of water for drinking and sanitation for the local people.

**Cultural Resources and Heritage:** The Gambella culture could be categorized as a diverse due to different ethnic groups found in the region. Cultural similarities might be seen between the Nuer and Anyuak but in a very minimal extent even though these two tribes are from Nilotic group. The Anyuak of course have their own way of life and thinking in a variable degree from their Nuer counterparts. The same is also true to Oppo and Mejeng people all of whom have various cultures different from one another. The Nuer have marks or scars called “gaar” in local dialect. The marks are placed on the forehead of male individuals only. Nuer females do not have anything on their faces to identify them from other women in the region. These marks on male faces do not only serve as identical symbols which distinguish them from other ethnic groups in the region or from other tribes for those found in South Sudan but they also initiative another function. They act as a prerequisite for marriage and joining or participation in the tribal or clan wars. Those who don’t have marks on their face cannot either get marry nor participate in communal strife as they are deemed too young regardless of how mature a person might be even if they might be well past their twentieth birthday. However, such a belief of marking does not longer exist among Nuers of Ethiopia these days. The marriage in Nuer does not use to be so easy especially when a person does not have cattle which is paid as a dowry to bride’s family. Unlike scars on the forehead which has been abandoned, the notion of dowry is not getting away easily even though the majority of Nuer now believe that it is a culture which should also go.

**Sexual and Gender Based Violence:** According to the 2016 EDHS, in Gambella 58 per cent of women (aged 15-49) decided themselves on their first marriage, while 40 per cent of women stated that their parents made the decision for their first marriage.[[14]](#footnote-14) The proportion of women (aged 15-49) who have ever experienced psychological, physical or sexual violence committed by their current or most recent husband/partner is 24 per cent, 25 per cent, and 8 per cent, respectively.[[15]](#footnote-15) The percentage of women who believe that a husband is justified in hitting or beating his wife in various circumstances is 60 per cent, while 36 per cent of men agree that wife beating is justified in some circumstances.[[16]](#footnote-16)

**Health:** The EDHS 2016 found that Gambella had made tremendous progress in maternal health indicators between 2011 and 2019. For example, the rate of pregnant women in Gambella who gave birth in the five years preceding the survey and received antenatal care during their pregnancy from a skilled health provider increased from 54 per cent in 2011 to 86 per cent in 2019, and now stands far above the national average of 74 per cent. The rate of skilled attendance during delivery increased from 27 per cent in 2011 to 70 per cent in 2019.[[17]](#footnote-17) In 2016, 12 per cent of women in Gambella did not have any assistance during delivery.[[18]](#footnote-18) The rate of women who delivered in a health facility increased from 28 per cent in 2011 to 70 per cent in

2019.[[19]](#footnote-19) This rate is also well above the national average.[[20]](#footnote-20)

**Education:** According to the Education Statistics Annual Abstract (ESAA) 2018/19, the gross enrolment ratio (GER) and net enrolment ratio (NER) for pre-primary education (ages 4-6) in Gambella is very low, at 55 per cent and 29 per cent, respectively. In comparison, the national average for pre-primary GER is 41 per cent and NER is 24 per cent.[[21]](#footnote-21) The rates in Gambella are far from the national GER target of 80 per cent by 2020, and Sustainable Development Goal (SDG) 4.2., which reads, “ensure that all children have access to quality early childhood development, care and pre-primary education so that they are ready for primary education by 2030”.[[22]](#footnote-22) With access to any form of early learning experience restricted to 26 per cent of children (aged 4-6), most children enter Grade 1 in formal schools with little or no preparation. In 2018/19, the GER and NER for Gambella primary education stood at 148 per cent and 108 per cent, respectively.[[23]](#footnote-23) The very high GER shows that there are more children in primary grades than there are children between 7 and 14 years. It indicates that children younger than 7 years and older than 14 years are enrolled in primary schools. The Gender Parity Index (GPI) for Gambella primary education is 0.94, compared to a national average of 0.9, meaning there are more boys enrolled in primary education than girls. In 2012/13, the GPI for primary education in Gambella was 0.92.[[24]](#footnote-24) On the other hand, GPI for secondary is the third lowest at 0.73 after Afar ND Somali in 2018/19.[[25]](#footnote-25)

## **3.4 Benishangul Gumuz (Bazema)**

**General Overview, Topography and Terrain:** The Beneshangul Gumuz regional state is located in the north-western part of Ethiopia, shares border with Sudan in the north-east, with the regional state of Amhara in the east, and Oromia regional state in the south. The region comprises of three zones (Assosa, Kamashi and Metekel) and one special woreda Mao Komo and one town administration Assosa Town. Topographically the elevation ranges from 488-2752 m.a.s.l and maximum slope steepness reaches about 740. The region is generally lowland and dominated by flat terrain. Some higher elevations and steeper slope areas are apparent in the mid-East and North-East parts of the region. Based on the projection census from CSA, 2007, the total population is 1,157,000. It occupies an estimated total area with 50,380 km, and the population consists of indigenous ethnic minority groups of Berta, Gumuz, Shinasha, Mao and Komo. It is also inhabited by settlers with a diverse ethnic background from other regions. The region is perceived to have extensive and untapped land resources with a great potential for agricultural development and has vast vegetation cover of natural forests, bushes, and shrubs.

**Land use and Settlement Pattern:** According to CSA,2007Benishangul Region is endowed with fertile land suitable for high value crops, livestock, apiculture, fishery, minerals like gold and marble, and economically important trees like bamboo and incense. The overall area of arable land in the region is about 911,877 ha, of which less than half has been cultivated. It was noted that 189,534 hectares of land in the region is potentially irrigable. The main sources of livelihoods include, farming including livestock production, traditional gold mining, petty trade, forestry, and lowland bamboo production. The region is also one of the four developing regional states in the country with many indicators below the national average. For instance, this region has the highest rate of neonatal mortality rates in the country.

**Water Resources:** The region is in an area where the Grand Renaissance Dam of Ethiopia is under construction over the Abay River (or Blue Nile) which includes the Beles, Dabus, Anger, Dhidhsa, and Dindir Rivers, which are tributaries of the Abay River (Derege.T et.al. 2016). According to Ethiopian Demographic Health and Survey 2016, an estimated 82% of households use improved drinking water sources in Beneshangul Gumuz compared to a national average of 65% (the second highest rate in the country, after Gambella). Urban areas have near universal usage of improved water sources (98%) and the rate in rural areas is also relatively high (79%). Unlike the other regions, the sustainability of water scheme is not a challenge in Beneshangul Gumuz region. Yet, sanitation is a massive challenge with only 1.8% of the households using improved sanitation which is below national average of 6.3%.

**Cultural Resources and Heritage:** Beneshangul Gumuz is historically closely linked to neighboring areas of Sudan, and to a lesser extent to the Ethiopian Highlands. Gold was traditionally an important export of Beneshangul. The people practice shifting cultivation, and their staple food is [sorghum](https://en.wikipedia.org/wiki/Sorghum) (Wallmark 1981). Cereal crops are kept in [granaries](https://en.wikipedia.org/wiki/Granaries) decorated with clay lumps imitating female [breasts](https://en.wikipedia.org/wiki/Breast). Sorghum is used for cooking [porridge](https://en.wikipedia.org/wiki/Porridge) (*nga*) and brewing [beer](https://en.wikipedia.org/wiki/Beer) (*kea*). All the cooking and brewing is carried out in earthen pots, which are made by women. The Gumuz also hunt wild animals, such as [duikers](https://en.wikipedia.org/wiki/Duiker) and [warthogs](https://en.wikipedia.org/wiki/Warthog), and gather [honey](https://en.wikipedia.org/wiki/Honey), wild fruits, roots and seeds. Those living near the Sudanese borderland converted to [Islam](https://en.wikipedia.org/wiki/Islam) and a few are Christians, but most Gumuz still maintain traditional religious practices. All Gumuz adorned their bodies with scarifications, but this custom is disappearing through government presser and education. All Gumuz are organized in clans. Disputes between clans are common and they are usually solved by means of an institution of conflict resolution called mangema or michu depending on the area. The region is also known for recent conflict with different groups around. The root causes of the conflict in the region, which has affected all three of its zones (Metekel, Assossa and Kamashi), relates to the threat that indigenous communities- principally Gumuz and Berta-have felt from Amhara and Oromo incomers to the region, particularly regarding their political rights under the ethnic federal system.

**Early Marriage:** The EDHS 2016 shows a median age at first marriage of 17.1 years among women aged 20-49 year in Benishangul-Gumuz. While the average median age is still low, it has increased significantly since 2011 (age of 15.9). In 1991, Benishangul-Gumuz region had 62 per cent of women aged 20-24 who had been married before age 18; this had declined to 50 per cent by 2016.[[26]](#footnote-26) In comparison, the national average of child marriage in this age group is 40 per cent. The reduction in BenishangulGumuz has not been fast enough to eliminate child marriage by 2030 and achieve SDG 5; it needs to decline 14 times faster.[[27]](#footnote-27)

**Health:** Benishangul-Gumuz has made great progress in maternal health care between 2016 and 2019. For instance, the per cent of pregnant women in Benishangul-Gumuz who gave birth and received antenatal care during their pregnancy from a skilled health provider increased from 69 per cent in 2016 to 83 per cent in 2019 and this is above the national average of 74 per cent. The per cent of pregnant women receiving of skilled attendance during birth delivery increased from 29 per cent in 2016 to 65 per cent in 2019.[[28]](#footnote-28) Still, almost one in three women in Benishangul-Gumuz did not have skilled assistance during delivery; but better than the national average of 50 per cent The rate of women who delivered in a health facility increased from 26 per cent in 2016 to 64 per cent in 2019,[[29]](#footnote-29) higher than the national average.

**Education:** According to the Education Statistics Annual Abstract (ESAA) 2018/19, the Gross Enrolment Ratio (GER) of 37 per cent and the Net Enrolment Ratio (NER) of 25 per cent for pre-primary education (ages 4-6) in Benishangul-Gumuz are still quite low. In comparison, the national average of the pre-primary GER is 41 per cent and NER is 24 per cent. Similar to most regions, the rates in Benishangul-Gumuz are far from the national GER target of 80 per cent by 2020 and Sustainable Development Goal (SDG) 4.2. that reads “Ensure that all children have access to quality early childhood development, care and pre-primary education so that they are ready for primary education by 2030”.[[30]](#footnote-30) Most children enter grade one with little or no preparation for school. In 2018/19, the GER and the NER for Benishangul-Gumuz primary education stood at 114% and 95%, respectively.[[31]](#footnote-31) A GER above 100% shows that there are more children in primary grades than there are children between 7 and 14 years. It usually indicates that children younger than 7 years and older than 14 years are enrolled in primary schools; it may also indicate that the population of this age group is actually higher than the estimate from the projection. The national GER target for primary school is 103% by 2020, which seems possible to achieve. The NER trend is positive till 2017/18 but declined in 2018/19.

## **3.5 Tigray**

**Biographical Environment:** It is located at the northern most regional state of the country, laying roughly between 14.0323° N, 38.3166° E, at about 500Kms from the national capital Addis Ababa. Total population of Tigray is recently estimated to be about 7.1 million people based on the last recorded census from which the male population is estimated to be about 50.5% and the female population is 49.5%. The Physiography of Tigray extends from Tekeze gorge in the south to central Eritrean highlands. The Tigrian plateau is separated from the Eritrean plateau by Mereb River. The Tigray plateau consists of 13% of the area of the region. It is an elongated highland with most of the land being between 1000 and 2000 meters above sea level. Long period of denudation has created residual features of granite hills, rugged topography, and Ambas. There are high mountains in this plateau with elevations of over 3000 meters. Most of the region’s climate is characterized as semi-arid. The Tigray region is dependent on Belg rainfall (Jan-May), Azmera rainfall (April to end of May) and Tsedia rainfall, which is the main rain equivalent to the Kiremt rain.

Tigray region is located between latitude 12°15 2 N

and 14° 572 N and longitude 36° 27 2 E and 39° 592 E in

the northern part of Ethiopia. The temperature regime of the

region varies from hot to very cool temperature. Most part

of the region’s climate is characterized as semi-arid. The

geography of Tigray region constitutes lowlands, mid-

highlands and highlands

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**Land Use and Settlement Pattern:** In most parts of the region, the common agricultural land use system is a smallholder farming system with agricultural production in small parcels for subsistence purposes with no or little external inputs. However, the small farm sizes are insufficient to provide for ever-increasing populations of the region. In response to the increasing demands for food production, agricultural lands are expanding at the expense of natural vegetation and grasslands. The farmers in this region grow a great variety of cereals such as sorghum, maize, millet, teff, wheat and barley, pulse crops such as chickpeas and cowpeas, they also keep cattle, small ruminants, chicken, and donkeys.

**Water Resources:** Due to the location on mountaintops, the main problem is the lack of water for humans, livestock, and crops. Over the last two decades, the regional government of Tigray in Ethiopia has invested extensively in developing surface and groundwater resources for water supply leading to 61% of rural and 57% of urban populations having access to safe drinking water by 2020.

**Cultural Resources and Heritage:** Mekelle is the current provincial capital and was home to Emperor Yohannes IV, who once ruled Ethiopia in the late 1800s. It served as the mecca of northern trade but now serves as an intellectual and political hub. Other key towns in Tigray are Adigrat, Adwa, and Axum. Tigrigna is the official language of Tigray and the most widely spoken. However, other spoken languages are Shahu, Kunama, and Amharic. Tigrayans make up 97% of the total population of Tigray. The other 3 percent of the population is composed of Amharas, Irob, Afar, Agaw, Oromo, and Kunama. Tigrayans predominantly practice Orthodox Christianity. Approximately 95.6% practice it. Orthodox Christianity was a central aspect of the Axumite Empire. According to some scriptures, one of the Three Wise Kings was an Axumite king. Tigray is home to 121 rock-hewn churches, believed to represent the single largest group of rock-hewn architecture in the world. Eighty of these churches, dating from the 5th to 14th centuries AD, as well as a small number of masonry-and-timber built churches, which include some of the oldest timber structures surviving worldwide (6th – 10th centuries AD), are in the Sacred Landscapes of Tigray. The proposed serial nomination consists of three separate zones containing groups of rock-hewn churches in spectacular natural landscapes located in Mehakelegnaw and Misraqawi Zones in the eastern half of Tigray Regional State. These rock hewn churches in landscape and the Axum Stele are registered as UNESCO Cultural Heritage.

**Sexual and Gender Based Violence:** In Tigray, the proportion of women (aged 15-49) who have ever experienced psychological, physical or sexual violence by their current or most recent husband/partner is 27 per cent, 19 per cent and 12 per cent, respectively.[[32]](#footnote-32) The percentage of women who believe that a husband is justified in hitting or beating his wife in various circumstances is 65 per cent, while 31 per cent of men share the same belief/opinion.[[33]](#footnote-33)

**Health:** Over the past years, Tigray has made significant progress in several child and maternal health, and nutrition, indicators. The figures show a reduction in reported maternal deaths, from 216 in 2014/15 to 96 in 2016/17.[[34]](#footnote-34) The regional GTP II shows a maternal mortality ratio of 266 deaths per 100,000 births in 2015.[[35]](#footnote-35) According to the Federal Ministry of Health, improvements can largely be attributed to the extent to which maternal mortality was elevated as a regional priority, with reporting of every maternal death to the Tigray Regional President. In addition, a range of activities was initiated to address the prevention and timely management of obstetric emergencies. Impressively, skilled attendance during delivery increased by almost five times, from 12.6 per cent in 2011 to 59.3 per cent in 2016.[[36]](#footnote-36)

**Education:** According to the Education Statistics Annual Abstract (ESAA) 2017/18, the gross enrolment ratio (GER) and net enrolment ratio (NER) for pre-primary education in Tigray were among the highest rates in Ethiopia, at 87 per cent and 86 per cent, respectively. This is far higher than the national average of 44 per cent (GER) and 43 per cent (NER).[[37]](#footnote-37) The regional government has prioritized the enrolment of children (aged 6) in “0 class”.[[38]](#footnote-38) With regard to pre-primary education, there are three modalities: “O” class attached to primary school, child-to-child (CtC), a programme delivered by young Grade 5 and Grade 6 facilitators, and formal kindergarten. Kindergarten accounts for 7 per cent, CtC for 64 per cent and “O” class for 26 per cent. The quality of pre-primary education is compromised by the rapid scale up of services, poorly equipped classes, a lack of standardized infrastructure and insufficient trained teachers, a shortage of educational materials, poor monitoring, lack of standards, and most importantly, inflated data. The GER and NER for Tigray primary schools continue to increase and exceeded 100 per cent in 2017/18.[[39]](#footnote-39) The Gender Parity Index for Tigray primary schools was 0.94, compared to the national average of 0.9. These ratios show that the region is performing better than the national average.

# **RELEVANT POLICIES, LEGAL AND INSTITUTIONAL FRAMEWORK OF ENVIRONMENTAL MANAGEMENT**

## **Applicable Policies and Strategies Forming the National Environmental and Social Management System**

### **The Constitution**

The constitution of the Federal Democratic Republic of Ethiopia had been issued in August 1995 with several provisions, which provides basic and comprehensive principles and guidelines for environmental protection and management in the country. The concept of sustainable development and environmental rights are presented in Articles 43, 44 and 92 of the Constitution.

***Article 40: The Right to Property***

In relation to the Right to Property, the Constitution under Article 40 every Ethiopian citizen has the right to the ownership of private property. Unless prescribed otherwise by law on account of public interest, this right shall include the right to acquire, to use in a manner compatible with the rights of other citizens, to dispose of such property by sale or bequest or to transfer it otherwise.

***Article 41: Economic, Social and Cultural Rights***

Article 41 of the Constitution states that every Ethiopian has the right to access publicly funded social services. Sub Article 5 of the same article stipulates, the state, within available means, should allocate resource to provide rehabilitation and assistance to physically and mentally disabled, the aged and to children who are left without parents or guardians.

***Article 42: Rights of Labor***

Article 42(2) stipulates that ‘workers have the right to a healthy and safe work environment’, obliging an employer (be it government or private) to take all necessary measures to ensure that workplace is safe, healthy, and free of any danger to the wellbeing of workers.

***Article 43- The Right to Development***

* The Peoples of Ethiopia as a whole, and each Nation, Nationality and People in Ethiopia have the right to improved living standards and to sustainable development.
* Nationals have the right to participate in national development and to be consulted with respect to policies and projects affecting their community.

***Article 44- Environmental Rights***

* All persons have the right to a clean and healthy environment.
* All persons who have been displaced or whose livelihoods have been adversely affected as a result of State programs have the right to commensurate monetary or alternative means of compensation, including relocation with adequate State assistance.

***Article 92- Environmental Objectives***

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

**Regional states constitution:** Regional states have their own constitution upholding the federal constitution in its entirety and constituting their regional particulars. All the regional state constitutions have addressed land and natural resources management and environmental protection. The regional states constitutions state that:

* The regional governments are entrusted to administer land and natural resources in the name of the people and deploy for the common benefit of the same.
* The regional governments and all citizens of the regions are responsible for the conservation of natural resources and the environment.
* Concerned communities shall be given opportunity to express their opinions in the formulation and implementation of policies in relation to the environment.

### **Environmental Policy of Ethiopia**

The first comprehensive statement of Environmental Policy of Ethiopia was approved by the Council of Ministers in April 1997 that was based on the policy and strategic findings and recommendations of the Conservation Strategy of Ethiopia. The policy is aimed at guiding sustainable social and economic development of the country through the conservation and sustainable utilization of the natural, man-made and cultural resources and the environment at large. The overall policy 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 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. The Environmental Policy provides a number of guiding principles that require adherence to the general principles of sustainable development. In particular, the need to ensure that Environmental Impact Assessment:

* Considers impacts on human and natural environments.
* Provides for early consideration of environmental impacts in project and program design.
* Recognizes public consultation processes as essential to effective management.

Includes mitigation and contingency plans.

* Provides for auditing and monitoring.
* Is a legally binding requirement.

The Government of Ethiopia has recently initiated to update the Environmental policy of Ethiopia. The technical committee under the Ministry of Environment, Forest and Climate Change (Now EPA) was formalized to be in charge of updating the National environmental policy to fulfil the gaps identified in addressing climate change and other environmental issues.

### **Climate Resilient Green Economy**

The Climate Resilient Green Economy (CRGE, 2011) is Ethiopia's overarching framework and a national strategy towards a green economy. The Green Economy Strategy is believed to provide an opportunity to promote sustainable development in Ethiopia. Currently, it builds on an investment plan of over 60 initiatives that are, or can be, turned into financed projects. For this to happen, there is a strong need to reform the economy. The CRGE is envisioned to be the main driver for this transformation. The CRGE has three complementary objectives: i) fostering economic development and growth, ii) ensuring abatement and avoidance of future GHG emissions; and iii) improving resilience to climate change. To achieve these objectives, CRGE sets out to tap into international climate finance, seize opportunities for innovation and new technologies, and create competitive advantages via sustainable resource use and improving productivity.

### **Digital Transformation Strategy**

Technological change has been the primary driver of social development, productivity improvements and inclusive growth. Ethiopia’s digital economy is at an early stage of development with few private sector players offering digital services and some government driven digitalization initiatives. While these initiative and services help solve important challenges, they cut across multiple stakeholders and require a coordinated effort to maximize their impact. The digital transformation strategy was developed to provide a collective vision and, specifically to meet the following key objectives:

* To propose an inclusive digital economy approach that will catalyze the realization of Ethiopia’s broader development vision.
* To emphasize the need for a sense of urgency and mobilize critical stakeholders to address the imperatives to enable an inclusive digital economy.
* To coordinate and strengthen current initiatives underway so the most pragmatic and strategic pathways are explored to unlock growth and maximize impact.
* To ensure an inherently international approach that will enhance Ethiopia’s place in regional and global value chains while benefitting from best practice and interoperable systems.

The strategy took into consideration the current economic drivers (Agriculture, Manufacturing and Services), the priority sectors, and the national objectives of jobs creation, forex earnings and inclusive prosperity as a means of identifying the most relevant digital enabled pathways for Ethiopia. These are:

* Pathway 1: Unleashing value from agriculture,
* Pathway 2: The next version of global value chains in manufacturing
* Pathway 3: Building the IT enabled services, and
* Pathway 4: Digital as the driver of tourism competitiveness.
  + 1. **Occupational Health and Safety (OHS)**

The National Policy and strategy on Occupational Safety and Health (OSH) was endorsed by the FDRE Council of Ministers in July 2014. The OSH policy and strategy was prepared to implement the rights of Labour as stipulated in article 42(2) of the Constitution and implement the requirements of International Conventions on Occupational Health and Safety (No.155) to which Ethiopia is a signatory. The overall objective of the national OSH Policy and strategy is to avoid, prevent or minimize occupational and health hazards by providing effective OSH services in all working places and thereby contribute to the socioeconomic development of the Country.

The guiding principles of the National OSH policy and strategy are stated as the following:

1. Occupational Safety and Health Services are basic rights of workers.
2. Occupational Safety and Health Services are necessary in all working places.
3. Occupational accidents and health hazards can be prevented.
4. Tripartite and bipartite cooperation and coordination are key instruments for the national OSH policy and strategy implementation.

The Specific objectives of the National OSH policy include:

To ensure availability and accessibility of OSH services in all economic activities including in the informal work sectors

To prevent occupational safety and health hazards by establishing a tripartite and bipartite consultation and coordination mechanisms

To establish OSH systems that pays attention to those workers who seek special assistance (e.g: Women, youth, persons with disabilities, HIV patients, etc.).

To prevent the environment, public and workers health by preventing the release of pollutants from the workplaces.

The strategy of the national OSH policy includes.

1. Establishment of an effective and accessible work conditions inspection mechanism that is focused on prevention.
2. Formulating and implementing national regulations and standards on OSH and updating and improving it periodically.
3. Integrating and implementing OSH protection principles in all national development plans
4. Establishing control and inspection mechanism that ensure prevention of occupational and health hazards to workers and impacts on the environment from occurring due to import. Use or disposal of machineries, raw materials, or chemicals in workplaces.
5. Establishing a mechanism to ensure OSH services are provided in the private sector.
6. Establishing a mechanism to ensure provision of advice and technical support on OSH are provided by Organizations.

The national OSH policy and strategy is applicable to all types of workplaces and economic activities in Ethiopia.

### **The National Policy on Ethiopia Women (1993)**

Itunderlines the need to establish equitable and gender sensitive public policies that empower woman, especially in education and property rights, and engaging them in decision making. Improving healthy working conditions, ensuring access to basic services, protecting woman from harmful traditional practices are among the emphasized key issues.

### **Gender Mainstreaming Guideline (2010)**

This strategy was adopted at policy, program and project level by government and development parteners to ensure the out comes 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 amendements made to the criminal code significantly support to fight abuses committted 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 pregenant 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.

### **The Development and Change Package (2007)**

It envisions to build democratic society where women are equal participants and beneficiaries of economic, social and political life of the country. Widespread awareness creation of women to actively participate in the development process; organizing and associate women to address challenges they face; capacitate women to solve problems and fight demeaning perceptions & fight for their rights; facilitate linkages and support among created associations and organization; and enable women to benefit economically and socially.

### **Home Grown Economic Reform Agenda (2020)**

In the year 2019, the government of Ethiopia launched the home-grown Economic reform Agenda which aims to expand Ethiopia’s economy capabilities by giving particular emphasis to several sectors including information and communications technology.

## **Applicable Proclamations, Regulations and Procedural Guidelines Formatting the National Environmental Management System**

### **Environmental Impact Assessment Proclamation (Proclamation No 299/2002)**

The ESIA Proclamation is used to predict and manage the environmental effects of a proposed development activity as a result of its design, sitting, construction, operation, or an ongoing one as a result of its modification or termination, entails and thus helps to bring about intended development. The proclamation is an effective means of harmonizing and integrating environmental, economic, cultural, and social considerations into the planning and decision-making processes thereby promoting sustainable development. Moreover, it serves as a basic instrument in bringing about administrative transparency and accountability, to involve the public and the communities, in the planning and execution of development programs that may affect them and their environment. The objective of undertaking the assessment study is to ensure the impacts of a development project and the incorporation of mitigating measures for the adverse significant impacts. The ESIA law and associated guidelines clearly defines:

* Why there is a need to prepare ESIAs?
* What procedure is to be followed in order to implement ESIA?
* The depth of environmental impact studies.
* Which projects require full ESIA studies?
* Which projects need partial or no ESIA studies?
* To whom the report must be submitted?

There are ongoing efforts carried out by the former MoEFCC (now EPA) to review the ESIA Proclamation in order to update and improve.

1. ***Environmental Impact Assessment Procedural Guideline Series (Series 1 and 2)***

In order to facilitate the implementation of Environmental Impact Assessment Proclamation (Proclamation 299/2002), the then MoEFCC (now EPA) had formulated four procedural guidelines, namely, Review Guideline Series 1: Guidelines for Review Approach; Review Guideline Series 2- Guidelines for Contents and Scopes of Report; Review Guideline Series 3- Checklist of Environmental Characteristics and Review Guideline Series 4- Review Criteria. These widely applied draft environmental impact assessment guidelines were under review to enhance the documents in light of the experiences gained so far and to publish it for official use after endorsement by the Ministry. The review process is still ongoing and yet to be completed during the current 2018/2019 fiscal year. Review Guideline Series 1 and 2 will be elaborated to a certain extent here and any further updates made to the documents will apply after official publication of the reviewed guidelines.

1. ***Procedural Guideline Series 1- Guidelines for review Approaches***

This guideline pointed out roles and responsibilities of the former MoEFCC (now EPA) and Regional Environmental Agencies, the proponent, consulting firm, interested and affected parties, and the licensing agency. In the guideline, the ESIA processes and requirements, and comprehensive description of the EA process has been stated. It also outlined projects which may have adverse and significant environmental impacts, and may, therefore, require full ESIA (Schedule 1), projects whose type, scale or other relevant characteristics have the potential to cause some significant environmental impacts but not likely to warrant an environmental impact study (Schedule 2) and projects which would have no impact and does not require environmental impact assessment (Schedule 3).

1. ***Procedural Guideline Series 2- Guidelines for Contents and Scope of Report***

This guideline among others indicates structure and content of the Environmental Impact Study Report and describes the contents including the administrative, legal and policy requirements, assessment, and mitigation measures. The guideline indicates the following main types of mitigating measures, which need due considerations:

* Preventing, reducing, or minimizing impacts before they occur.
* Eliminating an actual impact over time by incorporating appropriate maintenance measures during the life of the project.
* Rectifying an impact by repairing, rehabilitating, or restoring the affected environment.
* Compensating for an impact by replacing or providing substitute resources or environments as well as contingency plans in case of emergencies.
* Maximizing beneficial impacts through specific additional actions

1. ***Directive No.2 /2014 (2006EC)***

This guideline among others indicates structure and content of the Environmental Impact Study Report and describes the contents including the administrative, legal and policy requirements, assessment, and mitigation measures. The guideline indicates the following main types of mitigating measures, which need due considerations:

* Preventing, reducing, or minimizing impacts before they occur.
* Eliminating an actual impact over time by incorporating appropriate maintenance measures during the life of the project.
* Rectifying an impact by repairing, rehabilitating, or restoring the affected environment.
* Compensating for an impact by replacing or providing substitute resources or environments as well as contingency plans in case of emergencies.
* Maximizing beneficial impacts through specific additional actions

1. ***Environmental Guideline and Management***

***- Guideline for Environmental Management Plan (draft), May 2004*** outlines measures for preparation of an Environmental Management Plans (ESMP) for proposed developments in Ethiopia and institutional arrangements for implementation of ESMPs.

***- ESIA Procedural Guideline (draft), November 2003:*** This guideline outlines the screening, review and approval process for development projects in Ethiopia and defines the criteria for undertaking an ESIA.

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

* Environmental Assessment and Management in Ethiopia
* Environmental Impact Assessment Process
* Standards and Guidelines
* Issues for sector environmental impact assessment in Ethiopia covering agriculture, industry, transport, mining, dams and reservoirs, tanneries, textiles, hydropower generation, irrigation projects and resettlement.
* The guideline contains annexes that:
  + Identify activities requiring a full ESIA, partial measure or no action.
  + Contain sample forms for application.
  + Provide standards and guidelines for water and air.

Table 2: Relevant EPA and other guidelines and standards

|  |  |
| --- | --- |
| **Guideline/ standard** | **Description** |
| ESIA Procedural Guideline, November 2003 | The ESIA guideline of 2000 mentioned above was revised in 2003 and issued as draft ESIA procedural guideline. The later outlines the screening; review and approval process for development projects in Ethiopia and defines the criteria for undertaking an ESIA.  Annex-III identifies the schedule of activities for which a full ESIA, Preliminary ESIA or no action is required. The schedule of activities listed in Annex-III is widely applied by the Federal and Regional competent authorities to classify sub-projects into one of the three Categories. |
| Directive No.2/2014 (2006 EC): Directive on issuing “professional competence certificate to consultants and firms providing service in Environmental Impact Assessment, Environmental Audit and Climate Change fields” | The Directive has been issued by the EFCCC and brought into force in the last four years. It has become an important milestone in the development of the ESIA system in Ethiopia. The directive stipulates that ESIA, and Environment Audits should be conducted by professional consultants and firms that are registered and certified for their competence by the Ministry of Environment. ESIAs and Environment Audits prepared by unregistered and certified firms will not be eligible for review and approval. The Regional EPFCCs have also started applying the stated directive of EFCCC and others preparing their own version of the Directive (e.g., Amhara region) |
| Draft Guideline for Environmental Management Plan (draft), May 2004 | The guideline provides guidance on the necessary elements for preparation of an Environmental and Social Management Plan (ESMP) for proposed development projects in Ethiopia and the institutional arrangements for implementation of ESMPs. |
| Directive No.01/2010 Regional ESIA guideline of Amhara Region Environment, Forest, Wildlife Protection and Development Authority (EFWPDA). | The ESIA guideline provides details for acceptable ESIA content, the review and approval process involved, the certification process of ESIA practitioners/consultants/ in the region, and ESMP formats which need to be applied during ESIA preparation. The Amhara region EFWPDA is testing the preparation and submission of ESIA reports in the local Amharic language and is starting to collect service charges for reviewing and clearing ESIA documents. |

### 

### **Environmental Pollution Control Proclamation (Proc. No 300/2002)**

This proclamation is aimed at eliminating or, when not possible, to mitigate pollution as an undesirable consequence of social and economic development activities. It has also an objective of protecting the environment and safeguarding of human health, as well as maintaining of the biota and the aesthetic value of the environment. The Proclamation, among others has considered control of pollution; management of hazardous waste, chemical and radioactive substances; management of municipal wastes; the importance and need to respect environmental standards; and punitive and incentive measures.

### **Solid Waste Proclamation (Proclamation No 513/2007)**

Solid Waste Management proclamation aims to promote community participation to prevent adverse impacts and enhance benefits resulting from solid waste management. It provides for preparation of solid waste management action plans by urban local governments. Ethiopia lacks (i) appropriate legal framework for e-waste management, (ii) absence of e-waste recycling and refurbishing centers, and (iii) lack of regulatory framework including standards and certifications addressing environmental impacts from optical fibers and related telecommunications equipment and materials.

### **Hazardous Waste Management and Disposal Control (Proclamation No 1090/2018)**

This is one of the recently introduced environmental legislations that specifically deal with hazardous wastes, the proclamation in its preamble elucidated hazardous waste as one of the most crucial environmental problems in Ethiopia. It stated the importance of prevention and control of these type wastes and emphasized the need for creation of a system to control the generation, storage treatment, recycling and reuse as well as transportation and disposal of hazardous wastes to prevent harm to human and animal health as well as the environmental. The proclamation defined "hazard" as the inherent characteristics of a substance, agent, or situation having the potential to cause adverse effects or damage to human or animal health, the environment, biodiversity, and property and has determined the categories and characteristics of hazardous waste in annex I and annex II respectively. The objectives of this proclamation are stated as.

* Create a system for the environmentally sound management and disposal of hazardous Waste.
* Prevent the damage to the human or animal health, the environment, biodiversity, and property due to the mismanagement of hazardous waste.

Further its scope of application is also stated as:

* Waste that belongs to any category contained in Annex One of this Proclamation, and waste possesses any of the characteristic contained in Annex Two; as well as on those wastes that might be categorized as hazardous waste by the directive to be issued by the Ministry.
* Person who generates, reuses, recycles, stores, transports, or disposes hazardous waste at large in nation.

The proclamation within its 24 articles has dealt with all character and management of hazardous wastes.

### **Electrical and Electronic waste Management Disposal (Regulation No. 425/2018)**

This Regulation shall apply to producers, distributors, retailers, importers, transporters, collection centers, re-furbishers, dismantlers, recyclers, and consumers of electrical and electronic equipment listed under Annex One of the Regulations and any other appliance that may be added to the list by the Ministry in a Directive issued under these Regulation. The aim of this regulation is to ensure safe production, handling, and disposal of electrical and electronic wastes.

### **Water Resources Management (Proclamation No 197/2000)**

The purpose of the Proclamation is to ensure that the water resources of the country are protected and utilized for the highest social and economic benefits of the people of Ethiopia, to follow up and supervise that they are duly conserved, ensure that harmful effects of water are prevented, and that the management of water resources is carried out properly.

### **Expropriation of Landholdings for Public Purposes, Payment of Compensation and Resettlement of Displaced People (Proclamation No. 1161/2019)**

The previous proclamation no. 455/2005 has been repealed and replaced by a new Proclamation no. 1161/2019. The new proclamation has introduced extensive improvements to the principles and provisions governing the process of expropriation of landholdings for public purposes and payment of compensation. The new legislation bases itself on the following four principles:

***Principle 1*:** Expropriation of land for public purposes shall be made only on the basis of approved land use plan, urban structural plan; or development master plan.

***Principle 2***: Compensation and Resettlement Assistance Compensation for the expropriated land shall sustainably restore and improve the livelihood of displaced people.

***Principle 3:*** The amount of compensation to be paid at Federal, or Regional or Addis Ababa or DireDawa level for simillar properties and economic losses in the same areas shall be simillar.

***Principle 4:*** Where land is expropriated for public purpose, the procedure shall be transparent, participatory, fair and accountable.

The new proclamation has made improvemnts to the amount and kind of compensation entitlements to displaced people. Landholders whose land is expropriated for public purposes are entitled for property compensation, displacement compensation, displacement assistance, economic loss compensation and social ties discontinuance and moral damage compensations as deemed appropriate. The determination of the amount of property compensation for the property on the land is improved from “replacement cost” to “replacing the property anew”. Simillarly the determination of compensation for permanent improvement to land is clarified to be based on “current value of capital and labor expended on the land”. Determination of displacement compensation for expropriated Land holding where equivalnet substitute land is not available is improved from the previous “ten times” to “fifteen times” the highest annual income generated The new legislation has also introduced new provisions on resettlement ( i.e. livelihood restoration) and compensation for economic loss aspects. Article 16(1) of the proclamation states that “Regional states…..shall establish fund for compensation payment and rehabilitation” Moreover the the next during the last three years preceding the expropriation of land subarticle 16(2) puts a responsibility to regional states to develop a resettlment packages that enable displaced people to sustainably resettle. Subarticle 16(3) places the duty to resettle the people displaced on Urban or Woreda administrations based on the resettlement package and allocated budget.

### **Regulation to provide for Expropriation of Land for Public Purpose and Valuation, Compensation and settlement (Reg. No 472/2020)**

The regulation, on *Expropriation of Land for Public Purpose and Valuation, Compensation and settlement*is issued by the council of Ministers for the purpose of not only paying compensation but also to assist displaced persons to restore their livelihood. The regulation provides the procedures for application of proclamation No 1161/2011, for compensation payment for property situated on expropriated land for public benefit. The regulation identified the type of properties eligible for payments of compensation which includes buildings, fences, crops, perennial crops, trees, protected grass, improvement made on rural land; relocated property, mining license and burial grounds.

### **Communication Services (Proclamation No 1148/2019)**

The Communication services proclamation have been promulgated to establish the Ethiopian Communications Authority, which is an independent, transparent and accountable regulatory Authority, to achieve the Government’s policy of restructuring the telecommunications market and introducing competition. The main objectives of the Authority includes to promote the development of high quality, efficient, reliable and affordable communications service; and to promote a competitive service and market for the achievement of these goals throughout the nation.

The communication services proclamation, under Article 32, stipulates the rights of telecommunications operator to use land and buildings by paying usage fee. Article 32 sub article (1) states that: Any telecommunications operator before ten days of entering to any land or building, upon giving written notice to the lesee or possessor of the land or owner of the building may conduct the following activities;

* Pass telecommunications lines in or upon land or over, the building and establish same
* Put up any pole, which may be required for support of a telecommunications line,
* Fasten or attach to anything growing on that land a bracket or other support for a telecommunication line.
* Cut down any tree or branches that is likely to injure, impede or interfere with any telecommunications line.

The proclamation also states that: a telecommunications operator shall ensure that as little damage as possible is caused to the land or building and to the environment and shall pay fair and adequate compensation to the lessee or possessor of the land or owner of the building for any damage or loss sustained by reason thereof.

### **Proclamation 1156/2019 – The Labor Law**

The Proclamation repealed and substituted the former Labor Proclamation No.377/2003. But much of the provisions of the previous labor law were retained with some improvements and additions. One of the important improvements made is on protecting child labor by increasing the minimum age for young workers to be 15 years old (versus the previous 14 years) and have introduced a new sub-article (14h) prohibiting Sexual Harassment or Sexual Assault at workplace to prevent GBV.

Proclamation 1156/2019 covers health and safety at work, harmonious industrial relation, and minimum workplace standard and addresses workplace vulnerability. Article 92-93 of the proclamation defines obligation of employers and employees in workplace including assignment of safety officers and committee. The Labor Proclamation mandates employers to protect occupational safety, health and create better working environment for their workers. Article 92 states that “An employer shall take the necessary measure to safeguard adequately the health and safety of the workers…” The law requires employers to i) take appropriate steps to ensure that workers are properly instructed and notified concerning the hazards of their respective occupations and the precautions necessary to avoid accident and injury to health; ii) ensure that directives are given and also assign safety officer; establish an occupational, safety and health committee of which the committee's establishment, shall be determined by a directive issued by the Minister; iii) provide workers with protective equipment, clothing and other materials and instruct them of its use; etc. In addition to enacting its labor codes, Ethiopia is also a signatory to the international UN conventions and has ratified the major international human rights instruments. Ethiopia has also ratified the following ILO conventions:

* Forced Labor Convention No.29 /1930.
* Freedom of Association and Protection of the Right to Organize Convention, No.87/1948.
* employment Service Convention, No.88/1948.
* Right to Organize and Collective Bargaining Convention, No.98/1949.
* Abolition of Forced Labor Convention, No.105/1957.
* Minimum Age Convention No. 138 /1973.
* Occupational Safety and Health Convention, No.156/1981.
* Termination of employment Convention, No.158/1982.
* The Rights of the Child Convention (1989); and
* The Worst Forms of Child Labor Convention No.182/1999.

***The 2005 Occupational Health and Safety Directive****:* developed as a follow-up to the labor Proclamation provides guidance on the establishment of occupational health and safety committees in public and private organizations.

### **Federal Civil Servants (Proclamation No 1064/2017)**

This law was replaced by the Federal Civil Servants Proclamation No.515/2007. The new proclamation changes the system of recruitment and selection of civil servants and introduces a national system for the certification of professional and occupational competence.  Disability and Inclusion aspects: The proclamation prohibits discrimination on grounds of ethnic origin, sex, religion, political outlook, disability, HIV/AIDS or any other ground and entitles persons with disability for affirmative action in recruitment, promotion, education and training. The public employer is also required to create conducive environment and provide necessary tools and materials. Placement of civil servants in government institutions should be in fair representation of nations, nationalities, and peoples. Minority groups of the country will enjoy affirmative action during recruitment, promotion, transfer, redeployment education and training.

Gender equity: The law grants equal pay for equal work, affirmative actions to recruit, promote and train female workers. It also subjects sexual harassment or abuse at the workplace as offense that is subject to disciplinary action. The proclamation requires that government institutions establish a nursery where female civil servants could breastfeed and take care of their babies.

### **Proclamations on Persons with Disability and Vulnerable Group**

Proclamation No. 568/2008 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 appropriate environment for work, training and take affirmative measures particularly when employing women with disabilities.

### **Building Proclamation No. 624/2009 and Regulation No. 243/2011**

These legislations put as requirement accessibility for the elderly and physically impaired persons in the design and construction of public building. Various policies and plan of action have been formulated to protect people with disability and the elderly. The most relevant are mentioned below.

* National Plan of Action of Persons with Disabilities (2012-2021) addresses the needs of persons with disabilities for comprehensive rehabilitation services, equal opportunities for education, skills training, and work, as well as full participation in the life of their families, communities, and the nation.

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

Proclamation No 209/2000 is to devise ways and means for the full protection and preservation of cultural heritage and to ensure that the research of cultural heritage at all stages is carried out in a way consonant with the national interest and the rights of the people.

* + 1. **Proclamation No. 661/2009Food, Medicine, and Health Care Administration and Control Proclamation**

Proclamation No. 661/2009 on Food, Medicine, and Health Care Administration is crucial as it is believed that the attitudinal change of the society through primary health care approach can solve most of the health problems of the country; and the issuance of public health law is believed to be an important step for the promotion of the health of the society and for the creation of healthy environment for the future generation thereby enabling it to assume its responsibility.

### **Proclamation No 541/2007 Development and Utilization of Wildlife**

Proclamation No 541/2007 is to enhance the contribution of the wildlife sector towards poverty reduction strategy by maximizing the economic and social benefits to be derived from the wildlife resources through allowing the local community residing around conservation areas and private investors to actively participate in the wildlife development, conservation, and utilization.

### **Proclamation No 1065/2018 Forest Development Conservation and Utilization**

Proclamation No 1065/2018 is to implement policy and strategy that are formulated to enhance sustainable forest development, conservation and utilization through recognizing community ownership and public participation.

## **Applicable International Conventions Endorsed by Ethiopia**

Ethiopia has ratified several international/multilateral environmental conventions and many of the principles and provisions in those conventions have been well addressed in the national environmental policies and regulations. Accordingly, Article 9(4) of the constitution of the Federal Democratic Republic of Ethiopia provides that once an international agreement is ratified through the accepted or established procedure, it automatically becomes an integral part of the law of the land. Therefore, the following international conventions and protocols are relevant to the proposed EARDIP operation;

**UN Framework Convention on Climate Change:** It provides a framework for international cooperation to combat climate change by limiting average global temperature increases and the resulting climate change and coping with its impacts. The objective of this convention is to stabilize greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous interference with the climate system. Ethiopia ratified this convention through proclamation No. 97/1994 on May 2/1994. This convention considers the fact that climate change has trans-boundary impacts.

**The United Nations Conventions to Combat Desertification:** The objective of the convention is to combat desertification and mitigate the effects of droughts in countries experiencing serious drought and desertification, particularly in Africa. Ethiopia has ratified the convention through its proclamation No. 80/1997.

**Convention on Biological Diversity**: The convention on biological diversity has three goals. These are:

* Conservation of biodiversity.
* Sustainable use of the components of biodiversity; and
* Fair and equitable sharing of the benefits arising from the use of genetic resources.

**Cartagena Protocol on Biosafety to the Convention on Biological Diversity:** It aims to ensure the safe handling; transport and use of living modified organisms (LMOs) are resulting from modern biotechnology that may have adverse effects on biological diversity, taking also into account risks to human health.

**Convention for the Protection of the World Cultural and Natural Heritage Paris, 23 November 1972**

**The Paris Agreement is a** **legally binding international treaty on climate change**. It was adopted by 196 Parties at the UN Climate Change Conference (COP21) in Paris, France, on 12 December 2015. It entered into force on 4 November 2016. Its overarching goal is to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels” and pursue efforts “to limit the temperature increase to 1.5°C above pre-industrial levels.”

## **Institutional Roles and Responsibility for Environmental and Social Impact Assessment and Management**

The discussions hereunder summarize the roles and responsibilities of institutions involved in environment and social management in Ethiopia. Identification of institutional roles and responsibilities takes into account potential environmental and social implications of supported activities of the EARDIP SOP II.

### **Proclamation to Provide for the Establishment of Environmental Protection organ (Proclamation No. 295/2002**

The first objective of this proclamation is to assign responsibilities to separate organizations for environmental development and management activities on the one hand, and environmental protection, regulations, and monitoring on the other, which is instrumental for the sustainable use of environmental resources. The second objective is to establish a system that fosters coordinated but differentiated responsibilities among environmental protection agencies at federal and regional levels.

### **The Environment, Forest, and Climate Change Commission (EFCCC) (Now EPA)**

As per proclamation 1263/2021, the former Ministry of Environment, Forest, and Climate Change (MoEFCC) is altered to EPA and bestowed among others with the powers and duties listed below. Despite its devolvement from the level of Ministry headed by a Minister to a Commission headed by a commissioner and then now during the recent restructuring of the GoE introduced by the incumbent Prime Minister in 2021 through proclamation No 1263/2021, the powers and duties of the former MoEFCC (now EPA) the present Environmental Protection Authority (EPA) remains the same and it is made to be directly accountable to the Planning and Development Commission. The powers and duties include:

* 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 for evaluating and decision making, in accordance with the Environmental Impact Assessment Proclamation, the impacts of implementation of investment programs and projects on environment prior to approvals of their implementation by the concerned sectoral licensing organ or the concerned regional organ.
* 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 an environmental information system that promotes efficiency in environmental data collection, management, and use.
* Enforcing and ensuring compliance to the ESIA proclamation which currently is being implemented through delegated authority provided to sector ministries.
* Reviewing ESIAs and monitoring the implementation of ESIA recommendations which is also in part being implemented through delegated authority provided to sector ministries.
* Regulating environmental compliance and developing legal instruments that ensure the protection of the environment.
* Ensuring that environmental concerns are mainstreamed into sector activities; and
* Coordinating, advising, assessing, monitoring, and reporting on environment-related aspects and activities.

***Sector environment units:*** The other environmental organs stipulated in the Environmental Protection Organs Establishment Proclamation (295/2002) are ‘Sector Environmental Units’ which have been established in some of the line Ministries. These Sector Environment Units have the responsibility of coordinating and implementing activities in line with environmental protection laws and requirements (Article 14, Proclamation 295/2002). Article 13 of the ESIA Proclamation 299/2002 requires that public instruments undertake ESIA. To this end, Sector Environmental Units play an important role in ensuring that ESIA is carried out on projects initiated by their respective sector institution. However, capacity of these units is limited.

***Delegated authority:*** Previously the EFCCC (Now EPA) has delegated its authority to sector institutions to ensure implementation of ESIA laws and requirements in their sector and to undertake ESIA reviews. For instance, the Federal Ministry of Agriculture, Industry, Mining as well as Water, Energy and Irrigation are responsible for ensuring that an ESIA is undertaken on their sectoral projects and to review the ESIA. However, currently since February 2020 the sector institutions have been unauthorized by EPA.

### **Regional Environmental Protection, Forest, and Climate Change Authority (REPFCCA)**

At regional level, there are environmental bureaus to implement environment management systems within their respective jurisdictions. Proclamation 295/2002 requires regional states to establish or designate their own regional environmental agencies. The regional environmental agencies are responsible for coordination, formulation, implementation, review, and revision of regional conservation strategies as well as environmental protection, regulation, and monitoring. Relating to ESIA specifically, Proclamation 299/2002 gives regional environmental agencies the responsibility to evaluate ESIA reports of projects that are licensed, executed, or supervised by regional states and that are not likely to generate inter-regional impacts. Regional environmental agencies are also responsible for monitoring, auditing, and regulating implementation of such projects. The institutional standing of regional environmental agencies varies among regions. In many of the regions, they are established as separate institutions in the form of Environment, Forest, and Climate Change Authorities (e.g., Southwest Regional state, Sidama, Oromia, Amhara, and Gambella regions) while in others they are joined with Land use administration and utilization agencies as EPLAUA (e.g., Tigray and Benshangul).

Table 3: Summary of existing institutional and critical legislations for Environmental and Social Management at Regional level

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Region** | **Responsible Regional Environment Bureau/Agency** | **ESIA Regulations enacted at regional level** | **Other Environmental Key Management Legislations/guidelines** | | | **Remarks** |
| **Pollution Control** | **Solid Waste Management** | **Regional guideline for ESIA** |
| **Oromia** | Oromia  EFCCA | Yes | Yes | No | No | -Adopt the federal ESIA guideline  -It has zonal and woreda level Environment Offices |
| **Tigray** | Tigray EPLAUA | Yes | Yes | Yes | Draft | -Apply Federal ESIA procedural guideline  - Has woreda level Environment Offices |
| **Amhara** | Amhara  EFWPDA | Yes | Yes | No | Yes | -ESIA guideline Directive 01/2010  - It has zonal and woreda level Environment Offices |
| **Sidama Region** | Sidama  EPA | No  (Draft level) | No  (Draft level) | No | No | -Apply Federal ESIA law & guideline.  - It has zonal and woreda level Environment Offices |
| **Benishangul Gumuz** | Benshangul Gumuz EPLAUB | No  (Draft level) | No | No | No | -Apply Federal ESIA law & guideline  -It has zonal and woreda level Environment Offices |
| **Gambella** | Gambella EPFCC | No  (Draft level) | No | No | No | -Apply Federal ESIA law & guideline.  -It has zonal and woreda level Environment Offices |
| **Afar** | Afar EPRLUA | Yes | No | No | Yes | Apply regional ESIA procedural guideline for the development of ESRMs.  -Has Zonal and Woreda environment offices |
| **Somali** | Somali EFCCB | No | Yes | Yes | No | -Adopt the federal level ESIA law & Guideline.  -Has Zonal & Woreda Environment office |
| **Southwest regional States** | EFCCB | No | No | No | No | Apply ESIA procedural Guideline issues by federal EPA |

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### **Zonal and Woreda Level Environment, Forest, Land Utilization, and Climate Change Offices**

Based on the face to face and virtual consultation made with the FEPA and three regional offices, the team to conduct EARDIP SOP II E & S Safeguards identified that institutional structures for environmental management in the targeted regions Afar, Somali and Gambella Regions currently have parallel offices at Zonal and Woreda level. It should be noted that all the regional, zonal and woreda level environment offices are located in their respective zone and woreda cities/towns. In Amhara Region, EFWPDA has branch offices in three major cities of the region (i.e. Bahirdar, Gondar, and Dessie) which are categorized as metropolitan cities by the region’s bureau for industry and urban development. Moreover, in Oromia regional state, eighteen selected Cities with potential growing economy are made to have their own Environment Protection Forest and Climate Change (EPFCC) Offices with a Zonal office status. In Sidama region, the capital city Hawassa has its own environment protection office. The Region environment authority has also given the mandate to review and approve all types of projects (Schedule I to III) at its zonal level offices, but it allows them to seek assistance of the regional head office when faced with challenging ESIA reviews.All these environment offices main areas of responsibility fall in carrying environmental performance monitoring and follow up of development projects for which ESMPs and reviewing and approving screening/scoping reports and E & S Safeguards instruments. In Amhara region, the Authority has prepared and transmitted a list of the type of projects that can be reviewed and approved at woreda and zone levels.

### **Ministry of Labor and Skills/ Regional Labor and Skills Bureaus**

MoLS is established to create enough productive employment, settled decent work situation, and secured developmental social welfare of the citizen. MoLS is established to settle industrial peace, maintain employee’s health and safety at workplace, improve working conditions and environment and promote efficient and equitable employment services, maintain developmental social welfare of the citizens in particular to implementing Occupational Safety & Health, Public Safety and Social welfare protection activities, prevention of child labor is also among the mandates, roles, and responsibilities of their Ministry. Overall, the ministry shall have the following powers and duties to:

* Ensure the benefits of PWs from equal opportunities and full participation.
* Provide care and support to elderly and encourage their participation.
* Prevent social problems and provide rehabilitation services to the affected members of the society, by conducting studies and creating conducive conditions in cooperation with relevant stakeholders.

Regional governments have established bureau/agency responsible to implement the national vision and set mission of the Ministry. Woreda and town administrations have offices whose responsibility is investigation and supervision of establishment (manufacturing plants) to ensure that all stakeholders are adhering to Proclamation 1156/2019. Ensuring rights and interest of persons with disabilities and the elderly is included in policies and laws of federal and regional governments and are mainly the duty of the Ministry. By the same token even though the implementation of the National Social Protection strategy is a consorted effort of all government organs, the responsibility mainly falls on the Ministry. The Ministry of Urban and Infrastructure is responsible to ensure the public and workers safety. Regional governments have adopted different approach to establish a body responsible for the construction sector, as a department within the bureau of urban development, housing, and construction (Amhara region) or an independent bureau of construction (Oromia region).

### **Ministry of Women and Social Affairs**

Ministry of Women and Social Affairs is established under proclamation No. 1263/2014EC by merging the social affair of the previous Ministry of Labor and Social Affair with the Ministry of Women, Children and Youth Affairs (MoWCY). The institution has the responsibility to ensure that women are benefiting from development activities and are protected from harm. Its main area of responsibilities focuses on awareness creation and compilation and dissemination of data and information on woman and children; ensuring opportunities are created for woman to participate in political, economic and social affairs; ensure woman are not discriminated against and devise 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 Woman, Affairs Bureau responsible to implement national visions and objectives at region level. All urban administrations have offices responsible to promote women, children, and youth agenda. Woman, affair offices also provide legal support to children and women victim 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. In some regional women affair offices, the labour and social affairs are embedded in their structure to extend efforts to rehabilitation victims are however hindered due to capacity limitations.

## **World Bank Environmental and Social Standards**

According to the World Bank Environmental and Social Framework (ESF), projects supported by the Bank through Investment Project Financing are required to meet the Environmental and Social Standards (ESS). The ESS is designed to help the implementing agency and implementing partners (i.e., MInT, ECA, MoE and MoTRI and Partners) to manage the risks and impacts of a project, and improve their environmental and social performance, through a risk and outcomes-based approach. The implementing agency and partners are required to manage environmental and social risks and impacts of the project throughout the project life cycle in a systematic manner, ***proportionate to the nature and scale of the project*** and ***the potential risks and impacts***. MInT where PIU is situated expected to prepare an Environmental and Social Commitment Plan (ESCP) outlining detailed commitments to support compliance with the ESS of the Environmental and Social Framework (ESF) of the Bank. The ESCP described the different management tools that MInT will use to develop and implement the agreed measures and actions. These management tools include Environmental and Social Management Framework (ESMF), Social Assessment (SA), Stakeholders Engagement Plan (SEP), Labour Management Plan (LMP) and GBV Action Plan and E-waste Management Plan. In the context of the EARDIP SOP-II project, ESMF has been proposed as a management tool for the project as the specific sites for the implementation of the subproject activities has not been identified at this stage. However, during implementation stage, the site-specific risk management instruments (Full/ partial ESIA or ESMP) will be prepared to mitigate risks associated with the sub project activities. This EARDIP SOP-II ESMF will serve as an instrument to satisfy the Bank’s ESS1 on Assessment and Management of Environmental and Social Risks and Impacts. In the present context of the EARDIP SOP-II, the Environmental Assessment considers the natural environment (air, water, and land); human health and safety; as well as social aspects (involuntary resettlement and physical cultural resources) in an integrated way.

Table 4: World Bank Applicable Environmental and Social Standards

|  |  |  |
| --- | --- | --- |
| **World Bank Environmental and Social Standards (ESS)** | **Applicable** | **Explanation (Optional)** |
| ESS1: Assessment and Management of Environmental and Social Risks and Impacts | Yes | The EARDIP SOP-II will finance a variety of subprojects including deployment of upwards of up to 1,500 kms of fiber network in Ethiopia and up to 300 kms in Djibouti, covering strategic cross-border and national backbone network links as well as their extension into borderland areas ,deployment of 1100km of cross boarder terrestrial links along prioritized routes of cross boarder connectivity, build greater resilience with up to five additional routes to the sea, repair and rehabilitate damaged terrestrial cables which have been damaged due to conflicts. TA services including service for feasibility study on fiber layout, towards repair and rehabilitation damaged fibers in conflict-stricken areas (Tigray). Djibouti: Key links include fiber optic link (250km) from Balho to the North-East frontier with Ethiopia as well as two new connections towards Galilé in the South and Galafi on the Western frontier. The project also provide support to connect remote rural boarder land’s locations where last mile network expansion and TA services for (i) detailed network design including technical specifications for prioritized routes and network architecture/configuration, deployment of linear infrastructure wherever possible and site selection of cell towers is informed by climate and disaster risk assessments (ii) develop a universal access market gap assessment including identifying sites to be connected along priority routes; and (iii) survey and providing quality assurance of deployed routes. (Ethiopia, Djibouti), TA to (i) define financing options for deployment, ownership, management, and maintenance of the network between the Government and the operators to be detailed in a CTM, provide transaction advisory services to prepare related bidding documents and support for launching and administering the commercial transaction. (Ethiopia, Djibouti), TA, capacity building and financing of systems (information technology hardware and software) for and national telecom regulators and universal service access funds to support effective harmonization, implementation, and sustainability of connectivity investments, TA for capacity building to reduce and/or eliminate roaming charges on voice and data services in the region, building on the One Network Area (ONA) initiative of the EAC and the feasibility assessment and roadmap developed for the IGAD Member States under SOP-I. (Ethiopia, Djibouti), TA to the telecom regulator in Ethiopia (ECA) on developing climate smart infrastructure, including e-waste management protocols, and rollout guidelines, Capacity building to Ethiopia’s MInT’s to operationalize gender-specific recommendations outlined in Ethiopia’s (forthcoming) ‘National Digital Inclusion Strategy’, TA to introduce and strengthen national legal, strategic, and institutional frameworks for cyber-security, including compliance standards, as well as their harmonization at the regional level. (Ethiopia, Djibouti), TA for the establishment of cyber-security emergency response and related hardware and software, TA to undertake data hosting (including adoption of a cloud-based approach) and data management needs assessments at the national level, TA to establish a national data protection authority in Djibouti enabling them to strengthen complaints investigation and handling and undertake compliance monitoring/auditing and train staff, including regional exchange and knowledge sharing between data protection authorities, development of e-commerce strategies, TA for development of national protocols pertaining to the ICT sector obligations for World Trade Organization and AfCFTA accession. (Ethiopia, Djibouti), TA and capacity building towards the adoption of regionally harmonized frameworks for the mutual recognition of e-signatures and e-transactions, TA for the development of a long-term business plan for sustainable EthERNet expansion (Ethiopia).  **Note**: For projects involving multiple small subprojects, that are identified, prepared and implemented during the course of the project, the MInT will carry out appropriate site specific environmental and social assessment of subprojects, and prepare and implement such subprojects, as follows: a) High risk subprojects shall be excluded during project screening phase (b) Substantial, moderate, and low risk subprojects shall be assessed and implemented in accordance with national law and all sub-projects in accordance with ESF requirements. This means that subprojects shall undergo two levels of screening, i.e., (1) To determine the risk of the subprojects according to the Bank's risk classification (High, Substantial, Moderate, Low). If the subproject falls on High risk classification, it will not be eligible for funding since the overall project risk is Substantial. (2) For subprojects with Substantial, Moderate, and Low risk classification, the national Schedule 1, 2, and 3 classifications can be applied. However, this will be complemented by the Bank's ESSs where deemed relevant. ESF applies and instruments shall be prepared in line with ESF and WB EHS Guidelines. Most stringent requirements between local regulation and WB standards shall apply. Note also that the overall Environmental and social risk rating of the EARDIP SOP-II is “Substantial”. Annex-III of the Federal EFCCC (now EPA) ESIA Procedural Guideline, (November 2003) has outlined the schedule of activities (subprojects) for which a full ESIA, Preliminary ESIA or no action is required. The schedule of activities listed in Annex-III of the guideline is widely applied by the Federal and Regional competent authorities to classify sub-projects into one of the three Categories. In Amhara Regional State, EFWPDA has issued the list of subprojects that are reviewed and approved at Regional, Zonal and Woreda level environment offices. |
| ESS2: Labor and Working Conditions | Yes | The EARDIP SOP II will engage direct workers, workers hired by the project (such as workers in the PIU). These involve MInT and PIU staff engaged in project implementation, as well as staff working in outsourced subproject directly procured by EARDIP SOP-II. Contracted workers (such as consultants, technical expert’ workers hired by contractors at project implementation sites). The project under the subproject activities in subcomponent 1.1, 1.2, 2.1, 2.2 and 3.1, involves deployment of cross border and national fiber optics backbone, last mile connectivity to refugees and IDPs, deployment of cyber security and data infrastructures and data exchange digital materials will involve lots of labor. The project has developed LMP to guide risk mitigation. The potential risks identified include occupational health and safety (OHS) risks specifically to hazards from exposure to e-waste as well as workplace accidents/injuries, lack of use of personal protective equipment (PPE), and dust; community health and safety issues (e.g., exposure to e-waste & other hazardous materials); communicable disease (e.g., COVID-19) which may arise from the interaction of project workers with local communities, between project workers; GBV in relation to contacts between project workers, and members of the project affected local communities and members of local communities. Although there might be a risk of discrimination, i.e., a potential inappropriate treatment or harassment of project workers; potential exclusion/preferences with respect to recruitment, training and development, termination of employment, and working conditions, discrimination is unacceptable as per the Ethiopian Labor Law and WB’s ESS2. While some direct workers involved are direct, governed by the civil service Proclamation (Proc. 1064/2017), indirect or contracted workers governed by the labor law, (Proc. No. 1156/2019)., They need to be contracted in line with the requirements of ESS2 in relation to labor and working conditions, non-discrimination and equal opportunities and occupational health and safety and workers grievance redress mechanisms. Thus, ESS2 remains relevant for the EARDIP SOP II project. |
| ESS3: Resource Efficiency and Pollution Prevention and Management | Yes | The EARDIP SOP II has subcomponent activities that result in excavation and installation of digital communication infrastructures and wide dissemination of digital devices, provision of high-speed internet connectivity to public establishments which result in expanded use of digital devices. Provision of data storage and exchange digital equipment. These and similar other activities of the project will result in the generation of hazardous and an electronic waste stream that will have a potential to cause environmental and social impacts. On the other hand, schemes for recovery, reuse and recycling of the e-waste stream can create jobs and minimize impacts on environment. Moreover, the construction activities to be carried to deploy middle (national and cross border) and last mile connectivity infrastructure such as fiber optics, and long-distance trench excavation to provide broad band connectivity to Refugees, IDP and communities at borderland areas as well as universities schools and health centers will likely generate pollutants that will be released to air, water, and soil. The energy use and efficiency aspects of the digital devices to be procured and disseminated by the various sub-components of the project are also a major concern that seek due attention during project implementation and during operation to ensure use of energy efficient, digital materials during construction and operation. As a result, ESS 3 remains relevant to EARDIP SOP II. |
| ESS4 Community Health and Safety | Yes | Project may involve civil works, in the deployment of the long-distance fiber optics and cell tower installment and installation of hardware may result in the influx of workers with the potential to impact community health. Installation of broadband fiber-optics and of 4G/5G cell towers, construction of fixed transmission tower result in excavations of trenches. Open trenches can cause risks to community safety especially in remote underserved or unserved areas who most of are pastoralists and where farmland, culturally important areas, ecologically sensitive areas are situated. Increased traffic movements due to subproject construction and digital equipment installation activities may also cause community safety hazards through. Improperly managed electronic waste stream generated by subproject supported activities may also pose public health risks in the long term. Thus, ESS4 is relevant and is applied by the EARDIP SOP II. ESS4 is also relevant regarding provisions for GBV |
| ESS5 Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement | Yes | The subproject activities in the EARDIP SOP II are anticipated to involve loss of assets and properties and any respective investments. The implementation of component1, subcomponent 1,1 & 1.2 is associated with Civil work, excavation, and deployment of fiber optics for cross border backbone network and last mile network to refugees and IDPs may be implemented on land currently used/owned by farmers households. The ESMF should entertain the ESS5 paragraph 11 as it involves both physical and economic displacement.  As the Project will also finance construction of transmission tower and other fixed connecting stations and access roads to these facilities in subcomponent 1.2 last mile network expansion and low cost online facilities such as WiFi hotspots, all subproject activities may lead to land acquisition downstream, this ESMF include the development of Resettlement Framework (RF) in line with the development of the related documents during project implementation. The RF also provides guidance on the process of public consultations, establishment of a functional grievance handling mechanism, and disclosure requirements. This project will not finance any land acquisition and compensation as it is the responsibility of the federal or regional government as stated on regulation No 472/2020.  As the Project will also assist the development of regulatory standards on siting, design, construction and operation of digital infrastructure for future digital infrastructure investments, which may lead to land acquisition downstream, such TA to ECA will include the development of Universal Service Fund (USF) in line with the development of the related documents during project implementation. Thus ESS 5 is relevant to the EARDIP. |
| ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources | Yes | The EARDIP SOP II is planned to be implemented physically in Afar, Somali, Gambella, Beneshangul Gumuz and Tigray regions of Ethiopia. Some sensitive terrestrial habitats including rivers, national parks or protected forests, wetlands, and migratory wildlife, are found in the borderland areas where the subproject implemented. The regions (Afar, Gambella, Somali, Beneshangul and Tigray) in which these subprojects are implemented are known for their natural resources such as rivers, wildlife reserves, national parks, migratory wildlife, wetlands and minerals and oil. Though the civil work would be linear it may cause ecosystem disruption, and construction of fixed tramsmission tower and last mile digital facilities/infrastructure by the private or public sector could affect sustainable use of natural resources. Potential impacts to habitat could be more significant during construction and installation of linear infrastructure, such as long-distance fiber-optic cables, fixed transmission towers as well as access roads to infrastructure along previously undeveloped land. This leads to the development of Biodibersity Management Plans/BMPs in case of significant impacts are foreseen, and exclusion/avoidance of high risks to the biodiversity. Hence, ESS6 is relevant for this project. |
| ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities | Yes | The Project will be implemented in the boarder land areas where refugee and IDPs and local communities in rural area residing, including emerging regions and in areas where large part of the population follows pastoralist livelihood systems. The project has conducted Social Assessment as part of the ESMF. The SA will identify key impacts and planning measures to ensure equitable benefit sharing, accessibility of services to remote communities, culturally appropriate communication including the use of local languages in project web site. The full report of the SA will be annexed and is part of the ESMF. Hence, ESS7 is relevant for this project. |
| ESS8 Cultural Heritage | Yes | Ethiopia is an extremely rich and diverse country culturally and is home to ancient civilizations. The Country has 7 sites that are classified as UNESCO World Cultural Heritage sites. Some of the Ethiopian cities and rural areas has historical, religious, and cultural properties that are of significance at National and/or international levels in them (e.g: Harar, Addis Ababa, Bahirdar, Gondar, and Mekelle). There are also additional heritages sites such as buildings and religious sites registered at national, regional or Woreda level throughout the Country. The anticipated infrastructure development activities such as deployment of digital infrastructure regional and national backbone fiber roll out; data centers, fixed transmission tower, and right of way may have impact on cultural heritage. If there is a possibility that EARDIP SOP II subprojects may result in damage to cultural property, the ESMF specifies procedures for avoiding such damage. Chance Find Procedures will be incorporated into civil works supervision plan, and buffer zones will be created to avoid damage to cultural resources. If significant impacts are expected, Cultural Heritage Management Plan/CHMP will be required. Thus ESS 8 remains relevant for the EARDIP SOP II Project. |
| ESS9 Financial Intermediaries | No | Financial Intermediaries (FIs) are not involved in this project. |
| ESS10 Stakeholder Engagement and Information Disclosure | Yes | The project will require inputs from different stakeholder groups, including those who will be directly affected like the local people in the boarder land, refugees and IDPs as well as those who have other interests in the project interventions. The project should ensure that the voices of vulnerable people (female-headed households, elderly, youth, people with disabilities), refugees, IDPs and their host communities and underserved communities are heard through inclusive consultation and participation to ensure that they can equally participate and benefit from the project.  The project will require inputs from different stakeholder groups, including those who will be directly affected as well as those who have other interests in the project interventions. Stakeholder engagement will be facilitated through appropriate means such as virtual arrangements and phone calls among others taking proper measures as precaution to COVID 19. In consultation with the Bank team, a Stakeholder Engagement Plan (SEP) has been developed (before appraisal) with specific provisions for the different project components. The SEP outlines the characteristics and interests of the relevant stakeholder groups and timing and methods of engagement throughout the life of the project. The project will ensure that the needs and voices of vulnerable people (female-headed households, elderly, youth, and people with disabilities) and underserved communities are heard through inclusive consultation and participation to ensure that they can equally participate and benefit from the project. The project will also ensure those respective provisions on gender equality and the mitigation of gender-based violence in digital businesses to avoid potential adverse impacts but also to ensure strong participation of women in the development of the country’s digital sector. The establishment of project level Grievance Redress (GR) will be undertaken no later than 60 days after the project Effectiveness date, targeting integration with existing GR structures in the respective communities and MInT, and maintained and strengthened throughout the project lifecycle. Application of the standard will be closely monitored and reported on through the project life cycle. Thus ESS 10 remains relevant for the EARDIP SOP II. |

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## **Relevant EHS Guidelines (World Bank Group) for EARDIP SOP II Subprojects**

The Environment Health and Safety general and industry sector guidelines provide information on a variety of issues which need to be adopted to mitigate adverse environmental and safety issues that may likely arise during the implementation of EARDIP SOP II subprojects. The most relevant of these guidelines to the subprojects of this project include the following:

* EHS Guideline for Telecommunications
* EHS General Guidelines
* EHS Guideline for Waste Management Facilities

### **EHS Guideline for Telecommunication**

The EHS guideline exhaustively covers the major EHS risks associated with the construction activities of the Telecommunications sector. As the EARDIP SOP-II is going to finance (directly or indirectly) subproject activities that would provide deployment of cross border and national backbone connectivity, repair and rehabilitation of damaged terrestrial optic fibers, fixed transmission towers construction and data storage, the EHS guideline becomes directly relevant to address the EHS risks that may arise during subproject implementation. Again, the scope and coverage of these EHS guidelines are very broad and addresses environmental and safety issues commonly encountered in the telecommunications sector construction activities and is heavily consulted while developing the present ESMF.

### **EHS General Guidelines**

The EHS general guideline sections 1 to 4 provides guidance on prevention and control of environmental, occupational health and safety, community health and safety, as well as on construction and decommissioning impacts that may occur during new project development, at the end of the project life cycle, or due to expansion or modification of existing project facilities. As some of the EARDIP SOP-II subprojects consist of construction activities which will involve manual labor work activities, section 2.0 and 4.0 of the EHS general guidance provides some appropriate strategies and recommendations useful to minimize occupational health and safety hazards and demolition waste management. It describes the sources of hazards and recommended strategies for the prevention of risks associated with over-exertion, slips and falls, work in heights, struck by objects, and working in confined spaces and excavations in construction and decommissioning sites. These recommendations of the EHS guidance are highly applicable for the EARDIP SOP-II subprojects and would need to be considered during the course of subproject implementation.

### **EHS Guideline for Waste Management Facilities**

The EHS Guidelines for Waste Management cover facilities or projects dedicated to the management of municipal solid waste and industrial waste, including waste collection and transport; waste receipt, unloading, processing, and storage; landfill disposal, e.t.c. Though this guideline is broad in context and in its coverage of the environmental and safety issues addressed, there are some environmental and safety risk aspects which are relevant and applicable to the primary solid waste collection and transfer activities. These are mainly reflected under “Waste Collection and Transport” as well as under the “Occupational Health and Safety” topics of the guideline.

Table 5: Comparison of the World Bank ESF (Ess 1-10) with National legal and policy frameworks

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ESF Environmental and Social Standards (ESS)** | **Status of application to the project** | **Available national policy and legislation to fulfill the performance standard** | **Gaps** | **Measures to bridge the gap** |
| ESS-1: Assessment and Management of Environmental and Social Risks and Impacts | ESS-1 is applicable to the EARDIP SOP II. | The Federal EIA Proclamation No. 299/2002 and related regional EIA regulations mandatorily requires a project proponent to undertake EIA. The Federal EIA procedural guideline (2003) classifies projects into Schedule I, II and III to facilitate the undertaking of EIA proportionate to the risks and impacts of each project. The EIA proclamation and regulations seek all direct, indirect and cumulative impacts likely to occur during project life cycle are considered in the assessment. The stated legislation and regulation also require stakeholder and community consultations to be carried as part of the EIA process. The preparation of ESMP based on mitigation hierarchy and monitoring plan is also required by the EIA proclamation and associated guidelines.  The national legislation or Pro. No. 299/2002, article 4 sub-article 1 states about 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 effect, duration, reversibility or irreversibility or other related effects of the project. Under article 6 it further discusses about trans-regional impact assessment | -Requirements of the EIA proclamation and regional regulations do not explicitly seek for consideration of risks and impacts associated with primary suppliers as defined by the ESF during EA.   * Apart from the presence of effluent standards for specified industrial sectors, the EIA proclamation is not complemented by a guideline like EHS and do not require its use   - The national legislation does not discus about trans-boundary impact assessment. | - EA requirements for “primary suppliers” shall be addressed as part of the present ESMF process when and if it occurs  -Based on screening result, Site-specific instruments such as  Environmental and Social Impact  Assessment (ESIA), including cumulative impacts, Environmental and Social Management Plan (ESMP) and Resettlement Action Plan (RAP) reports  to be prepared during implementation phase of the project as required.  -The application and use of EHS guidelines as appropriate to subproject EA is required by the present ESMF. The most stringent standards between local and WB standards will be applied. |
| ESS-2: Labor and Working Conditions | ESS-2 is applicable to the EARDIP SOP II. | The labor Proclamation No 1156/2019 remains to be the labor legislation applied invariably all over the Country without customization to regional contexts. The labor law is applied to govern all aspects of employment relations based on a contract of employment that exists between a worker and employer. The legislation covers formation of contract of employment defining the rules and conditions of employment, nondiscrimination, equal opportunity for women workers, the right to form trade unions (workers organizations), working conditions of young labor setting the minimum age for child labor to be 15 and working conditions, and arbitration/conciliation mechanism to handle grievances and disputes of workers in relation to employment. The labor law also covers occupational health, safety, and work environment aspects. The labor law largely fulfills the requirements of ESS 2.  Proclamation No. 568/2008 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. | All the rules of the labor law are applicable to employment relations based on a contract of employment that exists between a worker and an employer. EARDIP SOP II will not likely involve community workers.  The WBG EHS Guidelines provide a more detailed requirements on OHS (including sector specific requirements) compared to the national frameworks, particularly the labor law which is more elaborated on compensations and liabilities once accidents occur. | - The project and the ESMF will adopt the provisions of both the labor law and ESS 2 for undertaking complete Labor Management Practices.  Adopting the WBG EHS Guidelines could bridge the gap. |
| ESS-3 Resource Efficiency and Pollution Prevention | ESS-3 is applicable to the EARDIP SOP II. | The requirements of ESS-3 are largely fulfilled by the following national legislations and International Conventions which Ethiopia is a Party with, and which are widely referred during EIA studies. These include:  -The Pollution Control Proclamation no. 300/2002 which set the binding provisions for prevention and control of pollution addresses management of hazardous waste; chemicals and radioactive materials, management of non-hazardous municipal waste, and set the provisions for issuing environmental standards including for air, water, and various effluents. The proclamation is complemented by effluent standards for certain industrial sectors.  EPA has issued an Electrical and electronic Waste regulation No.425/2018.  - Ethiopia has ratified and is party to the following three International Conventions that help in managing/avoiding the use of restricted and banned pesticides, chemicals trade and transboundary movement of Hazardous wastes. These are:  -The Stockholm Convention on POPs  - The Rotterdam Convention on PIC procedures  -The Basel Convention on transboundary movement of Hazardous Wastes.  Bamako Convention, 1998, a treaty of African nations prohibiting the import into Africa any hazardous (including radioactive) wastes.  Besides the Proclamation for the Registration and Control of Pesticides (Proclamation No. 674/2010) provides for the procedures of approval and registration of pesticides to be imported or manufactured in Ethiopia. | Detailed guidelines to support the avoidance, minimization, or reduction of environmental and health impacts of pesticides during application are not sufficiently available. The e-waste management regulation issued by EPA lacks also detail guideline and institution to manage e-waste. There is also no provision stated any measures to enhance private service providers for e-waste management.  The national frameworks do not provide guidelines on resource efficiency (particularly energy and water) while the WBG EHS Guidelines provides details on energy and water conservation and efficiency. | The application of relevant sections of the General EHS and sector specific EHS guideline is required when appropriate.  Use of the WBG EHS Guidelines can bridge the gap. |
| ESS-4: Community Health, Safety and Security | ESS-4 is applicable to the EARDIP SOP II. | Building Proclamation No. 624/2009 and Public Health Proclamation No.200/2000 contain certain provisions that partly address the issues of community safety in the areas of building designs and community exposure to health risks. Other regulations such as prevention of industrial pollution require industrial facilities to prepare emergency response systems. In general, some aspects of the ESS 4 are either fully or partially addressed across the existing sector legislations and regulations. | There are gaps in fully addressing the community Health, Safety aspects as defined in the ESF.  There is no stand-alone regulation addressing community health and safety. | The provisions in ESF ESS 4 will apply to project activities where they are found to be higher than local legal and regulatory provisions'  The application of relevant sections of the General EHS and sector specific EHS guideline is required cocomplete the national frameworks. |
| ESS-5: Land acquisition and Involuntary Resettlement | ESS-5 is applicable to the EARDIP SOP II. | The new Proclamation no 1161/2019 for expropriation of land for public purposes has provisions that address resettlement and compensation of involuntary resettlements caused by land acquisition for public purposes. The new proclamation provides for various types of compensation for resellers such as property, displacement, and economic loss compensations. Resettles are also entitled for replacement land substitution and compensation for disruption of social ties. Entitlement for compensation is based on legal land holding. Valuation of compensation will be based on current costs and values to replace the properties anew. The proclamation also consists of a provision for establishing resettlement fund, resettlement package to restore livelihood of resettles and complaint hearing and appeal provision to address complaints in relation to resettlement and compensation.  - The communication services proclamation provide the rights of telecommunications operator to use land and buildings by paying usage fee. It also require the telecommunications operator to pay fair and adequate compensation to the lessee or possessor of the land or owner of the building for any damage or loss sustained by reason thereof. | The entitlements for compensation of resettles is based on legal land holding and do not include informal settlers without any legal landholding.  -The determination of “user fee” and “compensation” in the communications service proclamation is not elaborated and remains open for subjective interpretation.  The national framework does not provide clear guidance on how claimants without possession of proof of ownership will claim for compensation. | -The application of ESS 5 to bridge the gap and cover the informal resettles during resettlement is recommended.  -reliance on the more elaborate provisions of proclamation 1161/2019 and regulation 472/2020 is advisable to bridge the gap of non-clarity.  Use of ESS5 would bridge the gap. The project RPF can also be referred here. |
| ESS-6: Biodiversity Conservation and Sustainable Management of Living Natural resources. | ESS-6 is applicable to the EARDIP SOP II. | The Federal EIA Proclamation no.299/2002 has defined the terms “Environment” and “Impact” broadly to include all forms of habitats, biodiversity, heritage, and ecosystems. "Environment" means the totality of all materials whether in their natural state or modified or changed by human; their external spaces and the interactions which affect their quality or quantity and the welfare of human or other living beings, including but not restricted to, land atmosphere, whether and climate, water, living things, sound, odor, taste, social factors, and aesthetics. "Impact" means any change to the environment or to its component that may affect human health or safety, flora, fauna, soil, air, water, climate, natural or cultural heritage, other physical structure, or in general, subsequently alter environmental, social, economic, or cultural conditions. The impact of a project shall be assessed based on the size, location, nature, cumulative effect with other concurrent impacts or phenomena, trans regional effect, duration, reversibility or irreversibility or other related effects of the project. The EIA report is required to contain information on the characteristics and duration of all the estimated direct or indirect, positive or negative impacts, as well as measures proposed to eliminate, minimize, or mitigate negative impacts.  Thus, the requirements of ESS 6 are broadly addressed through the EIA process. There are also more specific sectoral laws and regulations which complement the EIA proclamation in conserving habitats and biodiversity such as:  -[Forest Development, Conservation and Utilization Proclamation No.542/2007](#_Toc23430032)  -[Development Conservation and Utilization of Wildlife Proclamation No. 541/2007](#_Toc23430033)  -[Wildlife Development, Conservation & Utilization Council of Ministers Regulations No.163/2008](#_Toc23430034).  -National Biodiversity Strategy and Action Plan (NBSAP). | ESS6 categorizes habitats in three main group, namely Natural, Modified, and Critical habitats, and provides conditions where projects will not be implemented in these habitats. In the national frameworks, ecosystems are mainly defined considering altitudes, specific flora, and fauna presence. Environmental assessment for projects implemented in these ecosystems are broadly addressed through the general EIA process rather than specific ecosystem requirements. | Applying provisions in the ESS6 will bridge the gap. |
| ESS-7: Indigenous People | ESS-7 is applicable to the EARDIP SOP II. | The Constitution of FDRE recognizes all the Nations, Nationalities and Peoples of Ethiopia and provides for equal rights to them through its various articles. The frequently applied name for the Indigenous people as defined in ESS 7 in Ethiopia are “Nationalities”. Thus, all nationalities are equally treated in accordance with the mainstream laws in project EIA studies which involve carrying a series of consultations with community and stakeholders to include their opinions and views during project design and implementation. Thus, though Ethiopia consists of more than 80 different Nations and Nationalities, | The absence of sufficiently detailed national framework to address the needs and aspirations of SSAHUTLCs/indigenous people (as defined in ESS7) and the need to conduct targeted social assessments, meaningful consultation, and Free, Prior and Informed Consent (FPIC) can be considered as a gap. | -The use of ESS7 can be considered to bridge the gap. |
| ESS-8: Cultural Heritage | ESS-8 is applicable to the EARDIP SOP II. | As described above in ESS 6 the term “Impact” is defined broadly by the EIA proclamation. The definition reflects the kind of adverse impacts a project proponent is required to assess which includes any change to the environment or to its component that may affect flora, fauna, **natural or cultural heritage**, or in general, subsequently alter environmental, social, economic or **cultural conditions**. Thus, the Federal proclamation on EIA has provisions by which it considers the issues of cultural resources.  Article 41 of Proclamation No. 209/2000 on research and conservation of cultural heritage also contains the measures that should be taken during chance finding of heritages. | Though natural and cultural heritages are required to be included during EIA process, the preparation of a Cultural Heritage Management Plan (CHMP) as indicated in the ESF is not required by the national EIA law. | The application of ESS 8 requirement for CHMP is advisable when appropriate. |
| ESS 10: Stakeholder Engagement and Information Disclosure | ESS-8 is applicable to the EARDIP SOP II. | Article 15 of the EIA Proclamation requires public participation/consultation during EIA study process and public disclosure of EIA reports. Current practice also shows public consultations are carried during EIA studies and minutes of consultation produced. Incorporation of the views and concerns of stakeholders into the EIA report usually carried. | The stakeholder and public consultations requirement are focused on initial EIA study phase and do not continue through the project lifecycle as required by ESS-10. Thus, preparation of Stakeholder Engagement Plan not required by the EIA proclamation. Establishing GRM to address public concerns is also not required by the EIA proclamation. | The application of ESS 10 requirement for SEP is required to continue engagement of stakeholders during project implementation and beyond when appropriate.  *The provisions in ESF ESS 10 will apply in the implementation of the project. The SEP prepared for EARDIP SOP II will guide stakeholder engagement and information disclosure.* |

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# **ESMF IMPLEMENTATION PROCESSES**

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## **Responsibilities in the ESMF Implementation Process**

The lead responsibility for the overall coordination and implementation of the EARDIP SOP-II lies on the Ministry of Innovation and Technology (MInT) under which EDFP Project Implementation Unit (PIU) situated. It is necessary that the PIU is staffed adequately with environmental and social risk/impact management specialists who will be spearheading the implementation of the ESMF process throughout the project life cycle. The PIU and its environment and social risk management staff will be in charge of implementing the ESMF process in all applicable EARDIP SOP-II financed subprojects. The PIU will need to work in close collaboration the regional Project Coordination Committee (PCC), of the EARIDP SOP-II, the technical committee and other partner as well as implementing institutions.

As the EARDIP SOP-II is going to be implemented in different regions of Ethiopia and at cross borders with Djibouti and where rural underserved host communities and refugees and IDPs are located resulting in potential large number of subproject activities spread all over the project targeted areas, it will be important that EARDIP SOP-II implementing agencies, partners and beneficiary Government institutions (such as MoE (EthERNet, ECA, MoTRI, NID, MoLS, NID regional line BoMInT and R/EPA), and the public and private sector telecom operators, who will be awarded with Indefeasible Right of Use (IRU) contracts, should assign focal persons for environment and social risk management. Close coordination and collaboration at the between PIU, PCC and PSC levels as well as regional state level in Ethiopia will be necessary so as to pass on clear information to all pertinent implementing government institutions. For purposes of practical application of E & S mitigation measures, it is important to include an environmental clause that demands the deployment of an environmental and social risk management focal person in the PIM. The PIU environment and social safeguard specialists will coordinate with the focal persons to be deployed by the partner and beneficiary institutions and public/private sector telecom operators. The PIU ES specialists will be responsible for the implementation of subproject activities in compliance with the requirements of the ESMF. Exclusion criteria for subproject activities is attached within the annex section (see annex –I).

**5.1.1. Implementation Responsibilities of MInT**

* MInT, a federal ministry organ, is empowered mainly to ensure and set general policy framework for the provision of quality, reliable and secure information technology service and oversee the implementation thereof;
* Supports PIU through the National EARDIP SOP II Steering Committee with an oversight on the implementation of the E & S Safeguards of the EA-RDIP II project.
* Leads the overall digital integration undertakings of the EA-RDIP SOP II through its dedicated Digital Transformation Project Office/Digital Infrastructure Unit, including collection of regional level digital infrastructure development performance data, analyzing the same and reporting to the WB/Mint-PIU.

**5.1.2. Roles and responsibilities of the Project Implementation Unit (PIU)**

The PIU is responsible for the overall coordination and management of project implementation activities, including the day-to-day fiduciary requirements, liaising technically with all partner agencies, NGOs and the private sector actors involved in the EA-RDIP SOP II implementation. With the support from MInT, the PIU carries out the following tasks and is responsible for:

* Safeguards implementation and reporting
* Financial management and reporting
* Procurement management and reporting
* Monitoring and evaluation for EA-RDIP SOP II as per each defined indicator in the results framework and others as required by government and desired by the project team
* Direct implementation of specific technical assistance activities financed by the EA-RDIP SOP II
* Joint annual work programming and budget preparations, with inputs from MInT, ECA, MoTRI and regional bureaus and other relevant entities; and preparation of the annual procurement plan
* Local level PIU team engage and work with Woreda and Kebele officials (Woreda administrators and experts) and other actors to coordinate EA-RDIP SOP II interventions and related initiatives across sectors that have an impact on digital sector (promoting inclusive digital service approach)
* Facilitating coordination with EA-RDIP SOP II related initiatives, i.e., liaising with executive-level focal points and regional innovation and technology bureaus or commissions, as required
* Ensures that services funded by USF verification are carried out through a third party.
* Ensuring the delivery, implementation and reporting on the agreed all E & S Safeguards tools for the EA-RDIP SOP II
* Conducting strategic communication through MInT
* Serving as secretariat for the National EA-RDIP SOP II Steering Committee and National EA-RDIP SOP II Technical Working Group and actively participating in meetings.

**5.1.3. Roles and responsibilities of the Project Implementation Unit (PIU) E and S Team**

PIU E and S safeguard team, at the project onset, will hire one environmental, health and safety (EHS) specialist and one social safeguards specialist. Other experts such as SEA/SH and SH advisors will also be engaged on part-time basis. However, Contractors and Supervision Consultant (s) will be required to have experienced and qualified EHS staff and social safeguards staff respectively.

There will be public technical officers to monitor project civil works. They will work closely with the project E&S specialists as well as the relevant partner organizations key personnel. Hired PIU’s E&S specialists’ technical capacity will be enhanced by induction training at the beginning of project implementation to appreciate the new WBG ESF. This will facilitate a better understanding and appreciation of safeguard requirements through discussion of modalities for implementation of the project ESMF and safeguard instruments provisions. Financial facilitation would however be necessary for their effective participation.

**5.1.4. Environmental, Health and Safety (EHS) Specialist Roles and Responsibilities**

• Oversee the implementation of the ESMF, subproject ESMPs, and other safeguard instruments e.g., ESCP, etc.;

• Closely help and deliver capacity building training to contractors, suppliers, MCDAs, etc., to close knowledge/skill gaps and minimize the likelihood of risks to happen to subprojects;

• Together with the social specialist, complete subproject ESF and make recommendations;

• Ensure EHS assessment requirement are included in the Subproject ESIA TORs;

• Support subproject ESIA consultant in their studies;

• Ensure the Subproject ESIAs include EHS risks and impacts and recommended mitigation;

• Review the subproject ESIAs and submit to WB for review and clearance;

• Ensure all contracts include EHS provisions and contractors have C-ESMPs;

• Undertake follow up monitoring to ensure that proposed mitigation measures are implemented according to the C-ESMPs;

• Oversee the implementation of C-ESMP provisions through contractor EHS officers;

• Lead on developing and delivering a series of spot checks to ensure environmental safeguards instruments are properly implemented by both the contractor and beneficiary MCDAs;

• Receive environmental complaints relating to EADRIP SOP II activities and ensuring that they are addressed in accordance with the GRM;

• Undertake monitoring visits to subprojects sites according to E&S issues therein;

• Review monthly progress reports from subprojects and prepare reports covering all environmental safeguard aspects of the project; and

• Carrying out any other duties as assigned by the PIU Project Manager that contribute to achieving the objectives of the EARDIP SOP II.

**5.1.5. Social Specialist Roles and Responsibilities**

* Provide leadership on core social development themes under the EARDIP SOP II project. Oversee the updating of the SEP, SA, RPF, SMP, LMP and subproject specific ESMPs. Together with the EHS specialist, complete subproject ESSF and make recommendations;
* Serve as lead person on social issues including, stakeholder engagement, grievance management, vulnerable and marginalized groups who may be affected by EARDIP SOP II, and work closely with other PIU members to address any challenges;
* Oversee and guide the production and implementation of RAPs;
* Ensure implementation of LMP;
* Advice and/or provide quality leadership on major or sensitive matters relating to social impacts and risks associated with EARDIP SOP II project activities;
* Support the set up and operationalization of project’s Grievances Redress Mechanisms (GRMs);
* Integrate social inclusion (with respect to gender, age, marginalised groups or any other relevant factors) into EARDIP SOP II activities;
* Ensure social clauses are incorporated in all agreements signed between MInT/PIU and Contractors, Suppliers, etc.;
* Ensure that relevant stakeholders are informed about issues relating to implementation of EARDIP SOP II social safeguards and providing the required support for timely implementation;
* Develop and implement capacity building and training plans on social safeguards for EARDIP SOP II stakeholders;
* Maintain records on the social safeguard’s performance of subprojects and MCDAs in accordance with the EARDIP SOP II social safeguard instruments provisions;
* Act as a link between PIU and other stakeholders on social matters;

**5.1.6. Contractors for Civil Works**

Contractors will be required to comply with the Project’s E&S risk management plans and procedures, including the ESMF, ESCP, LMP, SA, SMP, GBVAP, RPF, and local legislation. ESIAs/ESMPs to be developed before commencement the procurement process. RAPs will be produced and implemented fully before civil works take place. This provision will be specified in the contractor’s agreements. Contractors will be expected to disseminate and create awareness within their workforce on E&S risk management compliance for their effective implementation. Contractors for civil works have the following responsibilities:

• The contractors will be responsible for planning, implementation, and reporting on implementation of mitigation measures during the execution of civil works. The contractor will also be required to apply standard quality assurance procedures in full compliance with the approved sub-project specific ESMP;

• Have full time E&S officers for the day-to-day guidance of the project on matters of E&S compliance;

• Construction supervision will include monitoring of, and reporting on, E&S aspects, daily;

• Develop a Contractor’s ESMP (C-ESMP) guided by the sub-project’s ESMP. C-ESMP should include the following at a minimum:

o Occupational Safety and Health Plan;

o Waste Management Plan;

o SEA/SH Management Plan;

o Labour management Plan;

o Emergency Response Plan;

## **Overview of Subproject Categorization and the ESS Requirements**

The ESMF is designed to support the application of World Bank Environmental and Social Standards in combination with the Ethiopian legislation on environmental and social impact assessment to EARDIP SOP-II. ESS1 on Assessment and Management of Environmental and Social Risks and Impacts is among the standards applied to the EARDIP SOP II and thus the relevant principles in relation to subproject categorization are briefly outlined in the document. The EARDIP SOP-II being a project which consists of a series of sub-project activities to be identified and implemented in several places across the project targeted areas, the risks and impacts cannot be determined until the subproject location and design details have been identified. For such projects as EARDIP SOP-II involving multiple small subprojects, that are identified, prepared, and implemented during the project life cycle, MInT will carry out appropriate environmental and social assessment of the subprojects, and prepare and implement such subprojects, as follows:

(a) High Risk subprojects are excluded

(b) Substantial Risk, Moderate Risk and Low Risk subprojects, in accordance with National law and any requirements of the ESF that the Bank deems relevant to such subprojects as determined during its review of the sub-project for “no objection” clearance, and in case of discrepancies whatever standard is more stringent. Thus, all subprojects will be prepared following the process in the ESMF and the requirements of the ESF ESS and local policy, legal and regulatory requirements.' Where subprojects are likely to have minimal or no adverse environmental or social risks and impacts (i.e., low risk), such subprojects do not require further environmental and social assessment following the initial screening. Screening will identify areas that may require ad-hoc measures to mitigate risks and impacts according to ESF requirement.

Figure 4: Proposed National institutional arrangement for ESMF implementation

The EARDIP SOP-II is generally categorized as “**Substantial Risk**” project and hence MInT will be required to undertake the appropriate environmental and social assessment of subprojects in accordance with the ***national law and any requirements of the ESSs*** that deemed relevant to the sub-projects. Accordingly, the most important National guideline that defines the categorization of subprojects into various schedules is the EIA Procedural Guideline issued by the Federal Environment Protection Authority in November 2003. The ESIA Procedural Guideline Categorizes all development projects into three Schedules of activities or projects. The full list of Schedule I, II and III subprojects of the EIA procedural guideline (2003) is provided in **Annex- F.** It should also be noted that the relevant ESSs that are likely to be triggered by the EARDIP SOP-II are broadly assessed and outlined in **Table 3** of this ESMF and will need to be customized and applied for each sub-project. Under the EARDIP SOP-II, it is anticipated that the subprojects in EARDIP SOP-II will fall into Schedule-I (substantial risk) subprojects and may require Full ESIA. As some of the subprojects, may also possibly crossing through environmentally sensitive areas and ecosystems such as National Parks, areas with rare/endangered plants and animals, wetlands, and National Heritage sites. However, if risk rating of the subprojects is “High Risk” as per the World Bank ESF classification, under such circumstances, re-sitting, redesigning, or rerouting of subproject sites should be made to avoid impacts on the sensitive areas and ecosystems. MInT will apply the relevant ESSs and the ESCP will also be updated as appropriate.

## **5.3 Processes and Procedures of the ESMF**

**Step-1 Subproject Identification**

Sub project refers to the set of activities derived from the EARDIP SOP-II Components and sub-component activities including technical assistance studies and consultancies for which support through catalytic infrastructure financing is sought by MInT. One procurement contract be a subproject, or can multiple subprojects be part of one contract. Identification of subprojects is carried through consultative process by the lead implementing agency (MInT), the implementing partner institutions such as MoE (EthERNet), MoTRI and ECA, regional states (e.g: MInT line offices, Education, and regional Environment authorities and bureau), and in collaboration with other beneficiary institutions.

**Step-2 Subproject Preparation (Studies, Designs)**

Once the subprojects are identified, it will be reviewed and compiled in the project annual action plan of the EARDIP by the Technical Committee in which the PIU coordinator and M & E is a member and will be forwarded to the Project Steering Committee for approval and endorsement. The PIU E & S specialists in collaboration with the E & S focal persons from the implementing partners will identify the scope, and the sensitivity of the location in which the subproject is going to be implemented and anticipate significant E & S risks /impact of the subproject with the corresponding mitigation actions. Moreover, the subproject will be categorized in to High, Substantial, Moderate and Low impacts using the guidance for subproject risk categorization attached as **Annex A**. At this stage (Subproject Preparation), study and designs will be prepared. The study and design activities will be carried out in consistence with the requirements of ESS 1, and the PIUs at MInT will carry out environmental and social assessments of the project/activities to assess the environmental and social risks and impacts. The assessment to be carried should be proportionate to the potential risks and impacts of the subproject, and will assess, in an integrated way, all relevant direct, indirect and cumulative environmental and social risks and impacts throughout the project life cycle, including those specifically identified in ESSs 2–10 (except ESS 9). Thus, requirements embedded within ESSs-1-10, except ESS9, will be considered including requirements for analysis of alternatives including ES considerations, since early stage in project design of subproject identification essential to avoid significant impacts. This stage doesn’t entail E&S screening, which will be addressed in the next step, i.e., Step 3. The screening report will be prepared describing the contents mentioned in the same section step 3 and submitted to the proper competent authority, Federal, Regional or Zonal EPA for approval.

**Step-3 E & S Screening of Subprojects**

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 categories consistent with the ESS of the WB and with National EIA Guidelines. Screening will be carried out on specific subprojects once they have been identified during planning phase of the EARDIP SOP-II. This ESMF requires that all relevant subprojects having specified site location as well as relevant technical assistance subprojects be screened for social and environmental impacts. Screening will also be required where investments will be made on repair and rehabilitation of damaged infrastructure (Optic Fiber), or on deployment of new infrastructure subprojects included in the endorsed action plan of EARDIP SOP-II. To meet the requirements of ESS-1 and National EIA guidelines, the environmental and social screening will follow two stages. Initially, a screening of subprojects will be carried to categorize it into one of high, substantial, moderate, or low risk based on the WB ESF environmental and social risk classification. During this first stage, the subproject will be screened using the screening form attached in **Annex-A**. Under the EARDIP SOP-II sub-components, it is anticipated that the majority of subproject activities will fall under substantial risk (in line with the overall E&S risk classification of the EARDIP as “Substantial” risk rating). Risk related to sexual exploitation and abuse or sexual harassment/SEA or SH is rated as moderate and other risks rated as moderate and low are associated with some minor risks. If the subprojects fall under High Risk, in this case 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, moderate or low risk. Moreover MInT, will apply the relevant ESSs and the ESCP will be updated., as required Once the subprojects are screened and confirmed to fall on or below substantial risk category, then further categorization will be carried by applying the national screening system to identify the schedule of activities into which the subproject will fall (Schedule I, II &III). Based on the nature and scale of EARDIP SOP-II subprojects it is expected that most will fall under schedule I and II which may require full or Preliminary ESIA.

The PIU environment and social staff in collaboration with the environment and social focal persons of implementing partner and beneficiary institutions will initiate the screening processes using the attached questionnaire in the ESMF **Annex A**. The aim of the screening questionnaire is to assist in identifying potential environmental and social impacts based on field investigations of the subproject site. The questionnaire helps to determine the characteristics of the prevailing local bio-physical and social environment with the aim of assessing the potential risks/impacts of the construction and rehabilitation activities of the subproject on the environment. The screening exercise should also involve 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 project activities for the area.
* Having been briefed / trained in environmental and social screening.

Based on the nature and size of the subproject, the PIU environment and social risk management staffs can seek assistance from other members of the technical committees while carrying the environmental and social screening. The outcome of environmental screening will be classifying the proposed EARDIP SOP-II subproject into one of Substantial, Moderate, or low Categories and Schedule I, II or III activities. The Screening report to be produced will describe,

1. The proposed subproject and its potential impacts,
2. Characteristics of the location (sensitivity of the area),
3. Size (small, medium, and large scale),
4. Degree of public interest,
5. Main environmental impacts and mitigation considerations,
6. Categorization of the subproject (Substantial, Moderate, Low risk and schedule I, II or III)

**Step-4 Review and Appraisal of Screening Reports by Stakeholders and Regulatory Bodies**

The completed screening report will be submitted first to the PIU coordinator and to the specific implementing agency by/in which the subproject is implemented for checking and approval. It will then be submitted to the relevant Federal competent authority, when the subproject is trans-regional and when the subproject is implemented at regional level. The screening report will be submitted to Zonal EPA or related regional offices when the subproject is implemented at zonal or woreda level with an official application letter for review and approval **Note**: As it is stated explained under section 4.4.4, it is important for EARDIP SOP-II subproject E&S screening reports to be submitted to environment protection offices at federal, regional, or zonal level as appropriate for review and approval procedures. For subprojects implemented in Addis Ababa city administrations, the E&S screening reports will be submitted to the Addis Ababa City Environment Protection Offices. The Bank E & S specialist will be involved on verifying the risk classification of subprojects according to ESF requirements. The Federal, Regional or Zonal EPA offices will review the Screening Report and will:

* 1. Accept the document - with conditions relating to implementation.
  2. Accept the documents with required and/or recommended amendments; or
  3. Reject the document with comments as to what is required to submit an acceptable Screening Report.

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

1. Schedule I subprojects will require a Full ESIA (including an ESMP) and will necessitate the inclusion of environmental and social mitigation and enhancement measures in the design and implementation of subprojects.
2. Schedule II Subprojects will require Partial or Preliminary ESIA (which also include an ESMP).
3. Schedule III projects are not subject to environmental assessment as no potential risks/impacts are anticipated. Thus, no further action is required. However, a generic ESMP or E&S clauses to be included in works contract documents can be prepared. Further, the construction contractors will be required to prepare for Construction Environmental and Social Management Plan (C-ESMP) before the implementation of the subproject.

The possible risk categorization relationship between the WB ESF and the national ESIA guideline’s risk classification is presented below:

* + 1. **Schedule 1 and 2 “Substantial Risk” Sub-projects:** these are sub-projects that are not complex or too large but qualified as medium scale and are not located in sensitive areas (natural or conflict areas). Such sub-projects will implement mitigation measures based either through Full or Preliminary ESIAs (the national classification mostly considered the type of subprojects and thus certain subprojects may fall under substantial risk rating based on WB ESF and still fall under Schedule 1 according to the national classification, requiring a full ESIA).
    2. **Schedule 2 or “Moderate Risk” Subprojects:** these are sub-projects without any significant potentially harming people and the environment and not located in sensitive locations. These subprojects most likely require Preliminary ESIAs or ESMPs.
    3. **Schedule 3 or “Low Risk” subprojects:** these are sub-projects without any specific type of negative social and environmental risks. A schedule 3 or low risk sub-project will not require any further ESIA assessment but still require EHS terms and conditions in all procurement documents (bids, contracts). Nevertheless, the WB ESS1 requires all subprojects to be assessed for environmental and social impacts.

The next step in the ESMF process is to proceed to the next actions to fulfill the requirements based on the screening categorization, which is outlined in step 5 below.

**Step-5 Preparation of Subproject Environmental and Social Instruments**

If the outcome of the E & S screening finally results in categorizing the subproject as schedule-I activities, the following actions need to be pursued. Schedule I subprojects will be subject to full Environmental and Social Impact Assessment that could be carried out with the help of independent, registered and licensed environment and social consulting firm. Schedule I subprojects are required to prepare full ESIAs in which the depth of its information requirement can be defined based on the scope of the subproject and in consultation with the relevant Regional or Zonal level EPAs. If the categorization on the screening report is Schedule II, the subproject is subjected to Partial or preliminary ESIA. This partial ESIA should also be conducted by registered and licensed consulting firm. Generally, the scope of ESIA for schedule II projects may vary, yet it is narrower than that of Schedule-I ESIA. Like Schedule I ESIA, it conducts stakeholder consultations, examines the project's potential negative and positive environmental risks/impacts and recommends measures needed to prevent, minimize, mitigate, or compensate for adverse impacts and prepare E & S Management and Monitoring Plan but it is not required to conduct policy, legal and institutional analysis, baseline data, and alternative analysis. Alternatively, for those sub-projects classified as “substantial risk” and/or “moderate risk”, Full ESIAs, Preliminary ESIAs or ESMPs will be prepared and mitigation measures will be implemented based on an ESMP that will be prepared by E&S experts from the implementing institution MInT. A subproject that is considered likely to have only a small number of issues for further investigation may be considered to prepare an ESMP, rather than a full or preliminary ESIA. The purpose of the ESIA preparation is to generate sufficient information on significant impacts, which will be used to determine under what conditions the subproject should proceed. The ESIA will be conducted by MInT or an independent consultant. Undertaking for the preparation of the Full/Preliminary ESIA involves:

* A field assessment of the subproject area to identify likely environmental and social impacts.
* Consultation with beneficiaries and affected communities.
* Preparation of the ESIA.

**Step-6 Review and Appraisal of Subprojects E & S Instruments by Stakeholder and Regulatory Bodies**

During the study of the ESMP, he PIU and Implementing partner/beneficiary institution environment and social safeguard staff/focal persons from the beneficiary institutions will have to ensure the quality of the assessment by conducting interim review of draft ESMP report submissions. The ESMP will then be presented by the PIU to the PSC for further executive review and approval. Following that, the ESMP will be send to the World Bank Country office for review and clearance /no-objection. Finally, the ESMP will be submitted by the PIU and/or environment focal persons in partner/beneficiary institutions to the relevant Federal/Regional or Zonal level EPA offices with an official application letter for review and approval. The WB E & S specialist shall involve on the final approval/clearance process of the ESMP. Furthermore, the PIU/MInT shall adopt the site-specific ESIA/ESMP before launching the bidding process for the respective project activity/subproject that requires the adoption of such as ESIA/ESMP.

**Note:** If, on the other hand, the outcome of the E & S screening finally results in categorizing the subproject as schedule-III activities/low risks, no further actions will be needed to carry Environmental Assessment. Based on the nature of the schedule-III subproject, if it deemed necessary, a distinct ESMP will be prepared by PIU to address and mitigate the expectedly minimal or negligible[[40]](#footnote-40) environmental and social impacts of the subproject and attach it with the E&S screening report for further implementation.

The relevant Federal, Regional or Zonal EPAs will review the Full/Preliminary ESIAs submitted to by the PIU and/or environment focal persons in partner/beneficiary institutions. The purpose of review is to examine and determine whether the Full/Preliminary ESIA is an adequate assessment of the environmental effects of the EARDIP SOP II subproject under consideration and of sufficient relevance and quality for decision-making. Reviewing by the competent Federal, Regional or Zonal level EPAs may include considerations of the adequacy of:

* The examination of alternatives, assessment of impacts, appropriateness of mitigation measures and monitoring schemes as well as implementation arrangements.
* The extent of public involvement and reflection of Community/stakeholder concerns; and
* The presence of adequate information required in the report.

The outcome of the review of the ESIA by the Regional or Zonal level EPAs will result in either one of the following:

1. Accept the document - with conditions relating to implementation.
2. Accept the documents with required and/or recommended amendments; or
3. Reject the document with comments as to what is required to submit an acceptable ESIA.

**Step-7: Disclosure of Subproject E & S Instrument**

While in the review and approval process, as required by the World Bank ESF guidelines and the National ESIA proclamation, the Full/Preliminary ESIA and associated ESMPs documents must be disclosed for public review at a place accessible to local people (e.g. at a local government office i.e. kebele council, City/town and regional bureaus, at the Regional/Federal EPAs, MInT/PIU website, or on the Grievance Management System site developed for EARDIP SOP II project e.t.c), and made available in a form, manner, and language they can understand. Disclosure of the Full/Preliminary ESIA in the World Bank’s info shop is also a requirement for the EARDIP SOP II. The approved Full/Preliminary ESIA will be send finally to the World Bank Country office for further disclosures in the info shop.

**Step-8 Subproject Implementation**

Based on the E & S Management plan mitigation measures will be implemented along the implementation of the subproject activities and systemic and periodical follow-up will also be conducted. 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 and telecom operators. In relation to this, ESIAs/ESMPs shall be in place prior to relevant contractors' bidding phase; contractors will prepare their own C-ESMPs. The environmental clause should demand the construction contractor and telecom operator to implement and monitor all proposed mitigation measures in the ESMP that are applicable during the construction phase and beyond. The PIU will also be required to enforce implementation of proposed mitigation measures as proposed in the ESMP by all responsible institutions and stakeholders in the subproject implementation.

**Step-9: Environmental and Social Risk Management Monitoring Report**

Quarterly, biannual, and annual environmental and social risk management monitoring reports must be prepared by the PIU E & S specialists in collaboration with the environment focal persons in partner/beneficiary institutions. The environmental and social risk management monitoring reports should be submitted to the project steering committee, to the Regional EPAs and the World Bank for review.

The purpose of these reports is to provide:

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

**Step-10 Environmental and Social Management and Monitoring**

Internal monitoring to ensure the compliance of EARDIP SOP-II subproject implementation activities against the mitigation measures set out in its ESMP, will be carried out by the environment and social safeguard specialists of the PIU, focal person of the Federal/Regional partner/beneficiary institutions who are responsible for environmental and social management as well as the supervisory engineer at the construction site. The PIU environment and social safeguard specialists in collaboration with the implementing partner/beneficiary institution focal persons will have the primary responsibility to carry out this monitoring by regularly visiting the subprojects, and pursuing the corrective measures as required. Periodic reports of internal monitoring should be prepared quarterly by the environment and social safeguard specialists and submitted to the PIU and then to the PSC as part of the regular EARDIP SOP-II M&E process. The contractors are also expected to submit a monthly ESHS performance reports as established in the ESCP. The implementation of the recommended mitigating measures will also be monitored by the Regional, or Zonal level EPA offices (REPAs). The PIU E & S specialists and/or focal persons in the implementing partner institutions will have to collaborate in the planning for external compliance monitoring and inspections that will be conducted by the relevant Regional and Zonal EPA offices. The planning for external compliance monitoring/inspection could be initiated by the regional and zonal EPAs itself or by the PIU and partner/beneficiary institution environment focal persons in line with the M&E system. Compliance monitoring comprises on site-inspection of construction activities to verify that measures identified in the ESMP and those included as environmental clauses in the contractual agreements for contractors are being implemented. Compliance monitoring and supervision of the ESMP covers:

* determining whether the project is being carried out in conformity with environmental risk management instruments and legal agreements.
* ensuring that the anticipated risks/impacts are maintained within the levels predicted,
* identifying problems as they arise during implementation and recommend means to resolve them.
* seeing that the un-anticipated risks are managed and or mitigated before they become impacts/problems,
* recommending changes in project concept/design, as appropriate, as the project evolves, or circumstances change; and
* realizing and optimizing the benefits expected, and
* providing information for a periodic review and alteration of the environmental management plan and enhance environmental protection through good practice at all stages of the project.

It is therefore necessary that Environmental and Social Management Plan, Resettlement Plan, including Cultural/Heritage Resources Management Plan, e-waste Management Plan is supervised, monitored, and reported on together with other progresses of the subprojects.

**Step 11: Audit and Reviews**

ESMF implementation monitoring activities will also be supported by conducting annual Environmental and Social Performance Audit (including audit of implementation of Full/Preliminary ESIA/ESMPs, and CHMPs 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 EARDIP SOP-II subproject activities to evaluate the overall implementation of the ESMF. The annual environmental and social performance audits, along with the quarterly ESHS performance reports, and monthly reports from contractors will be the principal source of information to project management for improving environmental and social performance. It is expected that these annual performance audits will be carried out by registered and licensed independent consultant firm that is not otherwise involved in the Project. The purpose of the annual performance audit includes:

* to assess compliance with ESMF procedures, learn lessons, and improve future ESMF performance; and
* to assess the occurrence of, and potential for, cumulative impacts due to Project-funded and other development activities.
* To evaluate the E & S management activities against budget and time allocated.

Figure 5: Flow chart showing the ESMF process flow

**Step1: Subproject identification**

**Step 2: Subproject preparation by PIU E&S staff and focal persons of partner/beneficiary institution**

**Step 3: E & S screening of subprojects**

**Step 4: Review and appraisal of screening reports by stakeholders and regulatory bodies**

**Step 5: Preparation of subproject E & S safeguard instruments**

**Step 6: Review and appraisal of subproject E&S instruments by stakeholders and regulatory bodies**

**Step 7: Disclosure of Subproject E & S instruments**

**Step 8: Subproject Implementation**

**Re-sitting, re-design or re-route the subproject for financing.**

**Amendment and rectification of ESIA/ARAP/RAP reports for comments**

**Step 9: Environmental and Social Management and Monitoring**

No

**yes**

PIU

No

**Step 10: Audit and Review**

**Step 11: E & S risk management and monitoring report**

Table 6: Outline of roles and responsibilities for the ESMF

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Activity** | **Lead Role for preparation and/or implementation** | | **Lead role for review, approval &monitoring** | |
| Completion of ES screening using the form in Annex A: Screening Form. | | E&S staff of the PIU in collaboration with focal persons to be deployed by each Partner/beneficiary institutions. | | Federal, Regional, Woreda or City level EPAs and the World Bank, for review and clearance of Full/Preliminary ESIA documents |
| Preparation of Full/Preliminary ESIA, CHMP | | Full/Preliminary ESIA by registered/licensed consultant/firm, ESMP (for schedule III or moderate risk), CHMP preparation by environmental and social focal persons to be deployed by each partner/beneficiary institutions. | |
| Implementation monitoring of Full/Preliminary ESIA, ESMP, CHMP | | PIU Environmental and Social Specialists in collaboration with Environmental and social focal persons to be deployed by each implementing partner/beneficiary institutions, contractors/supervisors | |
| Annual Environmental and Social Audit (by independent consultant) | | External registered/licensed environment and social consulting firm in collaboration with PIU | |

## 

## **Sub-project Requiring a Special Procedure and Guideline**

**a)** **Projects Involving Cultural Heritage Management**

As the EARDIP SOP-II subcomponents are likely to involve civil works in the subproject activities with long distance linear infrastructure development, fixed transmission tower implementation acquiring plot of lands and/or usage of properties, and activities to repair and rehabilitate damaged fiber optics it is possible to pose an impact on historical buildings and cultural heritage sites. Therefore, it is important that the environmental and social assessment consider direct, indirect, and cumulative sub project-specific risks and impacts on cultural heritage. Through the environmental and social assessment, the potential risks, and impacts of the proposed activities of the project on cultural heritage will be determined.

The EARDIP SOP-II subproject activities should consider avoiding impacts on cultural heritage. When avoidance of impacts is not possible, it should identify and implement measures to address impacts on cultural heritage in accordance with the mitigation hierarchy. The mitigation measures will need to be integrated into the ESMP to avoid damage to cultural properties. Based on the nature (i.e., whether affecting National or World heritage sites) and scale of impacts, where appropriate, it will also develop a Cultural Heritage Management Plan (CHMP). The mitigation plan in the ESMP should be consistent with Proclamation No 209/2000 on Research and Conservation of Cultural Heritage, the World Bank ESS8 for Cultural Heritage, and should take into account institutional capabilities relating to the management and preservation of physical cultural resources. Mitigation measures include, for example,

* Consultations with the appropriate authorities and local inhabitants to identify known or possible sites during subproject planning.
* relocating of subprojects to avoid identified sites.
* relocating or modifying the physical footprint of the project.
* conservation and rehabilitation in situ.
* relocation of cultural heritage.
* establishment of a monitoring system to track the progress and efficacy of these activities.
* Establishment of an implementation schedule and required budget for the identified mitigation measures; and cataloguing of finds.

In case of chance finds of heritage encountered during subproject implementation activities, the procedures that should be followed are stipulated under article (41) “Fortuitous Discovery of Cultural Heritage” of the Proclamation No 209/2000 which includes:

* + 1. 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 same to the Authority, and shall protect and keep same intact, until the Authority takes delivery thereof.
    2. 'The Authority' shall, upon receipt of a report submitted pursuant to Sub-Article (I) hereof, take all appropriate measures to examine, take delivery of, and register the Cultural Heritage so discovered.
    3. Where the Authority fails to take appropriate measures within six months in accordance with Sub- Article (2) of this Article, the 'person who has discovered the Cultural Heritage may be released from his responsibility by submitting, a written, notification with a full description of the situation to the regional government official.
    4. The Authority shall ensure that the appropriate reward is granted to the person who has handed over a Cultural Heritage discovered fortuitously in accordance with sub-Articles (1) and (2) of this Article. And such person shall be entitled to reimbursement of expenses, if any, incurred in the course of discharging his duties under this Article.

A complete chance finds procedure incorporating the above procedure of the proclamation enriched with other necessary good practice procedures is presented in Annex C.

1. **E-waste Management Plan**

The subproject activities in each component of the EARDIP SOP-II are anticipated to generate significant amount of electrical and electronic wastes. The generation of E-waste is becoming an issue in waste management due to the rapid growth of industries, trade and services including the recent proliferation of digital facilities and expansion of mobile phones and accessories has accelerated the generation of electronic waste. Electric and electronic waste, or E-waste, is an informal name for electrical and electronic products nearing end of their useful life computers, mobile phones, servers, modems, televisions, stereos, copiers, and fax machines are common electronic products. For this project E-waste include servers, modems, computers, monitors, scraps of fiber optic cables, scanner, printer, coolants, ventilators, and instruments for fixed transmission towers, other digital devices. Thus, implementing institutions for EARDIP SOP II subprojects need to update and adopt the E-waste Management Plan developed for EARDIP SOP-II attached at **Annex J.**

1. **Site Specific SSAHUTLCs / Indigenous People Plan/**

The subproject activities specially under subcomponents 1.1 and 1.2 are going to be implemented in the remote borderland areas where it is believed that indigenous people of Ethiopia reside. These subprojects will involve civil work or construction activities that have risks/ impacts on the traditional land, religious sites, cultural activities, territories, and natural resource utilization. Hence, EARDIP SOP II in collaboration with concerned partner institutions may be required to prepare the preparing Social Development Plan Support for Historically Underserved Communities, during project implementation, on which subproject implementing institution can adopt the plan to work with the indigenous people.

1. **OHS and CHS Management Plan**

The subprojects under subcomponent 1.1 and 1.2 involves civil works, excavation, backfilling, deployment of backbone fiber, installation of transmission towers, huge labor influx which can have social risks on vulnerable groups, and health of workers, labor work force has an implication on the community health, child and forced labor, data privacy and safety. Hence, Occupational Health and Safety (OHS) and Community Health and Safety (CHS) management plan may need to be developed specific to these subproject activities, before the commencement of the subprojects to be adopted and implemented by the contractors.

1. **Contractor Management Procedure**

The subproject in EARDIP SOP-II involves infrastructure activities where contractors and subcontractors will involve. In this case contractor management procedure is required for as it can help to avoid any potential problems such as missed deadlines, cost overrun, and non-compliance to the client’s standards. So, this procedure will help to ensure that work is completed on time and within budget and it also help to ensure that contractors are working in compliance with the client’s standards. Thus, the Procedure should be prepared and practiced before the commencement of the project. It is the efficient way to incorporate E&S concerns in any infrastructure development that will involve a third-party Client is responsible to manage the E & S performances of contractors who are perceived as ‘separate entities’ or ‘third parties. To manage the E & S performances of the contractor or subcontractors, the client should prepare and implement sound, consistent and effective approaches which is in compliance with the World Bank EHS guideline and WB Procurement Guide-Contract Management Practice This procedure provides practical guidance to clients and contractors on the process of prequalification, solicitation, evaluation contracting and procurement to ensure adequate E & S management during construction, installation, operation, and demolition activities. It also provides a recommendation on how to manage project performance during the different phases of services being provided by the contractors (i.e., from mobilization to construction, operations, and maintenance) and how to monitor and report on contractors’ performance effectively. It would be advisable that the implementing agencies to refer to World Bank EHS guidelines and WB Procurement Guide-Contract Management Practice while preparing the detail contractor management Plan. The detailed Contractor Management Procedure for EARDIP SOP-II is attached to this ESMF as Annex-I.

# **POTENTIAL ENVIRONMENTAL AND SOCIAL BENEFITS AND RISKS**

This chapter describes the potential environmental and social benefits and risks/impacts of the EARDIP SOP-II subproject activities. The environmental and social risks likely to arise from the subproject activities of the EARDIP SOP-II can be grouped into two as: (a) those which will arise because of subproject activities directly financed by the EARDIP SOP-II and (b) those occurring as a result of subproject activities indirectly financed by the EARDIP SOP II through matching investments that involve public and private telecom institutions for the implementation of subprojects in subcomponents 1.1 and 1.2.

The subproject activities involved with EARDIP SOP-II are long distance linear trench excavation, backfilling, cross border and national back bone fiber deployment, access road to fixed transmission tower, which may require access corridor crossing aquatic habitat and biodiversity hot spots, transmission tower implementation involves trench or pit excavation, last mile infrastructure that may involves excavation of trenches, fiber optics rollout, backfilling, data storage infrastructure, cyber security infrastructure and rehabilitation of damaged fiber optics, labor influx that can result in STI and other communicable diseases may lead to CHS issues, labor force OHS that involve vehicle accidents, struck by falling object, risk of working at high space, confined space etc. will generate impacts that are of significance that required assessments for anticipation of risks/impacts and prediction of mitigations. The civil work and deployment of infrastructure in the area also require large amount of land which makes the community to loss both physical and economical displacement. The environmental and social risk assessment carried as part of the present EARDIP SOP-II ESMF has also confirmed that the risk rating is “*substantial*” for both environmental and social risks with the overall risk rating being the same “*substantial*”. According to the Project Appraisal Document certain subprojects under subcomponent 1.1 and 1.2 will be implemented through Matching Investments that leverage UCF from the private sector. However, project implementation can still go ahead even without UCF.

## **6.1 Project Beneficial Environmental and Social Impacts**

The EARDIP SOP-II will have significant positive Environmental and Social impacts on the country’s population , as it is expected to (i) Increase affordability and enhance reliability of digital access; (ii) Strong digital inclusion of refugees and IDPs, expanded access to broad band among underserved rural and borderland communities (iii) allow digitalization of higher education and thus educational institutions will access on line educational resources; (iv) promote accessible and affordable internet coverage in rural areas with low access to communications infrastructure and services; and (v) Free flow of digital services across boarder strengthen e-commerce among countries in the region (vi) support for CERC which will help improve the country’s capacity and resilience to climate hazards. When the CERC is activated, this ESMF will be applicable. These positive social and environmental impacts of the EARDIP SOP-II are elaborated further as follows.

**Increased affordability and reliability of digital access**: One of the important and wide- reaching beneficial impacts of the ERDIP SOP II is anticipated to be realized through the opportunity it will provide for the wider public to improved access to broadband internet and digital services. The implementation of the project components will enable citizens to access a lower cost, higher quality broadband internet services. The project will promote reliability through increased participation of service providers to ensure the sustainability. Improvements in infrastructure will increase reliability and quality of services.

**Strong digital inclusion expanded access to broad band among remote, underserved rural and borderland communities (refugees and IDAs):** The project, through participation of new service providers in the market and incentivizing service providers will enable the expansion of infrastructure and broad band services to remote rural areas and the pastoral and agropastoral communities living in the lowlands of underserved regions namely, Somali, Afar, and Gambella. The incentive mechanisms and the competition between different providers is expected to lower costs and provide affordable services for poor communities.

**support the development of the digital skills base through foundational support to the establishment of a National Research and Education Network (NREN) in Djibouti and assistance to the regional activities of EthERNet, the Ethiopian NREN:** It will enable the expansion and strengthening of the regional infrastructure supporting higher education by establishing regional collaboration among NRENs, allowing for economies of scale and knowledge transfer. Support will be provided to enhance the capacity of universities and TVETs, in partnership with NRENs and governments, to deliver digital skills programs for civil servants and university faculty and students.

**Free flow of digital services across boarder strengthens e-commerce among countries in the region:** Project financing will cover capacity building to MInT and the Ministry of Trade and Industry (MoTI) for facilitating participation in regional trade agreements and expanding cross-border e-services.

## **Project Adverse/Negative Environmental, OHS, CHS and Social Risks**

The environmental impacts/risks of the subcomponent activities under the EARDIP are anticipated to be substantial adverse impacts. The following are the anticipated direct and indirect potential adverse environmental impacts/risks that are envisaged to arise during EARDIP subproject implementation activities.

### **Environmental, OHS, CHS and Social Risks of Subproject Activities Directly Financed by EARDIP SOP-II**

Component 1, Connectivity Market Development and Integration, Component 2 Data Market Development and Integration and Component 3 Online Market and Integration in all these three components of the EARDIP SOP-II involves subproject activities that will support excavation and deployment of up to 1,500 km of new fiber cables rollout, fixed transmission tower implementation, support Data storage and transfer equipment installation, cyber security infrastructure, repair and rehabilitate damaged terrestrial cables due to conflicts, last mile connectivity to the remote rural areas (Borderland, Refugees, IDPs) and strengthen educational institutions network through expansion and integration to high speed broadband internet service, and TA support to develop standards, regulations, guidelines, bidding documents. The implementation of these subproject activities is planned to be among those that will be directly financed by the EARDIP SOP-II.

The implementation of the above described subprojects are anticipated to entail potential environmental and social risks due to the fact that it will necessitate the excavation of long distance trenches, roll out of backbone fibers, construction of fixed transmission towers and pit or trench excavation, last mile infrastructures, installation of data storage and transfer and high speed connectivity instruments for educational institutions, access roads to digital facilities, establishment, will result in the following (i) Environmental Risks/Impacts: alteration of terrestrial and aquatic habitats which could have adverse impacts especially if linear digital infrastructure may pass through critical habitats or biodiversity hotspots, access roads to transmission towers and other fixed infrastructure, may require construction of corridors crossing aquatic habitats with the potential to disrupt watercourses, wetlands, and riparian vegetation release of localized greenhouse gas emissions, construction activities may also account for an increased demand for resources including water, energy and raw materials, long distance fiber optic cables (then the sub-project will be not funded by WB or excluded). Early assessment will be conducted to avoid intervention with critical impacts and come up with an alternative approach or intervention. Another adverse impact is that the sub-project may cause nuisance due to dust and noise, construction and electronic wastes, construction, hazardous and electronic wastes, ii) Occupational Health and Safety: electromagnetic field risk, work at height risk, collapse of excavation risk, struck by falling objects, confined space risk, traffic safety, electrocution risk, ambient air pollution, noise pollution, housekeeping, iii) Community Health and Safety Risks, disaster risks (like; flooding, landslides, earthquakes, etc.), labor influx which may impact CHS including transmission of disease (STI and other communicable diseases) and conflict between workers and community as well as SEA/SH risks, which may be introduced by having contract workers on site, iv) Social Risks: acquisition of land, that potentially leads to physical and economic resettlement on vulnerable and displaced communities, risk of child labor, data security risk, data protection risk related to ESS7 communities, and other project-affected persons, all these anticipated to cause during construction periods and possibly during operation and maintenance. In general, the project intervention will reduce the risk of digital inclusion and will enhance data protection through support to the future Data Protection Authority, which is to be established at the ECA (with support from the Digital Ethiopia program). Cumulative Environmental impacts such as, localized GHG emission, hazardous and e-waste and air emission may lead to cumulative impacts regionally, including cross border Impacts such as trans-border pollution, spread of infectious diseases, etc.

### **Gender Based Violence Risks**

[**Gender Based Violence (GBV)**](#_Toc33001988)**, and Sexual Exploitation, Abuse and Sexual Harassment (SEA/SH):** The project may possibly involve construction activities that can cover long distance for infrastructure development in the project targeted areas. The GBV and SEA/SH as risk within the project scope is considered substantial thus the project has conducted an assessment and identified main GBV/SEAH risks and action plans (annex GBV Assessment report). Below is a summary of key findings.

**SEA/SH risk training activities and workplace:** There is high prevalence of SEAHs in workplaces of public institutions, universities, and offices where services are accessed in return for sexual favors. Although there are national civil servant laws and regulations that prohibit such acts the problems remain widespread. In the project context there are a) GBV/SH between project workers; b) GBV/SEA/SH, perpetrated by project workers toward members of local communities and c) GBV/SEA/SH risks in selection process/targeting of the women and girls for training.

**Sexual violence in higher education:** There is high prevalence of sexual violence in higher education institutions in Ethiopia although reporting is very low due to cultural norms. This may affect the willingness of women, and LGBTQ individuals to participate in the digital skills training anticipated under sub-component 3.2. Existing grievance mechanisms (often handled by gender officers) within higher institutions are weak and insufficiently resourced to be able to provide the needed services such as counseling and referral for services. The expansion and improvement of digital services in higher institutions such as broadband and Wi-Fi services in libraries and dormitories should help to alleviate these GBV and SEA/SH risks as it will mean that female students can study at night without having to leave their dorms.

**Digital Technology Enabled GBV/SEA/SH:** Digital technology facilitated GBV (including stalking, bullying, sexual harassment, defamation, hate speech and exploitation) is a global challenge that has serious psychological and social impacts for the victims. Technology-facilitated GBV/SEAH is action by one or more people that harm others based on their sexual or gender identity or by enforcing harmful gender norms. This action is carried out using the internet and/or mobile technology. The impacts of online GBV takes a monumental toll on mental health, including depression, anxiety and fear that follows women offline at home, school, work and other social spaces. Most of these crimes are not reported due to low level of awareness among the public and law enforcement agencies. The project activities to enhance the capacity of higher institutions, MDAs and regional and Woreda offices could potentially increase such digitally facilitated GBV/SEAs. )

**Labor related GBV/SEA/SH Risk:** GBV in relation to contacts between project workers, such as the engineers and labor working on deployment of new fiber rollout along prioritized routes and last mile connectivity to rural, borderland areas (Refugees/IDPs, ICT experts, the consultants and others, and members of the project affect local communities and members of local communities (component 1.1& 1.2). The project has developed labor management procedures to address these and other risks, as described in the GBV annex.

Key Recommendations to address GBV/SEAH risks:

* Awareness creation on digitally enabled GBV/SEAs in all beneficiary institutions including government officials, library and information center managers and educate users on personal data protection, safe use of internet and reporting abuse.
* Project should put in place open and transparent criteria and procedures for project accessing project services and communicate properly to potential participants.
* Ensuring that service points for internet (libraries, WiFi spots, internet cafes) are safe environment for service users and can be monitored.
* Develop codes of conduct on the use of digital services in public spaces (libraries, information centers, etc.) and display in public spaces (adapting from the Digital Ethiopia project – P171034).
* Advice and create awareness on content filters especially education institutions and public offices.
* Hire part time GBV specialist for effective management of GBV/SEAH risks.
* A robust GBV Action Plan for preventing and mitigating possible related risks is presented in the annex.
* Develop code of conduct (CoC) to be signed by all and commits all persons engaged by the contractor, including sub-contractors and suppliers, to acceptable standards of behavior.

### **6.2.3 Technical Assistance Subproject Risk**

The project will finance TA activities under Sub-components 1.1, 1.3, 2.1, 2.2, 3.1,3.2., which are detailed in the PAD. Thus, to manage any downstream E&S risks and impacts, TA activities will be implemented in accordance with ToRs acceptable to the WB consistent with the World Bank’s Advisory Note on Technical Assistance & the ESF/ESSs.

### **6.2.4 Labor Management Risks**

To deliver the ‘Digital Integration’ project, the use of government and private human resources (HR) is anticipated at all levels from Federal to regions and *Woreda*/*Kebeles*. The GoE recognizes that comprehensive management of the HRs is important in augmenting the positive outcomes of the project. As a result, the Labor Management Procedures (LMP) has been developed and attached at **Annex K**. Staff for PIU and TAs who may be directly engaged to support the project will need to be contracted in line with the requirements of ESS2 in relation to Labor and working conditions, non-discrimination and equal opportunities and occupational health and safety.

There might be a risk of discrimination, i.e., a potential inappropriate treatment or harassment of project workers (e.g., based on gender, age, disability, ethnicity, or religion); potential exclusion/preferences with respect to recruitment, training and development, termination of employment, and working conditions, *discrimination is unacceptable as per the Ethiopian Labor Law and WB’s ESS2*.

### **Environmental Risks of EARDIP SOP II Subproject Indirect Impacts**

Component 1, Subcomponent 1.1 and 1.2 deployment of new backbone fiber along prioritized routes, and rehabilitation of damaged cables and existing terrestrial cables subjected to frequent outage, connecting remote, rural, borderland locations for last mile network where the commercial incentive for last-mile network expansion is insufficient (host communities and IDP/refugees camps in borderland areas. The risks associated with these activities are described earlier. These subproject activities will be implemented through the provision of matching investments from the project and implemented by telecom operators, fiber wholesalers, internet service providers (ISPs) and other licensed operators that would be able to bid to offer this capacity, using the tendered contracts as an investment guarantee for a wider network roll-out. There is a lot of experience associated with this type of investment elsewhere in the East Africa region and, even though it is relatively new for Ethiopia, and there are no additional risks which are not covered by standard deployment methodologies.

### **Environmental Risks and Recommended Mitigations**

1. **Terrestrial and Aquatic habitat Alteration**

Terrestrial and aquatic habitats may be altered primarily during the construction of linear digital infrastructure may pass through critical habitats or biodiversity hotspots during construction periods and possibly during maintenance. The installation of fixed line components, including shore approaches for long distance backbone fiber optic cables, and access roads to transmission towers and other fixed infrastructure, may require construction of corridors crossing aquatic habitats with the potential to disrupt watercourses, wetlands, and riparian vegetation., sensitive habitats like National Parks, sanctuaries, protected areas as well as wetland areas could be affected during the construction activities. As the EARDIP SOP-II is going to be implemented in cross border and rural, borderland area and underserved communities, refugees and IDPs historical and cultural heritage sites could also be affected. Exclusion criteria of sub-project activities will be added during implementation, as required, once the locations of sub-projects are identified in more detail. As per the exclusion list (see on annex I), high risks will be excluded as well as interventions in critical habitats will be avoided since early stages during analysis of alternatives and screening. If significant impacts to the biodiversity are foreseen, development of BMPs will be required. Recommended measures to prevent and control impacts to terrestrial habitats during construction of the right-of-way include:

* Site fixed line infrastructure (e.g., fiber optic cable) and other types of linear infrastructure rights-of-way, access roads, lines, and towers to avoid sensitive habitats and heritage sites through use of existing utility (electric transmission towers) and transport corridors, whenever possible;
* Avoidance of construction activities during the breeding season of wildlife and other sensitive seasons or times of day; and
* Revegetation of disturbed areas replaced with indigenous plant species.

**ii)**  **Hazardous and Electronic Materials and Waste Risks**

Digital infrastructure development for broadband connectivity usually requires the use of electrical and electronic equipment believed to contain significant amounts of hazardous materials. At their end of life these materials should be collected, dismantled, recovered, reused, and disposed properly following international and national guidelines. As certain types of activities, switching and transmitting equipment may require the use of solar power and backup power systems consisting of a combination of batteries (typically lead-acid batteries) and diesel-fueled backup generators for electricity. Operations and maintenance activities may also result in the generation of electronic waste (e.g., nickel-cadmium batteries and printed circuit boards from computer and other electronic equipment as well as backup power batteries). The operation of backup generators and service vehicles may also result in the generation of used tires, and waste oils and used filters. Transformer equipment may potentially contain Polychlorinated Biphenyls (PCBs) while cooling equipment may contain refrigerants (potential Ozone Depleting Substances [ODSs). E-waste exposure, handling and disposal also exposes people to non-dioxin-like polycyclic aromatic hydrocarbons (PAH), polychlorinated dibenzo-p-dioxins (PCDD), polychlorinated dibenzofurans (PCDF) and dioxin-like polychlorinated biphenyls (DL-PCB). Most of these compounds are endocrine disrupters, and most are neuro-and immune-toxic as well. E-waste-related toxic elements can enter living organisms through air (e.g. open burning), soil (e.g. disposal), water via ingestion (e.g. food chains contamination due to disposal and primitive recycling processes), inhalation, and dermal absorption (e.g. dust and direct exposure of workers who labor in primitive recycling areas and their families). E-waste is resistant to biodegradation with strong tendency to bio-accumulate in agricultural lands and be available for uptake by grazing livestock. Elevated levels of e-waste pollutants in water, air, soil, dust, and human matrices (blood, urine, breast milk) indicate that not only are e-waste workers at risk from exposure, but the general population and future generations as well.

Recommended mitigation measures include:

* Implementing fuel delivery procedures and spill prevention and control plans applicable to the delivery and storage of fuel for backup electric power systems, preferably providing secondary containment and overfill prevention for fuel storage tanks.
* Implementing procedures for the management of lead acid batteries, including temporary storage, transport, and final recycling by a licensed facility.
* Ensuring that new support equipment does not contain PCBs or ODSs. PCBs from old equipment should be managed as a hazardous waste.
* Purchasing electronic equipment that meets international phase out requirements for hazardous materials contents.
* E-waste should be handled according to ITU procedure for use, handling, and management of e-waste after end of life.
* Project implementing agencies are required to prepare detail e-waste management plan and abide by.

**In line with the ESS3 and EHS guideline**

* Segregation of Waste at source and avoid mixing with other wastes
* Collection: Establish collection centers who can be individually or jointly or as registered

society. They could also be owned by a designated agency, a company or an association to undertake collection operations of E-waste;

* Transportation: Once general waste is collected at designated places, the contracted service providers collect and take it to dumping sites and recycling facilities for processing
* Recycling: identify both formal and informal recycling activities in the Ethiopia market where the wastes can be recycled
* Refurbishment: identify licensed entrepreneurs and organized groups which are refurbishing E-waste in the country with the intent of increasing product lifespan
* Take back: identify manufactures who have introduced take-back programs in the

Ethiopia and collaborate with them for uptake of the wastes.

* Raise public awareness about E-waste and its management.

**iii)** Risk from Construction Waste and Non-hazardous Solid Waste

Deployment of infrastructure, of long-distance terrestrial fiber optic backbones cables, cell tower construction and access road to the fixed transmission tower needs civil works like clearing of lands and excavation of trenches. These activities will result in soil waste and stockpile. The soil waste is in general an innocent/inert waste that will not have any adverse effect to the environment when properly disposed. The impact of this soil waste on the environment and community usually arises when it is improperly disposal at unauthorized places blocking drainage channels and access roads, destroying community open green spaces etc., affecting the movement and wellbeing of communities and domestic and wild animals. The domestic waste, trashes, food remains from canteen in the camp, unappropriated disposal of human waste will have big risk.

Recommended mitigation measures include:

* Preventing the washing away of construction materials, soil, silt, or debris into any drainage system.
* Properly segregate and dispose wastes to encourage reuse and recycling of some useful waste materials.
* Construction and demolition wastes should be recycled or reused as much as possible to ensure that materials that would otherwise be disposed of as waste are diverted for productive uses (topsoil).
* The contractor and EARDIP subproject beneficiary management must work together to facilitate proper waste handling and disposal from the site. All construction wastes must be taken to the approved disposal site.
* Contractor should provide proper waste disposal cans for the domestic waste and proper latrine for the work force.

**iv) Emission to Air**

Emissions from land clearing, trench excavation and cell tower and access road construction may be primarily associated with the operation of vehicle fleets, the use of backup power generators and the use of cooling and fire suppression systems during operation. Cooling equipment may contain refrigerants (potential Ozone Depleting Substances).

Recommended mitigation measures include:

* Implementation of vehicle fleet and power generator emissions management strategies
* Avoiding the use of backup power generators as a permanent power source, if feasible.
* Substitution in use of chlorofluorocarbons (CFCs) in cooling and fire-suppression systems, using contractors who are properly trained or certified in the use of CFC free materials.

**v) Noise and Vibration**

As digital infrastructures are implemented in the borderland and rural area as people live sparsely in a wide area noise will not be significant risk of the project. However, the principal source of noise in digital infrastructures and connectivity/ construction and operation activities is associated with the operation of backup power generators.

Recommended mitigation measures include:

* Apply noise management actions including use of noise suppression shields and mufflers.
* The location of noise generating sources away from residential or other noise-sensitive receptors to meet the noise emission.

***As provided by ESS4 and EHSG on Noise***-

* Siting noisy plant and equipment as far away as possible from classrooms and use of barriers (e.g. site huts, acoustic sheds or partitions) to reduce the level of construction noise at receptors wherever practicable.
* Construction workers should be aware of the sensitive nature of work places where they are operating in & advised to limit verbal / other form of noise.
* Undertake regular maintenance of the construction equipment/ vehicles as per the operational manual.
* Where practicable noisy equipment will be orientated to face away from the nearest classroom and other receptors.
* Working hours for significant noise generating construction work will be on daytime only and preferably during the school holidays.
* Alternatives to diesel and petrol engines and pneumatic units, such as hydraulic or electric controlled units, will be used, where practicable.

**vi) Visual Impact**

The visual impacts from tower and antennae equipment may depend on the perception of the local community as well as the aesthetic value assigned to the scenery (e.g., scenic and tourism areas).

Recommended mitigation measures include:

* Minimizing construction of additional towers through collocation of proposed antennae in existing towers or existing structures such as buildings or power transmission towers.
* Use of tower and antennae camouflaging or disguising alternatives (e.g. masts or towers designed to look as trees);
* Considering public perception about aesthetic issues by consulting with the local community during the siting process of antenna towers.

**vii)** **Soil Erosion and Land Degradation**

It is obvious that the subproject activities for trench excavation and land clearing for access road construction will lead to soil erosion and localized land degradation.

Recommended mitigation measures include:

* It is advisable that trench excavation should be designed and implemented on gentler slope areas.
* Avoid steep slope to any construction activities.
* The infrastructures that need access roads should not be designed and implemented near sensitive ecosystems (lakes, rivers, forest etc.)
* Awareness should be created among the construction works about (sensitive ecosystems, soil, and land degradation etc.)
* Topsoil shall be stockpiled separately from subsoil. Stockpiles shall not exceed 2 m height, shall be located away from drainage lines, shall be protected from rain and wind erosion, and shall not be contaminated.
* Soil backfilled into excavations shall be replaced in the order of removal in order to preserve the soil profile.
* Sheet and rill erosion of soil shall be prevented where necessary through the use of sandbags, diversion berms, culverts, or other physical means.

**viii) Risk due to Inefficient Energy Use**

There are some environmental risks due to use of energy inefficient technologies. In efficient energy use increase amount of GHG emissions, it will make the project unsustainable. The project will support regulatory reform to reduce emission from digital infrastructure like to develop energy efficiency standards.

Recommended Mitigation Measures include:

* Use energy efficient technology for the project implementation.
* Use renewable (green) energy sources.
* Apply the energy efficiency standards to technical specification.

**ix) Water Quality Deterioration**

The subproject activities under subcomponent 1.1 and 1.2 the linear infrastructure may pass through sensitive ecosystems (forest, lakes, rivers etc.) and access roads to the fixed transmission tower may cross aquatic habitats. So, these subproject activities may result in water quality deterioration.

Recommended mitigations measure, to be expanded in the exclusion criteria, include:

* Excavated soil should be pile up in a place where far from water resources.
* Avoid crossing ecosystem hotspot.
* Hazardous wastes like, greases, oils, gasoil for the construction machineries and cars should be stored and refilled on a paved floor to protects seepage.
* Drainage structure should be constructed for the construction wastewater to be directed for proper disposal.
* Domestic solid waste should be handled with solid waste handling and disposal procedure. (Waste cans should be prepared to dump the solid waste and dump to the proper site.

As it is indicated in ESS 3

* Discharge of grey water or uncontrolled discharges from the site/working areas (including wash down areas) to adjacent rivers shall not be permitted;
* Contractor should sensitize workers on water conservation and put strict measures to avoid wastage of water.
* Where possible an 8m buffer strip of existing vegetation will be maintained within the project site.
* Water containing pollutants such as cements, concrete, lime, chemicals and fuels shall be discharged into a conservancy tank for planned removal from site.
* The drainage system will be developed to prevent silt-laden run-off from entering surface water drains and streams without treatment (e.g. earth bunds, silt fences, straw bales, or proprietary treatment) under any circumstances.
* Tools and plant will be cleaned in designated areas within the site where run-off can be isolated for treatment before discharge to the river or nearby water resources; and
* Debris and other material will be prevented from entering watercourses; Construction sites (such as settlement lagoons or other temporary attenuation) to be used during construction if necessary; Diversion of minor watercourses will be carefully managed to prevent suspension of silt (or contamination by other pollutants)

**x) Loss of Vegetation due to Land Clearing**

The subproject activity under subcomponent 1.1 and 1.2, involves infrastructure development, such as excavation of trenches, transmission tower establishment and access road to the transmission tower are anticipated to have land clearing activities. This in turn will expose the soil to erosion, loss of habitat and biodiversity.

Recommendations, which will be expanded in the exclusion criteria (Annex I), include:

* Restricting constructions on the earmarked areas, which may require some vegetation clearance, and sticking to the design.
* Developing BMPs when significant impacts are expected.
* Revegetating disturbed areas with indigenous plant species, with a target of 10 seedlings for each displaced plant.
* Avoiding areas which are ecologically sensitive and are biodiversity hotspots.

### **6.2.7 Occupational Health and Safety Risks and Mitigation Measures**

Occupational health and safety issues in digital infrastructures development and cell tower implementation and related construction subprojects primarily includes electrical safety, electromagnetic fields (occupational), optical fiber safety, elevated and overhead work, etc. Using the hierarchy of control creates a systematic approach to managing occupational safety and health in the workplace by providing a structure to select the most effective control measures to eliminate or reduce the risk of certain hazards that have been identified as being caused by the operations of the EADRIP II implementation. The hierarchy of control has five levels of control measures, the most effective measure is at the top of the hierarchy and the least effective is at the bottom. So the idea is that, start from the top of the hierarchy in choosing the appropriate control measure. Where elimination is not feasible, measures should be taken to reduce the risk by following the hierarchy in the recommended order. Do not simply jump to the easiest control measure to implement. Risk control can be applied at the source of the hazard, through engineering controls, administrative controls and personal protective equipment (PPE). It is important to undertake OHS risk assessments following the mitigation hierarchy. The outline on how to conduct a OHS assessment is included within LMP (see annex K, sub-annex iii). The contractors or project implementing entities shall establish safe systems of work and permit to work for high risk activities. The overall mitigation measures are elaborated as follows:

1. **Electro-Magnetic Fields**

Electric and magnetic fields (EMF) are invisible lines of force emitted by and surrounding any electrical device, such as power lines and electrical equipment. Magnetic fields result from the flow of electric current and increase in strength as the current increases. Radio waves and microwaves emitted by transmitting antennas are one form of electromagnetic energy. Radio wave strength is generally much greater from radio and television broadcast stations than from cellular phone communication base transceiver stations. Microwave and satellite system antennas transmit and receive highly concentrated directional beams at even higher power levels. Although there is public and scientific concern over the potential health effects associated with exposure to EMF, there is no empirical data demonstrating adverse health effects from exposure to typical EMF levels from power transmissions lines and equipment. Telecom workers typically have a higher exposure to EMF than the public due to working in proximity to transmitting antennas emitting radio waves and microwaves. Microwave and satellite system antennas transmit and receive highly concentrated directional beams at even higher power levels. Occupational EMF exposure should be prevented or minimized through the preparation and implementation of an EMF safety program including the following components:

* Identification of potential exposure levels in the workplace, including surveys of exposure levels in new projects and the use of personal monitors during working activities.
* Training of workers in the identification of occupational EMF levels and hazards.
* Establishment and identification of safety zones to differentiate between work areas with expected elevated EMF levels compared to those acceptable for public exposure, limiting access to properly trained workers.
* Implementation of action plans to address potential or confirmed exposure levels that exceed reference occupational exposure levels developed by international organizations such as the International Commission on Non-Ionizing Radiation Protection (ICNIRP), and the Institute of Electrical and Electronics Engineers (IEEE). Action plans to address occupational exposure may include deactivation of transmission equipment during maintenance activities, limiting exposure time through work rotation, increasing the distance between the source and the worker, when feasible, use of shielding materials, or installation of ladders or other climbing devices inside the mast or towers, and behind the transmission beams.
* Limiting public access to antennae tower locations

**ii) Optical Fiber Safety**

Workers involved in fiber optic cable installation or repair may be at risk of permanent eye damage due to exposure to laser light during cable connection and inspection activities. Workers may also be exposed to minute or microscopic glass fiber shards that can penetrate human tissue through skin or eyes, or by ingestion or inhalation. Optical fiber installation activities may also pose a risk of fire due to the presence of flammable materials in high-powered laser installation areas.

Recommendations to prevent minimize, and control injuries related to fiber optic cables installation and maintenance include:

* Worker training on specific hazards associated with laser lights, including the various classes of low and high-power laser lights, and fiber management.
* Preparation and implementation of laser light safety and fiber management procedures which include:
* Switching off laser lights prior to work initiation, when feasible
* Use of laser safety glasses during live optical fiber systems installation
* Prohibition of intentionally looking into the laser of fiber end or pointing it at another person
* Restricting access to the work area, placing warning signs and labeling of areas with potential for exposure to laser radiation, and providing adequate background lighting to account for loss of visibility with the use of protective eyewear
* Inspecting the work area for the presence of flammable materials prior to the installation of high-powered laser lights
* Implementation of a medical surveillance program with initial and periodic eye examinations.
* Avoiding exposure to fibers through use of protective clothing and separation of work and eating areas.
  + - 1. **Electric Safety**

Telecom workers may be exposed to occupational hazards from contact with live power lines during construction, maintenance, and operation activities.

Prevention and control measures associated with live power lines include:

* Only allowing trained and certified workers to install, maintain, or repair electrical equipment.
* Deactivating and properly grounding live power distribution lines before work is performed on, or in close proximity to, the lines.
* Ensuring that live-wire work is conducted by trained workers with strict adherence to specific safety and insulation standards.
* Qualified or trained employees working on transmission or distribution systems should be able to achieve the following:
* Workers should not approach an exposed, energized, or conductive part even if properly trained.
* Where maintenance and operation are required within minimum setback distances, specific training, safety measures, personal safety devices, and other precautions should be defined in a health and safety plan.
* Strict procedures for de-energizing and checking of electrical equipment should be in place before any maintenance work is conducted. If de-energizing is not possible, electrical installations should be moved or insulated to minimize the hazardous effects.
* Prior to excavation works, all existing underground cable installations should be identified and marked. Drawings and plans should indicate such installations.
* All electrical installations or steel structures, such as masts or towers, should be grounded to provide safety as the electrical current chooses the grounded path for electrical discharge. In cases where maintenance work must be performed on energized equipment, a strict safety procedure should be in place and work should be performed under constant supervision.
  + - 1. **Elevated and Overhead Work**

The assembly of towers and installation of antennae can pose a physical hazard to workers using lifts and elevated platforms and those located below due to the potential for falling objects.

Recommended management strategies include:

* The area around which elevated work is taking place should be barricaded to prevent unauthorized access. Working under other personnel should be avoided.
* Hoisting and lifting equipment should be rated and maintained and operators trained in their use. Elevating platforms should be maintained and operated according to established safety procedures that include such aspects as equipment and use of fall protection measures (e.g. railings), movement of location only when the lift is in a retracted position, repair by qualified individuals, and the use of effective locks to avoid unauthorized use by untrained individuals;
* Ladders should be used according to pre-established safety procedures including proper placement, climbing, standing, and the use of extensions.
  + - 1. **Fall Risks**

Workers may be exposed to occupational hazards when working at elevation during construction, maintenance, and operation activities.

Prevention and control measures for working at height include:

* Implementation of a fall protection program that includes training in climbing techniques and use of fall protection measures; inspection, maintenance, and replacement of fall protection equipment; and rescue of fall-arrested workers, among others.
* Establishment of criteria for use of 100 percent fall protection (typically when working over 2 meters (m) above the working surface, but sometimes extended to 7m, depending on the activity). The fall protection system should be appropriate for the tower structure and necessary movements, including ascent, descent, and moving from point to point.
* Installation of fixtures on tower components to facilitate the use of fall protection systems.
* Provision of an adequate work-positioning device system for workers. Connectors on positioning systems should be compatible with the tower components to which they are attached.
* Safety belts should be of not less than 16 millimeters (mm) (5/8 inch) two-in-one nylon or material of equivalent strength. Rope safety belts should be replaced before signs of aging or fraying of fibers become evident.
* When operating power tools at height, workers should use a second (backup) safety strap.

The other occupational health and safety hazards that may also arise during construction are common to other types of construction sites.

* + - 1. **Confined Space Entry**

The type of confined spaces encountered in telecom projects varies but may include underground fixed line infrastructure co-located with other underground infrastructure in urban areas. Telecommunications facility operators should develop and implement confined space entry procedures. The occupational hazards associated with confined spaces should be prevented according to the following recommendations:

* Providing safe means of access and egress from excavations, such as graded slopes, graded access route, or stairs and ladders
* Avoiding the operation of combustion equipment for prolonged periods inside excavations areas where other workers are required to enter unless the area is actively ventilated.
* Controlling site-specific factors which may contribute to excavation slope instability including, for example, the use of excavation dewatering, sidewalls support, and slope gradient adjustments that eliminate or minimize the risk of collapse, entrapment, or drowning.
  + - 1. **Motor Vehicle Risks**

The geographically dispersed nature of the infrastructure of some telecom operators may require the frequent use of ground transportation for maintenance activities. Under these circumstances, operators should prepare and implement motor vehicle safety programs to protect the safety of its workers and the communities in which they operate. Road safety initiatives proportional to the scope and nature of project activities should include:

* Adoption of best transport safety practices across all aspects of project operations with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public.
* Regular maintenance of vehicles and use of manufacturer approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure.
* Emphasizing safety aspects among drivers
* Improving driving skills and requiring licensing of drivers
* Adopting limits for trip duration and arranging driver rosters to avoid overtiredness.
* Avoiding dangerous routes and times of day to reduce the risk of accidents.
* Use of speed control devices (governors) on trucks, and remote monitoring of driver actions

**viii) Ambient Air Pollution**

During construction period OHS risk like inhalation of dust and smoke could affect respiratory organs and results in difficulty in breathing in a long-term on the project workers. This is also a community health and safety risk.

The measure recommended is:

* Watering work areas and using proper PPE could be considered.

**ix) Noise Pollution**

During construction period noise pollution results from equipment such as grinders and generators as a source of energy could be a risk for the workers.

The measures recommended:

* Avoid using heavy construction machinery during night-time.
* Select transport routes to minimize noise pollution in sensitive areas.
* Install noise silencer on the construction machineries.
* Where necessary, ensure good and appropriate selection of agriculture machinery and equipment with low level of noise.
* Where necessary, fit with noise mufflers and maintain the construction machineries and equipment timely to minimize excessive noise releases.
* When possible, select sub-project sites away from wildlife habitat during sub project screening.The process of applying the mitigation measures shall pass through engineering control, administrative controls and use of PPE steps.
* Engineering controls, administrative controls and use of personal protective are a three-tier hierarchy of controls is widely accepted as an intervention strategy for reducing, eliminating, or controlling workplace hazards, including noise pollution. The three tiers are:

***Use of engineering controls***

* The preferred approach to prevent and control noise pollution is to design the job to take account of the capabilities and limitations of the workforce using engineering controls.

***Use of administrative controls (changes in work practices and management policies)***

* Administrative control strategies are policies and practices that reduce noise pollution risk but they do not eliminate workplace hazards. Although engineering controls are preferred, administrative controls can be helpful as temporary measures until engineering controls can be implemented or when engineering controls are not technically feasible.

**Use of personal protective equipment (PPE)**

* PPE generally provides a barrier between the worker and hazard source. Respirators, ear plugs, safety goggles and hard hats are all examples of PPE. Although these devices may, in some situations, reduce the duration, frequency or intensity of exposure, evidence of their effectiveness in injury reduction is inconclusive. In some instances, these devices may decrease one exposure but increase another because the worker has to “fight” the device to perform the work.

### **6.2.8 Community Health and Safety Risks and Mitigation Measures**

Examples of community health and safety issues identified during the construction phase include exposure to construction vehicles and transports, and exposure to dust, noise and vibrations caused by construction activities, Labor influx (transmittable diseases), Conflict between workers and communities, SEA/SH risks and structural safety issues and use of armed security to secure project sites and operations. These hazards are common to most typical construction sites. These same sites may also attract unauthorized persons interested in climbing these structures, also representing a risk to their safety.

1. **Structural Safety Risk**

Communities may be exposed to structural safety issues in the event of structural failure of masts or towers during operation phase. This structure may cause collision.

Recommendations to manage site/structural safety issues include:

* Design and installation of tower structures and components according to good international industry practice, taking into account the potential frequency and magnitude of natural hazards.
* Erection of fences in combination with other institutional controls and management approaches, such as the posting of signs forbidding entry and placement of guards to protect the premises surrounding the site.
* Equipping masts or towers with anti-climbing devices to preclude unauthorized climbing.
* Such structures should be equipped with warning lights to prevent collision with aerial transports.

1. **Labor Influx**

Labor influx can provoke higher rates of violence, injury, alcohol and drug consumption and sexually transmitted diseases, GBV in the local population. The social interaction of workers with local communities especially in underserved communities may expose the latter to health risks such as HIV/AIDS.

Recommended mitigations:

* Establishing or upgrading health centers at camp and construction sites.
* Community sensitization on the project and project related risks.
* Awareness raising about public health risks/impacts from labor influx.
* Facilitate free testing and provision of condoms.
* Awareness raising on the Grievance Redress Facility for the project.

1. **Exposure to e-Waste Risk**

The infrastructure implementation of electrical and electric equipment will have risks/impacts on the community during construction and operation phases of the project. Risk of exposure to e waste- related toxicants through air (e.g. open burning of e-waste) soil (e.g. random disposal of e-waste), water via ingestion (e.g. food chains contamination due to disposal and primitive recycling processes), inhalation, and dermal absorption (e.g. dust and direct exposure of workers who labor in primitive recycling areas and their families). E-waste is not biodegradable with strong tendency to bioaccumulation in agricultural lands posing a community health concern.

Recommended Mitigations:

* Awareness raising on what e-waste is, risks of e-waste and how to handle it.
* The implementers or contractors should be forced to adopt the project e-waste management plan.
* Establish private service providers on administrative levels where the subproject implemented.

1. **Child or Forced Labor Risk**

It is anticipated child labor or forced labor may be conducted by the contractor who is going to implement the subprojects for infrastructure development in the EARDIP SOP II.

**Recommended Mitigations:**

* The Labor Management Plan of EARDIP SOP II should be publicized and forced on the contractors.
* Awareness creation among the contractor and supply chain actors.

1. **Security Risk including Rising from Security Personnel**

The security risks at project site could be kidnapping, violence, theft of equipment, tools and materials, vandalism, trespassing, and cyber threats.

**Recommended Mitigations:**

* Minimizing entry points.
* Constructing perimeter fencing and.
* Illuminating working site and support with CCTV camera.
* Taking steps to also secure construction sites away from the main work site, for instance adequately covering any construction works to oncoming traffic.

**Recommended actions in relation to security personnel:**

* Appropriate guideline (Good International Industry Practice GIIP- WB- Good Practice Note – Assessing and Managing the Risks and Impacts of the Use of Security Personnel and Good Practice Note: Assessing and Managing the Risks and Impacts of the Use of Security Personnel, ISO 31000) should be applied to hire, rules of conduct, training, equipping, and monitoring of such security personnel.
* Train security personnel adequately in the use of force, but when used it should be for preventive defensive purposes in proportion to the nature and extent of the threat.
* Training of workers on GBV/SEA-SH non-tolerance in the project and signing of CoC;
* The borrower reviews all allegation or unlawful or abusive acts of security personnel, act (or urge appropriate parties to take actions to prevent recurrence.
* The borrower will make reasonable inquiries to verify that the direct or contract workers retained by the borrower to provide security are not implicated in the past abuses.
* Apply the Security Risk Assessment developed for the project.

1. **Disaster Risks**

The projects direct impact on natural disaster risks can be: landslides, flooding, erosion, etc. Indirect impacts on the Environment

✔ Increase in deforestation (e.g. logging, land clearing, slash and burn, etc) ;

✔ Increase and facilitation in forest resource exploitation (industrial and local);

✔ Increase in poaching and harvesting of non-timber forest products;

**Recommended Mitigations:**

* Identifying disaster risks which require risk-specific intervention and cross-cutting institutional interventions and taking action accordingly.
* Contractor should sensitize workers on disaster prevention and put strict measures to minimize the impacts of natural disaster
* Application of computational methods and models to integrate disaster risk (landslide, flood, earthquake, erosion, drought, etc) calculations into infrastructure design [IT].
* Creating a system of centrally managed and institution-wide open disaster information can serve as a real-time decision-support system for utility companies, allowing them to make quick and informed disaster mitigation and management actions in a fast-changing environment like providing great information visibility to decision makers by centrally managing all disaster information (damage, restoration, and response status) collected by various departments within the utility institutions, and by summarizing important information in the institution-wide Activities Log.
* Establish early warning systems for floods, landslides and earthquakes.
* Enhance hazard mapping and analysis for floods, landslide and earthquakes.
* Working in collaboration with police and fire departments to get report about traffic restrictions and status of fires.

1. **Emergence Preparedness and Response**

If the project implementation process is not supported by appropriate emergence preparedness and response mechanisms, the impacts can be devastating.

**Recommended Mitigations:**

* Coordinating disaster information across different agencies and levels of governance, particularly for public utilities which are critically interconnected with other government agencies.
* Improving observation and collection of hazard information.
* Preparation and dissemination of hazard maps.
* Preparation of safety and evacuation information collection systems.
* Development of early warning systems.
* Emergency drills (Standard Operation Procedures-SOPs and Emergency Operation Centers-EOCs) & awareness raising.
* Preparation of emergency kits and Radio/backup communication tools [CT].
* Food and material stockpiling and emergency supply database.
* Business continuity planning- ICT BCP; relocation of crucial communication hardware, redundancy of key ICT systems, digitalization/cloud storage/backup of key DRM info, etc. [IT & CT].
* Improving and monitoring traffic control system
* Gathering information about blackouts, traffic restrictions, river levels, amount of precipitation, and information relating to medical service availability.
* Search and rescue-establishing disaster message phone line.
* First aid treatment- Incident report (real time data management system; medical supply monitoring/request software [IT & CT].
* Establishment of Emergency Operation Centers: Disaster management information system for real-time data gathering and visualization for decision-making; communication channels incident report database [IT & CT].
* Establishment and operation of evacuation center: Disaster management information system to update and communicate evacuees, supply, services, etc [IT & CT].
* Identification and distribution of relief supplies: Communication, disaster management information system to connect evolving demand (needs at evacuation center) and supply (needs) [IT & CT].
* Assessment, analysis, and communication of damage/situation reports and response plans, monitoring and warning of secondary disasters: Disaster managemen information system integrating updated (real-time) information from image monitoring tools (drones, helisat, satellite image assessments). [IT Communication software (social media, media, and hardware (mobile phones, radio, etc) [CT].
* Utility and infrastructure recovery: Disaster management information system [IT].
* Introduce traffic measures to prevent further damage to infrastructure materials and prevent heavy goods vehicles from travelling on recently refurbished roads or on flooded roads as this deform the surface.
* Introducing transitional traffic measures and mechanisms to clear rubble and debris from any priority routes, and to temporarily patch to damaged infrastructures to prevent further damage.

It is important to note that the emergency preparedness and response mechanisms and activities applies for project staffs workers and beneficiaries, but most activities shall be carried out in collaboration with the National Disaster Risk Management Commission. In this regard MInT shall sign an MOU with the National DRM commission and these activities shall be integrated to the annual plan of the commission. Thus, detail procedures and activities can be outlined between MInT/PIU and the commission, as a result the preparedness and response activities can be implemented smoothly.

### **6.2.9 Social Risks and Mitigation Measures**

The project will be implemented in parts of the country where borderland, historically underserved and vulnerable groups including refugees, IDPs and host communities reside. The historically underserved communities live, inter alia, in the lowlands of Afar, Somali, Gambella and Benishanguel-Gumuz. Vulnerable groups include women, elderly, female heads of households, unemployed youth, persons with disability. These groups in the population that are likely to be impacted adversely or benefit least from project activities. In the context of EARDIP SOP II project, certain communities from such specific targeted areas and with minority ethno-linguistic groups or specific livelihood are recognized as communities deserving special attention for equitable share of benefits from socio economic development of the country. These communities are constrained by limited availability of infrastructure and services and the livelihood strategy based on mobility (pastoral and agropastoral communities) often results in exclusion and inequitable benefits from socio economic improvements. The EARDIP SOP II has the potential to transform the lives of communities living in these regions. There are also risks that may prevent the project from attaining this objective. The social assessment conducted by the project has identified the main risks and planning measures. The following summarizes the key findings from the Social Assessment details is discussed in Annex K.

1. **Barriers to Benefits**

Historically underserved communities include those living in the lowlands of underserved regions (i.e. Gambella, Somali, Afar Regions) and vulnerable groups (including women, girls, non-literate people, people with disabilities, elderly, low income youth and borderland communities, IDPs and Refugees). There are many barriers that hinder access to project benefits by underserved communities and vulnerable people such as digital illiteracy; unavailability of power; lack of ICT infrastructure; unaffordability of ICT technologies and services; unavailability of user-friendly devices for people with disability; lack of awareness of the digital businesses; physical access problem for people with disabilities; and lack of awareness and readiness for the use of technology among the elderly. This presents a risk to effective project implementation. The following actions need to be taken:

* Provide flexible and customized ICT training to women, with a focus on practical skills that improve their access to employment Post QER EARDIP SOP II PAD (August 17, 2023), see Annex 2 table 2, page 48.
* Subsidize digital apparatuses and internet services to the vulnerable groups, including women, elderly, persons with disabilities, low-income households, etc.
* Improve ICT knowledge by providing short courses/trainings on digital skills and entrepreneurship in both urban and rural areas.
* Create economic opportunities through digital entrepreneurship.
* Digital equipment and services developers should ensure that people with disabilities gain the same benefits as the wider population. Depending on the nature of their impairment, provide additional technological and application/software features.

1. **Exclusion of Women**

Women and girls can be excluded from the project benefits due to embedded gender inequality, i.e., socio-economic, and cultural marginalization. Women’s time poverty means they find it difficult to balance their triple roles competing for their equal attention. Female household heads may face the risk of not benefiting from the project in equal measure with male counterparts because of not being able to balance their domestic responsibilities with their other roles. The low level of literacy and education attainment by women could exclude them from realizing project benefits.

* Enhance the status of women by increasing their access to digital technologies and information through affordable and accessible devices and services,
* Providing basic digital literacy etc, that would alleviate their burden, hence allows them to engage in a wide range of activities with reduced hardship and pressure. Beneficiary targeting might involve corruption, nepotism, and elite capture risks.
* The digital technology sector is dominated by men and the number of female graduates from ICT, Science and Technology fields is disproportionately low and the Science and Technology is often viewed as a ‘male profession’. To meet the project target of reaching 60% female access to digital services would require taking affirmative action to recruit, train and access services especially in underserved regions.

1. **Inequity of Benefits and Impact on Existing Power Structure and exclusion risks**:

It was observed the project might have potential differential impacts on beneficiaries: (i) the educated and urbanites are more likely to benefit from the project because of access and capacity to pay both for the digital technologies and the services; and (ii) the economically better-off, whether they live in rural or urban areas, might benefit more than others. The educated and urban residents are more likely to benefit from any project due to access and affordability advantages they have over others, which correspondingly creates a risk of exclusion that might be addressed using vouchers. There is a risk of creating more access to educated people, so that widening existing socio-economic gaps.

* Have a monitoring and evaluation system in place, which is implemented not only in diverse agro-ecological settings, but also in areas where government structures are the strongest (for purposes of comparison). This makes it very important to put in place effective and efficient M & E system.
* Use measures to address the affordability gap, such as vouchers, use of internet pre-purchase or device affordability initiatives, undertaken in conjunction with operators.

1. **Lack of Transparency, Corruption, Nepotism, and Elite Capture**

Lack of transparency and corrupt practices are challenges for proper targeting of beneficiaries for project activities (eg., training and incentives for ICT businesses). This may lead to risks associated with corruption, nepotism and elite capture which would and project benefits away from the intended target groups. Lack of transparency is especially problematic for vulnerable women as it exposes them to risks of GBV/SEAH. Mitigation measures will include:

* Developing and implementing clear and transparent guidelines to mitigate the risk of corruption, in line with WB guidelines.
* Effective M&E and citizen engagement, with a grievance redress mechanism which allows for anonymous reporting.

1. **Unintended long-term Impact of Access to Affordable Internet**

young children and adolescents might fall prey to human traffickers; be addicted to unnecessary contents (gender-based violence (GBV) and sexual exploitation).

* Provide proper content management education and training for parents and communities to mitigate the risk of online sexual abuse and exploitation of young children and adolescents.
* The ECA also must issue a regulation that helps mitigate this risk.

1. **Loss of Land and Other Assets**

Due to the nature of the sub-projects financed by the EARDIP SOP II, most of the construction activities for deployment of new fiber rollout along prioritized routes, rehabilitation of the damaged existing terrestrial fibers due to conflicts, last mile connectivity for refugee/IDPs, access road to transmission towers and other fixed connecting station, anticipated to require acquisition of ample land and permanent or temporary loss of assets or properties on the local community. The activities such as deployment of new fiber rollout along the prioritized routes and last mile connectivity to rural, borderland areas (Refugees/IDPs) will be implemented in consistent with requirements of the ESS 5.

* Appropriate to apply the Resettlement Policy Framework (RPF) by the project for subproject 1.1 and 1.2 before the commencement of the subproject so that the necessary measures will be implemented accordingly.
* Cash compensation for the harvest or product from the affected land or asset as per national law and ESS 5.
* Replacement land of same value of land lost and at location acceptable to PAPs where feasible.
* Cash compensation for affected building and other fixed assets, taking into account of replacement costs of structures and materials. In addition, cash assistance to cover costs of restoration of the remaining structure

1. **Risks on Physical Cultural Resources**

The subproject activities under subcomponent 1.1, 1.2 involves infrastructure developments like long distance linear trench excavation, back bone fiber rollout, transmission tower implementation, access road to the transmission tower. The danger that these subprojects may pass through protected and unidentified heritage sites will be avoided by having clear exclusion criteria (annex I).

* Determine the presence of legally protected or cultural heritage in the project implementation area.
* Develop Cultural heritage plan as appropriate before the commencement of subprojects and comply.
* Consult protected area sponsor, project affected parties (individuals or communities) or other interested party on the proposed project.

### **6.2.10 Cumulative Impacts of the Project**

Cumulative impacts are a result of effects that act together (including those from concurrent or planned future third-party activities) to affect the same resources and/or receptors as the Project under consideration (e.g., the combined effect of other similar projects in the general area).

In practice, effective design and implementation of complete Cumulative Impact Assessment (CIA) processes is often beyond the technical and financial capacity of a single developer as recognized in WBG’s Good Practice Handbook for CIA. CIA thus transcends the responsibility of a single project developer. However, it may be in the best interest of EARDIP SOP II to lead the CIA process, but the management measures that will be recommended because of the process may ultimately be effective only if other relevant institutions are involved.

CIA is guided by the following principles:

* Assesses the ecological and social impacts that determine the status of environmental components and affected communities;
* Requires consideration of past, present, and future projects and natural drivers that affect them; and
* Assessment reflects the geographical and temporal context in which the effects are aggregating and interacting (e.g., river catchment, town, landscape).

This Good Practice Handbook proposes as a useful preliminary approach for conducting a rapid cumulative impact assessment (RCIA). The RCIA can be an integral component of a subproject ESIA or a separate process. It entails a desk review that, in consultation with the affected communities and other stakeholders, enables the developer to determine whether its activities are likely to significantly affect the viability or sustainability of selected Valued Environmental and Social Components (VECs). The proposed approach recognizes that many challenges associated with managing a good CIA process include lack of basic baseline data, uncertainty associated with anticipated developments, limited government capacity, and absence of strategic regional, sectoral, or integrated resource planning schemes. Given the many challenges, the handbook recommends that developers:

* follow a six-step RCIA process,
* engage stakeholders as early as possible and throughout the decision-making process, and
* clearly record the fundamental reasoning behind each important decision made, supporting it with as much technical evidence as possible.

In conclusion, cumulative impact assessment on planned infrastructure deployment, & legacy issues that are directly related to enabling infrastructure &/or are generating ongoing impacts related to pre-existing facilities) & trans-boundary impacts with mitigation measures will be addressed in site specific E&S instrument(s) for EARDIP-SOP II subprojects when specific sites (including path of new telecom routes) are identified following technical studies.

The EARDIP SOP-II implemented in individual countries may have adverse impacts initially but these are considered relatively minor. On the other hand, several projects in combination with other government or private sector activities in individual country could result in larger and more significant cumulative positive impacts locally and regionally and may extend globally. The project also envisaged to create regional integration in different digital sectors among different countries through extending cross-border and backbone connectivity, data markets and online market environment by pool additional countries. Digital infrastructure development for broadband connectivity usually requires the use of electrical and electronic equipment believed to contain significant amounts of hazardous materials, but the lifetime of these investments is expected to be around 25-30 years, and probably longer in the case of buried fiber. At the end of their lifespan, these materials should be collected, dismantled, recovered, reused, and disposed of properly following international and national guidelines. As certain types of switching and transmitting equipment may require the use of solar power and backup power systems consisting of a combination of batteries (typically lead-acid batteries) and diesel-fueled backup generators for electricity. Operations and maintenance activities may also result in the generation of electronic waste (e.g., nickel-cadmium batteries and printed circuit boards from computer and other electronic equipment as well as backup power batteries). The operation of backup generators and service vehicles may also result in the generation of used tires, and waste oils and used filters. Transformer equipment may potentially contain Polychlorinated Biphenyls (PCBs) while cooling equipment may contain refrigerants (potential Ozone Depleting Substances [ODSs). But, tender documents will ensure that this is avoided. This is particularly the case of:

1. **Localized Green House Gases (GHGs)**

The Green House Gases from the backup generator, cooling and fire suppression system and vegetation clearing during construction could be insignificant if it is seen locally, but the cumulative effects of the GHGs from different development projects in different countries may result in large impacts regionally. The main Greenhouse Gases are CO2, water vapor and methane (CH4), and Nitrous oxides. These gases while released to the surrounding environment due to the project activities will have localized and regional climate change effects that can add up to the global climate change effects.

1. **Hazardous Materials and E-Waste**

As it is already mentioned in the hazardous and e-waste risks section digital infrastructure development for broadband connectivity usually requires the use of electrical and electronic equipment believed to contain significant amounts of hazardous materials. At their end of life these materials should be collected, dismantled, recovered, reused, and disposed properly following international and national guidelines by certified firm. This is vital as certain types of switching and transmitting equipment may require the use of solar power and backup power systems consisting of a combination of batteries (typically lead-acid batteries) and diesel-fueled backup generators for electricity. Operations and maintenance activities may also result in the generation of electronic waste (e.g., nickel-cadmium batteries and printed circuit boards from computer and other electronic equipment as well as backup power batteries). The operation of backup generators and service vehicles may also result in the generation of used tires, and waste oils and used filters. Transformer equipment may potentially contain Polychlorinated Biphenyls (PCBs) while cooling equipment may contain refrigerants (potential Ozone Depleting Substances [ODSs). The release of such hazardous and e-waste materials from different projects in individual countries to the natural environment will also result in cumulative impacts to the region.

1. **Air Emission**

Air emission from the individual subprojects of backup generators, from fuel combustion of motor vehicles, and land clearing could result in ambient air quality deterioration however, emission from different project in the individual countries in the region participated in the project implementation will have significant cumulative impacts.

The avoidance and mitigation of cumulative impacts require avoidance and mitigation of the impacts of individual projects; careful planning, based on sound technical knowledge, of the location, size and material and technical requirements of such digital integration projects from individual countries for local and regional planning.

Recommended Mitigation Measures:

The mitigation actions that are mentioned for environmental impacts above can be applied by the individual project participating countries to mitigate the regional.

### **6.2.11Cross Border Impacts of the Project**

Deployment of cross-border fiber optics between Djibouti and Ethiopia can bring many positive impacts, primarily by supporting the integration of national economies, creating economies of scale, and promoting trade, economic growth, and poverty reduction. These kinds of impacts can be significant for land-locked, low-trade, and resource-poor countries. Cross boarder infrastructure development is also important as it connects isolated communities and opens economic and social opportunities. It also fosters spread of knowledge, transfer of technologies and enrichment of cultural capital. This brings communities together and build trust which is important for any kind of cooperation.

The construction of cross border infrastructure project may lead to changes in land use, forest and vegetation coverage, ecosystems and biodiversity spots, and relocation of human settlements. These changes may put the affected regions, those already vulnerable to climate change, at great risk, and affect their abilities to adapt to climate change and maintain carbon sinks. Cross-border routes, those that open remote areas, can also become conduits for communicable diseases and the trafficking of people and drugs.

Recommended Mitigation Measures:

* Carefully selecting project sites and routes; developing and implementing proper contract awarding systems; specifying the green credentials required of head construction contractors.
* Engaging project-affected people and communities and concerned stakeholders in public consultation and disclosure processes during the project design stage.
* Sites and routes should not be located in sensitive areas such as watersheds, forest reserves, natural habitats, cultural and historic heritage sites, or tourism spots.

# **7. CONSULTATION WITH RELEVANT STAKEHOLDERS AND ESMF DISCLOSURE**

Federal Regional and Community level stakeholder consultations virtually and face to face have been conducted using the checklists prepared by the team prior to the commencement of consultation sessions. At the public consultation held in Addis, on September 21, 2022, and February 2, 2023, the main issues raised by stakeholders concerned the possible inclusion in the project design of an additional fiber link into South Sudan, For the moment this is not considered because it would involve traversing a mountainous area of outstanding national beauty. Instead, the project team would consider use satellite backhaul to cover this route if there is sufficient demand. The ESMF will be disclosed on the project website, at the MInT and at ECA, and in other appropriate and publicly accessible locations. Based on the consultation made the stakeholder opinion, towards the project is stated below:

## **7.1. Federal Level**

As part of the ESMF preparation process, consultations with stakeholders involved in project implementations, regulatory function as well as project beneficiaries were conducted. One sessions of face to face and virtual consultative meeting were held with federal and regional institutions. The World Bank project development team members and task team leaders have also been consulted multiple time from the commencement of the assignment. The consultation at federal institutions has been always started with a discussion to gather information regarding their knowledge of the EARDIP SOP II, and provision of explanation from the team about the project if they are not aware. The consultation was also focused on providing information and receiving the concerns and opinions of the participants regarding the overall EARDIP SOP II objectives, its main components for which the ESMF is prepared. The consultations were also carried out to obtain their input in the identification of potential environmental and social impacts of the EARDIP SOP II and design of mitigation measures, their institutional arrangements for the implementation of the project, the presence of E & S experts at their respective offices for the implementation of E & S mitigation measures, their policies, legislations, guidelines related to E & S risk management during the project life cycle were also discussed.

**MInT as Implementing Agency and ECA as Implementing Partner**

The authority vice director has been consulted, as key informer on Oct 11/2022. Ethiopian Communication Authority (ECA) is established as key implementing partners, with the objective of regulating communication service providers in promoting accessibility, affordability, and protection of the interest of consumers. ECA does not have any line institution at regional level, but they have designated body in the regional President office to solve any problem that the telecom operators face among themselves or with the local communities. ECA is already involved as implementing agency in the already existing EDFP project and ready to be part of EARDIP SOP II that can support its regulatory mission and vision. The authority is only one year since it come into picture, so eventually, there is shortage of technical human resources and institutional capacity thus the authority needs capacity building support for human resources, and to the designated bodies in the regions. ECA expects EARDIP SOP II support for the institutional capacity building to establish laboratory and expertise who can use the laboratory procedure and identify the outcome of any imported digital equipment. The authority also identifies some of E&S impacts that can be anticipated in the implementation of EARDIP SOP II, ecological damage due to civil work, optical fiber risk, electrical and magnetic field risks, risk of elevated work, structural failure of tower on the community and properties and Right of Way issues due to tower, transmission station and access roads. As mitigation the towers should be far from public infrastructures like schools, residents, and hospitals and the work force should be trained on the project risks and equipped with Personal Protective Equipment (PPE). This authority is implementing partner with the EDFP, so the E & S focal persons are already assigned and being participated in the E & S mitigation measures implementation, the focal persons are provided with E &S training in collaboration with the PIU and WB. So, the same focal person can serve for E & S concerns in the coming EARDIP SOP II subproject implementation. Regarding e-waste the authority is committed to reduce the e-waste from the source, so they are developing a guideline for operators and any ICT development agencies to follow and apply in importing and using green and climate resilient digital equipment.

**MInT as Main Implementing Institution**

The consultative meeting was made on October 24/2022 among the consultant and project focal point at MInT, to initiate the preparation of the ESMF. Other consultation meetings were held on September 21, 2022, and February 2, 2023, and during the pre-appraisal mission, from September 19-26, 2023. As the main implementing agency issues discussed with MInT project focal person in the initial meeting covered identification of the main stakeholder at all levels and their involvement modalities in the project and on how to reach the communities at the targeted regions, as well as EARDIP SOP II subcomponents and the potential environmental and social risks to resulted from physical construction activities, and the nature of the potential environmental and social risks were discussed. Ecosystem disruption, EHS risks, blockage of access, loss of land, economic and physical displacements, GBV due to labor influx and digital development and accessibility are identified as project risks/impacts. In addition, MInT expressed its concerns that the deployment of new fiber along the prioritized routes to be preferably from Kenya than Somalia as the area is vulnerable from security point of view.

**National ID as Partner MDAs**

The consultation meeting was also held on Oct 24/2022with NID director and experts of the agency. They are not aware of the EARDIP SOP II, but they accept this project with open arms as it will be very supportive to meet their organizational target, which is to issue a unique identifier that will serve as the primary proof of identity to access services to all Ethiopian citizens and to all resident from any part of the world. The officials also emphasize that the countries in the eastern African region beneficiary of EARDIP SOP II should also have to use or develop interoperable applications for their respective NID which can synchronize with the application that NID using for unique identification purposes. This will help to implement the online regional market and integration concept of the project. Additionally, NID underline that there is a need for a capacity building support from EARDIP SOP II for human resources in developing customized application from open sources and institutional capacity building. With respect to the ESMF implementation environmental and social focal person, assigned for E & S mitigation measure implementation for the support to EDFP can handle the E & S issues in EARDIP. The institution does not have lots of electronic equipment but to reduce the e-waste from the source they usually purchase electronic equipment which have climate and environment resilience and are very easy for recycling.

**Ministry of Women and Social Affairs (MoWSA)**

The consultation was conducted on Oct 26/2022 with the official in MoWSA expresses that Women in this country are not beneficiaries of online market facility developed regionally to participate 50 million women in Africa as they have digital capacity limitation both in know-how and digital facilities. Thus, the ministry believes that the EARDIP SOP II project can solve the gender disparity in the use of digital facilities and enable women at community level to participate in the regional and international trade opportunities. There is also a gap in gender equality in the projects implemented by different MDAs because women affair departments will not be invited to participate in project design and appraisal or implementation. The ministry also believes that EARDIP SOP II can support them in identifying the women owned businesses at community level and integrate it with the COMESA project for 50 million African Women.

**Ethiopian Investment Commission (EIC)**

The informant from EIC is the Director for ICT department, and it was conducted on Oct 28/2022. EIC would play a role in

* Creating easy way of doing business: providing license and writing supporting letter to regional states, city administration and concerned federal organizations to help investors easily acquire land and provisions of basic utilities for investment.
* Technical support in feasibility study of the intended investment project.
* Care Account Manager for each ICT based investment project for follow-up.
* Duty free for importing ICT equipment and materials.
* Value-chain investment approach.
* Promoting women only owned business enterprises by extending technical support.

**Ministry of Trade and Regional Integration (MoTRI)**

The consultation with MoTRI was conducted on Oct 28/2022, with the assigned official. The ministry will be benefited from the implementation of EARDIP SOP II as the project has common targets with the mandates of MoTRI and hence the ministry will be benefited with the implementation of EARDIP SOP II. MoTRI, is mandated for enhancing cross border trade, bilateral trade and regional integration and it is also a regulatory body for e-commerce and cross border trade and digital economy exchange system. However, the ministry faces challenges due to poor connectivity in the country. MoTRI also has both human and institutional capacity gaps where EARDIP SOP II can support as MoTRI involves in the previous World Bank supported project, aware of the E and S standards and policy of the World Bank.

**Environmental Protection Authority as partner MDA**

With the consultation made on Oct 31/2022, though, EPA is not implementing or beneficiary institution, the consulted governmental officials and E & S experts at authority are very happy as they have close working relation with the WB and glad to see such project who will respect and follow the national environmental and social regulations and guidelines in place by the authority. The standards and the guideline to be followed in the preparation of the E & S Safeguards instruments development will help the authority to identify gaps in the E & S policies, regulations, and guidelines that the authority issued so far and make proper corrective action. Furthermore, the authority is committed to facilitate and work with the project regarding the site specific E & S Safeguards instruments at federal and trans regional level where it has a jurisdiction. The authority has also good relationship with the regional EPAs (Zonal and Woredas too) in all regions and has a regular and periodical training session with the regional line ministries with the support of the World Bank. Though, there is a change in institutional structure and name from Ministry of Environment Forest and Climate Change (MoEFCC) to Environmental Protection Authority (EPA) all the ESIA regulations, guidelines, and directives to be applied or followed in the preparation of E & S scoping/screening and the main ESIA report preparation is the same. E-waste management is also acknowledged and get attention, and the authority has developed and issued e-waste management regulations for producers, distributors, retailers, importers, transporters, collection centers, re-furbishers, dismantlers, recyclers, and consumers of electrical and electronic wastes and the aim of this regulation is ensure safe production, handling, and disposal of electrical and electronic wastes by the private service providers and auditing and monitoring the e-waste handling processes procedures. In this regard as the authority has enough human and institutional capacity can act as partner to work with MInT and the private service providers concerning e-waste.

**EthERNet (under MoE) as Implementing MDA**

The consultation was made on Oct 31/2022, the focal person made a discussion with, under this implementing agency is aware of the project as EthERNet was part in the project appraisal process. The department is also a beneficiary of similar project (EDFP), it will also be benefited from this coming EARDIP SOP II project through component 3, NREN and hence they have big expectation and stake in the project implementation as:

* The Ministry of Education is the implementing partner and beneficiary institution and will have big role in all the project life cycle.
* The digital facility in the education sector is very poor as last mile connectivity is not in place and results in limitation in school and higher education connectivity.
* The project Implantation will facilitate regional integration in developing common curriculum to science subjects among universities, TVETs, CTEs, and high schools too.
* It will help the universities to access foreign libraries, educational and research resources (books, research papers, journals, and modules with best universities in the world)
* It will facilitate federal and regional universities with better connectivity to the internet at the moment, Addis Ababa university itself does not have connectivity that can cover the whole compass let alone the regional educational institutions.
* It will facilitate and support female university students to have connectivity at their own dormitories and reduce their exposure for bullying, defamation, and sexual harassment during the night, while travelling from dormitory to the library or vice versa.
* It will facilitate to integrate applied research activities with the actual industries in the country or in the region.
* The digital literacy is limited due to low level of connectivity at the universities.

With respect to the environmental and social safeguard activities for the implementation of the project, the department is already being involved with the support of the World Bank through the Ethiopia Digital Foundation Project (EDFP), to which the E & S focal person is assigned so the same focal person can work for this coming project as the focal person participated in many trainings provided by the WB and the EDFP PIU on E & S risk management and GRM processes & procedures. With the issue of e-waste management, the department also acknowledges significance of e-waste management as the generation of e-waste and associated hazardous wastes during construction and end-of-life digital equipment will be inevitable in the subproject activities. The institution also emphasized and recommended the need for responsible government organization and enhancement of private service provider for management of electronic and hazardous waste collection, storage, reuse, recovery, and safe disposal.

**Development Bank of Ethiopia (DBE) as Partner**

DBE consultation was held on Oct 31/2022 and DBE believes that EARDIP SOP II will contribute to enhance public private Partnership by improving access to finance for women. The project will enhance service delivery in the financial sector through technical assistance. The Development Bank of Ethiopia expects grants for women owned enterprises from the Digital Ethiopia project (Component 3) digital market platform. DBE can share its experience on hazardous waste management, on ESMS implementation, corrective action plan, field visit and putting in place a time bounded requirement. We have a rich experience in E and S safeguards, and we have a senior officer dedicated for this task. DBE also perceive the adverse impacts of the project as the Cable Land Stations (CLS) uses diesel generator or battery, it may have a hazard waste and can spoil the environment and in cities there may be a delay on securing permission certificate and there may be a delay in releasing grants from donor or MoF.

**Ministry of Labor and Skills (MoLS)**

The consultation with the Ministry of Labor and Skills was conducted on February 23/2023. The official with whom the discussion was made, is very well aware of the World Bank project as this person is the focal person for the EDFP and believes that MoLS will be benefited from EARDIP SOP II subproject activities through IT job to be created, improved access to connectivity and access through shared digital infrastructures. Regarding E &S issues the ministry already engaged with EDFP and assigned one focal person to handle any E & S issues related to the subproject. MoLS also recognized that the network expansion to network TVETs will have small distance excavation, backfilling, and fiber rollout activities where E & S risks will be ultimate. Moreover, for such network expansion there are some electronic instruments to be provided like routers and other electronic accessories, which will add up the e-waste sources after end-of life.

## **7.2. Regional Level**

The consultation made with the regional and Woreda as well as community level includes regional (MInT line ministry, Regional Environmental Protection Authority, REPA, Regional Trade and Industry, Rural Land Use Administration, Regional Peace and Security, and Women and Child Affairs. The specific checklist prepared for the regional, woreda and community level is used for the key informants at this level. In all cases the consultation was started with the knowledge of the participants about EARDIP and briefing about the project, objectives the activities in the components to be implemented. The consultation was based on questions from the checklist and chances have been given to receive their opinion and comments about the natural resources in the project targeted areas, potential risks they perceive due to project implementation, the security conditions of the area, the institutional and human capacity they have for the implementation of E & S risk management instruments. As security condition is volatile the team is not able to conduct face to face regional and woreda or community level consultations for Somali and Gambella regions however, virtual consultation meeting were conducted with the Somali and Gambella regional state stakeholders (implementing, and partner) on Nov 07 and 16/2022 respectively. During the consultation, discussions were also held on devising feasible institutional arrangements necessary for implementation of the E & S risk management and on the recommendation necessary to fill any capacity gaps they have.

### **7.2.1. Somali Region**

In this virtual meeting from Somali regional MInT line ministry as implementing agency, regional environmental protection authority and rural land use, and women & child affair office officials and experts were involved. From this consultation meeting, the team able to learn that the regional stakeholders are very happy to have such project as it expands their connectivity coverage which is only 10% presently, very small coverage taking the area coverage of the region into consideration which is the second after Oromia region. They have also mentioned that the Somali people are very fond of their land so measures should be applied to avoid, reduce, or mitigate the loss of land by the rural community if it is a must they have their own cultural ways of compensation mechanisms for the communal and private lands. Regarding the E & S structures at woreda level they have E & S experts who can handle any concerning issues in the implementation of the subprojects, but the E& S experts at the regional, zonal and woreda levels need for training and capacity building specifically related to the implantation of ESMF and mitigation measures of the project. One participant from the REPA is also recommend that the site specific E & S Safeguards instruments should be done with registered, well experienced, and licensed firms as the region has lots of livestock, ecologically sensitive ecosystems and host migratory wildlife, mines, oil and gas, water resources (Rivers, artificial ponds, and reservoirs), riparian vegetation and cultural heritages on which this project might risk. The women and child affair office of the Somali region has also expressed a concern on the structural problem they have that may block the project benefit as the social affair office is a standalone office which is different from other regions and federal level. With respect to the e-waste management in the region municipality is the one who collect, solid waste (hazardous and e-waste), but recently the e-waste management regulation is on pipeline to involve private service provider to handle and manage e-waste in the region.

### **7.2.2. Afar Region**

#### **7.2.2.1. Consultation at Regional Level**

A visit to regional MInT (the lead implementing agency), Regional EPA and Rural land use, Trade and Industry office, regional peace and security, women and social affairs offices were made from Nov 09-13/2022 to carryout in depth consultation and discussion with regard to existing institutional capacities, practices, and experiences in the area of environmental and social management in general and the ESMF procedures in particular. The Afar regional MInT office is very happy to have such project that can improve the connectivity in the region, and they are ready to help the realization of this project in their region. With the E & S personnel deployment in the project implementation the main implementing agency regional MInT does not have E&S experts in the structure but the regional EPA as the partner agency has enough human resource at regional and woreda level can extend the support to review and approve site specific E & S Safeguards and to monitor the implementation of E & S mitigations in the ESMF but the only concern of office is the site specific E & S instruments should be conducted by registered and licensed firms as the area has lots of migratory wild life and water bodies ( rivers, reservoirs) and cultural heritages and historical places. The office also has the human capacity to give any technical advice for the PSC at regional level. The region does not have any institution to handle the e-waste management, but they can issue an MOU with the federal level e-waste service provider to handle and manage the e-waste generated from the region. The rural land use administration office they are very happy to have such project as they expect to get support through the training on GIS and RS experts who are working on land administration. To the acquire land for project implementation from the rural people the project implementer should follow the procedure in the Afar culture where they must communicate the clan leaders and discuss what they can benefited from the project implementation first to acquire any size or type of land.

The regional trade and industry office they are presently provide and renew trade licenses online as they are the gate for import and export of the country, but they face difficulty in their day-to-day activities due to network on and off so it is a great relief to have such project that can improve connectivity challenges in the region. It will push them to their milestone if they will be supported by EARDIP SOP II. The staff in the office needs capacity building to handle the digital platform that will be developed by the support of this EARDIP SOP II as well as digital facility support. The peace and security office of the region is also happy and ready to fill the gap in realization of the implementation of this project. From the discussion with Women and child affair, the exiting activities like initiatives on training, diary production, and other pastoral community development activities can be integrated with the activities and platforms of EARDIP SOP II.

There are IDPs in Zone 2, 5 and 1, hence we can use the project to provide digital services to them. There are some negative consequences of the war on the northern part of Ethiopia and early marriage is accompanied with dropping out from school; thus EARDIP SOP II can help us to fight such kinds of malpractices. There is high rate of 1-5 years old mortality, and these platforms (Internet Exchange Points and mobile solutions) can be used for emergency response purposes. We can mobilize resources and traditional communication mechanisms like *‘Dagu’* and work on local radio transmission to promote the project and enhance community engagement. Another contribution will be working on follow-up and reporting on the project progress and overall implementation. Project implementation can be facilitated by working with NGOs, Women and Child affairs, and the GRM activities can be linked to the women development groups and can help to prevent GBV.

#### **7.2.2.2. Consultation Woreda and Community Level**

The community consultation at Elidar Woreda was conducted on Nov 18/2022. The Head for Trade Office, Peace and Security office, Women and Child Affair Office and Rural land and Urban Development were participated in the consultation. They are very happy as the project will create job to the young community members, and it improve the on and off network in the areas the pastoral communities benefited as well. For any social risks emanated from the project implementation, it is conceivable that conflicts over resource allocation may arise during project implementation Afar is known for the conflict resolution mechanisms using the Clan leaders, thus if any conflicts arise, the participants promised to solve it in the usual Afar cultural ways with the clan leaders. But if the issue is beyond the clan leaders it will be escalated to the court with the participation of the clan leaders to facilitate the solution. The person from women and child affairs office expresses that they have never participated before in such consultation about a project to be implemented in their area and emphasized that the women in the woreda will be initiated to start small businesses and will be benefited from the capacity building program to be conducted by the EARDIP SOP II in the area of small businesses on digital services and technicalities on how to use digital facilities. Regarding the adverse effects of the project, the community did not anticipate any significant environmental risks due to project implementation as there are not any sensitive ecological resources or historical or cultural sites in this Woreda.

The person from peace and security ensures that there is not any security problem in their Woreda. Likewise, the kebele level community participation was held on same day with the Woreda, on Nov 18/2022. The number of people participated were eighteen, comprised of two Clan leaders, fifteen community members, and one person from the head for community level Women Affairs Office. Out of the eighteen consultation participants five were female that makes 28% of the participants. The community is very happy to have such project as they believe that the project will bring a job opportunity and improve the network in the area. The community did not anticipate any significant environmental risks from the project implementation, as there are not any sensitive ecological resources, women in Afar are expected to remain at home to handle all household choirs and taking care of their kids so participation were limited. However, due to this project the women in this community can be benefited from the job opportunity that this project will bring to the area. There are not any refugee camps or IDPs around this community the area is very peaceful and secured.

## **7.2.3. Gambella Region**

The virtual consultation meeting with the Gambella region was made on 16 of Nov/2022. The regional MInT line ministry, Women and Social Affair, peace and security and R/EPA are participated in the consultation. The technology is welcomed by the representative as it will be very helpful to the borderland communities the IDPs and refugees as this area host more than 24 refugee camps in this region. They anticipated the project to be very helpful in easing the problem in land administration of the region. However, the participants emphasize that as the subproject activities needs land acquisition which is a very sensitive issue in the region it is recommended that the community should be sensitized through awareness creation programs about the project objectives and what the community will benefited from. The community consultation will also be very important as the project implementation site is very rich in natural resources like forest reserves, mineral resources (Gold), migratory wildlife, indigenous wildlife, and water resources (Rivers, artificial boreholes etc.). Moreover, the land in the Dima area is already administered to many private gold mining private firms hence the assessment will be very helpful to know the attitude of the community towards the project and enable the implementer to identify the place where the subproject can be carried out. The REPA also has enough experts to review and approve any site specific E & S Safeguards and monitoring the implementation of the project. Regarding the capacity in implementing and monitoring the coming project all agree that they have enough human resources and strong institutional arrangement. The participants are also having a concern as the peace and security condition in the project implementation Woreda, Dima is volatile as there are some cross boarder armed groups. However, they express their hope that it will not be an obstacle for the project implementation because it is not continuous incidence as situations are improving.

The main implementing agency MInT/PIU will ensure continuous community engagement and conducting localized mini surveys to assess the scale of some of the potential challenges these groups may face. The project Stakeholder Engagement plan also outlines a process for regular consultation with vulnerable groups and underserved communities during implementation. The SEP includes six monthly consultation meeting and annual survey to receive feedback on project implementation and quality of services from communities.

**7.3. Summary of Key Findings from Stakeholder Consultations During ESMF Preparation**

For the preparation of this ESMF, consultations have been conducted with relevant stakeholders from federal to community levels, as discussed in the earlier sections.

Before directly going to stakeholder and community consultations, participants were introduced with the nature, scale and potential positive social, environmental and economic impacts of the proposed project. This was followed by description of the potential negative impacts of the EARDIP SOP II focusing on the project activities under each component of the project. Finally, the participants in the community consultations were let to express their views and concerns. The views and concerns raised are summarized into the following key points.

The project is accepted by all federal and regional institutions including grass root level communities.

Most of the federal institutions at national level have World Bank project implementation experiences to comply with the World Bank and National E&S requirements.

The proposed project is welcomed. The participants in stakeholder consultations shared the view that the project can benefit the local community in multiple ways including:

* The implementation of the EARDIP SOP II will basically address the lack or poor connectivity infrastructure that has been existing in the local area for years.
* The implementation of the project would facilitate easy communication for the local communities for their social and economic purposes.
* The undertaking of the proposed project can increase the basic digital literacy of the local communities, particularly the pastoral communities.
* The project is also welcomed as it encourages pastoral communities to invest in areas outside livestock or digital economy.
* Job opportunities to local communities due to the implementation of the project in their local areas.
* The project intends special consideration for disadvantaged or vulnerable groups and Historically Underserved Communities in digital economic based enterprises.

Despite welcoming the project for the aforesaid potential positive social, environmental and economic impacts, consultation participants raised a serious concern about the risks and adverse impacts of due to project-related E&S as well as health and safety potential risks and impacts. In particularly, the concerns of the participants focus on: what procedures of project-related land acquisition will be followed; what kind of compensation will be provided for the affected persons; what kind of procedures will be followed to express dissatisfaction on the project or any compliant; how disputes involving community members and project workers will be addressed; how local employment promoted, etc. Accordingly, responses were given that:

* The procedures of project-related land acquisition strictly adhere to the national legal framework, World Bank’s ESS 5 and RF developed for EARDIP SOP II, after disclosure of relevant project-related information to the affected individuals or communities. No displacement will take place before payments of compensation.
* The project will provide priority of employment opportunities (often, semi-skilled and unskilled labor) for local residents where the project activities will be undertaken. Elders, local government structures and PAPs representative will be represented in processing in collaboration with project contractors/ subcontractors or IAs.
* The project will establish strong and accessible (structure from community to regional level) Grievance Redress Mechanism to manage disputes and disagreement on any part of the project interventions. Participants were given the awareness that if grievance is unresolved through project’s GRM, the affected persons have the right to appeal to the formal court system. Moreover, the project will in place workers COC to manage relationship with the communities.

Likewise, disadvantaged or vulnerable individuals and groups (including women, the elderly, people with disability, and pastoral communities) have raised their concern on how the project will address their special social and economic barriers with differential adverse impacts of the project-induced risks and impacts. Response was given that EARDIP SOP II has developed Social Assessment (SA) embedded with social development plan (SDP) to incorporate the differential mitigation measures for the disadvantaged and vulnerable individuals and groups such as differential measures for active engagement and securing benefits from the proposed project. Furthermore, HUCS or pastoral communities were explained that the project requires obtaining Free, Prior and Informed Consent (FPIC) of the affected pastoral communities in circumstances in which project-related land acquisition or restriction on land use have adverse impacts on land and natural resources subject to their traditional ownership or under customary use or occupation.

Finally, consensus was made with the participants that: (a) awareness is created on the potential risks and adverse impacts due to project interventions, including land acquisitions and restriction on land use; (b) any project activity with the risk of physical or economic displacement shall not be commenced without the preparation of appropriate resettlement plan and active engagement of the displaced persons in the planning, implementation and monitoring of resettlement mitigation measures; and (c) the need to incorporate the above mentioned views and concerns of consulted stakeholders in to this ESMF. More specifically, the views and concerns of the consultation participants are used as inputs for the development and implementation of ESMF, SEP, RF, ESIA, RP, LRP, etc. (d) robust grievance redress mechanism is vital.

# **GRIEVANCE REDRESS MECHANISM**

## **Project Grievance Redress Mechanism**

While considerable efforts have been made to include the Environmental and Social Standards in the design and implementation of the project in order to minimize and prevent potential impacts, there is always a possibility that interests of some individuals, groups and institutions may still be negatively affected by the project activities. Typical grievances that are anticipated from the implementation of EARDIP SOP II activities may relate to the following:

* Discriminatory practices including gender and disability in selection of beneficiaries (government officials, civil servants, grantees, etc.).
* Complaints on targeting, selection criteria.
* Displacement related complaints.
* Poor quality of services, delays or inadequate support compared to needs or promises.
* Poor accessibility of services for persons with disability.
* Poor relations with contractor workers during implementation
* Corrupt practices and lack of transparency in selection of beneficiaries -trainees, grantees
* Sexual exploitation, abuse gender-based violence
* Poor consultation and lack of information
* Environmental pollution during construction such as nuisance (dust and noise).
* Health related grievances (long term health effects of project)
* Safety issues (surrounding communities may be exposed to danger with the thieves targeting the project infrastructures)
* Other issues related procurement processes and decision of the project.

## **Institutional Arrangement of the GRM**

Grievance Redress Mechanisms (GRMs) can be an effective tool for early identification, assessment, and resolution of complaints on projects. Grievance Redress Mechanisms (GRMs) are institutions, instruments, methods, and processes by which a resolution to a grievance is sought and provided. It is a way to receive, assess or review and resolve complaints that may arise from the EARDIP SOP II supported activities, though that propject has not, to date, received any safeguards-related grievances. Understanding when and how a GRM may improve project outcomes can help both project teams and beneficiary institutions improve results. The goals of GRM are (i) open channels for effective communication (ii) mitigate or prevent adverse impacts on individuals and communities caused by projects activities, (iv) improve trust and respect, and promote productive relationships. The main objective of a Grievance Redress Mechanism (GRM) is to assist to resolve complaints and grievances in a timely, effective, and efficient manner that satisfies all parties involved. Specifically, it provides a transparent and credible process for fair, effective, and lasting outcomes. It also builds trust and cooperation as an integral component of broader community consultation that facilitates corrective actions. Specifically, the GRM:

* Provides affected people with avenues for making a complaint or resolving any dispute that may arise during the implementation of projects.
* Allow anonymous grievances to be raised and addressed; compliant boxes and others that allows anonymity of the complainant will be available.
* Ensures that culturally appropriate and mutually acceptable redress actions are identified and implemented to the satisfaction of complainants; and
* Avoids the need to resort to judicial proceedings.

Grievance mechanism for the project should be adapted to the specific contexts of project implementation. The grievance mechanism should be accessible and needs to be integrated with the existing grievance mechanisms in Regions, Woreda, MDAs, universities, TVETs focal regional bureaus and implementing agency and partner ministries. Similarly, grievance mechanism in the context of underserved communities requires an approach that considers the existing community institutions and local mechanisms. The GRM should be close to the potentially affected communities.

**Grievance Management Platforms**

**Project Grievance Committee**: The project will set up a project level grievance mechanism consisting of representatives from the members of the PSCs. Itwill the final level of the GRM within the project.

**Implementing Agency/Partner GRC**- Each federal level implementing agency and partners (MiNT, ECA, MoE/Ethernet MoTRI) will within the existing grievance mechanism assign a focal person for handling of project related grievances. The GRCs will address project related grievances submitted directly or through the regional bureaus of health, education.

**Beneficiary institution GRC**: Beneficiary institutions (MoH, MoLS, MoWSA, and NID) and offices such as universities and TVETs will use existing GRCs to receive and address grievances where feasible and forward to the respective federal level implementing agency.

**Woreda GRC**- The woreda level GRCs will also assign a focal person for project related grievances, address grievances and report to the respective regional bureaus. The grievance handling arrangements do not replace the formal system of justice; however, complainants who feel their grievance has not been fairly handled may seek justice in the court of law. The PIU is the responsible body for ensuring that all beneficiary institutions have functioning GRCs in place and GRM procedures are followed, documentation and reporting of grievances. The PIU should provide regular training to improve the capacity of GRMS at various levels. handling of GRMs.

There will be several tiers for grievance redress. For urgent matters that need immediate attention, supervision consultants and contractors will provide easily accessible contact details for speedy resolution. The name, designation, and contact number of personnel responsible for grievance redress—that is, the safeguard manager, special officer on HUCs affairs, and the key person of the implementing unit—will be posted in the contractor’s and PIU’s site office in full view of the public. If possible, this will be translated into local language, if any written form exists, or in a language understandable to the HUCs. Simple grievances and those needing immediate redress will be resolved onsite by the contractor and the project management supervision consultant (PIU) engineer. If the grievance is not addressed in 7 days at field level, they will be escalated to the safeguard manager and special officer on HUCs affairs at the PIU. During all these activities, the implementing unit will maintain liaison and assist the aggrieved HUCs/ communities. Grievances of an immediate and urgent nature should be resolved at PIU level within 15 days of registration of grievances, in written form. The assistance of the implementing unit will be sought. If necessary, a joint field visit should be made by the PIU safeguards manager and special officer on HUCs affairs, the local implementation unit at PIU level, and the site engineers from the contractor’s and PMCU’s office to verify justification and nature of the grievances, and seek mitigation measures to resolve the grievance, with consultation with the HUCs, community, and representatives.

Major grievances that cannot be resolved at PIU level will be forwarded to the grievance redress committee (GRC) set up at district level under the chairmanship of the District Collector and having the District Social and Women Affairs Officer as member. For addressing issues related to the HUCs, one expert member will be inducted into the committee who will provide best judgment and advice to resolve issues of the HUCs. The GRC will try to resolve the issues within 30 days. All documents related to grievances and follow-up action taken to resolve them, along with an explanatory note on the nature, seriousness, and time taken for grievance redress, shall be prepared by the PMCU special officer on HUCs affairs and circulated to GRC members at least 1 week prior to the scheduled meeting. The decision taken at the GRC level will be communicated to the HUCs/ community by the PIU and the implementing local unit. For any issues that remain unresolved by the GRC, or if the decision made at such meetings is not acceptable, the HUCs/community can approach the Court of Law.

## **Grievance Procedures**

The GRM process for EARDIP SOP II will consist of the following steps:

1) Complaint uptake,

2) Complaint assessment and analysis,

3) Resolution and closure,

4) Grievance Registry, and

5) GRM Monitoring and Evaluation.

**Table 7: Tentative Time Allocation for GRM Activities**

|  |  |  |
| --- | --- | --- |
| **Grievance mechanism** | **Length of Time** | **Remarks** |
| Assigning local elder/traditional grievance redress institution/kebele/woreda | During the public meeting through the first phase of the project. | The flow of the project grievance redress mechanism will be introduced to the assigned party |
| Accepting grievances submitted through a channel of: in person in oral /written form, phone, text message, mail, e-mail | 1 day |  |
| grievances are registered in writing and maintained as a database | 2 days |  |
| Acknowledgement of grievances | 2 days |  |
| Presenting Grievance to appropriate body | 3-5 days |  |
| Development of verified response | 2 days |  |
| Redress action implemented and update of progress on resolution communicated to complainant | 1. Week |  |

1) Complaints Uptake: The project will have three different pathways for submission of grievances

*Pathways*:

* Pathway 1- is for grievances related to expansion of services to underserved communities and rural areas. The first point of complaint under pathway 1 will be existing GRMs in the kebeles/Woredas where the complainant resides.
* Pathway 2- is for grievances related to beneficiary government offices and institutions targeted by the project. The first point of grievance under pathway 2 is the GRM of the targeted beneficiary institution (public institution, city administration or Woreda office, university, TVET, etc).
* Pathway 3: is for grievances related to component 3.1 by aggrieved persons, farmers or MSMEs that could be submitted directly to the project level GRM.

***Submission:***

**Face to face**: This may be verbal or written submissions done at any time through face-to-face interactions with members of committees, program officials, local administration structures. The name and contact details of the focal person for the GRC at project site shall be disclosed in a clear and observable location such as notice board located at project activity sites or service points.

**Complaint Box**: Grievance boxes placed in strategic places of project implementation sites or communities where project affected parties would drop in their grievances at any time. These will locate at visible sites where project activities take place and at service points (eg. libraries, internet cafes or offices). The boxes will be marked and secured. Phone Call or SMS: This will be at project affected party’s own discretion and capability. Where possible, details of relevant immediate contact persons in the project area shall be made available. It is advisable for project to develop digital technology grievance management system which is very easily accessible for the public and promote the availability of different options for any grievance that the public can raise.

2) Case Assessment and Analysis: When a complaint is received, a maximum of ten (10) days will be provided for the GRC to access, analyze and respond to the affected person. This is so to make sure that grievances/complaints are resolved as early as possible.

The GRM committee shall be consisting of both male and female representatives. The GRM-C for PAPs will have as members of 9: (i) deputy Woreda administrator of the district/Woreda as Chairperson, (ii) revenue department (registrar) official, (iii) Woreda Level PMU social safeguard specialist; (iii) PMU social safeguard officer/special officer on PAP affairs, who will request for inclusion of PAPs’ issues related to EARDIP SOP II in the periodic meeting of the district monitoring committee and shoulder responsibility of keeping records of grievances/complaints in detail, with help from the resettlement committee, (v) expert on social and women affairs; and (v) Woreda Social Affairs Officer as convener. Hence, the existing structure of the district/Woreda monitoring committee will remain; and project-related social safeguard/PAPs affairs officers will join the meeting of the Woreda monitoring committee for discussions on any grievances / complaints lodged by PAPs, that cannot be resolved at field level. Other members, such as NGO/CBO representatives, community development representatives, and other PAPs representatives will be selected by the Woreda Social Affairs Officer to represent them in the GRC meeting. The local implementation unit should also deploy one person in the team who will be responsible for coordinating with all GRM-C members and the Development Agents (DAs) for grievance redress. They should be able to accept complaints, provide relevant information on the process, discuss the complainants’ situations with the concerned person, and explore possible approaches for resolution. Costs related to GRM implementation mechanisms will be covered from the estimated cost of the ESMF implementation (see on section 11).

Once complaints received, the GRM committees shall assesses:

* whether the complaint is related to the project or not, whether the case can be ably handled at their level or another,
* whether the case can effectively be handled through the project GRM or alternative mechanisms (formal court), Where possible, provision of instant feedback will be made depending on the nature of the cases.

3)Handling of complaints- this includes hearing and investigation

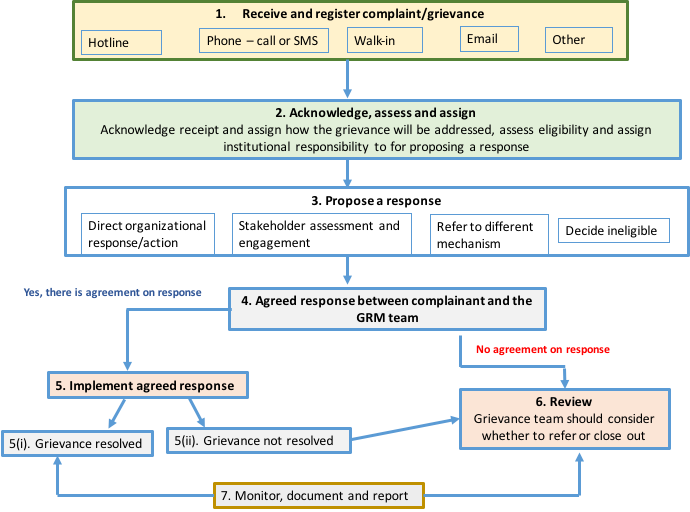
4) Case Resolution and Closure

* Where a resolution has been arrived at and the affected party accepts the resolution, this will be recorded, and case will be closed.

5) GRM Registry and Reporting

* All grievances received will recorded on a GRM registry that shall be maintained at all the GRM committee levels following the guidelines to be provided by PIU.

All measures will be undertaken to ensure that the grievance is solved amicably between the concerned parties and the courts will be the last resort. Efficiency in solving of the grievances will be of paramount importance. The above steps are summarized in the Figure 6 below.



**Figure 6: PAPs Grievance Resolution Channels**

## **8.1.3. GBV Related Grievance Redress**

The project has conducted GBV risk assessment which identified GBV related risks and, mitigation measures. The project should as part of the Environmental and Social screening process assess the GBV risks within the project sites and map existing prevention and handling mechanisms as well as the service providers in specific the project sites. This will be conducted by a GBV specialist. Once the GBV assessments are finalized, procedure for management of GBV related complaints will be developed. The specific procedures for GBV will ensure confidential reporting with safe and ethical documenting of GBV cases. The Gender Action Plan recommends that the project engage a GBV specialist on a part time basis to support the screening, mapping of institutions, develop GBV pathways, conduct awareness raising and training on GBV complaints handling mechanism. Project workers, project provided service point supervisors (eg. library supervisors, internet service supervisors), gender officers, local community members and other relevant bodies such as local GBV service providers will undergo training on GBV/SEA and SH. Well-functioning GRMs include multiple channels for voicing feedback or grievances, are widely accessible for different stakeholders, culturally appropriate, and entail strong complaint resolution and feedback functions. When GBV related complaint is received at any point of complaint pathway should observe confidentiality.

The GRC will designate a member for GBV complaints handling. Once complaint is reported to the relevant committee, and immediate actions should be taken that is consistent with the wishes and choices, rights, and dignity of the complainant. The complainant should be given information in simple and clear terms on the steps for filing complaints and the possible outcomes, the timelines, and the types of supports available to be able to make informed decision. For GBV cases, it is important to ensure that access to the complaints processes is as easy and as safe as possible for the complainant survivor. The recording of incidence should be limited to the nature of complaint put exactly in the words of the complainant, the age of the survivor and if to the best of their knowledge, the perpetrator was associated with the project. The complainant should decide on whether they would like to be referred to the grievance committee and the complainant should give consent to share basic monitoring data.

**Safety & Well-Being:** The safety of the survivor shall be ensured at all times including during reporting, investigation, and the provision of victim assistance. Those involved in the management of complaints will need to consider potential dangers and risks to all parties (including the survivor, the complainant if different, the subject of the complaint, and the organizations involved), and streamline ways to prevent additional harm in all the complaint handling process.

The survivor is never to blame for reporting an act of GBV and should never be made feel investigated. On the contrary, it is important that she/he feels that her story is heard, believed, and valued. The actions and responses of the complaint mechanism will be guided by respect for the choices, needs, rights, and the dignity of the survivor.

**Confidentiality:** The confidentiality of complainants, survivors, and other relevant parties must be always respected. All GBV-related information must be kept confidential, identities must be protected, and the personal information on survivors should be collected and shared only with the informed consent of the person concerned and on a strict need-to-know basis. \

**Survivor-Centered Approach:** All prevention and responses action will need to balance the respect for due process with the requirements of a survivor-centered approach in which the survivor’s choices, needs, safety, and wellbeing remain at the center in all matters and procedures. As such, all actions taken should be guided by respect for choices, needs, rights and dignity of the survivor, whose agency and resilience must be fostered through the complaint process.

**Accessibility and non-discrimination:** The mechanism must be accessible to all potential complainants and sufficient information must be given on how to access it, making the complaints process accessible to the largest possible number of people. This includes identifying and instituting various entry points that are both gender and context sensitive. To facilitate incidents reporting and avoid stigmatization, reports from third parties (witnesses, people suspicious or aware of an incident, etc.) must also follow accountability protocols.

**Labor Related Grievances:** The grievance redress mechanism (GRM) for addressing and managing workplace and employment related conflicts or complaints as well as GBV is crucial for the project. A project worker who has a complaint or grievance has the right to present it and obtain proper redress through the Worker Grievance Mechanism (WGM) established by the project for this purpose. In this project, a grievance mechanism will be provided for all workers (direct and contracted), who will be informed of the GRM at the time of recruitment and the measures put in place to protect them against reprisal for its use. Measures will be put in place to make the GRM is easily accessible to all project workers. A worker’s grievance mechanism will be set up for workers on site such as daily laborers hired from local community in project sites. In best practice, WGRMs will be housed or usually set-up and run by the contractors with the participation of the supervision consultant representatives (RE and/or E and S personnel).

## **8.1.4. GRM Publicization and Sensitization of Stakeholders**

The PIU ESS will initially brief all staff of the project office, the Project Steering Committee (PSC), consultants and contractors on the Grievance Redress Mechanism and GBV complaints mechanism of the Project and explain to them the procedures and formats to be used including the reporting procedures. The project Social Specialist will brief all project stakeholders on the Grievance Redress Mechanism of the Project and explain the procedures and formats to be used including the reporting procedures. Awareness campaigns would be conducted targeting project stakeholders to inform them of the availability of the mechanism; various mediums will be used- as detailed in previous sections of the SEP. The GRM will also be published on the MInT website and those of the implementing partners and the project website or Facebook page if there is one. A project site board will be erected on the sites of sub-projects indicating the existence of the mechanism and a phone number, email, and address for further information. The GRM will be translated into local languages if needed. Workers in project sites will be informed of the Workers Grievance Mechanism that will be established by the project. Training and capacity building activities should be conducted regularly as well as monitoring the effectiveness of the grievance.

* 1. **World Bank Grievance Redress System**

Communities and individuals who believe that they are adversely affected by the World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB’s independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non - compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to World Bank’s corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit [www.inspectionpanel.org](http://www.inspectionpanel.org).

# **9. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN**

This Chapter describes a generic Environmental and Social Management Plan ESMP for ESMF implementation. The ESMP brings to synergy and alignment the implementation of mitigations measures to address risks and impacts, and the responsibilities for mitigation and monitoring. The costs for mitigation and monitoring cannot be determined at this point as specific details are unknown. Nonetheless, a site-specific ESMP to be prepared for interventions detailed under each subcomponent under Components 1 to 3. For sub-projects which may require environmental and social assessment, the mitigation measures assigned to contractors and their associated cost estimates should be included in the bidding documents to be prepared by the Procurement Specialist(s) at the PIUs.

Table8 : Generic Environmental and Social Management Plan

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Potential Environmental and Social Impacts** | | **Recommended Mitigation/ Enhancement Measures** | | **Responsible institution for implementation of the measures** | | **Responsible for monitoring for the implementation of mitigation measures** | | **Implementation period** | | **Budget Estimate, USD** | |
| **Positive Environmental and Social Impacts** | | | | | | | | | | | | |
| 1. | Employment through construction jobs during trench excavation and access road construction and installation of fiber optics cables, planting of towers and masts. | | Prioritize and promote recruitment of local labor where technically and commercially feasible | | Contractors/ private sector operators | | PIU E&S staff, implementing/Beneficiary Institution E&S focal persons,  Construction Supervisor | | During Construction phase | | 106,000 USD-Part of construction budget | |
| 2. | Increased business opportunities for construction materials. Local material suppliers and traders within the project areas will benefit from construction works. | | The contractors should purchase as many local materials as possible from local markets | | Contractors/ private sector operators | | Construction Supervisor | | During Construction phase | | 30, 000 USD-Part of Construction budget | |
| 3. | Improved connectivity and reliability of internet services in the targeted area and community and as the geographical coverage of high-speed internet will be expanded | | Connect as many institutions as possible to increase uptake of the internet services. | | MInT and EARDIP SOP II Partner Institutions | | Project Steering Committee and PIU | | During Operation phase | | 200, 000 USD-Part of operation cost | |
| **4.** | Improving connectivity to the local community | | Provide connectivity to farmers associations, agricultural development Companies, agriculture product consumer associations | | MInT and Partner Institutions, selected digital businesses | | PIU and third-party monitoring firm | | During EARDIP SOP II operation period | | Part of EARDIP SOP II operation budget | |
| **5.** | Enhance internet connectivity in education institutions and provide ICT equipment | | -Connect as many educational institutions as possible to increase uptake of the internet services  - Provide ICT equipment to the education institutions | | MInT and Partner Institutions (MoE), through EthERNet | | PIU and third-party monitoring firm | | During EARDIP SOP II operation period | | 200,000 USD Part of EARDIP SOP II operation budget | |
| **6.** | Improved information management such as dissemination and storage. Digital services will improve information sharing, flow, and faster delivery of  Services. | | Improve connectivity in public service institutions | | MInT and Partner Institutions | | PIU and the beneficiary institutions | | During operation period | | 100,000 USD Part of EARDIP SOP II operation budget | |
| **7.** | Increased in digital innovation as affordable and fast internet would allow higher education institutions to develop, test and launch applications at a low cost. | | -Provide digital equipment to  educational institutions | | MInT and Partner Institutions (MoE), through EthERNet | | PIU and third-party monitoring firm | | During EARDIP SOP II operation period | | 75,000 USD-Part of EARDIP SOP II operation budget | |
| **8.** | Improved inter/intra-government electronic transactions through establishment of shared platform that could connect various government systems. | | Enhance staff and workforce digital skill capacity | | MInT and Partner/Beneficiary Institutions | | PIU and third-party monitoring firm | | During EARDIP SOP II operation period | | 100,000 USD Part of EARDIP SOP II operation budget | |
| **9.** | Creation of jobs as proposed project will spur booming of Internet Service Providers. Reduced connectivity costs will attract more ISPs to join internet business in remote rural locations. | | Enhance connectivity capacity | | MInT and Partner Institutions, selected digital service providers | | PIU and third-party monitoring firm | | During EARDIP SOP II operation period | | 200,000 USD Part of EARDIP SOP II operation budget | |
| **No** | **Potential Impacts** | | **Recommended Enhancement /Mitigation Measures** | | **Responsible Institution for implementing the measures** | | **Responsible for monitoring the implementation of mitigation measures** | | **Implementation Period** | | **Estimated Budget** | |
| **Environmental, OHS, CHS and Social Risks of the Subproject Activities** | | | | | | | | | | | | |
| **Environmental Risks/ Impacts** | | | | | | | | | | | | |
| **1.** | **Terrestrial and aquatic habitat alteration:** Terrestrial and aquatic habitats may be altered primarily during the construction of linear digital infrastructure may pass through critical habitats or biodiversity hotspots during construction periods and possibly during maintenance. | | -Infrastructure implementation should avoid sensitive habitats and heritage sites through use of existing utility (electric transmission towers) and transport corridors, whenever possible;  -Avoidance of construction activities during the breeding season of wildlife and other sensitive seasons or times of day.  -Revegetation of disturbed areas replaced with indigenous plant species  .-As per the exclusion list (see on annex B), high risks will be excluded as well as interventions in critical habitats will be avoided since early stages during analysis of alternatives and screening. If significant impacts to the biodiversity are foreseen, development of BMPs will be required. | | Construction contractors/Private sector telecom operators | | Construction supervisor  -Private sector operators E&S Focal Persons,  -PIU E&S staff, Federal, regional and local bodies and relevant sector ministries /bureaus/ offices. | | During Construction phase | | 60,000 USD- | |
| **2.** | **Hazardous and electrical materials and waste Risks:** Digital infrastructure development for broadband connectivity usually requires the use of electrical and electronic equipment believed to contain significant amounts of hazardous materials. Other hazardous wastes from fuel, oil and greases for construction machineries and cars . | | -Implementing fuel delivery procedures and spill prevention and control plans applicable to the delivery and storage of fuel for backup electric power systems, preferably providing secondary containment and overfill prevention for fuel storage tanks.  -Implementing procedures for the management of lead acid batteries, including temporary storage, transport, and final recycling by a licensed facility.  -Ensuring that new support equipment does not contain PCBs or ODSs. PCBs from old equipment should be managed as a hazardous waste.  -Purchasing electronic equipment that meets international phase out requirements for hazardous materials contents.  E-waste should be handled according to e-waste management plan of the project and ITU procedure for use, handling, and management.  **In line with the ESS3 and EHS guideline**  - Segregation of Waste at source and avoid mixing with other wastes  -Collection: Establish collection centers who can be individually or jointly or as registered society. They could also be owned by a designated agency, a company or an association to undertake collection operations of E-waste;  -Transportation: Once general waste is collected at designated places, the contracted service providers collect and take it to dumping sites and recycling facilities for processing  - Recycling: identify both formal and informal recycling activities in the Ethiopia market where the wastes can be recycled  -Refurbishment: identify licensed entrepreneurs and organized groups which are refurbishing E-waste in the country with the intent of increasing product lifespan  -Take back: identify manufactures who have introduced take-back programs in the Ethiopia and collaborate with them for uptake of the wastes.  - Raise public awareness about E-waste and its management. | | Construction contractors/Private sector operators, Implementing agencies. | | - Construction supervisor  - Private sector operators  --E&S Focal Persons,  -PIU E&S staff, Federal, regional and local bodies and relevant sector ministries /bureaus/ offices. | | During Construction phase | | 40,000 USD- | |
| **3.** | **Construction and Domestic waste:** Infrastructure development for ERDIP may result in soil waste and stockpile that can block access road and domestic waste, trashes, food remains from canteen in the camp, unappropriated disposal of human waste will also have big risk. | | -Preventing the washing away of construction materials, soil, silt, or debris into any drainage system.  -properly segregate and dispose wastes to encourage reuse and recycling of some useful waste materials.  -Construction wastes should be recycled or reused as much as possible to ensure that materials that would otherwise be disposed of as waste are diverted for productive uses (topsoil).  -The contractor and EARDIP subproject beneficiary management must work together to facilitate proper waste handling and disposal. All construction wastes must be taken to approved disposal site.  Contractor should provide proper waste disposal cans for the domestic waste and proper latrine for the work force. | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff, | | During Construction phase | | 100,000 USD- | |
| **4.** | **Air Emission:** Emissions from land clearing, trench excavation and cell tower and access road construction may be primarily associated with the operation of vehicle fleets, the use of backup power generators. | | Implementation of vehicle fleet and power generator emissions management strategies  -Avoiding the use of backup power generators as a permanent power source, if feasible.  -Substitution in use of chlorofluorocarbons (CFCs) in cooling and fire-suppression systems, using contractors who are properly trained or certified in the management of CFCs. | | Construction contractors/Private sector operators | | -Construction supervisor  - Private sector operators --E&S Focal Persons,  -PIU E&S staff | | During Construction phase | | 25,000 USD- | |
| **5.** | **Noise and Vibration:** the principal source of noise in digital infrastructures and connectivity/ construction and operation activities is associated with the operation of backup power generators, vehicle fleet and construction machinery. | | -Use vehicles and machineries that are in good use and are well maintained.  -Apply noise management actions including use of noise suppression shields and mufflers.  -The location of noise generating sources away from residential or other noise-sensitive receptors to meet the noise emission.  -Switch off engines of trucks and machines when not in use from injuries  As provided by ESS4 and EHSG on Noise-  -Siting noisy plant and equipment as far away as possible from classrooms and use of barriers (e.g. site huts, acoustic sheds or partitions) to reduce the level of construction noise at receptors wherever practicable.  - Construction workers should be aware of the sensitive nature of work places where they are operating in & advised to limit verbal / other form of noise.  -Undertake regular maintenance of the construction equipment/ vehicles as per the operational manual.  -Where practicable noisy equipment will be orientated to face away from the nearest classroom and other receptors.  -Working hours for significant noise generating construction work will be on daytime only and preferably during the school holidays.  -Alternatives to diesel and petrol engines and pneumatic units, such as hydraulic or electric controlled units, will be used, where practicable. | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff | | During Construction phase | | 20,000 USD- | |
| **6.** | **Visual Impact:** The visual impacts from tower and antennae equipment may depend on the perception of the local community as well as the aesthetic value assigned to the scenery | | -Minimizing construction of additional towers through collocation of proposed antennae in existing towers or existing structures such as buildings or power transmission towers.  -Use of tower and antennae camouflaging or disguising alternatives (e.g. masts or towers designed to look as trees);  -Considering public perception about aesthetic issues by consulting with the local community during the siting process of antenna towers. | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff | | During Construction and operation phases | | 10,000-USD- | |
| **7.** | **Soil erosion and land degradation:** the subproject activities for trench excavation and land clearing for access road construction will lead to soil erosion and localized land degradation | | -It is advisable that trench excavation should be designed and implemented on gentler slope areas.  -Avoid steep slope to any construction activities.  -Awareness should be created among the construction works about (sensitive ecosystems, soil, and land degradation etc.)  -Topsoil shall be stockpiled separately from subsoil. Stockpiles shall not exceed 2 m height, shall be located away from drainage lines, shall be protected from rain and wind erosion, and shall not be contaminated.  -Soil backfilled into excavations shall be replaced in the order of removal in order to preserve the soil profile.  -Sheet and rill erosion of soil shall be prevented where necessary through the use of sandbags, diversion berms, culverts, or other physical means. | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff | | During Construction and operation phases | | 40,000 USD- | |
| **8.** | **Risk due to inefficient energy use:** There are some environmental risks due to use of energy efficient technologies. In efficient energy use increase amount of GHG emissions, it will make the project unsustainable. | | -Use energy efficient technology for the project implementation.  -Use renewable (green) energy sources.  -Apply the energy efficiency standards to technical specification. | | Construction contractors/Private sector operators and implementing institution. | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff | | During construction and operation | | 30,000 USD | |
| **9.** | **Water quality deterioration:** The subproject activities under subcomponent 1.1 and 1.2 the linear infrastructure, and access roads to the fixed transmission tower may crossing aquatic habitats and pass through sensitive ecosystems (forest, lakes, rivers etc.), damage the water resources with silt and other wastes. | | -Excavated soil should be pile up in a place where far from water resources.  -waste disposal area should be far from aquatic ecosystem  -Hazardous wastes like, greases, oils, gasoil for the construction machineries and cars should be stored and refilled on a paved floor to protects seepage.  -Drainage structure should be constructed for the construction wastewater to be directed for proper disposal.  Domestic solid waste should be handled with solid waste handling and disposal procedure. (Waste cans should be provided to dump the solid waste and dump to the proper site.  **As it is indicated in ESS 3**  -Discharge of grey water or uncontrolled discharges from the site/working areas (including wash down areas) to adjacent rivers shall not be permitted;  -Contractor should sensitize workers on water conservation and put strict measures to avoid wastage of water.  -Where possible an 8m buffer strip of existing vegetation will be maintained within the project site.  -Water containing pollutants such as cements, concrete, lime, chemicals and fuels shall be discharged into a conservancy tank for planned removal from site.  -The drainage system will be developed to prevent silt-laden run-off from entering surface water drains and streams without treatment (e.g. earth bunds, silt fences, straw bales, or proprietary treatment) under any circumstances.  -Tools and plant will be cleaned in designated areas within the site where run-off can be isolated for treatment before discharge to the river or nearby water resources; and  -Debris and other material will be prevented from entering watercourses; Construction sites (such as settlement lagoons or other temporary attenuation) to be used during construction if necessary; Diversion of minor watercourses will be carefully managed to prevent suspension of silt (or contamination by other pollutants) | | Construction contractors/Private sector operators and implementing institution. | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff and F/R EPA | | During construction and operation | | 10,000 USD- | |
| **10.** | **Loss of Vegetation due to land clearing:** The infrastructure development, such as excavation of trenches, transmission tower establishment and access road to the transmission tower are anticipated to have land clearing activities may lead to loss of Vegetation | | -Restrict vegetation clearing and stripping ear marked area to minimizing project footprint.  -Revegetate disturbed areas with indigenous plant species.  -Avoid areas which are ecologically sensitive and are biodiversity hotspots.  - Developing BMPs when significant impacts are expected. | | Construction contractors/Private sector operators and implementing institution. | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff | | During construction | | 10,000 USD- | |
| **Occupational Health and Safety (OHS)** | | | | | | | | | | | | |
| **1.** | **Electrical and Magnetic Field:** Magnetic fields result from the flow of electric current and increase in strength as the current increases. Radio waves and microwaves emitted by transmitting antennas are one form of electromagnetic energy it may result in harm to the people working on it. | | -Identification of potential exposure levels in the workplace, including surveys of exposure levels in new projects and the use of personal monitors during working activities.  -Training of workers in the identification of occupational EMF levels and hazards.  -Establishment and identification of safety zones to differentiate between work areas with expected elevated EMF levels compared to those acceptable for public exposure, limiting access to untrained workers.  -Implementation of action plans to address potential or confirmed exposure levels that exceed reference occupational exposure levels developed by international organizations such as the International Commission on Non-Ionizing Radiation Protection (ICNIRP), and the Institute of Electrical and Electronics Engineers (IEEE). Action plans to address occupational exposure may include deactivation of transmission equipment during maintenance activities, limiting exposure time through work rotation, increasing the distance between the source and the worker, when feasible, use of shielding materials, or installation of ladders or other climbing devices inside the mast or towers, and behind the transmission beams.  --Limiting public access to antennae tower locations | | Construction contractors/Private sector operators and implementing institution | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff and F/R EPA | | During construction and operation | | 8,000 USD- | |
| **2.** | **Optical Fiber Safety:** Workers involved in fiber optic cable installation or repair may be at risk of permanent eye damage due to exposure to laser light during cable connection and inspection activities. | | -Worker training on specific hazards asso ciated with laser lights, including the various classes of low and high-power laser lights, and fiber management.  -Preparation and implementation of laser light safety and fiber management procedures which include:   * Switching off laser lights prior to work initiation, when feasible * Use of laser safety glasses during live optical fiber systems installation * Prohibition of intentionally looking into the laser of fiber end or pointing it at another person   -Restricting access to the work area, placing warning signs and labeling of areas with potential for exposure to laser radiation, and providing adequate background lighting to account for loss of visibility with the use of protective eyewear  -Inspecting the work area for the presence of flammable materials prior to the installation of high-powered laser lights  -Implementation of a medical surveillance program with initial and periodic eye examinations.  -Avoiding exposure to fibers through use of protective clothing and separation of work and eating areas. | | Construction contractors/Private sector operators and implementing institution | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff and F/R EPA | | During construction and operation | | 35,000 USD- | |
| **3.** | **Electric Safety:** Telecom workers may be exposed to occupational hazards from contact with live power lines during construction, maintenance, and operation activities. | | -Only allowing trained and certified workers to install, maintain, or repair electrical equipment.  -Deactivating and properly grounding live power distribution lines before work is performed on, or in close proximity to, the lines.  -Ensuring that live-wire work is conducted by trained workers with strict adherence to specific safety and insulation standards.  -Qualified or trained employees working on transmission or distribution systems should be able to achieve the following:   * Workers should not approach an exposed, energized, or conductive part even if properly trained unless: * Where maintenance and operation are required within minimum setback distances, specific training, safety measures, personal safety devices, and other precautions should be defined in a health and safety plan.   -Strict procedures for de-energizing and checking of electrical equipment should be in place before any maintenance work is conducted. If de-energizing is not possible, electrical installations should be moved or insulated to minimize the hazardous effects.  -Prior to excavation works, all existing underground cable installations should be identified and marked. Drawings and plans should indicate such installations.  -All electrical installations or steel structures, such as masts or towers, should be grounded to provide safety as the electrical current chooses the grounded path for electrical discharge. In cases where maintenance work must be performed on energized equipment, a strict safety procedure should be in place and work should be performed under constant supervision. | | Construction contractors/Private sector operators and implementing institution | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff and implementing institution | | During construction and operation | | 20,000 USD- | |
| **4.** | **Elevated and Overhead Work:** The assembly of towers and installation of antennae can pose a physical hazard to workers using lifts and elevated platforms and those located below due to the potential for falling objects. | | -The area around which elevated work is taking place should be barricaded to prevent unauthorized access. Working under other personnel should be avoided.  -Hoisting and lifting equipment should be rated and maintained and operators trained in their use. Elevating platforms should be maintained and operated according to established safety procedures that include such aspects as equipment and use of fall protection measures (e.g. railings), movement of location only when the lift is in a retracted position, repair by qualified individuals, and the use of effective locks to avoid unauthorized use by untrained individuals;  -Ladders should be used according to pre-established safety procedures including proper placement, climbing, standing, and the use of extensions. | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff and implementing institution | | During construction and operation | | 17,000 USD- | |
| **5.** | **Fall Risk:** Workers may be exposed to occupational hazards when working at elevation during construction, maintenance, and operation activities | | -Implementation of a fall protection program that includes training in climbing techniques and use of fall protection measures; inspection, maintenance, and replacement of fall protection equipment; and rescue of fall-arrested workers, among others.  -Establishment of criteria for use of 100 percent fall protection (typically when working over 2 meters (m) above the working surface, but sometimes extended to 7m, depending on the activity). The fall protection system should be appropriate for the tower structure and necessary movements, including ascent, descent, and moving from point to point.  -Installation of fixtures on tower components to facilitate the use of fall protection systems.  -Provision of an adequate work-positioning device system for workers. Connectors on positioning systems should be compatible with the tower components to which they are attached.  -Safety belts should be of not less than 16 millimeters (mm) (5/8 inch) two-in-one nylon or material of equivalent strength. Rope safety belts should be replaced before signs of aging or fraying of fibers become evident.  -When operating power tools at height, workers should use a second (backup) safety strap. | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff and implementing institution | | During construction and operation | | 5,000 USD- | |
| **6.** | **Confined Space Entry:** Telecommunication facility operators will face health hazard due to suffocation working in the confined space. | | -Providing safe means of access and egress from excavations, such as graded slopes, graded access route, or stairs and ladders  -Avoiding the operation of combustion equipment for prolonged periods inside excavations areas where other workers are required to enter unless the area is actively ventilated.  -Controlling site-specific factors which may contribute to excavation slope instability including, for example, the use of excavation dewatering, sidewalls support, and slope gradient adjustments that eliminate or minimize the risk of collapse, entrapment, or drowning. | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff and implementing institution | | During construction and operation | | 25,000 USD- | |
| **7.** | **Motor Vehicle Risk:** Due to geographically dispersed nature of the infrastructure of some telecom operators may require the frequent use of ground transportation for installation and maintenance activities. This expose the workers and the community for accident. | | -Adoption of best transport safety practices across all aspects of project operations with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public.  -Regular maintenance of vehicles and use of manufacturer approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure.  -Emphasizing safety aspects among drivers  -Improving driving skills and requiring licensing of drivers  -Adopting limits for trip duration and arranging driver rosters to avoid overtiredness.  -Avoiding dangerous routes and times of day to reduce the risk of accidents.  -Use of speed control devices (governors) on trucks, and remote monitoring of driver actions | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff | | During construction and operation | | 10,000 USD- | |
| **8.** | **Ambient Air Pollution:** During construction period OHS risk like inhalation of dust and smoke could affect respiratory organs and results in difficulty in breathing in a long-term on the project workers. | | -Watering work areas and using proper PPE could be considered as mitigation. | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff | | During construction | | 5,000 USD- | |
| **9.** | **Noise Pollution:** During construction period noise pollution results from equipment such as grinders and generators as a source of energy could be a risk for the workers. | | -  Engineering controls, administrative controls and use of personal protective are a three-tier hierarchy of controls is widely accepted as an intervention strategy for reducing, eliminating, or controlling workplace hazards, including noise pollution. The three tiers are:  I. Use of engineering controls  -The preferred approach to prevent and control noise pollution is to design the job to take account of the capabilities and limitations of the workforce using engineering controls.  II. Use of administrative controls (changes in work practices and management policies)  -Administrative control strategies are policies and practices that reduce noise pollution risk but they do not eliminate workplace hazards. Although engineering controls are preferred, administrative controls can be helpful as temporary measures until engineering controls can be implemented or when engineering controls are not technically feasible.  III. Use of personal protective equipment (PPE)  -PPE generally provides a barrier between the worker and hazard source. Respirators, ear plugs, safety goggles and hard hats are all examples of PPE. Although these devices may, in some situations, reduce the duration, frequency or intensity of exposure, evidence of their effectiveness in injury reduction is inconclusive. In some instances, these devices may decrease one exposure but increase another because the worker has to “fight” the device to perform the work. | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff | | During construction | | 5,000 USD- | |
| **Community Health and Safety Risks** | | | | | | | | | | | | |
| **1.** | **Structural Safety Risk:** Communities may be exposed to structural safety issues in the event of structural failure of masts or towers during operation phase | | -Design and installation of tower structures and components according to good international industry practice, taking into account the potential frequency and magnitude of natural hazards.  -Erection of fences in combination with other institutional controls and management approaches, such as the posting of signs forbidding entry and placement of guards to protect the premises surrounding the site.  -Equipping masts or towers with anti-climbing devices to preclude unauthorized climbing.  -Such structures should be equipped with warning lights to prevent collision with aerial transports. | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff | | During construction and operation | | 10,000 USD- | |
| **2.** | **Labor Influx:** occur on this project as construction activities resulting in labor influx which may impact community health and safety including transmission of diseases. | | -Establishing or upgrading health centers at camp and construction sites.  -Establishment of recruitment centers in urban areas and sensitization of general public on the same,  -Prohibition of recruitment of workers at the gate and at active work sites, Preferential provision of employment opportunities to local communities  -Community sensitization on the project and project related risks.  -Awareness raising about public health risks/impacts from labor influx.  -Facilitate free testing and provision of condoms.  -Awareness raising on the Grievance Redress Facility for the project. | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff and implementing institution, F/R EPA | | During construction and operation | | 12,000 USD- | |
| **3** | **E****xposure to**  **HIV/AIDS and other**  **Sexually Transmitted**  **Infections (STDs)** | | -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. | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff and implementing institution, F/R EPA | | During construction and operation | | 5,000 USD | |
| **4** | **Exposure to Sexual Exploitation and Abuse and Sexual Harassment** | | Management measures including proper toilet/  Sanitation facilities, awareness  Training & sensitization events on GBV/SEA/SH at communities & project sites.  - The reinforcement of laws on SEA/SH 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/SH and workplace  sexual harassment. | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff and implementing institution, F/R EPA | | During construction and operation | | 5,000 USD | |
| **5.** | **Exposure to e-waste:** E-waste is not biodegradable with strong tendency to bioaccumulation in agricultural lands posing a community health concern. | | -Awareness raising on what e-waste is, risks of e-waste and how to handle it.  -The implementers or contractors should be forced to adopt the project e-waste management plan of the project.  -Support Establishment of private service providers on administrative levels where the subproject implemented.  - A separate eWaste Management Plan has been developed and provided with a budget for implementation | | Construction contractors/Private sector operators and Implementing Institution | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff and implementing institution, F/R EPA | | During construction and operation | | 20,000 USD- | |
| **6.** | **Child Labor:** It is anticipated child labor or forced labor may be conducted by the contractor who is going to implement the subprojects for infrastructure development in the EARDIP. | | -The Labor Management Plan of EARDIP SOP II should be publicized and prohibition of child labor to be applied by contractors.  -Awareness creation among the contractor and supply chain actors. | | Construction contractors/Private sector operators and Implementing Institution | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff F/R EPA | | During construction | | 5,000 USD- | |
| **7** | **Forced Labor:** Forced labor takes place in Ethiopia for example in regard to recruitment into the national army. There is hence a risk that forced labor will be deployed under the project | | -Contractors’ obligations will be spelled out in their respective  contracts and the PIU will monitor full compliance  - The employment of project workers will  be based on the principle of fair  treatment;  - The project management will hold  sensitization meetings on forced labour  and conflict resolution mechanism  - The contracts with third parties will  include prohibition of forced labour  requirements as part of the monitoring  system  - All contracts will have contractual  provisions to comply with the non-use of  forced labour requirements including  penalties for non-compliance in-line with  the relevant national laws.  - Subproject Environmental and Social  Management Plans (ESMPs) will clearly  forbid the use of forced labor. | | Construction contractors/Private sector operators and Implementing Institution | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff F/R EPA | | During construction | | 5,000 USD- | |
| **8.** | **Security Risk (Rising from Security Personnel)** | | -Minimize entry points.  -Construct perimeter fencing.  -Illuminate working site and support with CCTV camera.  -Appropriate guideline (GIIP) should be applied to hire, rules of conduct, training, equipping, and monitoring of such security personnels.  -Train security personnel adequately in the use of force, but when used it should be for preventive defensive purposes in proportion to the nature and extent of the threat.  -The borrower reviews all allegation or unlawful or abusive acts of security personnel, act (or urge appropriate parties to take actions to prevent recurrence.  -The borrower will make reasonable inquiries to verify that the direct or contract workers retained by the borrower to provide security are not implicated in the past abuses.  -Apply the Security Risk Assessment developed for the project. | | Construction contractors/Private sector operators and Implementing Institution | | Construction supervisor  - Private sector operators E&S Focal Persons,  -PIU E&S staff ,and implementing institution | | During construction and operation | | 30,000 USD- | |
| **Social Risks** | | | | | | | | | | | | |
| **:** | |  | |  | |  | |  | |  | |
| **1.** | **Barrier to Benefit:** There are many barriers that hinder access to project benefits by underserved communities and vulnerable people such as digital illiteracy; unavailability of power; lack of ICT infrastructure; unaffordability of ICT technologies and services; unavailability of user-friendly devices for people with disability | | -Provide the vulnerable people Free/Low priced digital devices and services, education/training, and localizing the technologies.  -Subsidize digital apparatuses and internet services to the vulnerable groups, including women, elderly, persons with disabilities, low-income households, etc.  -Improve ICT knowledge by providing short courses/trainings on digital skills and entrepreneurship in both urban and rural areas.  -Create economic opportunities through digital entrepreneurship.  Digital equipment and services developers should ensure that people with disabilities gain the same benefits as the wider population. Depending on the nature of their impairment, provide additional technological and application/software features. | | Implementing Institution, Contractor, Private telecom operator | | Construction supervisor, private telecom operator E&S Focal Persons,  -PIU E&S staff, and implementing institution | | During construction and operation | | 20,000 USD- | |
| **2.** | **Exclusion of Women**: Women and girls can be excluded from the project benefits due to embedded gender inequality, i.e., socio-economic, and cultural marginalization. | | -Targeted stakeholder engagements to the vulnerable and marginalized groups on access to project benefits; employment quotas for women, PwDs and marginalized communities; -Training on delivery of construction activities etc. | | Implementing and concerned partner institutions, | | E&S Focal Persons,  -PIU E&S staff, and implementing institution | | During Operation | | 10,000 USD- | |
| **3.** | **Inequity of Benefits and Impacts on Existing Power Structure:** The educated and urban residents are more likely to benefit from any project due to access and affordability advantage they have over others. There is a risk of creating more access to educated people, so that widening existing socio-economic gaps. | | -Have a monitoring and evaluation system in place, which are implemented not only in diverse agro-ecological settings, but also in areas where government structures are the strongest, for the purposes of benchmarking and comparison, makes it very important to put in place effective and efficient M & E system. | | Implementing Institution, Partner institutions, Private Telecom Operators | | E&S Focal Persons,  -PIU E&S staff, and implementing institution | | If required, ahead of Construction and operation | | 10,000 USD- | |
| **4.** | **Lack of Transparency, corruption, Nepotism, and elite capture:** Lack of transparency and corrupt practices are challenges for proper targeting of beneficiaries for project activities (eg. training and incentives for ICT businesses) and take project benefits away from the intended target groups. | | -Develop and implement clear and transparent guidelines to mitigate the risk of corruption. | | Implementing institution, PIU, private telecom operators | | Implementing and F/R Partner Institutions, | | During Construction and operation | | 5,000 USD- | |
| **5.** | **Unintended long term impact of access to affordable internet:** Requirement for child online protection and content filtering. | | -Provide proper content management and filtering of educational content, and awareness raising and training for parents and communities to mitigate the risks to young children and adolescents.  -The ECA may issue a regulation in child online protection that helps mitigate this risk. | | F/R Implementing and partner institutions, private telecom operators | | Implementing institution, E & S PIU specialists and E & S focal persons | | During and following project implementation | | 5,000 USD- | |
| **6.** | **Loss of Land and other assets:** Due to the nature of the sub-projects directly financed by the EARDIP, most of the construction activities for deployment of new fiber rollout along prioritized routes, rehabilitation of the damaged existing terrestrial fibers due to conflicts, last mile connectivity for refugee/IDPs, access road to transmission towers and other fixed connecting station, anticipated to require acquisition of ample land and permanent loss of assets or properties on the local community. | | -It is appropriate to apply and adhere the Resettlement Framework (RF) developed for the project before the commencement of the subproject so that the necessary measures will be implemented accordingly.  Proposed mitigation measures include the following.  -Land of lowest value (non-cultivable and not used for grazing) should be allocated for  the contractor’s camp and quarry sites as much as possible;  - All the contractors’ facilities should require best practice management in terms of site  cleanliness, waste disposal and social management;  - Before implementing the infrastructure consult the public on the land acquisition  process.  - Provide adequate compensation for the property loses and damages. This is usually  done when the appropriate PAPs are identified during the screening and prior the  construction activities start. | | F/R Implementing institution, partner institutions, telecom operators | | Implementing institution, E & S PIU specialists and E & S focal persons, competent authority | | If required, ahead of Construction | | 40,000 USD- | |
| **7.** | **Risks on physical cultural resources:** The subproject activities under subcomponent 1.1,1.2 involves infrastructure developments like long distance linear trench excavation, back bone fiber rollout, transmission tower implementation, access road to the transmission tower. These subprojects may pass through protected and identified and unidentified heritage sites. | | -Determine the presence of legally protected or unidentified cultural heritage in the project implementation area.  -Follow and adhere to chance find procedure to rescue relics.  -Consult protected area sponsor project affected parties (individuals or communities) or other interested party on the proposed project  -Avoid implementing civil work on areas known as cultural and archeological. | | Construction contractors/Private sector operators and Implementing Institution | | E & S PIU specialists and E & S focal persons, competent authority and partner institution. | | During Construction | | 15,000 USD- | |
| **Cumulative Impacts of the Project** | | | | | | | | | | | | |
| **1** | **Localized Green House Gases:** The Green House Gases from the backup generator, cooling and fire suppression system and vegetation clearing during construction could be insignificant if it is seen locally, but the cumulative effects of the GHGs from different development projects in different countries may result in large impacts regionally | | -Use of energy efficient materials to reduce emission.  -The local government should commit and act to reduce and prevent emission.  -Nationally, project participating countries should take responsibilities for the GHGs emissions in their localities.  -design and implement technologies that require less energy.  -Design plan, policy, project and processes to offset their GHGs emissions. | | -Individual project participating countries through implementing agencies.  -Public/private telecom operators  -Regional regulatory bodies | | E & S PIU specialists and E & S focal persons, competent authority and implementing institution. | | During operation | | 30,000 USD- | |
| **2** | **Hazardous materials and e-waste:** As it is already mentioned in the hazardous and e-waste risks section digital infrastructure development for broadband connectivity usually requires the use of electrical and electronic equipment believed to contain significant amounts of hazardous materials. At their end of life these materials should be collected, dismantled, recovered, reused, and disposed properly | | -Implementing fuel delivery procedures and spill prevention and control plans applicable to the delivery and storage of fuel for backup electric power systems, preferably providing secondary containment and overfill prevention for fuel storage tanks.  -Implementing procedures for the management of lead acid batteries, including temporary storage, transport, and final recycling by a licensed facility.  Ensuring that new support equipment does not contain PCBs or ODSs. PCBs from old equipment should be managed as a hazardous waste.  -Purchasing electronic equipment that meets international phase out requirements for hazardous materials contents.  E-waste should be handled according to e-waste management plan of the project and final recycling should be done by a licensed facility.  -Purchasing electronic equipment that meets international phase out requirements for hazardous materials contents. | | Construction contractors/Private sector operators, Implementing agencies. | | - Construction supervisor  - Private sector operators  --E&S Focal Persons,  -PIU E&S staff  - E & S regulatory bodies | | Both at construction and operation phase | | 25,000 USD- | |
| **3** | **Air Emission:** Air emission from the individual subprojects of backup generators, from fuel combustion of motor vehicles, and land clearing could result in ambient air quality deterioration however, emission from different project in the individual countries in the region participated in the project implementation will have significant cumulative impacts. | | -Implementation of vehicle fleet and power generator emissions management strategies  -Avoiding the use of backup power generators as a permanent power source, if feasible.  -Substitution in use of chlorofluorocarbons (CFCs) in cooling and fire-suppression systems, using contractors who are properly trained or certified in the management of CFCs. | | Construction contractors/Private sector operators | | Construction supervisor  - Private sector operators --E&S Focal Persons,  -PIU E&S staff  -Individual project participating countries | | During construction | | 10,000 USD- | |
| **Cross Border Impacts** | | | | | | | | | | | | |
| **1** | The construction of cross border infrastructure project may lead to changes in land use, forest and vegetation coverage, ecosystems and biodiversity spots, and relocation of human settlements. These changes may put the affected regions, those already vulnerable to climate change, at great risk, and affect their abilities to adapt to climate change and maintain carbon sinks. | | -Careful selection of sites and routes, developing and implementing proper contract awards systems, specify the green credentials required of head construction contractors.  -Engaging project affected people and communities and concerned stakeholders in public consultation and disclosure processes during the project design stage. | | - Construction contractors.  Private/public telecom operators | | -Individual project participating countries through PIU Safeguards specialists.  -Individual country’s regulatory institutions | | During Construction | | 10,000 USD- | |

**Table 9: Generic Environmental and Social Monitoring Plan**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Impacts** | **Monitoring Indicator** | **Monitoring cycle** | **Frequency of Reporting** | **Budget per year in USD** |
| **A.** | **Construction Phase** | | | | |
| 1. | Construction and Domestic waste: | Civil structures, such as ducts and ditches, in place to protect the cables from wastewater drainage.  Waste handling and disposal facilities in place (No of latrines and waste cans)  Waste recycling facilities (four nationwide) | Monthly | Quarterly | 2000 USD |
| 2. | Air Emission: | Establish monitoring sampling stations.  Analyze the air quality.  In-situ measuring of air quality and target  Pollutants and PM10 will be measured usingµg/m3 and for CO2 (ppm indoors and ppm outdoors)  **As provided by ESS4 and WB EHS guideline**  -Develop and implement a Dust Management Plan  (DMP) and Undertake inspections to ensure  compliance with the Dust Management Plan;  - Contractors to use dust screens/nets as necessary  when dusty construction activities are occurring;  -Provide appropriate PPE ( dust masks) to workers &  enforce use;  -Record all dust and air quality complaints, identify  cause(s), take appropriate action;  -Undertake monitoring close to dusty activities,  noting that this may be daily visual inspections, or  passive/active monitoring as parameter  -Remove dusty materials form site as soon as  possible if not being re-used. If being re-used, cover  or vegetate if possible;  -Impose speed limits on haul routes and in  construction compounds to reduce dust generation;  -Construction trucks delivering materials to site  should be covered with tarpaulins in order to  minimize spread of dust/fugitive emissions to the  surrounding areas and prohibit unnecessary idling of  construction related vehicles  - Apply whatever standard is most stringent between local and WB standards | Every other day as far as the construction activities are there | Quarterly | 2000 USD |
| 3. | Noise and Vibration: | Establish Monitoring sampling station.  Analyze level of noise the measure against the country’s standard or WB standard whichever is stringent. | Every Other day | Quarterly | 2000 USD |
| 4. | Soil erosion and land degradation: | Rate of erosion, sedimentation, dust generation | Once in six months | Annually | 1000 USD |
| 5. | Water quality deterioration: | Biological and chemical parameters measurement and results | Every six month | Annually | 1000 USD |
| 6. | Spread of HIV/AIDS and other sexually transmitted diseases | * Number of community awareness sessions held.   Number of incidents reported where protection measures have not been followed | Every Month | Quarterly | 1500 USD |
| 7. | Motor Vehicle Risk/ Traffic risk | Traffic Management and consider at minimum the following mitigation measures:  1. No of vehicle inspections conducted and passed;  2. No of road safety trainings conducted to drivers;  3. No. of code of conducts signed by drivers including safe driving and vehicle maintenance requirements. | Every Month | Quarterly | 2000 USD |
| 8. | Security Risk (Rising from Security Personnel): | 1. No. of human rights trainings conducted to security personnel;  2. No. of Codes of Conduct signed by security personnel;  3. GBV/SEA-SH trainings/sensitizations conducted to security personnel;  4. No. of community sensitization activities conducted jointly by security teams and E and S project staff to sensitize community members. | Every six Month | Annually | 1000 USD |
| 9. | Community and Workforce Health Impact | 1. No. of CHS trainings conducted to workforce;  2. No. of Codes of Conduct signed by workforce;  3. No. of community sensitization activities conducted jointly by OHS teams and E and S project staff to sensitize community members. | Monthly | Quarterly | 2000 USD s |
| 10. | Risks on physical cultural resources | Number of physical cultural resources found in the subproject area | Immediately as it is found | Immediately as it is found | 1000 USD |
| 11. | Loss of land and other assets | Number of Resettlement Plans (RPs) implemented.  Number of Livelihood Restoration Plans (LRPs) implemented.  Number of resettlement related complaints reported through GRM. | Prior to commencement of subproject physical activities | Quarterly | Compensation cost of MInT and other IAs. |
| 12. | Exposure to Sexual Exploitation and Abuse and Sexual Harassment | Percentage (%) of workers that have signed CoC. | Continuous | Immediately as it is happened. | Cost covered by GBV Action Plan. |
| 13. | Risk of labor Influx | Percentage (%) of local workforce hired.  Number of sensitization/awareness events within communities  Number of local suppliers used | Quarterly | Quarterly | 1000 USD |
| 14. | Risk of child labor | Number of existence/maintenance of a labor registry of all contracted workers.  Percentage (%) of workers with age verification    Number of awareness campaigns | Continuous | Immediately as it is happened. | 1000 USD |
| 15. | Risk of Forced labor | Number of existence/maintenance of a labor registry of all contracted workers.  Percentage (%) of workers with age verification    Number of awareness campaigns | Continuous | Immediately as it is happened. | 1000 USD |
| **B.** | **Operation Phase** | | | | |
| 1. | Loss of Vegetation due to land clearing, during construction | The area cover for environmental rehabilitation e.g. revegetation and maintenance of the area exploited for construction input. | Quarterly | Annually | 1000 USD |
| 2. | Barrier to Benefit | Number of vulnerable and underserved people got digital devices and service.  Number of of consultations focusing on vulnerable groups  Number of awareness sessions on GRM held.  Number of documents translated into local languages | Every six months | Annually | 1000 USD |
| 3. | Exclusion of Women | No of women and girls got access to digital technologies and services with affordable price | Every six months | Annually | 1000 USD |
| 4. | Unintended long-term impact of access to affordable internet young children and adolescents might fall prey to human traffickers; be addicted to unnecessary contents (gender-based violence (GBV) and sexual exploitation). | Regulation in place to mitigate this impact | Quarterly | Annually | 1000 USD |

# **10. TRAINING AND CAPACITY BUILDING**

## **Institutional Capacity Assessment**

Effective implementation of ESMF and the annexed E & S Safeguard instruments will require technical capacity within the PIU, implementing partners and beneficiary institutions as well as other institutions responsible for monitoring EARDIP SOP II activities including regional line ministries, departments, and agencies (MDAs). There will be a need for in depth understanding of the operationalization mechanism for ESMF to be provided to various the lead implementing institutions, partner and beneficiary institutions and key stakeholders involved in the implementation of EARDIP SOP II activities. Capacity building will be integral to support the teams in appreciating their roles in providing supervision, monitoring, evaluation, and environmental reporting on the project activities. Therefore, a special initiative is needed to develop the capacity of the project implementing unit, focal persons and government officials from partner and beneficiary institutions to support implementation of the EARDIP SOP II with regard to the project social and environmental aspects and management. The following sections outline the capacity building needs of the implementing institutions, partner, and beneficiary institutions.

### **Assessment of** [**Capacities and Practical Experiences of Implementing Agencies on Environmental and Social Management**](#_Toc33002011)

The main implementing agency of the EARDIP SOP II is the Ministry of Innovation and Technology (MInT). Partner Institutions involved in spearheading the implementation of various sub-components of the EARDIP SOP II includes MoE through EthERNet and Ethiopian Communications Authority (ECA) and MoTRI. Beneficiary institutions of the EARDIP SOP II consists of a broad array of Government institutions MoH, MoLS, NID, MoWSA and partner institutions such as DBE, CSC, EIC, EIA, EPA and EEP found both at Federal and regional states, various line ministries; departments and agencies (MDAs). The EARDIP will also invite the participation of private sector operators (i.e. telecom operators) and the public operator Ethio-telecom.

The existing capacities and practical experiences of the main EARDIP SOP II implementing and partner institutions in the area of environmental and social management is found to be generally weak. During the consultations carried with the main implementing agency (MInT), it was learned that its existing organizational structure does not constitute an environmental unit and have no environment and social staff deployed. The ICT and Digital Economy state Minister of MInT to which the EARDIP SOP II will be anchored to also has no previous experiences in the areas of environmental and social management from other projects supported by international financers such as the World Bank and African Development Bank, EU. The consultation discussion held with the main implementing partner institutions also revealed that, ECA which is a new institution established recently, MoE (EthERNet) and MoTRI do not environmental and social safeguard Unit in their structure but recently in connection to the EDFP project ECA and MoE (EthERNet) are able to assign E & S focal persons to be part of any E & S safeguard activities in the implementation of EARDIP SOP II supported subprojects in their respective offices. From the partner institutions NID and MoLS also have already assigned E & S focal person for the support they provided from EDFP. The state of environmental and social management capacities in the other beneficiary institutions mainly MoWSA has no experiences in the Environment and social management exercises. However, out of the partner institutions EIC has already the Environmental and Social Risk Management experiences from the World Bank projects implemented and hence the institution is familiar with the E & S Safeguards instruments and implementation processes. Similarly, the environmental management capacities of the private sector operators (i.e., telecom operators) that will participate as potential contractors during EARDIP SOP II implementation are generally expected to have certain form of capacity due to their International operational experience, though this might not be the case with the National Ethio-telecom.

In summary, the consultation discussions and assessments held with the various institutions at federal and regional levels have shown that there are huge capacity gaps in environmental and social management which needs to be filled through deploying adequate human resource and training. As a result, it is recommended that the capacity gap in E& S safeguards manpower should be filled in as follows.

* The Environment and Social risk management specialists in the PIU will be engaged in the EARDIP SOP II. These specialists should be trained prior to the commencement of project implementation, as per the ESF requirements and in line with E&S safeguards instruments developed for the project.
* Additional training will be provided on safeguards and occupational risks will be provided during project implementation. Topics may include use of micro-trenching techniques for cable laying, child online protection, data protection, cybersecurity etc.
* Assign qualified Environment and Social focal persons at the implementing agencies at regional level who are expected to implement multiple subprojects. (Regional MInT line ministries or use the expertise at regional EPA).
* Assign qualified environmental and Social Focal persons at private sectors operators (Telecom operators) that will enter into contractual agreement with EARDIP SOP II for construction activities and pre-purchase of internet connectivity under Indefeasible Rights of Use. This requirement together with the need to comply with the ESMF procedures during subproject implementation should be included in the “environmental clauses” of the main contractual agreement.
* Assign qualified Environment and Social Focal Persons at the main implementing and beneficiary Institutions; MoE (EthERNet) and ECA, MoTRI. It is possible to assign people with related field of study and PIU will take the responsibility to the overall E&S safeguards and contribute to the objectives of the EARDIP SOP II which include:
* The preparation, together with the partner and beneficiary entities, of annual work programs and budgets to fulfill ESMF requirements of subprojects.
* Monitoring project progress as it relates to compliance with the ESMF guidelines, resolving implementation bottlenecks, and ensuring overall that project implementation proceeds smoothly.
* Collecting and managing information relevant to the subproject environmental management works (i.e. environmental monitoring and audit reports of ESMPs, and CHMPs,
* Ensuring that the implementing partner and beneficiary bodies are supported adequately and that they adhere to the principles of the project, specific to compliance with ESMF guidelines.

The environment and social focal persons to be deployed by each partner and beneficiary institutions will be responsible for the implementation of their respective subprojects in compliance with the requirements of the ESMF. The environment and social focal person will be supported by other members of the PIU, members of the technical committees, as necessary in conducting the scoping/screening of the subproject.

### **Assessment of Capacities and Practical Experiences of Federal, Regional, Zonal and City Level EPAs**

The role of the environmental regulatory agencies in implementing the EARDIP ESMF is very important. As shown in table 4 there are environment regulatory institutions at Federal and Regional levels in all the eleven regions and two city administrations of the Country. Many of the regional states also have operating environment protection office branches at zonal, woreda and city levels. Some large cities in Amhara and Oromia regions such as Dessie, Gondar, Jimma, Adama, etc. have city EPA offices with a status of Zone level authority. Such City EPA offices are reported to be vertically accountable to their regional EPA offices and horizontally to the City Administrations. Whereas most of the city level environment protection offices are observed to be directly accountable to the mayor of the city, the Zone level EPAs are vertically accountable to the regional EPAs.

The woreda EPA offices are usually accountable to the Zone EPA offices. On the other hand, apart from the major city environment offices having a zone authority status, the responsibility of the remaining city level offices found in the regional states mainly focus on carrying environmental monitoring and inspections of development projects implemented in their jurisdiction. Similarly, the responsibility of the Woreda level environment protection offices are mainly focused towards providing services to the rural parts of the Woreda found outside urban City administrations. As a result, it will be important for EARDIP SOP II subproject E&S scoping/screening reports to be submitted to environment protection offices at federal, regional, or Woreda level for review and approval procedures. For subprojects implemented in Addis Ababa and Diredawa City Administrations, the E&S screening reports will be submitted to the respective City level environment protection offices.

Most regional and woreda level environmental protection offices where World Bank funded projects has been implemented have acquired a certain level of experiences in reviewing the required environmental and social management reports such as E&S scoping/ screening, full/partial ESIA, etc. Based on the consultation made with the federal EPA reveals that they organize and conduct regular and periodic training sessions for the regional, zonal, and woreda level environmental and social staffs with the support from WB. However, these capacities need to be further strengthened in order to fill the gaps in the area of conducting rigorous reviews of the E&S scoping/screening reports and ESIA reports, gaps in conducting environmental monitoring and inspection on subproject E & S mitigation implementations. Therefore, it is necessary that a sound understanding, and dependable level of capacity exists in these institutions that would enable the implementation of the present ESMF, and annexed E & S Safeguards and the new World Bank ESSs in general.

### **Training Requirements**

One of the capacity building areas sought for by the Lead implementing institution (MInT) and the Partner Institutions (ECA, MoE (EthERNet), MoTRI ) involved in the implementation of the EARDIP SOP II subprojects is the provision of training on ESMF, E & S mitigation measures implementation and GRM processes and procedures. The training to be offered will also need to address target groups from different beneficiary (e.g: focal persons from regional beneficiary and Partner institutions and line ministries) and stakeholder institutions (e.g., private sector operators/contractors) which will have a role in implementing the ESMF and other E & S Safeguard instruments annexed to the ESMF at various levels. The training is also necessary for high level project coordination and management groups, (such as members of project steering committee and technical committee) as well as to relevant members of the broader beneficiary community to create awareness on environment management aspects of the EARDIP SOP II. As a result, the type of trainings necessary to these various target groups will vary and is briefly outlined as the followings:

1. **Technical Training on ESMF**

This detailed training will mainly focus on the technical staffs that will be involved in directly applying the ESMF and other E & S Safeguards instruments annexed to ESMF. It includes the E&S specialists in PIU at the lead implementing agency (MInT), E&S Focal Persons at implementing partner, beneficiary and stakeholder institutions, member of technical committees, professionals from the Regional, Zonal and City level Environment Protection Offices etc. Members of the Federal, Regional and Zonal REPAs will have to participate in the training to facilitate for smooth implementation of EARDIP SOP II ESMF. The training will focus in explaining the details of the National and World Bank environmental requirements and the procedures that need to be fulfilled to comply with it. Implementation of the ESMF and RPF including all aspects of the World Bank ESSs, environmental management, EIA, public consultation, and integration of environmental management into development planning will be the center topics for the training. The training would also cover skills upgrading refreshment topics such as, environmental, and social scoping/screening and categorization review and approval processes, EIA review and quality assurance, environmental audits, environmental guidelines, and others as necessary. Detailed topics that would need to be covered by the training include the following:

* Overview of enabling policy, legal and institutional framework for ESMF,
* Basic principles of ESMF,
* Occupational health and safety (OHS),
* Community health and safety (CHS),
* Potential Environmental and Social Impacts for EARDIP SOP II,
* Environmental and social screening process,
* Assignment of environmental and social risk classification,
* Scoping and the preparation of preliminary and full ESIAs,
* Preparation of terms of reference for carrying out ESIA/ESMPs,
* Review and clearance of the screening results and separate ESIA/ESMP reports,
* Supervision, monitoring, evaluation, and environmental reporting,
* Participatory public consultation and engagement,
* Gender Based Violence (GBV) prevention and Control,
* Grievance Redress Mechanisms (GRM) of the EARDIP SOP II, Stakeholders Engagement,
* Public consultation process in view of the ESMF,
* Requirements and procedures for RP, and
* Discussion of, and amendments to, the environmental and social screening form.

1. **Awareness Raising**

Integrating environmental and social considerations into development planning will encompass defining processes, procedures and responsibilities for environment related activities and actions into the preparation of the EARDIP SOP II annual plans and budgets. Thus, there will be a need to carry out environmental awareness workshops for officials of project implementing and stakeholder institutions such as members of project steering committee and technical committee on environmental management principles and ESMF procedures. The awareness raising workshops and trainings should target the higher officials, EARDIP SOP II project management and coordination organs including relevant directorates of the federal and regional lead implementing, partner, and beneficiary institutions. This will help to ensure that there is good knowledge of EARDIP SOP II ESMF requirements at different levels in the lead implementing agency, partner and beneficiary institutions, stakeholders, and other professional and technical staffs.

The awareness raising should focus on clarifying EARDIP SOP II project objectives and components, its institutional arrangements for implementation and coordination, the need for complying with Environmental and Social Management Framework (ESMF) and so on. It is important to clarify the roles and responsibilities of each stakeholder based on established guidelines such as the ESMF and other E & S Safeguards instruments. The awareness raising workshop will also be an important venue to introduce the contents of the new ESF and its Environmental and Social Standards (ESSs), ESMF and other E & S Safeguards in the ESMF procedures and associated implementation requirements of the World Bank and the GoE. EARDIP SOP II beneficiary institutions and relevant REPAs in the regions, zones and cities will have to obtain copies of the ESMF, other E & S Safeguards instruments as well as all relevant Federal and regional laws, guidelines and procedures relating to environmental protection, cultural heritage, and resettlement issues.

1. **Sensitization**

The beneficiary communities at the grass root level will need to be sensitized about the overall objectives of the EARDIP SOP II project components and subcomponents, environmental sustainability, and the need to consider environmental concerns with regard to e-waste management and others hazardous and non-hazardous wastes while preparing proposals/applications for matching fund competitions.

# **11. PROPOSED ESMF IMPLEMENTATION BUDGET**

The breakdown of estimated costs for putting the ESMF into operation is provided in Table 10. This includes the costs of providing the capacity building and training set out in Chapter 10. The total estimated costs for mainstreaming environment into the EARDIP SOP II subcomponents are USD 1,160,000 consisting of:

1. USD 1 million which will be included in the consultants procured to provide full/Preliminary ESIA/ESMP for EARDIP SOP II subprojects involving physical construction. These consultants will be responsible for the work on preparation of ESIA, ESMP, and CHMP documents.
2. USD 40,000 for the preparation and printing of ESMF training materials.
3. USD 300,000 for delivery of ESMF training as described in Section 10.1.3.
4. USD 400,000 for salaries of Environmental and Social Specialists in EARDIP SOP II PIU for the five years duration of the project.
5. USD 500,000 EARDIP SOP II to undertake annual external Environmental and Social Performance Audit.
6. USD 100,000 for Implementation and monitoring of GBV/SEAH action plan.

The above costs will be funded from EARDIP SOP II project. The EARDIP SOP II PIU Environmental and Social Specialists will report on EARDIP SOP II ESMF expenditure. This will provide for another way of monitoring on the extent that environmental and social issues are being addressed by the project beneficiaries and stakeholders. Costs related to the required mitigation measures for EARDIP SOP II subprojects are not set out in the budgets presented here. These will be assessed and internalized by beneficiary institutions as part of the overall EARDIP subproject cost. It is extremely difficult to estimate the proportion of project costs that can be expected to be devoted to mitigation measures. However, a rough rule of thumb is that they should be expected to cost between 2% and 5% of the total project cost. Compensation and resettlement costs will be borne by beneficiaries.

**Table 10: Proposed Budget for Implementation of EARDIP SOP II ESMF**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **YR1** | **YR2** | **YR3** | **YR4** | **YR5** | **TOTAL** | **Notes** |
| Technical Assistance support for preparation Full/Preliminary ESIAs, ESMPs, RAP, CHMPs and ES annual Audits, | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 100,000 | Assume lump sum USD 100,000 for preparation of 5 full/ ESIA, per year (assuming that one document prepared by 20,000USD) |
| Training supplier develops ESMF & RF training modules | 20,000 |  | 20,000 |  |  | 40,000 | Assume lump sum USD 20,000 for development and printing of training materials/ modules two times in project lifetime |
| Training supplier delivers Technical ESMF training + | 100,000 |  | 100,000 |  | 100,000 | 300,000 | Assume 100 participants x USD 200 pd x 2 days awareness raising & sensitization workshop + 50 participants x USD 200 pd in depth technical training x 5days + stationary+ trainers’ cost venue rent |
| PIU Envi & Social risk management experts | 24,000 | 24,000 | 24,000 | 24,000 | 24000 | 120,000 | Assume maximum USD 1,000 per month total wage x 2. |
| Budget for external Annual Environmental and Social Performance Audit | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 500,000 | External Environmental and social performance Audit to be carried once per year. |
| Implementation of GBV action Plan | 30,000 | 20,000 | 20,000 | 20,000 | 10,000 | 100,000 | Part time GBV consultant to support action plan |
| **Total ESMF costs** | 530,000 | 400,000 | 520,000 | 400,000 | 500,000 | **1,160,0000** |  |

# **MONITORING, EVALUATION and REPORTING SYSTEM FOR ESMF IMPLEMENTATION**

## **Monitoring**

Quarterly, Biannual and Annual Internal E&S performance monitoring report on ESMF implementation will be prepared by the PIU Environmental and Social Specialists and delivered to the PSC, Federal EPA and the World Bank. In addition, EARDIP SOP II is subject to an annual performance audit report, for delivery to EPA and the World Bank, this audit will be conducted by certified consulting firm.

An external independently commissioned annual environmental and social Safeguards and performance audit will be carried out in all EARDIP SOP II implementing and beneficiary institutions. This will be conducted as part of the annual performance audit of the EARDIP SOP II. The external independent E & S Safeguards and performance audit team will report to the EARDIP SOP II and the World Bank. The annual E&S performance audit is necessary to indicate:

1. To what extent environmental and social considerations are being incorporated into the planning process.
2. That mitigation measures are being identified and implemented by implementing partner, beneficiary, and stakeholder institutions, and
3. To check that EARDIP SOP II subprojects are being correctly scoped/screened. The audit will be able to identify any amendments in the ESMF approach that are required to improve its effectiveness.

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 MInT, and other relevant program implementing entities (EthERNeT, ECA and MoTRI), and the report will be delivered to the MInT, and the WB. Any High or substantial-Risk project financed by EARDIP SOP II that has been subject to an ESIA study will also be required to produce an annual audit report, for delivery to MInT, and the WB. 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 E & S Safeguards instruments developed;
* Number of written warnings of violations of ESMPs issued to subproject contractors in case of non-compliance;
* Number of recommendations from the WB 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 E & S Safeguards tools.

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.

## **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 MInT, as applicable. The Audit amongst other things will assess the performance of projects under EARDIP SOP II 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 EARDIP SOP II and its activities.

The Annual Audit also provides a strong incentive for MInT, EthRNeT, ECA, MoTRI 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 MInT as well as to the EthERNeT, ECA, MoTRI, EPA, as required and the WB, 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 E&S annual performance audit report will include:

* A summary of the environmental and social performance of the EARDIP SOP II, based on a sample of subprojects.
* A presentation of compliance and progress in the implementation of the project ESMPs, CHMPs.
* 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.
* A review of implementation of gender/GBV action plan implementation, assessment of robustness and functionality of GRM, assessment of effectiveness of stakeholders’ engagement
* A synopsis of the environmental and social performance audit results from individual project monitoring measures (as set out in the project ESMPs, and CHMPs).
* 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.

## **End-of project evaluation**

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[[41]](#footnote-41).

## **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 MInT -PIU Environmental and Social Specialists and shall be delivered to the MInT, and the WB. In addition, any “Substantial Risk” subproject financed by EARDIP SOP II that has been subject to an ESIA study will also be required to produce an annual audit report, for delivery to MInT, EPA and the WB.

To monitor the progress of the implementation of the measures that have been identified in this ESMF, annual audit/reviews will be carried out. 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.

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 MInT for action, as applicable. The feedback of reports from the Project office, MInT should be provided to the SE within the time stipulated in the contract document. MInT will also submit copies of reports to the WB. 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.

**ANNEXES**

# **ANNEX A: ENVIRONMENTAL & SOCIAL SCREENING FORM**

**INTRODUCTION**

This Environmental and Social Screening Form (ESSF) has been designed to assist in the evaluation of trench excavation, access road construction to the fixed transmission tower, data storage establishment, cybers security and fiber optic cables installment and repair and rehabilitation of damaged cables activities and under EARDIP SOP II. The form will assist the sub-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 full/preliminary ESIA environmental and social management plan) if necessary. The form also 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.

**GUIDELINES FOR SCREENING**

The evaluator should undertake the assignment after:

* 1. Gaining adequate knowledge of baseline information of the area.
  2. Gaining knowledge of proposed project activities for the area.
  3. Having been briefed / trained in environmental and social screening.

The form is to be completed by consensus of at least two people, knowledgeable of the screening process.

**Environmental and Social Screening Form**

**Guideline: Site Inspection of Project Sites. The evaluation results should be at least the consuensus of three officials.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sub Project Name: | | | District/City: | | | | | | |
| Sub Project Location: | | | Nature/Size: | | | | | | |
| Type of activity: (e.g. new construction, rehabilitation, periodic maintenance): | | | | | | | | | |
| Name & Signature of Evaluator:  1……………………………………..  2. …………………………………… | | | Date of Field Evaluation:  ………………………….  …………………………. | | | | | | |
|  |  | Appraisal | | Risk / Significance rating | | | | | | |
|  |  | Yes/No | | None | Low | Moderate | Substantial | High | unknown | |
| **1** | **Environmental Screening (ESS -1, ESS-3 & ESS-6)** |  | |  |  |  |  |  |  | |
|  | 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, etc.)? |  | |  |  |  |  |  |  | |
| 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   1. 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 2. ( ii) the project involves (a) complex mitigation 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 (as per paras.11 of ESS 1) that could lead to wide-  ranging ES risks and impacts? Does the project design take into consideration such associated facilities? |  | |  |  |  |  |  |  | |
| 1.17 | Generation of e-waste such as used gadgets, routers, and computers, and other e-materials which require proper disposal |  | |  |  |  |  |  |  | |
| 1.18 | Pollution of spillage of oils and fuel products from construction machinery, and operation of generators |  | |  |  |  |  |  |  | |
| 1.19 | Visual Impact |  | |  |  |  |  |  |  | |
| 1.20 | Located or crossing near environmentally sensitive areas (National Parks, forests, wetland areas etc.) |  | |  |  |  |  |  |  | |
| 1.21 | Heap of excavated Materials |  | |  |  |  |  |  |  | |
| 1.22 | Does the project have an impact on associated facilities?  The renewable power resources that the subproject use:  Hydro  Solar  Wind  Geothermal |  | |  |  |  |  |  |  | |
| 1.23 | Air emissions from vehicular traffic resulted in the discharge of GHGs (Sulphur, Nitrogen, and CO2 |  | |  |  |  |  |  |  | |
| 1.24 | Do the project activities use a backup diesel generator for construction and operation? |  | |  |  |  |  |  |  | |
| 1.25 | Air emissions from vehicular traffic resulted in the discharge of GHGs (Sulphur, Nitrogen, and CO2 |  | |  |  |  |  |  |  | |
| 1.26 | Can the project cause disruption of wildlife migratory routes? |  | |  |  |  |  |  |  | |
| 1.27 | Does the project bring alien species or GMOs to the area |  | |  |  |  |  |  |  | |
| 1.28 | Will the project involve extraction, diversion or containment of surface or groundwater? |  | |  |  |  |  |  |  | |
| 1.29 | Will construction, operation or decommissioning of the project involve physical changes, such as topography or land use (e.g. construction camps, housing, etc.)? |  | |  |  |  |  |  |  | |
| 1.30. | Will the project implementation have an impact on traffic control and monitoring system? |  | |  |  |  |  |  |  | |
| 1.31. | Does the project have impact on natural disaster risks can be: landslides, flooding, erosion, etc.? |  | |  |  |  |  |  |  | |
| 2 | Labor and Working Conditions and Community safety (ESS2 and ESS4) |  | |  |  |  |  |  |  | |
| 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? |  | |  |  |  |  |  |  | |
| 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 (ESS-5)** |  | |  |  |  |  |  |  | |
|  | 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 |  | |  |  |  |  |  |  | |
|  |  | Appraisal | | Significance | | | | | | |
|  |  | Yes/No | | None | Low | Moderate | Substantial | High | unknown | |
|  | **Resettlement Screening (ESS-5)** |  | |  |  |  |  |  |  | |
| 3.4 | Loss of crops by people |  | |  |  |  |  |  |  | |
| 3.5 | Loss of access to river/forests/grazing area |  | |  |  |  |  |  |  | |
| 3.6 | Conflicts over use of local water resources |  | |  |  |  |  |  |  | |
| 3.7 | Disruption of important pathways, footpath/roads |  | |  |  |  |  |  |  | |
| 3.8 | Loss communal facilities –churches |  | |  |  |  |  |  |  | |
| 3.9 | Loss of livelihood system |  | |  |  |  |  |  |  | |
| 3.10 |  |  | |  |  |  |  |  |  | |
| 4 | Cultural Heritage Screening |  | |  |  |  |  |  |  | |
| 4.1 | Impact heritage site, graveyard land |  | |  |  |  |  |  |  | |
| 4.2 | Will the project activities involve excavations,  demolitions, earth movements, flooding or changes to physical environment that could affect cultural heritage values? |  | |  |  |  |  |  |  | |
| 4.3 | Are project activities likely to affect tangible and/or intangible cultural heritage as defined under ESS 8 (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)? |  | |  |  |  |  |  |  | |
| 4.4 | Are project activities located in legally recognized and/or legally protected areas or defined buffer zones designated for the protection of cultural heritage? |  | |  |  |  |  |  |  | |
| 4.5 | Will the project activities affect cultural heritage in non-designated or legally recognized areas or protection zones? |  | |  |  |  |  |  |  | |
| 4.6 | Will the project affect cultural heritage assets that are movable (i.e., rare books, manuscripts, paintings, etc.) that could be endangered by the project? |  | |  |  |  |  |  |  | |
| 5 | Gender, Vulnerable and disadvantaged group screening |  | |  |  |  |  |  |  | |
| 5.1 | Does the project present risks to and impacts on individuals or groups whom, 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 |  | |  |  |  |  |  |  | |
| 5.2 | Is the project likely to affect disadvantaged or  vulnerable individuals or groups including SSAHUTLCS as indicated in ESS 7who would require specialized approaches to participation or consultation for the project? |  | |  |  |  |  |  |  | |
| 5.3 | 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? |  | |  |  |  |  |  |  | |
| 5.4 | Is there a potential for prejudice or discrimination in accessing project benefits for those who may be disadvantaged or vulnerable? |  | |  |  |  |  |  |  | |

**Categorization and Recommendation**

After compiling the above, determine which risk category the subproject falls under based on the environmental categories High, Substantial, Moderate and Low risk. If the subproject falls under “Substantial, Moderate or low” risk categories, proceed to identify the category of the subproject (as Schedule I, II or III) based on the National EIA procedural guideline issued by the Federal Environment, Forest and Climate Change Commission now EPA.

**a.** **World Bank ESF categorization**

|  |  |  |
| --- | --- | --- |
|  | High Risk | If the subproject falls under “High Risk” shall be excluded |
|  | Substantial Risk | If the subproject falls under “Substantial Risk” the Environmental and social Assessment of the subproject should be conducted in accordance with National law and any requirements of the ESSs that the Bank deems relevant to such subprojects |
|  | Moderate Risk | Environmental and social Assessment or Environmental and Social Management Plan of the subproject should be conducted in accordance with National law and any requirements of the ESSs that the Bank deems relevant to such subprojects. |
|  | Low Risk | Sub project is not subject to environmental assessment as no potential impacts are anticipated. However, preparation/inclusion of simple ESMP or Environmental Guideline for Construction Contractors will be acceptable. |

**\*place a tick on the appropriate box**

**b. National EIA Procedural Guideline (2003) categorization**

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Schedule I | EARDIP SOP II subproject 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 EPAs |
|  | Schedule II | Subproject will require a partial/preliminary ESIA and will necessitate the preparation of Preliminary ESIA / ESMP. |
|  | Schedule III | Subproject is not subject to environmental assessment as no potential impacts are anticipated. |

**\*Please Tick in the Applicable box**

**Note:**

**1.** Note that the Federal EIA Procedural Guideline (2003) is widely applied in many regions as it is. However, Regional EPAs such as Amhara EFWPPDA has issued ESIA guideline Directive 01/2010 that outline the list of projects to be reviewed and approved at different levels of its Zonal and Woreda offices. Thus, it is advisable to consult such regional guidelines while determining the screening Category in addition to the Federal EIA procedural guideline.

**2.** Note that based on the national ESIA procedural guideline, “Telecommunication” is generally put in schedule III under “Economic infrastructure and Service” section without specifying details of the type of facilities and activities involved. However, it was noted during the consultation discussion held with the Federal EPA, EIA Directorate that the draft EIA Procedural guideline was prepared in 2003, and it is clear that some of the development activities involved in telecommunication sector in the past two decades have brought in new telecom infrastructures with the advancement of technologies in the sector. Such new telecom infrastructure includes underground fiber optic cable and cell towers, the environmental and social impacts of construction and installation of which may not have been considered. Thus, it will be important to weigh the nature, anticipated size and significance of potential impacts of the subprojects under consideration in deciding the categorization into the schedule of activities.

|  |  |
| --- | --- |
| Reviewer and Approver : |  |
| Name: |  |
| Signature:  Date |  |

# **ANNEX B: GUIDELINE FOR SUBPROJECT ENVIRONMENTAL AND SOCIAL RISK CLASSIFICATION**

In accordance with the WB ESF, subprojects are classified as *High Risk*, *Substantial Risk*, *Moderate Risk* or *Low Risk* considering relevant potential risks and impacts.

**1.** A Project/subproject is classified as **High Risk**after considering, in an integrated manner, the risks and impacts of the Project, considering the following, as applicable.

1. If a Subproject is likely to generate a wide range of significant adverse risks and impacts on human populations or the environment. This could be because of the complex nature of the Project, the scale (large to very large) or the sensitivity of the location(s) of the Project. This is considered highly unlikely in the context of activities considered under EARDIP SOP II. This would take into account whether the potential risks and impacts associated with the Project have the majority or all of the following characteristics:

Long term, permanent and/or irreversible (e.g., loss of major natural habitat or conversion of wetland), and impossible to avoid entirely due to the nature of the Project.

(ii) High in magnitude and/or in spatial extent (the geographical area or size of the population likely to be affected is large to very large);

(iii) Significant adverse cumulative impacts.

(iv) Significant adverse transboundary impacts; and

(v) a high probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.);

b. The area likely to be affected is of high value and sensitivity, for example sensitive and valuable ecosystems and habitats (legally protected and internationally recognized areas of high biodiversity value), lands or rights of Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities and other vulnerable minorities, intensive or complex involuntary resettlement or land acquisition, impacts on cultural heritage or densely populated urban areas.

c. Some of the significant adverse ES risk and impacts of the Project cannot be mitigated or specific mitigation measures require complex and/or unproven mitigation, compensatory measures or technology, or sophisticated social analysis and implementation.

d. There are significant concerns that the adverse social impacts of the Project, and the associated mitigation measures, may give rise to significant social conflict or harm or significant risks to human security.

e. There is a history of unrest in the area of the Project or the sector, and there may be significant concerns regarding the activities of security forces.

f. The Project is being developed in a legal or regulatory environment where there is significant uncertainty or conflict as to jurisdiction of competing agencies, or where the legislation or regulations do not adequately address the risks and impacts of complex projects, or changes to applicable legislation are being made, or enforcement is weak.

g. The experience of the implementing agencies in developing complex Projects is limited; their track record regarding ES issues would present significant challenges or concerns given the nature of the Project’s potential risks and impacts.

h. There are significant concerns related to the capacity and commitment for, and track record of relevant Project parties, in relation to stakeholder engagement.

i. There are a number of factors outside the control of the Project that could have a significant impact on the ES performance and outcomes of the Project.

j. In general, projects or sub-projects identified with’ high risk’ rating will be excluded.

**2.** A Project is classified as **Substantial Risk**after considering, in an integrated manner, the risks and impacts of the Project, taking into account the following, as applicable.

a. the Project may not be as complex as High-Risk Projects, its ES scale and impact may be smaller (large to medium) and the location may not be in such a highly sensitive area, and some risks and impacts may be significant. This would take into account whether the potential risks and impacts have the majority or all of the following characteristics:

(i) They are mostly temporary, predictable and/or reversible, and the nature of the Project does not preclude the possibility of avoiding or reversing them (although substantial investment and time may be required);

(ii) there are concerns that the adverse social impacts of the Project, and the associated mitigation measures, may give rise to a limited degree of social conflict, harm or risks to human security.

(iii) they are medium in magnitude and/or in spatial extent (the geographical area and size of the population likely to be affected are medium to large);

(iv) the potential for cumulative and/or transboundary impacts may exist, but they are less severe and more readily avoided or mitigated than for *High-Risk* Projects; and

(v) there is medium to low probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.), and there are known and reliable mechanisms available to prevent or minimize such incidents.

b. The effects of the Project on areas of high value or sensitivity are expected to be lower than High Risk Projects.

c. Mitigatory and/or compensatory measures may be designed more readily and be more reliable than those of High-Risk Projects.

d. The Project is being developed in a legal or regulatory environment where there is uncertainty or conflict as to jurisdiction of competing agencies, or where the legislation or regulations do not adequately address the risks and impacts of complex Projects, or changes to applicable legislation are being made, or enforcement is weak.

e. The past experience of the implementing agencies in developing complex Projects is limited in some respects, and their track record regarding ES issues suggests some concerns which can be readily addressed through implementation support.

f. There are some concerns over capacity and experience in managing stakeholder engagement, but these could be readily addressed through implementation support.

**3.** A project is classified as **Moderate Risk** after considering, in an integrated manner, the risks and impacts of the Project, taking into account the following, as applicable:

a. the potential adverse risks and impacts on human populations and/or the environment are not likely to be significant. This is because the Project is not complex and/or large, does not involve activities that have a high potential for harming people or the environment, and is located away from environmentally or socially sensitive areas. As such, the potential risks and impacts and issues are likely to have the following characteristics:

(i) Predictable and expected to be temporary and/or reversible.

(ii) Low in magnitude.

(iii) Site-specific, without likelihood of impacts beyond the actual footprint of

the Project; and

(iv) Low probability of serious adverse effects to human health and/or the environment (e.g., do not involve use or disposal of toxic materials, routine safety precautions are expected to be sufficient to prevent accidents, etc.).

b. The Project’s risks and impacts can be easily mitigated in a predictable manner.

# **4.** A project is classified as ***Low Risk*** if it’s potential adverse risks to and impacts on human populations and/or the environment are likely to be minimal or negligible. These Projects, with few or no adverse risks and impacts and issues, do not require further ES assessment following the initial screening.**ANNEX C: SAMPLE CHANCE FIND PROCEDURE**

Cultural, historical, natural, or archaeological heritage may be damaged or lost during excavations and ensuing construction work activities. In addition, chance finds of heritages during excavations would be at risk of loss, unless due measures are taken to protect and save this heritage. Chance finds procedures will be an integral part of the project ESMP and civil works contracts. If the Contractor discovers archeological sites, historical sites, remains and objects, including graveyards and/or individual graves during excavation or construction, the Contractor shall:

|  |  |
| --- | --- |
| Chance Find Procedures | |
| Step 1 | Stop the construction activities in the area of the chance find; |
| Step 2 | Delineate the discovered site or area; |
| Step 3 | Secure the site to prevent any damage or loss of removable objects. |
|  | In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities for Culture and Tourism, or the Federal Authority for Research and Conservation of Cultural Heritages take over; |
| Step 4 | Notify the Subproject beneficiary/implementing institution E&S Focal Persons and PIU E&S staff, Project Supervisory Engineer who in turn will notify the responsible local authorities for Culture and Tourism or the Federal Authority for Research and Conservation of Cultural Heritages (within 24 hours or less); |
| Step 5 | The responsible local authorities for Culture and Tourism or the Federal Authority for Research and Conservation of Cultural Heritages would then be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by the archaeologists of the local/regional or Federal Authorities. The significance and importance of the findings should be assessed according to the various criteria relevant to Proclamation No. 209/2000 on research and conservation of cultural heritage. |
| Step 6 | Decisions on how to handle the finding shall be taken by local authorities for Culture and Tourism or the Federal Authority for Research and Conservation of Cultural Heritages This could include changes in the layout (such as when finding irremovable remains of cultural or archeological importance) conservation, preservation, restoration and salvage. |
| Step 7 | Implementation for the authority decision concerning the management of the finding shall be communicated in writing by the relevant authorities. |
| Step 8 | Construction work may resume only after permission is given by the relevant local/regional or Federal Authorities concerning safeguard of the heritage |

**Note:**

According to Article 41 of Proclamation No. 209/2000 on research and conservation of cultural heritage the measures that should be taken during chance finding of heritages (i.e. Fortuitous Discovery of Cultural Heritage) are the following:

1. 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 same to the Authority, and shall protect and keep same intact, until the Authority takes delivery thereof.
2. 'The Authority' shall, upon receipt of a report submitted pursuant to Sub-Article (I) hereof, take all appropriate measures to examine, take delivery of, and register the Cultural Heritage so discovered.
3. Where the Authority fails to take appropriate measures within six month in accordance with Sub- Article (2) of this Article, the 'person who has discovered the Cultural Heritage may be released from his responsibility by submitting, a written, notification with a full description of the situation to the Regional government official.
4. The Authority shall ensure that the appropriate reward is granted to the person who has handed over a Cultural Heritage discovered fortuitously in accordance with sub-Articles (I) and (2) of this Article. And such person shall be entitled to reimbursement of expenses, if any, incurred in the course of discharging his duties under this Article.

# **Annex D. TERMS OF REFERENCE FOR EARDIP SOP II ENVIRONMENTAL AND SOCIAL SPECIALISTS**

**Objective**: To provide technical advice on environmental management and mitigation and ensure that the EARDIP SOP II ESMF is fully implemented.

**Tasks:**

* Coordinate and support the system of E&S screening, review and approval process set out in this ESMF, and oversee its smooth operation including advice to Partner and beneficiary institutions on the procurement of consultants for any required ESIA studies.
* Liaise with the Federal and Regional EPAs on a regular basis to support implementation of the ESMF.
* Lead the delivery of capacity building programs on Environmental management for lead and partner implementing institutions, as well as beneficiary and other stakeholders.
* Monitoring of field research for E & S assessment. Undertake field monitoring missions and review documentation in order to monitor the implementation of the E&S requirements, and they will train regional level government staff in monitoring efforts.
* Provide technical advice to beneficiary institutions on all technical issues related to natural resources and environmental management. These issues will relate to impacts on surface water, groundwater, agricultural resources and vegetation, human health, ecology and protected areas, land, and soil degradation.
* Organize training workshops to raise awareness of officials of project implementing and stakeholder institutions, technical and management officers.
* Liaise with the project beneficiary and stakeholder institutions to ensure the project’s compliance with the ESMF, RPF 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 SEP
* 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 performance audit of EARDIP SOP II on an annual basis.
* Undertake review of Preliminary ESIA/ESMP to ensure compliance with the ESMF and other annexed E & S Safeguards; and in collaboration with the appropriate bodies initiate and carry periodic environmental monitoring and inspection on selected subprojects.
* Compile and submit quarterly, biannual, and annual E&S performance reports of the EARDIP SOP II to the PIU, PSC and the Federal and Regional EPAs as appropriate.

# **ANNEX E: TERMS OF REFERENCE FOR FULL ESIA**

This Terms of Reference (TOR) are applicable to development projects involving Digitization acceleration projects. The ToR will outline the aspects of an Environmental and Social Impact Assessment (ESIA) which when thoroughly addressed will provide a comprehensive evaluation of the sites, in terms of predicted environmental impacts, needed mitigation strategies, potentially viable alternatives to the development proposed and all related legislation.

Planned Areas: Issues such as slope stability, impact on drainage patterns, property etc. should be examined. The path of the corridor cleared of vegetation for transmission lines, substations and Hydro power plants should be the major focus of this exercise.

Rivers/ Riverine Areas: Issues such as erosion and siltation, macro invertebrate habitat destruction, disrupting of regular flow of the river and the possible impact of upstream activities on the area ecosystems e.g., wetlands etc.

Distinct Terrestrial Forest Types: Issues relating to the specific growth form of the vegetation, the carrying capacity, the successional stage of the forest and the projected level of disturbance which the forest can withstand.

Sites located within and adjacent to areas listed as protected or having protected species:

The main issue(s) of concern will be in part determined by the local legislation as well as Government of Ethiopia (GoE) responsibilities under applicable international conventions. The impact of the development on the specific sensitivities of the protected area should be highlighted. Mitigation of impacts should assess if the post mitigation status would be acceptable in the protected area context. Alternative sites should be rigorously evaluated. Socio–Economic issues such as land acquisition and impact of these conveyances on commerce in the community should be closely examined.

1. **Objective of the Study:**

This section will (i) outline the objectives and particular activities of the planned activity; and (ii) indicate which activities are likely to have environmental and social impacts that will require appropriate mitigation (Adapted to specific activities).

**Specific objectives:**

1. To undertake an Environmental and Social Impact Assessment (ESIA) for proposed project to meet the requirements of the WBG Environmental and Social standards (ESSs) and Environmental Health and Safety Guidelines (EHSGs) and the Kenya legal requirements;

2. To provide relevant environment and social baseline conditions on the proposed project area,

3. Review the relevant WBG’s ESSs triggered for the project, the national legal requirements and guidelines that the project will be implemented;

4. Assess and predict the potential site specific environmental and social impacts of the project during site preparation, construction and operation phase;

5. Develop proposed feasible and cost-effective mitigation measures for the potential adverse environmental and social impacts as well as safety risk associated with the proposed project site activities;

6. Assess safeguards capacity of MInT and recommend appropriate measures to address gaps through capacity building during implementation of the project; and

7. Develop Environmental and Social management and monitoring plans and prepare appropriate budget for Environmental, Social, Health and Safety mitigation measures for the project.

**II. ESIA Report Outline**

The Environmental and Social Impact Assessment should:

Provide a complete description of the corridor proposed for development. This should include a description of the main elements of the development, highlighting areas to be reserved for construction, the creation of verges and other green areas.

* Identify the major environmental and social issues of concern through the presentation of baseline data which should include social and cultural considerations. Assess public perception of the proposed development.
* Outline the Legislation and Regulations relevant to the project.
* Predict the likely impacts of the development on the described environment, including direct, indirect and cumulative impacts, and indicate their relative importance to the design of the development’s facilities.
* Identify mitigation action to be taken to minimize adverse impacts and quantify associated costs.
* Design a Monitoring Plan which should ensure that the mitigation plan is adhered to.
* Describe the alternatives to the project that could be considered at that site.

To ensure that a thorough Environmental and Social Impact Assessment is carried out, it is expected that the following tasks/ contents to be covered:

1. **Executive summary**.

* Concisely discusses significant findings and recommended actions.

1. **Policy, legal, and administrative framework**.

* Analyses the legal and institutional framework for the project, within which the environmental and social assessment is carried out, including the issues set out in ESS1, paragraph 264.
* Compare the Borrower’s existing environmental and social framework and the ESSs and identify the gaps between them.
* Identifies and assesses the environmental and social requirements of any co-financiers.
* Outline the pertinent regulations and standards governing environmental quality, safety and health, protection of sensitive areas, protection of endangered species, siting and land use control at the national and local levels. The examination of the legislation should include at minimum, legislation such as the land proclamation and regulation, Environmental protection and conservation laws, expropriation law, etc. and the appropriate international convention/protocol/treaty where applicable.

1. **Project description**.

* Concisely describes the proposed subproject and its geographic, environmental, social, and temporal context, including any offsite investments that may be required (e.g., dedicated pipelines, access roads, power supply, water supply, housing, and raw material and product storage facilities), as well as the project’s primary suppliers.
* Through consideration of the details of the project, indicates the need for any plan to meet the requirements of ESS 1 through 10.
* Includes a map of sufficient detail, showing the project site and the area that may be affected by the project’s direct, indirect, and cumulative impacts.

1. **Baseline data**.

This task involves the generation of baseline data which is used to describe the study area as follows:

* Physical environment
* Biological environment
* Socio-economic and cultural constraints.
* It is expected that methodologies employed to obtain baseline and other data be clearly detailed.
* Baseline data should include:

(i) Physical

* + A detailed description of the existing geology and hydrology. Special emphasis should be placed on storm water run-off, and drainage patterns. Any slope stability issues that could arise should be thoroughly explored.
  + Water quality of any existing rivers, ponds, streams, or coastal waters in the vicinity of the corridor or substation. Quality Indicators should include but not necessarily be limited to suspended solids, turbidity, oil, and grease.
  + Climatic conditions and air quality in the area of influence including particulate matter wind speed and direction, precipitation, relative humidity and ambient temperatures,
  + Obvious sources of pollution existing and extent of contamination.

(ii) Biological

* + Present a detailed description of the flora and fauna (aquatic and terrestrial) in the proposed corridor of influence, with special emphasis on rare, endemic, protected or endangered species. Migratory species should also be considered. There may be the need to incorporate microorganisms to obtain an accurate baseline assessment. Generally, species dependence, niche specificity, community structure and diversity ought to be considered.

(iii) Socio-economic & Cultural

* + Present and projected population; present and proposed land use; planned development activities, issues relating to squatting and relocation, community structure, employment, distribution of income, goods and services; recreation; public health and safety;
  + Cultural peculiarities, aspirations and attitudes should be explored. The historical importance of the area should also be examined. While this analysis is being conducted, it is expected that an assessment of public perception of the proposed development be conducted. This assessment may vary with community structure and may take multiple forms such as public meetings or questionnaires.
  + Vulnerable and disadvantaged groups,
  + Historically Underserved People of Ethiopia (Regions such as Afar, Benishangu Gumuz, Gambella, Somali, and pastoralists found in in southern parts and Oromia region.

1. **Identification of Potential Environmental and social impacts/risks**.

Takes into account all relevant environmental and social risks and impacts of the project. This will include the environmental and social risks and impacts specifically identified in ESS2 – 8, and any other environmental and social risks and impacts arising because of the specific nature and context of the project, including the risks and impacts identified in ESS1, paragraph 28.

Identify potential impacts as they relate to, (but are not restricted by) the following:

* public health and safety, risk assessment, change in drainage pattern flooding potential and aesthetics;
* landscape impacts of excavation and construction
* loss of natural features, habitats and species by construction and operation
* noise, air pollution, pollution of potable, coastal, surface and groundwater - Socio-economic and cultural impacts.
* Loss of land and assets due digital infrastructures construction, rehabilitation and operation
* Distinguish between significant positive and negative impacts, direct and indirect, long-term

and immediate impacts, as well as temporary and permanent and cumulative impacts.

* Identify triggering, avoidable reversible and irreversible impacts.

1. **Mitigation Measures**

* Identifies mitigation measures and significant residual negative impacts that cannot be mitigated and, to the extent possible, assesses the acceptability of those residual negative impacts.
* Identifies differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable.
* Assesses the feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of proposed mitigation measures, and their suitability under local conditions; and the institutional, training, and monitoring requirements for the proposed mitigation measures.
* Specifies issues that do not require further attention, providing the basis for this determination.

1. **Analysis of alternatives**.

* Systematically compares feasible alternatives to the proposed project site, technology, design, and operation—including the “without project” situation—in terms of their potential environmental and social impacts.

Assess the alternatives’ feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of alternative mitigation measures, and their suitability under local conditions; and the institutional, training, and monitoring requirements for the alternative mitigation measures.• For each of the alternatives, quantifies the environmental and social impacts to the extent possible, and attaches economic values where feasible.

1. **Design Measures**

• Sets out the basis for selecting the particular project design proposed and specifies the applicable EHSGs or if the ESHGs are determined to be inapplicable, justifies recommended emission levels and approaches to pollution prevention and abatement that are consistent with GIIP.

* + - 1. **Environmental and Social Management Plan (ESMP)**.
* Covers mitigation measures, monitoring, budget requirements and funding sources for implementation, as well as institutional strengthening and capacity buildings requirements.
  + - * 1. **An Environmental and Social Monitoring Plan**

An outline monitoring program should be included in the ESIA, and a detailed version submitted to Ethiopian Environmental Authority (EPA)/ Or Regional Environmental Bureaus for review and approval prior to the commencement of the development. At the minimum, the monitoring program and report should include:

* The activity being monitored and the parameters chosen to effectively carry out the exercise.
* The methodology to be employed and the frequency of monitoring.
* The sites and project components being monitored. This may include a control site where no impact from the development is expected.
  + - * 1. **Stakeholder Engagement**
* List and details of engagements undertaken in the preparation of the ESIA
* List and plan for further engagements to be undertaken during implementation.
  + - * 1. **GRM**
* detail GRM mechanisms to be applied
  + 1. **Information Disclosure**
* list how and when thie ESIA is disclosed

**N. Qualification of the Consultant**

The consulting Team shall consists of, at least, an Environmentalist and a Sociologist working together in undertaking the ESIA.

The Environmentalist will have the following minimum qualifications:

• MSc. Degree in Environmental Sciences or a BSc. Environmental Engineering from a recognized University

• EPA Registered Lead EIA Expert or equivalent

• Minimum overall experience of 10 years, with at least 5 years’ experience on similar projects in Sub-Saharan Africa

• OHS expertise

• Participation in an ESIA for large infrastructure project that met the requirements of an International Financial Institution, such as the World Bank, IFC, AfDB, or EIB.

The Sociologist: Bachelor of Arts Degree in Sociology or related field from recognized university and 5-10 years post-graduation experience and at least three (3) experience in large scale infrastructure project. The sociologist should be conversant with the WBG’s ESSs).

**O. Deliverables and Reporting**

The ESMP will be prepared in English. The assignment shall be carried out and completed within sixty (45 days) from the contract signing to MInT.

| Report | Description | Submittal date | Copies | |
| --- | --- | --- | --- | --- |
| Hard | Soft |
| Report 1: | Acceptable inception report including; clear description of understanding the assignment, methodology to be used and work plan | 5 days after contract effective date. | 2 | 2 |
| Report 2: | Submission of Draft ESIA Report | 30 days after contract effective date. | 2 | 2 |
| Report 3: | Submission of acceptable final ESIA Report to MInT | 40 days after contract effective date | 5 | 1 |

**Appendixes**

* + - 1. **List Experts participated in ESIA preparation** – individuals and organizations.
      2. **References -** written materials both published and unpublished, used in study preparation.

1. **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., socio-economic baseline survey, resettlement plan)

**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 F: GUIDELINE FOR ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)**

When a subproject includes distinct mitigation measures (physical works or management activities), a simple ESMP needs to be included with the subproject. A simple ESMP usually includes the following components:

* **Description of adverse effects**: the anticipated effects are identified and summarized.
* **Description of mitigation measures**: each measure is described with reference to the effect(s) it is intended to deal with. As needed, detailed plans, designs, equipment descriptions, and operating procedures are described.
* **Description of monitoring program**: Monitoring provides information on the occurrence of environmental effects. It helps identify how well mitigation measures are working, and where better mitigation may be needed. The monitoring program should identify what information will be collected, how, where and how often. It should also indicate at what level of effect there will be a need for further mitigation.
* **Responsibilities:** The people, groups, or organizations that will carry out the mitigation and monitoring activities are defined, as well as to whom they report and are responsible. There may be a need to train people to carry out these responsibilities, and to provide them with equipment and supplies.
* **Implementation schedule:** The timing, frequency and duration of mitigation measures and monitoring are specified in an implementation schedule and linked to the overall subproject schedule.
* **Cost estimates and sources of funds**: These are specified for the initial subproject investment and for the mitigation and monitoring activities as a subproject is implemented.
* **Monitoring Methods:** Methods for monitoring the implementation of mitigation measures or environmental effects should be as simple as possible, consistent with collecting useful information, so that community members can apply them themselves (see example below). For example, they could just be regular observations of subproject activities or sites during construction and then use.

# **ANNEX G: NATIONAL EIA PROCEDURAL GUIDELINE FOR SCHEDULE OF ACTIVITIES**

**Schedule I. List of projects that require FULL EIA**

**1. Agriculture**

1. water management projects for agriculture (drainage, irrigation)
2. large scale mono- culture (cash and food crops)
3. Pest control projects
4. Fertilizer and nutrient management
5. Land development schemes covering an area of 500 hectares or more to bring forest land into agricultural production
6. Agricultural programmers necessitating the resettlement of 100 families or more.
7. Development of agricultural estates covering an area of 500 hectares or more
8. Construction of dams, man-made lakes, and artificial enlargement of lakes with surface areas of 200 hectares or more.
9. Drainage of wetlands wildlife habitat or of virgin forest covering an area of 100 meters or more.
10. Introduction of new breed, species of crops, seeds, or animals
11. Surface water fed irrigation projects covering more than 100 hectares
12. Ground water fed irrigation projects more than 100 hectares
13. River diversions and water transfers between catchments

**2. Livestock and Range management**

1. Large Scale livestock movement
2. Introduction of new breeds of livestock
3. Introduction of improved forage species
4. Large scale open range rearing of cattle, horses, sheep etc
5. Large scale livestock production in Urban area
6. Large scale slaughterhouse construction
7. Ectoparasite management (cattle dips, area treatment)
8. Intensive livestock rearing units

**3. Forestry activities**

* Timber logging and processing
* Forest plantation and afforestation and introduction of new species
* selective removal of single commercial tree species
* pest management
* Conversion of hill forest land to other land use
* Logging or conversion of forest land to other land use within the catchments area of reservoirs used for municipal water supply, irrigation or hydropower generation or in areas adjacent to parks
* Logging with special emphasis for endangered tree species
* Large scale afforestation/reforestation, mono-culture forest plantation projects which use exotic free species
* Conversion of forest areas which have a paramount importance of biodiversity conservation to other land use
* Resettlement programs in natural forest and woodland areas.

**4. Fisheries activities**

1. Medium to large scale fisheries
2. Artificial fisheries (Aqua-culture for fish, algae, crustaceans shrimps, lobster or crabs).
3. Introduction of new species in water bodies commercial fisheries

**5. Wildlife**

* introduction of new species
* wildlife catching and trading
* hunting
* wildlife ranching and farming
* zoo and sanctuaries

**6. Tourism and Recreational Development**

1. Construction of resort facilities or hotels along the shorelines of lakes, river, islands and oceans
2. Hill top resort or hotel development
3. Development of tourism or recreational facilities in protected and adjacent areas (national parks, marine parks, forestry reserves etc) on islands and in surrounding waters
4. Hunting and capturing
5. Camping activities walkways and trails etc.
6. sporting and race tracts/sites
7. Tour operations

**7. Energy Industry**

* Production and distribution of electricity, gas, steam, and hot water
* Storage of natural gas
* Construction of offshore pipelines in excess of 50 km in length
* High power transmission line
* Construction of combined cycle power station
* Thermal power development (i.e. coal, nuclear)
* Hydro-electric power
* Bio-mass power development
* Wind -mills power development

1. Solar (i.e. Impact due to pollution during manufacture of solar devices, acid battery spillage and improper disposal of batteries)
2. Nuclear energy

**8. Petroleum Industry**

1. Oil and gas fields exploration and development, including Construction of offshore and onshore pipelines
2. Construction of oil and gas separation, processing, handling, and storage facilities.
3. Construction of oil refineries
4. Construction of product deposits for the storage of petrol, gas, diesel, tar and other products within commercial, industrial or residential areas.
5. Transportation of petroleum products

**9. Food and beverage industries**

1. manufacture of vegetable and animal oils and fats
2. oil refinery and ginneries
3. processing and conserving of meat
4. manufacture of dairy products
5. brewing distilling and malting
6. fish meal factories
7. slaughter - houses
8. soft drinks
9. tobacco processing
10. canned fruits, and sources
11. sugar factories
12. other agro-processing industries

**10. Textile in industry**

1. cotton and Synthetic fibers
2. dye for cloth
3. ginneries

**11. Leather Industry**

* tanning
* tanneries
* dressing factories
* other cloth factories

**12. Wood, Pulp and Paper Industries**

1. manufacturing of veneer and plywood
2. manufacturing of fiber board and of particle - board
3. manufacturing of Pulp, Paper, sand-board cellulose – mills

**13.** **Building and Civil Engineering Industries.**

1. industrial and housing Estate
2. major urban projects (multi-story building, motor terminals, markets etc)
3. tourist installation
4. construction and expansion/upgrading of roads, harbors, shipyards, fishing harbors, air fields (having an air strips of 2,500mor long) and ports, railways and pipelines
5. River drainage and flood control works.
6. hydro - electric and irrigation dams
7. reservoir
8. Storage of scrap metal.
9. military installations
10. construction and expansion of fishing harbors
11. developments on beach fronts

**14**. **Chemical industries**

1. manufacture, transportation, use and storage of pesticide or other hazardous and or toxic chemicals
2. production of pharmaceutical products
3. storage facilities for petroleum, petrochemical and other chemical products (i.e. filling stations)
4. Production of paints vanishes, etc.

**15. Extractive industry**

1. extraction of petroleum
2. extraction and purification of natural gas
3. other deep drilling - bore-holes and wells
4. mining
5. quarrying
6. coal mining
7. Sand dredging.

**16. Minerals extraction and processing**

* Metallic minerals such as Iron, Lead, Copper, Nickel

1. Industrial minerals such as kaolin, diatomite,
2. Construction Minerals
3. Mineral Water
4. Thermal Water
5. Extraction of salts from brines.

**17. Non-metallic industries (Products)**

1. manufacture of cement, asbestos, glass, glass-fiber, glass-wool
2. processing of rubber
3. plastic industry
4. lime manufacturing, tiles, ceramics

**18. Metal and Engineering industries.**

1. manufacture and assembly of motor - vehicles
2. manufacture of other means of transport (trailers, motorcycles, motor-vehicle bicycles-cycles)
3. body - building
4. boiler - making and manufacture of reservoirs, tanks, and other sheet containers
5. foundry and Forging
6. manufacture of non - ferrous products
7. iron and steel
8. electroplating

**19. Waste treatment and disposal**

*(a) Toxic and Hazardous waste*

1. construction of Incineration plants
2. construction of recovery plant (off-site)
3. construction of wastewater treatment plant (off-site)
4. construction of secure landfills facility
5. construction of storage facility (off - site)
6. Collection and transportation of waste.
7. installation for the disposal of industrial waste

*(b) Municipal Solid Waste*

1. construction of incineration plant
2. construction of composting plant
3. construction of recovery/re-cycling plant
4. construction of Municipal Solid Waste landfill facility
5. construction of waste depots.
6. collection and transportation

*(c) Municipal Sewage*

1. construction of wastewater treatment plant
2. construction of marine out fall
3. Night soil collection transport and treatment.
4. construction of sewage system

**20. Water Supply**

1. canalization of water courses
2. diversion of normal flow of water
3. water transfers scheme
4. abstraction or utilization of ground and surface water for bulk supply
5. water treatment plants
6. Construction of dams, impounding reservoirs with a surface area of 100 hectars
7. Ground water development for industrial, agricultural or urban water supply of greater than 4000 m3 /day
8. Drainage Plans in towns close to water bodies

**21. Transport**

* Major urban roads
* Rural road programmes
* Rail infrastructure and railways
* Trans-regional and international highway
* Upgrading or rehabilitation of major rural roads
* Airports with basic runway

**22. Health projects**

* vector control Project (malaria, biliharzia, tripanosomas etc)

**23. Land Reclamation and land development**

1. rehabilitation of degraded lands
2. dredging of bars, greyone, dykes, estuaries etc.
3. spoil disposal.

**24. Resettlement/relocation of people and animals**

* resettlement plan
* establishment of refugee camps

**25. Multi-sectoral Projects**

* Agro-forestry
* dispersed field - tree inter-cropping
* alley cropping
* living fences and other linear planting
* windbreak/shelterbelts
* taungya system
* Integrated conservation and development programs e.g. protected areas.
* Integrated Pest Management (e.g. IPM)
* Diverse construction - public health facilities, schools, storage building, tree
* Nurseries, facilities for ecotourism and field research in protected areas, enclosed latrines, small enterprises, logging mills, manufacturing furniture carpentry shop, access road, well digging, camps, dams, reservoirs.
* River basin development and watershed management projects
* Food aid, humanitarian relief

**26. Trade: Importation and Exportation of the following**

1. hazardous Chemicals/Waste
2. plastics
3. petroleum products
4. vehicles
5. used materials
6. wildlife and wildlife products
7. pharmaceuticals
8. food
9. beverages
10. GMOs and GMOs based products

**27.** **Public instruments**

1. decisions to change designated status
2. family planning
3. technical assistance
4. development strategies
5. urban and rural land use development plans e.g. master plans,
6. structural adjustment,
7. national budget
8. Polices and Programmes formulations, etc.

**28.** **All projects in environmentally sensitive areas should be treated as equivalent to Schedule**

1 activity irrespective of the nature of the project.

**Schedule. 2**. **List of Projects That Require A PRELIMINARY ENVIRONMENTAL IMPACT Study.**

**A List of Small - Scale Activities and Enterprises**

* Fish culture
* Bee-keeping
* Small animal husbandry and urban livestock keeping
* Horticulture and floriculture
* Wildlife catching and trading
* Production of tourist handicrafts
* Charcoal production
* Fuel wood harvesting
* Wooden furniture and implement making
* Basket and other weaving
* Nuts and seeds for oil processing
* Bark for tanning processing
* Brewing and distilleries
* Bio-gas plants
* Bird catching and trading
* Hunting
* Wildlife ranching
* Zoo, and sanctuaries
* Tie and dye making
* Brick making
* Beach sailing
* Seaweed Farming
* Salt pans
* graves and cemeteries
* Urban Livestock Keeping
* Urban agriculture.
* Fish landing stations.
* Wood carving and sculpture
* Hospitals and dispensaries, Schools, Community center and social halls, play grounds
* Wood works e.g. boat building
* Market places (livestock and commodities).
* Technical assistance
* Rainwater harvesting
* Garages
* Carpentry
* Black smith.
* Tile manufacturing
* Kaolin manufacturing
* Vector control projects e.g. Malaria, Bilharzia, trypanosomes
* Livestock stock routes
* Fire belts.
* Tobacco curing kilns
* Sugar refineries
* Tanneries
* Pulp plant
* Oil refineries and ginneries
* artisanal and small-scale mining
* Rural road
* Research having the potential to affect ecosystems functions, use, or the health and welfare of the society.
* Rural water supply and sanitation
* Land drainage (small scale)
* Sewerage system

**Schedule 3. Lists of Projects That May Not Require Environmental Impact Assessment**

**1. Social infrastructure and services**

* Educational facilities (small scale)
* Audio visual production
* Teaching facilities and equipment
* Training
* Medical centre (small scale)
* Medical supplies and equipment
* Nutrition
* Family planning

**2. Economic infrastructure and services**

* Telecommunication
* Research, small scale

**3. Production Sector**

* Irrigation
  + - Surface water fed irrigation projects covering less than 50 hectares
    - Ground water fed irrigation projects covering less than 50 hectares
* Agriculture

All small-scale agricultural activities

* Forestry
* Protected forest reserves (small scale)
* Productive forest reserves (small scale)
* Livestock
* Rearing of cattle (<50 heads); pigs (<100 heads), or poultry (<500 heads)
* Livestock fattening projects (small scale)
* Bees keeping projects (small scale)
* Fisheries
* Artesian fisheries (small scale)
* Industry
* Agro industrial (small scale)
* Other small-scale industries having no impact to the environment
  + Trade
* All small-scale trades except trade in endangered species and hazardous

materials

* Financial assistance
  + Programme assistance
  + Non-project or special country support
  + Food aid not involving GMOs based food
* Emergency Operations
  + Assistance to refugee returned and displaced person
  1. **All projects involved in environmental enhancement programs**

***The overall exercise shall identify any discrepancies with the ESF requirements and local EIA guideline and applying the most stringent approach.***

# **ANNEX H: LIST OF CONSULTED PARTICIPANTS**

|  |  |  |  |  |  |
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|  |  |  |  |
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# **ANNEX-I: CONTRACTOR MANAGEMENT PROCEDURE**

1. **Procedures for managing Contractors in ES Performances**

Client is responsible to manage the E & S performances of contractors who are perceived as ‘separate entities’ or ‘third parties. To manage the E & S performances of the contractor or subcontractors, the client should prepare and implement sound, consistent and effective approaches which are consistent with the World Bank EHS guideline and WB Procurement Guide: Contract Management Practice or Good Practice Note: Managing Contractors' Environmental and Social Performance requirement. This procedure provides practical guidance to clients and contractors on the process of prequalification, solicitation, evaluation contracting and procurement to ensure adequate E & S management during construction, installation, operation, and demolition activities. It also provides a recommendation on how to manage project performance during the different phases of services being provided by the contractors (i.e., from mobilization to construction, operations, and maintenance) and how to monitor and report on contractors’ performance effectively.

* 1. **A Risk Based Approach for Contractor Selection**

E & S risks in the contracting process are most effectively addressed by integrating the risk management requirements of the contractor into the contract. Following the construction risk assessment process, clients should identify the risk management measures that will be demanded of the contractor, formalize these as “Contractor Management Plan” or “Contractor E & S Requirement Document” and integrate these plans into the procurement process. The contractor management Plan or contractor E & S requirement document should describe in a comprehensive and structured manner the various E & S considerations, controls, and commitments related to the main activities that the contractor will be required to implement as part of its scope of work. They should include all relevant E & S requirements, commitments, and provisions derived from source documents (e.g., E & S policies, regulatory requirements, E & S commitment registers, ESIA documentation, supplemental assessments, etc., and should be an integral part of the contract. These plans help improve the contractor’s understanding of the E & S requirements for the project and provide an overall framework of the client’s expectations on E & S matters. The understanding will enable the contractor to determine the resources and associated costs that will be required for executing the work. As a result, the bidding process, the selection of the contractor, the contract, and the execution of the work itself will include the client’s (and project’s) E & S considerations from the outset. By including all relevant provisions in these documents, and by making the Contractor Management Plan/ the Contractor E & S Requirements document an integral part of the contract, the client will have better tools to manage the E & S performance of their contractors and will be a better position to adequately control and mitigate the identified risks and impacts of the project or activity. The contractor selection process should involve a multidisciplinary team, with one or more qualified E & S professionals responsible for the project’s E & S-related aspects, including E & S performance, worker and community health, safety and security, and human resources. This will ensure that E & S matters and variables are consider early in the process of selecting a contractor.

**1.2** **Managing the Project Performance through Proactive Monitoring**

The client is responsible to proactively monitor the E & S performance of their contractors and subcontractors. On a day-to-day basis, contractors should monitor their own E & S performance and that of all its subcontractors through mobilization, construction phase, operation, and demobilization. Clear responsibilities and reporting lines are essential to avoid duplication of efforts and/or gaps in monitoring. Clients should agree on reporting metrics and require contractors to report on E & S performance at an agreed frequency. Timely reporting of E & S performance and results enables the client to identify opportunities for improvement, prevent poor performance issues, and assist contractors if remedial action needs to be taken. Regular meetings between clients and contractors, and between contractors and their subcontractors are essential to ensure contractor performance is satisfactory and that project specifications are being met. Throughput this process, clients should ensure that contractors employ qualified E & S personnel to oversee E & S performance, and that contractor staffing and resources are commensurate with the magnitude and timing of work and potential E & S risks.

A proactive monitoring of the contractors’ on E & S performance is key for the success of the work and service being provided, and for the overall E & S performance of the project. A successful contractor will foster good E & S performance. This guideline provide recommendations on how to monitor contractor performance from mobilization, construction, demobilization and site handover, including guidance on how to conduct site handover, including guidance on how to conduct site visits, how to perform E & S induction and training, and how to assess E & S conditions and overall performance. This guide further provides examples on monitoring and reporting requirements for contractors and suggestions on how the client can perform the E & S review of contractor invoices to ensure the fulfillment of contractual obligations.

* 1. **Contractor Selection**

The contractor selection process should involve a multidisciplinary team, with one or more qualified E & S professionals with primary responsibility for the project’s E & S performance, worker and community health, safety and security, and human resources (HR). The participation and engagement of the E & S professional in the contractor selection process is aimed at providing an early consideration of E & S matters and variables when selecting a contractor. The first step in contractor procurement process is the preparation of RFP. This RFP is typically prepared by procurement staff with input from the project manager, technical specialists (engineers, ES specialists and lawyers).

A good international industry practices for EPC contracts is for the client to prepare Contractor Management Plans (CMPs) or similar documents, which describe in a comprehensive and structured manner the various E & S considerations, controls, and commitments related to the main activities that the EPC contractor will be required to implement as part of its scope of work. These management plans spell out E & S requirements to proactively manage risks in their activities including clear definitions of responsibilities, training, needs, performance measurement, tools, and reporting requirements. In sum, the CMPs describe the mitigation and performance improvement measures and actions that address the identified E & S risks and impacts of the project.

* The first step in the contractor procurement process is the preparation of RFP. This RFP is typically prepared by procurement staff with input from the project manager, technical specialists (for example: engineers and E & S specialists), and lawyers.
* A good international industry practice for EPC contracts is for the client to prepare Contractor Management Plan (CMP) or similar documents, which describe in a comprehensive and structured manner the various E & S considerations, controls, and commitments related to the main activities that the EPC contractor will be required to implement as part of its scope of work. These management plans spell out E & S requirements to proactively manage risks and impacts in their activities including clear definitions of responsibilities, training needs, performance measurement tools, and reporting requirements. In sum, the CMPs describe the mitigation and performance improvement measures and actions that address the identified E & S risks and impacts of the project.
* Having a set of CMPs addressing all relevant E & S matters improves the understanding by the contractor of the E & S requirements and provides an overall framework of the client’s expectations on E & S matters. With a better understanding of these, the contractor can determine the resources required for executing the work with due consideration of the client’s E & S requirements. As a result, the bidding process, the selection of the contractor, the contract, and the execution of the work itself includes the client’s (and project’s) E & S considerations from the outset. Summarizing the e
* For other types of contracts (i.e., contracts different in scope to EPC and EPCM contracts), clients may choose to develop a consolidated Contractor E & S Requirements document summarizing the general expectations in terms of occupational health and safety, and E & S for all of their contractors and subcontractors. This is a common of industry practice that helps clarify the client’s main Environmental, Social, Health and Safety (ESHS) requirements, conditions, and provisions that every contractor or subcontractor must follow when entering into an agreement with the client. A high-level definition of ESHS expectations allows the contractor to better understand the minimum requirements that must be met. It also helps the client to set basic expectations of the ESHS framework that will govern the client-contractor relationship from the outset. A Contractor E & S Requirements document fosters a better understanding of expectations and helps the contractor to know from the beginning what is required and deemed necessary to match the requirements and associated costs. This can be particularly helpful during the bidding and procurement process.
* These documents (the CMPs and/or the Contractor E & S Requirements document) must include all relevant E & S requirements, commitments, and provisions derived from a number of source documents, including as applicable:
* WBG General and relevant industry specific EHS Guidelines
* WB ESF-ESSs
* Commitments included in the ESIA’s and E & S related permits.
* ESHS Commitment registers
* Legal obligations and applicable codes and standards; and
* Company policies and internal procedures.
* By including all relevant provisions in these documents, and by making the CMPs and /or the Contractor E & S Requirements document an integral part of the contract, the client will have better tools to manage the E & S performance of their contractors, ensuring compliance with E & S requirements and will be in a better position to adequately control the identified risks and impacts of a project or activity.
* Sometimes a request for information (RFI), “expression of interest”, and/or a qualification questionnaire is issued prior to an RFP. RFIs are technically brief and include limited information. They are used to determine market interest and solicit preliminary information on potential vendors or contractors, and potentially to create a short list of contractors from whom to issue RFPs.

**1.4 Prequalification**

* The contractors should be required to provide details including (but not limited to) past EHS performance; status of ESMS; number and qualification of ESHS personnel; occupational health and safety procedures and control; HR policies, codes of conduct, and grievance mechanism controls; including means to address harassment and other forms of GBV plus prior reported incidents of SEA and GBV; and supply chain management as criteria for inclusion on such lists. The number of documents and level of information and detail that are requested to contractors shall be commensurate to the scope of work and other specific feature that the contractor is being prequalified against.

**1.5 Solicitation**

* In the interest of sharing of project specific E & S requirements, clients are encouraged to include the following in their RFPs or other solicitation to prospective contractors:
* Documentation showing compliance the country’s ESHS requirements.
* The client’s corporate E & S policy and other relevant policies such as for human resources, anticorruption and bribery, procurement, and stakeholder engagement.
* The clients Contractor’s E & S Requirements that define the main expectations in terms of occupational health, safety, E & S, and community aspects.
* Other governance frameworks or industry standards the client has publicly committed to comply with are also helpful information for contractors. These could include for example the Equator Principles, Global Reporting Initiative (GRI) standards, Millennium Development Goals (MDGs), Sustainable Development Goals (SDGs), Extractive Industries Transparency Initiative (EITI), International Council of Mining and Metals (ICMM) 10 Principles.
* Where there is not an ESIA prepared or permitting requirement in place for the project, the following may be used as sources of information about E & S concerns and sensitives: (a) WB’s Environmental and Social Review Summary, available on WB’s website in the event that WB is involved in the project and has concluded its appraisal process, (b) due diligence and independent engineer/E & S specialist reports, (c) gap analyses, (d) an assessment of security risks, (e) general E & S risk context of the project location(s), and (f) country legislations.
* Project specific E & S requirements that are part of an ESIA or permits or approvals that will be included in the contract are also helpful to include in the RFP. These may include environmental design criteria (the environmental engineering parameters for aspects such as water quality, air quality, and noise) to which the project must adhere; specific social and labor issues that must be addressed (for example, protection for migrant workers); and relevant management plans. Where appropriate, the sustainability and /or certification of materials to be used should be included as a requirement. A commitment registers or extracts from it. May also be useful. The project’s ESCP, if available, should also be provided. The information in the RFP should tailor to contract activities as closely as possible.
* Relevant requirements of the clients ESMS, including any project specific E & S management Plan that has been prepared, are also helpful to potential contractors.
* If a site visit is planned during the bidding phase (as should always be the case for significant construction contracts, or if the features, location, or specific characteristics of the service in the bidding process may require so), the solicitation should include site visit. All information shared on the site visit should be made available to all the bidders. A client’s E & S representative should always be present during the site visit(s) to present the E & S framework within which the project is operating, answer questions, and provide clarification to bidders. Whether a contractor’s E & S representative attends the site inspection will depend on the significance and complexity of the of the E & S issues.
* Gender should be addressed in the contracting process. Proactive promotion of gender equality and diversity can enhance the economic output, performance, development and reputation of a project business. Socially inclusive workplaces can increase productivity yields, flow and transparency of information, and quality of service; encourage adherence to rules and policies, and attract diverse points of view and opinions. It is important therefore, that contractors’ internally facing human resource policies and procedures actively seek to address all forms of deliberate or unintentional discrimination against women in the workplace.
* It is often found in large-scale construction projects that contract and subcontract employees are predominantly male, well paid in the local context, and often from outside the host community and project area. These circumstances elevate the risk of SEA and GBV by contract workers. Such SEA and GBV can range in severity from sexual harassment to exploitation and abuse of women and children. Contractors should put in place measures, including codes of conduct, to address such risks. Such measures should clearly establish that contractors/workers should not engage in any sexual activities with children, defined as anymore under the age of 18 (regardless of national statues or standards). Different codes of conduct will be relevant for contracting companies, contracting company managers, and individual workers.
* Contractors benefit from identifying areas and procedures where a more equal and diverse workplace can be developed. Contracts can include specific language, targets, and objectives around recruitment, hiring, training, management, and promotion of a diverse and competent workforce. Inclusiveness helps to ensure that all activities associated with a project and meet the needs of the workforce in a dignified manner, while ensuring equal pay for equal competencies and work. This includes ensuring all planning and implementation processes consider, for example, differences in training, communication, housing, personal hygiene and use o lavatories, personal protective equipment, and adherence to code of conduct.
* Contracts should explicitly integrate language, terms, and conditions for enabling equal opportunity and diversity in the workforce in each phase of the contracting and procurement process. Recruitment and hiring policies should strictly prohibit and discourage discrimination or exclusion based on gender or diversity. Finally, for the client to assess performance, contacts and contractors will need to include a means for reporting and measuring results and outcomes of having a socially inclusive workforce, considering both the formal and informal sectors, which are often important components of socially inclusive and diverse construction environments.

1**.6 Proposal Evaluation and Contractor Selection**

* The contractor’s existing systems, its capacity to implement E & S requirements, and the contractor-supplied information on past E & S performance should be among the key criteria used to evaluate contractors. Capacity may be judged by past performance, existing or projected management, technical ability, and resources. The latter can include solutions or options proposed by the contractor to implement the mitigation described in the E & S documentation, such as management plans that are contained in the bid package. A lack of capacity to establish am ESMS (if one does not exist), implement E & S requirements, and meet applicable standards should disqualify a contractor from further consideration. Referees should be asked to validate claims regarding E & S performance.
* As the client evaluates proposals, past E & S performance and key personnel can be evaluated either on a pass-fail basis or on a numerical basis, which can then be included in overall comparisons including technical and financial. If the numerical basis is selected, weightings should be carefully considered, with significant E & S sensitivities and safety being the highest priorities and the basis for passing or failing.
* While the evaluation methodology will vary according to the project, scope of work of the activity, and any project specific feature, it will need to be agreed on by the project team. It is recommended that the following be considered grounds for disqualification
* Failure to provide information on past E & S performance, including health and safety records
* Reports of past performance deemed unacceptable for the current project
* Notices of material labor issues between workers and management
* Fines and sanctions imposed by E & S and labor regulations and authorities
* Poor security management records from previous projects and
* Material community grievances and high-profile adverse press reports on E & S matters
* It is strongly recommended that the team evaluating proposals includes at least one qualified and experienced E & S professional who has been involved in the development of solicitations and establishment of the criteria that should be used to evaluate bidders’ E & S qualifications.
* Interview with key personnel be part of the evaluation of prospective contractors, client is encouraged to require prospective contractor E & S personnel be interviewed by client’s E & S specialists. As this will be a contractor expense, it should be made clear early on that this is a requirement.
* If a prospective contractor proposes to substitute personnel for any proposed key E & S positions, at any stage of the selection and or contract negotiation process, clients should require that the replacement must at least equivalent qualifications and experience of the previous professional and that they be approved by the client, or the entire proposal may be reevaluated using the substitute personnel.
* At the end of the evaluation and selection process, clients should issue a letter of intention to place a contract subject to certain conditions, including E & S requirements and conditions, which should be listed. These could be over and above those in the solicitation, but they must have been discussed with the contractor during the selection process.

**1.7 Contracting**

Types of Contracts: Clients can use any of the variety of contracts to procure engineering and construction services. Widely used international contacts templates and model contracts include those from the International Federation Consulting Engineers (FIDIC), the new engineering contract (NEC) or NEC Engineering and Construction Contract (NEC3) contract suite, and the International Chamber of Commerce. Many companies, especially those with international experience, also have contract templates that are used on individual projects by their project companies and other subsidiaries.

* *Standard E & S clauses*: Model international contracts and many companies’ model contracts have conditions relevant to E & S performance, but these are general in nature and vary between the various types of contracts. These contracts also allow for inclusion of project-specific special conditions, although in the past most special conditions have been related to engineering and payment for work completion. Requirement in the model contract should include international good practice for some E & S requirements, such as on footprint management, erosion control, hazardous materials and hazardous waste management, site restoration, general pollution prevention, biodiversity management, requirements of workers safety and worker accommodation, stakeholder communication or community protection, but do not include project specific requirements for stakeholder needed to controls site-specific impacts as described in the preceding paragraph.
* *Contract templet review and revision:* Regardless of whether acontract is based on an international model, the client’s E & S manager or other qualified person should review the contract to assess any general E & S requirements present and determine how much requirements need to be modified to fit the client’s need.
* *E & S organizational chart:* An organizational chart illustrating reporting lines on E & S to the client and subcontractors is a key aspect of the contract negotiations and may be included with the contract documentation.
* *Inclusion of project specific E & S requirements:* To require contractors to implement E & S commitments specified in project specific ESIAs and E & S management plans, clients should include and directly reference these requirements regardless of contract type.
* *Identification of E & S plans to be developed by contractor:* clients should list in the E & S conditions of the contract all E & S management plans and associated documentation that must be prepared or refined and implemented by the contractor, and require these documents be submitted for client review and approval within agreed timeline relative to the project schedule, contractor mobilization, and commencement of work. The level of required documentation and E & S plans may depend on the scope of the activities and services to be provided and should be proportionate to the E & S risks involved in the execution of the work. If it is an EPC and OM contract, then certainly the contractor will have to develop number of E & S implementation plans detailing the controls that will be applied to ensure compliances to the requirements. In the case of small contracts, tasks or services that do not pose significant E&S risks, general E&S plans describing controls and monitoring mechanisms or client’s procedures is suffice.
* *Provision of E & S personnel and resources allocated to the contract or service:* Clients should include the requirement that appropriate resources and key E & S personnel be appointed as part of the contract, throughout project implementation, or during the period in which their services are needed to manage and implement E & S requirements. It is recommended that replacement of the E&S personnel should be acceptable to client’s E&S representative.
* *Selection and alteration of E&S contract requirements:* Specific provisions should be included in the contract only after they are deemed to be acceptable by the evaluation panel, including the E&S representative, and approved by client management. If certain conditions are to be agreed on later, the contract should include requirements to reach such an agreement.
* *General or specific requirements:* Clients should ensure their contracts include general and/or project specific requirements for the following:
* Development and adoption of an E&S management program or system or commitment to adhere to, adopt and implement the client’s ESMS framework, as necessary for the contractor involvement in the project.
* Number and qualifications of E&S personnel required to be on staff and on-site including those responsible for HR; worker health and safety; worker grievances; environmental management; community health; safety and security; worker accommodation; site security; and emergency response.
* The nature, risk, and complexity of the project; the scope of work of the service being contracted; the development and implementation of specific client-approved E&S management plan; and associated documentation as required by the ESIA/Environmental and Social Management Plan will include, at a minimum, implementation plans for occupational health and safety, emergency response, hazards materials management, and site restoration, among others. The contract should list the plans the contractor is to develop for client approval and the plans that may have been prepared by the client for contractor implementation.
* Explicit commitment to compliance with the project commitments as captured in the commitment register; conditions of approval; environmental design criteria; management plan; ESCP and national law; and acquisition of all required permits, licenses, consents, and approvals prior to undertaking the activities being permitted or otherwise approved.
* Specific reference to WB ESF, EHS Guidelines (general and relevant sector specific), and other guidance as appropriate.
* Adherence to the project code of conducts.
* Adherence to the project security forces management plan, if applicable.
* Induction and training program for E&S and other personnel, including training on applicable HR policy provisions, grievance mechanisms, health and safety, code of conduct including on the provisions intended to combat GBV and SEA, materials management, and environmental protection.
* Monitoring of E&S performance by contractor and subcontractor and client’s role in this.
* Any monitoring of environmental parameters (such as noise, air emissions and air quality, water flows and quality, waste generation and management) thatcontractors may be required to carry out.
* Implementation of a grievance mechanism for workers (including subcontractor workers) through a grievance mechanism implemented by the client. In this case reporting on grievances and how they are addressed is required. The grievance mechanism should ensure proper handling of GBV related grievances, including but not limited to sexual harassment.
* Assurance that the client’s grievance mechanism for external stakeholder is either adopted by all contractors or there is clear communication to stakeholders on how to address grievances related to the activities of the contractors, including both workers in the project sites and in any ancillary facilities and infrastructure. The community-level grievance mechanism should ensure proper handling of grievances arising from GBV and SEA.
* Other requirements of the client’s stakeholder engagement program are to be supported by the contractor. This should be integrated with the client stakeholder engagement program to ensure consistency.
* Creation and maintenance of records on E&S performances.
* The environmental conditions under which the contractor will be allowed to demobilize and leave the site, including conditions of site restoration and requirements for handling personnel retrenchment, particularly those involving local workers.
* Penalties and/or incentives for E&S performance contractors and subcontractors.
* Reporting requirements, including reporting on E&S performances.
* Clear contract statement that the contractor is responsible for the E&S performance of subcontractors and supplies.
* Contract statement that on the contractor’s failure to meet the E&S requirements in such a way as to prevent significant impacts to workers, local communities and/or individuals., and/or environmental resources, and on the contractor failure to correct such deficiencies upon receiving proper notice, the client has the right to appoint and pay another party to prepare damages or otherwise remedy the impacts and reduce payment to the contractor in the amount to the third party.
* As noted previously mitigation measures to control E&S impacts during construction work to be considered as part of the works themselves, not measures that are needed in addition to the main works. The bill of quantities shall include adequate costs and timelines for expenditure to contract administrator effectively implement the commitments related to E & S performance. The bill of quantities should define milestone and final payments for completion or partial completion of work, to include satisfactory performance related to E&S requirements. If a contract includes incentives for timely completion of work, it should also include corresponding penalties for failure to implement required mitigation measures.
* *Implementing GIIP:* Full spectrum of E&S requirements may not be known at the time of the contracts that GIIP must be implemented to mitigate E&S impacts.
* *Review of bill of quantity:* The bill of quantities for payments on technical and overall quantity of the service should be reviewed and accepted by the contract administrator and depending on the complexity and sensitivity of the activities E&S professionals is involved in the review of invoices and bill of quantities to ascertain implementation of E&S control and mitigation measures included in the contractor’s works when payments are received at milestone.
* *Incentivizing good E&S performance:* Clients are encouraged to include incentive mechanisms in the bill of quantities for satisfactory E&S performance and control of potential impacts as part of their completion of major works. Such mechanisms may include better score in contractors’ overall qualification and clients’ contractor performance database (which is helpful for any future bidding process or service); expedited processing of invoices or bill of payments; recognition of good E&S practices; and an additional bonus for completion of work package with overall good E&S performance.

**1.8 Subcontracting and Procurement**

* It is the client’s responsibility to comply with ESHS guideline, WB ESF, Loan agreement commitments, ESIA, local laws and regulations, and permits and standards, ensuring that any contractor providing services of any kind to the client duly follows these requirements throughout the duration of the contract, including any activity or services performed by subcontractors or third parties undertaking a contract from the contractor.
* Clients generally do not have direct control over subcontractor performance, although they may have some influence over the selection and may (indirectly) supervise their E&S performance. Therefore, clients must use their direct control over the contractors to ensure that E&S requirements are being met by subcontractors. Clients should require contractors to include E&S requirements in the subcontractors’ agreements to comply with the E&S requirements that are appropriate for the work being. In general clients should require the contractors to apply the guidance in this document to prequalify, soliciting, selecting, and entering subcontracts.

1. **Existing Client managed Contractors**

Amending existing contracts, for large development projects, there may be existing, smaller contracts managed by the client (for example for track maintenance and drill pad construction) that will continue into the construction phase alongside major contracts. For consistency, these contracts and the performance requirements associated with them should be reviewed and, if necessary, brought in line with the other contracts to properly incorporate all applicable E&S requirements. This is particularly the case where the ESIA process had not been completed when the contract was awarded. This might mean developing a contract amendment to ensure all the necessary E&S provisions are included and ensuring that contractor staff undergo the same training as other contractors new to the site.

1. **Project performance**

* *Understanding implementation responsibilities*. The roles of clients and contractors in meeting E&S requirements are usually intertwined and must be worked out at the project level. Some actions described below as being the responsibility of the client or the contractor may be reversed or shared on some projects. In some cases, such as stakeholder engagement, both clients and contractors will have certain obligations and limits and will need to coordinate their efforts. In others, such as monitoring, each party will monitor E&S performance, but at different frequencies and levels of detail. In all cases, the client remains ultimately responsible to lenders for ensuring E&S requirements are met, with the responsibilities of the contractor defined in the contract. For design-build (or design-build operate) contractors, the design standards, and requirements (and operation standards) will also be set out in the terms of reference to the contract. For public private partnership (PPP) projects the administration may also have roles and responsibilities (to the Bank) which may be additional to their usual regulatory functions.
* *Contractor oversite.* The client will monitor contractor and subcontractor E&S performance and ensure the contractor monitors its own and all subcontractors’ E&S performance throughout construction, including mobilization, the main construction phase, and demobilization. Clear responsibilities and reporting lines are essential to avoid duplication of effort or, conversely, gaps in monitoring. If operations are carried out under contract, or some work is performed by contractors, the client and contractor will monitor E&S performance during operation as well.
* Clients should require contractors to report on an agreed frequency their E&S performance and matrices (which shall include relevant information and data from subcontractors, as applicable). Timely reporting of E&S performance and results enables the client to identify opportunities for improvement, prevent poor performance issues and assist contractors if remedial action is to be taken.
* *E&S performance meetings.* Regular meetings are essential to ensure contractor performance is satisfactory and that project specifications are being met. The authority of monitoring staff who control contractors’ performance also needs to be clarified and understood by contractors (for example, who gives instructions to stop work or proceed but with modifying the approach, scope, equipment, and so forth.).
* Clients should ensure that contractors employ qualified E&S personnel to oversee E&S performance, and that contractor staffing and resources are commensurate with the magnitude and timing of work and potential E&S risks. Clients should also approve documentation, including for training programs, to ensure all staff are aware of E&S commitments and their part in meeting them.

1. **Construction**
   1. **Mobilization**

* *Review and approval of contractor E&S plans.* Clients are responsible for their contractors meeting all the project’s E&S requirements, it is essential for the to review and approve projects E&S management plans and procedures at this stage. These might include such as plans as working within boundaries (footprint management), protection of biodiversity, land clearing and erosion control, traffic management, labor sources and methods of recruitment of workers, worker accommodation, noise and dust control, and possibly others.
* *Kickoff Meeting.* Prior to early work activities the client should hold kickoff meeting with the contractor prior to arriving to the site. Clients and contractor project managers and major subcontractors should participate in these meetings. The purpose is to review planning activities and schedules, review E&S requirements (among others), review the roles of the various parties in implementing and monitoring mitigation measures, and agree on project specific induction and training content. These meetings should include a discussion about control of access to the site, use of security forces if applicable, and how to best coordinate the client’s security management system and E&S activities at both the base camp (accommodation site) and any remote construction sites. Both client and contractor E&S representatives should be present to reiterate all E&S commitments and establish initial compliance points and coordination requirements during site establishment.
* *E& S induction and training.* A general E&S site induction should be mandatory for all workers, with specialized technical E&S training delivered to staff. The degree of training should be based on the project’s E&S risks, on the tasks that will be performed, the code of conduct, including stakeholder engagement rules, and security management, and on the general E&S provisions that are applicable for all personnel, including contractors and subcontractors. All workers should be made aware of the worker and public grievance mechanisms and how to access them. In particular security contractors should be given detailed training on community engagement and the grievance mechanism as complaints may be brought to their attention. In projects at high risk of SEA or GBV, contractors should develop and implement SEA and GBV awareness training for the staff at all levels. Additional training may be needed for staff that will be responsible for implementing, monitoring, and reporting E&S performance. Once the general E&S induction is defined, a series of specific trainings may be required to ensure that requirements, controls, and mitigation measures are well communicated and understood.
* *Clients Site visits and oversight.* At project sites where there could be significant and/or permanent impacts due to preconstruction activities, including substantial amount of land clearing, the client, representative engineer, or E&S lead should visit daily during the first weeks to help guide the contractor’s E&S managers and staff in overseeing activities and ensuring that there are common expectations on E&S performance. This might continue for the duration of the activity with a periodicity properly assessed to ensure adequate supervision, proactive monitoring, and sound E&S performance.

1. **Main Construction**

* *Clients E&S capacity.* Clients and/or their representatives (for example, owner’s engineers) must assign E&S personnel with appropriate qualifications and seniority to oversee and supervise the E&S performance of contractors, including their subcontractors. The number of personnel and their disciplines should be commensurate with the size of the project and potential E&S risks.
* Prior to construction activities that could cause E&S impacts, the client should hold a kickoff meeting with the contractor. Client and contractor project managers and E&S personnel should participate with a purpose of review plan activities and schedules, review E&S requirements and expectations, review the roles of the various parties in implementing and monitoring mitigation measures and E&S management plans, and agree on an induction and training program on project -specific E&S aspects, including site security arrangements. A general site induction to E&S, including OHS and code of conduct training, should be mandatory for all workers, with specialized training for key staff responsible for implementing, monitoring, and reporting E&S performance.
* Clints will monitor contractor E&S performance during this phase, it will also require contractors to monitor their own and their subcontractors’ E&S performance and report to the client in a timely manner. In the case of environmental, safety, or social incidents, the client should be informed immediately. The applicable instances should be agreed to an understood by all parties. Clients will consider E&S performance in the payment of invoices.

1. **Demobilization and Site Handover**

* Upon meeting the conditions established in the contract determining that construction is complete, the contractor can demobilize equipment and personnel and turn over the site or, if more than one, all work sites to the client. To ensure that all the necessary E&S provisions have been duly met and that the appropriate controls and requirements were implemented, the client could typically develop a checklist or punch list including all relevant E&S aspects that need to be verified upon completion of work. If there are pending topics or requirements, these shall be communicated to the contractor, who should address them on an agreed schedule.
* Client E&S personnel should inspect all work sites and other areas affected by the contractor, when notified that construction is complete, to determine if the requirements established in the contract have been met. Client’s will allow contractors to demobilize equipment and E&S personnel only after client E&S personnel determine that E&S requirements have been arisen during the contract should be reviewed carefully during the handover review and acceptance by the client, including the possibility of the issues arising in the future.

1. **Client Monitoring Activities**

* Client monitoring of contractor E&S performance must continue throughout construction, from mobilization through demobilization. This should involve both visits to work locations and reviews of records kept by the contractor and of reports submitted by the contractor. The frequency of site visits should be commensurate with the magnitude of the E&S risks of the activities being carried out and permanence of the potential impacts that could result from ongoing activities. For highly sensitive projects, consideration should be given to having the client or engineer’s representative on-site on a permanent basis. Monitoring may be conducted by client E&S personnel and/or E&S personnel of an owner’s team.
* Client E&S personnel should review one or more recent inspection reports and the contractor’s previous month’s E&S progress report prior to visiting the site to monitor the contractor’s E&S performance. They should do the same before participating in meetings where the contractor’s performance is to be discussed.
* Clients E&S personnel will review contractor reports and follow up as needed to ensure timely resolution of issues of noncompliance with E&S requirements. This may include additional visits to the contractor’s site or offices, further communications with contractor E&S personnel, issuance of notices of deficiency or warnings to the contractor, and other actions as needed.
* At any stage of construction or other work, if the contractor has not taken appropriate action to achieve compliance with E&S requirements after repeating notices of violation and warnings of noncompliance, and significant E&S impacts are occurring or imminent, the client should order the contractor to stop work until E&S performance is brought under control and up to acceptable standards.

1. **Contractor Monitoring and Reporting**

* Clients should require contractors to monitor and keep records on E&S performance in accordance with the ESMS and E&S management plans. This may include monitoring of E&S matters, scheduled and unscheduled inspections to work locations, observations made during routine activities, desk reviews, drills, and any other monitoring protocols implemented by the contractor to ensure E &S compliance. The client E&S personnel must be familiar with the contractor’s monitoring and record keeping system so this aspect of the contractor’s performance can itself be monitored.
* Responsibilities for monitoring need to be clear between the client and contractor, and results (if client and contractor are both collecting data) must be comparable, for example collected using the same methodologies, analyzed at the same labs, and using similar equipment, and so forth.
* Clients should require contractors to report on E&S performance on at least a monthly basis throughout the construction phase, including mobilization, construction, and demobilization. This could be more frequent for more sensitive E&S projects. It can be part of the overall engineering progress report or a stan-alone E&S report. Reported E&S information should include:
* Safety: hours worked, recordable incidents and corresponding Root Cause Analysis (lost time incidents, medical treatment cases), first aid cases, high potential near misses, and remedial and preventive activities required (for example, revised job safety analysis, new or different equipment, skills training and so forth).
* Environmental Incidents and near misses: environmental incidents and high potential near misses and how they have been addressed, what is outstanding, and lessons learned.
* Major works: those undertaken and completed, progress against project schedule, and key work fronts (work areas).
* E&S staffing: new hires and departures and listing of current staff and titles.
* E&S requirements: noncompliance incidents with permits and national law (legal noncompliance), project commitments, or other E&S requirements.
* E&S inspections and adults: by contractor, engineer, or others, including authorities-to include date, inspector or auditor name, sites visited, and records reviewed, major findings, and actions taken.
* Workers: number of workers, indication of origin (expatriate, local, nonlocal nationals), gender, and skill level (unskilled, skilled, supervisory, professional, management).
* Training on E&S issues: including dates, number of trainees and topics.
* Footprint management: details of any work outside boundaries or major off-site impacts caused by ongoing construction- to include date, location, impacts, and actions taken.
* External stakeholder engagement: highlights, including formal and informal meetings, and information disclosure and dissemination-to include a breakdown of women and men consulted and themes coming from various stakeholder groups, including vulnerable groups (e.g., disabled, elderly, children, etc.).
* Details of any security risks: details of risks the contractor may be exposed to while performing its work- the threats may come from third parties external to the project or from inappropriate conduct from security forces employed either by the client or public security forces.
* Worker’s grievance: details including occurrence date, grievance, and date submitted; actions taken and dates; resolution (if any) and date; follow-up yet to be taken grievances listed should include those received since the preceding report and those that were unresolved at the time of that report.
* External stakeholder grievance: grievance and date submitted, action(s) taken and date (s), resolution (if any) and date, and follow-up yet to be taken grievances listed should include those received since the preceding report and those that were unresolved at the time of that report. Grievance data should be gender disaggregated. Particular sensitivity may be needed around SEA or GBV issues raised.
* Major E&S changes: to ESMS, E&S management, or practice.
* Deficiency and performance management: actions taken in response to previous notice of deficiency or observations regarding E&S performance and/or plans for actions to be taken these should continue to be reported until the client determines the issue is resolved satisfactorily.

1. **Approving Invoices for Payment**

* E&S review of contractor invoices: the client’s E&S manager or representative should be part of the process for signing off on all payments to contractors, even if the payment is not for work that is explicitly related to E&S mitigation and performance. E&S staff shall work closely with the project manager (client or engineer’s project manager, depending on who employs the E&S personnel) to determine if there are any outstanding E&S items and whether including that or partial payment under specific lines items of the bill of quantities should be withheld, either temporary or permanently, or that there should be some combination of temporary and permanent with holding.
* If the contractor does not take timely action to reach compliance with E&S requirements, client E &S personnel and the project manager should continue to take appropriate action to encourage compliance, which could include orders to stop work, withholding of further payments, and/or escalation of the issue to higher management. If significant impacts are occurring or imminent, the client may notify the contractor that another party will be brought in to deal with the issue and the payment to the contractor will be reduced by the amount paid to the other party, as would be specified in the contract.

# **ANNEX-J: EXCLUSION CRITERIA**

The exclusion criteria are summarized below:

* 1. Activities/subprojects that are classified high risk according to WBG ESF;
  2. Activities that contravene Ethiopia’s obligations under its international agreements;
  3. Activities that may cause long term, permanent and/or irreversible adverse impacts to natural, critical habitats and biodiversity;
  4. Activities that have a high probability of causing serious adverse effects to human health and/or the environment e.g., construction of major civil structure covering ecologically sensitive area. Sub Projects that involve the transformation or degradation of critical natural habitats and may result in the loss of biodiversity, including any official protected natural areas, such as national parks and other protected areas or can cause degradation of critical habitats.;
  5. Sub Projects that involve the transformation or degradation of critical natural habitats and may result in the loss of biodiversity, including any official protected natural areas, such as national parks and other protected areas or can cause degradation of critical habitats;
  6. Sub Projects that within areas identified as at risk from flooding, rising water levels, landslides, ravines, fires, etc.,
  7. Activities that may involve generating large volume of e-waste causing significant irreversible adverse impacts to human health and natural resources;
  8. Activities that may affect lands or rights of indigenous people or other vulnerable minorities;
  9. Activities that may involve significant permanent resettlement or large land acquisition or adverse impacts on cultural heritage;
  10. Activities in “disputed areas”;
  11. Sub Projects that that would damage non-replicable cultural property;
  12. Sub Projects that include activities that may have significant adverse social impacts and may give rise to significant social conflict between communities;
  13. Sub Projects that involve harmful or exploitative forms of forced labor / harmful child labor;
  14. Activities that limit access for women and PWDs to project benefits (e.g., public offices with no ramps to, inaccessible websites, etc.);
  15. Sub Projects that involve significant air emissions, harmful effluents, noise emissions above international standards, or represent potential physical, chemical, biological, and radiological hazards, or any threat to community health and safety that cannot be mitigated by the environmental and social instruments proposed in this ESMF.

**ANNEX K: Electronic Waste Management Plan (E-Waste Plan)**

# **INTRODUCTION**

The East Africa Regional Digital Integration Project (EARDIP SOP II) is to be implemented by the main implementing agency Ministry of Innovation and Technology (MInT), and other implementing agencies and partners institutions. The project seeks to advance regional digital connectivity market, data market and online market development and integration through increasing access to broadband connectivity and strengthening the enabling environment for digital service delivery, for the Ethiopian rural communities who are underserved and residing in borderland including refugees and IDPs through a) increase access to high-speed broadband connectivity, b) strengthening the enabling environment for digital service delivery c) establishing of an integral digital market across East African region. The project is funded by the World Bank and is designed to reflect environmental and social considerations as required by national laws, regulations, and guidelines and the World Bank Environmental and Social Frameworks (ESF) and its Environmental and Social Standards (ESSs) in all the project life cycle. Based on the ESF requirements, the implementing agency is being preparing Environmental and Social Safeguards instruments such as Framework (ESMF), Social Assessment(SA), Stakeholder Engagement Plan (ESP), Security Management Plan (SMP), GBV Risk Assessment and Action Plan, Resettlement Framework (RF), Labor Management Plan (LMP), Environment and Social Commitment Plan (ESCP) and E-waste management Plan as per the requirements of the World Bank ESF and national ES guidelines and regulations. The ESMF has been developed which details the anticipated environmental and social potential impacts, proposed mitigation measures, subproject scoping/ screening methodology, review, and approval processes and World Bank applicable ESSs and information disclosure as well. The East African Regional Digital Integration Project (EARDIP SOP II) has four main components and seven subcomponents and several subproject activities that will be implemented by the different implementing partners (ECA, EthERNet, MoTRI) and regional MInt.

The subproject activities in each component of the EARDIP SOP II are anticipated to generate significant amount of electrical and electronic wastes. The generation of E-waste is becoming an issue in waste management due to the rapid growth of industries, trade and services including the recent proliferation of digital facilities and expansion of mobile phones and accessories has accelerated the generation of electronic waste. In the case of Ethiopia, these waste streams are being collected, transported, recovered, and disposed with other municipal streams. However, sustainable safe management system needs to be installed and practiced for hazardous electronic waste. Electric and electronic waste, or E-waste, is an informal name for electrical and electronic products nearing end of their useful life computers, mobile phones, servers, modems, televisions, stereos, copiers, and fax machines are common electronic products. For this project E-waste include servers, modems, computers, monitors, fiber optic cables, scanner, printer, coolants, ventilators, and instruments for fixed transmission towers, other digital devices.

Out of the identified potential environmental and social risks in the ESMF is the generation and management of E-waste requires its own E-Waste Management Plan (E-WMP). Therefore, this e-waste management plan shall serve as a guidance document for MInT the Project Management Unit (PIU) and other subproject implementing institutions to face the challenges for providing a safe, environmentally sound, and unified response for E-waste management.

## **1.1 Waste Management**

Waste management or waste disposal includes the process and actions required to manage waste from its inception to its final disposal. This includes the collection, transport, treatment, and disposal of waste, together with monitoring and regulation of the waste management process and waste-related laws, technologies, and economic mechanisms. Waste can be solid, liquid, or gases and each type have different methods of disposal and management. Waste management deals with all types of waste, including industrial, biological, household, municipal, organic, biomedical, radioactive wastes. In some cases, waste can pose a threat to human health. Health issues are associated throughout the entire process of waste management. Health issues can also arise directly through the handling of solid waste, indirectly through the consumption of contaminated water, soil, and food. Waste is produced by human activity, through extraction and processing of raw materials. Waste management is intended to reduce adverse effects of wastes on human health, the environment, planetary resources, and aesthetics.

## **1.2 Toxicity and Radioactive Nature of E-waste**

Electronic wastes are also known as e-wastes which are an electronic product, or products containing electronic components that has reached the end of useable life cycle. Electronic waste contains substances that are toxic and hazardous to the environment and humans health, which are sourced from electronic materials like Cathode Ray Tube (CRT), insulation, plastic, circuit boards, batteries, rubbers, Liquid Crystal Display (LCD), florescent lamps, etc. that can release potentially toxic substances such as lead, mercury, cadmium, and beryllium as demonstrated below (Table 1).

E- wastes also contain precious and special metals, including gold, silver, palladium, and platinum. Therefore, responsible end-of-life management of e-wastes is imperative in order to recover valuable components and properly manage hazardous and toxic components. End-of-life management of e-waste includes reuse of functional electronics, refurbishment and repair of electronics, recovery of electronic components, recycling e-waste, and disposal. Reuse, refurbishment, or repair of electronic products is most desirable since this option increases the life span of the electronic products and higher resource efficiency, Jennifer Namias (2013). The consequences of improper e-waste disposal in landfills or other non-dumping sites pose serious threats to current public health and can pollute ecosystems for the generation to come. When e-wastes are improperly disposed and end up in landfills, toxic chemicals are released, impacting the earth’s air, water ultimately, human health.

## **Table 1: Toxic Substances in E-waste**

|  |  |
| --- | --- |
| **Component Of E-waste** | **Possible Hazardous waste** |
| Plastic | Phthalates plasticize, Brominated Flame Retardant (BFR) |
| Insulation | Insulation ODS in foam, asbestos refractory ceramic fiber |
| CRT (Cathode ray Tube) | Lead, Antonyms, Mercury, Phosphorous |
| LCD (Liquid Crystal Display) | Mercury |
| Rubber | Phthalates plasticize, BFR |
| Wiring/ Electrical | Phthalate Plasticize, BFR, lead |
| Circuit Board | Lead, Beryllium, Antimony, BFR |
| Florescent Lamp | Mercury Phosphorus, Flame Retardant |
| Batteries | Lead, Lithium, Cadmium, Mercury |
| Thermostat | Mercury |
| External Electrical cables | BFRs, Plasticizers |
| Electrolyte Capacitor (over L/D 25mm) | Glycol, other unknown substances |

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### **1.2.1** **Negative Effects on Air**

When e-waste is informally disposed; by dismantling, shredding, or melting the materials, releasing dust particles or toxins, such as dioxins, into the environment that cause air pollution and damage respiratory health. E-waste of little value is often burned, and burning is also a way to extract valuable metal from electronics, like copper. Chronic diseases and cancers are at higher risk to occur when burning e-waste as it also releases fine particles, which can travel thousands of miles, creating numerous negative health risks to humans and animals. Higher value materials, such as gold and silver, are often removed from highly integrated electronics by using acids, desoldering, and other chemicals, which also release fumes in areas where recycling is not regulated properly. The negative effects on air from informal e-waste recycling are most dangerous for those who handle this waste, but the pollution can extend thousands of miles away from recycling sites. Some animal species may also be impacted by the air pollution caused by e-waste impacts than others this intern may danger some animal species and the biodiversity of some regions that are chronically polluted. Over time, air pollution can hurt water quality, soil, and plant species, creating irreversible damage on ecosystems. This can cause disproportionate neurological damage to larger animals, wildlife, and humans in the area.

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### **1.2.2 Negative Effects on Soil**

The improper disposal of e-waste in regular landfills or in places where it is dumped illegally, both heavy metals and flames retardants can seep directly from the e-waste into the soil, causing contamination of underlying groundwater or contamination of crops that may be planted nearby or in the area in the future. When the soil is contaminated by heavy metals, the crops become vulnerable to absorbing these toxins, which can cause many illnesses and may reduce the productivity of the farmland. The large particles released from burning, shredding, or dismantling e-waste, they quickly re-deposit to the ground and contaminate the soil as well, due to their size and weight, The amount of soil contaminated depends on range of factors including temperature, soil type, pH levels and soil composition. These pollutants can remain in the soil for long period of time and can be harmful to microorganisms in the soil and plants. Ultimately, animals and wildlife relaying on nature for survival will end up consuming affected plants, causing internal health problems. Moreover, the e-waste contamination may also create imbalance of soil nutrient contains this intern change the property and fertility of the soil.

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### **1.2.3 Negative effects on Water**

Soil contamination by e-waste constituents of heavy metals such as Mercury, Lithium, Lead, and barium will lead to seepage of the heavy metals to reach groundwater. Then, they eventually make their way into ponds, streams, rivers, and lakes. Through these pathways, acidification and toxification are created in the water, which is unsafe for animals, plants, and communities even if they are miles away from a recycling site. Acidification can kill marine and freshwater organisms, disturb biodiversity and harm ecosystems. If acidification is present in water supplies, it can damage ecosystems to the point where recovery is questionable, if not impossible.

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### **1.2.4 Negative Effects on Human**

As it is mentioned above, electronic waste contains toxic components that are dangerous to human health, such as Mercury, Lead, Cadmium, Polybrominated flame retardants, Barium, and lithium. The negative health effects of these toxins on humans include brain, heart, liver, kidney, and skeletal system damage. It can also considerably affect the nervous and reproductive systems of human body, leading to diseases and birth defects.

Furthermore, when e-waste is dismantled plastic materials are burnt, metals are recovered through chemical processes and discarded parts are disposed of on land or water under unsafe manner. Owing to unsafe recycling practice, the health of the workers involved in the E-waste recycling operations and communities living in the vicinity of e-waste recycling operations are at risk. The scrappers don’t use protective gears. They handle extremely toxic waste with their bare hands. Workers involved with the breaking of the computers are at the risk of inhalation of dust that may contain lead, barium oxide and phosphorus. Lead may cause neurotoxicity, high blood pressure, and muscle pains, and learning disabilities among children. Barium oxide can cause severe skin irritation and ingestion is harmful and chronic exposure may lead to damage of Central Nervous System (CNS), spleen, liver, kidney, or bone marrow. Gold is extracted from E-waste either by burning the gold containing components at high temperatures or using leaching chemicals like cyanide solution. Burning releases toxic gases and disposal of cyanide solution or other leaching chemicals into the drain or on land pollutes water and soil. Improper disposal of e-waste is unbelievably dangerous to the global environment, which is why it is so important to conduct awareness sessions on this growing problem and the threatening aftermath. To avoid these toxic effects of e-waste, it is crucial to properly apply the 4R principles, reduce, reuse, recycle, recover, refurbished, or resold. The growing stream of e-waste will only worsen if not educated on the correct measures of disposal.

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## **1.3 Benefits from Sustainable Waste Management Practice**

Sustainable waste management refers to the collection, transportation, dismantling, recovery, reuse, and disposal of various types of waste, in a manner that does not jeopardize, the environment human health or future generations. It includes any activity involved in the organization of waste management, from production to the final treatment. There are different types of wastes such as municipal including domestic waste, commercial and demolition waste and electronic or e-waste, which includes computer parts, and radioactive waste, among many other forms of waste.

Sustainable waste management is a key concept of the circular economy and offers many opportunities and benefits to both the economy, the society, and the environment. Sustainable waste management involves collecting, sorting, treating, recycling, and when a source of energy properly provided, and resources facilitated. It, therefore, creates jobs, improves waste management methods, and lessens the impact of human activities on the environment, thereby, improving the air, water, and soil quality. It is also reducing food wastage, keeps heavy environmental costs, and prevents some human health conditions, thereby improving the overall human life. Importance of sustainable management are stated as follows:

**Create Jobs:** E-waste recycling creates jobsfor professional recyclersand laborers who can work in the recycling facilities as collector, dismantler, and creates a second markets for recycled materials

**Create Space:** If waste was never managed, it would end up on land, either scattered or may be centralized in a landfill somewhere. Landfills are big and can use up a lot of space. In some confined areas, sustainable waste management control and manage the waste, enable to make the best of it.

**It Saves and Makes Money:** Increasing recycling can cut disposal costs and improve bottom line. Sustainable waste management can help generate money for some establishments. For instance, municipal administration that collect garbage can charge collection and recycling fees. This is also discouraged institutions that generate a lot of waste, making them sustainable and more responsible for the environment.

**It Enhance Sustainability:** Managing waste, energy, and water, and doing it more efficiently, are at the core of sustainability. Improving individual business, government or organizational sustainability can boost businesses and attracting more quality tenants, clients, and customers to establishments. It also positively engages our employees, volunteer, and citizens.

**It Controls Pollution:** Each waste has a particular effect on the environment sustainable waste management helps to understand the waste and how best to deal with it.

**It is the Core for Environmental conservation:** Sustainable waste management is therefore at the core of environmental conservation seeing as it will help to preserve the environment as well as improve it, not only for human but also for other species and future generation.

**It makes Humans Better and Responsible Inhabitants:** Sustainable waste management will help human to manage the waste carefully, effectively, and sustainably. It will also provide with different technologies, options, and alternatives for different kinds of wastes.

# **E-WASTE MANAGEMENT PLAN**

This section describes the proposed e-waste management plan for the implementing departments of the Eastern Africa Regional Digital Integration Project (EARDIP SOP II). Under the current scenario, no formal collection of e-waste from households and businesses in Ethiopia, households mostly give obsolete electric and electronic equipment (EEE) to repair shops to restore functionally. In case the equipment proves to be beyond repair, the repair shops typically keep the devices and use them as a source of spare parts. However, some years back the government establish an institution called Public Procurement and Property Disposal Service (PPPDS) under the Ministry of Finance and Economic Development (MoFED) and this institution issued a circular letter to all federal government offices to hand over e-waste to the De-manufacturing Facility (DMF) in Akaki kality. As per this circular, various federal government institutions delivered obsolete equipment to the facility. Between October 2011 and December 2012, the DMF received 17,162 devices like computers, uninterrupted power supplies, TVs, mobile phones, typewriters, printers, and copy machines. In addition, various other institutions such as the African Development Bank, The World Bank, The World Food Program as well as several NGOs located in Addis Ababa have handed overused and end-of-life EEE (Manhart et al. 2013). All incoming equipment is first given to the nearby Computer Refurbishing and Training Centers (CRTC) where it undergoes functionally testing. Equipment not suitable for reuse is handed over back to the DMF for dismantling. However due to limited storage capacity of the DMF the facility must slow down collecting efforts. The circular letter does not affect the municipal government offices and currently have no strategy to manage e-waste from their offices. Recently the obsolete EEE from municipal government offices are started to be sold to a private service provider in Addis Ababa, Hefli E-waste management center.[[42]](#footnote-42)

With regard to E-waste Management Practice in Ethiopia, Ethiopian Federal Ministry of Communication and Information Technology (MCIT) the present MInT and the Ethiopian Federal Ministry of Environment and Forest the present (Federal EPA) had run a project called E-waste Management Project in Ethiopia (EWAMP Ethiopia) from April /2014-December /2014, supported by GEF (Global Environment facility) (GEF ID: 5040).

The objective of the project was:

* To establish a national e-waste strategy (e-waste regulations, collections, financing and training and awareness.
* Upgrading the activities of Akaki De-manufacturing Facility (DMF).
* Promote cooperation with other countries in the region.

However, currently with the new institutional structure, MInT is not entitled to work on e-waste management as it is only mandated for technology development and transfer and development of related enabling legal instruments moreover, MInT has no institutional arrangements to handle activities related to e-waste. At federal and at Addis Ababa City administration level the Public Procurement and Property Disposal Services (PPPDS), under the ministry of Finance and Economic Development (MoFED) is mandated to handle e-wastes, it has also given with the authorization to register and license the responsibility of e-waste handling to the private service providers. In this case, Hefli E-waste Management Center has been given with the certification by the AAPPPDS, the Federal Environmental Protection Authority (EPA) and MInT. Hefli e-waste management center is a private service provider who is certified by the above authorities for collection, dismantling, recovery, reuse and treatment and safe disposal of e-waste.

The company established four years ago but it is not able to commence the activity due to lack of e-waste sources. However, since last year the company auctioned the e-waste stored at Akaki collection site by MInT and starts to dismantle, segregate, reuse, recover. The company is equipped with all instruments and machineries to collect, transport, recover and reuse and dispose e-waste. The company also collected e-waste from different NGOs (UNDP, FAO, etc.) where these NGOs will give their e-waste with some amount of money for Hefli e-waste management company to comply with the Extended Producers Responsibility. The company also provided with a mandate to collect e-waste from the universities and cities at federal and regional level.

In compliance with the national environmental legislations and guidelines the company is also conduct Environmental and Social Impact Assessment and OHS as it handles very sensitive and hazardous waste, furthermore it is also passing through periodical E & S auditing by the Addis Ababa Environmental Protection Authority (AAEPA) for Environmental and Social Mitigation Measures Implementation as indicated in the ESIA. However, the company has a problem of auctioning e-waste as the e-waste from the governmental institutions are very expensive as they are taken as assets by the authorities. The company expecting a support from such project as the company needs its own space as it is now working in rented warehouse and needs also training support for the local workers in the e-waste handling and management.

## **E-Waste Management During Project Implementation**

1. **Making the Inventory of E-waste**

Each implementing MDAs will make the inventory of the e-waste. The Ministry of Innovation and Technology (MInT) as the main implementing institution and host to Project Implementation Unit (PIU) in collaboration with the Federal or regional Environmental protection bodies, will be responsible for developing the e-waste inventory and updates. This inventory should be reconciled with the inventory of the procured ICTs. In some cases, during the implementation of the project, the existing or new digital equipment would become part of the e-waste, ensuring that the inventory is updated periodically for incorporating any changes with respect to allocation, movement, auction etc. This type of E-waste will also be included in the inventory with the remarks ‘obsolete digital equipment ’against such E-waste. This inventory will be useful in identifying the quantum of the E-waste collected in the respective MDAs.

1. **Storage of E-waste**

All the discarded digital equipment or e-waste will be handed over to the Federal, regional or city level Procurement and Property Disposal Service (PPPDS). The PPPDS will receive the e-waste and record it in its E-waste inventory and place it in the specified storage bins or storage facilities based on the volume and recycling purposes of E-waste. The list of the items placed in the bin will be displayed at the bin so that anybody can see what type of items are placed inside the bins. The storage bins should have appropriate space for the collection of the items. The bin should be covered from all sides with one opening from the top for placing and removing the E-waste items. The bins should be placed under shades to be protected from sunlight and rain with proper ventilation. The bins should be placed under normal room temperature. There should be a facility in the storage room to ventilate the temperature during hot months. The surface of the storage bins should be impermeable which should not allow to seep in or seep out any material to/from the bin.

1. **Continuous liaison with the Environmental Protection Authority**

Project implanting MDAs cannot hand over E-waste to any recycler or scrap collector because of the risk that the E-waste may be handled improperly in the absence of certified/ licensed recycler/ facility in the country. In the absence of this control, there are chances that the E-waste mishandling will pose environment and health risks to the labor and community. It will be the responsibility of the MInT/PIU to establish a continuous liaison with the Environmental Protection Authority (EPA) and convince it to take structural or legal actions against the E-waste collectors, dismantlers and recyclers and certify them. In the first step, the MInT/PIU will seek guidelines from EPA on E-Waste management and hazardous substances handling rules and pursue in applying the rules to all recycling private service providers/facilities and issue license after ensuring that the rules are being compiled.

1. **Guideline for collector, Transporter, Dismantlers and Recyclers**

MInT/PIU and other implementing partners including regional implementing agencies, will seek technical support guidelines from EPA for the E-waste collectors, transporters, dismantlers, and recyclers.

**Collectors:** The guidelines for the collector will be related with the safe storage of the E-waste. The storage place will be proper with respect to protecting the waste from sunlight and rain (waterproof covering), placing waste on impermeable floor to avoid seepage of the hazardous materials and waste segregation according to type of waste. The store should be safe with respect to fire hazard. The storage area should have the provision of spillage collection facilities and where appropriate, decanters and cleanser-degreasers as well. The workers should also be equipped with proper PPE while handling the waste.

**Transporters:** The e-waste should be transported by licensed transporters. The transport of E-waste should be safe so that it could not break/damage the e-waste to avoid release of hazardous material. The surface of the transport vehicle should be impervious and equipped with containment arrangement and spill kits, to manage releases, in case of any accident or incident. The e-waste transporter should be licensed by the competent authority.

**Dismantlers:** the guidelines for the dismantlers should mainly focus on the manual dismantling of different parts of the E-waste without using any chemicals or any burning process. The labor involved in the dismantling should equipped with proper PPE while handling the Waste.

**Recyclers:** the guideline for the recyclers will be specific for the type and nature of the recycling process to be adopted by recyclers. However, whatever process adopted, it should be safe for environment, workers, and the community health. The major E-waste recycling techniques are decontamination and disassembly, or repair followed by shredding of different fractions. E-waste fractions emitted after shredding go for metal recovery. However, whatever the process is adopted, it should be safe for environment, workers, and the community health. The major E-waste recycling techniques are decontamination and disassembly, or repair followed by shredding of different fractions. E-waste fractions emitted after shredding go for metal recovery. The remaining of E-waste fractions are disposed of either in landfills or incinerated. In line with the ESS3 and EHS guideline, the following e-waste disposal and/or treatment mechanisms shall be considered.

* Segregation of Waste at source and avoid mixing with other wastes
* Collection: Establish collection centers who can be individually or jointly or as registered society. They could also be owned by a designated agency, a company or an association to undertake collection operations of E-waste;
* Transportation: Once general waste is collected at designated places, the contracted service providers collect and take it to dumping sites and recycling facilities for processing
* Recycling: identify both formal and informal recycling activities in the Ethiopia market where the wastes can be recycled
* Refurbishment: identify licensed entrepreneurs and organized groups which are refurbishing E-waste in the country with the intent of increasing product lifespan
* Take back: identify manufactures who have introduced take-back programs in the Ethiopia and collaborate with them for uptake of the wastes.
* Raise public awareness about E-waste and its management.

1. **Inspection Visit to the licensed E-waste Recycling Facility**

After EPA takes actions on E-waste management and certifies the E-waste recyclers in the country, the MInT/PIU will pay a visit to the certified collection, dismantling, and recycling facilities to ensure that the facilities are complying with the EPA rules and guidelines as well as compliance with ESF requirements and WB EHS guidelines. After the visit; MInT/PIU will select the best recycler company for handling over the EARDIP SOP II proect’s E-waste whenever required.

1. **Handling Over the E-waste**

The MInT/PIU should hand over the collected and stored E-waste to licensed and selected collectors, dismantlers, and recyclers. This handling over auction will be as per the procurement rules and regulations of Ethiopia and WB requirements.

## **2.2 Purpose and Objectives of the E-waste Management Plan**

The purpose of this assignment is to achieve and maintain an integrated E-waste management plan that is efficient to ensure the generated E-waste is not indiscriminately disposed to detriment of human health and the environment.

The overall objectives of the E-waste management plan are summarized as:

1. To assess the activities involved for the proposed project and determine the type, nature, and estimated volumes of wastes to be generated.
2. To identify any potential environmental impacts from the generation of wastes at the project site.
3. To recommend appropriate waste handling, storage, transport, treatment, and disposal measures in accordance with the current legislative requirements WB ESHG (The WB EHS Guidelines on Waste Management) and GIIP.
4. To strengthen capacity building and raise awareness to communities and firms on the E-waste management risks and impacts.

All project workers involved in any waste management process must read and have a complete knowledge of the procedures contained within this guidance document. MInT main implementing agency in cooperation with the other implementing and partner institutions will enhance establishment of additional private service providers on e-waste management and ascertain whether licensed disposal sites are being operated to acceptable standards and will minimize waste sent to such sites and

# **RELEVANT NATIONAL POLICY, LAWS, REGULATIONS AND GUIDELINES**

## **3.1** **Environment Policy of Ethiopia**

The first comprehensive statement of Environmental Policy of Ethiopia was approved by the Council of Ministers in April 1997 that was based on the policy and strategic findings and recommendations of the Conservation Strategy of Ethiopia. The policy is aimed at guiding sustainable social and economic development of the country through the conservation and sustainable utilization of the natural, man-made and cultural resources and the environment at large. The overall policy 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 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. The Environmental Policy provides a number of guiding principles that require adherence to the general principles of sustainable development.

## **3.2 FDRE National Occupational Safety and Health Policy and Strategy**

The National Policy and strategy on Occupational Safety and Health (OSH) was endorsed by the FDRE Council of Ministers in July 2014. The OSH policy and strategy was prepared to implement the rights of Labour as stipulated in article 42(2) of the Constitution and implement the requirements of International Conventions on Occupational Health and Safety (No.155) to which Ethiopia is a signatory. The overall objective of the national OSH Policy and strategy is to avoid, prevent or minimize occupational and health hazards by providing effective OSH services in all working places and thereby contribute to the guiding principles of the National OSH policy and strategy are stated as the following:

1. Occupational Safety and Health Services are basic rights of workers.
2. Occupational Safety and Health Services are necessary in all working places.
3. Occupational accidents and health hazards can be prevented.
4. Tripartite and bipartite cooperation and coordination are key instruments for the national OSH policy and strategy implementation.

The Specific objectives of the National OSH policy and strategy include:

1. To ensure availability and accessibility of OSH services in all economic activities including in the informal work sectors
2. To prevent occupational safety and health hazards by establishing a tripartite and bipartite consultation and coordination mechanisms
3. To establish OSH systems that pays attention to those workers who seek special assistance (e.g: Women, youth, persons with disabilities, HIV patients, etc.).
4. To prevent the environment, public and workers health by preventing the release of pollutants from the workplaces.

The strategy of the national OSH policy includes.

1. Establishment of an effective and accessible work conditions inspection mechanism that is focused on prevention.
2. Formulating and implementing national regulations and standards on OSH and updating and improving it periodically.
3. Integrating and implementing OSH protection principles in all national development plans.
4. Establishing control and inspection mechanism that ensure prevention of occupational and health hazards to workers and impacts on the environment from occurring due to import. Use or disposal of machineries, raw materials, or chemicals in workplaces.
5. Establishing a mechanism to ensure OSH services are provided in the private sector.
6. Establishing a mechanism to ensure provision of advice and technical support on OSH are provided by Organizations.

The national OSH policy and strategy is applicable to all types of workplaces and economic activities in Ethiopia.

## **3.3 Environmental pollution Control Proclamation No. 300/2002**

This proclamation is aimed at eliminating or, when not possible, to mitigate pollution as an undesirable consequence of social and economic development activities. It has also an objective of protecting the environment and safeguarding of human health, as well as maintaining of the biota and the aesthetic value of the environment. The Proclamation, among others has considered control of pollution; management of hazardous waste, chemical and radioactive substances; management of municipal wastes; the importance and need to respect environmental standards; and punitive and incentive measures.

## **3.4 Solid Waste Management Proclamation (Proclamation No. 513/2007)**

Solid Waste Management proclamation aims to promote community participation to prevent adverse impacts and enhance benefits resulting from solid waste management. It provides for preparation of solid waste management action plans by urban local governments. Ethiopia lacks (i) appropriate legal framework for e-waste management, (ii) absence of e-waste recycling and refurbishing centers, and (iii) lack of regulatory framework including standards and certifications addressing environmental impacts from optical fibers and related telecommunications equipment and materials.

## **3.5 Hazardous Waste Management and Disposal Control (Proclamation No. 1090/2018)**

This is one of the recently introduced environmental legislations that specifically deal with hazardous wastes, the proclamation in its preamble elucidated hazardous waste as one of the most crucial environmental problems in Ethiopia. It stated the importance of prevention and control of these type wastes and emphasized the need for creation of a system to control the generation, storage treatment, recycling and reuse as well as transportation and disposal of hazardous wastes to prevent harm to human and animal health as well as the environmental.

The proclamation defined "hazard" as the inherent characteristics of a substance, agent, or situation having the potential to cause adverse effects or damage to human or animal health, the environment, biodiversity, and property and has determined the categories and characteristics of hazardous waste in annex I and annex II respectively. The objectives of this proclamation are:

* Create a system for the environmentally sound management and disposal of hazardous waste.
* Prevent the damage to the human or animal health, the environment, biodiversity, and property due to the mismanagement of hazardous waste.

Further its scope of application is also stated as:

* Waste that belongs to any category contained in Annex One of this Proclamation, and waste possesses any of the characteristic contained in Annex Two; as well as on those wastes that might be categorized as hazardous waste by the directive to be issued by the Ministry.
* Person who generates, reuses, recycles, stores, transports, or disposes hazardous waste at large in nation.

The proclamation within its 24 articles has dealt with all character and management of hazardous wastes.

## **3.6 Electrical and Electronic Waste Management Disposal Regulation No. 425/2018**

This Regulation shall apply to producers, distributors, retailers, importers, transporters, collection centers, re-furbishers, dismantlers, recyclers, and consumers of electrical and electronic equipment listed under Annex I of the Regulations and any other appliance that may be added to the list by the Ministry in a Directive issued under these Regulation. The aim of this regulation is ensured safe production, handling, and disposal of electrical and electronic wastes.

The regulation has defined Electrical and Electronic wastes as, all types electrical and electronic equipment which is powered by electric current or electromagnetic fields including those used for the generation, transmission, and measurement of electric current and electromagnetic fields. Furthermore, Electrical and Electronic Waste means all types of electrical and electronic equipment and its parts, except radio-active equipment, that have been discarded.

## **3.7 Applicable International Conventions Endorsed by Ethiopia**

Ethiopia has ratified several international/multilateral environmental conventions and many of the principles and provisions in those conventions have been well addressed in the national environmental policies and regulations. Accordingly, Article 9(4) of the constitution of the Federal Democratic Republic of Ethiopia provides that once an international agreement is ratified through the accepted or established procedure, it automatically becomes an integral part of the law of the land. Therefore, the following international conventions and protocols are relevant to the proposed EARDIP SOP II operation;

### **3.7.1 The Basel Convention on the Control of Transboundary Movement of Hazardous Wsates and Disposal**

Ethiopia ratifies the Basel Convention in April/2000 and entry to force in July/2000, the convention aims to reduce hazardous waste generation and to promote environmentally sound management of hazardous wastes despite the place of disposal. Additionally, the Basel convention provisions the restriction of transboundary movements of hazardous wastes except where it is perceived to be in accordance with the principles of environmentally sound management. The convention provides a regulatory system applying to cases where transboundary movements are permissible.

The convention also emphasizes amongst other principles, Environmentally Sound Management (ESM) of hazardous wastes and other wastes. ESM is defined as taking all and a detailed control practicable steps to ensure that hazardous wastes or other wastes are managed in a manner which will protect human health and the environment against the adverse effects which may result from such wastes. The convention stipulates a number of specific requirements, including the following:

* The minimization of the generation of hazardous and other wastes
* The reduction of transboundary movements of hazardous and other words subjects to Basel Convention to the minimum consistent with the environmentally sound and efficient management of such wastes.
* Specific conditions and a detailed control procedure for any proposed transboundary movement of hazardous and other wastes.
* Cooperation to promote transfer of technology and use of a low waste technique.

### **3.7.2 The Bamako Convention is Treaty of African Nations Prohibiting the Import into Africa of any Hazardous (including Radioactive) Waste.**

The Bamako convention is response to Article 11 of the Basel convention which encourages parties to enter bilateral, multilateral, and regional agreements on hazardous Waste to help achieve the objectives of the convention. The impetus for the Bamako convention arose also from:

* The failure of the Basel convention to prohibit trade of hazardous waste to less developed countries (LDCs).
* The realization that many developed nations were exporting toxic wastes to Africa.

The Bamako convention uses a format and language like that of the Basel convention, except that: (a) it is much stronger in prohibiting all imports of hazardous wastes, and (b) it does not make exceptions on certain hazardous wastes (like those for radioactive materials) made by the Basel convention. The convention negotiated by 12 nations of Africa, at Bamako, Mali in January 1991and it came into force 1998 to date, it has 29 signatories and 25 parties.

Purpose of the convention:

* To prohibit import of all hazardous and radioactive wastes into the African continent for any reason.
* To minimize and control transboundary movements of hazardous wastes within the African countries.
* To prohibit all ocean and inland water dumping or incineration of hazardous wastes.
* To ensure that disposal of wastes conducted in an ‘environmentally sound manner’.
* To promote cleaner production over the pursuit of permissible emissions approach based on assimilative capacity assumptions.
* To establish the precautionary principle.

The convention covers more wastes than covered by Basel conventions as it not only includes radioactive wastes but also considers any waste with a listed hazardous characteristic or a listed constituent as a hazardous waste; the convention also covers national definitions of hazardous waste. Other products also covered under the convention as waste include that have been severely restricted or have been subject of prohibition. Countries should ban the import of hazardous and radioactive wastes as well as all forms of ocean disposal. For Intra-African waste trade, parties must minimize the trans-boundary movement of wastes and only conduct it with consent of the importing and transit states among other controls; they should minimize the production of hazardous wastes and cooperate to ensure that wastes are treated and disposed of in an environmentally sound manner.

## **3.8 World Bank Environmental and Social Standard**

### **3.8.1** **ESS1: Assessment and Management of Environmental and Social Risks and Impacts**

ESS1 sets out the borrower’s responsibilities for assessing, managing, and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through investment project financing to achieve environmental and social outcomes consistent with the Bank ESSs. ESS1 also contains a provision on Annex 1 Environmental and Social Assessment section 5 (c) states that Hazards and Risk Assessment is an instrument for identifying, analyzing, and controlling hazards associated with the presence of dangerous materials and conditions at the project site. The bank also requires a hazard or risk assessment for projects involving certain inflammable, explosive, reactive, and toxic materials when they are present in quantities above specified threshold level.

### **3.8.2. ESS3: Resource Efficiency and Pollution Prevention and Management**

ESS3 contains provisions on the management of hazardous and non-hazardous wastes under section B paragraph 17 and 18. It sets the borrowers’ requirements under World Bank funded projects will avoid the generation of hazardous and nonhazardous waste where waste generation cannot be avoided; the borrower will minimize the generation of waste, and reuse, recycle and recover waste in a manner that is safe for human health and the environment. Where waste cannot be reuse, recycled, or recovered; the borrower will treat, destroy, or dispose of it in an environmentally sound and safe manner that includes the appropriate control of emissions and residues resulting from the handling and processing of the waste materials. If the generated waste considered hazardous the borrower will comply with existing requirements for management (including storage, transportation, and disposal) of hazardous wastes including national legislation and applicable international conventions including those related to transboundary movement. Where such requirements are absent, the borrower will adopt GIIP alternatives for its environmentally sound and safe management and disposal. When hazardous waste is conducted by third parties, the borrower will use contractors that are reputable legitimate enterprises licensed by the relevant government regulatory agencies and with respect to transportation and disposal, obtain chain of custody documentation to the destination. The Borrower will ascertain whether licensed disposal sites are being operated to acceptable standards and where they are, the Borrower will use these sites. Where licensed sites are not being operated to acceptable standards, the Borrower will minimize waste sent to such sites and consider alternative disposal options, including the possibility of developing its own recovery or disposal facilities at the project site or elsewhere.

### **3.8.3 World Bank Environmental, Health and safety (EHS) Guidelines-General EHS Guideline**

The EHS guidelines defines hazardous waste as one sharing the properties of hazardous materials (e.g., ignitability, corrosivity, reactivity or toxicity, etc.,) among other physical, chemical, or biological characteristics that may pose potential health risks. Hazardous waste in terms of this document are ones that are also classified as “hazardous’ by local regulations. The EHS guidelines define the practices required from facilities that generate and store waste which include avoidance and minimization, and where waste generation cannot be avoided but has been minimized, recovering, reusing waste and where this cannot be implemented, reusing, treating, and destroying and disposing of it in an environmentally sound manner. Understanding potential impacts and risks associated with the management of any generated hazardous wastes during its complete lifecycle. There is also provision in the EHS guideline that, ensuring the contractors handling treating and disposing hazardous waste should be reputable and legitimate enterprises licensed by relevant regulatory authority and following good international industry practice for the management of hazardous waste. In addition to; general waste management measures on waste prevention, reuse, recycling, treatment, disposal, storage, transportation, and monitoring. The contractor should also handle the hazardous management in compliance with applicable local and international regulation. Hence, the ESMF requires application of the Bank’s EHS guidelines, or other more stringent measures where these exist.

### **3.8.4 Good International Industrial Practices (GIIP)**

According to Sustainable Recycling Industries 2021, the best E-waste management practices contains concepts which are pillar for good international practice related to e-waste management including Extended Producer Responsibility (EPR), Producer Responsibility Organization (PRO), WEEE, E-waste Regulations and E-waste Management.

* Extended Producer Responsibility (ERP): is the main feature of the E-waste management system worldwide where the producer of the electronic equipment has the responsibility of managing such equipment after its end of life, thus the producer is responsible for the products once the consumer discards them. The ERP principle aims to shift part of the waste management responsibilities (administrative, financial and/or physical) from governments or municipalities to (taxpayers) the entitles that produce and sell the products that are destined to become waste. Therefore, the producer is also entrusted with the responsibility. Although in EPR-based system, producers ensure the financing of systems, consumers might eventually pay the end-of-life costs via an increase of the product price. Most e-waste models around the world are based on the EPR concept which also motivates the producers to reduce consumption of virgin materials, undertake product design changes to reduce waste generation and ensure closure of material loops to promote resource efficiency and sustainable development.
* Producer Responsibility Organization (PRO)/ Compliance Scheme: Producers can implement EPR either individually or collectively, in which case through a Producer Responsibility Organization (PRO) or compliance scheme. A PRO can be for profit (e.g., ERP in Europe, or not-for-profit e.g., WEEE forum systems). The PRO takes on the responsibility of the operational aspects such as collection, transportation, environmentally sound recycling and disposal of end- of- life products, on the behalf of the producers to meet the EPR obligations. While a PRO is founded by producers collectively, a compliance scheme is similar, except that is a service provider to producers. The main services provided by PRO are:
* Manage the financing of the system.
* Organize and supervise collection and recycling activities.
* Maintain integrity of the system through standards and audits.
* Conduct awareness raising programs.
* Manages corresponding data.
* Provide reporting and compliance on behalf of its members.
* Economic Instruments: enabling the financing of a system is often a fee that may be designated as “environmental fee” , “eco-fee”, “eco-levy”, “advance recycling fee” etc. depending on the regulation. The OECD provides a useful criterion for evaluating economic instruments including environmental effectiveness, economic efficiency, administration and compliance costs, revenues, wider economic benefits, soft effects and dynamic effects.
* Informal Sector: The guidance principles for the Sustainable Management of Secondary Metals (ISO IWA: 19, 2017) categorized informal actors as those in economic substance activities or unofficial economic activities. The former category includes recyclers who subsist thanks to their recycling activities, while the latter category includes those who have profitable or even lucrative businesses that deliberately evade compliance with pertinent regulations.
* Down Stream value Chain: The WEEE value chain is basically the post-consumer e-waste management value chain and consists of stakeholders such as dealers,/retailers, collectors, dismantler, refurbishes, and recycler/ material recovery operations for the metals and plastics mainly.
* Product Scope and Characterization: The type of products included under national legal frameworks for WEEE and EPR based regulation may be specific, only certain products, it is also important to clearly identify and define waste from the non-waste. WEEE product category include:
* Cooling and Freezing (CFCs)
* Screen
* Lamp with Mercury
* Large household appliances
* Small household appliances
* IT and consumer equipment
* E-waste management value Chain: One of the character that differs E-waste from other waste streams, it involve the range of players that are active after the first dismantling phase the three broad stages in the e-waste value chain are:
* Waste generation
* Waste collection and aggregation
* Treatment, recovery, and disposal
* Key Stakeholders, Roles, and Responsibilities in an e-waste management System: The e-waste management value chain consists of a range of actors responsible for the functioning of different stages of the system. While many current e-waste regulations are built around the EPR concept and thus focus more on the responsibilities of producers, other stakeholders such as governments, municipalities, consumers, retailers, treatment partners, etc. also have important roles to play in a successful system. These stakeholders may play slightly different roles and different capacities based on countries based on country-specific cultural, societal, economic and further conditions. The main stakeholders are:
* National/Regional government: Regulatory authorities lay the e-waste management regulatory framework for the country/region.
* Municipalities: Municipalities carry out over all waste management at local level including e-waste. May choose to have specific systems in place to handle e-waste.
* Producers/Manufacturers: Under EPR-based legislation, they organize, finance and operate e-waste take back system, either individually or collectively through PROs.
* Producers Responsibility Organization: Operate e-waste takeback systems on behalf of the producers/OEMs and ensure collected e-waste is transported to appropriate treatment centers and properly treated.
* Retailers: as the consumers touchpoint for producer’s retailers are often also their collection centers are take-back points.
* Waste Collectors Aggregators: Responsible for collection, in many Asian and African Countries, this is done largely by small and medium collectors (door-to-door, municipal dump site) with small informal collectors dominating the collection.
* Consumers: Household and business consumers are often considered as the weakest link in the chain as convenience is the determining factor in their e-waste disposal behavior. The determining factors are level of awareness, availability of infrastructure and system.
* E-waste processors: material recovery, recycling, or disposal; secondhand markets, scrap dealers, dismantlers, processors, recyclers, and down stream partners are all responsible for proper management, material recovery or disposal also play important role for sound management.
* Recyclers: Recycling and recovery of fractions; industrial recyclers are capital incentives, operating mechanized shredding and sorting or largescale material recovery facilities. The number and capacity of facilities varies by country, linked to the volume of e-waste generated, as well as the legislative landscape and the presence of an informal recycling sector. Informal recyclers play a dominant role in e-waste management systems, specifically in developing countries. They carry out pre-processing and first material recycling. However, at times, due to unsound treatment practices, they also contribute to the adverse effects in human health and the environment.
* Non-Governmental Organizations (NGOs): Both international local NGOs, play an important role in bringing awareness about e-waste management. Knowledge transfer, stakeholder interaction, funding: to tackle the overall e-waste issues, international organizations have launched various programs and initiatives to encourage the key stakeholders, particularly governments, regulators, producers and recyclers, to identify and address the gaps in e-waste management system.

# **PROJECT RELATED E-WASTE SOURCES**

In all subproject activities of EARDIP it is anticipated that there will be installation of different kinds of digital equipment that could be the sources for the electrical and electronic wastes (e-waste) at their end -of-life. In subcomponent 1.1 the sources of e-waste from this subproject are due to installation up to 1,500km of new of terrestrial fiber optics backbone network infrastructure along prioritized routes and building greater resilience with up to five additional routes to the sea. Rehabilitation long distance existing terrestrial cables damaged with conflicts. Subcomponent 1.2 last mile connectivity to connect remote rural borderland locations where IDPs and Refugee camps situated, and rehabilitation of long-distance cables damaged due to conflict and existing cables subjected to frequent outage. Subcomponent 2.2 improve infrastructure for data storage, transmission, and exchange and cyber security infrastructure. The construction of transmission towers, other fixed connecting stations and construction of 4G broadband Radio Access Network in borderland areas. In subcomponent 3.1 the construction of payment systems infrastructure in support of interoperable cross-border payment systems and component 3.2 where the project is supporting and upgrading the Ethiopia National Research and Education Network (EthERNet) and establishing a new NRENs in Djibouti.

# **POTENTIAL ENVIRONMENTAL, SOCIAL AND HEALTH IMPACTS**

Electronic products, which were once thought to be luxurious, has presently become a need. The term electronics encompasses a wide range of home and business electronic goods, including televisions, monitors, computers, audio and stereo equipment, servers, computer peripherals, VCR, DVD, players, video cameras, telephones, fax and copy machines, cellular phones, wireless devices, connectivity digital equipment household appliances such as washers, dryers, refrigerators, and toasters can also be considered as electronic products (Ramachandra, 2004). Electronic wastes can cause widespread environmental damage due to the use of toxic materials in the manufacture of electronic goods. Hazardous materials such as lead, mercury, and hexavalent chromium in one form or the other are present in such wastes primarily consisting of Cathode Ray Tubes (CRTs), printed board assemblies, Capacitors, Mercury switches and relays, Batteries, Liquid Crystal Displays (LCDs), Cartilages from photocopying Machines, Selenium drums (Photocopier) and Electrolytes. It is hardly known that e-waste contains toxic substances such as Lead and Cadmium in computer circuit boards; Lead oxide and cadmium in monitor Cathode Rays Tubes (CRTs) and Mercury in switches and flat screen monitors; Cadmium in computer batteries; Polychlorinated biphenyls. The subproject activities and the instruments for connectivity infrastructure, such as fiber optic cables, transmission tower, cell towers, data centers and associated facilities (servers, ventilators, coolants etc..), computers, printers, scanners.

The following are potential environmental risks that could arise from the generation of e-waste:

* Generation of leachate and the release of pollutants and heavy metals to the environment due to unsafe and improper disposal of generated e-waste, posing health and safety risks to the public.
* Contamination and acidification of agricultural soil, affecting soil fertility and agricultural yield.
* Water, air, and soil pollution due to the release of environmental pollutants such as Persistent, Bio-accumulative Pollutants (PBT), and Persistent Organic Pollutants (POPs), furans, lead, mercury, polybrominated flame retardants, lithium, dioxins, and Polycyclic Aromatic Hydrocarbons (PAHs) among others.
* Improper e-waste recycling practices are done for scavenging resale cables, components, and parts, therefore causing environmental pollution due to the burning of cables, random disposal of wastewater from the recycling processes, and random dumping of irretrievable e-waste.

Improper collection, management, and disposal of e-waste could, pose the following social risks:

* Nuisance to communities due to aesthetical and visual pollution
* Contamination of drinking water, underground water resources with heavy metals, and other POPs.
* E-waste recycling in developing countries takes advantage of child labor. Child labor and gender Based Violence Impacts associated with employing children and women in collection and primitive recycling of e-waste.
* Workers aiming to recover valuable materials such as copper, and gold, are at risk of exposure to over 1000 harmful substances, including Lead, Mercury, Nickel, Brominated Flame Retardants, Polycyclic Aromatic Hydrocarbons (PAHs)
* Exposure to lead associated with behavioral problems, reduce cognitive and language scores.
* Other effects on children such as effects on lung functions, respiratory effects, DNA damage, increased risk of some chronic diseases later in life.
* Human can absorb toxic chemicals through air and ground water.
* When disposed of improperly, toxins from E-waste mixes with ponds, lakes, and ground water. Communities that directly depends on these sources of water for their domestic use and their livestock then consume it unknowingly and these heavy metals are hazardous for all forms of living beings.

Improper collection, handling and disposal of E-waste pose the following health risks:

* Various health impacts due to heavy metals in water, air, and soil due to the carcinogenic nature of these pollutants and their bioaccumulation in the food chain and water resources.
* Still birth, premature births, low birth weight and length.
* Lead may cause neurotoxicity, high blood pressure, and muscle pains, and learning disabilities among children. Barium oxide can cause severe skin irritation and ingestion is harmful, and chronic exposure may lead to damage of Central Nervous System (CNS), spleen, liver, kidney, or bone marrow.
* Gold is extracted from E-waste either by burning the gold containing components at high temperatures or using leaching chemicals like cyanide solution. Burning releases toxic gases and disposal of cyanide solution or other leaching chemicals into the drain or on land pollutes water and soil.
* Mostly the above-mentioned hazardous chemicals and toxic metals are persistent toxic substances (PTSs), which are released in the environment and can enter the food webs. Several PTSs are known to be endocrine disrupters, posing adverse health effects such as reproductive disorders, developmental deformities, and cancer in both humans and wildlife.
* Dioxins, released from burning of E-waste are known carcinogens, which accumulate in the human body and may cause changes in the immune system, glucose metabolism and reproductive problems.
* Inhalation of cadmium fumes or particles can be life threatening. Cadmium exposure may cause kidney damage. The International Agency for Research on Cancer (IARC) has classified cadmium as a human carcinogen (group I) based on sufficient evidence in both humans and experimental animals.
* Acute mercury exposure may give rise to lung damage. Chronic poisoning is characterized by neurological and psychological symptoms, such as tremor, changes in personality, restlessness, anxiety, sleep disturbance and depression.
* High mercury exposure results in permanent nervous system and kidney damage. It has also been possible to detect proteinuria at relatively low levels of occupational exposure. Metallic mercury is an allergen, which may cause contact eczema.
* The symptoms of acute lead poisoning are headache, irritability, abdominal pain, and various symptoms related to the nervous system. People who have been exposed to lead for a long time may suffer from memory deterioration, prolonged reaction time and reduced ability to understand. Acute exposure to lead is known to cause proximal renal tubular damage. Long-term lead exposure may also give rise to kidney damage.
* Inorganic arsenic is acutely toxic, and intake of large quantities leads to gastrointestinal symptoms, severe disturbances of the cardiovascular and central nervous systems, and eventually death. Populations exposed to arsenic via drinking water show excess risk of mortality from lung, bladder and kidney cancer, the risk increasing with increasing exposure. There is also an increased risk of skin cancer. Studies on various populations exposed to arsenic by inhalation, such as smelter workers, pesticide manufacturers and miners in many different countries consistently demonstrate an excess lung cancer.
* Beryllium can cause sensitization, lung, and skin disease in a significant percentage of exposed workers. Calcium chromate, chromium trioxide, lead chromate, strontium chromate, and zinc chromate are known human carcinogens. An increase in the incidence of lung cancer has been observed among workers in industries that produce chromate and manufacture pigments containing chromate.
* Exposure to relatively high concentrations of antimony (9 mg/m3 of air) for a longer period can cause irritation of the eyes, skin, and lungs. As the exposure continues more serious health effects may occur, such as lung diseases, heart problems, diarrhea, severe vomiting, and stomach ulcers.

# **MITIGATION MEASURES AND E-WASTE MANAGEMENT**

In accordance with the Council of Ministers Regulation No. 425/2018 on E-Waste Management, adopting Environmental Pollution Proclamation No. 300/2002 and Hazardous Waste management and Disposal Control No. 1090/2018 and the ITU End of Life Management for ICT Equipment for E-Waste management. The following are general requirements for e-waste:

1. Waste Minimization and Prevention
2. Selection of technologies and equipment based on international standards to maximize their lifetime and minimized associated risks at their end-of-life stage.
3. Coordination with a relevant authorities and stakeholders.
4. Identification, labeling, and segregation of e-waste at the source.
5. E-waste quantification, and qualitative record keeping.
6. Temporary storage on site.
7. Collection and transport.
8. Central storage at designed location.
9. Reuse, recycling, and recovery of suitable waste.
10. Treatment and Disposal.
11. Incident reporting of e-waste related accidents.

E-waste segregation must take into account due to the hazardous nature of the waste or its content (e.g. heavy metals, POPs) shall always be segregated from other waste that does not contain environmental, carcinogenic, or other pollutants. The segregation shall be done based on content, and correct labelling and quantification must be applied. Annex II presents the e-waste management and monitoring matrix expected to be implemented in relation to the project by MInT and the other implementers or contractors engaged in the infrastructure development and implementation of EARDIP SOP II.

## **6.1 E-waste Minimization and Prevention**

The following set of measures aim to prevent and/ or minimize the quantities of e-waste generated and the hazards associated with e-waste.

* Procure electronic devices from credible manufactures to avoid purchasing second hand, refurbished, or obsolete devices with a short shelf life or already categorized as e-waste. In order to achieve this, project related Information and Communication Technology (ICT) procurement shall be done according to the World bank procurement procedures and GIIP in the ICT sector.
* Instituting good housekeeping and operating practices, including inventory control to reduce the amount of e-waste resulting from materials that are out-of-date, off specification, contaminated, damaged, or excess to operational needs; and
* Minimizing hazardous e-waste generation by implementing stringent waste segregation to prevent the commingling of non-hazardous and hazardous e-waste to be managed.
* Instituting procurement measures that recognize opportunities to return usable materials.
* Awareness and sensitization of project staff who will use the electronic devices on the proper disposal once they become damaged, irreparable or at their end of life is vital. Awareness and sensitization will also be extended to contractors in the event they generate e-waste. The sensitization program will include the usefulness and significance of e-waste recycling, and the need for returning all-electronic items procured by the project to a collection center that should be established. Also, project staff should be aware and sensitize on the fact that cell phones and computers do hold sensitive data/information, which present security risks if not properly disposed, and this can lead to lawsuits.

## **6.2 E-waste Recycling, Recovery, and Reuse**

Operational assessment of end-of-life equipment shall be conducted by running appropriate tests to assess the functionality when replacing or retrofitting project related equipment. A sample of a functionality test that shall be conducted is adapted from the ITU guideline on the End-of-life Management of ICT Equipment, available in Annex I. In addition to the implementation of e-waste prevention strategies, the total amount of e-waste may be significantly reduced through the implementation of reuse and recycling plans, which should consider the following elements: i) Identification and reuse/recycling of products that can be reintroduced into the operational processes ii) Investigation of external markets for recycling by other industrial processing operations located in the neighborhood or region of the facility (e.g., e-waste exchange); iii) Establishing reuse/recycling objectives and formal tracking of e-waste generation and recycling rates; and iv) Providing training and incentives to employees in order to meet objectives.

## **6.3 E-waste Storage**

MInT staff and involved contractors shall ensure that the storage of project related e-waste is being conducted in accordance with the national laws and regulations, GIIPs such as the ITU guidelines, and the World Bank EHS Guidelines containing measures on hazardous waste. E-waste shall be stored in a way that prevents and controls accidental release to natural resources (air, soil, and water). The Following measures are to be followed in the storage of e-waste.

* Temporary storage containers shall be available on site until transported into their final storage location.
* E-waste shall be stored in closed containers, each depending on type and composition away from direct sunlight, rain, wind, electrical fixtures, water systems and in an area where ventilation system is not circulated to other rooms or facilities.
* E-waste shall be stored in an appropriate manner preventing the mixing or contact between different sorts of e-waste and in a separate location from solid waste.
* The storage arrangement shall allow for inspection between containers to monitor leaks or spills. Examples could include insufficient space between incompatible e-waste.
* The contractor, employees involved in the e-waste management, and the disposal or recycling enterprises shall provide their personnel with training and induction on the proper handling of e-waste.
* Employees involved with e-waste management shall be provided with the appropriate Personal Protective Equipment (PPEs), vaccination in accordance with the health Law and the bylaw on hazardous waste, and a medical record shall be kept.
* Containers with different types of e-waste shall be correctly labelled, with a datasheet attached and specified for each type including but not limited to number of containers, number of units within each container, type, weight, hazardous material content (Lead, Mercury, etc….), date of collection, e-waste management personnel name, receiver, and final disposal method.
* Conduct periodic inspection of e-waste storage area and document the findings.

## **6.4 E-Waste Transportation**

All e-waste containers designated for off-site transport shall be secured in the designated storage location and shall be labelled as indicated in section 6.4 with the contents, associated hazards, receiver, destination, and other information. E-waste shall then be properly loaded onto the transport vehicles in accordance with OHS guidelines on loading and unloading, specified in the World Bank EHS Guidelines, ILO guidelines and other GIIP. The e-waste containers shall be accompanied by an e-waste transfer note, in the forms of a transport manifest that describes the load and its associated hazards, in suitable and well-suited vehicles in accordance with GIIPs. The handler and transporter shall be registered and certified.

When preparing for shipment the following should be implemented:

* Name and identification number of the material(s) composing the e-waste.
* Physical state (i.e., solid, liquid, gaseous or a combination of one, or more, of these).
* Quantity (e.g., kilograms or liters, number of containers).
* Waste shipment tracking documentation to include, quantity and type, date dispatched, date transported, and date received, record of the originator, the receiver, and the transporter.
* Method and date of storing, repacking, treating, or disposing at the facility, cross-referenced to specific manifest document numbers applicable to the e-waste.
* Location of each e-waste within the facility, and the quantity at each location.

## **6.5 E-waste Treatment and Disposal**

In cases when e-waste is still generated after the implementation of feasible e-waste prevention, reduction, reuse, recovery and recycling measures, e-waste materials should be treated and disposed of, and all measures should be taken to avoid potential impacts to human health and the environment. Selected management approaches like i) On-site or off-site chemical, or physical treatment of the e-waste material to render it non-hazardous prior to final disposal; ii) Treatment or disposal at permitted facilities specially designed to receive the e-waste; iii) Permitted and operated landfills or disposal facilities designed for the respective type of e-waste or other methods known to be effective in the safe, final disposal of e-waste materials. include timely removal, treatment and/or disposal at permitted/ approved facilities specially designed to receive the e-waste in accordance with national laws and GIIP.

# **MONITORING**

When significant quantities of hazards e-wastes are generated and stored on site, monitoring activities shall include:

* Weekly visual inspection of all e-waste storage collection and storage areas for evidence of accidental release and to verify that e-waste is properly labelled and stored.
* Weekly visual inspection of labelling, quantities, and containers conditions.
* Weekly inspection of loss or identification of cracks, corrosion, or damage to protective equipment, or floors.
* Verification of locks, and other safety devices for easy operation (lubrication if required and employing the practice of keeping locks and safety equipment in standby position when the area is not occupied).
* Documenting any changes to the storage facility, and any significant changes in the quantity of materials in storage.
* Tracking of e-waste generation trends by type and amount, preferably by facility departments.
* Regular visual inspection of all e-waste storage, collection and storage areas for evidence of accidental releases and to verify that e-waste is properly labelled, and stored; ii) Inspection of loss or identification of cracks, corrosion, or damage to protective equipment, or floors; iii) Checking the operability of emergency systems; iv) Documenting results of testing for integrity, emissions; v) Documenting any changes to the storage facility, and any significant changes in the quantity of materials in storage; vi) Regular audits of e-waste segregation and collection practices, vii) Tracking of e-waste generation trends by type and amount of e-waste generated, preferably by facility departments, viii) Characterizing e-waste at the beginning of generation of a new e-waste stream, and periodically documenting the characteristics and proper management of the e-waste, especially hazardous e-wastes; ix) Keeping manifests or other records that document the amount of e-waste generated and its destination; x) Periodic auditing of third-party treatment, and disposal services including re-use and recycling facilities when significant quantities of hazardous e-wastes are managed by third parties. Whenever possible, audits should include site visits to the treatment storage and disposal location. In the event that e-waste (on-site storage and/or pre-treatment and disposal) is in direct contact with soil, additional procedures must be performed to ensure regular monitoring of soil quality.

Additionally, records keeping of collected e-waste needs to be monitored, E-waste collected, stored, or transported shall include:

* Name and identification number of the material(s) composting the hazardous e-waste or physical state.
* Quantity (i.e., kilograms, number of containers)
* Content (i.e., devices, screens servers)
* Schedule (date of collection, date of transportation, etc….)
* Hazardous and pollutants contents (i.e., existence of mercury, lead, PHAs)
* E-waste transport tracking documentation shall include, quantity and type, date dispatched, date transported, and date received, record of the originator, the receiver, and the transporter.
* Method and date of storing, repacking, treating, or disposing at the facility, cross referencing.
* To specific manifest document (e-waste transfer notes) numbers applicable to the hazardous e-waste, or the location of each hazardous e-waste within the facility, and the quantity at each location.
* Tracking of e-waste generation trends by type and amount, preferably by facility departments.
* Additionally, record keeping of collected e-waste needs to be monitored.

E-waste collected, stored, or transported shall include:

* Name an identification number of the material (s) composing the hazardous e-waste or physical state.
* Quantity (i.e, kilograms, of containers)
* Content (i.e, Devices, screens, servers)
* Schedule (date of collection date of transportation, etc…)
* Hazardous and pollutant contents (i.e., existence of mercury, lead, PHAs)
* E-waste transport tracking documentation shall include, quantity and type, date dispatched, date transported, and date received, record of originator, the receiver, and the transporter.
* Method and date of storing, repacking, treating, or disposing at the facility, cross referenced.
* To specify manifest document (e-waste transfer notes) numbers applicable to the hazardous e-waste, or the location of each hazardous e-waste within the facility, and the quantity at each location.

## **Table 2: Major Activities and Responsibilities for E-waste Management Plan Implementation**

|  |  |  |  |
| --- | --- | --- | --- |
| **Activities** | **Responsibilities** | **Frequency** | **Output** |
| Development of Implementing Agency specific E-waste management plan | MInT/PIU | One time within 90 days of project effectiveness | E-waste Management plan |
| Identification of E-waste inventory at the start of the project | All implementing federal MDAs and regional implementing partners (R/MInT and EPA) | One time/ once procurement plan is finalized | Initial e-waste inventory |
| Liaison with EPA and receiving guidelines on E-waste recycling and disposal | MInT/PIU and Regional MInT and EPA | Quarterly | Technical Guideline |
| Capacity building and Training support for staffs and staffs of the private service providers on E-waste management | MInT/ PIU, F/EPA | Once a year | Training Report |
| Procurement of ICT equipment and updating E-waste inventory | All implementing federal MDAs and regional implementing partners (R/MInT and EPA) | Based on the procurement plan and within 30 days of each procurement | Equipment acquisition and updated inventory document |
| Distribution and operations of ICT equipment and updating the inventory accordingly | MInT/ PIU | Based on the procurement plan and within 30 days of each procurement | Equipment distribution report |
| Collection of retired obsolete ICT equipment | F/R PPPDS | Once in a year if E-waste generated | Collected E-waste |
| Recording E-waste inventory and storing the retired and obsolete E-waste | F/R PPPDS and MInT/PIU | Updated E-waste management plan and E-waste Inventory |
| Initiation of E-waste recycling or disposal | MInT/PIU and regional implementer and partners |
| Visit and select E-waste recycling facilities | MInT/ PIU |
| Implementation of formal E-waste disposal and recycling | Registered and licensed private service providers for E-waste management |
| Update E-waste Inventory | MInT/PIU | Bi-annual | Updated Inventory document |

# **BUDGET AND RESOURCES REQUIREMENTS**

## **Table 3:Budget Requirements for E-waste Management**

|  |  |  |  |
| --- | --- | --- | --- |
| Activity | Timeline | Responsible Organization | Estimated Cost |
| Hiring a consultant for the preparation of detailed E-waste management plan and its requirements for specific subprojects in EARDIP | After awarding the contract | MInT/PIU and ECA, EthERNet and MoTRI | 30,000 USD |
| Training to workers on the identification and handling of E-waste, segregation, filling data sheet and storage | Prior to commencement of the activity | MInT/PIU and the WB | 20,000 USD |
| Providing containers for e-waste collections | Prior to commencement of the activity | MInT/PIU | 5,0000 USD |
| Audits | On completion | Federal or Regional EPA | 20,000 USD |
| Tracking and Monitoring | Continuous | Federal/Regional EPA and MInT/PIU a | Routine duty of the monitoring body |
| Collection and transportation of E-waste | Quarterly | MInT/PIU and Private Service Provider | 7,740 USD per collection on four occasions |
| Dismantling | Quarterly | Private Service Provider | 5,111 USD per collection on four occasions |
| Sorting | Quarterly | Private Service Provider | 1296 USD per collection on four occasions |
| Sum | |  | 131,588 USD |

\*The estimated cost for the E-waste management plan implementation is from the ESMF implementation of similar project, EDFP, and the costs for collection, sorting, dismantling, transportation of E-waste is taken from the sole E-waste management service provider, Hefli, and converted from Ethiopian birr into US dollars.

# **9. PUBLIC CONSULTATION MECHANISMS**

Consultation with the local Community will assess the views, needs, priorities and concerns of the project affected local communities. Consultation with the local communities will also be informative about the objectives, nature, scale and the overall planning and implementation activities of the EA-RDIP SOP II in Ethiopia. To allow inclusive engagement, the arrangement of community consultation will take into account of the socio-cultural and economic factors that exclude, restrict, discriminate or disproportionately impact on the participation of different segments in local communities. Accordingly, proper community consultations, should be made regarding the e-waste management plan and implementation of the project.

## **9.1 Phone Interview, Virtual Interview, and E mail exchange**

There are security risks in all three project target regions. The Afar region in the Ethiopia-Djibouti border is directly affected by the ongoing war in Tigray Region. The security condition in the Somali region is very volatile. The source of security risks in the Southwest Ethiopia Peoples’ Region is associated with the recurring attacks from the armed clan in South Sudan. To mitigate these security risks, phone interviews, virtual consultations, e-mail exchanges (sending interview guiding questions and getting back the response through email) may be used to engage with the stakeholders in these regions. (If it is possible to assign a local person on the spot with the needed facilities the WB portfolio Mapping, GEMs facility may be a solution). At federal level and for those who are able to access it the Ethiopia Digital Foundations Project (EDFP) Complaint Management System as public consultation Plat form.

# **MONITORING ROLES AND RESPONSIBILITIES**

## **10.1 Roles and Responsibilities of the Ministry/Institution**

The Ministry of Innovation and Technology (MInT), as the main implementing agency and a host for PIU coordinate with the other implementing and beneficiary agencies and federal and regional EPA.

* Conduct inventory and updates of e-waste against procured electronics.
* Select private service provider for the e-waste management.
* Provide periodical induction and training for employees who are directly involved in e-waste collection, storage, dismantling, recovery, and disposal.
* Conduct periodical monitoring on the implementation of the e-waste management plan during operational phase of the project.
* Prepare periodical monitoring report on the implementation of the e-waste management plan during operational phase of the project.
* Ensure the e-waste collection, storage, transportation, and disposal in accordance with the national law, regulation, and guideline.
* Ensure the sustainability of the e-waste management activities, by creating a department in the ministry organizational structure.

## **10.2** **Roles and Responsibilities of Project Implementation Unit (PIU)**

* Coordinate all the implementing/ beneficiary agencies and other stakeholders involved in e-waste management.
* In collaboration with federal /regional EPA and the World Bank, facilitate the development of more detail e-waste management plan.
* Facilitate selection of private service provider for e-waste management.
* Facilitate structural and human resource development for the e-waste management.
* In collaboration with the WB Facilitate awareness and sensitization of project stakeholders and project staff and for the MInT and other implementing agencies.
* Prepare periodical reports to the World Bank on project progress.

## **10.3 Roles and Responsibilities of The World Bank**

* Support the training and capacity building session concerning e-waste management.
* Provide support in the e-waste management plan preparation.
* Review the periodical reports and provide comments and recommendations for further action.

# **Annex I: Sample Functionality Test for Used Computing Equipment**

This sample functionality test is adapted from ITU end-of life management for ICT equipment[[43]](#endnote-1)and the Basel convention PACE revised guidelines on environmentally sound material recovery and recycling of end-of-life computing equipment[[44]](#endnote-2).

|  |  |  |
| --- | --- | --- |
| Computing Equipment | Functionality Test | Test Result |
| Central Processing Units (CPUs) including desktop PCs routers, and other equipment. | Power on Self-Test (POST)  Switch on the computer and successfully completing the boot up process. This will confirm that the principal hardware is working, including power supply and hard drive.   * A working monitor will need to be used if non present. * Ensure that cooling fans are functioning. * Remove dust as much as possible   (e.g. delicately using a vacuum cleaner is possible), in order to ensure better cooling and stable operation. | **Computer** should boot up successfully.  **Computers** should respond to keyboard and mouse input.  Cooling fans should operate normally. No strong mechanical sound denoting end-of-life of fan |
| Cable and power cords | * Assess cable insulation inspect plugs | Cabling and plugs should be completed and free of damage e.g., has no cracked insulation.  Any detachable with damage should be replaced by a new one to avoid electric shocks or premature failures |
| Components (removed from equipment) including motherboard, other circuit boards, sound cards, graphic cards, hard drives power supplies and cords/cables) | Components should be gently wiped from dust to improve thermal exchange and allow better cooling.  Components should be tested for functionality either before removal from the host computer or laptop, by insertion in a test bench computer using diagnostic software, or a known working device as applicable | Components should be fully functional  Power supplies and cords/cable should be complete and free of damage e.g., has no cracked installation. Any detachable cable with damage should be replaced by a new one to avoid electric shocks or premature failures. |

**Annex II: E-waste Management Plan**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **E-waste Risks/Impacts** | **Mitigation Measures** | **Responsible Monitoring MDAs** | **Timing** |
| **Positive Environmental and Social Impacts of proper E-waste Management** | | | | |
| **1** | Create space: as sustainable waste management use controlled and confined space | If waste was never managed, it would end up on land, either scattered or may be centralized in a landfill somewhere. Landfills are big and can use up a lot of space. In some confined areas, sustainable waste management control, enable to make the best of it. | MInT/PIU and F/R EPA in collaboration with other partner agency e.g. Ministry of Labor and Skill | Annually |
| **2** | Saves and makes money: recycling waste reduce disposal cost | Increasing recycling can cut disposal costs and improve bottom line. Sustainable waste management can help generate money for some establishments. For instance, municipal administration that collect garbage can charge collection and recycling fees. This is also discouraged institutions that generate a lot of waste, making them sustainable and more responsible for the environment. | MInT/PIU and F/R EPA in collaboration with other partner agency e.g. Ministry of Labor and Skill | Annually |
| **3** | Enhance Sustainability: As it enables to manage energy and water. | Managing waste, energy, and water, and doing it more efficiently, are at the core of sustainability. Improving individual business, government or organizational sustainability can boost businesses and attracting more quality tenants, clients, and customers to establishments. It also positively engages our employees, volunteer, and citizens. | MInT/PIU and F/R EPA in collaboration with other partner agency e.g. Ministry of Labor and Skill | Annually |
| **4** | Control pollution: as it is recycling will end up reuse | Each waste has a particular effect on the environment sustainable waste management helps to understand the waste and how best to deal with it. | MInT/PIU and F/R EPA in collaboration with other partner agency e.g. Ministry of Labor and Skill | Annually |
| **5** | Make human better responsible: help human to handle waste carefully, effectively, and sustainably. | Sustainable waste management will help human to manage the waste carefully, effectively, and sustainably. It will also provide with different technologies, options, and alternatives for different kinds of wastes. | MInT/PIU and F/R EPA in collaboration with other partner agency e.g. Ministry of Labor and Skill | Annually |
| **6** | Job Creation: E-waste recycling creates new job for professional recyclers and creates a second market for recycled materials | E-waste recycling creates jobs for professional recyclers and laborers who can work in the recycling facilities as collector, dismantler, and creates a second markets for recycled materials | MInT/PIU and F/R EPA in collaboration with other partner agency e.g. Ministry of Labor and Skill | Annually |
| **Adverse Environmental Risks/Impacts due to Improper handling of E-waste** | | | | |
| **1** | Generation of leachate and the release of pollutants and heavy metals to the environment | -Temporary storage containers shall be available on site until transported into their final storage location.  -E-waste shall be stored in closed containers, each depending on type and composition away from direct sunlight, rain, wind, electrical fixtures, water systems and in an area where ventilation system is not circulated to other rooms or facilities.  -The storage arrangement shall allow for inspection between containers to monitor leaks or spills. Examples could include insufficient space between incompatible e-waste | MInT/PIU and F/R EPA | Periodical Inspection |
| **2** | Contamination and acidification of agricultural soil, affecting soil fertility and agricultural yield. | E-waste shall be stored in closed containers, each depending on type and composition away from direct sunlight, rain, wind, electrical fixtures, water systems and in an area where ventilation system is not circulated to other rooms or facilities.  Minimizing hazardous e-waste generation by implementing stringent waste segregation to prevent the commingling of non-hazardous and hazardous e-waste to be managed.  All e-waste containers designated for off-site transport shall be secured in the designated storage location and shall be labeled | MInT/PIU  F/R EPA | Quarterly inspection |
| 3 | Water, air, and soil pollution due to the release of environmental pollutants such as Persistent, Bio-accumulative Pollutants (PBT), and Persistent Organic Pollutants (POPs), furans, lead, mercury, polybrominated flame retardants, lithium, dioxins, and Polycyclic Aromatic Hydrocarbons (PAHs) among others. | Procure electronic devises from credible to avoid purchasing second hand refurbished or obsolete devices with a short shelf life or already categorized as e-waste. Apply WBG procurement procedures and GIIP.  Establish e-waste collection centers and including collection bins, receptacles.  Implement stringent e-waste segregation to prevent the commingling nonhazardous and hazardous e-waste to be managed. | F/REPA | Periodical |
| 4 | Improper e-waste recycling practices are done for scavenging resale cables, components, and parts, therefore causing environmental pollution due to the burning of cables, random disposal of wastewater from the recycling processes, and random dumping of irretrievable e-waste. | Contract a licensed e-waste firm/or liaise with appropriate authorities for two timely remove e-waste for treatment and/ or at permitted facilities.  Instituting good housekeeping and operating practices, including inventory control to reduce the amount of e-waste resulting from materials that are out-of-date, off specification, contaminated, damaged, or excess to operational needs.  Awareness and sensitization of project staff who will use the electronic devices on the proper disposal once they become damaged, irreparable or at their end of life is vital. Awareness and sensitization will also be extended to contractors in the event they generate e-waste. | MInT/PIU and F/R EPA | Periodical |
| **Adverse Social Risks/Impacts of the Improper Risk Management** | | | | |
| 1 | Nuisance to communities due to aesthetical and visual pollution | - Waste Minimization and Prevention  -Temporary storage on site far from residences and offices | MInT/PIU  F/R EPA | Weekly visual inspection |
| 2 | Contamination of drinking water, underground water resources with heavy metals, and other POPs. | -Minimizing hazardous e-waste generation by implementing stringent waste segregation to prevent the commingling of non-hazardous and hazardous e-waste to be managed.  -Awareness and sensitization of project staff who will use the electronic devices on the proper disposal once they become damaged | F/R EPA | Periodical |
| **3** | Child labor and gender Based Violence Impacts associated with employing children and women in collection and primitive recycling of e-waste. | Awareness and sensitization of project staff who will use the electronic devices on the proper disposal once they become damaged  Strict application of the LMP for EARDIP | MInT/PIU and regional implementing agency | Weekly |
| **4** | Workers aiming to recover valuable materials such as copper, and gold, are at risk of exposure to over 1000 harmful substances, including Lead, Mercury, Nickel, Brominated Flame Retardants, Polycyclic Aromatic Hydrocarbons (PAHs) | Ensure that receiving entities or firms are contractually committed to provide their workers with all necessary requirements or provisions in accordance with the LMP, PLL, and ESS2.  Contract a licensed e-waste firm/or liaise with appropriate authorities for two timely remove e-waste for treatment and/ or at permitted facilities. | F/R EPA | Quarterly |
| 5 | E-waste mixes with ponds, lakes, and ground water. Communities that directly depends on these sources of water for their domestic use and their livestock | -E-waste shall be stored in a way that prevents and controls accidental release to natural resources (air, soil, and water). The Following measures are to be followed in the storage of e-waste  -Contract a licensed e-waste firm/or liaise with appropriate authorities for two timely remove e-waste for treatment and/ or at permitted facilities.  -Institutionalizee-waste management practices  Awareness creation and sensitization on e-waste management is for the community is important | MInT/PIU/WB | Periodically |
| Health risks due to improper E-waste Management | | | | |
|  | The various health risks posed by the improper E-waste management are still birth, premature birth, high blood pressure, neurotoxicity, skin irritation, change in immune system, kidney, lung and liver damage. | -Awareness and sensitization of project staff who will use the electronic devices on the proper disposal once they become damaged, irreparable or at their end of life is vital. Awareness and sensitization will also be extended to contractors in the event they generate e-waste and the community too.  -E-waste shall be stored in a way that prevents and controls accidental release to natural resources (air, soil, and water). The Following measures are to be followed in the storage of e-waste  -E-waste shall be stored in closed containers, each depending on type and composition away from direct sunlight, rain, wind, electrical fixtures, water systems and in an area where ventilation system is not circulated to other rooms or facilities.  -Workers directly participated in the E-waste collection, sorting, dismantling, recovery and reuse and disposal should be provided with proper PPE. | MInT/PIU and F/R EPA in collaboration with other partner agency e.g. Ministry of Health | Annually |

**Annex III: Inspection Form Templet**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E-Waste generated** |  | **Hazardous content (Pb, Hg, PAH…)** | **Segregated** | | **Stored** | | **Recycled/Reused /Recovered** | | **Disposed** | | **Satisfactory** | |
|  |  |  | Y | N | Y | N | Y | N | Y | N | Y | N |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

# **ANNEX-L: LABOR MANAGEMENT PROCEDURES (LMP)**

1. **Introduction and Background**

**1.1. Project Description**

Ethiopia has a single fiber optic transmission network for telecommunications, deployed by incumbent operator Ethio-Telecom. The domestic backbone network currently consists of 21,178 kilometers (km) of fiber optic route, of which 7,302 km is Optical Ground Wire/OPGW (along power lines) using Huawei and Zhong Xing Telecommunication Equipment /ZTE equipment. The OPGW appears to be on routes deployed by Ethiopian Electric Power, which has installed OPGW (24 core, 48 core) on many of its power lines for internal use.[[45]](#footnote-43) Ethio Telecom has deployed its national fiber optic backbone along roads, power lines (OPGW), and railway routes to establish a resilient national network topology.[[46]](#footnote-44)

A review of the Ethiopian digital economy landscape reveals close to 570 businesses offering a wide range of digital finance, ecommerce, and transport, sector-tech, and ecosystem services. We find that most companies operating in the digital space are still largely sub-scale in nature and that very few ‘digital disruptors’ have emerged so far with widespread market acceptance, a large customer base, and meaningful revenue generation. This should change very soon, however, as major sector reforms are addressing numerous past constraints—poor network connectivity, high telecom costs, restrictive regulations, limited funding, skills shortages—while broader policy conditions are now much more conducive for the emergence of truly disruptive Ethiopian companies using digital platforms to transform traditional ways of doing business in agriculture, industry, transport, and other services. In this context, we take stock of the current state of Ethiopia’s digital economy, identify key themes and trends, assess the impact of recent ‘game-changers’ in this field (new policies, new entrants, new products), and offer our views on both the overall outlook and sector-specific prospects.[[47]](#footnote-45)

Despite the recent progress, the scale and scope of Ethiopia’s digital disruptors remains quite limited when seen from a cross-country perspective. Companies in other country contexts have shown mass market adoption by providing exemplary solutions to some well-known consumer ‘pain points’ and/or business bottlenecks. In the Ethiopian context, this would mean, among other things, offering simplified solutions for making payments (Person-to-Person-P2P, Person-to-Busines-P2B, Person–to-Government-P2G, Government-to-Person-G2P); addressing inefficient/costly food value chains; improving weak information bases faced by buyers and sellers of goods/services (jobs, homes, personal goods, industrial items); enhancing localized offerings for services (education, entertainment); and solving bureaucratic aspects of government services (utilities, Identifications-IDs, permits).[[48]](#footnote-46)

The Eastern Africa-Regional Digital Integration Project SOP I (P176181) will enhance ongoing and planned national-level projects that support digital development in the region[[49]](#footnote-47), and in some exceptions, could also include components focused on national objectives that are financed by national IDA. While many countries in the region already have projects supporting national objectives in the digital sector, some countries - such as Eritrea, Sudan, South Sudan and Somalia - currently do not, and, therefore, this regional project could potentially include support to such national objectives which would be critical to set the path for integration. For countries with on-going national projects, like Djibouti and Ethiopia, the proposed project will focus on regional connectivity needs and enabling cross-border flows of digital service. In both these instances, the project will ensure that national interventions are aligned with regional goals, and that the balance between national and regional interventions is maintained overall. The EA-RDIP SOP II will seek to promote private sector investment through (a) upstream policy, legal, and regulatory reforms that create a more enabling environment for broadband market development (subcomponent 1.3 - legal, regulatory and institutional enabling ICT environment); (b) frameworks for data protection and cyber-security that create a more predictable and robust trust environment (subcomponent 2.1 and 2.2); (c) digital access initiatives that help stimulate demand and create a growing user base that can increase and sustain commercial investment incentives (subcomponent 1.2 - last mile connectivity, including in borderland areas). The World Bank will be collaborating closely with the International Finance Corporation (IFC) to unlock prospects for downstream investments in the digital infrastructure.

The EA-RDIP SOP II supports GoE to strategically mobilize, coordinate, and scale up funding from diverse sources. The success of the Ethiopian Digital Foundation Project/EDFP (P171034) and the achievement of the GoE broader digital connectivity and digital industries and spatially inclusive development in Ethiopia ambitions depends on the EA-RDIP II’s ability to leverage human resources from existing EDFP, Single Digital Market (SDM) for East Africa, Digital Economy for Africa Initiative (DE4A) and AfCFTA Support to Negotiations and Implementations (P172232) and the private sector including the International Finance Corporation (IFC) initiative, the digital economy and transformation facility and bilateral supports, private investments.

**1.2. Project Development Objectives**

The Series of Projects (SOP) Development Objective is to promote the establishment of an integrated digital market across the Eastern Africa region by increasing the cross-border flow of broadband, data traffic and digital services.

The Project Development Objective (PDO) of SOP-II is to advance regional digital market integration through increasing access to broadband connectivity and strengthening the enabling environment for digital service delivery.

**1.3. Project Components**

The project is designed around four integrated and mutually reinforcing components, which reflect the distinct but interconnected layers of an integrated regional digital market. Components 1, 2 and 3 will support Connectivity Market Development and Integration; Data Market Development and Integration; and Online Market Development and Integration, respectively, whereas component 4 will support Project Management and Implementation Support (at regional and national level). These components include a menu of activities from which Borrowers (Ethiopia[[50]](#footnote-48) and Djibouti), have selected activities to be implemented under SOP-II, based on their most pressing needs. In addition, components include activities to be undertaken by Regional Economic Communities (RECs) including Eastern Africa Community (EAC), and Intergovernmental Authority on Development (IGAD) to help coordinate and advise countries in the region, ensuring that all benefit from the larger contiguous regional market supported by the project.

Table 1: Summary of EA-RDIP SOP II components and related activities

|  |  |
| --- | --- |
| **COMPONENT** | **Activities** |
| **Component 1: Connectivity Market Development and Integration** | |
| 1.1: Cross border and backbone network connectivity | 1,100 KM of new fiber five additional routes to the sea and rehabilitation of terrestrial cables  Private capital mobilization |
| 1.2: Last mile connectivity including in borderland areas | To connect remote, rural, borderland locations where the commercial incentive for last-mile network expansion is insufficient (host communities and Internally Displaced Person (IDP)/refugees camps in borderland areas). Tigray region is included as a beneficiary under conflict affected regions category. |
| 1.3: Enabling legal, regulatory and institutional ICT environment | Activities financed will support reforms that aim to catalyze further investments in climate-smart digital infrastructure and attainment of universal access targets |
| **Component 2: Data Market Development and Integration** | |
| 2.1: Cyber-security frameworks, infrastructure and capacity | To strengthen and harmonize cyber-security frameworks, build capacity for responding to cyber threats/cybercrimes and create greater awareness on cyber-security. |
| 2.2: Data exchange, governance and protection | To improve the efficiency of data storage, transmission and build resilience for government data storage. |
| **Component 3: Online Market Development and Integration** | |
| 3.1: Digital enablers cross-border trade and service delivery | Support to build readiness for partaking in regional trade initiatives will be provided. Project financing will cover capacity building to Ministry of Innovation and Technology (MInT) and the Ministry of Trade and Regional Integration (MoTRI) for facilitating participation in regional trade agreements and expanding cross-border e-services. |
| 3.2: Regional research and education networks (RENs) and training for digital skills | To strengthen the higher educational network through expansion and integration of Ethiopia Education and Research Network (EthERNet) with regional Research and Education Networks (RENs) allowing for network economies in unit prices for capacity purchase and knowledge transfer. |
| **Component 4: Project Management and Implementation Support** | This component would finance the Project Implementation Unit -PIU’s (at MInT) operations for project implementation. Implementation would entail functions of project management and coordination, including procurement, financial management (FM), and M&E, as well as environmental and social safeguards management. |
| **Component 5: Contingency Emergency Response Component** | CERC will help strengthen the institutional capacity to respond to emergencies caused by climate and natural disasters, and support reinforcing the country’s resilience to climate and natural risks identified above. |

**1.4. Benefits and Beneficiaries of the Project**

**The project will benefit citizens, refugees, IDPs, businesses, public sector MDAs and RECs** through improved access to connectivity, an environment enabling digital services and provision of digital skills**:**

1. **Citizens:** Citizens will benefit both indirectly and directly from wider opportunities to participate in an expanding regional digital market, which offers new employment opportunities and access to new public and commercial services online. Expansion of network coverage will directly benefit un-served or underserved communities, particularly in rural and borderland areas, where new networks are deployed or upgraded, supporting greater digital access and inclusion. Network coverage (of the population) is expected to increase from X to Y percent and X to Y percent in Ethiopia and Djibouti, respectively, on the back of the supported infrastructure investments. Approximately 5,000 citizens, of which at least 30 percent are women, including persons with disabilities, will also benefit directly from digital skills trainings (conducted using accessible techniques and tools), which will increase their readiness to access online service and contribute to the development of the digital market.
2. **Refugees, and IDPs:** Refugees, IDPs, and people in host communities will directly benefit from enhanced network coverage and new access to mobile and emergency response ICT infrastructure, for example, boosting their resilience to withstand climate shocks.
3. **Businesses:** ICT service providers, including mobile network operators and internet service providers, will directly benefit from the project through contracts for infrastructure deployment and capacity purchase as well as local procurement of IT, awarded on a competitive basis. The wider business community will also benefit indirectly from reforms supported and investments made, including a more secure and cost-effective environment for conducting business online, on the back of more reliable, better quality, and low-cost broadband services; more seamless data exchange within and across borders; and the deployed enabling digital public infrastructure that facilitates online services, which boosts e-commerce. The creation of a regional digital market will provide local businesses with opportunities to scale within the region and access larger markets more easily.
4. **Public sector.** MDAs, particularly line ministries for ICT and trade, as well as ICT industry regulatory bodies in participating countries, will directly benefit from targeted financial and TA. Public institutions (including unconnected government offices, health care centers, schools, universities, and TVETs) will also benefit from improved access to connectivity and access to shared digital infrastructure (for example, IXPs and data hosting solutions).

**1.5. Rational**

The EA-RDIP SOP II employs and deploys project workers at the project office, zonal and woreda offices and engages expert consultants, contractors, and temporary workers from different segments of society. This Labor Management Procedures (LMP) is necessary to manage labor related risks and to promote sound worker management relationships during the implementation of the EA-RDIP SOP II. The purpose of this LMP is to facilitate the planning and implementation of subprojects by identifying the main labor requirements and the associated risks and determining the resources necessary to address the project-related labor issues.

The LMP is prepared in accordance with the World Bank Environmental and Social Framework (ESF) requirements and consistent with provisions in the Environmental and Social Standards including ESS2, ESS4 and other relevant ESSs. The LMP is intended to promote health and safety of all project workers and project affected communities during implementation. The LMP is designed to promote fair treatment, non-discrimination and equal opportunity of all project workers; to protect vulnerable workers such as women, persons with disabilities, children of working age, migrant workers, contracted workers and primary supply workers; to prevent the use of forced labor and child labor; to support the principles of freedom of association and collective bargaining of project workers in a manner consistent with pertinent national laws and to provide project workers with accessible means to raise workplace concerns.

1. **Overview of Labor use in the EA-RDIP SOP II Implementation**

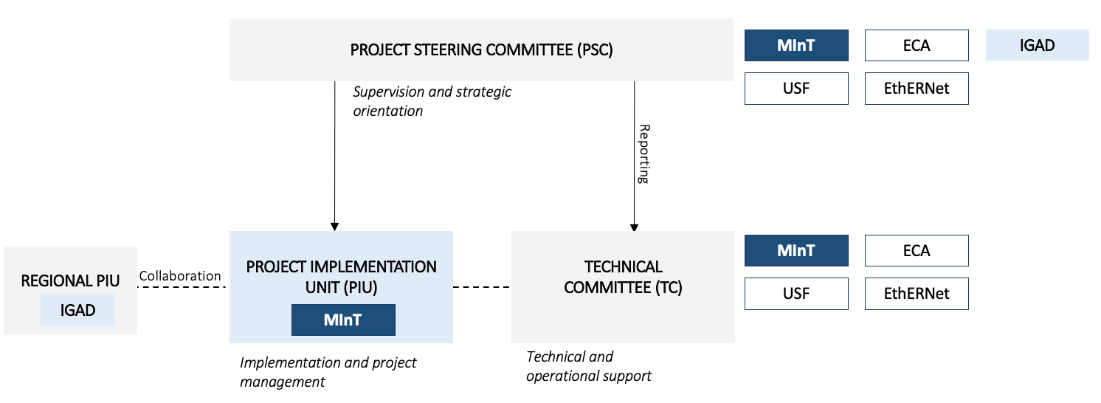
EA-RDIP II will be implemented per the Ethiopian Labor Proclamation No. 1156/20192 and the World Bank’s ESS2. The project implementing agencies are responsible to ensure compliance by their employees as well as potential contracted institutions. Labor and working conditions in the project are relevant to direct workers (including government civil servants seconded from their home agencies to work concerning the project) employed or engaged by the project implementing agencies, contracted workers, and primary supply workers. These will include construction workers hired for the projected civil works (as required). EA-RDIP SOP II project will not anticipate mobilization of community workers as defined in ESS2 - people engaged and employed in providing community labor.

This LMP will also include potential labor risks anticipated in the project; terms and conditions that will be applicable for workers, as per the Government of Ethiopia Labor Proclamation; Government o Ethiopia’s/GoE’s legal frameworks on Occupational Health and Safety (OHS); responsibility of staff management and Workers Grievance Mechanism. As per paragraph 9 of ESS2, Labor Management Procedure should be developed and implemented for project-related workers. Thus, MInT has prepared this LMP which will be implemented defining the potential project workers, the risks, and impacts with issues of labor and working conditions. The procedures identified in this LMP apply to the direct, contracted, and primary supply workers. The project components' activities will involve workers which include both males and females.

**2.1. Institutional Arrangement for EA-RDIP SOP II Project Implementation**

The existing PIU under the MInT will serve as the main implementing agency in Ethiopia. This PIU was originally set up in 2021 to manage the Digital Ethiopia Foundations Project (P171034), which has been effective since July 23, 2021, and for which project implementation is rated as “Satisfactory” (as of August 2022). The PIU is fully staffed with a Project Coordinator, Procurement Specialist, FM Specialist, E&S Specialist, M&S Specialist and others. Additional support will be provided towards i) hiring key technical specialists, with subject matters expertise in connectivity infrastructure, cyber-security etc; ii) key equipment, material, and logistics related requirements for the PIU staff, shared with the existing project. The PIU staff would be hired within three months after effectiveness. The detailed composition and role of the PIU will be set forth in the Ethiopia PIM. The PIU will be primarily responsible for project implementation, including overseeing core project-related fiduciary functions, M&E and E&S commitments in Ethiopia. In addition, the PIU will also act as the single point of contact for the regional PIU at IGAD (where Ethiopia is a member) to facilitate collaboration on designing and implementing specific activities. The PIU will submit project reporting to the National Project Steering Committee (NPSC), the National Technical Committee (NTC) and engage with the NTC on specific matters requiring technical expertise/input on an ad-hoc basis. Figure 1 depicts the main reporting lines.

***Figure 1: National Implementation Arrangements for the EA-RDIP in Ethiopia***



At the region level, EA-RDIP SOP II project implementation is led by regional institutions such as Science, Innovation and Technology Commission in Afar, Innovation and Technology in Gambella and Innovation and Technology Bureau in Somali region, with the involvement of relevant institutions at the state, Zonal, Woreda, Kebele and community levels with specific accountabilities and decision-making roles based on existing mandates. Also, it will take the leading responsibility to establish the Regional Project Steering Committee (RPSC) and Regional Project Technical Committee (RPTC). The constituency and role of the RPSC and RPTC resemble the NPSC and NPTC but at the regional level.MInT will hire Cluster Area Project Personnel (CAPP) comprising competent Environmental Safeguards Specialist, Social Safeguards Specialist and GBV Specialist that base the project office at the respective regions but coordinate and oversee the overall implementation of the ESMPs across the Project Operation Areas (POAs) in their respective regions. The number of the CAPP will depend on the number of POAs in the respective target regions. The CAPP will closely work with the PIU, RPSC, RPTC and Woreda Project Task Force (WPTS). Likewise, MInT will hire Project Area Focal Person (PAFP) who will take the leading role for the overall coordination and implementation of the project’s ESMPs including the RF at the Woreda level. Besides, the implementation arrangement will establish Woreda Project Task Force (WPTF) comprising the Heads and Experts from Woreda Rural Land Use and Administration Office, Woreda Environmental Protection Office, Woreda Women and Children Affairs Office, Woreda Trade and Industry Office, and Woreda Peace and Security Office. The WPTF will closely work with Cluster Area Project Personnel (CAPP) and Project Area Focal Person (PAFP) to oversee the day-to-day E&S performance of the project as compliance with the ESMPs specified in this ESCP.

Table 2: Roles and responsibilities of the implementers and partners

|  |  |  |
| --- | --- | --- |
| Administrative level | Organizations | Roles and responsibilities |
| Federal Level | MoF | * Responsible for financial management, budget managing payments (which are delivered through Commercial Banks and Financial Institutions) |
| MInT | * MInT, a federal ministry organ, is empowered mainly to ensure and set general policy framework for the provision of quality, reliable and secure information technology service and oversee the implementation thereof; * Supports PIU through the National EDFP Steering Committee with an oversight on the implementation of the E & S Sfeguards of the EA-RDIP II project. * Leads the overall digital integration undertakings of the EA-RDIP II through its dedicated Digital Transformation Program Office/Digital Infrastructure Unit, including collection of regional level digital infrastructure development performance data, analyzing the same and reporting to the WB/Mint-PIU. |
| ECA | * the Ethiopian Communication Authority, a regulator of the telecommunication sector, is empowered, among others, to 'promote information security, data privacy, and protection'; * In line with this the Universal Service Fund (USF) has been established at the ECA and with support of the Digital Foundations Project (P171034). General capacity building and regulatory strengthening and adopt regulatory standards on siting, design, construction and operation of digital infrastructure in response to climate risks. * ECA will provide Technical Assistance (TA), Transaction Advisory Services, conducting feasibility studies, guide on modalities of public financing /Capital expenditure (CAPEX) on connectivity work, upgrading, repairing and rehabilitation for activities related sub-component 1.1. * ECA will provide Transaction Advisory Services, conducting feasibility studies, guide on modalities of public financing /Capital expenditure (CAPEX) on establishing/ upgrading broadband radio access networks, transmission augmentation through fiber extension, emergency response facilities, and establishing a range of low-cost online access facilities for activities related sub-component 1.2. * Works on achieving targets set on sub-component 1.3. * Operationalize gender-specific recommendations outlined in Ethiopia’s (forthcoming) ‘National Digital Inclusion Strategy’. |
| MoTRI | * Will support realization of regional trade initiatives, and facilitating participation in regional trade agreements and expanding cross-border e-services (related to sub-component 3.1.). |
| MoE | * MoE will provide TA on activities related to sub-component 1.1.-c., related to radio access networks for schools and sub-component 1.1.-f., related to low- cost online access facilities, particularly related to school computer lab units * MoE in collaboration with EthERNeT will provide TA, financing modality and collaboration for activities identified under sub-component 3.2. |
| MoH | * MoH will provide TA on activities related to sub-component 1.1.-c., related to radio access networks for health care facilities |
| MoLS | * MoLS will work in collaboration with Job Creation Commission, to recruit, train and link local community members with both international and national suppliers |
| MoP | * Will handle issues related to emergency response and benefit of pastoral and communities living along the border line of the beneficiary countries |
| MoWSA | * MoWSA provides support on validating provisions are embedded related to protections from GBV and incentives for women –owned business in sub-contracting in both component 1.1.-b and 1.2.-b |
| NIDPO | * National ID Program Office will be involved to support in achieving targets stated under sub-component 3.1. which deals with TA to develop regional guidelines and capacity building for national authorities to design and implement digital ID and civil registration systems, in line with Principles on Identification for Sustainable Development, as well as to facilitate regional cooperation for cross-border mutual recognition and interoperability (including to identify priority use cases) |
| FCSC | * Federal Civil Service Commission will be involved on supporting the recruitment and administration of training for at least at 1,500 (the number is including civil servants from Ethiopia, South Sudan and Somalia) civil servants, including female staff will be trained in management or use of digital systems and digital skills |
| EPA | * Environmental Protection Authority –play a regulatory role on the preparation and implementation of E & S Safeguards tools, particularly E and S safeguard related matters. |
| NLAU | * National Land Administration and Use, addresses issues related to involuntary land expropriation, resettlement and upholding land rights |
| DBE | * Development Bank of Ethiopia will provide support on achieving set on sub-component 1.1. including the use of Public Private Partnerships (PPPs), investment guarantees and sub-component 1.2. incentivize private sector CapEx and OpEx investment in the roll-out and maintenance of last-mile access networks that connect targeted locations/areas, but also benefit the wider consumer base in the vicinity of connected sites, with national governments serving as the anchor tenant required for enhanced service provision |
| EIC | * Ethiopia Investment Commission- supports in creating enabling environment to attract external and internal investment actors to achieve targeted activities identified under sub-components 1.1., 1.2., and 1.3. |
| EED | * Ethiopia Enterprises Development will support the promotion of women-owned enterprises and the transition of the enterprises from small scale level engagement to progressively large scale development and contributes to supply goods and services for the digital industries |
| Ethio-Telecom | * Ethio-telecom supports on resource sharing for digital sector development and in realizing targeted activities listed under sub-components 1.1., 1.2., and 1.3. * According to “Telecommunications Infrastructure Sharing * and Collocation Directive No. 793/2021”, Ethio-Telecom will share an Access Provider’s active and passive infrastructure, including, but not limited to, the sharing of network elements, systems, equipment, facilities, premises or rights of way, with an Access Seeker, subject to an agreement between the parties; and * Will allow the placement of network equipment or systems that are used for service provision by a Telecommunications Operator together with network equipment or systems installed at premises of other Telecommunications Operator at a technically feasible location on the basis of agreement reached between them. |
| Safaricom | * will provide TA on activities related to sub-component 1.1.-f., related to low- cost online access facilities, particularly related to school computer lab units |
| UNHCR | * Will work on benefit packages related to IDP/refugees and host communities |
| Regional | Innovation and Technology Commission-Gambell  Innovation and Technology Bureau-Somali  Science, Innovation and Technology Commission-Afar | * Governs the ICT, Innovation, technology and digital sector in the region * Coordinates with regional government line institutions, ICT & digital sector-based unions, the private sectors, the civil societies and research & academia, by (i) providing services of implementing program activities directly financed by the EA-RDIP; and (ii) implementing their own project activities financed by themselves contributing to the overall project objectives. * Responsible for policy development and enforcement related to digital sector development; utilization and management of government, private and community forest * provides expert advice for digital expansion including on topics such as backbone connectivity, last mile connectivity, establishing enabling ICT institutional environment, data and online market development; * coordination of EA-RDIP II activities and projects in the regional state; ensuring environmental and social integrity; jointly resolving digital sector resource related disputes with relevant institutions; * leads implementation of the digital integration initiative |
| Regional PIU | * Coordinates overall implementation of the EA-RDIP II project activities, administratively supported by the regional innovation and technology commissions or bureaus. * Receives strategic guidance from the Afar Regional State vice president. |
| Multi-sector Steering Committee and Technical Committee | * Provide strategic guidance and technical inputs respectively, to guide the EA-RDIP II project implementation. |
| Regional bureaus or offices of BoWSA, BoTI, BoEPA, BoLS, BoH, BoE, BoPD and BoLAU | * Support the EA-RDIP II project implementation and coordinate activities on the ground through their decentralized staff, particularly those activities potentially conducive to produce more USF financed from own sources or from private sector. * Specific activities to be implemented by the relevant bureaus will be defined with specific accountabilities, including lead and supporting roles and budgets, in the joint annual work program and budget and joint procurement plan. * Involve in joint work planning, budget formulation and reporting for the EA-RDIP II and ICT related policy development/harmonization |
| Zonal | Cluster based safeguard coordinators | * Oversee the safeguards work of the EA-RDIP II woreda coordinators and ensure that environmental and social safeguards are implemented according to the EA-RDIP II environmental and social safeguards instruments. |
| lead facilitators hosted at Communication Office | * Provide technical and operational support to EA-RDIPII woreda coordinators and EA-RDIP SOP II E & S safeguards coordinators to ensure satisfactory implementation. |
| Woreda | Cluster Area Project Personnel (CAPP) with Woreda administration office, sector experts | * Support on different activities of the EA-RDIP SOP II project activities * EA-RDIP II woreda coordinators will: (a) reinforce woreda capacity to coordinate implementation of EA-RDIP II activities, related projects and operations, (b) lead implementation of activities directly funded by EA-RDIP II financing, and (c) support fiduciary aspects of EA-RDIP SOP II including E & S Safeguards , activity reporting, financial management and procurement. |

**2.2. Roles and responsibilities of the Project Implementation Unit (PIU)**

The PIU is responsible for the overall coordination and management of project implementation activities, including the day-to-day fiduciary requirements, liaising technically with all partner agencies, NGOs and the private sector actors involved in the EA-RDIP SOP II implementation. With the support from MInT, the PIU carries out the following tasks and is responsible for:

* Safeguards implementation and reporting
* Financial management and reporting
* Procurement management and reporting
* Monitoring and evaluation for EA-RDIP SOP II as per each defined indicator in the results framework and others as required by government and desired by the program team
* Direct implementation of specific technical assistance activities financed by the EA-RDIP SOP II
* Joint annual work programming and budget preparations, with inputs from MInT, ECA, MoTRI and regional bureaus and other relevant entities; and preparation of the annual procurement plan
* Local level PIU team engage and work with Woreda and Kebele officials (Woreda administrators and experts) and other actors to coordinate EA-RDIP SOP II interventions and related initiatives across sectors that have an impact on digital sector (promoting inclusive digital service approach)
* Facilitating coordination with EA-RDIP SOP II related initiatives, i.e., liaising with executive-level focal points and regional innovation and technology bureaus or commissions, as required
* Ensures that services funded by USF verification are carried out through a third party.
* Ensuring the delivery, implementation and reporting on the agreed SEP for the EA-RDIP II
* Conducting strategic communication through MInT
* Serving as secretariat for the National EA-RDIP SOP II Steering Committee and National EA-RDIP SOP II Technical Working Group and actively participating in meetings

**2.3. Labor requirements and use in the PIU for the Implementation of EA-RDIP II**

The ESS2 defines program/project workers into four categories and the scope of application of the ESS2 varies accordingly.

1. ***Direct workers***: “people directly employed or engaged by the borrower (including the project proponent and the project implementing agencies) to work specifically in relation to the program/project

The PIU for EARDIP SOP II project, to be deployed at the federal coordination office are direct workers. These will be engaged in running the day-to-day activities of the EA-RDIP II project. At the federal office (in its head quarter), there are a total of 10 technical and support staffs and 5 drivers. The technical staffs include a project manager, two safeguard specialists (social and environmental) and M and E specialist. The support staff comprises of a financial management specialist, two procurement specialists, finance officer, contract management specialist and an office assistant. At the MoE or EthERNeT office level, EDFP has a total of 9 technical staff. These are a chief technical officer, senior network engineer, senior network operations engineer, senior security engineer, senior systems engineer (two), senior cloud engineer, senior system analyst and National Research and Education Network service portfolio manager. Thus, the number staffs from PIU and EthERNeT will be 24.

The other main implementing partner of the project is ECA, the following four staffs are required to be involved, i.e., director general/ deputy director general, universal access and service directorate/universal access and service division manager, competition and market analysis director, and chief corporate resource administrator. In additions to that, a total of four focal persons shall be assigned from MoTRI particularly from information communication technology directorate, trade relation and negotiation directorate general, legal affairs directorate, trade management information center and market and enterprise inspection regulatory directorate. Furthermore, the following ministries shall assign one focal person each MoH, MoWSA, MoLS, MoP, MoF, and working to meet the responsibilities identified under (table 2) of this report. In additions to the above identified institutions and as their roles are identified on table 2, the following partner organizations shall assign a focal person each which includes; NIDPO, FCSC, EPA, NLUA, DBE, EIC, EED, Ethio-Telecom, UNHCR and Safaricom-Ethiopia. In this regard, a total number of 16 staffs will be involved.

Another dimension of involvement is related to the regional level PIU which is going to be stationed in the four regional states where the backbone connectivity routes will pass by. The institutions will be regional innovation and technology bureau in the case of Somali regional state, science, innovation and technology in the case of Afar and innovation and technology commission in the case of Benishangul Gumuz and Gambella. The regional PIU will be consisting of one project coordinator, two safeguards specialists (1 environmental and 1 social), one M and E specialist, one network and system analysis engineer and one finance and administration officer; and 4 drivers. The total number of staffs at regional level will be 28.

At zonal level one facilitator and one environmental and social safeguards specialist will be deployed, and will be backed by 4 drivers. At the Woreda level, EA-RDIP SOP II has 4 Cluster Area Project Personnel (CAPP) in the implementation Woredas. As the number of link points or Cable Land Stations (CLS) increases the number of CAPP at woreda level. The number of staffs at zone and woreda level will be 16 (12 at zone and 4 at woreda levels). In general, 40 staffs at federal level, 28 staffs at regional level, 12 staffs at zone level and 4 staffs at woreda level will be involved. When we add it up all staffs it will give us a total number of 96 technical and support staffs. These direct employees of PIU are governed by a mutually agreed contractual agreement as defined in a standard human resource governance policy of the organization. Terms and conditions of these workers are guided by Federal Civil Servants proclamation no. 1064/2017 at federal level and by the Civil Service Proclamations of the Afar, Benishangul Gumuz, Gambella and Somali regional states.

The EA-RDIP II, being an umbrella platform, serves as a project coordination of multi-sector, multi-partner interventions in Ethiopia. The platform coordinates all relevant ICT and digital sector related initiatives in Ethiopia. Hence, the EA-RDIP SOP II implementation relies on existing Government institutions at different levels, encompassing all concerned regional institutions down to the Kebele level. In addition to the employees of PIU, civil servants, experts and decision makers will contribute directly or indirectly to the EA-RDIP SOP II implementation. They will have different degrees of contribution and various roles depending on the respective organizational mandates. They may serve as members of technical working groups, technical advisory teams, task force members, community facilitators, various committee members, on top of their regular jobs/commitments in their respective offices. These kinds of direct workers will be engaged on intermittent or basis as per the provisions in national and regional civil servant codes. The Federal Civil Servants proclamation no. 1064/2017 and the Civil Service Proclamations of the Afar, Benishangul Gumuz, Gambella and Somali regional states will govern the contract engagement.

1. ***Contracted workers***: people employed or engaged through third parties (i.e., contractors, subcontractors, brokers, agents or intermediaries) to perform work related to core functions of the program/project (i.e., production and/or service processes essential for a specific project activity without which the project cannot continue), regardless of location.

The EA-RDIP II may require contracted workers from third parties to implement activities of the program components. For example, in cases of sustainable forest management actions such as control of un-anticipated fire incident, it might be necessary to construct fire breaks, and such works may be outsourced to sub-contractors. In addition, local level community development works such as establishing or maintaining social infrastructure from USF, constructing access roads or village access roads as part of a social development plan from USF revenues or from own investments, and extensive digital service use stimuli raising campaigns, and resettlement activities. Some specialized activities including validation of reported EA-RDIP SOP II sub-components requires engaging specialized professional consultants to be provided from a third party. For example, independent environmental and social audit consultants may be deployed from third party to evaluate E & S Safeguards implementations. Hence, these and other similar activities of the project will require outsourcing and engaging a third party to get goods and services, which will bring contracted workers and experts to implement such activities. The Terms of Engagement of contracted workers will be based on mutually agreed terms of contract that is consistent with the provisions in the ESS2.

1. ***Primary supply workers***: people employed or engaged by the borrower’s primary suppliers (i.e., those suppliers who, on an ongoing basis, provide directly to the project goods or materials essential for the core functions of the project), and

The state-wide implementation of the EA-RDIP SOP II project involves multiple sectors and actors that are engaged in implementation of cross-border connectivity and trade, data and online market development and integration, damaged connectivity network rehabilitation and restoration, ICT sector development initiative, small-scale construction related development activities (maintenance of social service facilities), consultancy services on specialized social development issues (counseling, GBV victims rehabilitation Center, etc…) , supply of materials as part of the USF proceeds (e.g., access to IXP and mobile solutions), goods and other inputs such as camping equipment, protective gears will be procured from suppliers who will be selected through a standard competitive bid process. Workers coming from primary suppliers (e.g., porters, technicians, drivers, experts, facilitators, skilled labors, consultants and advisers, etc…) will be required to comply with the ESS2 and workers of the suppliers will be required to have a formal contractual engagement with the supplying entity and an indirect involvement in the EA-RDIP SOP II activities implementation. Primary supply workers in the project will be occasional and not required throughout the project.

1. **Assessment of key potential Labor risks**

**3.1. Risks Associated with Direct Workers**

Direct workers of the EA-RDIP II may face potential labor related risks such as in connection with the process of hiring and employment (terms in conditions of contracts), discriminations, health and safety risks, accidents, gender-based violence, child labor, worker’s organization and absence of grievance redress mechanisms.

1. **Risks of inadequacy in terms and conditions of employment:** risks of exclusions or omissions of basic rights of workers related benefits, work hours, wages, compensations, etc. in employment contracts in violation of national labor law provisions; engaging workers without a valid contract agreement in place; un-clarity in the language of the contract; lack of awareness and understanding on the terms and conditions (rights and obligations); lack of awareness on the relevant labor laws and procedures;
2. **Risks of discrimination and deprivation of equal opportunity**: workers may face this risk during hiring and recruitment of employees and while at work. There might be discrimination of workers based on their identity, physical ability or disability, political affiliation, HIV/AIDS, religion, and gender; discrimination can also happen in relation to provision of compensations, benefits and other opportunities such as access to training, job assignment, promotions; application of disciplinary measures and penalties; termination of employment or retirement, working conditions and terms of employment; discriminations may arise due to favoritism, nepotism and corruption;
3. **Risks of child labor and forced labor**: though it is legally prohibited to formally employ a worker of underage, there might be cases of engaging underage as direct worker. In the Ethiopian civil servant proclamation, any person less than 18 years of age is not legally allowed to be employed. Testimonials or credentials from legally authorized body should be provided as proof of proper age in cases of doubtful or contentious age claims;
4. **Risks of restrictions on worker’s organization**: employer may interfere and restrict workers from forming worker’s organization or joining other similar organization for collective rights negotiations, to express grievances, to enable collective voicing on conditions of work, benefits, and protection of rights.
5. **Gender-Based Violence, Risks of sexual harassment and assault**: women workers may face risks of sexual harassment and assault by employees, clients, work colleagues, visitors, during hiring and employment process, and/or while at work in office and/or outside of office during field works in project implementation areas;
6. **Risk of absence of a mechanism to express grievances and to protect rights of workers**: labor related grievance redress mechanism may not be in place at workplace and workers may not be aware of how and where to file complaints, violations of rights and prevention of harassments;
7. **Risks related to occupational health and safety**: workers may face risk of contracting and/or transmitting COVID-19 at workplace, and/or in places of potential exposure such as social gatherings, travel to and from work, public transportation, in offices, and field work sites; workers may also be exposed to the risk of HIV/AIDS infections due to contaminations at workplaces, during accidents, in medical facilities and/or due to law awareness on protection measures;
8. **Risks related to external security threats**: project workers travel throughout the program implementation areas in the region and there might be risks of violent attacks, ambushes and robberies from irregular armed groups in remote hideouts and rural areas. In addition, because of the current situation of political instability ethnic violence might be risk which leads to distance between people increased and a climate of suspicion and distrust developed,
9. **Risks of accidents**: workers may be exposed to accidents related to travel (car, motorbike, bus) and field work in remote forest landscapes during inventory, monitoring and during routine facilitation and coordination activities of program; in addition, misuse and improper maintenance of hand tools may expose to risks. For example, if impact tools such as chisels, wedges, or drift pins have mushroomed heads, the heads might shatter on impact, sending sharp fragments flying toward the user or other employees.

**3.2. Risks Associated with Contract Workers**

1. **Risks of discrimination and deprivation of equal opportunity**: workers may face this risk during hiring and recruitment of employees and while at work. There might be discrimination of workers based on their identity, physical ability or disability, political affiliation, HIV/AIDS, religion, and gender; discrimination can also happen in relation to provision of compensations, benefits and other opportunities such as access to training, job assignment, promotions; application of disciplinary measures and penalties; termination of employment or retirement, working conditions and terms of employment; discriminations may arise due to favoritism, nepotism and corruption;
2. **Risks of child labor** : though it is legally prohibited to formally employ a worker of underage, there might be cases of engaging underage as direct worker. In the Ethiopian civil servant proclamation, any person less than 18 years of age is not legally allowed to be employed. Testimonials or credentials from legally authorized body should be provided as proof of proper age in cases of doubtful or contentious age claims;
3. **Forced Labor**: Forced labor takes place in Ethiopia for example in regard to recruitment into the national army. There is hence a risk that forced labor will be deployed under the project.
4. **Risks of restrictions on worker’s organization**: employer may interfere and restrict workers from forming worker’s organization or joining other similar organization for collective rights negotiations, to express grievances, to enable collective voicing on conditions of work, benefits, protection of rights, etc.
5. **Risks related to occupational health and safety**: workers may face risk of contracting and/or transmitting communicable diseases at work place, and/or in places of potential exposure such as social gatherings, travel to and from work, public transportation, in offices, and field work sites; workers may also be exposed to the risk of HIV/AIDS infections due to contaminations at work places, during accidents, in medical facilities and/or due to law awareness on protection measures;
6. **Risks related to external security threats**: project workers travel throughout the program implementation areas in the region and there might be risks of violent attacks, ambushes and robberies from irregular armed groups in remote hideouts and rural areas. In addition, because of the current situation of political instability ethnic violence might be risk which leads to distance between people increased and a climate of suspicion and distrust developed,
7. **Risk of Gender-Based Violence, Sexual Exploitation and Abuse, and Sexual harassment**: contract workers from sub-contractors may be exposed to this risk. Due to the nature of the program, contract workers from third parties may be engaged in social service structures to be conducted or maintained in the EA-RDIP implementation areas (in the field), where there is a chance that workers and beneficiary communities interact in isolations, which might cause potential risks of Gender-Based Violence, Sexual Exploitation and Abuse, Sexual Harassment in the program implementing areas.
8. **Risk of non-compliance by the contracting entity**: in case of sub-contracting and outsourcing maintenance and construction works of social services in the EA-RDIP areas, sub-contractors will be required to be legitimate sources and reliable entities, present evidence of compliance to the ESS2, incorporate the requirements of the ESS2 into contractual agreements.
9. **Risk of absence of access to grievance mechanisms during engagement**: workers from sub-contractors may not have appropriate access to grievance mechanisms and may not be able file complaints. The sub-contractor will be required to provide grievance mechanisms for such workers and/or they will be provided access to existing grievance mechanisms.
10. **Risks related to Community Health and Safety:** Contracted workers from sub-contractors or third parties may live in program implementation areas during maintenance works or construction of small infrastructure as part of the social service provision activities from the USF revenues. This could be a possibility of contract workers to be exposed to and/or expose others to a risk of transmission of communicable diseases such as Sexually Transmitted Diseases (STDs), and HIV/AIDS in the project implementation areas.
11. **Risks to vulnerable and forest dependent communities**: there might be potential risks and impacts of GBV/SEA/SH in the program area due to interactions between contractor/subcontractor workers who will be engaged in maintenances of schools, clinics and roads, community workers and other project workers with nearby communities, especially vulnerable and forest dependent communities.

**3.3. Risks Associated with Primary Suppliers’ Workers**

1. **Risk of child labor and forced labor:** supply workers may face such risks. The Ethiopian Labor Law prohibits children under the age 18 years to be considered as able workers, cannot be engaged in contract agreements. The law also requires any work assigned to workers should be done voluntarily, without any form of threat of force or penalty. Primary supply workers will be required to comply with the requirements of the ESS2 and be consistent with the Ethiopian Labor Law and relevant proclamations. If child labor or forced labor cases are identified, the supplier will be required to take remedial measures.

Table 3: Summary of Key Labor Risks and Mitigation Measures

| **Impact and Risk Description** | **Mitigation Measures** |
| --- | --- |
| * + - **Construction Phase** | |
| **Electrical Safety** | * Only allowing trained and certified workers to install, maintain, or repair electrical equipment; * Deactivating and properly grounding live power distribution lines before work is performed on, or near, the lines; * Ensuring that live-wire work is conducted by trained workers with strict adherence to specific safety and insulation standards. Qualified or trained employees working on transmission or distribution systems should be able to achieve the following:   + Distinguish live parts from other parts of the electrical system   + Determine the voltage of live part   + Understand the minimum approach distances outlined for specific live line voltages.   + Ensure proper use of special safety equipment and procedures when working near, or on, exposed energized parts of an electrical system * Workers should not approach an exposed, energized or conductive part even if properly trained unless:   + The worker is properly insulated from the energized part with gloves or other approved insulation; or   + The energized part is properly insulated from the worker and any other conductive object; or   + The worker is properly isolated and insulated from any other conductive object (live-line work) * Where maintenance and operation is required within minimum setback distances, specific training, safety measures, personal safety devices, and other precautions should be defined in a health and safety plan;   Recommendations to prevent, minimize, and control injuries related to electric shock include:   * + All electrical installations should be performed by certified personnel and supervised by an accredited person. Certification for such work should include theoretical as well as practical education and experience;   + Strict procedures for de-energizing and checking of electrical equipment should be in place before any maintenance work is conducted. If de-energizing is not possible, electrical installations should be moved or insulated to minimize the hazardous effects;   + Prior to excavation works, all existing underground cable installations should be identified and marked. Drawings and plans should indicate such installations;   + All electrical installations or steel structures, such as masts or towers, should be grounded to provide safety as the electrical current chooses the grounded path for electrical discharge. In cases where maintenance work must be performed on energized equipment, a strict safety procedure should be in place and work should be performed under constant supervision; * Personnel training should be provided in revival techniques for victims of electric shock. |
| **Confined Spaces and Excavations** | * Controlling site-specific factors which may contribute to excavation slope instability including, for example, the use of excavation dewatering, side-walls support, and slope gradient adjustments that eliminate or minimize the risk of collapse, entrapment, or drowning * Providing safe means of access and egress from excavations, such as graded slopes, graded access route, or stairs and ladders * Avoiding the operation of combustion equipment for prolonged periods inside excavations areas where other workers are required to enter unless the area is actively ventilated |
| **Optical Fiber Safety** | * Worker training on specific hazards associated with laser lights, including the various classes of low and high-power laser lights, and fiber management; * Preparation and implementation of laser light safety and fiber management procedures which include:   + Switching off laser lights prior to work initiation, when feasible   + Use of laser safety glasses during live optical fiber systems installation   + Prohibition of intentionally looking into the laser of fiber end or pointing it at another person   + Restricting access to the work area, placing warning signs and labeling of areas with potential for exposure to laser radiation, and providing adequate background lighting to account for loss of visibility with the use of protective eyewear   + Inspecting the work area for the presence of flammable materials prior to the installation of high- powered laser lights * Implementation of a medical surveillance program with initial and periodic eye examinations; * Avoiding exposure to fibers through use of protective clothing and separation of work and eating areas. |
| **Elevated and Overhead Work** | * The area around which elevated work is taking place should be barricaded to prevent unauthorized access. Working under other personnel should be avoided; * Hoisting and lifting equipment should be rated and maintained and operators trained in their use. Elevating platforms should be maintained and operated according to established safety procedures that include such aspects as equipment and use of fall protection measures (e.g., railings), movement of location only when the lift is in a retracted position, repair by qualified individuals, and the use of effective locks to avoid unauthorized use by untrained individuals; * Ladders should be used according to pre-established safety procedures including proper placement, climbing, standing, and the use of extensions. |
| **Fall Protection** | Prevention and control measures for working at height include:   * Implementation of a fall protection program that includes training in climbing techniques and use of fall protection measures; inspection, maintenance, and replacement of fall protection equipment; and rescue of fall-arrested workers, among others; * Establishment of criteria for use of 100 percent fall protection (typically when working over 2 meters (m) above the working surface, but sometimes extended to 7m, depending on the activity). The fall protection system should be appropriate for the tower structure and necessary movements, including ascent, descent, and moving from point to point; * Installation of fixtures on tower components to facilitate the use of fall protection systems; * Provision of an adequate work-positioning device system for workers. Connectors on positioning systems should be compatible with the tower components to which they are attached; * Safety belts should be of not less than 16 millimeters (mm) (5/8 inch) two-in-one nylon or material of equivalent strength. Rope safety belts should be replaced before signs of aging or fraying of fibers become evident; * When operating power tools at height, workers should use a second (backup) safety strap. |
| **Sexual Exploitation and Harassment and Gender-Based Violence** | * contractors’ workforce on all sites including schools will be lean, trained and well supervised minimizing the SEA/SH risks for the project; * all supervision consultants and contractor’s workers will include full time social and gender experts and community liaison officers; * all workers will sign a code of conduct; * SEA/SH training for MInT staff, supervision consultants’ staff and the contractor’s workers will continue throughout project implementation; * SEA/SH mitigation measures will be incorporated into the Environmental and Social Management Plans (ESMPs); * stakeholders' consultations will properly inform communities and stakeholders of the project on SEA/SH risks; * the project grievance redress mechanism will provide multiple channels to initiate complaints, including specific procedures for SEA/SH related complaints including confidential reporting with safe and ethical documentation of SEA/SH; and * the project will maintain SEA/SH staff for PIU, Supervision Consultants and Contractors. |
| **II. Operations Phase** | |
| **Electromagnetic fields (EMF)** | * Identification of potential exposure levels in the workplace, including surveys of exposure levels in new projects and the use of personal monitors during working activities; * Training of workers in the identification of occupational EMF levels and hazards; * Establishment and identification of safety zones to differentiate between work areas with expected elevated EMF levels compared to those acceptable for public exposure, limiting access to properly trained workers; * Implementation of action plans to address potential or confirmed exposure levels that exceed reference occupational exposure levels developed by international organizations such as the International Commission on Non-Ionizing Radiation Protection (ICNIRP), and the Institute of Electrical and Electronics Engineers (IEEE). |
| **Motor vehicle safety** | Road safety initiatives proportional to the scope and nature of project activities should include:   * Adoption of best transport safety practices across all aspects of project operations with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public. Measures should include:   + Emphasizing safety aspects among drivers   + Improving driving skills and requiring licensing of drivers   + Adopting limits for trip duration and arranging driver rosters to avoid overtiredness.   + Avoiding dangerous routes and times of day to reduce the risk of accidents   + Use of speed control devices (governors) on trucks, and remote monitoring of driver actions * Regular maintenance of vehicles and use of manufacturer approved parts to minimize potentially serious accidents caused by equipment malfunction or premature failure. |
| Working at Heights | * Installation of guardrails with mid-rails and toe boards at the edge of any fall hazard area * Proper use of ladders and scaffolds by trained employees * Use of fall prevention devices, including safety belt and lanyard travel limiting devices to prevent access to fall hazard area, or fall protection devices such as full body harnesses used in conjunction with shock absorbing lanyards or self- retracting inertial fall arrest devices attached to fixed anchor point or horizontal life-lines * Appropriate training in use, serviceability, and integrity of the necessary PPE * Inclusion of rescue and/or recovery plans, and equipment to respond to workers after an arrested fall |
| Fire and Explosions | * Storing flammables away from ignition sources and oxidizing materials. Further, flammables storage area should be:   + Remote from entry and exit points into buildings   + Away from facility ventilation intakes or vents   + Have natural or passive floor and ceiling level ventilation and explosion venting   + Use spark-proof fixtures   + Be equipped with fire extinguishing devices and self-closing doors, and constructed of materials made to withstand flame impingement for a moderate period of time * Providing bonding and grounding of, and between, containers and additional mechanical floor level ventilation if materials are being, or could be, dispensed in the storage area * Where the flammable material is mainly comprised of dust, providing electrical grounding, spark detection, and, if needed, quenching systems * Defining and labeling fire hazards areas to warn of special rules (e.g., prohibition in use of smoking materials, cellular phones, or other potential spark generating equipment) * Providing specific worker training in handling of flammable materials, and in fire prevention or suppression |
| **General Facility Design and Operation** | **Integrity of Workplace Structures**  Permanent and recurrent places of work should be designed and equipped to protect OHS:   * Surfaces, structures and installations should be easy to clean and maintain, and not allow for accumulation of hazardous compounds. * Buildings should be structurally safe, provide appropriate protection against the climate, and have acceptable light and noise conditions. * Fire resistant, noise-absorbing materials should, to the extent feasible, be used for cladding on ceilings and walls. * Floors should be level, even, and non-skid. |
| **Workspace and Exit**   * The space provided for each worker, and in total, should be adequate for safe execution of all activities, including transport and interim storage of materials and products. * Passages to emergency exits should be unobstructed at all times. Exits should be clearly marked to be visible in total darkness. The number and capacity of emergency exits should be sufficient for safe and orderly evacuation of the greatest number of people present at any time, and there should be a minimum two exits from any work area. * Facilities also should be designed and built taking into account the needs of disabled persons. |
| **Fire Precautions**   * The workplace should be designed to prevent the start of fires through the implementation of fire codes applicable to industrial settings. Other essential measures include: * Equipping facilities with fire detectors, alarm systems, and fire-fighting equipment. The equipment should be maintained in good working order and be readily accessible. It should be adequate for the dimensions and use of the premises, equipment installed, physical and chemical properties of substances present, and the maximum number of people present. * Provision of manual firefighting equipment that is easily accessible and simple to use * Fire and emergency alarm systems that are both audible and visible. |
| **Lavatories and Showers**   * Adequate lavatory facilities (toilets and washing areas) should be provided for the number of people expected to work in the facility and allowances made for segregated facilities, or for indicating whether the toilet facility is “In Use” or “Vacant”. Toilet facilities should also be provided with adequate supplies of hot and cold running water, soap, and hand drying devices. * Where workers may be exposed to substances poisonous by ingestion and skin contamination may occur, facilities for showering and changing into and out of street and work clothes should be provided. |
| **Potable Water Supply**   * Adequate supplies of potable drinking water should be provided from a fountain with an upward jet or with a sanitary means of collecting the water for the purposes of drinking * Water supplied to areas of food preparation or for the purpose of personal hygiene (washing or bathing) should meet drinking water quality standards |
| **Lighting**   * Workplaces should, to the degree feasible, receive natural light and be supplemented with sufficient artificial illumination to promote workers’ safety and health, and enable safe equipment operation. Supplemental ‘task lighting’ may be required where specific visual acuity requirements should be met. * Emergency lighting of adequate intensity should be installed and automatically activated upon failure of the principal artificial light source to ensure safe shut-down, evacuation, etc. |
| **Safe Access**   * Passageways for pedestrians and vehicles within and outside buildings should be segregated and provide for easy, safe, and appropriate access * Equipment and installations requiring servicing, inspection, and/or cleaning should have unobstructed, unrestricted, and ready access * Hand, knee and foot railings should be installed on stairs, fixed ladders, platforms, permanent and interim floor openings, loading bays, ramps, etc. * Openings should be sealed by gates or removable chains * Covers should, if feasible, be installed to protect against falling items * Measures to prevent unauthorized access to dangerous areas should be in place. |
| **First Aid**   * The employer should ensure that qualified first-aid can be provided at all times. Appropriately equipped first-aid stations should be easily accessible throughout the place of work * Eye-wash stations and/or emergency showers should be provided close to all workstations where immediate flushing with water is the recommended first-aid response * Where the scale of work or the type of activity being carried out so requires, dedicated and appropriately equipped first- aid room(s) should be provided. First aid stations and rooms should be equipped with gloves, gowns, and masks for protection against direct contact with blood and other body fluids * Remote sites should have written emergency procedures in place for dealing with cases of trauma or serious illness up to the point at which patient care can be transferred to an appropriate medical facility. |
| **Air Supply**   * Sufficient fresh air should be supplied for indoor and confined work spaces. Factors to be considered in ventilation design include physical activity, substances in use, and process- related emissions. Air distribution systems should be designed so as not to expose workers to draughts * Mechanical ventilation systems should be maintained in good working order. Point-source exhaust systems required for maintaining a safe ambient environment should have local indicators of correct functioning. * Re-circulation of contaminated air is not acceptable. Air inlet filters should be kept clean and free of dust and microorganisms. Heating, ventilation and air conditioning (HVAC) and industrial evaporative cooling systems should be equipped, maintained and operated so as to prevent growth and spreading of disease agents (e.g. Legionnella pneumophilia) or breeding of vectors (e.g. mosquitoes and flies) of public health concern. |
|  | **Work Environment Temperature**   * The temperature in work, rest room and other welfare facilities should, during service hours, be maintained at a level appropriate for the purpose of the facility. * Monitoring weather forecasts for outdoor work to provide advance warning of extreme weather and scheduling work accordingly * Adjustment of work and rest periods according to temperature stress management procedures provided by ACGIH, depending on the temperature and workloads * Providing temporary shelters to protect against the elements during working activities or for use as rest areas * Use of protective clothing * Providing easy access to adequate hydration such as drinking water or electrolyte drinks, and avoiding consumption of alcoholic beverages. |
| **Physical Hazards** | **Noise**   * No employee should be exposed to a noise level greater than 85 dB(A) for a duration of more than 8 hours per day without hearing protection. In addition, no unprotected ear should be exposed to a peak sound pressure level (instantaneous) of more than 140 dB(C). * The use of hearing protection should be enforced actively when the equivalent sound level over 8 hours reaches 85 dB(A), the peak sound levels reach 140 dB(C), or the average maximum sound level reaches 110dB(A). Hearing protective devices provided should be capable of reducing sound levels at the ear to at least 85 dB(A). * Although hearing protection is preferred for any period of noise exposure in excess of 85 dB(A), an equivalent level of protection can be obtained, but less easily managed, by limiting the duration of noise exposure. For every 3 dB(A) increase in sound levels, the ‘allowed’ exposure period or duration should be reduced by 50 percent.65 * Prior to the issuance of hearing protective devices as the final control mechanism, use of acoustic insulating materials, isolation of the noise source, and other engineering controls should be investigated and implemented, where feasible * Periodic medical hearing checks should be performed on workers exposed to high noise levels |
|  | **Ergonomics, Repetitive Motion, Manual Handling**   * Facility and workstation design with 5th to 95th percentile operational and maintenance workers in mind * Use of mechanical assists to eliminate or reduce exertions required to lift materials, hold tools and work objects, and requiring multi-person lifts if weights exceed thresholds * Selecting and designing tools that reduce force requirements and holding times, and improve postures * Providing user adjustable work stations * Incorporating rest and stretch breaks into work processes, * and conducting job rotation * Implementing quality control and maintenance programs that reduce unnecessary forces and exertions * Taking into consideration additional special conditions such as left handed persons |
| **Chemical Hazards** | * Replacement of the hazardous substance with a less hazardous substitute * Implementation of engineering and administrative control measures to avoid or minimize the release of hazardous substances into the work environment keeping the level of exposure below internationally established or recognized limits * Keeping the number of employees exposed, or likely to become exposed, to a minimum * Communicating chemical hazards to workers through labeling and marking according to national and internationally recognized requirements and standards, including the International Chemical Safety Cards (ICSC), Materials Safety Data Sheets (MSDS), or equivalent. Any means of written communication should be in an easily understood language and be readily available to exposed workers and first-aid personnel * Training workers in the use of the available information (such as MSDSs), safe work practices, and appropriate use of PPE. |
| **Biological Hazards** | * If the nature of the activity permits, use of any harmful biological agents should be avoided and replaced with an agent that, under normal conditions of use, is not dangerous or less dangerous to workers. If use of harmful agents cannot be avoided, precautions should be taken to keep the risk of exposure as low as possible and maintained below internationally established and recognized exposure limits. * Work processes, engineering, and administrative controls should be designed, maintained, and operated to avoid or minimize release of biological agents into the working environment. The number of employees exposed or likely to become exposed should be kept at a minimum. * The employer should review and assess known and suspected presence of biological agents at the place of work and implement appropriate safety measures, monitoring, training, and training verification programs. * Measures to eliminate and control hazards from known and suspected biological agents at the place of work should be designed, implemented and maintained in close co-operation with the local health authorities and according to recognized international standards. |
| **Radiological Hazards** | * Places of work involving occupational and/or natural exposure to ionizing radiation should be established and operated in accordance with recognized international safety standards and guidelines.[[51]](#footnote-49) * Exposure to non-ionizing radiation (including static magnetic fields; sub-radio frequency magnetic fields; static electric fields; radio frequency and microwave radiation; light and near-infrared radiation; and ultraviolet radiation) should be controlled to internationally recommended limits[[52]](#footnote-50). * In the case of both ionizing and non-ionizing radiation, the preferred method for controlling exposure is shielding and limiting the radiation source. Personal protective equipment is supplemental only or for emergency use. Personal protective equipment for near-infrared, visible and ultraviolet range radiation can include appropriate sun block creams, with or without appropriate screening clothing. |
| **Personal Protective Equipment (PPE)** | * Active use of PPE if alternative technologies, work plans or procedures cannot eliminate, or sufficiently reduce, a hazard or exposure * Identification and provision of appropriate PPE that offers adequate protection to the worker, co-workers, and occasional visitors, without incurring unnecessary inconvenience to the individual * Proper maintenance of PPE, including cleaning when dirty and replacement when damaged or worn out. Proper use of PPE should be part of the recurrent training programs for employees * Selection of PPE should be based on the hazard and risk ranking described earlier in this section, and selected according to criteria on performance and testing established by recognized organizations[[53]](#footnote-51). |

1. **Overview of Labor legislation in Ethiopia: Policies and procedures**

The Ethiopian government has enacted laws and policies governing labor and associated rights in the past decades pursuant to the constitution; and in accordance/in conformity with the international conventions and other legal commitments to which Ethiopia is a party. The policies and laws emanated from the 1995 Federal Constitution, which contains full articles on fundamental rights and freedoms, including the right to equality without discrimination, the rights of women and children, the right to access to justice, and economic, social and cultural rights. Exclusively on labor, Article 42 describes “Rights of labor”, including the rights of workers to form associations, improve conditions of employment and economic well-being, limitation of working hours, remuneration for public holidays and a healthy and safe working environment.

The relevant laws, proclamations and directives applicable to the implementation of the labor management procedure to address labor related risks in the EA-RDIP SOP II project are:

* Labor Proclamation No. 1156/2019
* Federal Civil Servants Proclamation 1064/2017
* Proclamation No. 568/2008, Right to Employment of Persons with Disability
* Occupational Safety and Health Directive, 2008 (Federal Ministry of Labor and Social Affairs)
* National Comprehensive COVID-19 Management Handbook\_2020 (MoH)
* National Comprehensive Guideline for HIV/AIDS prevention\_2018

**Worker-Employer relations** are governed by basic principles of rights and obligations stipulated under the Labor Proclamation No. 1156/2019. “Worker” means a person who has an employment relationship with an employer in accordance with Article 4 the Proclamation; and an “employer” is defined as a person or an undertaking that employs one or more natural persons in accordance with Article 4 of the Proclamation.

The Proclamation specifies **“Work rules”** which govern working hours, rest period, payment of wages and methods of measuring work done, maintenance of safety and prevention of accidents, disciplinary measures and their enforcement as well as other conditions of work. “Condition of work” are also elaborated as the full account of labor relations between workers and employers including hours of work, wage, leave, payments due to dismissal, workers health and safety, compensation to victims of employment injury, dismissal because of redundancy, grievance procedure and any other similar matters.

Project workers of the PIU must have a binding contract agreement that encompasses the details of rights (hours of work, overtime payments, wages), benefits (compensation benefits, severance payments, allowances, etc…), obligations, responsibilities and accountabilities (violations of rules, causing damages property, etc…) of the employee and the employer. In compliance to the requirements in the ESS2, project workers need to be engaged with a legally binding contract agreement that clearly states the terms and conditions of employment as per the appropriate Civil Servant law and labor law. The conditions of the contract should clearly inform the employee about the rights and obligations in understandable language. The contract agreement should be signed at the beginning of the employment and whenever changes are made within the provisions and the terms of employment changes.

The following general provisions are stipulated in the labor proclamation:

**4.1. Terms of employment contract and conditions of work**

The project will depend on the various laws; such as, (i) Labor Proclamation No. 42/1993 (replaced by Labor Proclamation No. 377/2003), (ii) Labor Proclamation No. 377/2003, (iii) labor Proclamation No.1156/2019 (complements (do not replace, Labor Proclamation No. 377/2003), (iv) Proclamation No. 632/2009, Employment Exchange Service Proclamation, (v) Proclamation No. 568/2008, Right to Employment of Persons with Disability. Further, Ethiopia is a signatory to the international UN conventions and has ratified the major international human rights instruments. Ethiopia has also ratified the following ILO conventions:

* 1. Forced Labor Convention No. 29/1930;
  2. Freedom of Association and Protection of the Right to Organize Convention, No. 87/1948;
  3. Employment Service Convention, No. 88/1948;
  4. Right to Organize and Collective Bargaining Convention, No. 98/1949;
  5. Abolition of Forced Labor Convention, No.105/1957;
  6. Minimum Age Convention No. 138/1973;
  7. Occupational Safety and Health Convention, No. 156/1981;
  8. Termination of Employment Convention, No. 158/1982;
  9. The Rights of the Child Convention, 1989; and
  10. The Worst Forms of Child Labor Convention No. 182/1999.

Article 4 of the Proclamation No. 1156/2019 stipulates that a contract of employment shall be deemed formed where a natural person agrees directly or indirectly to perform work for and under the authority of an employer for a definite or indefinite period or piece of work in consideration for wage; a contract of employment shall be stipulated clearly and in such manner that the parties are left with no uncertainty as to their respective right and obligation under the terms thereof; a contract of employment shall specify the type of employment and place of work, the rate of wages, method of calculation thereof, manner and interval of payment and duration of the contract; a contract of employment shall not be concluded for the performance of unlawful or immoral acts; the contract of employment shall not laydown less favorable conditions forth employee than those provided for by law, collective agreement or work rules.

1. **Wages**

A worker is entitled to wages in return for the performance of the work that he performs under a contract of employment. Wage, as defined in the law, is a regular payment for the work performed under a contract. Payments such as over-time pay, allowances, per-diems, bonuses, commissions, service charges, are not considered as part of wages.

1. **Hours of working**

**Normal work hours:** each worker is required to work for the legally defined normal hours of work. “**Normal hours of work”** is the time during which a worker actually performs work or avails himself for work in accordance with law, collective agreement or work rules. According to the law, the Normal hours of **work shall not exceed 8 hours a day or 48 hours a week**. **Overtime work** is considered a work that is done in excess of the normal daily hours work as defined in the law. A worker is entitled to an overtime payment in accordance with the law. Workers are not obliged to work on public holidays. Public holidays are those days observed under the relevant national law, and are paid public holidays.

**Arrangement of Weekly Hours of Work**: Hours of work shall spread equally over the working days of a week, provided, however, where the nature of the work so requires, hours of work in any one of the working days may be shortened and the difference be distributed over the remaining days of the week without extending the daily limits of eight hours by more than two hours.

1. **Rest:**

A worker is entitled to a weekly rest period covering not less than twenty-four non-interrupted hours in the course of each period of seven days. The weekly rest period shall be calculated to include the period from 6 a.m. to the next 6 a.m. Where the nature of the work or the service performed by the employee is such that the weekly rest cannot fall on a Sunday another day maybe made a weekly rest day as a substitute.

1. **Leaves**

The labor proclamation grants different kinds of pertinent leaves to workers as part of the rights of a worker to rest. A worker is entitled to be granted with annual leave, special leave (family events, social events, etc…) and sick leave.-

***Annual leave***: A worker entitled to uninterrupted annual leave with pay of Sixteen (16) working days for the first year of service; and Sixteen (16) working days plus one working day for every additional two year service.

***Special leave***: A worker is entitled to leave with pay for three consecutive working days for special events (marriage, death of relatives, paternity)

***Sick leave***: as per the provisions in section three and article 86 of the labor proclamation, a worker who has completed the probation period (a maximum of 60 working days after the first day of employment), and who is rendered incapable of working due to sickness other than employment injury, is entitled to a sick leave. The sick leave period shall not be more than six months counted consecutively or separately in the course of twelve months. The first month with payment of 100 % salary, the next two months with payment of 50 % salary and the next three months without pay.

***Maternity leave***: a pregnant worker shall be granted 30 consecutive days with pay of prenatal leave and a period of 90 consecutive days of post-natal leave.

1. **Contract Termination**

The detailed descriptions of conditions for termination of a contract under the law are diverse. The general provision on Article 4 of the Labor proclamation state that a contract of employment shall terminate on the grounds of the completion of the work where the contract of employment is for a specified work; on the death of the worker; on the retirement of the worker in accordance with the relevant law; when the undertaking ceases operation permanently due to bankruptcy or for any other cause; when the worker is unable to work due to partial or total permanent in capacity.

1. **Sexual harassment and sexual violence**

The labor proclamation No. 1156/2019 on sexual harassment and sexual assault has several provisions. Under section three, article 14 and sub-article (h), sexual harassment or sexual assault by any worker or employer or employee manager is clearly listed as a legally prohibited act at workplace. Further in sub-section two, on termination of contract by worker, under article 32 and sub-article (b), a worker who has been a victim of sexual harassment or sexual violence by an employer or employee manager can terminate his/her contract without any prior notice.

1. **Affirmative action to the underserved**

The Federal Civil Servants Proclamation No. 1064/2017, under section five, article 50 about conditions of work applicable to minority nations, nationalities and peoples state that the sub-article (1) placement of personnel in government institutions shall take into account fair representation of nations, nationalities and peoples, and under sub-article (2) it state that nations, nationalities and peoples having lesser representation in government institutions shall be given the advantage of affirmative action in recruitment, promotion, transfer, redeployment, education and training

**4.2. Non-discrimination and equal opportunity**

The Federal Civil Servants Proclamation No. 1064/2017 promulgated a law that establishes a system of recruitment and selection of civil servants that guarantees diversity and that improves conditions of work. Sub-article (2) of Article 13 in the proclamation clearly state that there shall be no discrimination among job seekers or civil servants in filling vacancies because of their **ethnic origin, sex, political outlook, religion, HIV/AIDS, disability and or any other ground.** Article 8 of the proclamation states ‘**equal pay for equal work’** regardless of any other ground than the professional requirements.

**4.3. Worker Age**

The relevant labor law and civil servant law declare that any person below the age of 15 years of age is considered child labor. Young worker, with restricted types of work and defined hours of work can be engaged as formal labor.

According to the civil servant law, children below 18 years of age are not legally allowed to become civil servants. Under Article 14 of the Civil Servants Proclamation No. 1064/2017, all persons less than 18 years of age cannot be employed as a civil servant.

However, the Labor Law (Labor proclamation 1156/2019), Article 89 has a provision for “Yong Worker”. A young worker is a person who has attained an age of 15 years but less than 18 years. The law has put restrictions on the types of work and hours of work in a day for young workers. The law prohibits assigning any work that may endanger the lives and health of young workers. The prohibited types of work include a) Work in the transport of passengers and goods by road, railway, air and internal water ways, dock sides and warehouses involving heavy weight lifting, pulling or pushing or any other related type of labor; b) Work connected with electric power generation plants, transformers or transmission lines; c) Underground work such as mines and quarries; d) Work in sewers and tunnel excavation.

The normal hour of work for young workers is restricted to seven hours a day. A young worker is prohibited from night works between 10:00 pm and 6:00 am. Over time work is counted on normal rest days and holidays.

Given the nature of the workforce involved, the project will not recruit children for project related works and project monitoring will include this aspect.

The WB ESS2 states that the minimum age of employment is 14 years unless national law specifies a higher age. While the newly revised Ethiopian Labor Law has extended the minimum year of employment to 15 years. However, both WB and Ethiopian law prohibit the engagement of children less than 18 years of age in works that have hazardous nature. The other gap between the WB and Ethiopian law is the fact that the national law does not indicate that it prohibits an employer to retaliate against a worker or reporting a dangerous work situation or removing himself/herself from a dangerous work situation. ESS2 of the World Bank ESF provides that project workers will not be retaliated against or otherwise subject to reprisal or negative action for reporting a dangerous work situation or removing /they from a dangerous work situation. The EARDIP SOP II PIU will ensure that all project workers, including those engaged by contractors, will have the right to report and remove themselves from dangerous work situations without being subject to reprisal or negative action.[[54]](#footnote-52)This and other provisions of the LMP will be part of the awareness-raising and training sessions of the project.

**4.4. The Right to Form Associations**

Under Article 113 of the Labor law, workers have the right to form associations and Trade Unions. Workers can organize themselves into collective relations through trade unions and associations.

Hence, the terms of condition follow stringent international requirements where the gaps of the national law are filled by WB requirements and ILO convention. Hence, the terms of the condition include the name and legal domicile of the employer; the worker's name; the worker's job title; the date employment began; where the employment is not permanent, the anticipated duration of the contract; the place of work or, where the work is mobile, the main location; benefit packages; hours of work, rest breaks, leave entitlements and other related matters; rules relating to overtime and overtime compensation; the pension and other welfare arrangements applicable to the worker; the length of notice that the worker can expect to give and receive on termination of employment; the disciplinary procedures that apply to the worker, including details of representation available to the worker and any appeals mechanism; and details of grievance procedures, including the person to whom grievances should be addressed.

In such case of differences between the international conventions, national legislation, regulation, and the World Bank Environment and Social Standards, the more rigorous provision will be applied.

1. **Occupational safety and health and working environment**

Ethiopia has legal frameworks on OHS. The Constitution (1995) under Article 42/2 stated the Rights of Labor as "workers right for healthy and safe work environment" Proclamation No. 4/1995. There are also different legal frameworks on OHS which include: The National Occupational Health Policy and Strategy, Occupational Health and Safety Directive (2008), Occupational Health and Safety Policy and Procedures Manual, and On Work Occupational Health and Safety Control Manual for Inspectors (2017/18) which will apply to the EA-RDIP SOP II project. OHS promotion is also included as a priority in the National Health Policy Statement (1993). Ministry of Labor and Skill (MoLS) and its regional counterparts are responsible for OHS at Federal and Regional levels. MoLS has OHS & Working Environment Department responsible for OHS responsibilities. Each administrative region has an OHS department within the Labor and Skill development Bureau with the responsibilities of inspection service.

As stated in Article 52 of the Proclamation No, 1064/2017, the OSH is applicable to civil servants including temporary workers. The objective of the OSH is to maintain the safety and health of civil servants and to enhance their productivity; to arrange, improve and keep suitable work place for the safety and health of civil servants; to guarantee high level of performance of a government institution on social wellbeing; in subsequent articles from 53-59, definitions of **Accident and injury, list of the types of accidents, necessary safety measures, worker’s rights in cases of accidents that result in different levels of disability (partial, temporary, permanent, etc…),**  benefits and leaves, claims of compensation from third party, and other benefits to the employee are provided in details and in cases of accidents, this law is applicable.

The health and safety of workers while at work are protected with provisions from the **Labor proclamation No. 1156/2019**. It provides the measures to be taken to prevent occupational accidents and injuries. The Employer has the obligation to safeguards the safety and health of workers, particularly to:

1. Comply with the occupational health and safety requirements provided for in this Proclamation.
2. Take appropriate steps to ensure that workers are properly instructed and notified concerning the hazards of their respective occupations; and assign safety officer; and establish an occupational health and safety committee.
3. Provide workers with protective equipment, clothing and other materials and instruct them of their use.
4. Register employment accidents and occupational diseases and report same to the labour inspection service.
5. Arrange, according to the nature of the work, at his own expense for the medical examination of newly employed workers and for those workers engaged in hazardous work, as may be necessary with the exception **of HIV/AIDS** Unless and otherwise the country has obligation of international treaty to do so.
6. Ensure that the workplace and premises of the undertaking do not pose threats to the health and safety of workers.
7. Take appropriate precautions to ensure that all the processes of work in the undertaking shall not be a source or cause of physical, chemical, biological, ergonomic and psychological hazards to the health and safety of the workers.
8. Implement the instructions given by the Competent Authority in accordance with this Proclamation;

Workers (all types of workers in the EA-RDIP SOP II) are required to comply with the requirements of the law. Hence, any worker engaged in the program has the obligation to:

1. Co-operate in the formulation of work rules to safeguard the workers’ health and safety, and implement same;
2. Inform forthwith to the employer any defect related to the appliances used and incidents of injury to health and safety of workers that he is aware of in the undertaking;
3. Report to the employer any situation which he may have reason to believe could present a hazard and which he cannot prevent on his own, and any incident of injury to health which arises in the course of or in connection with work;
4. Make proper use of all safety devices and other appliances furnished for the protection of his health and safety or for the protection of the health and safety of others;
5. Observe all health and safety instructions issued by the employer or by the Competent Authority.

In Chapter 13 of the proclamation, workers are entitled to the forms of benefits in the case of employment injuries include obligations of the employer, medical service benefits, various kinds of cash benefits including dependent’s benefits.

It is prohibited that no worker shall:

1. Interfere with, remove, displace, damage, or destroy any safety devices or other appliances furnished for his protection or the protection of others; or
2. Obstruct any method or process adopted to minimize occupational hazards.

The Labor proclamation gives the power for Regional Bureaus to determine standards and measures for the safety and health of workers and follow up on their implementation. It is also indicated that regional bureaus must collect, compile and disseminate information on the safety and health of workers.

It is unlawful for an employer to (a) impede the worker in any manner in the exercise of his rights or take any measure against him because he exercises his right; (b) discriminate against female workers, in matters of remuneration, on the ground of their sex; (c) terminate a contract of employment contrary to the provisions of the Labor Proclamation No. 1156/2019; (d) coerce any worker by force or in any other manner to join or not to join or to cease to be a member of a trade union or to vote for or against any given candidate in elections for trade union offices; (e) require any worker to execute any work which is hazardous to his life; (f) discriminate between workers based on nationality, sex, religion, political outlook or any other conditions.

According to WB ESF guideline-ESS2 Paragraph 24, measures relating to occupational health and safety will be applied to the project. The OHS measures will include the requirements of this Section, and will take into account the General EHSGs and, as appropriate, the industry specific EHSGs and other GIIP. The OHS measures applying to the project will be set out in the legal agreement and the ESCP.[[55]](#footnote-53)

On ESS2 paragraph 25, it is indicated that the OHS measures will be designed and implemented to address: (a) identification of potential hazards to project workers, particularly those that may be life threatening; (b) provision of preventive and protective measures, including modification, substitution, or elimination of hazardous conditions or substances; (c) training of project workers and maintenance of training records; (d) documentation and reporting of occupational accidents, diseases and incidents; (e) emergency prevention and preparedness and response arrangements to emergency situations;[[56]](#footnote-54) and (f) remedies for adverse impacts such as occupational injuries, deaths, disability and disease.[[57]](#footnote-55)

On the other hand, the WB ESF guideline ESS4 paragraph 2, states “ESS4 addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable. Tothis end ESS4 intends to: i) to anticipate and avoid adverse impacts on the health and safety of project-affected communities during the project life cycle from both routine and nonroutine circumstances; ii) to promote quality and safety, and considerations relating to climate change in the design and construction of infrastructure, including dams; iii) to avoid or minimize community exposure to project-related traffic and road safety risks, diseases, and hazardous materials; iv) to have in place effective measures to address emergency events and v) to ensure that the safeguarding of personnel and property is carried out in a manner that avoids or minimizes risks to the project-affected communities.

Therefore, during project activities implementation, the following activities need to be performed: (i) identification of OHS risks at the program design stage; (ii) establishment of safe systems of work, permit to work for high risk activities ; (iii) application of the OHS mitigation hierarchy; (iv) continuous contractor’s supervision in the field on daily basis, as well as supervision from the PIU to monitor OHS performance on a regular basis; (v) specify reporting procedures in case of accidents and maintaining insurances for workers and third party liability; (vi) prepare traffic management and road safety and emergency preparedness and response plan; (vii) provision of PPEs and health, safety, and security arrangements; and (viii) training at regular intervals to workers to enhance their skills.

The PIUs will refer to applicable International Best Practices by World Bank Group and international conventions, and directives for addressing health and safety issues, such as:

* + ESF-Guidance Note for Borrowers- ESS2: Labor and Working Conditions- Environmental & Social Framework for IPF Operations, 2018
  + European Union Health and Safety Legislation website.
  + International Finance Corporation. 2007. General EHS Guidelines-Occupational Health and Safety.
  + International Labour Organization Safe Work: Guidelines on occupational safety and health management systems.
  + International Organization for Standardization. 2018. Occupational health and safety management systems −Requirements with guidance for use.
  + National Institute for Occupational Safety and Health: United States of America Occupational Health and Safety Administration law and regulations website.
  + World Bank Group Environmental, Health, and Safety Guidelines for Electric Power Transmission and Distribution, 2013
  + World Bank Group. Environment and Social Framework Safeguards interim note:
  + World Bank Group. Environmental, Health, and Safety Guidelines. General EHS Guidelines, April 30th, 2007.
  + World Bank Group. Good Practice Note – Assessing and Managing the Risks and Impacts of the Use of Security Personnel, 2018.
  + ILO Occupational Safety and Health Convention, 1981 (No. 155)
  + ILO Occupational Health Services Convention, 1985 (No. 161)
  + ILO Safety and Health in Construction Convention, 1988 (No. 167)
  + WHO International Health Regulations, 2005
  + WHO Emergency Response Framework, 2017

Table 4: Summary of Key OHS Measures

|  |  |  |
| --- | --- | --- |
| Table 3: Summary of Key OHS Measures **Risk** | **Description** | **Mitigation** |
| Occupational Health and Safety | The project activities during construction and operational phases, which include the construction of fiber optic lines, other amenities, installation of ICT equipment and operational phase activities may be associated with OHS risks including physical hazards, such as slip and falls from heights associated with working on ladders, elevated noise, possible electrocution of the workers/staff, and exposure to air pollution hazards, including elevated dust levels and exposure to C contagious diseases, as well as potential exposure to asbestos-containing materials, if there are any old structures to be removed along the corridor to be affected by EARDIP II civil works. | The measures listed are representative but not necessarily complete, and a final complete set of all OHS management measures (avoidance, mitigation, monitoring, training, capacity, etc.) needed for project supported infrastructure construction. These will be established in ESMPs as necessary. This should be based on the WBG’s EHS General Guidelines (EHSGs).  -The contractors shall provide the workers with the required PPE and always enforce use while at the worksite.  -The contractors should keep emergency and first  aid tool kit in the sites, which will be replenished  once used  -The equipment used in the works should be  routinely serviced to ensure proper and safe  functionality  -Carry out job risk assessment (analysis of hazards  likely to exist and precautions required) before  executing the assignment, and at different intervals  as may be practically possible to ensure safety  assurance  -Use of safety signage “MEN/WOMEN AT WORK”  or “Object Falling” to warn the project staff and  other workers on site  -Provision of adequate signage and communication  in local language of risks to workers and  community members  -Hazardous areas should be clearly marked with  signs easily understood by workers, visitors and the  general public, as appropriate  -Contractor workers should be trained in the use of  temporary fall prevention devices, such as rails, full  body harnesses and energy absorbing lanyard  -Electrical works should be performed by trained  and qualified experts  -Ensure that electrical equipment is properly  connected before switching on sockets  -Use only the standard electrical connectors when  joining extension leads or cables  -In case of any spillage at work areas, the  contractor should clean the spillage immediately,  anti-slip hazard warning signs should be used when  mopping floors to reduce chances of slip falls  -Installation of different type of fire extinguishers  -Training of staff and the relevant team members  on the use of the fire extinguishers  There will be an elaborate health and safety  requirement which will address the OHS risks in  every subproject, including hazard analysis, health  and safety plans among others |
| Disaster Risks | The projects direct impact on natural disaster risks can be: landslides, flooding, erosion, etc. Indirect impacts on the Environment  Increase in deforestation (e.g. logging, land clearing, slash and burn, etc) ;  Increase and facilitation in forest resource exploitation (industrial and local); Increase in poaching and harvesting of non-timber forest products; | -Identifying disaster risks which require risk-specific intervention and cross-cutting institutional interventions and taking action accordingly.  -Contractor should sensitize workers on disaster prevention and put strict measures to minimize the impacts of natural disaster  -Application of computational methods and models to integrate disaster risk (landslide, flood, earthquake, erosion, drought, etc) calculations into infrastructure design [IT].  -Creating a system of centrally managed and institution-wide open disaster information can serve as a real-time decision-support system for utility companies, allowing them to make quick and informed disaster mitigation and management actions in a fast-changing environment like providing great information visibility to decision makers by centrally managing all disaster information (damage, restoration, and response status) collected by various departments within the utility institutions, and by summarizing important information in the institution-wide Activities Log.  -Establish early warning systems for floods, landslides and earthquakes.  -Enhance hazard mapping and analysis for floods, landslide and earthquakes.  -Working in collaboration with police and fire departments to get report about traffic restrictions and status of fires. |
| Emergence Preparedness and Response | If the project implementation process is not supported by appropriate emergence preparedness and response mechanisms, the impacts can be devastating. | -Coordinating disaster information across different agencies and levels of governance, particularly for public utilities which are critically interconnected with other government agencies.  -Improving observation and collection of hazard information.  -Preparation and dissemination of hazard maps.  -Preparation of safety and evacuation information collection systems.  -Development of early warning systems.  -Emergency drills (Standard Operation Procedures-SOPs and Emergency Operation Centers-EOCs) & awareness raising.  -Preparation of emergency kits and Radio/backup communication tools [CT].  -Food and material stockpiling and emergency supply database.  -Business continuity planning- ICT BCP; relocation of crucial communication hardware, redundancy of key ICT systems, digitalization/cloud storage/backup of key DRM info, etc. [IT & CT].  -Improving and monitoring traffic control system  -Gathering information about blackouts, traffic restrictions, river levels, amount of precipitation, and information relating to medical service availability.  -Search and rescue-establishing disaster message phone line.  -First aid treatment- Incident report (real time data management system; medical supply monitoring/request software [IT & CT].  -Establishment of Emergency Operation Centers: Disaster management information system for real-time data gathering and visualization for decision-making; communication channels incident report database [IT & CT].  -Establishment and operation of evacuation center: Disaster management information system to update and communicate evacuees, supply, services, etc [IT & CT].  -Identification and distribution of relief supplies: Communication, disaster management information system to connect evolving demand (needs at evacuation center) and supply (needs) [IT & CT].  -Assessment, analysis, and communication of damage/situation reports and response plans, monitoring and warning of secondary disasters: Disaster management information system integrating updated (real-time) information from image monitoring tools (drones, helisat, satellite image assessments). [IT Communication software (social media, media, and hardware (mobile phones, radio, etc.) [CT].  -Utility and infrastructure recovery: Disaster management information system [IT].  -Introduce traffic measures to prevent further damage to infrastructure materials and prevent heavy goods vehicles from travelling on recently refurbished roads or on flooded roads as this deform the surface.  -Introducing transitional traffic measures and mechanisms to clear rubble and debris from any priority routes, and to temporarily patch to damaged infrastructures to prevent further damage. |
| Personal Protective Equipment (PPE) | Absence of appropriate and essential PPE can lead, physical or psychological harm. | -Active use of PPE if alternative technologies, work plans or procedures cannot eliminate, or sufficiently reduce, a hazard or exposure  -Identification and provision of appropriate PPE that offers adequate protection to the worker, co-workers, and occasional visitors, without incurring unnecessary inconvenience to the individual  -Proper maintenance of PPE, including cleaning when dirty and replacement when damaged or worn out. Proper use of PPE should be part of the recurrent training programs for employees  -Selection of PPE should be based on the hazard and risk ranking described earlier in this section, and selected according to criteria on performance and testing established by recognized organizations . |

It is also vital to develop procedures for development of OHS risk assessment and safe work system.

* + 1. The employer, in consultation with workers and their representatives, should set out in writing an OHS risk assessment and safe work system procedure, which should be:

✓ specific to the organization and appropriate to its size and the nature of its activities;

✓ concise, clearly written, dated and made effective by the signature or endorsement of the employer or the most senior accountable person in the organization;

✓ communicated and readily accessible to all persons at their place of work;

✓ reviewed for continuing suitability; and

✓ made available to relevant external interested parties, as appropriate.

* + 1. The OHS procedure should include, as a minimum, the following key principles and objectives to which the organization is committed:

✓ protecting the safety and health of all members of the organization by preventing work related injuries, ill health, diseases, and incidents;

✓ complying with relevant national laws and regulations, voluntary programmes, collective agreements on OHS and other requirements to which the organization subscribes;

✓ ensuring that workers and their representatives are consulted and encouraged to participate actively in all elements of the OHS management system;

✓ continually improving the performance of the OHS management system; and

✓ The OHS management system should be compatible with or integrated in other management systems in the organization.

1. **AGE OF EMPLOYMENT**

This section sets out details regarding:

* The minimum age for employment on the project
* The process that will be followed to verify the age of project workers
* The procedure that will be followed if underage workers are found working on the project
* The procedure for conducting risk assessments for workers aged between the minimum age and 18

See ESS2, paragraphs 17 to 19 and related GNs.

1. **TERMS AND CONDITIONS**

Terms and conditions of direct workers are determined by their individual contracts and public service rules (for government staff). Most of the government staff who will be deployed to the project will be seconded from their parent ministries. Kenya Public Service is guided by terms and conditions stipulated in the Public Service (Values and Principles) labor proclamation.

Consultants will apply the terms and conditions stipulated in their contract of engagement.

The contractors’ labor management procedure will set out terms and conditions for the contracted and subcontracted workers. These terms and conditions will be in line, at a minimum, with this labor management procedure and General Conditions of the World Bank Standard Procurement documents.

1. **HIV/AIDS Prevention**

The Ministry of Health published a “National comprehensive guideline for HIV/AIDS prevention, care and treatment” in August 2018 to prevent the spread of HIV/AIDS and control the impacts. The guideline provides categories of vulnerable people, types of work places where Testing Services are needed and guiding principles are described. The guiding principles state that all forms of HIV testing and counseling should be voluntary and adhere to the five C’s: consent, confidentiality, counseling, correct test results and connections to prevention, care and treatment services. Community-based HIV/AIDS testing and counseling mechanism addresses clients who don’t appear at health facilities for HIV testing and counseling for different reasons. This model builds public trust and also mitigates issues related to stigma and discrimination. Providing HIV testing and counseling (HTC) in the community relieves clients from transportation and other expenses. Community-based model of HIV testing and counseling is recommended for targeted outreach testing to reach different types of workers including mobile workers, daily laborers, sex workers, long distance truck drivers and refugees.

1. **Grievance Redress Mechanism (GRM)**

**9.1. Grievance Handling Procedure and Principles**

The GRM is essential in addressing and managing employee and employer related to conflicts and/or complaints and gender-based violence (GBV). A worker or any person who has any complaint or grievance has the right to present it and get proper response. The EA-RDIP project coordination unit or the PIU will establish accessible and functional Grievance Mechanism for all employees of the program as described in the above sections.

In the Article 141 of the Labor Proclamation No. 1156/ 2019, it is clearly stated that employers and workers or their respective associations may use social dialogue in order to prevent and resolve labor disputes amicably.

In the Article 74 of the Federal Civil Servants Proclamation 1064/2017, labor grievance is described as any complaint of a civil servant that could not be resolved through discussion conducted with the civil servant’s immediate supervisor or concerned officer and should be addressed through a formal review procedure. The objectives of the civil servant’s grievance handling procedure are to:

* provide expeditious remedy to grievances
* rectify weaknesses and mistakes that are causes for grievances
* provide equitable and fair treatment to all civil servants and thereby promote smooth work relationships

The following principles of GRM will apply during the implementation of the LMP

* The program workers GRM is not same as the grievance mechanism to be established for project affected stakeholders.
* Both direct and contracted workers will be informed on the grievance mechanism at the time of recruitment and the measures put in place to protect them against any reprisal for its use.
* The grievance mechanism will be easily accessible via the disclosure of a hotline and/or office hours and transparently disclosed to all employees to raise workplace concerns.
* The grievance mechanism shall be transparent in using clear procedures.
* The aggrieved parties shall be informed within 10 days of their grievance application, either with a respective solution or with a request of extension in cases where more information is needed.
* The aggrieved party shall have the option to refer to a grievance log with key information that will be established by the regional bureau of agriculture.
* Grievance logbook will be maintained in the project office.
* The Project workers grievance mechanism will not prevent workers to use judicial procedure, if preferred.
* The quarterly environment and social implementation should include reports on grievances related to labor. If not satisfied with the outcome of the regional level, the aggrieved party shall be able to access a second level committee at the region and federal level.

**9.2. Establishment of a Grievance Handling Committee**

The EA-RDIP SOP II project formed usually forms an *ad hoc* committee to handle workers’ grievances that arose during program implementation. However, there have not been any serious cases and grievances arising from lower structure of the management has been handled and solved by the local cultural grievance redress mechanisms. From the EDFP implementation, as per the PIU report, Grievance Redress Committee were established across the EDFP implementation Woredas in the Ethiopia to resolve any actual and potential disputes and conflicts that may arise in the process of implementing EDFP. Thus, whenever possible the EA-RDIP will use these established GRM committees. Grievance registration and resolve have started in most of the implementation clusters. The GRC will continue throughout the EA-RDIP period. The experience shows that grievances are smoothly handled by the local committee and no escalations of cases were needed. The cultural set up has proved to function well. The experience showed that GBV cases were not filed so far to the GRC of the EDFP project. However, GBV related complaints are filed through the same structure (shown in figure 1 below) and at the Woreda level, the case will be referred to the Woreda women, youth and children office for appropriate analysis of the case and recommendation of resolution.

**9.3. GRM for Direct Workers**

The PIU is the highest responsible body for the proper implementation and management procedure through its organizational structure and the appropriate government institutions at the different level of administration. The PIU management team will address all direct worker related complaints using its internal instruments such as the HR policy manual, the organizational Code of Conduct, the labor grievance committee, and through the appropriate legal institution.

As per the labor proclamation 1064/2019 provisions, any government institution shall establish a grievance handling committee that conducts grievance inquiry and submits recommendations to the head of the government institution at the various hierarchy levels. Duties of grievance handling committee are described as follows.

A grievance handling committee shall have the duty to investigate complaints lodged by civil servants and submit recommendations relating to:

* Interpretation and implementation of laws and directives
* Protection of rights and benefits
* Occupational safety and health
* Placement and promotion
* Performance appraisal
* Undue influence exerted by supervisors
* Disciplinary measures taken pursuant to sub article (1) a and b of article 69.

**9.3.1. Administrative Decision**

This is a decision given in writing by the head of a government institution in cases of matters referred to as labor grievance on the recommendation of disciplinary or grievance committee on other matters directly falling into his/her authority in accordance with the law.

**9.3.2. Civil Servants Administrative Tribunal**

Civil Servants related grievance cases that are not resolved through the grievance mechanism and also cases that workers opt for appeal on administrative decisions are referred to civil servants administrative tribunal at the different level of administrative hierarchy. The tribunal is a formal court presided by judges.

**9.4. GRM Procedure**

The procedure shall include the following steps:

**Step One**

All civil grievances shall be submitted in writing to the Secretary within 24 hours, site specific workers GRC that sits weekly to handle grievances and provides feedback in 7 days. This committee shall consist of the site Engineer, Workers Representative, EARDIP SOP II-PIU- Sociologist (representative), Contractor EHS/Sociologist and the local government official. If the complainant is satisfied with the outcome of the mediation, the entity will fill in the grievance resolution form and the complaint will be closed. If the entity does not agree with the outcome of this committee meeting, the matter shall be referred to the project implementation team GRC. At all times, the GRCs shall be gender responsive with deliberate efforts to have women represented to cater for specific needs and grievances of women. In scenarios where the grievance or complaint is on one of the main committee members, these shall step aside to allow fair investigation and replacements made. For avoidance of doubt, suggestion boxes shall be utilized for scenarios where the complainant(s) prefer to stay anonymous.

**Step Two**

Project Implementation Unit (PIU) GRC that sits every week and will provide feedback in 14 days. This committee shall consist of the EARDIP II Project Manager, Contractor Project Manager, MInT Grievance Officer (representative), Contractor Engineer, Workers Representative, ICTA Social Safeguards Specialist and EHS and Contractor EHS. If the complainant is satisfied with the outcome of the mediation, the entity will fill in the grievance resolution form and the complaint will be closed. If the entity does not agree with the outcome of this committee meeting, the matter shall be referred to court for adjudication.

**Step Three**

MInT GRC. This will include a Grievance Officer, EARDIP SOP II Legal officer and the Executive Committee members of MInT with capacity to handle any civil issue including those that are intricate and complex. This GRC will meet once a month and respond to any issue within 21 days. If the complainant is satisfied with the outcome of the mediation, the entity will fill in the grievance resolution form and the complaint will be closed. If the entity does not agree with outcome of this committee, the matter shall be referred to court for adjudication.

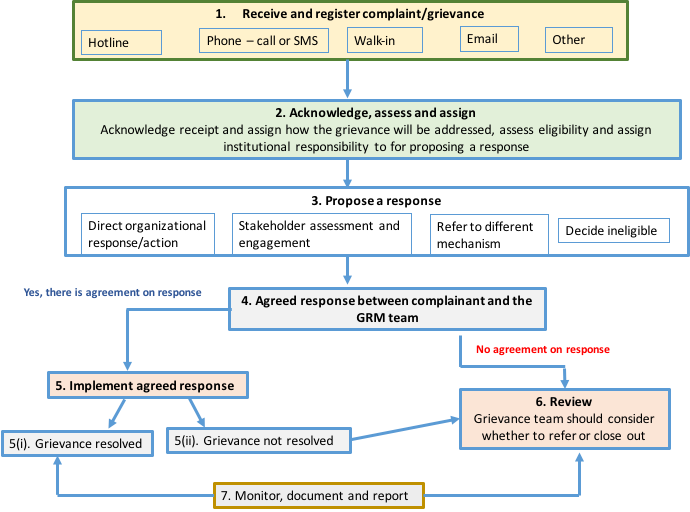


Figure 1: Workers Grievance Resolution Channel

**9.5. Labor Dispute Settlement**

Labor disputes, arising from any worker (especially community workers) that is reviewed through various levels of the EA-RDIP II structure, but unresolved through the grievance mechanism can be forwarded to the labor settlement courts. The Labor proclamation No. 1156/2019 has provisions on labor dispute settlement between a worker and an employer. “Labor dispute” as defined in the proclamation is, any dispute between a worker and an employer or trade union and employers’ association in respect of the application of law, collective agreement, work rules, employment contract and also any disagreement arising during collective bargaining or in connection with collective agreement.

The proclamation laid out the procedures to settlement labor disputes through a legally established labor court at the regional and federal levels. However, it has provisions for alternative labor dispute settlement mechanisms before taking the issue to a labor court. These mechanisms, as described from Articles 141-144, include social dialogue through a conciliator, defining the process of assigning a conciliator, responsibilities and arbitration of settling the issue in accordance with the law.

**9.6. World Bank Grievance Redress System**

Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB‟s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB’s independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank’s attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank’s corporate Grievance Redress Service (GRS), please visit, https://www.worldbank.org/en/projectsoperations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit, [www.inspectionpanel.org](http://www.inspectionpanel.org)

1. **Roles and Responsibilities to Oversee Implementation of the LMP**

The Environmental Health and Safety (EHS) and Social Safeguards Specialists are responsible for the overall implementation of this LMP. The specialists will work with various stakeholders including Ministry of Labour and Social Services, EPA and directorate for Safety and Health Services (DOSHS) to implement the LMP in compliance with national laws. Specific roles and responsibilities of the EHS and social specialists are defined as follows.

**MInT-Director:** Overall responsibility of project delivery and showcases commitment to set compliance aspects of the project as a responsible developer.

**MInT-Project Coordinator (PIU):** These are the main contract focal points throughout the project life cycle and provide final guidance in project execution.

**The Social Specialist:** SSS will provide support to the project on compliance including but not limited to monitoring of workers’ welfare, adherence to project related compliance aspects and advising on implementation of agreed or best practices in the operation. SSS will:

• Oversee the development of the project protocols;

• Oversee the implementation of the SEP and LMP;

• Assess the risk of serious safety issues;

• Link with EPA and DOSHS on all labor related issues; and

• Monitor, document, and report on all OHS matters, and provide training on codes of conduct and other relevant OHS matters.

Cases that may require the involvement of the Federal institutions including the MInT and Civil Servant Tribunal will involve in resolving complex and those which require legal institution intervention. The roles and responsibilities are described along with the structure in the below organogram.

PIU Management Team

PIU Safeguard team

National EA-RDIP SOP II Steering Committee

Appropriate Federal

Civil Service Tribunal

Zonal EA-RDIP SOP II SG Coordinators

EA-RDIP Woreda

Coordinator

EA-RDIP SOP II facilitator

Appropriate Regional

Civil Service Tribunal

Kebele Admin

Appropriate Zonal

Civil Service Tribunal

Appropriate Woreda

Civil Service Tribunal

Community level Labor related complaints

Figure 2 Grievance Redress mechanism in the LMP implementation and management structure

There has not been any labor related grievances escalated from the lower level to the second this highest level. The EDFP experience shows that labor related grievances are mostly addressed through dialogue and cultural resolution methods e.g., Shimgilina)

1. **Contractor Management**

This section sets out details regarding:

* The selection process for contractors, as discussed in ESS2, paragraph 31 and GN 31.1.
* The contractual provisions that will put in place relating to contractors for the management of labor issues, including occupational health and safety, as discussed in ESS2, paragraph 32 and GN 32.1
* The procedure for managing and monitoring the performance of contractors, as discussed in ESS2, paragraph 32 and GN 32.1

1. **Primary Supply Workers**

Where a significant risk of child or forced labor or serious safety issues in relation to primary suppliers has been identified, this section sets out the procedure for monitoring and reporting on primary supply workers.

1. **Contract Site Supervisor**

Responsible for daily monitoring of activities to ensure compliance to set legislation and ensure close out of action points as provided in various scenarios. They hold the mantle to sound project implementation. Additionally, the contractor shall:

1. Implement the labour management procedures and OHS requirements in line with the ESMF.
2. Supervise sub-contractors’ implementation of labor management procedures and OHS requirements.
3. Provide routine occupational health and safety training to all workers involved in works and maintains records of such trainings.
4. Maintain records of recruitment and employment of contracted workers as provided in their contracts.
5. Ensure that workers understand and sign the code of conduct, prior to commencement of works.
6. Provide workers with the necessary PPE and enforce PPE usage.
7. Ensure availability of first-aid kits, readily accessible by workers in case of injury.
8. Ensure availability of food and adequate potable drinking water for all project teams
9. Documentation and reporting of occupational accidents/incidents, maintain accident/incident logs. Major accidents/incidents such as fatalities etc., shall be reported to MInT and World Bank Group immediately and investigative action undertaken to determine root causes. Minor incidents shall be recorded in the monthly monitoring reports including corrective actions undertaken to prevent recurrence. As part of OHS requirements, develop and implement emergency preparedness and response measures to effectively respond to emergency situations.
10. **Contractor EHS Personnel**

Responsible for project compliance in line with workers’ rights and obligations and advising management on proper systems of work. These carry out daily and routine monitoring of activities to ensure compliance with specified safety measures and records of any incidents.

1. **Estimated Budget for the Implementation of the LMP**

Table 4: Estimated budget for implementing the LMP

|  |  |  |  |
| --- | --- | --- | --- |
| Labor Management Activities | Qty/per year | Unit Cost, USD | Total cost (USD) |
| Development of the protocols [OHS at the workplace, Code of conduct (COC), etc.] | 2 | 6,000 | 12,000 |
| Site-specific OHS risk assessment (included in contractors’ budget) | - | - | - |
| Site-specific PPE Supervision expert (included in contractors’ budget) | - | - | - |
| Purchasing PPE Equipment and site signage (included in contractors’ budget) | - | - | - |
| Travel expenses of staff on LMP activities (supervision missions by the safeguards specialists and PIU team members) | 4 | 5,000 | 20,000 |
| Cost of installation of guard rails with mid-rails and toe boards at the edge of any fall hazard area (included in contractors’ budget) | - | - | - |
| Training (contract management, COC, Grievance management, GBV, etc.) for PIU and contractors | 4 | 20,000 | 80,000 |
| Cost of managing the workers GRM | 12 | 5,000 | 60,000 |
| Monitoring and evaluation | 12 | 5,000 | 60,000 |
| Sub-total |  |  | **232,000** |
| Contingency (10%) |  |  | 23,200 |
| Total |  |  | **255,200** |

**Annex I: Roles and Responsibilities in Handling Labor grievances**

Table 5: Roles and responsibilities of the organizational structure of the PIU implementation in handling labor grievances

|  |  |
| --- | --- |
| EA-RDIP SOP II Management Structure Layer | Roles and Responsibility |
| Project Implementation Unit (PIU) | * Receive and compile unresolved complaints of legal nature * Resolve complaints through the relevant legal means * Compile and escalate unresolved complaints of legal nature to the MInT, appropriate regional and federal legal institution * Communicate outcome of resolved complaints in written form to the Regional and Zonal EA-RDIP SOP II SG coordinator |
| Regional and Zonal EA-RDIP SOP II Safeguard Coordinator | * Receive and compile unresolved complaints of legal nature at the Regional and Zonal level * Resolve complaints through the relevant legal procedures and guideline * Escalate unresolved complaints of legal nature to the regional Coordinator * Communicate outcome of resolved complaints in written form to the Kebele EA-RDIP II coordinator |
| Woreda EA-RDIP SOP II-CAPP | * Receive and resolve minor labor related complaints within the realm of authority * Compile and escalate unresolved labor related complaints to Woreda Administration Labor Office * Escalate unresolved labor complaints to Zonal EA-RDIP SOP II coordinator * Communicate outcome of resolved complaints in written form to the Kebele EA-RDIP SOP II coordinator |
| Kebele EA-RDIP SOP II facilitator | * Receive any labor complaints in oral and/or written form * Report the same labor related complaints to the Kebele Labor Grievance Committee |

**Annex II-Summary of Workers for EA-RDIP II Project Implementation**

Table 6: Positions and number of workers in the PIU and partner institutions involved on EA-RDIP SOP II implementation structure

|  |  |  |
| --- | --- | --- |
| Administrative level | Positions | Total number of staff |
| Federal Level | project manager-PIU | 1 |
| environmental safeguard specialist-PIU | 1 |
| Social safeguard specialist-PIU | 1 |
| GBV Specialist-PIU | 1 |
| M and E specialist-PIU | 1 |
| financial management specialist-PIU | 1 |
| procurement specialists-PIU | 2 |
| contract management specialist-PIU | 1 |
| office assistant-PIU | 1 |
| finance officer-PIU | 1 |
| Drivers | 5 |
| **Sub-total** | **16** |
| chief technical officer-EthERNeT | 1 |
| senior network engineer- EthERNeT | 1 |
| senior network operations engineer- EthERNeT | 1 |
| senior systems engineer- EthERNeT | 2 |
| senior cloud engineer- EthERNeT | 1 |
| senior system analyst | 1 |
| National Research and Education Network service portfolio manager- EthERNeT | 1 |
| Senior security engineer- EthERNeT | 1 |
| **Sub-total** | **9** |
| director general/ deputy director general-ECA | 1 |
| universal access and service directorate/universal access and service division manager-ECA | 1 |
| competition and market analysis director-ECA | 1 |
| chief corporate resource administrator-ECA | 1 |
| **Sub-total** | **4** |
| focal person-trade relation and negotiation directorate general-MoTRI | 1 |
| Focal person-Information communication technology directorate-MoTRI | 1 |
| Focal person-legal affairs directorate-MoTRI | 1 |
| Focal person-trade management information center-MoTRI | 1 |
| Focal person-market and enterprise inspection regulatory directorate-MoTRI | 1 |
| 1 Focal person from ministries-MoF, MoH, MoWSA, MoLS each | 5x1=5 |
| 1 focal person from NIDPO, FCSC, EPA, NLUA, DBE, EIC, EED, Ethio-Telecom, UNHCR and Safaricom-Ethiopia each | 10x1=10 |
| **Sub-total** | **20** |
| Region-Afar, Benishangul Gumuz, Gambella and Somali | Program Coordinator one each | 1x4=4 |
| Social Safeguards Specialist | 1x4=4 |
| Environmental Safeguards Specialist | 1x4=4 |
| network and system analysis engineer | 1x4=4 |
| M&E Specialist | 1x4=4 |
| finance and administration officer | 1x4=4 |
| Office Assistant | 1x4=4 |
|  | Drivers | 1x4=4 |
| Zonal | Lead facilitators | 1x4=4 |
| EA-RDIP II Safeguards Coordinators | 1x4=4 |
| Drivers | 1x4=4 |
| Woreda | CAPP-Woreda coordinators | 1x4=4 |
| Sub-total | | **48** |
| Community level | Temporary worker | NA |
| Grand total | | **97** |

**Annex III. Occupational Health and Safety (OHS) Assessment Checklist**

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# **ANNEX-M: UNDERSERVED LOCAL COMMUNITY PLANNING FRAMEWORK**

EXECUTIVE SUMMARY

Ethiopia is the second most populous country in the African continent and has a land area of 1,104,300 square kilometres. Within this vast country’s population of over 115 million people there are communities who may be considered as Historically Underserved Communities (HUCs) under the WB’s Environmental and Social Standards (ESS), particularly ESS7. In the context of Ethiopia these populations are largely pastoralists, with a few descendants of hunter-gatherers and groups who now focus on agriculture.

WB ESS7 requires that, in cases where Historically Underserved Communities (HUCs[[58]](#footnote-56)) are found within project sites, a Underserved Local Community Planning Framework (USLCPF) along with Social Development Plan (SDP) must be developed, with the purpose of promoting participation of those groups in the project, mitigating risks from the project, and ensuring equal and relevant benefits from the project alongside other participants. This Underserved Local Community Planning Framework (USLCPF) is a precursor to the site specific plan, and sets out the frameworks, issues and requirements for SDP development, which will take place before any activities commence that include HUCs, and within 6 months of Eastern Africa – Regional Digital Integration Project (EA-RDIP) site identification. During project implementation, if site-specific project environmental and social impact assessment (ESIAs) confirms that Underserved Local Community/ULC or HUCs will be affected by EARDIP SOP II, Underserved Local Development Plan will be prepared according to this ULCPF.

The Underserved Local Community Planning Framework for the Ethiopia EA-RDIP II used a cross-sectional design with no control group. To carry out the Assessment, secondary and primary sources of data were collected using document review and qualitative approaches, respectively. This helped the team to explore and produce cultural descriptions, uncovering multiple realities and complexities of livelihood activities in the EA-RDIP II covered regions of Ethiopia. The review of existing social instruments is framed in the context of the EA-RDIP II Project document and the situational context of potential and social risks, as indicated in the Environmental and Social Review Summary (ESRS) of this project. The assessment review covered, among others, the Environmental and Social (E&S) social baseline of the project; review of relevant policy, institutional & regulatory frameworks; ES risks and impacts, including cumulative impact assessment (on planned infrastructure deployment, and legacy issues that are directly related to enabling infrastructure and/or are generating on going impacts related to pre-existing facilities) and mitigation measures related to HUCs. The assignment also has involved the assessment of any policy/legal conditions that may have changed, and institutional changes that may have occurred and need further consideration.

The ULCPF has been prepared by the Ministry of Innovation and Technology (MInT). The WB-supported project: “Eastern Africa- Regional Digital Integration Project SOP II (P180931)” will promote regional market integration to expand access to broadband connectivity and strengthen digital service delivery in Ethiopia. This will be achieved through four main project components: Component 1: connectivity market development and integration; Component 2: data market development and integration; Component 3: online market development and integration, and Component 4: project management and implementation support. A fifth component is reserved as the Contingency Emergency Response Component (CERC).

The existing PIU under the MInT will serve as the main implementing agency in Ethiopia. The Project Implementation Unit (PIU) is staffed with a Project Coordinator, Procurement Specialist, Financial Management (FM) Specialist, and Monitoring and Supervision (M&S) Specialist, among others. The PIU shall hire a social specialist not later than two months from project effectiveness. The detailed composition and role of the PIU will be set forth in the Ethiopia Project Implementation Manual (PIM). The PIU will be primarily responsible for project implementation, including overseeing core project-related E&S commitments in Ethiopia. In addition, the PIU will also act as the single point of contact for the regional PIU at Intergovernmental Authority on Development (IGAD) (where Ethiopia is a member) to facilitate collaboration on designing and implementing specific activities. The PIU will submit project reporting to the National Project Steering Committee (NPSC), the National Technical Committee (NTC) and engage with the NTC on specific matters requiring technical expertise/input on an ad-hoc basis. Similar approaches will be followed across region, zone and woreda/district level coordination units. The summary of community consultation on the benefits of the project is indicated below:

**Benefits:** the gadgets such as tablets, smartphones and computers that were necessary in accessing the digital services were too expensive for them. Also, the mobile internet service was weak, intermittent, and the services too expensive, it can have the following benefits:

* The project will help the youth gain better access and participation in the Digital Integration Enhancing teaching learning process
* The youth can use the internet for research, studies, communication, and entertainment including sports.
* The project is good and unlikely to negatively affect the HUCs, except for fences, kiosks other temporary business structures along the roads where fiber optic cables will be laid, but this they acknowledged will be temporary and rare.
* At community level there is need for community centers with internet connections. It was argued that the best way to reach them with project information was through their clan leaders and local administrators.
* The cost of accessing internet in the homes be reduced to improve usage,
* Improved access to learning and teaching materials for HUCs learners
* Access to weather information for better farming
* Increased online business leading better returns and value for money
* Reduce carbon emissions because with stable and affordable internet connections fewer people will travel for meetings or classes away from home or even to visit cyber cafes in towns.
* Access to online jobs will reduce unemployment and poverty in the HUCs territories.
* Contributing to solve social inequality related problems by integrating and including vulnerable groups

This ULCPF highlights risks that are of particular relevance to HUCs. It also makes recommendations for further assessments and management measures; for free, prior and informed consent (FPIC) consultation procedures; monitoring; and options for grievance redress, for HUCs found on project sites. The summary of potential risks and mitigation measures is indicated on the SDP below:

Summary of potential social risks, impacts and challenges:

-Lack of capacity of HUCs;

- Project activities not being safeguards responsive during the project life cycle;

- Exclusion of affected stakeholders (HUCs like pastoralists, refugees, IDPs and others) due to their vulnerability and/or potential concerns about the project;

-Women exclusion

-Labor influx

- Risk on damage of cultural heritage;

- Risk of HUCs capacity to afford services;

- Risks related to labor conditions on HUCs;

- Lack of labor opportunities for HUCs;

- Risk of disproportionate impact on HUCs;

Summary of mitigation measures:

- the capacity building efforts will focus on HUCs contexts and level of exposure to digital technologies, practice HUCs based application and combining unique needs of the HUCs and their knowledge base;

- Assign Environmental and Social Risk Management (ESRM) focal person at woreda level and providing capacity development training on the Project E&S instrument requirements and World Bank Environmental and Social Framework (WB ESF) standards.

-Key actions to address exclusion include giving girls opportunities to access top digital learning environments and engage with digital technology, developing digital skills programs toward employability, providing digital skills training for out-of-school girls, creating safe spaces that inspire participation and inclusion in digital education for girls and boys, and encouraging female role models in the digital and tech sectors;

- Conduct labor influx risk screening prior to sub-project implementation (as part of ES instruments);

-Avoid risks and impacts: (i) Safety check of fragile structures/features to plan and avoid the specific type of works, (ii) Prepare alternate design to avoid sitting of structures/ activities near heritage features; or prevent disturbances or access restrictions to areas with a historical heritage;

- Conduct awareness creation program related terms and conditions of employment including their rights and obligations for HUCs;

- Recruitment policies will need to consider social issues and project acceptability. Considering the local impact of the project in terms of land and disruption of existing lifestyles, together with the distrust of "outsiders", it is probably wise to maximize local employment;

This ULCPF directly applies to Component 1 (1.1. and 1.2) and subcomponent 3.1, if supported cross border and backbone connectivity, and last mile connectivity sites include areas with HUCs, and Component 4, where data collection and monitoring will include HUCs if they are affected by the project. Indirect effects on minority groups from Component 1’s policy and regulation development, and Component 2’s cyber-security and data management frameworks, Component 3’s digital cross-border trade and research and training interventions and will have to be analysed in the ESIA (Environmental and Social Impact Assessment) and Social Development Plan (SDP). Since the actual severity and nature of risks and impacts will be identified on the different project sites, as per the requirements stated in the ESS7, a site specific SDP will be developed. In general the purpose of this assessment is to propose plans and frameworks to promote equitable access to benefits and mitigate adverse project impacts.

As explained in detail in the project SEP prepared as per the ESS 10, the project will establish a Grievance Redress Mechanism to allow affected ULCs/HUCs and other related stakeholders to appeal any disagreeable decisions, practices, and activities that may arise during preparation and implementation of the ULCDP. The ULCs will be made fully aware of their rights and the procedures for filing the complaints and grievances verbally and in writing during the planning, designing and implementation of ULCDP and other plan of activities targeted to ULCs/HUCs. The project’s GRM is at no cost to complainants and guarantees that there will be no retribution for people who lodge complaints on project activities. Furthermore, the grievance mechanism will not impede access to judicial and administrative remedies. To ensure a functioning GRM, the project has envisaged a two-tier project GRM system, one at the project level, and one at the Central PCU level. The project level GRC will record all the grievances at site office, will analyze and resolve the grievances. Any unresolved grievances at local level will then be submitted to the central level GRC for further action with its recommendation. The central level GRC will take the decision of the grievance and sent the decision to the project level GRC for disclosure to the complaining parties. The GRM will be functional throughout the project cycle. Local measures will be put into place to receive complaints:

- a hotline will be created for stakeholders to use for questions, recommendations and grievances with signage displaying the number at project sites

- two boxes will be installed at the pilot project sites to receive complaints

- the phone numbers for the Project Manager and M&E Officers will be displayed at several sites around the digital center locations.

The overall recommendations of this ULCPF are that:

1. The ULCPF be accepted by WB and MInT as the statement of the project’s social risks and impacts upon Historically Underserved Communities (HUC) and Vulnerable and Disadvantaged Groups (VDGs) and how such risks will be mitigated.
2. The project impacts and implementation of mitigation measures, be monitored as per the SDP.
3. Enhance outreach and awareness raising to ensure clarity on the project by all key stakeholders. Multiple means of communication (cultural and language appropriate) should be used to ensure that all members are reached including the HUCs and VDGs.
4. Work with local/village elders and religious leaders and other respected community leaders in project planning, implementation, and M&E. The emphasis should be placed on working with people and groups trusted by the communities.
5. For the implementation and monitoring of SDP activities, collaborate with trusted local organizations, CSOs, NGOs, and other relevant institutions that have a history and good working relationships with the HUCs and VDGs and relevant experience in the implementation of such plans.
   1. INTRODUCTION
   2. Background Underserved Local Community Planning Framework

This Underserved Local Community Planning Framework (ULCPF) provides policy, strategy, process and procedures to understand project impacts on HUCs under the Eastern Africa Regional Digital Integration Project SOP II (EARDIP SOP II).The Government of Ethiopia (GoE) has requested the World Bank (WB) to support the preparation and implementation of the EARDIP II with the project development objective to promote the expansion of an integrated digital market across Eastern Africa by increasing cross-border broadband connectivity, data flows and digital trade in the region. The ULCPF will be applicable to the cross-border and national backbone network connectivity (subcomponent 1.1.), last mile connectivity, including in borderland areas (subcomponent 1.2) and digital enablers for cross-border trade and service delivery (subcomponent 3.1) subcomponents. Since, the project screening or feasibility study is not completed, during project implementation, when project ESIAs are developed, ULCDP will be prepared according to this ULCPF.

The ULCPF has prepared relevant strategies in full compliance with Government of Ethiopia (GoE) and World Bank’s Environmental and Social Framework, specific objectives of Environmental and Socials Standard 7: Indigenous People (ESS7).Details of the impact will be determined when the Environmental and Social Impact Assessment (ESIA) will be conducted during the detailed design phase.

The focus of the ULCPF is on Impacts on the ULCs due to the implementation of the EARDIP II project in relation to subcomponents 1.1, 1.2, and 3.1. Adhering to this framework the sub project should develop Underserved Local Community Development Plan (ULCDP). This will be conducted during the project detailed design and ESIA stage of backbone network connectivity, last mile connectivity and cross-border trade and service delivery infrastructure works.

* 1. Background and Context of the Ethiopian Digital Transformation Status

The objective of conducting the Underserved Local Community Planning Framework study is to assess the potential impact of the proposed interventions of EA-RDIP II on the underserved and most vulnerable populations with the view to ensure the project design reflects the needs of all beneficiaries in the most appropriate manner. As per the PAD, 5 priority fiber optic link points/Woredas (Adwa, Bameza, Halli, Gode and Dolo Odo) are identified under cross-border backbone network connectivity linked to sub-component 1.1., Cross-border and backbone network connectivity. Under sub-component 1.2., Last mile connectivity, including in borderland areas, refugees/IDP and host communities are proposed to be covered. Two regional states, four Woredas and one town are identified as IP Microwave points. These link or connection points are Gambela (Dima Woreda), Somali (Aw-Bare Woreda, Kebribeya town, Dolo Odo and Bokolmayo Woredas). In general, under the EARDIP SOP II for Ethiopia, a total number of five regional states, eight Woredas and one town are identified as link points.

As part of preparation of the Eastern Africa Regional Digital Integration Project-EA-RDIP II project, the Bank funded a Underserved Local Community Planning Framework in one Woreda/link point from the three regional states. We have considered also the security condition and the socio-economic homogeneity of some regional states. Thus, we have selected one Woreda from Somali (Dolo Odo), one from Gambela region (link point-Dima) and another one from Afar Region (Link point-Halli).

The focus of the Underserved Local Community Planning Framework is on identifying the key stakeholder groups in the project areas describing their 1) socio-economic characteristics; 2) assessing the potential social impact of the project on HUCs/ULCs; 3) determining how relationships with stakeholder groups will affect or be affected by the project and 4) identifying expected social development outcomes and actions proposed to achieve those outcomes. The outcomes of the Underserved Local Community Planning Framework include the preparation of Grievance Redress Mechanism, Stakeholder Engagement Plan (prepared separately), Social development Plan, Socio-economic baseline information, assess the potential adverse social impact of the project and identification of differentiated mitigation measures.

* 1. Project Beneficiaries

The project will benefit citizens, refugees, IDPs, businesses, public sector MDAs and RECs through improved access to connectivity, an environment enabling digital services and provision of digital skills:

a) **Citizens:** Citizens will benefit both indirectly and directly from wider opportunities to participate in an expanding regional digital market, which offers new employment opportunities and access to new public and commercial services online. Expansion of network coverage will directly benefit un-served or underserved communities, particularly in rural and borderland areas, where new networks are deployed or upgraded, supporting greater digital access and inclusion. Network coverage (of the population) is expected to increase from X to Y percent and X to Y percent in Ethiopia and Djibouti, respectively, on the back of the supported infrastructure investments. Approximately 5,000 citizens, of which at least 30 percent are women, including persons with disabilities, will also benefit directly from digital skills trainings (conducted using accessible techniques and tools), which will increase their readiness to access online service and contribute to the development of the digital market.

b) **Refugees and IDPs:**  Refugees, IDPs, and people in host communities will directly benefit from enhanced network coverage and new access to mobile and emergency response ICT infrastructure, for example, boosting their resilience to withstand climate shocks.

* 1. Objectives of the Underserved Local Community Planning Framework

The overall objective of the underserved local community planning framework is to identify potential social impacts and concerns related to the proposed EA-RDIP II project through stakeholders’ consultations in project intervention areas.

The specific objectives of the underserved local community planning framework are to:

1. Assess the social characteristics of local communities to establish socio-economic baseline information, including determining the existence of underserved groups, sacred and religious sites and places of cultural importance at national, regional and/or local levels in the project areas.
2. Evaluate the potential adverse social impacts of EA-RDIP II project components on vulnerable and disadvantaged groups including individuals and groups found within the Underserved Regions of Ethiopia which goes in line with the principles of the ESS 7.
3. Determine how relationships between stakeholder groups will affect or be affected by the project.
4. Identify the expected social development outcomes and actions proposed to achieve those outcomes.
5. Advise on procedures and steps to be taken to address requirements of the World Bank on environmental and social standards (ESS 1, ESS2, ESS4, ESS5, ESS 7, ESS8 and ESS 10) applied by the projects early during project preparation.
   1. Methodology

**Study design and methodology:** the Under Served Local Community Planning Framework used a cross-sectional design with no control group. In order to carry out the Assessment for EA-RDIP II project, both secondary and primary sources data were collected by using qualitative approach. This helped the team to explore and produce cultural descriptions, uncovering multiple realities and complexities of livelihood activities of the EA-RDIP II covered regions of Ethiopia. The review of the existing social safeguards instruments is framed in the context of the EA-RDIP II Project document and the situational context of potential social risks. The assessment review covered among others, ES social baseline of the project; review of relevant policy, institutional & regulatory frameworks; ES risks and impacts, including cumulative impact assessment (on planned infrastructure deployment, and legacy issues that are directly related to enabling infrastructure and/or are generating on going impacts related to pre-existing facilities) and mitigation measures related to HUCs. The assignment also has involved the assessment of any policy/legal conditions that may have changed and institutional changes that may have occurred and need further consideration.

**Approach:** the ULCPF is prepared in a way that maintains the balance of social safeguards standardization and empowering the PAPs in the process until they receive the required attention starting from project design, implementation and, monitoring and evaluation. The output of the consultation is establishing a framework for the development of the ULCPF and, subsequent SDP and SEP. The process was elaborated and clear to avoid and minimize confusion and suspicion. This was done according to the different levels of consultations, the expected outcome from the different stages of consultation and participation approach. The consultant has used a participatory bottom-up approach that considers the active participation of federal, regional and woreda level officials, sector representatives and experts on one hand and elderly, religious leaders and community or clan leaders on the other hand. The stakeholder consultation was conducted at regional level (Afar, Somali and Gambella regional states) and at Woreda level at Elidar woreda and the community consultation at Halli-Lofefele connectivity route in Afar region. Finally, the methodology has a tool to capture mitigation mechanisms on the identified potential risks and impacts which are derived from for the views of the sector and bureau representatives and community members at large.

**Key Informant Interview:** Key informant interview (KII) has been conducted with relevant stakeholders from federal to woreda level. Table 2 presents the summary of the participant organizations and people. The purpose of the KII with stakeholders is twofold. First, as part of an on-going project information disclosure, provide project information to allow stakeholders understand: (i) the purpose, nature, and scale of the project; (ii) the duration of proposed project activities; (iii) potential benefits, risks and adverse impacts of the project; (iv) the proposed stakeholder engagement process highlighting the ways in which stakeholders can participate in designing, implementing and monitoring ULCPF; and (v) the process and means by which grievances can be raised and will be addressed Accordingly, the key informant interview with relevant federal level stakeholders has been conducted from October 10 to November 4, 2022; stakeholders in Afar region from November 09-13, 2022; and stakeholders Elidar woreda in Halli-Lofefele connectivity route in Afar region from November 18-21, 2022. Annex 10 gives detail contract address of the participant organizations and key informant interview**.**

**Video conference and virtual consultation:** Unlike for Afar region, the MInT security clearance was not obtained for the face-to-face interview with the stakeholders in Somali and Gambella regions. The security risks in Somali region are posed due to the recent war with the Al-Shebab terrorist group and the current political instability in the region. The source of security risks in Gambella region is associated with the recurring attacks from the Murule armed clan from South Sudan. To mitigate these security risks, consultation with stakeholders; in Somali and Gambella regions[[59]](#footnote-57) have been conducted through video conference and virtual consultation. The consultation with stakeholders in Somali region was conducted through video conference on October 28, 2022, whereas consultation with stakeholders from Gambella region was done on November 16, 2022 through virtual consultation using Microsoft Teams. Both the video conference and virtual consultations were facilitated by the MInT team. The summary of the participant organizations and people in video conference and virtual consultation is given in Table 1.

**Consultation conducted by Afar Regional State Science, Innovation and Technology Commission:** Due to the security protocol, the ULCPF consultants didn’t go to Elidar Woreda located in Afar regional state. As a result, togther with MInT with Digital Transformation Program Office and MInT-Directorate to Councils and Regions Coordination; the consultant provided orientation on Woreda level stakeholder and community consultation to experts working in Afar regional state’s Science, Innovation and Technology Commission. Apparently, the experts have conducted the Woreda level stakeholder consultation starting from November 15, up to November 23, 2022. The summary of the stakeholder consultation participants is also included on table 1, below.

Table 1: Participant Organizations and Individuals in Key Informant Interview, Video Conference and Virtual Consultation.

|  |  |  |
| --- | --- | --- |
| ***Name of organization*** | ***Number of KII*** | ***Level of Stakeholder Group*** |
| Ministry of Innovation and Technology | 3 | **Federal** |
| Ethiopian Communication Agency | 1 |
| Ministry of Trade and Regional Integration | 1 |
| National Research and Education Networks | 1 |
| Development Bank of Ethiopia | 4 |
| Ethiopian Investment Commission | 1 |
| Ethiopian Environmental Protection Authority | 2 |
| Ministry of Women and Social Affairs | 1 |
| National ID Program Office | 2 |
| Afar Region Trade and Industry Bureau | 2 | **Regional** |
| Afar Region Science, Innovation and Technology Commission | 5 |
| Afar Region Women and Children Affairs Bureau | 1 |
| Afar Region Peace and Security Bureau | 1 |
| Afar Region Rural Land Use and Administration Bureau | 1 |
| Afar Region Environmental Protection Bureau | 1 |
| Somali Region Innovation and Technology Bureau\* | 5 |
| Somali Region Women and Children Affairs Bureau\* | 2 |
| Somali Region Environmental Protection Bureau\* | 3 |
| Gambella Region Innovation and Technology Commission\*\* | 2 |
| Gambella Region Peace and Security Bureau\*\* | 1 |
| Gambella Region Women and Children Affairs Bureau\*\* | 1 |
| Elidar Woreda Trade Office\*\*\* | 1 | **Woreda** |
| Elidar Woreda Rural Land Use and Administration Office\*\*\* | 1 |
| Elidar Woreda Environmental Protection Office\*\*\* | 1 |
| Elidar Woreda Women and Children Affairs Office\*\*\* | 1 |
| Elidar Woreda Peace and Security Office\*\*\* | 1 |

**Community consultation:** To have a representative sample, it was planned to undertake one community consultation in each of the three connectivity route. As planned, the community consultation in Haweli Kebele along the Halli-Ellidar-Lofefelo connectivity route in Afar region has been conducted. It was held at the Galafi village on November 18, 2022 in which 18 participants took part. With the aim to capture the views and concerns of all segments in the local community including disadvantaged or vulnerable groups, the participants were composed of clan leader, religious leaders, community representative, women, youth, person with disability and refugee.

The minutes, sample photos and attendance sheet of this community consultation are annexed herewith (see Annex 1). The community consultation in the Bameza-Abugedaf and Dollo-Oddo connectivity routes are recommended for special consideration in the next phase of stakeholder consultation in the project.

**Consultation with HUCs:** To capture the views and concerns of disadvantaged or vulnerable groups, the participants of community consultation composed of women, youth, person with disability and refugee. Special emphasis was paid to these disadvantaged or vulnerable groups by taking into account their views and special concerns to be incorporated in the preparation of this ULCPF. The total number of consultation with HUC session participants is 17; five are female and 12 male. The composition of the social status of the participants includes, two clan leaders, two youth, two house wives and 11 community members. The consultation is carried out Halli-Lofefele connectivity route in Afar region from November 18-21, 2022.

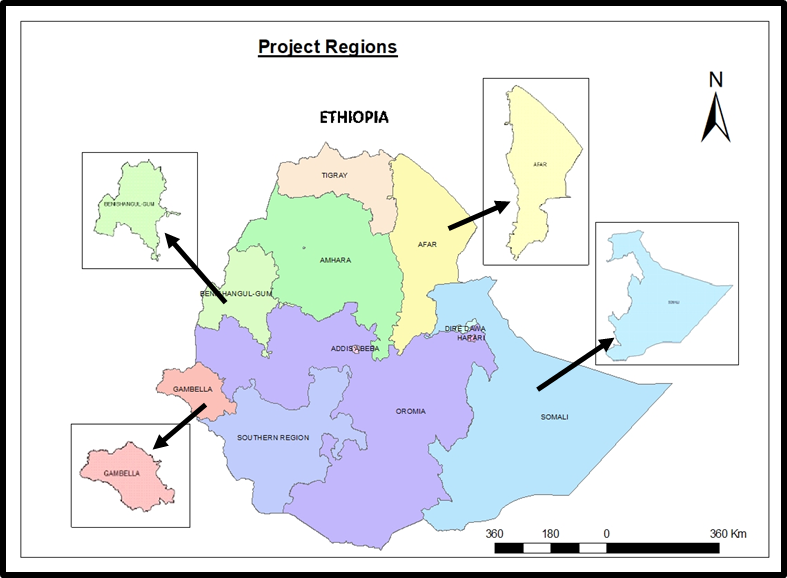
**Sampling procedure:** The preparation of this ULCPF employed sampling procedures that allow to achieve representativeness both in terms of geographic and stakeholder coverage. To obtain geographic representativeness, the sample selection and assessment for this ULCPF covered all the project areas: (a) the Halli-Ellidar-Lofefelo to depicts the E&S situation along the Ethio-Djbouti cross-border connectivity route; (b) Bameza-Abugedaf to capture the trans-boundary connectivity between Ethiopia and South Sudan; and (c) Dollo-Oddo to reveal the situation of the Ethio-Somalia cross border connectivity.

The sampling technique has given a similar attention for the inclusiveness of the appropriate stakeholders by applying the following procedures. First, as highlighted in sub-sections 2.1., 2.2., and 2.3., the selection for stakeholder consultation covered key stakeholders (the main implementing agency, partner organizations, main direct beneficiaries, and public private partnership) from federal to woreda level. Second, the engagement of the local community has been captured through community consultation. The participants were selected by using purposive sampling technique. The community consultation participants consisted of two (2) community/clan leaders, two (2) religious leaders, two (2- 1 Male and 1 Female) elderly, two (2) women, and two (2- 1 Male and 1 Female) extremely poor pastoralist individuals. In additions to that; two (2- 1 Male and 1 Female) person with disabilities, two (2- 1 Male and 1 Female) uneducated or unemployed youths and two (2- 1 Male and 1 Female) refugees or internally displaced persons were included in the community consultation sessions. Hence, the total number of participants was sixteen (16) and a five (5) out of the 16 participants were be female. Finally, the sampling procedure applied ways to represent the views and concerns of the vulnerable and disadvantaged groups: elderly, two (2) women, and two (2- 1 Male and 1 Female) extremely poor pastoralist individuals; two (2- 1 Male and 1 Female) person with disabilities, two (2- 1 Male and 1 Female) uneducated or unemployed youths and two (2- 1 Male and 1 Female) refugees or internally displaced persons )were proportionately included during the selection of the participants for community consultation; and organizations for disadvantaged or vulnerable groups such as Ministry of Women and Social Affairs and the line regional bureau and woreda office were consulted for the special concerns of these groups and incorporated in the preparation of this ULCPF.

2.0. BASELINE INFORMATION OF THE EA-RDIP II TARGET AREAS

**2.1. Overview of Bio-Physical Baseline**

Ethiopia is a large land-locked country occupying an area of over 1.1 million square km². It is located between 3º and 15ºN latitude and 33º and 48 º E longitudes. Ethiopia is bounded by Sudan on the west, Eritrea and Djibouti on the northeast, Somalia on the east and southeast, and Kenya on the south. The country is constituted of ten regional states and two city administrations. It is a country of great geographical and climatic diversity, which has given rise to many and varied ecological systems. The biophysical conditions of the regions where the project target implementation regions or the infrastructure developments will take place are situated in Afar, Somali, and Gambella regions.



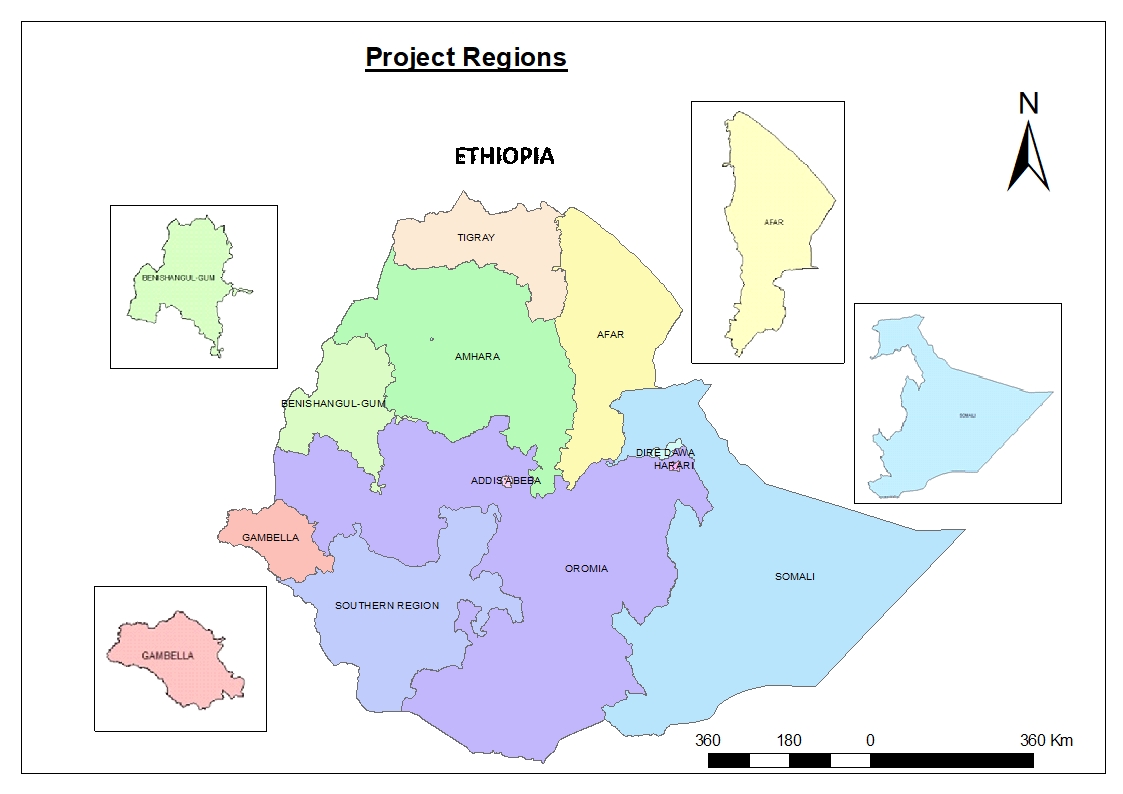
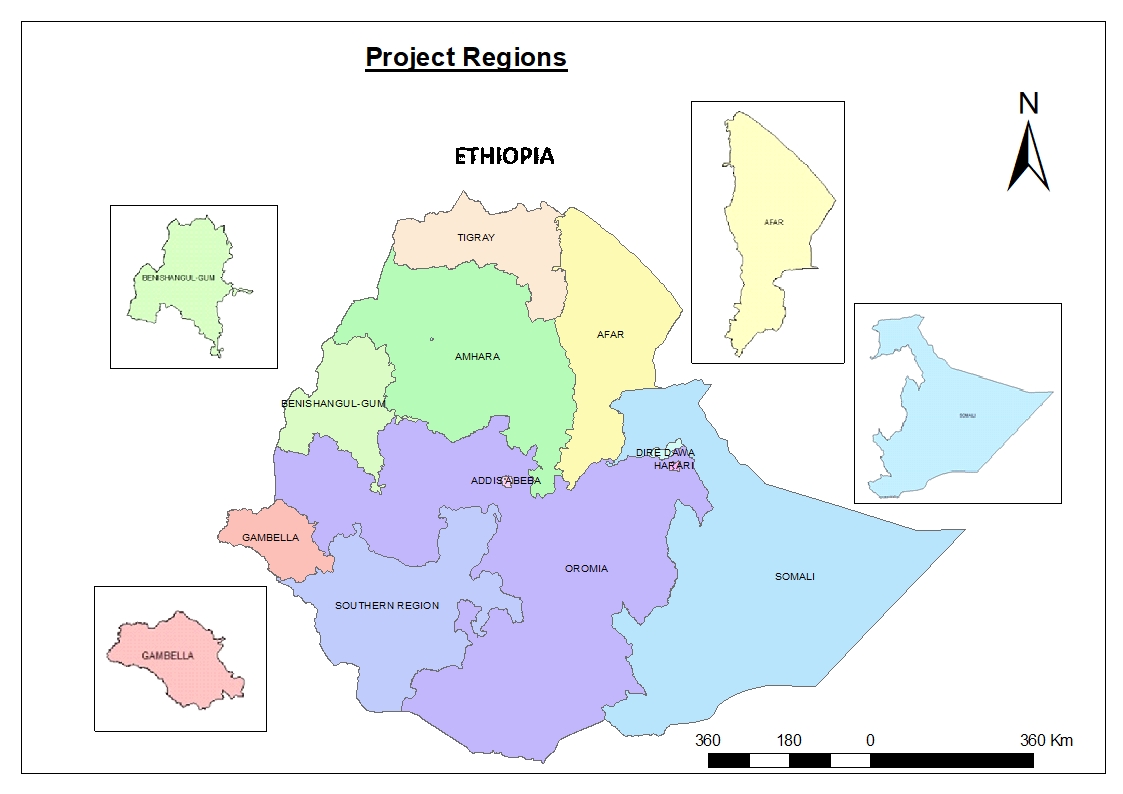
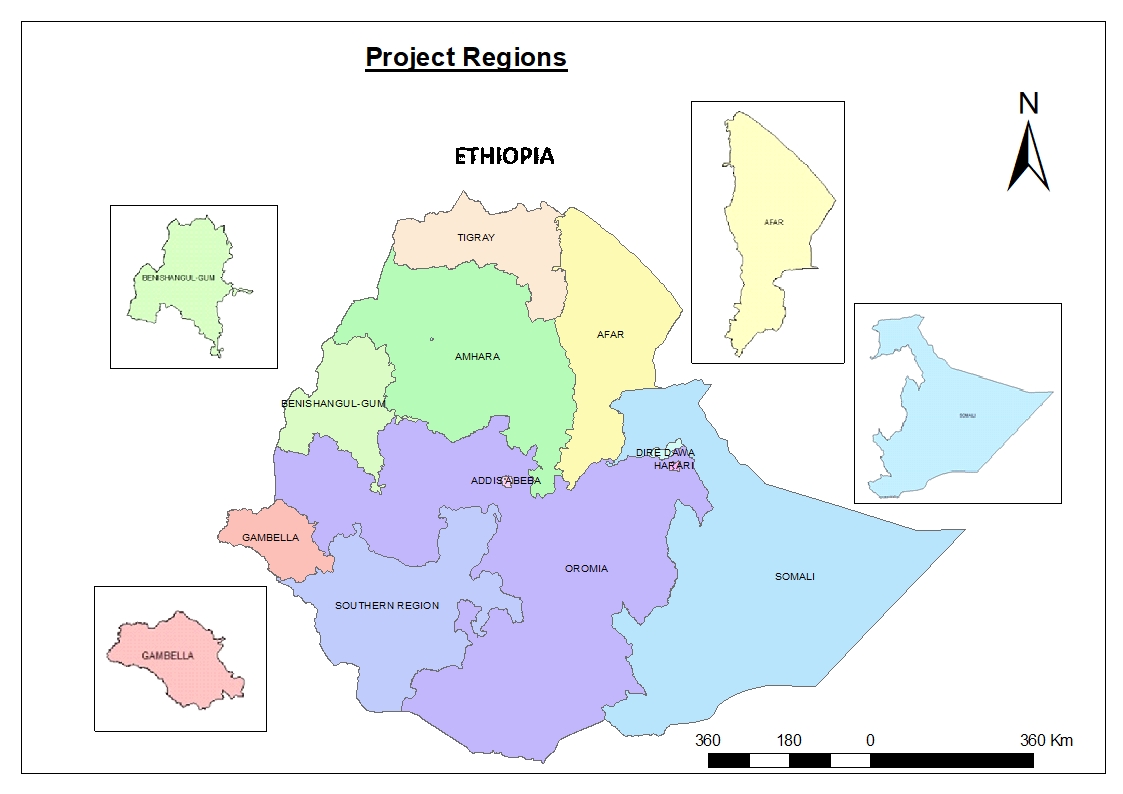


Figure 1: Map of Ethiopia showing Project Targeted Regions

**2.2. Socio-Economic Information of the EA-RDIP Target Areas**

The project targeted regions (Afar, Somali, Gambella) where the subproject 1,1 and 1.2, 2.1, 2.2, are planned to be implemented are categorized in Bereha Eco-climatic zones, where have low soil quality, high erosion potential and vulnerability to pastoral livelihood and where lots of Internally Displaced People and Refugees hosted. In all cases the host community is also underserved and un-served borderland community from the connectivity point of view. These regions are very important environmentally and socially as most of the country’s protected areas and wildlife reserves and migratory wildlife are situated and the river basins are also passing or originated in these regions. Furthermore, these areas are known for their rich minerals and oil (Gold, natural gas etc) and the people who reside in these regions also are indigenous for the country and with lots of cultural and historical heritages furthermore these regions are known for their water resources and almost all the river basins are either sourced from or passing through these regions.

2.2.1. Afar Regional State

Afar regional state in Ethiopia is homeland of Afar people, and it is the region where lowest point of the country is located. The sensitive natural ecosystem, historical and heritage sites situated in this region are Awash National Park, Yangudi Rassa National Park, Afar Depression, Ert Ale Active Volcano, Hadar and Aramis areas which are which are historical and designated as tourist attraction points. Afar is a home to peculiar wildlife, which include African wild ass, Grevy’s Zebra, Wild Fox, Wild cat, Cheetah, and Ostrich. Based on the projection made in 2017 by CSA the Afar regional state population was 1,812,002 comprised of 991,000 men and 821,000 women; urban inhabitants’ number 346,000 of the population, the remaining 1,446,000 are pastoralists which is around 80% of the total population. This region has an estimated density of 14.38 people per square kilometer and the average household are counted 5.6 persons. It is the region where Awash River end up into interconnected lakes.

Afar regional state is in the north-eastern part of Ethiopia with an area of about 150,000km2 that stretches in the lowlands covering the Awash valley and the Dankil depression. Geographically, it is located between 39034’ and 42028’ East Longitude and ‘8049 and 14030’ North Latitude. The region is bordered with Tigray region to the northwest, Amhara region to the southwest, Oromia region to the south, and Ethiopian Somali region to the southeast. It is also bordered with Djibouti to the east and Eritrea to the northeast. Administratively, the region is divided into 5 zones, 32 *Woredas* and 401 *Kebeles*. Afar people belong to the Cushitic-speaking language groups in Ethiopia and the society is structured into clans and sub-clans.

The projects will capitalize on existing customary information sharing system i.e Dagu in disseminating and sharing knowledge and best practice among communities. Dagu functions within a defined set of regulations and expectations, though the rules are not necessarily transcribed. The law of Dagu means that whenever a person meets someone on the road who has travelled some distance, for example, from a nearby village, he is required to pause and engage in a news exchange session. The two persons will usually sit down immediately and ask each other ‘Iytii mahatobie?’ and ‘Intii maha tubilie?’ (‘What have your ears heard?’; ‘What have your eyes witnessed?’). The Dagu can involve any item of public relevance, such as weddings, funerals, battles, new alliances, missing cattle, the conditions of the trail ahead, or the weather. Failure to pass on relevant information is not only an offence to the conversation partner, but considered harmful to the community. To this end, misuse of Dagu is subject to punishment within customary law (Mada’a). Anyone who passes on unchecked information can be punished according to the Mada’a. Disseminating false or fabricated information is considered “unforgivable”. Moreover, the projects, through capacity building interventions, enhance the participation of customary institution and will not adversely impact socio-political culture of these underserved communities.

Afar regional state is characterized by an arid and semi-arid climate with low and erratic rainfall that has frequently been affected by drought. The north-eastern part of the region is chronically water insecure due to a lack of perennial rivers, leaving the people of Afar largely dependent on ponds and traditional wells for their water supply. One of the Woreda (Elidear) was sampled for this study.

1. **Elidaar Woreda**

Elidaar Woreda has a total population of 52,888 constituting of 29,029 (55%) males and 23,837 (45%) females with a total of 5,647 households. Out of which a total population of 15,060 constituting of 8,184 males and 6,876 females and a total of 2,229 households (Female = 672) are found in EA-RDIP intervention kebeles namely Haweli or Galafi, Elidaar, Bure, Gewha, Manda, and Suela. Among the Kebeles Bure is the most populated and Suela is the least populated Kebele.

1. **Profile of Underserved Communities in Afar Regional State**
2. Argoba ethnic group

The Argoba ethnic group lives in Argoba Special Woreda, which are their ancestral territories. They make their living from the land, the main natural resource inherited from their forefathers. Recognizing the special characteristics, and their long historical vulnerability, the Argoba People have been underserved for generations since the mid-1600s. In 1995, the government of Ethiopia materialized the rights of the people through its constitution and the Argoba were given their own special woreda in 1997. The values, culture and norms governing social, political and economic institutions in Argoba originate from Islamic thoughts and principles. The second differentiating factor is the Argoba commonly migrates in many parts of the country. Thus, the people have a unique culture practicing mixed agriculture with a special attachment to trade. The Argoba women are commonly involved in spinning cotton so that men can weave and sell it to generate income. In order to draw the best benefits from their main economic engagement, agriculture, they have a long history of terracing to rehabilitate the natural environment, decrease soil erosion, eventually improve fertility and ultimately increase production.

The Argoba ethnic group is a minority in Afar region and vulnerable to livelihood shocks during early or late rains, draught, and outbreak of pest which ultimately affect their overall productivity. The Argoba people have various forms of social affiliations, resources and networks. They have various arrangements as an informal social protection mechanism, such as livestock transfer mechanisms with neighboring people, resource pooling within their vicinity, sharing information, discussing peace and security and so on. Besides, the Argoba have a unique social institution called Liela, that is open for all in terms of membership. It is a social network used to discuss various issues covering production, market, health of people and livestock, food shortages, social services, grain stocks, death of livestock, restocking, funeral, wedding, agricultural inputs, peace and security. The village residents meet every Friday under a tree commonly called Helewa; the discussion is usually context specific, providing a coping strategy for various shocks, trends and seasonality. The meeting under the Helewa enables them to share available resources within the village and design strategies to cope with the stemming challenges. If a member of the community has lost or will lose his/her livestock due to disease or other natural disaster, the community will discuss the issue and decide to pool resources to restock the loss. The reciprocity and mutual support applies across agenda items of everyday meeting discussions at Liela. Marriage, divorce and inheritance are determined by religion rites, and women do not have equal rights over resources. The project will use the platform of the Liela as part of various participatory approaches to discuss and decide on project issues. The projects can use this social networking to mobilize community efforts for the implementation of development interventions. As the findings of the community consultation indicated, the communities fully accepted the projects implementation approach and expressed complementarities to informal social institution and community culture.

1. Internally Displaced Persons and Refugees

Two refugee camps in Afar Regional State were visited in August 2019: Barahle (since 2007) and Aysaita (since 2007). These camps house mainly ethnic Afar Eritrean refugees totalling some 27,000 persons. Overall, about 60 per cent of refugees are under 18 years of age; approximately 51 per cent are women[[60]](#footnote-58). On the other hand, in Afar Region, food assistance remains overall inadequate. More than 100,400 people (21 per cent of target) have received assistance under Round 5 relief food distribution. Multi-purpose cash support schemes are being explored to ensure food security amongst vulnerable households and increase reach. Similarly, shelter support for IDPs is on-going but still inadequate due to limited funding, lack of local shelter materials and other operational challenges. In a slow yet steady progress, more than 79,000 households have received shelter assistance to date, while shelter rehabilitation is on-going for an additional 1,994 households. Overall, more than 137,000 people in return areas are yet to receive shelter assistance. Some areas in Berhale, Dalol and Kunneba woredas (Zone 2) remained inaccessible as of 4 January owing to insecurity and lack of roads. Meanwhile, the return of IDPs living with host communities in and around Semera to Zones 2 and 4 continues. On 4 January??, the second batch of returnees, 534 IDPs in total, was supported to return to their areas of origin, leaving 4,414 IDPs remaining to return by end January[[61]](#footnote-59).

2.2.2. Gambella Regional State

Gambella Regional State has a total land area of 29,782.82 km2, with a total population of 396,000 (207,000 males and 189,000 female) according to the CSA, 2013 national population projection data for 2014-2017. Of these, 68.7% inhabit in rural areas while 31. 3% live in urban areas. This region has an estimated density of 10 people per square kilometer and in average 4.6 persons to household. The region is in the south-western part of Ethiopia, bordering with Oromia Regional State in the north and east, SNNPR in the south and east, and Benishangul-Gumuz in the north. The Region also borders the Republic of South Sudan in the south and Sudan in the west. The altitude of Gambella region ranges between 300 and 2,500 m.a.s.l. Ago-ecologically, the region is predominantly lowland (kola), with a few midlands (Woina Dega).

The average annual rainfall of the region varies according to the different altitudes. While areas with 400 - 500 m.a.s.l of the western part receive 900 mm - 1500 mm/annum, areas over 2,000 m.a.s.l (eastern part) receive average rainfall ranging from 1,900 to 2,100 mm/annum. Accordingly, the average temperature is 17.50C – 27.50C and the mean annual rainfall is 900-2200mm. Most of the population of the region lives in rural areas where their livelihood is based on sedentary agriculture (crop based, livestock based and agro-forestry based) in which the region’s economy is predominantly dependent. The region is endowed with abundant natural resources of expansive land and water which are the main source of livelihoods of the people. Gambela Region is endowed with vast natural resources.

Gambella People’s National Regional State is endowed with large volume of ground and surface water sources including rivers, lakes, reservoirs, ponds and huge floodplain areas. The region has four main rivers: Baro, Gillo, Alwero and Akobo. These main rivers have originated from the highlands of Oromia and Southern Ethiopia Peoples’ Regional State and have tremendous tributaries originated from the region and outside the region and generally these rivers flow from east to west direction. In addition, the region has two main lakes; namely: Lake Tatta in Gog Woreda and Lake BishanWaqa in Godere Woreda, and numerous ponds. The main habitats of Gambella Region are forests, woodlands, swamps and rivers. Out of the total area 25% of the land is covered with forest. The region is very rich in water sources especially availability of five major rivers, namely, Baro, Akobo, Itang, Gillo and Alwero Rivers that are also trans-boundary makes the region a water tower. The region is a home of five indigenous ethnic groups.

The major ethnic groups are the Nuer (46%), Agnuwa (21%), Majenger (7%), Komo (3%), and Opo (3%). Gambella is also a host region for people who migrated there at different times, locally called highlanders, accounting for 20% of the population. The dominant faiths in the region are Protestant, Orthodox Christian, traditional belief, Islam, Catholic, and others.

1. **Dima Woreda**

The topography of the area is differentiated by rugged terrains of Gura Ferda in the north, Shoa Gimira in the East, Maji in the south and flat morphology in the west of South Sudan border. The altitude of the Dima District ranges from 412 meter to 2063 meter above sea level. Akobo River runs from east to west and forming dendritic drainage patterns whereby it’s joining tributaries draining from north to south and from south to north.

1. **Profile of Underserved Communities in Gambella Regional State**
2. The Majang

The Majang inhabit in the thickly forested area of the south-western edge of the Ethiopian plateau. It is bordered on the west by Anywa on the south and east by the Southern Nations Nationalities and People’s region and on north by Oromia Region. They belong to the Nilo-Saharan linguistic group. The Majang have a population of 12280 (6036 male and 6244 female) in Gambella Region. They reside mainly in the Majang Zone, in Mengshi and Godare woredas. Leading a non-sedentary way of life, the livelihood of the Majang is mainly based on beekeeping, especially wild bee. Other livelihood activities include hunting, gathering and shifting cultivation, with lifestyle highly attached to the forest and forest products. Currently the Majang people are practicing maize and sorghum cultivation including fruit, coffee, spices and vegetables. Domestic groups tend to farm plots adjacent to those of friends or kin, but the settlements remain small and constantly changing in composition (as well as in location). In resource management and land use, the Majang have indigenous institution called Jung. They have an indigenous forestlandrelated dispute settlement mechanism, called Guten and comprises elders and religious leaders playing important role in this regard.

1. The Opou

The Opou people are one of the five ethnic groups living in Gambella Regional State. They live in Itang special woreda (at Wnke and Mera kebeles). The total population of Opou ethnic group is 1161 (CSA, 2013). The Opou are mainly crop dependent people (Maize, Millets and Sorghum) with hunting and gathering as their supplementary income sources. They also practice beekeeping.

1. The Komo

Living in Anyuaa zone, Komo ethnic group are minority in number than the rest of ethnic groups, they are agrarian and fishermen. In the reality the business sector of the regional economy mostly controlled by the highlanders, the “indigenous” greatly dependent on government jobs[[62]](#footnote-60). The Komo people counts with population of only 224 (0.07 %)[[63]](#footnote-61).

1. Internally Displaced Persons and Refugees

Most of these recent ethnic clashes are centred on access to land resources and power. Since the re-eruption of conflicts in South Sudan in 2013, the number of new refugee arrivals in Gambella has once again increased. By the end of 2017, the host population was estimated at 307,097, while the refugee population stood at 399,174, representing 57 per cent of the total population in the Gambella Region. Despite the large numbers of refugees and the instability in the region, the Ethiopian government has continuously maintained its opendoor policy toward refugees[[64]](#footnote-62). Since the new arrivals in 2013, existing camps have been filled to capacity and the Ethiopian Government has opened up new refugee camps. By now, more than 320,000 South Sudanese refugees are sheltered in 7 camps in the Gambella Regional State. This includes the Nguenyyiel camp (83,988), the Tierkidi camp (65,260), the Jewi camp (59,220), the Kule camp (45,815), the Pugnido camp 1 (43,719), the Pugnido 2 (9,424), and the Okugo camp (11,858) while 1,730 refugees are accommodated in Akula[[65]](#footnote-63). Importantly, five of the refugee camps in Gambella constitute the largest refugee camps in Ethiopia and a large majority of these refugees live in situations of protracted displacements[[66]](#footnote-64).

2.2.3. Ethiopian Somali Regional State

Ethiopian Somali Regional State is the second largest region in Ethiopia next to Oromia regional State that covers 350,000km2, which is located in south-eastern part of the country. It is situated between 4°and 11’ N latitude and 40 ° and 48’ E longitude. The region is arid and mostly hot (18-45ºC), mostly plain with an altitude 400-1600 meters above sea levels. The average annual rainfall ranges from 150mm-650mm and has bimodal rainfall. The region is endowed with perennial rivers: Wabi Shebelle, Genale, Dawa and Weyib and seasonal rivers: Erer, Daketa and Fafen. Thus, the region has irrigated and localized rain fed farm potentials. However, low rainfall, high temperature, lack of infrastructure is the major constraints. The development of irrigated agriculture in fertile areas of the above rivers basins and the exploitation of perennial springs, seasonal floods and rain water harvesting elsewhere in the region for irrigated crop and pasture production can be taken into consideration. In the rain fed areas, the use of drought resistant crop varieties together with soil and water conservation techniques can improve farm production.

According to CSA (2013) projection, Somali region has a population of 5.3 million with average household size of 6.6. The region consists of 11 zonal administration, 93 districts, 6 city administrations and 1,224 *Kebeles*. People are primarily dependent on pastoralism. Livestock in the region is both considered as social prestige and means of wealth accumulations. Thus, the region has livestock population of 30,536,000 million heads, encompassing (24%) of cattle, (36.5%) of sheep, (32.2%) of goat, (7.2%) of camel and (1%) of equines (CSA, 2014). The region has 17 rural livelihood zones, generally classified as pastoral, agro-pastoral, riverine sedentary farming and etc. Livestock are the main pillar of livelihoods in Somali region supporting about 86% of the people. It supplies milk and meat for home consumption, and live animals for sale.

1. **Dolo Ado Woreda**

Dolo Ado Woreda (also referred to as “Dolo Addo” or “Dollo Ado”) is a woreda in the Somali Regional State of Ethiopia and part of the Liben Zone. Towns in Dolo Ado Woreda include Dolo Ado town and Softu. Dolo Ado town is located at the confluence of the Ganale and Dawa River, and bordered to the northwest by Filtu Woreda, on the northeast by Afder Zone, on the southeast by Somalia, and on the south by Kenya[[67]](#footnote-65).

The total population of Dolo Ado Woreda was 150,100 in 2011 of which 37,000 living in Dolo Ado town (Woreda census data, 2011). This population census does not include the Refugee Settlements mostly situated along the Genale river: Bur-Amino, Bokolmayo, Melkadida, Kobe, and Hilaweyn. According to the United Nations High Commissioner for Refugees (UNHCR) Operational portal, there are currently 157,000 refugees living in the refugee settlements in Dolo Ado Woreda. The arrivals mostly originating from the Bay, Gedo, Middle Juba and Bakool regions since 2009 and fled to the refugee settlements from conflicts, exacerbated by the droughts in Somalia (Betts et al., 2019). Most refugees remain poor and dependent upon food aid. Only 21% of refugees have an income-generating activity, compared with 29% of the host community. The largest source of employment for both communities is with humanitarian non-governmental organizations (NGOs) and international organizations.

1. **Profile of Underserved Communities in Somali Regional State**
2. Competition between Gerri and Jarso

Conflicts between the Gerri (sometimes also spelled Girhi) and Jarso illustrate the complexities of Somali-Oromo relations under ethnic federalism. Straddling the border between eastern Hararghe in Oromiya and Fafen zone in SRS close to the regional capital Jigjiga, the Gerri-Jarso are agro-pastoralists who mix ‘Oromo farming techniques’ with ‘Somali social institutions’. The Gerri and Jarso are closely intermarried. The numerically stronger Jarso have for long been subordinated to the Gerri. The latter consider themselves more ‘noble’ as they trace their genealogy to the Darood clan family. Perceptions about the Gerri-Jarso’s collective identity are contested by both insiders and outsiders and by Oromo and Somalis alike. For a long time, Somalis viewed both as Somali, considering conflicts between the Gerri and Jarso as an intra-Somali affair. But in the eyes of members of the Absame lineages (who are part of the Darood clan family), these same conflicts were part of an inter-ethnic confrontation between Somali (Gerri) and Oromo (Jarso). Given this complex mixture of intermarriage and hierarchy, competition over land and political dominance has been part of the centuries old Gerri-Jarso compact. These struggles intensified whenever one group attempted to use changing political conditions to challenge or reassert its counterpart.

1. Internally Displaced Persons and Refugees

Hosting communities face pre-existing and precarious socio-economic situations plagued by food insecurity, limited access to basic social services and economic infrastructure, poor livelihood opportunities, shifting land ownership and access patterns, and a diminishing natural resource base[[68]](#footnote-66).Climate change, conflict and securitization of borders across the region are an increasing threat to regional stability. Low rainfall, high temperature and insufficient infrastructures pose major constraints to the region’s populations and expose them to recurring shocks. As of January 2022, during the Round 28 DTM site assessments 157,227households comprising 932,568 IDPs were identified in 457 sites in Somali region[[69]](#footnote-67). Conflict was the main reason for displacement and displaced an estimated 517,750 IDPs climate displaced 414,818 from drought, seasonal floods flash floods and landslides. Conflict-induced IDPs are clustered mostly along the frontier areas of Somali – Oromia border. They are mainly hosted in Fafan, Dawa, Liban and Afder zones, which border Oromia. Populations displaced by drought are primarily in the interior zones of Dawa,Korahey, Shabelle, and Doollo, as well as Siti and Jarar zones.

Drought has resulted in the displacement of pastoralist and agro-pastoralist communities in Erer, Nogob, Shabelle, Korahe, Dollo, Afder, Liban, and Dawa. More than 3.5 million people affected in Somali region[[70]](#footnote-68). 2.2 million people in Somali region are in need of water assistance in 78 woredas. More than 67 percent of the 1.46 million livestock deaths resulting from the drought affecting the Ethiopian lowlands are seen in Somali[[71]](#footnote-69). Surviving animals have significantly deteriorated body conditions which has decreased their market value. Atleast 183,000 people have migrated in search of water, pasture, or assistance[[72]](#footnote-70).

Following the Federal Government of Ethiopia’s (GOE) endorsement of the Internally Displaced Persons Recovery Plan in April 2019, the Somali Regional Government returned and relocated conflict affected IDPs that had sought refuge within the Somali region and along the border areas between the Somali and Oromia regions. 64,719 households comprising of 388,353 returning IDPs have been identified in 97 villages according to the DTM National Displacement Report[[73]](#footnote-71). To date 2,121 households have been relocated by the regional govt. to areas in Shinele, Erer, Mieso, Raso,Marsin, Warder, Goljano, Awbare, El Ogaden, Birgod woredas and the government has announced intentions to facilitate the relocation of 17,000 households[[74]](#footnote-72).

3.0. LEGAL, POLICY AND INSTITUTIONAL FRAMEWORK

3.1. Administrative Framework

Ethiopia is a Federal Democratic Republic. The 1995 constitution of Ethiopia establishes nine States that are demarcated based on settlement patterns, language identity and under consensus of the people in the respective areas. The constitution therefore establishes the Federal government and the State Authority, both of which have legislative, executive and judicial powers (Federal Democratic Republic of Ethiopia. The constitution also gives citizens the right to fully partake in local and national development; as such, the lowest units of local government are empowered to allow citizens make direct contribution in the administration of grass root level units. For instance, Article 89, Section 6 of the Ethiopian Constitution (1995) stipulates that “Government shall at all times promote the participation of the People in the formulation of national development policies and programs; it shall also have the duty to support the initiatives of the People in their development endeavors”.

At the urban level, there exist city administrations whilst the rural areas are under the jurisdiction of districts known as “woredas”. Both the city and the district administrations are mandated by state constitutions to plan and execute socio- economic programs and projects for the benefit of residents within their respective geographic areas. These local authorities largely depend on grants from regional states for the implementation of developmental activities. At the lowest level of governance structure in Ethiopia are village level authorities called “Kebeles” which oversee development in village communities. The Kebeles are expected to collect income taxes from agricultural land, organize communal labor to support the execution of developmental activities and assist in the resolution of conflicts. The approval of development plans prepared by the woredas is also the responsibility of Kebeles. A major challenge faced by local authority (Woreda, city and Kebele) administrations in the discharge of socio-economic services, is the inadequate funding for the provision of infrastructure and social services. This situation is explained by the fact that revenue generated by local authorities in Ethiopia constitutes only 19% of total national revenue; whilst the federal government accounts for the greater portion of revenue collected as mandated by the Constitution.[[75]](#footnote-73) As such, national grants and transfers to local authorities remain the major source of revenue for local development.

3.2. The Constitution of Ethiopia

The Constitution of the Federal Democratic Republic of Ethiopia (FDRE) is the highest policy and legal document that presents the basis for all laws and policies in the country. The Ethiopian Constitution recognizes the presence of different socio-cultural groups, including historically disadvantaged and underserved communities, pastoralists, and minorities, as well as their rights to socio-economic equity and justice. The Constitution of Federal Democratic Republic of Ethiopia (FDRE) provides a number of basic and comprehensive principles that consider social protection and management in the country including the sustainable development. It also recognizes the existence of diverse socio-cultural groups, including historically disadvantaged and underserved communities, pastoralists, agro-pastoralists and minorities as well as their rights to socioeconomic equity and justice. The relevant articles with social and environmental provisions among others are pinpointed below:

Table 2: Relevant articles with social and environmental provision extracted from the FDRE’s Constitution.

|  |  |  |
| --- | --- | --- |
| **S. no** | **Relevant Articles** | **Description** |
| 1 | **Article 25-Rights 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, colour, sex, language, religion, political or other opinion, property, birth or other status. |
| 2 | **Article 35-Rights to Women** | -The historical legacy of inequality and discrimination suffered by women in Ethiopia taken into account, women, in order 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 shall; in the enjoyment of rights and protections provided for by the Ethiopian Constitution, have equal right with men.  - Women have equal rights with men in marriage as prescribed by this Constitution.  - 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.  - The State shall enforce the right of women to eliminate the influences of harmful customs. Laws, customs and practices that oppress or cause bodily or mental harm to women are prohibited. |
| 3 | **Article 37-Rights 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. |
| 4 | **Article 39-Rights of Nations, Nationalities, and Peoples** | -The rights of groups identified as ‘Nations, Nationalities, and Peoples’ and defined them as “a group of people who have or share a large measure of common culture or similar customs, mutual intelligibility of language, belief in a common or related identity, a common psychological make-up, and who inhabit an identifiable, predominantly contiguous territory.”  -It also portrays their rights up to self-determination-the right to secession; speak, write, and develop their own languages; express, develop, and promote their cultures; preserve their history; and, self-government, which includes the right to establish institutions of the Government in the territory that they inhabit and equitable representation in state and Federal Governments. As aforementioned, most EA-RDIP target communities are from these population groups. |
| 5 | **Article 40-The Right to Property** | - Every Ethiopian citizen has the right to the ownership of private property. Unless prescribed otherwise by law on account of public interest, this right shall include the right to acquire, to use and, in a manner compatible with the rights of other citizens, to dispose of such property by sale or be quest or to transfer it otherwise.  -"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.  -narrates that, “Ethiopian pastoralists have the right to free land for grazing and cultivation as well as the right not to be displaced from their own land”.  - 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.  - 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. |
| 6 | **Article 41-** | -States that “Ethiopian pastoralists have the right to receive fair prices for their products, that would lead to improvement in their conditions of life and to enable them to obtain an equitable share of the national wealth commensurate with their contribution. This objective shall guide the State in the formulation of economic, social and development policies.” |
| 7 | **Article 43-The Right to Development** | - The Peoples of Ethiopia as a whole, and each Nation, Nationality and People in Ethiopia in particular have the right to improved living standards and to sustainable development.  - Nationals have the right to participate in national development and, in particular, to be consulted with respect to policies and projects affecting their community. |
| 8 | **Article 44-Environmental Rights** | -All persons have the right to a clean and healthy environment.  -All persons who have been displaced or whose livelihoods have been adversely affected as a result of State programs have the right to commensurate monetary or alternative means of compensation, including relocation with adequate State assistance. |
| 9 | **Article 54 –Members of the House of People’s Representatives** | -states that “Members of the House [of Peoples Representatives], on the basis of population and special representation of minority Nationalities and Peoples, shall not exceed 550; of these, minority Nationalities and Peoples shall have at least 20 seats.” These groups have less than 100,000 members and most live in the ‘Developing Regional States’. Due to limited access to socioeconomic development and underserved status over the years, the Ethiopian government has designated Afar, Benishangul-Gumz, Gambella and Ethiopian Somali as ‘Developing Regional States’ (DRS). |
| 10 | **Article 89-Economic Objectives** | -specifies, ‘The Government has the obligation to ensure that all Ethiopians get equal opportunity to improve their economic situations and to promote equitable distribution of wealth among them’.  -states that, “Nations, Nationalities and Peoples least advantaged in economic and social development shall receive special assistance.  Government shall take measures to avert any natural and manmade disasters, and, in the event of disasters, to provide timely assistance to the victims.”  -Government shall provide special assistance to Nations, Nationalities, and Peoples least advantaged in economic and social development.  -Government has the duty to hold, on behalf of the People, land and other natural resources and to deploy them for their common benefit and development.  - Government shall at all times promote the participation of the People in the formulation of national development policies and programs; it shall also have the duty to support the initiatives of the People in their development endeavors.  -Government shall ensure the participation of women inequality with men in all economic and social development endeavors.  -Government shall endeavor to protect and promote the health, welfare and living standards of the working population of the country. |
| 11 | **Article90-Social Objectives** | -To the extent the country’s resources permit, policies shall aim to provide all Ethiopians access to public health and education, clean water, housing, food and social security.  -Education shall be provided in a manner that is free from any religious influence, political partisanship or cultural prejudices. |
| 12 | **Article 91-Cultural Objectives** | -Government shall have the duty to support, on the basis of equality, the growth and enrichment of cultures and traditions that are compatible with fundamental rights, human dignity, democratic norms and ideals, and the provisions of the Constitution.  -Government and all Ethiopian citizens shall have the duty to protect the country's natural endowment, historical sites and objects. |
| 13 | **Article 92-Environmental Objectives** | -Government shall endeavor to ensure that all Ethiopians live in a clean and healthy environment.  -The design and implementation of programs and projects of development shall not damage or destroy the environment.  -People have the right to full consultation and to the expression of views in the planning and implementations of environmental policies and projects that affect them directly.  **-**Government and citizens shall have the duty to protect the environment. |

In general, The Ethiopian Constitution recognizes the presence of plurality in ethnic groups, including historically underserved, disadvantaged and vulnerable groups, as well as the rights to their identity, culture, language, customary livelihoods, socioeconomic equity and justice. There are approximately 80 culturally distinct ethnic groups within Ethiopia.

3.3. Ethiopian Relevant Laws and Regulations

The effects of development projects on the environment and social fabrics should be assessed in order to ensure that projects, as much as possible, must be in harmony with the overall environment. In one way or another, this ultimately contributes to ensure sustainable development. In this regard, policies, legislative frameworks, guidelines and standards have been developed by governmental and non-governmental organizations so as to contribute for the enhancement of sustainable development. The relevant policy, legal and administrative frameworks of the Government of Ethiopian and the policies of the World Bank have been stated in the following sections.

3.3.1. National Social Protection Policy

The current Government of Ethiopia views social protection as a means to make other investments more effective, efficient and to support economic growth. Social protection is not presented as a right of citizens, nor as an obligation of the state to its citizens. Even when the constitutional rights are referred to, it is prefaced with the condition of ‘progressive realization of social and economic rights’; which rights would be progressively realized, for whom and why, is left unstated. Even the constitution is vague about rights and responsibilities: Article 41(5) prefaces support with the condition of ‘within available means’, Article 41(6) states the ‘state shall pursue policies’ (rather than protect rights of individuals), and Article 41(7) states ‘to the extent the country’s resources permit’. What is not clear is how the available means and resources are determined, amidst a range of pro-growth objectives, which policies will be pursued, and for whom. This aligns with the broader ideological foundations of the government, whereby citizens are recipients of government benevolence, which acts to protect the population based upon what it deems as vital, not as something that citizens can demand.

The rights that one could theoretically demand include the international conventions and instruments that the Government of Ethiopia has ratified, such as those outlined in the Universal Declaration of Human Rights, the African Charter on Human and Peoples’ Rights, Convention on the Rights of the Child, Convention on the Elimination of all forms of Discrimination Against Women, and the African Charter on Rights and Welfare of the Child. This is constitutionally upheld in Article 13(2): ‘The fundamental rights and freedoms specified in this Chapter shall be interpreted in a manner conforming to the principles of the Universal Declaration of Human Rights, International Covenants on Human Rights and International instruments adopted by Ethiopia’. However, in practice there are few examples when non-state actors or individuals have been able to demand such rights be protected. Throughout the most recent decade, the government has heavily restricted CSO and NGO abilities to engage in rights-based activities, which has restricted the support for any demand of these types.

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 underemployed;

- 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.

3.3.2. National Digital Transformation Strategy

Technological change has been the primary driver of social development, productivity improvements and inclusive growth. Ethiopia’s digital economy is at an early stage of development with few private sector players offering digital services and some government driven digitalization initiatives. While these initiative and services help solve important challenges, they cut across multiple stakeholders and require a coordinated effort to maximize their impact. The digital transformation strategy was developed to provide a collective vision and, specifically to meet the following key objectives:

* To propose an inclusive digital economy approach that will catalyze the realization of Ethiopia’s broader development vision.
* To emphasize the need for a sense of urgency and mobilize critical stakeholders to address the imperatives to enable an inclusive digital economy.
* To coordinate and strengthen current initiatives underway so the most pragmatic and strategic pathways are explored to unlock growth and maximize impact.
* To ensure an inherently international approach that will enhance Ethiopia’s place in regional and global value chains while benefitting from best practice and interoperable systems.

The strategy took into consideration the current economic drivers (Agriculture, Manufacturing and Services), the priority sectors, and the national objectives of jobs creation, forex earnings and inclusive prosperity as a means of identifying the most relevant digital enabled pathways for Ethiopia. These are:

* Pathway 1: Unleashing value from agriculture,
* Pathway 2: The next version of global value chains in manufacturing
* Pathway 3: Building the IT enabled services, and
* Pathway 4: Digital as the driver of tourism competitiveness.

3.3.3. National Policy on Ethiopian Women

Nationally, the Constitution of the Federal Democratic Republic of Ethiopia (1995) includes articles on rights including rights to life, security and liberty (Article 14, 16, 17); rights to equality (25) and marital, personal and family rights (34). Article 35 on Rights of Women supports affirmative measures to enable women “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”. Article 36 on Rights of Children stipulates that children should free of corporal punishment or cruel and inhumane treatment in schools and other institutions responsible for the care of children.

*National Policy on Ethiopian Women* (1993) aimed to institutionalize the political, economic, and social rights of women by creating appropriate structures in government offices and institutions so that public policies and interventions are gender-sensitive and equitable. It was this policy that created the Ministry of Women and Children’s Affairs. The policy aims to: 1) Facilitate conditions to increase equality between men and women so that women can participate in the political, social and economic life of their country on equal terms with men and ensure that their right to own property as well as their other human right are respected and that they are not excluded from the enjoyment of their fruits of their labor or from performing public functions and being decision makers; 2) Facilitate the necessary conditions whereby rural women can have access to basic social services and to ways and means of lightening their work-load; and 3) Eliminate, step by step, prejudices as well as customary and other practices that are based on the idea of male supremacy and enabling women to hold public office and to participate in the decision making process at all levels.

3.3.4. National Youth Policy

Endorsed on 12 March 2004, the National Youth Policy (NYP) is one of Ethiopia’s most significant youth-specific state documents. It argues that an age-based definition of youth is ‘most suitable for research and policy purposes’ and goes on to define youth as people between 15 and 29 years. The NYP envisions ‘creating [an] empowered young generation’ with values incorporating a democratic outlook, knowledge, professional skills, organized engagement and ethical integrity. The objectives of the policy include: to ‘bring about active participation of youth’ in socioeconomic, political and cultural activities; and ‘enable [youth] to fairly benefit from the results’.

There are two levels of narrative within the NYP: a broad narrative about the status of youth, and a narrative more specific to youth employment. At the broader level, high levels of poverty, economic and political marginalization are identified as main factors restricting young people’s ‘potential energies and capabilities’. The policy envisions changing the dire socioeconomic and political situation through ‘active participation’ of the youth. The government aims to play an instrumental role to help youth organize themselves and actively participate in ‘development endeavors, building democratic system and good governance’.

The narrative specific to youth employment issues has multiple layers. The NYP suggests that the government alone cannot ‘resolve the problem of unemployment’. Hence, the policy aims to create favorable conditions for the youth to ‘create new jobs for themselves’ and to enable the private sector to create job opportunities for them. It also advocates for policy interventions that shape both formal and informal employment opportunities, and suggests that these can help address the under- and unemployment problems among youth. With regard to rural youth, ensuring access to land and expansion of off-farm activities are identified as part of the solution to youth unemployment.

3.3.5. Cultural Policy of Ethiopia (2016)

The cultural policy clearly states strategic issues and strategies regarding the conservation and protection of heritage resources of the country. Article 2 of the Policy states to systematically identify, develop, preserve and use the cultural, historical, and natural heritages of the peoples of Ethiopia, to sus­tainably apply them for economic, social and human develop­ment, and to facilitate their study, documentation, visibility and transfer to the next generation.

It also devised implementation strategies, which includes:

* The country’s heritages shall be protected and maintained in ac­cordance with their cultural and historical values by devising and applying a heritage management system
* Close relations shall be forged with communities and other part­ners to protect and manage the country’s heritages Moreover, the Policy put down strategic statement regarding “Cultural Resources and Indigenous Knowledge” under article 2.3 and maintains:

**Relevance to the Project:** In planning and implementation of the proposed project, consideration should be taken to protect cultural, historical, and natural heritages of the country in general and the project area in particular.

3.3.6. Ethiopian Laws on Pastoralists and Minority Groups

The Ethiopian Constitution also recognizes the rights of pastoral groups inhabiting the lowland of the country. The constitution under article 40 (4) stipulates “Ethiopian pastoralists have a right to free land for grazing and cultivation as well as a right not to be displaced from their own lands”. The Constitutions under Articles 41(8) also affirms that “Ethiopian Pastoralists have the right to receive fair prices for their products, that would lead to improvement in their conditions of life and to enable them to obtain an equitable share of the national wealth commensurate with their contribution. This objective shall guide the State in the formulation of economic, social and development policies.” Pastoralist regions/areas recognized by the government are: Afar; Somali; Borena Zone and Fentele Woreda (Oromia); South Omo Zone, Bench-Maji Zone, and parts of Decha Wereda in Keffa Zone (SNNPR); and, Nuer Zone (Gambella). The pastoralists comprise approximately 12-15 million people that belong to 29 groups of Nations, Nationalities and Peoples[[76]](#footnote-74). Whilst government policies have strengthened, and resource allocations increased over the last decade[[77]](#footnote-75), pastoralist areas are still amongst the least served in terms of basic services.

The Constitution also recognizes another group called “national minorities”. Article 54 (1) states that: “Members of the House [of Peoples Representatives], based on population and special representation of minority Nationalities and Peoples, shall not exceed 550; of these, minority Nationalities and Peoples shall have at least 20 seats.” These groups have less than 100,000 members and most live in the “Developing Regional States”. Owing to their limited access to socio-economic development and underserved status over the decades, the Ethiopian government has designated four of the country’s regions, namely: Afar, Somali, Benishangul-Gumz, and Gambela as Developing Regional States (DRS). In this respect, Article 89 (2) of the Ethiopian Constitution stipulates: “The Government has the obligation to ensure that all Ethiopians get equal opportunity to improve their economic situations and to promote equitable distribution of wealth among them”. Article 89 (4) states: “Nations, Nationalities and Peoples least advantaged in economic and social development shall receive special assistance”.

3.4. Proclamations

3.4.1. Proclamations

3.4.1.1 Expropriation of Land holdings for Public Purposes, Payments of Compensation and Resettlement Proclamation (1161-2019)

The GoE has issued a new proclamation (1161/2019) which addresses the public’s concern on the previous proclamation (455/2000). The new proclamation has included many changes in provisions including the provision of livelihood restoration of PAPs beyond compensation of the lost asset and property. The new proclamationdefines the basic principles that have to be taken into consideration in determining compensation to a person whose landholding is going to be expropriated. The Proclamation is applicable on both rural and urban lands. The general condition for which land and property can be expropriated is for public purpose defined as use of land by the appropriate body or development plan to ensure the interest of citizens to acquire direct or indirect benefits from the use of the land and to consolidate sustainable socio-economic development.

As per the Proclamation No. 1161/2019(Article 13) valuation of displacement compensation for communal landholding is based on the use of the communal land; or the lost benefits and livelihood of the displaced people through identifying communal land clearly. The method of allocating the displacement compensation money or the use of it in kind to all members of the communal landholding community shall be clearly determined. In addition to compensation according to *Proclamation No. 1161/2019 Article 13(1*) ``displacement compensation shall be paid equivalent to 15 times the highest annual income he/she secured during the three years preceding the expropriation of the land`. Compensation will be in an amount sufficient to reinstate displaced people to their economic position prior to displacement; the regionally relevant administration is required to give another piece of land to any person who lost his land in favor of a public project (*Proclamation No1161/2019*). The assessment of compensation does not include the value of the land itself, but the property and any development made on the land because land is a public property and not subject to sale in Ethiopia.

A rural landholder whose landholding has been permanently expropriated (where substitute land is not available) shall be paid displacement compensation, in addition to compensation payable for property situated on the land and for permanent improvements made to such land, the land holder shall be paid displacement compensation which is equivalent to 15 times the highest annual income he generated during the last 3 years preceding the expropriation of the land(*Proclamation No. 1161/2019,* Article 13). Complaints arising from landholding rights are resolved amicably through the establish complaint hearing body and apple council or in accordance with and administration laws of the regional state.

3.4.1.2. Proclamation on Research and Conservation of Cultural Heritage (No. 209/2000)

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 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 on 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.

3.4.1.3. Labour Proclamation (No. 1156/2019)

The Labour Proclamation (which was revised in 2019) provides the basic principles which govern labour conditions taking into account the political, economic and social policies of the Government, and in conformity with the international conventions and treaties to which Ethiopia is a party. The proclamation under its Part Seven, Chapter One, and Article 92 of this proclamation deals with occupational safety, health and working environment, prevention measures and obligations of the employers. Accordingly, the Proclamation obliges the employer to take the necessary measure for adequate safeguarding of the workers in terms of their health and safety. In addition, in this proclamation under its Part Six, Chapter1 and 2 described about women and young safety that women are not assigned on the works that may risk to women health and also overnight work including night shift work. Regarding young employees, organizations do not hire young personnel less than 15 years old and if they hire young between age 15 and 18 years, they should not allow to work more than 7 hours per day and also overnight work including night shift work. Moreover, the Occupation Health and Safety Directive provides the limits for occupational exposure to working conditions that have adverse impacts on health and safety.

Women shall not be discriminated against as regards employment and payment on the basis of their sex. It is prohibited to employ women on type of work that may be listed to be particularly odious or harmful to their health; an employer shall not terminate the contract of employment of women during her pregnancy and until four months of her confinement reformulated by Labour Proclamation No.156/2019 as until four months after her confinement. Grant leave to pregnant women without deducting her wage; adhere to the occupational health & safety requirements provided in the proclamation; take appropriate steps to ensure that workers are properly instructed and notified concerning the hazard of their respective occupation and the precautions necessary to avoid accident and injury to health; provide workers with protective equipment, clothing and other materials and instruct them of its use; and Ensure that the work place and premises do not cause danger to the health and safety of the workers.

3.5. World Bank Environmental and Social Standards Applied to EA-RDIP

According to the World Bank Environmental and Social standards, projects supported by the Bank through Investment Project Financing are required to meet the Environmental and Social Standards (ESS). The ESS is designed to help Clients to manage the risks and impacts of a project, and improve their environmental and social performance, through a risk and outcomes-based approach. Clients are required to manage environmental and social risks and impacts of the project throughout the project life cycle in a systematic manner, proportionate to the nature and scale of the project and the potential risks and impacts.

ESF (2018) is an instrument that examines the risks and impacts when a project consists of a program and/or series of subprojects, and the risks and impacts cannot be determined until the program or subproject details have been identified.

MInT has prepared an environmental and social commitment plan (ESCP) outlining detailed commitments to support compliance with the ESS of the Environmental and Social Framework (ESF) of the Bank. The ESCP describes the different management tools that the Client will use to develop and implement the agreed measures and actions. These management tools will include, as appropriate, environmental and social management plans, environmental and social management frameworks, operational manuals, management systems, procedures and practices.

The World Bank ESS 7: The World Bank Environment and Social Standard (ESS 7) on Indigenous Peoples recognizes Indigenous Peoples as social groups with identities that are distinct from dominant groups in national societies, are often among the most marginalized and vulnerable segments of the population. The ESS 7 underlines the requirement of avoiding/minimizing adverse impacts on Indigenous Peoples in a project area, respecting the local culture and customs, fostering good relationship and ensuring that development benefits are provided to improve their standard of living and livelihoods. It also ensures that the development process fosters full respect for the human rights, dignity, aspirations, identity, culture, and natural resource-based livelihoods of these peoples/communities. Some important and specific ESS7 objectives are:

1. To ensure that the development process fosters full respect for affected parties’ human rights dignity, aspirations, identity, culture, and natural resource-based livelihoods;

2. To avoid adverse impacts of projects on Indigenous Peoples, or when avoidance is not possible, to minimize, mitigate and/or compensate for such impacts;

3. To promote sustainable development benefits and opportunities in a manner that is accessible, culturally appropriate and inclusive;

4. To improve project design and promote local support by establishing and maintaining an ongoing relationship with the affected IPs throughout the life of the Project;

5. To obtain the Free Prior and Informed Consent (FPIC) of the IPs in the three circumstances described in this ESS;

6. To recognize, respect and preserve the culture, knowledge, and practices of Indigenous Peoples, and to provide them with an opportunity to adapt to changing conditions in a manner and in a timeframe acceptable to them.

Paragraph 24 to 26 of ESS-7 mention circumstances requiring free, prior and informed consent (FPIC). The provisions for FPIC mentioned therein is quoted below:

“24. Indigenous Peoples may be particularly vulnerable to the loss of, alienation from or exploitation of their land and access to natural and cultural resources. In recognition of this vulnerability, in addition to the General Requirements of this ESS (Section A) and those set out in ESSs1 and 10, the Borrower will obtain the FPIC of the affected Indigenous Peoples in accordance with paragraphs 25 and 26 in

circumstances in which the project will:

(a) have adverse impacts on land and natural resources subject to traditional ownership or under customary use or occupation;

(b) cause relocation of Indigenous Peoples from land and natural resources subject to traditional ownership or under customary use or occupation; or

(c) have significant impacts on Indigenous Peoples cultural heritage that is material to the identity and/or cultural, ceremonial, or spiritual aspects of the affected Indigenous Peoples lives.

In these circumstances, the Borrower will engage independent specialists to assist in

the identification of the project risks and impacts.

The Bank’s Environmental and Social Framework consists of ten Environmental and Social Standard prepared to help Borrowers to manage the risks and impacts of a project, and improve their environmental and social performance and those standards relevant to the proposed project are summarized below in table 3.

Table 3: Summary of relevant World Bank’s Environmental and Social Standard

| **Environmental & Social Standards (ESSs)** | **Summary** |
| --- | --- |
| **Assessment and Management of Environmental and Social Risks and Impacts -ESS 1** | ESS1 requires Borrower’s for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank in order to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESSs)  This standards aims to identify, evaluate and manage the environment and social risks and impacts adopt a mitigation hierarchy approach Including avoidance , minimize or reduce risks and impacts to acceptable levels, utilize national environmental and social institutions, systems, laws, regulations and procedures in the assessment, development and implementation of projects, whenever appropriate & promote improved environmental and social performance, in ways which recognize and enhance Borrower capacity.  Relevance : The proposed development project is likely to cause environmental and social impacts Hence , assessment and management of environmental and social risks and impacts is required |
| **Labor and Working Conditions- ESS 2** | Stresses the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. It requires to promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions  Relevance: The project will involve temporary or permanent workforce during construction and implementation phase of the project. Hence, the project will trigger this standards |
| **Resource Efficiency and Pollution Prevention and Management-ESS 3** | Recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels. The current and projected atmospheric concentration of greenhouse gases (GHG) threatens the welfare of current and future generations. At the same time, more efficient and effective resource use, pollution prevention and GHG emission avoidance, and mitigation technologies and practices have become more accessible and achievable |
| **Community Health and Safety -ESS 4** | Recognizes that project activities, equipment, and infrastructure can increase community exposure to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration or intensification of impacts due to project.  It addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable |
| **Land Acquisition, Restrictions on Land Use and Involuntary Resettlement-ESS 5** | Recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons which may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood) or both.  Relevance : This OS will be triggered since the proposed project projects will likely cause at least loss of income sources or means of livelihood of the local community in the project area as a result of the project, whether or not the project affect persons (PAPs) are required to move or not |
| **Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local-ESS 7** | This ESS applies to a distinct social and cultural group identified in accordance with paragraphs 8 and 9 of this ESS. ESS7 contributes to poverty reduction and sustainable development by ensuring that projects supported by the Bank enhance opportunities for Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local communities to participate in, and benefit from, the development process in ways that do not threaten their unique cultural identities and well-being.  Relevance: Since the proposed development project is to be implemented in some of the project regions where indigenous peoples (vulnerable and marginalized groups) is a possibility, this standard should be considered and the project should respect indigenous people’s dignity, human rights, and cultural uniqueness so that they receive culturally compatible, social and economic benefits and do not suffer from adverse effects during the development process. |
| **Cultural Heritage- ESS 8** | Recognizes that cultural heritage provides continuity in tangible and intangible forms between the past, present and future. People identify with cultural heritage as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. Cultural heritage, in its many manifestations, is important as a source of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people’s cultural identity and practice.   * Sets out measures designed to protect cultural heritage throughout the project life cycle. * Sets out general provisions on risks and impacts to cultural heritage from project activities.   Relevance: project should identify any important physical cultural resources that need protection in the project area and its surrounding. A chance finds procedure should also be considered if no physical cultural site is identified at the early stage of the proposed project |
| **Stakeholder Engagement and Information Disclosure- ESS10** | This ESS recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice. Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation.  Relevance : The standard is relevant to the project since stakeholder engagement and information disclosure is apriority for ensuring sustainability of the proposed project |

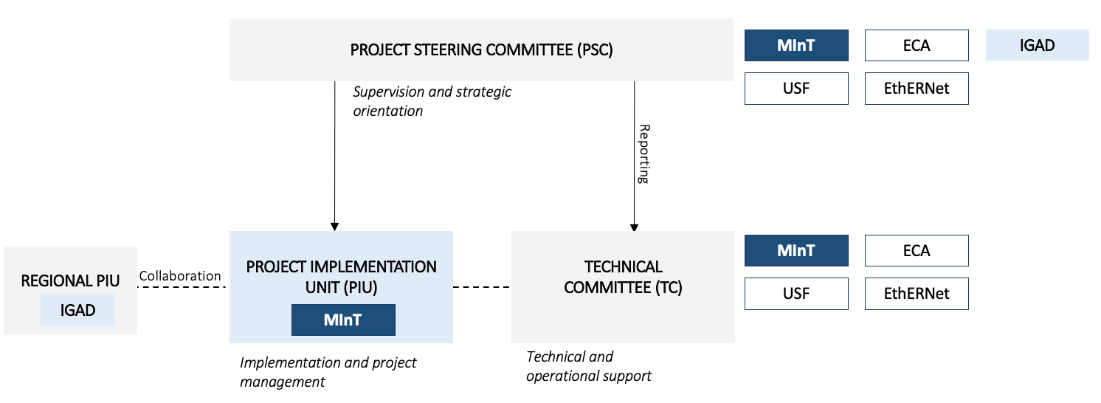
**3.6. Institutional Framework**

3.6.1. Institutional Arrangement for EA-RDIP II Project Implementation

The following section briefly summarized relevant institutional arrangement of federal and regional institutions responsible for EA-RDIP II Project.

The existing PIU under the MInT will serve as the main implementing agency in Ethiopia. This PIU was originally set up in 2021 to manage the Digital Ethiopia Foundations Project (P171034), which has been effective since July 23, 2021. The PIU is fully staffed with a Project Coordinator, Procurement Specialist, FM Specialist, E&S Specialist, M&S Specialist and others. The PIU shall hire social specialist not later than two months from project effectiveness (see also ESCP). Additional support will be provided towards i) hiring key technical specialists, with subject matters expertise in connectivity infrastructure, cyber-security etc; ii) key equipment, material, and logistics related requirements for the PIU staff, shared with the existing project. The detailed composition and role of the PIU will be set forth in the Ethiopia PIM. The PIU will be primarily responsible for project implementation, including overseeing core project-related fiduciary functions, M&E and E&S commitments in Ethiopia. In addition, the PIU will also act as the single point of contact for the regional PIU at IGAD (where Ethiopia is a member) to facilitate collaboration on designing and implementing specific activities. The PIU will submit project reporting to the National Project Steering Committee (NPSC), the National Technical Committee (NTC) and engage with the NTC on specific matters requiring technical expertise/input on an ad-hoc basis. Figure 2 depicts the main reporting lines.

***Figure 2: National Implementation Arrangements for the EA-RDIP in Ethiopia***



At the region level, EA-RDIP II project implementation is led by regional institutions such as Science, Innovation and Technology Commission in Afar, Innovation and Technology in Gambella and Innovation and Technology Bureau in Somali region, with the involvement of relevant institutions at the state, Zonal, Woreda, Kebele and community levels with specific accountabilities and decision-making roles based on existing mandates. Also, it will take the leading responsibility to establish the Regional Project Steering Committee (RPSC) and Regional Project Technical Committee (RPTC). The constituency and role of the RPSC and RPTC resemble the NPSC and NPTC but at the regional level.MInT will hire Cluster Area Project Personnel (CAPP) comprising competent Environmental Safeguards Specialist, Social Safeguards Specialist and GBV Specialist with expertise of gender at the PIU, that base the project office at the respective regions but coordinate and oversee the overall implementation of the ESMPs across the Project Operation Areas (POAs) in their respective regions. The number of the CAPP will depend on the number of POAs in the respective target regions. The Cluster Area Project Personnel (CAPP) will closely work with the PIU, RPSC, RPTC and Woreda Project Task Force (WPTS). Likewise, MInT will hire Project Area Focal Person (PAFP) who will take the leading role for the overall coordination and implementation of the project’s ESMPs including the RF at the Woreda level. Besides, the implementation arrangement will establish Woreda Project Task Force (WPTF) comprising the Heads and Experts from Woreda Rural Land Use and Administration Office, Woreda Environmental Protection Office, Woreda Women and Children Affairs Office, Woreda Trade and Industry Office, and Woreda Peace and Security Office. The WPTF will closely work with Cluster Area Project Personnel (CAPP) and Project Area Focal Person (PAFP) to oversee the day-to-day E&S performance of the project as compliance with the ESMPs specified in this ESCP.

Table 4: Roles and responsibilities of the implementers and partners

|  |  |  |
| --- | --- | --- |
| Administrative level | Organizations | Roles and responsibilities |
| Federal Level | MoF | * Responsible for financial management, budget managing payments (which are delivered through Commercial Banks and Financial Institutions) |
| MInT | * MInT, a federal ministry organ, is empowered mainly to ensure and set general policy framework for the provision of quality, reliable and secure information technology service and oversee the implementation thereof; * Supports PIU through the National EDFP Steering Committee with an oversight on the implementation of the ESRM of the EA-RDIP II project. * Leads the overall digital integration undertakings of the EA-RDIP II through its dedicated Digital Transformation Program Office/Digital Infrastructure Unit, including collection of regional level digital infrastructure development performance data, analyzing the same and reporting to the WB/MInT-PIU. |
| ECA | * Support the implementation of component 1. * the Ethiopian Communication Authority, a regulator of the telecommunication sector, is empowered, among others, to 'promote information security, data privacy, and protection'; * In line with this the Universal Service Fund (USF) has been established at the ECA and with support of the Digital Foundations Project (P171034). General capacity building and regulatory strengthening and adopt regulatory standards on siting, design, construction and operation of digital infrastructure in response to climate risks. * Operationalize gender-specific recommendations outlined in Ethiopia’s (forthcoming) ‘National Digital Inclusion Strategy’. * TA, capacity building, and systems[[78]](#footnote-76) for ECA to establish a universal service fund, and to support the effective alignment, implementation, and sustainability of connectivity investments under the project through technical training and additional advisory services. * Providing license service/ permitting entry to new players/Internet Service Provider (ISP) |
| MoTRI | * Will support realization of regional trade initiatives, and facilitating participation in regional trade agreements and expanding cross-border e-services (related to sub-component 3.1.). |
| EthERNet | * Will support the implementation of sub-component 3.2 * Will receive support through regional capacity-building initiatives (study tours and workshops) and regional access to open educational resources (Ethiopia). * TA for the development of a long-term business plan for sustainable EthERNet, Ethio ICT Park, and talent centers expansion. * Financing toward connecting and providing ICT equipment to up to additional 50 national universities and a minimum of seven TVET regional centers of excellence. * Will support on design and implementation of new and expanded digital skills programs aimed at expanding the availability of digital skills trainings focusing on foundational digital skills courses and specialized courses on cyber-security and data protection, through existing HEIs, targeting university students and civil servants, with minimum targets for female beneficiaries. |
| MoE | * MoE will provide TA on activities related to sub-component 1.1.-c., related to radio access networks for schools and sub-component 1.1.-f., related to low- cost online access facilities, particularly related to school computer lab units * MoE in collaboration with EthERNeT will provide TA, financing modality and collaboration for activities identified under sub-component 3.2. |
| MoH | * • MoH will provide TA on activities related to sub-component 1.1.-c., related to radio access networks for health care facilities |
| MoLS | * MoLS will work in collaboration with Job Creation Commission, to recruit, train and link local community workers with both international and national suppliers |
| MoP | * Will handle issues related to emergency response and benefit of pastoral and communities living along the border line of the beneficiary countries |
| MoWSA | * MoWSA provides support on validating provisions are embedded related to protections from GBV and incentives for women –owned business in sub-contracting in both component 1.1.-b and 1.2.-b |
| FCSC | * Federal Civil Service Commission will be involved on supporting the recruitment and administration of training for civil servants from Ethiopia civil servants, including female staff will be trained in management or use of digital systems and digital skills |
| EPA | * Environmental Protection Authority –play a regulatory role on the preparation and implementation of ESRM tools, particularly E and S safeguard related matters. |
| NLAU | * National Land Administration and Use, addresses issues related to involuntary land expropriation, resettlement and upholding land rights |
| DBE | * Development Bank of Ethiopia will provide support on achieving set on sub-component 1.1.including the use of Public Private Partnerships (PPPs), investment guarantees and sub-component 1.2. incentivize private sector investment in the roll-out and maintenance of last-mile access networks that connect targeted locations/areas, but also benefit the wider consumer base in the vicinity of connected sites, with national governments serving as the anchor tenant required for enhanced service provision |
| EIC | * Ethiopia Investment Commission- supports in creating enabling environment to attract external and internal investment actors to achieve targeted activities identified under sub-components 1.1., 1.2., and 1.3. |
| EED | * Ethiopia Enterprises Development will support the promotion of women-owned enterprises and the transition of the enterprises from small scale level engagement to progressively large scale development and contributes to supply goods and services for the digital industries |
| Ethio-Telecom | * Ethio-telecom supports on resource sharing for digital sector development and in realizing targeted activities listed under sub-components 1.1., 1.2., and 1.3. * According to “Telecommunications Infrastructure Sharing * and Collocation Directive No. 793/2021”, Ethio-Telecom will share an Access Provider’s active and passive infrastructure, including, but not limited to, the sharing of network elements, systems, equipment, facilities, premises or rights of way, with an Access Seeker, subject to an agreement between the parties; and * Will allow the placement of network equipment or systems that are used for service provision by a Telecommunications Operator together with network equipment or systems installed at premises of other Telecommunications Operator at a technically feasible location on the basis of agreement reached between them. |
| Safaricom | * will provide TA on activities related to sub-component 1.1.-f., related to low- cost online access facilities, particularly related to school computer lab units |
| UNHCR | * Will work on benefit packages related to IDP/refugees and host communities |
| Regional | Innovation and Technology Commission-Gambell  Innovation and Technology Bureau-Somali  Science, Innovation and Technology Commission-Afar | * Governs the ICT, Innovation, technology and digital sector in the region * Coordinates with regional government line institutions, ICT & digital sector-based unions, the private sectors, the civil societies and research & academia, by (i) providing services of implementing program activities directly financed by the EA-RDIP II; and (ii) implementing their own project activities financed by themselves contributing to the overall project objectives. * Responsible for policy development and enforcement related to digital sector development; utilization and management of government, private and community forest * provides expert advice for digital expansion including on topics such as backbone connectivity, last mile connectivity, establishing enabling ICT institutional environment, data and online market development; * coordination of EA-RDIP II activities and projects in the regional state; ensuring environmental and social integrity; jointly resolving digital sector resource related disputes with relevant institutions; * leads implementation of the digital integration initiative |
| Regional PIU | * Coordinates overall implementation of the EA-RDIP project activities, administratively supported by the regional innovation and technology commissions or bureaus. * Receives strategic guidance from the Afar Regional State vice president. |
| Multi-sector Steering Committee and Technical Committee | * Provide strategic guidance and technical inputs respectively, to guide the EA-RDIP II project implementation. |
| Regional bureaus or offices of BoWSA, BoTI, BoEPA, BoLS, BoH, BoE, BoPD and BoLAU | * Support the EA-RDIP project implementation and coordinate activities on the ground through their decentralized staff, particularly those activities potentially conducive to produce more USF financed from own sources or from private sector. * Specific activities to be implemented by the relevant bureaus will be defined with specific accountabilities, including lead and supporting roles and budgets, in the joint annual work program and budget and joint procurement plan. * Involve in joint work planning, budget formulation and reporting for the EA-RDIP II and ICT related policy development/harmonization |
| Zonal | Cluster based safeguard coordinators | * Oversee the safeguards work of the EA-RDIP II woreda coordinators and ensure that environmental and social risk managements are implemented according to the EA-RDIP II environmental and social risk management instruments. |
| lead facilitators hosted at Communication Office | * Provide technical and operational support to EA-RDIP II woreda coordinators and EA-RDIP II safeguards coordinators to ensure satisfactory implementation. |
| Woreda | Cluster Area Project Personnel (CAPP) with Woreda administration office, sector experts | * Support on different activities of the EA-RDIP project activities * EA-RDIP II woreda coordinators will: (a) reinforce woreda capacity to coordinate implementation of EA-RDIP activities, related projects and operations, (b) lead implementation of activities directly funded by EA-RDIP II financing, and (c) support fiduciary aspects of EA-RDIP including ESRM, activity reporting, financial management and procurement. |

**3.6.2. Roles and responsibilities of the Project Implementation Unit (PIU)**

The PIU is responsible for the overall coordination and management of project implementation activities, including the day-to-day fiduciary requirements, liaising technically with all partner agencies, NGOs and the private sector actors involved in the EA-RDIP implementation. With the support from MInT, the PIU carries out the following tasks and is responsible for:

* E & S implementation and reporting
* Financial management and reporting
* Procurement management and reporting
* Monitoring and evaluation for EA-RDIP II as per each defined indicator in the results framework and others as required by government and desired by the program team
* Direct implementation of specific technical assistance activities financed by the EA-RDIP
* Joint annual work programming and budget preparations, with inputs from MInT, ECA, MoTRI and regional bureaus and other relevant entities; and preparation of the annual procurement plan
* Local level PIU team engage and work with Woreda and Kebele officials (Woreda administrators and experts) and other actors to coordinate EA-RDIP II interventions and related initiatives across sectors that have an impact on digital sector (promoting inclusive digital service approach)
* Facilitating coordination with EA-RDIP related initiatives, i.e., liaising with executive-level focal points and regional innovation and technology bureaus or commissions, as required
* Ensures that services funded by USF verification are carried out through a third party.
* Ensuring the delivery, implementation and reporting on the agreed SEP for the EA-RDIP II.
* Conducting strategic communication through MInT
* Serving as secretariat for the National EA-RDIP II Steering Committee and National EA-RDIP Technical Working Group and actively participating in meetings

4.0. POTENTIAL BENEFITS AND ADVERSE EFFECTS OF THE PROPOSED INVESTMENT

4.1. Potential Benefits of the Project

In general, promote the digital market within and among the target countries of the EA-RDIP, remove cross-border barriers, and create enabling environment. Specific potential positive socio-economic impacts of the project include:

1. **General Benefits**

* Single connectivity market created due to infrastructure (Terrestrial Fiber, Submarine Cables, Bulk Purchase) and services (Fixed and Mobile Broadband Internet) infrastructure development. Support connectivity to facilitate technical interoperability of systems, data portability and data provenance both within and among the target countries of the EA-RDIP II.
* Single data market enhanced through implementing data protection and privacy, cybersecurity and content regulation. Thus, enabled cross-border trusted free flow, storage, and processing of data.
* Single online market created including digital ID, digital payments, E-transactions, consumer protection, digital public services, trade and customs, and logistics
* E-commerce, digital services and the functions that support them ensured across the borders of the target countries of the EA-RDIP II.
* Trade and customs barriers removed among the target countries of the EA-RDIP II for goods purchased online.
* The data protection and privacy laws ensured among the target countries allow for cross-border data transfers and share cybersecurity resources in the region.
* Interoperability and mutual recognition encouraged for data protection, and data exchange flows through national and regional legal frameworks.
* Cross-border barriers removed among the target countries of the EA-RDIP II to infrastructure and connectivity (wholesale and retail).
* Digital skills and innovative environment enhanced.

1. **Social Benefits**

The following are the social benefits identified from the stakeholder and community consultation sessions carried out during the preparation of the ULCPF.

* If women are provided with the required support in the ICT sector, they are active and effective in transforming their life and changing the fate of a given household and country,
* Private market is efficient in transforming women, thus the EA-RDIP II can benefit from exploiting the private sector/market
* TVET and ETHERNET can contribute on providing TA to women and their enterprises
* Local coordinators at rural and urban areas can be women and can drive the women owned enterprises in a positive direction, MIS, training, follow-up and designating a hotline for GRM can help to prevent or mitigate potential impacts,
* The project will benefit women, given that it is innovation and technology focused. Since it is linked with Djibouti, it will help to strengthen the existing socio-economic tie and helps to enhance cross-border data market and online market integration.
* Being supported with sufficient training, involving women unions or associations and working on market network can provide a better probability of implementing the project component related to women-owned enterprises promotion.
* Digitalized service platforms saves transportation costs and time when accessing government services
* Digitalized service platforms adds another layer of privacy by avoiding middlemen
* Digitalized facilitated informal workers’ access to pandemic relief after the onset of disasters like drought, flood or man-made disasters.
* The mix of social media platforms will keep beneficiaries informed and enable them to share information,
* GRMs will be available through multiple channels, such as telephone hotlines, email and SMS

***Assistance to Vulnerable People:*** The project will assist vulnerable people are affected by the project related displacement and resettlement process. Such assistance may include the following activities:

* Identification of vulnerable people, how the project makes them more vulnerable and identification of the cause and impacts of their vulnerability, preferably through an identification mechanism devised with, and implemented by the beneficiary community; this step is critical because often vulnerable people do not participate in community meetings, and their disability/vulnerability may remain unknown;
* Identification of required assistance at the various stages of the process: negotiation, compensation, moving;
* Implementation of the measures necessary to assist the vulnerable person; and,
* Monitoring and continuation of assistance after resettlement and/or compensation, if required, and/or identification of those entities, whether Governmental or not, that could sustain the Program’s assistance beyond its period of activity.
* Assistance may take the following forms, depending upon vulnerable persons’ requests and needs:
* Assistance in the compensation payment procedure (e.g., specifically explain the process and procedures, make sure that documents are well understood);
* Assistance in the post payment period to secure the compensation money and reduce risks of misuse/robbery;
* Assistance in moving: providing vehicle, driver and assistance at the moving stage, assist the person in identifying his/her resettlement plot;
* Assistance in building: providing materials, workforce, or building houses
* Counseling in matters such as family issues, health, etc;
* Assistance during the post-resettlement period, particularly if the solidarity networks that the vulnerable person was relying on have been affected: food support, health monitoring, etc.; and,
* Health care if required at critical periods, particularly during moving and transition periods.

4.2. Potential Adverse Risks and Impacts of the Project

1. Risk 1: Risk on lack of capacities. Application via digital technologies could exclude those unable to use ICTs. Lack of capacity on the use of offline digital tools to circumvent issues related to the lack of internet connection or digital literacy.
2. Risk 2: Risk of project activities not being safeguards responsive during the project life cycle . Where HUCs form minorities and are considered by majority groups as having lower social and economic status, negative impacts from lack of safeguards may be more severe than with other groups. If the PIU failed to use a special approach that considers the context and unique socio-economic conditions of the HUCs, they will not maintain the optimum level of safeguarding the interest of HUCs and preventing them from being dis-proportionately affected by the adverse risks and impacts of EA-RDIP II.
3. Risk 3: Risk of exclusion of affected stakeholders (HUCs like pastoralists, refugees, IDPs and others) due to their vulnerability and/or potential concerns about the project. HUCs and those relying on pastoralism or hunting and gathering may have lower incomes and be more affected by private provider pricing of digital services. In addition, social and political dynamics in a given area may reduce access to digital services to those of a lower social status (for example preferential routing of digital infrastructure). Where HUCs form minorities, and are considered by majority groups as having lower social and economic status, a lower level of participation by HUCs may be likely. That is the project may exclude those without access to ICTs and the internet and lacking digital literacy, especially in remote areas.
4. Risk 4: Risk on Women. Where HUCs form minorities and are considered by majority groups as having lower social and economic status, exclusion, risks and impacts for historically underserved women are likely to be greater.
5. Risk 5: Risk on the community due to hazardous materials (mainly batteries, e-waste, chemicals for land clearance). Increased risk may be envisaged for groups of lower economic status and higher unemployment, including children, due to unfavorable siting of settlements, greater informal housing and collection of materials, hence may have a greater impact on HUCs. The risks may include exposure to pollution such as air, construction waste, noise, water, and solid and liquid wastes, e-wastes, and inappropriate disposal of wastes, as well as impacts related to project workforce interactions with members of project affected local communities. Increased incidence of communicable and vector-borne diseases may occur because of construction activities. Construction activities may also result in an increase in traffic-related accidents and injuries to local communities. These risks could have considerable impacts on community health. For example, people can be exposed to e-waste-related toxicants though air (e.g., open burning of e-wastes), soil (e.g., random disposal of e-waste), water via ingestion (e.g., food chains contamination due to disposal and primitive recycling processes), inhalation, and dermal absorption (e.g., dust and direct exposure of workers who labor in poor recycling areas and their families). E-waste is not biodegradable with a strong tendency to bioaccumulate in agricultural lands posing a community health concern. These risks could become more apparent in the long term perhaps during and post-project implementation.
6. Risk 6: Ambient perturbance on the community due to intense works locally at construction and decommissioning, and new economic activities subsequent from productive use of the ICT.
7. Risk 7: Risk on community health, safety and/or security due to the influx of people, mainly project workers and other new comers subsequent to the new economic activities resulting from the productive use of the ICT. Non-local workers who will be engaged in the construction activities may increase the community risk of sexually transmitted diseases, and risks to women and girls if not adequately supervised and trained. If HUCs are viewed as lower social or economic status by neighboring ethnic groups, women and girls from the HUCs/ groups may face higher risks in this regard.
8. Risk 8: Risk on damage of cultural heritage. Damage, removal or destruction of cultural heritage may have a disproportional effect on HUCs, due to imbedded belief systems, cultural value and minority cultural identities, but can be mitigated through the effective participation of HUCs in project sites.
9. Risk 9: Risk to HUCs. HUCs and those relying on pastoralism or hunting and gathering may have lower incomes and be more affected by private provider pricing of digital services. Thus, they fail to afford the available services. In addition, social and political dynamics in a given area may reduce access to digital services to those of a lower social status (for example preferential routing of digital infrastructure). The presence of conflict among local communities, political unrest and social rift in project areas can restrict access to use digital services.
10. Risk 10 Risk on labour conditions. Increased risk may be envisaged for groups of lower economic and education status, , including HUCs. Since the project requires a professional skills on more technical aspects of the sub-project activities and the utilization of digital technologies where the community members can involve in providing services through data centers, IXP and data content distribution networks (CDNs), requires digital literacy they may not get a chance of being employed.
11. Risk 10b: Risk on labour opportunities. Increased risk may be envisaged for groups of lower economic and education status, thus provide minimal local level employment opportunities, including vulnerable groups. As risks are reassessed during the project (see the Environmental and Social Management Framework (ESMF) for further information), further risks may be identified that were not apparent at the planning stage, or have developed due to factors within or external to project activities. This, for example, may include the development of policies under Component 1 that affect HUCs. When the level and/or the types of skills the HUCs has are at a lower level than those required to adequately perform the job, they will not allowed to join the workers engaged in the project.
12. Risk 11: Risks related to stability and conflict In addition to the project risks, at this time due to ongoing instability in Ethiopia, there is increased risk of conflict and violence. Often groups meeting ESS7 standard occupy the periphery of mainstream society, culture and the economy, and therefore (while all Ethiopians are affected) they may be an increased risk from instability and conflict. Any related risks resulting directly or indirectly from project activities require a high degree of caution and analysis for mitigation and avoidance measures. The presence of biases based on ethnic background or political view can restrict HUCs and other vulnerable groups can be restricted from getting opportunities for professional development or higher occupational position placement. This limits the above raised groups from improving their professional careers and personal aspirations.
13. Risk 12: Disproportionate impacts on Historically Underserved Communities (HUCs):As per Article 89 of the Constitution of the FDRE, there are communities in all the three connectivity routes proposed in the EA-RDIP II recognized as Historically Underserved Communities (HUCs) that meet a distinct social and cultural group identified in accordance with paragraphs 8 of the ESS7. In the Ethiopian context, Afar, Ethiopian Somali, Benishangul-Gumuz Gambella as well as pastoralists and semi-pastoralist in parts of Oromiya and former SNNPR Regional States are categorized as Historically Underserved People (HUP), that meet the criteria set under ESS7. Owing to this fact, there are good reasons that underline the disproportionate adverse resettlement impacts of the project to the HUCs:

* The pastoral communities in the project target areas are inextricably linked to the land on which they live and the natural resources on which they depend. This means that HUCs’ means of livelihood (mobile pastoralism) cannot be possible if they are relocated from collective land under traditional ownership or customary use and, thus, their economic production systems may be dismantled.
* HUCs’ generally lack the necessary economic skills to survive if relocated to a different living environment.
* HUCs’ economic, social, and legal status frequently limits their capacity to defend their rights to, and interests in, land, territories, and natural and cultural resources, and may restrict their ability to participate in and benefit from development projects.

**4.3. Mitigation and Management Measures**

To avoid or minimize adverse impacts to HUCs or minority groups, while at the same time ensuring their inclusion in benefits and full participation the project will:

1. Mitigation mechanism on risk on lack of capacities: The choice of technology and software is crucial for the technical sustainability of ICT programs. The use of low-cost, simple and traditional technologies is often recommended. The existing technologies in relation to IXP, DCs and CDN . Technology can be changed by the characteristics of its use or by changes in the physical or social setting within which the technology exists. Hence, the capacity building efforts will focus on HUCs contexts and level of exposure to digital technologies, practice HUCs based application and combining unique needs of the HUCs and their knowledge base,
2. Mitigation mechanisms for risk of project activities not being safeguards responsive during the project life cycle: check if consultations with HUCs were sufficient and the HUCs have accepted mitigation measures being proposed. Ensure whether the identified risks are addressed on SDP and other ESRM instruments. Provide capacity building training to social safeguards specialist and schedule the implementation of the proposed safeguards compliance procedures and monitoring procedures. Identify procedures for addressing HUCs related impacts which may occur during implementation but were not predicted in the impact assessment.
3. Mitigation measures to risk of exclusion of affected stakeholders (HUCs like pastoralists, refugees, IDPs and others) due to their vulnerability and/or potential concerns about the project: Among others the following measures are indicated a)PIU and community leaders should ensure equal participation of HUCs during consultation and along the project cycle; b) Carry out a continuous awareness-raising of HUCs’ rights to land, natural resources and livelihoods; c) Use of communication mechanisms that will assure their participation in the project/Use of local leaders from their groups; d) Adequate communication framework to ensure HUCs voices are heard, pending issues resolved and grievances heard and e) enhance the HUCs capacity in digital literacy.
4. Mitigation measures of risk on Women exclusion: Key actions to address the exclusion include giving girls opportunities to access top digital learning environments and engage with digital technology, developing digital skills programs toward employability, providing digital skills training for out-of-school girls, creating safe spaces that inspire participation and inclusion in digital education for girls and boys, and encouraging female role models in the digital and tech sectors.
5. Mitigation measures for risk on the community due to hazardous materials (mainly batteries, e-waste, chemicals for land clearance): The following measures are suggested

* Further reference shall be made to the relevant WBG EHS Guidelines to manage OHS risks to security personnel.
* Conduct regular training and awareness project focused on the key and relevant content of international and national guidance, the ESMP, Code of Conduct, accident and incident reporting, accident root cause analysis and remedial measures, projects for project workers, community and IAs;
* Environmental and Social Clauses for Contractors Consultation (it will be included in bids and contractors’ contracts)
* Adhere to Hazardous material and Wastes Management set out in the ESMF
* Adhere to Labor Management Procedures (LMP).
* Adhere to Liquid and Solid Waste Management Guideline prepared for EA-RDIP II.
* Ensure ESHS/OHS provisions are incorporated in the bidding documents and contract agreement for construction.
* Ensure that waste management is operable to reduce the fuel element for fire
* Ensure a fire alarm/smoke alarm system is operable within the sites
* Conduct regular Environmental and Social Monitoring and audit (the security monitoring will be included in regular E&S monitoring).

1. Mitigation measures for risk on ambient perturbance on the community:

The following mitigation measures are recommended to minimize impacts on the communities around:

a) Dust

- Regularly spray water to suppress the re-suspension of dust during construction; particularly during use of gravel roads and dirt tracks.

- Limit the speed of vehicle movements to minimize dust.

- Laborers working in dusty areas should be provided with requisite protective equipment such as dust masks and dust coats for preventive and protection purposes.

b) Noise

- Avoid using heavy construction machinery during night-time.

- Select transport routes to minimize noise pollution in sensitive areas.

- Install noise silencer on the construction machineries.

- Where necessary, ensure good and appropriate selection of agriculture machinery and equipment with low level of noise .

- Where necessary, fit with noise mufflers and maintain the construction machineries

and equipment timely to minimize excessive noise releases.

1. Mitigation measures for risk on community health, safety and/or security due to the influx of people, mainly project workers and other new comers subsequent to the new economic activities resulting from the productive use of the ICT:

* Undertaking periodic awareness creations for workforce on safe working practices.
* Provision of STDs, HIV and AIDS prevention measures such as distribution of condoms to workers/local people both male and female.
* (IEC) messages about HIV/AIDS, STDS, COVID 19 infection, protection, counseling and care.
* Include best practice health and safety provisions in the construction contracts and ensure strict compliance with national legislation and EHS Guidelines,
* Ensure notifications at ongoing construction canals.
* Disseminate traffic management plans in the project area, through campaigns in schools and communities with other relevant sectors, and ensure speed limits and traffic controls for project vehicles and equipment.

1. Mitigation measures for risk on damage of cultural heritage:

* Inventory of Heritage features and Consultation with Community and official stakeholders (including local bodies) during ESIA
* Avoid risks and impacts: (i) Safety check of fragile structures/features to plan andavoid the specific type of works, (ii) Prepare alternate design to avoid sittingof structures/ activities near heritage features; or prevent disturbances or access restrictions to such areas
* Consider at the design stage, risks to heritage due to potential overexploitation or impacts due to overuse

1. Mitigation measures risk of HUCs capacity to afford services:

* Selecting digital service platforms which are sustainable and less costly,
* Contextualizing digital platforms and services to the unique context, demand and interest of HUCs,
* Introducing voucher or waiver/cost sharing mechanism to enhance the affordability capacity of HUCs.
* Introducing adult education or sort term trainings to fill the skill gaps of HUCs in using the digital platforms, services and devices

1. Mitigation measures on risks related to labor conditions on HUCs:

* Compliance with wage payment regulations.
* Establishment of an effective grievance mechanism.
* Equipping workers with the tools they need for their jobs.
* Conduct awareness creation program related terms and conditions of employment including their rights and obligations

1. Mitigation measures on lack of labor opportunities for HUCs: the following measures are suggested:-

* Recruitment policies will need to consider social issues and project acceptability. Considering the high local impact of the project in terms of land and disruption of existing lifestyles, together with the distrust of "outsiders", it is probably wise to maximize local employment.
* Local residents are looking forward to construction-related employment opportunities,

especially refugees, IDPs, women and landless youth.

1. Mitigation measures on risk of disproportionate impact on HUCs:

* Strengthening the institutional capacities of HUCs and local government for better understanding on project benefits and potential adverse risks and impacts;
* Increasing local skills and capacities in adverse risks and impacts screening and mitigation;
* Supporting structural (e.g., construction of digital infrastructure) and non-structural (e.g., building codes and policies/procedures for risk analysis of infrastructure projects) measures to reduce or avoid the possible impacts of natural hazards; and
* Building up and diversifying livelihoods assets and activities.
* The site-level SDP/ESIA process and/or targeted assessment process will be conducted and PIU will consult local government and community leaders, as well as local organizations and experts, to ensure a good understanding from multiples sources of community and ethnic dynamics at each implementation site. The approach to HUCs will be designed to avoid isolating ethnic groups or exacerbating local tension.

1. The PIU will ensure key project stakeholders, principally representatives of MInT, local government and principal private sector partners, are sensitized by a consultant with appropriate experience of vulnerable communities in Ethiopia on relevant groups to ESS7, and the ESF requirements under WB projects. This will also be a key intervention to ensure vulnerable communities’ inclusion in discussions, policy development and investment within project components 1 and 3, and wider inclusion in project processes and benefits.
2. The PIU will ensure that HUCs in project areas (as well as any national organization) are informed of activities, design, and implementation processes to seek input and to provide clarification. This should include informing national or local NGOs.
3. PIU will ensure that consultations are carried out inclusively, for example ensuring that locations, languages, timings and pre-notification are done in non-discriminatory and culturally appropriate manners. This includes understanding limits to communications access, and providing full or summary documentation in a language and format that is accessible to communities.
4. Minority groups/vulnerable peoples will have equitable access to opportunities, such as employment within project activities, and benefits of market digitalization. Given the lower exposure of the minority groups in the digital sector, initiatives focused on digital literacy will allow them to benefit from the outcomes of the project, thereby granting them an equitable access to opportunities.
5. The GRM will contain additional measures to ensure maximum accessibility to the mechanism by community members, including the nomination of a trusted local focal point(s) by the communities in question. SEP, screening reports, both draft and final ESIA/ESMPs and SDP/ULCPF, if needed, and monitoring reports are to be disclosed, including translation and/or presentation where necessary. Measures must be developed, consulted on, publicly disclosed and put in place prior to the start of any activities that might cause adverse impacts.

**4.4. Social Development Plan: Potential Risks, Challenges, Opportunities and Mitigation Measures**

| **Potential Social Risks, Impacts and challenges** | **Mitigation Measures** | **Responsible Body** | **Budget** |
| --- | --- | --- | --- |
| Risk on lack of capacities of HUCs | The choice of technology and software is crucial for the technical sustainability of ICT programs. The use of low-cost, simple and traditional technologies is often recommended. The existing technologies in relation to IXP, DCs and CDN . Technology can be changed by the characteristics of its use or by changes in the physical or social setting within which the technology exists. Hence, the capacity building efforts will focus on HUCs contexts and level of exposure to digital technologies, practice HUCs based application and combining unique needs of the HUCs and their knowledge base, | PIU at MInT, Contractors, Cluster Area Project Personnel (CAPP) with Woreda administration office, sector experts | Core activity of component 1,2,3 and 4 and budget from ESRM instrument implementation |
| Risk of project activities not being E&S safeguards responsive during the project life cycle | check if consultations with HUCs were sufficient and the HUCs have accepted mitigation measures being proposed. Ensure whether the identified risks are addressed on SDP and other ESRM instruments. Provide capacity building training to social safeguards specialist and schedule the implementation of the proposed safeguards compliance procedures and monitoring procedures. Identify procedures for addressing HUCs related impacts which may occur during implementation but were not predicted in the impact assessment. Furthermore, hiring or assign ERSM expert at national PIU and regional project coordination office. Assign ESRM focal person at woreda level and providing the capacity development training on the Projects E&S instruments requirements and WB ESF standards are additional suggestions. | PIU at MInT, Contractors, Cluster Area Project Personnel (CAPP) with Woreda administration office, sector experts and lead facilitators hosted at Communication Office | Core activity of component 4 and budget from ESRM instrument implementation |
| Risk of exclusion of affected stakeholders (HUCs like pastoralists, refugees, IDPs and others) due to their vulnerability and/or potential concerns about the project | The following measures are indicated  a)PIU and community leaders should ensure equal participation of HUCs during consultation and along the project cycle; b) Carry out a continuous awareness-raising of HUCs’ rights to land, natural resources and livelihoods;  c) Use of communication mechanisms that will assure their participation in the project/Use of local leaders from their groups;  d) Adequate communication framework to ensure HUCs voices are heard, pending issues resolved and grievances heard and  e) enhance the HUCs capacity in digital literacy. | PIU at MInT, Contractors, Cluster Area Project Personnel (CAPP) with Woreda administration office, sector experts and Woreda women and child affairs office and pastoral development office | Core activity of component 1,2 and 4 and budget from ESRM instrument implementation |
| Risk on Women exclusion | Key actions to address the exclusion include giving girls opportunities to access top digital learning environments and engage with digital technology, developing digital skills programs toward employability, providing digital skills training for out-of-school girls, creating safe spaces that inspire participation and inclusion in digital education for girls and boys, and encouraging female role models in the digital and tech sectors. | PIU at MInT, Contractors, Cluster Area Project Personnel (CAPP) with Woreda administration office, sector experts and Woreda women and child affairs office | Core activity of component 4 and budget from ESRM instrument implementation |
| Risk of labor influx | -Conduct labor influx risk screening prior to sub-projects implementation (as part of ES instruments).  -Ensure that sub-project planning considers workforce estimates, skills required, workforce recruitment policy and management, and availability of workforce housing and other utilities.  -As much as possible, recruit sub-projects workforce from the local labor (particularly unskilled labor).  -Monitor change in labor influx throughout the life cycle of a sub-project, effectiveness of mitigation measures,  -Conduct training (once in a year) for all sub-project participants on the likelihood, significance and management of labor influx. | PIU at MInT, Contractors, Cluster Area Project Personnel (CAPP) with Woreda administration office, sector experts and Woreda women and child affairs office and labor and skill office | Core activity of component 4 and budget from ESRM instrument implementation |
| Risk on damage of cultural heritage | - Inventory of Heritage features and Consultation with Community and official stakeholders (including local bodies) during ESIA  - Avoid risks and impacts: (i) Safety check of fragile structures/features to plan andavoid the specific type of works, (ii) Prepare alternate design to avoid sittingof structures/ activities near heritage features; or prevent disturbances or access restrictions to such areas  - Consider at the design stage, risks to heritage due to potential overexploitation or impacts due to overuse | PIU at MInT, Contractors, Cluster Area Project Personnel (CAPP) with Woreda administration office, sector experts and Woreda women and child affairs office, culture and tourism office and EPA | Core activity of component 4 |
| Risk of HUCs capacity to afford services | - Selecting digital service platforms which are sustainable and less costly,  - Contextualizing digital platforms and services to the yunique context, demand and interest of HUCs,  - Introducing voucher or waiver/cost sharing mechanism to enhance the affordability capacity of HUCs.  - Introducing adult education or sort term trainings to fill the skill gaps of HUCs in using the digital platforms, services and devices | PIU at MInT, Contractors, Cluster Area Project Personnel (CAPP) with Woreda administration office, sector experts and Woreda women and child affairs office, labor and skill office | Core activity of component 2 |
| Risks related to labor conditions on HUCs | - Compliance with wage payment regulations.  - Establishment of an effective grievance mechanism.  - Equipping workers with the tools they need for their jobs.  - Conduct awareness creation program related terms and conditions of employment including their rights and obligations | PIU at MInT, Contractors, Cluster Area Project Personnel (CAPP) with Woreda administration office, sector experts and Woreda women and child affairs office, labor and skill office | Core activity of component 1 |
| Lack of labor opportunities for HUCs | the following measures are suggested:-  - Recruitment policies will need to consider social issues and project acceptability. Considering the high local impact of the project in terms of land and disruption of existing lifestyles, together with the distrust of "outsiders", it is probably wise to maximize local employment.  - Local residents are looking forward to construction-related employment opportunities,  especially refugees, IDPs, women and landless youth. | PIU at MInT, Contractors, Cluster Area Project Personnel (CAPP) with Woreda administration office, sector experts and Woreda women and child affairs office, labor and skill office | Core activity of component 1 |
| Risk of disproportionate impact on HUCs | - Strengthening the institutional capacities of HUCs and local government for better understanding on project benefits and potential adverse risks and impacts;  - Increasing local skills and capacities in adverse risks and impacts screening and mitigation;  - Supporting structural (e.g., construction of digital infrastructure) and non-structural (e.g., building codes and policies/procedures for risk analysis of infrastructure projects) measures to reduce or avoid the possible impacts of natural hazards; and  - Building up and diversifying livelihoods assets and activities. | PIU at MInT, Contractors, Cluster Area Project Personnel (CAPP) with Woreda administration office, sector experts and Woreda women and child affairs office and pastoral development office | Core activity of component 1,2,3 and 4 |

5.0. GRIEVANCE REDRESS MECHANISM IN EA-RDIP II

5.1. Proposed Grievance Redress Mechanism

A project-level Grievance Redress Mechanism (GRM) is developed as part of the EARDIP SOP II- SEP and will be implemented throughout the project cycle. The project GRM offers a special consideration for DVGs. To this effect, the institutional setup of the project GRM considers the voice of the disadvantaged and vulnerable groups (DVGs) and Historically Underserved Communities (HUCs) by including their representative in the Project Site Grievance Management Committee (PSGMC) and Kebele Grievance Management Committee (KGMC). To make the project GRM accessible to the project-affected communities, including HUCs and VDGs, the PSGMC serve as the grassroots level of entry point.

The members of PSGMC include clan leaders, community elders, religious leaders, and representatives of women, youth and other DVGs. The PSGMC will handle grievance in a culturally appropriate manner and provide opportunities to utilize the customary conflict resolution system before referring to the next level of appeal. Also, this venue will help to resolve issues and complaints of affected person at the earliest point to make the project GRM process faster and cost-effective. In case, agreement is not reached through the mediation of the PSGMC, the person with the complaints presented his/her case to the KGMC. The members of the KRMC shall include the Kebele administration or council member, the project area focal person, representatives of project-affected communities (clan leader and elected community elder), and representatives of DVGs and HUCs. With similar manner of grievance appeal and management through the PSGMC, the process of resolving grievance through KGMC will look all the possible opportunities to solve grievance based on the customary system. The project GRM process maintaining special consideration for DVGs and HUCs will extend to Woreda and Regional Grievance Management Committee structures (see details in the SEP). Yet, the project GRM will not impede the rights of the project-affected party with complaints, for taking the case to the regular court system.

Moreover, the project GRM is complementary to other existing formal grievance redress mechanisms within the legal and administrative structures including Police, Anti-Corruption Office, and Human Rights Commission. Project affected parties shall also be informed about the existing legal and formal mechanisms and be allowed to make use of them wherever they find it necessary.

5.2. GRM Steps and Timeframe

The project grievance process will be simple and administered as far as possible at the local levels to facilitate access, flexibility and ensure transparency. To achieve this, the project GRM involves the following steps and timeframe alongside each step.

**Step 1:** Receiving complaints at PSGMC meeting place. The means of receiving complaints provides multiple options for submission of grievances by project-affected persons in order to minimize barriers that may prevent others from forwarding their issues. These channels include the following:

1. *In person*: This may be verbal or written submissions done at any time through face-to-face interactions with members of the PSGMC.
2. *Grievance box*: Grievance boxes placed in strategic places of project implementation sites or communities where project affected parties would drop in their grievances at any time.
3. *Phone Call or SMS:* The project-affected parties with complaints can make a call and text SMS to any of the members of the PSGMC for presenting his/her complaints orally and to arrange the meeting with the committee for submission in written.
4. The members of the PSGMC will meet within one day after the complaint is being received to resolve the case and let the person with the complaints know the decision within 24 hours.
5. If agreement not reached, the PSGMC will submit the case to KGMC in the same day.

**Step 2:** The KGMC will meet within 24 hours after receiving unresolved cases of complaints from the PSGMC for decision. The KGMC will let the PSGMC know the decision within the same day which in turn let know the person with complaints within one day.

**Step 3:** W/CGMC will sit for meeting to investigate the complaints received from the KGMC within a week time and decision will be made accordingly.

**Step 4:** As members of the RGMC will meet every three weeks to investigate and make decision on the unresolved complaints received from the W/CGMC. As the RGMC mostly likely receive complex issues, the process of decision making will yet take another one-week time as appropriate.

**Step 5:** In due process from step 1 to step 4, the person with complaints will receive the decision made by the highest level of the GRM appealing system within one month time. If still not satisfied with the decision made by the RGMC, the person will be informed the right to appeal through the formal court system and he or she can be decision accordingly.

*A written record of all complaints will be maintained, having all the necessary information required for its management (*see SEP for details*).*

The project will provide contact details for responsible personnel assigned for the GRM, during consultation and awareness raising sessions, MInT websites as well as posted in places with full view of the public, as required, any written form exists or the steps of the GRM procedure will be translated in to local language understandable to the HUCs. In the case of a complaint where anonymity is requested, the grievance management committees at all levels, PIU and any resulting grievance process must respect this condition.

Awareness on grievance redress procedures will be created through a public awareness campaign, with the help of print and electronic media and radio. The implementing PIU will ensure that the HUCs are made aware of the GRM and their entitlements and assured that their grievances will be redressed adequately and in a timely manner. However, where HUCs or the community are not literate in languages other than their own, special assistance will be sought from community leaders, CBOs, and NGOs having knowledge of their language, culture, or social norms, or having working experience among the HUC, who will help the HUCs express their concerns, consult about mitigating measures, and explain to them the project and its potential impact on the HUCs.

5.2. World Bank Grievance Redress Services

Communities and individuals who believe that they are adversely affected by a WBG supported program, may submit complaints to existing program-level grievance redress mechanisms or the WBG‘s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address program-related concerns. Program affected communities and individuals may submit their complaint to the WBG‘s independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WBG non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the WBG‘s attention, and WBG Management has been given an opportunity to respond. For information on how to submit complaints to the WBG‘s corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the WBG Inspection Panel, please visit you may download relevant information on how to file a request from the following source: [www.inspectionpanel.org](http://www.inspectionpanel.org).

6.0. INFORMED CONSULTATION AND MAIN FINDINGS

This section, among others, deal, with key issues like the community’s reflections, concerns and aspiration for the EA-RDIP II; community institutions; livelihoods, household structure and leadership and causes of conflict and traditional resolution mechanisms in the area. Furthermore, it focuses on natural resources use and control in the project areas; types and use of land tenure; ethnic relationships in the project areas; cross-cutting issues in the EA-RDIP II communities involved in the underserved local community planning framework ; community involvement in development projects; summary of community consultation with community representatives and community involvement in the EA-RDIP II project.

6.1. Engagement of ULCs and other Stakeholders

As envisaged by the Stakeholder Engagement Plan (SEP) prepared for the project, the project will conduct meaningful consultations with all the project identified stakeholders, including the ULCs in and around the project area to ensure that the priorities, preferences, and needs of the indigenous groups are taken into consideration adequately while designing ULCDP and other mitigation mechanisms. With that objective in view, a strategy for consultation with UL communities has been proposed so that all consultations are conducted in a manner that ensures full and effective participation. The approach of full and effective participation is primarily based upon transparent, good faith interactions, so that everyone in the community is empowered to join fully in the decision-making process. It includes providing information in a language and manner the community understands and, in a timeframe, compatible with the community’s cultural norms. Care will be taken to maintain transparency of the Project, reduce potential conflicts, minimize the risk of project delays, and enable the Project to design the ULCDP and required resettlement and the rehabilitation program as a comprehensive development program to suit the needs and priorities of the project affected ULCs.

The development of the ULCPF/ULCDP will follow a participatory approach to enable ULCs to have a role in the project planning and development process. Once detailed design is finalized, the detailed project activities and location of the UL communities and impacts on UL community and IPs households will be determined. ULCs that will be impacted due to the implementation of the project will be interviewed on an individual basis, consulted in group discussions and meetings to understand and collect their views on their needs, priorities, and preference regarding the project implementation. Separate focus group discussions will be organized with indigenous communities to assess the project impacts and benefits to these groups. Based on ESIA findings, an ULCDP will be prepared with the feedback of consultation and respects their views, concerns, requests and recommendations and also fully considered.

The affected ULCs will be actively engaged in all stages of the project cycle, including project preparation, and feedback of consultations with the UL communities will be reflected in the project design, followed by disclosure. Their participation in project preparation and planning will inform them about project design and will be continued in the project execution. Once the ULCDP is prepared, it will be translated into Amharic and local language (if possible) and made available to them before implementation.

The ULCPF/ULCDP implementation will continue this participatory approach to enable meaningful consultation and effective participation of ULCs. The project will adopt a strategy to ensure involvement of ULCs in project preparation and implementation. Core components of this strategy are (a) the representation of ULC on ULCPF/ULCDP implementation structures; (b) a grievance management system for the resolution of grievances and disputes; and (c) monitoring and evaluation mechanisms to track implementation issues. The detailed implementing plans will be developed jointly with the UL communities. The project team will work with them on the community schemes. For household-specific schemes and activities, the project team will work with individual households belonging to indigenous people to develop and implement their household-specific schemes. Project’s SEP outlines the specific measures proposed for engagement with the IPs and the vulnerable groups throughout the project lifecycle. The time and location of consultations will be determined as appropriate to the needs of ULCs and vulnerable people.

6.2. Summary of Consultation Government Officials and Stakeholders

**I. Summary of Concerns and Views raised by the Community Members during SA Preparation.**

| **S.n** | **Stakeholders** | **Date** | **Location** | **# of Participants** | **Views Raised by participants on BRWDLP II** | **Clarification and Response from the Team** |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | PAP-Elidar Woreda | 09/03/2015 E.C | Haweli/galafi Village Center | 18 (13Male and 5Female) | **Benefits:** the gadgets such as tablets, smartphones and computers that were necessary in accessing the digital services were too expensive for them. Also, the mobile internet service was weak, intermittent, and the services too expensive, it can have the following benefits:   * The project will help the youth gain better access and participation in the Digital Integration Enhancing teaching learning process * The youth can use the internet for research, studies, communication, and entertainment including sports. * The project is good and was unlikely to negatively affect the HUCs, except for fences, kiosks other temporary business structures along the roads where fiber optic cables will be laid, but this they acknowledged will be temporary and rare. * At community level there is need for community centers with internet connections. It was argued that the best way to reach them with project information was through their clan leaders and local administrators. * The cost of accessing internet in the homes be reduced to improve usage, * Improved access to learning and teaching materials for HUCs learners * Access to weather information for better farming * Increased online business leading better returns and value for money * Reduce carbon emissions because with stable and affordable internet connections fewer people will travel for meetings or classes away from home or even to visit cyber cafes in towns. * Access to online jobs will reduce unemployment and poverty in the HUCs territories. * Contributing to solve social inequality related problems by integrating and including vulnerable groups | The project is expected to have an important impact on the country’s resilience through increased digital access for consumption and production, through improved business information systems providing validated data and analyses to decision makers, and through increased drought preparedness. The project will contribute to improve pastoral and agro-pastoral livelihoods through community level sub-projects to increase digital access and use, involving targeted communities in the development, management, and maintenance of digital sector investments. |
| **Risks:** the project implementation can have the following risks:-   * Policy landscapes may fail to include the interests of HUCs, youth, women and people living with disabilities (PLWDs) in the country, while also ensuring gender equity. * Exclusion of the HUCs from the project. This is likely to result from the HUCs’ current limited access to ICT equipment and internet services, inadequate awareness and inadequate on computing and the digital integration. * It affects ecologically sensitive areas like; forest and park. * If the E and S safeguards instruments are not managed properly and if the project hires a large amount of laborers it may result on gender based violence problems. * Trenches for laying the fiber optic cables unless managed properly will pose safety challenges for humans and livestock. This will be mitigated through effective warning signs, barricades, and effective backfilling. | - Compensation for all affected communities regardless of their land holding is effected;  - Land-to-land replacement in the case of loss of land;  - Compensation is provided for loss of assets other than land.  - Displaced persons should be assisted in their efforts to improve or restore their livelihoods (capacity building opportunities);  - Awareness creation around computing, online jobs, and digital integration opportunities in general. Some HUC youth were accessing internet on their smart phones mainly for entertainment. They need to be moved beyond entertainment to identifying digital integration opportunities.  - To utilize digital integration opportunities members of HUCs require training and capacity development on computing and other knowledge and skillsets necessary for their effective participation in the digital integration.  - After training and capacity development the HUC youth will require mentorship from seasoned digital integration actors. This will help entrench them in the digital integration, benefit, and mentor others in their communities to work and do business in the emerging integration.  - Since there are no cyber cafes in the shopping centres in HUC territories it will be appropriate for the project to support the establishment of community centres with Wi-Fi to support HUC youth and other interested people gain experience and skills to start cybercafé business as demand for services outstrip the capacity of the community centres.  - EARDIP II will enhance benefits for HUCs school children if the project supports provision of IT equipment to schools in their territories. This will give HUC children a head-start in gaining computing skills, accessing learning and teaching materials online and ultimately getting ready for the digital Integration. |
| **Mitigation mechanisms:** Among others the following mitigations mechanisms are suggested:   * Proper SDP process handling and compensation shall be on place * Community shall be engaged from planning to project implementation * Effective GBV handling and prohibition mechanism for child labor needs to be considered * Change shall be achieved on decision-making and school enrolment. Male are given upper hand on both dimensions, thus needs to be changed. Women shall involve on the decision making process. | - Adapting safeguards measures to the poverty context provides a useful guide to mitigation actions and also provides an opportunity to link safeguard outcomes to the Bank’s mission of poverty reduction.  -Bringing vulnerable groups into mainstream of project/development benefits.  -Better integration of the mitigation objectives of safeguards with the objectives of enhancing social and environmental sustainability  Anticipated risks, which are addressed in the SA, and are expected to be easily mitigated. Along the various stages of the project implementation, there will be an affirmative action or other equivalent mechanism which helps to identify the vulnerable PAPs and design a mechanism that responds in line with their needs and contexts. |
| **Communication methods:** we prefer to use local communication mechanism- *‘Dagu.’*  We can also use other communication mechanisms like radio transmission and community notice board. | Apart from the local communication mechanism- Dagu the project will use the following communication methods. Public meetings, workshops; Social Media Communication -Facebook;  Disclosure of written information – (Brochures, posters, flyers, and slicker) and radio transmission. |
| **Grievance Redress Mechanism:**  The GRM is locally established which is consisting of community leaders and elderly. Thus, we can integrate the project’s GRM with the local GRM mechanism. But capacity building support is vital. | * Strengthen client capacity and enhance responsibility and ownership, by providing training on the project’s GRM mechanism and on how to best strike a balance among the local and the project’s GRM mechanism. |

**II. Summary of Issues Raised during Federal-Stakeholder Consultation**

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| --- |
| **Issues raised** |
| 1. **Federal Level Stakeholder Consultation** |
| 1. **Benefits of the project:** |
| **Ministry of Innovation and Technology**  • Increased access to information to a wider group  • Job creation (temporary construction and creative economy)  • Device affordability  • Reduced environmental pollution.  • Increased e-resources to institutions  • Infrastructure sharing  • Liberalization to allow competition.  • Efficiency through improved service delivery  • Standardization  • Data management  • Bridging of the digital divide  • Visibility in government  • Increased digital skills ***(Participant 1-MInT-October 23, 2022)***. |
| **Women and Social Affairs(MoWSA)**  The project will be helpful for MoWSA, especially if it is linked with the gender MIS (project supported by AfDB) and can be effective if it is guided by findings and directions stated under Women Development Index (indicator). The project will benefit for potential women entrepreneurs if they start working on the well-established and active women-owned enterprises. For instance the owner of RIDE Hybrid Designs PLC is women owned enterprise, and there are many women engaged in agricultural business, these successful women can be engaged also in the digital sector. Much work is required at grass root level to engage the rural communities. In most cases refugees and IDPs requires short and medium term solutions; hence, EA-RDIP shall be linked with emergency response projects ***(Participant 4-MoWSA-October 26, 2022)***. |
| **FS3- Development Bank of Ethiopia**  We believe that the project will contribute to enhance the Public Private partnership by improving access to finance for women. EA-RDIP will enhance the service delivery in the financial sector by providing technical assistance in a way that enhances the three main principles of DBE that is *connectivity, affordability and accessibility*. We believe there will be grants for women owned enterprises or digital market platforms for women. Thus, goes in line with the mission and objectives of DBE ***(P5-DBE-October 31, 2022)***. |
| 1. **Project design and implementation:** |
| **MoWSA**  The project design and implementation shall visit active interventions like, African Women Speak (COMESA) which is an online market platform with an access to 50 million people. In the case of Ethiopia, there are active women and if the language barrier is resolved, the number of women who will actively involve in the online marketing will increase. Furthermore, the project design shall consider the national access and usage gap on internet access and mobile usage for women. Interventions needs to be integrated with the financial instruments of National Bank of Ethiopia and have to contribute on improving the financial literacy status of women ***(Participant 4-MoWSA-October 26, 2022)***. |
| **Development Bank of Ethiopia**  While dealing with enhancing women owned enterprises, the project items and activities related with capital expenditure investment item shall be linked with operational capital investment. Thus, existing systems related to capital expenditure is treated under wholesale category and handled at head office. In the case of operational capital expenditure, it can be linked with microfinance retail, lending/granting institutions. While delivering technical assistance, the project can borrow lessons from ‘Rural Financial Intermediation Program, Training association Micro-enterprises, Federal and Regional Cooperatives commission and support from consultants ***(P5-DBE-October 31, 2022)***. |
| 1. **Contribution of Stakeholders on the Overall EA-RDIP project implementation** |
| **Development Bank of Ethiopia**  The contribution of DBE on the process of implementation of the project can include;   * Differential treatment to women-improving policy instruments at our institution. * Refining financial instruments- interest rate reduction for women, exclusive funding, and risk sharing mechanism (providing fund in the form of partial grant) ***(P5-DBE-October 31, 2022).*** |
| 1. **Contribution on Environmental and social safeguards:** |
| **MINT(PIU)**   * Provide leadership on core social development Oversee the implementation of the SA, ESMF, subproject ESMPs, and other safeguard instruments e.g., ESCP, etc.; * Closely help and deliver capacity building training to contractors, suppliers, etc., to close knowledge/skill gaps and minimize the likelihood of risks to happen to subprojects; * Complete subproject ESIA and make recommendations; * Support subproject ESIA consultant in their studies; * Ensure the Subproject ESIAs include EHS risks and impacts and recommended mitigation; * Review the subproject ESIAs and submit to WB for review and clearance; * Ensure all contracts include EHS provisions and contractors have C-ESMPs; * Undertake follow up monitoring to ensure that proposed mitigation measures are implemented according to the C-ESMPs; * Lead on developing and delivering a series of spot checks to ensure social and environmental risks are properly implemented by both the contractor and beneficiary; * Receive social and environmental complaints relating to EARDIP activities and ensuring that they are addressed in accordance with the GRM; * Undertake monitoring visits to subprojects sites according to E&S issues therein; |
| **FS3-Development Bank of Ethiopia**  DBE can share its experience on hazard waste management, on ESMS implementation, corrective action plan, field visit and putting in place a time bounded requirements. We have a rich experience in E and S safeguards and we have a senior officer dedicated for this task ***(P7-DBE-October 31, 2022)*** . |
| 1. **Lessons learned:** |
| **FS2- MoWSA**  Nationally, gender equality projects brings the 2nd largest fund in Ethiopia, but there are better accomplishments in solving women related problems on the projects implemented and funded by UNFPA (SGBV, FGM, early marriage and reporting system), UN-Women (on women empowerment, GBV, coordination and leadership) and UNICEF (Child protection, child marriage, early marriage and FGM). Thus, EA-RDIP shall take lessons from the projects implemented by these UN institutions and it shall use existing infrastructures to better execute the project components and to provide practical benefit to women ***(Participant 4-MoWSA-October 26, 2022)***. |
| **FS3-Development bank of Ethiopia**   * The successful implementation of WB-Women Entrepreneurship Development Project (WEDP) has transformed different women owned enterprises and hence can serve as a source of lesson on the implementation of components of EA-RDIP related to enhancing women owned enterprises. * If women are provided with the required support, they are active and effective in transforming their life and changing the fate of a given household and country, * Private market is efficient in transforming women, thus the EA-RDIP can benefit from exploiting the private sector/market, ***(P8-DBE-October 31, 2022)*** * TVET and ETHERNET can contribute on providing TA to women and their enterprises * Local coordinators at rural and urban areas can be women and can drive the women owned enterprises in a positive direction, * MIS, training, providing ID to beneficiaries, follow-up and designating a hotline for GRM can help to prevent or mitigate potential impacts, * Reporting system, case study, success story and establishing data base system can enhance the success of the project implementation, * Training to internal staff and beneficiaries, * Cross-sector coordination and staging multiple consultative meetings can promote the project design and implementation process ***(P8-DBE-October 31, 2022)***. |
| 1. **Negative impact of the project:** |
| **FS-3-Development Bank of Ethiopia**  Though the project have plenty benefits, if the required ESRM tools are not in place, it may have the following negative impacts;   * If the Cable Land Stations (CLS) uses diesel generator or battery, it may have a hazard waste and can spoil the environment ***(P 6-DBE-October 31, 2022)***, * In cities there may be a delay on securing permission certificate, * There may be a delay in releasing grants from donor or MoF ***(P 7-DBE-October 31, 2022)***, |
| 1. **Challenges:** |
| **FS-2 MoWSA**  One of the beneficiaries of the project is IDPs and refugees, since the infrastructures are temporary; it discourages the contractors to engage on such kinds of settings ***(Participant 4-MoWSA-October 26, 2022)***.  Though there are some initiatives from the government institutions like gender responsive budgeting system, there is no a platform that involves MoWSA on the donor funded interventions or activities run by CSOs. For every project implemented by different ministries and institutions, in most case gender is included as a main component or as a cross-cutting issues, but gender directorate or office representatives or MoWSA are not consulted. MoWSA is not also awarded a functional role in different projects which should have been the case ***(Participant 4-MoWSA-October 26, 2022)***. |
| 1. **Suggested mitigation measures:** |
| **FS-3 Development Bank of Ethiopia**   * The backbone connectivity can use the electric light powers, thus may not need diesel or battery and if it requires a waste Management Plan will be prepared * The Cable Land Stations requires small power to function, thus can be managed properly, ***(P6-DBE-October 31, 2022)***. * The E and S requirements can be included as part of the financial agreement in the PAD, which is the case, * Training need assessment on women owned enterprises and providing technical assistance, * Including the provision of E and S impact management principles and preparation and submission of ESRM report as part of the loan agreement, * Conducting follow-up, field visit, preparing and implementing Corrective Action Plan (CAP), * Including time bounded requirements and if not met taking corrective measures like shifting a risk category and eventually excluding the service supplier, ***(P7-DBE-October 31, 2022)***. |

**III. Summary of Issues Raised during Regional-Stakeholder Consultation**

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| **Issues raised** |
| 1. **Regional Level Stakeholder Consultation** |
| 1. **Benefits of the project:** |
| **RS1- Afar-Science, Innovation and Technology Commission**  It will improve the overall intervention of our office, because we were not functional for the past two years due to the conflict on the northern part of Ethiopia. Thus, we can take this opportunity to revitalize our organizational mandate and deliver services related to ICT and Digital sector development in Afar Regional State. We expect both financial and technical support to our office from EA-RDIP ***(Participant 9-*** ***Afar-Science, Innovation and Technology Commission -November 09, 2022)***. |
| **RS2- Afar-BoWSA**  The project will be helpful for BoWSA, on providing financial and technical support. The project will benefit women, given that it is innovation and technology focused. Since it is linked with Djibouti, it will help to strengthen the existing socio-economic tie and helps to enhance cross-border data market and online market integration ***(Participant 11-*** ***Afar-BoWSA-November 10, 2022)***. |
| 1. **Project design and implementation:** |
| **RS1- Afar-Science, Innovation and Technology Commission**  The project shall consider the utilization of community level ICT infrastructures like community centers for ICT and knowledge management. This will help to enhance the intervention on Internet Exchange Points (IXP) and Household internet solutions. We expect also both ***(Participant 9-*** ***Afar-Science, Innovation and Technology Commission -November 09, 2022)***. |
| **RS2-BoWSA**  The project shall assess on-going activities which are focused on ICT and women economic empowerment ***(Participant 11-*** ***Afar-BoWSA-November 10, 2022)***.. |
| 1. **Contribution of Stakeholders on the Overall EA-RDIP project implementation** |
| **RS1- Afar-Science, Innovation and Technology Commission**  The contribution of Afar SITC on the process of implementation of the project can include;   * Filling the staff and logistics requirement to execute the project components. * Establish both the regional steering (officials) and technical (experts) committees consisting of the main implementing institutions and partner implementing offices. * Serving MInT as a regional unit to follow-up the project and prepare and submit timely report. * We have a good working relationship with Regional State Administration, Education, Finance, Disaster Risk Prevention and Reduction, and Health bureaus, thus we can benefit from cross-sectoral integration intervention ***(Participant 10-*** ***Afar-Science, Innovation and Technology Commission -November 09, 2022).*** |
| **RS2- Afar-BoWSA**  We can integrate the exiting activities like initiatives on training, diary production, and other pastoral community development activities with the activities and platforms of EA-RDIP. There are IDPs in Zone 2, 5 and 1, hence we can use the project to provide digital services to them. There are some negative consequences of the war on the northern part of Ethiopia and early marriage is accompanied with dropping out from school; thus EA-RDIP can help us to fight such kinds of malpractices. There is high rate of 1-5 years old mortality and these platforms (Internet Exchange Points and mobile solutions) can be used for emergency response purposes. We can mobilize resources and traditional communication mechanisms like *‘Dagu’* and work on local radio transmission to promote the project and enhance community engagement. Another contribution will be working on follow-up and reporting on the project progress and overall implementation ***(Participant 11-*** ***Afar-BoWSA-November 10, 2022)***. |
| 1. **Contribution on Environmental and social safeguards:** |
| **RS1- Afar-Science, Innovation and Technology Commission**  We have some practical experience in managing and implementing E and S safeguards tools and we will assign experts who will handle E and S issuers related to EA-RDIP ***(Participant 9-*** ***Afar-Science, Innovation and Technology Commission -November 09, 2022)***. |
| **RS2- Afar-BoWSA**  There is not an expert on the E and S safeguard issues, but we can take lessons from regional urban development offices, as they are well-experienced on implementing WB-financed projects ***(Participant 13-*** ***Afar-BoWSA-November 10, 2022)***. |
| 1. **Lessons learned:** |
| **RS1- Afar-Science, Innovation and Technology Commission**  We have good working relationship with different offices, thus we can execute the project components effectively.  Better capacity building and experience sharing practices can enhance the proper implementation of the project ***(Participant 9-*** ***Afar-Science, Innovation and Technology Commission -November 09, 2022)***. |
| **RS2- Afar-BoWSA**  We expand the success of women owned enterprises in the agriculture sector in to ICT and digital service supply sector.  Being supported with sufficient training, involving women unions or associations and working on market network can provide a better probability of implementing the project component related to women-owned enterprises promotion ***(Participant 12-*** ***Afar-BoWSA-November 10, 2022)***. |
| 1. **Negative impact of the project:** |
| **RS1- Afar-Science, Innovation and Technology Commission**  Though the project have plenty benefits, if the required ESRM tools are not in place, it may have the following negative impacts;   * The project may have negative impact on the environment and the community ***(Participant 9-*** ***Afar-Science, Innovation and Technology Commission -November 09, 2022)***. |
| **RS2- Afar-BoWSA**  The project may have dis-proportionate impact on pastoral communities and women.  ***(Participant 12-*** ***Afar-BoWSA-November 10, 2022)***. |
| 1. **Challenges:** |
| **RS-1 Afar-Science, Innovation and Technology Commission**  Among others:   * There is a major problem on regular public service delivery mandates execution, * There is shortage both in man power and financial resources, ***(Participant 9-*** ***Afar-Science, Innovation and Technology Commission -November 09, 2022)***. |
| **RS2- Afar-BoWSA**  The major challenges are:  -Afar region is left behind on executing gender related activities; the better performers are Amhara, SNNP and Oromia regional states.  - Afar women development groups are not strong as such.  -Both education and health offices have poor working relationship with BoWSA.  -Leaders and experts working on women and social affairs are not executing their respective activities at the needed level  -The report prepared and submitted to the regional council on gender and development is generic and is far from reflecting the specific issues on the ground.  - A permanent committee on women and social affairs to the regional government council is not active.  -The gender directorate directors are not members of the management teams on different regional bureaus, the good practice we have is in regional health bureau.  -The perception they have to women is very poor and they did not involve the representatives of the gender directorate in planning and implementation activities.  -The social cluster which is chaired by the President of Afar Regional state is not working closely with gender directorates of the various offices  ***(Participant 12-*** ***Afar-BoWSA-November 10, 2022)***. |
| 1. **Suggested mitigation measures:** |
| **RS-1 Afar-Science, Innovation and Technology Commission**   * The E and S requirements can be included as part of the financial agreement in the PAD, which is the case, * Training need assessment on capacity building requirements of the staffs and providing technical assistance, * Including the provision of E and S impact management principles and preparation and submission of ESRM report as part of the loan agreement, * Conducting follow-up, field visit, preparing and implementing Corrective Action Plan (CAP), * Including time bounded requirements and if not met taking corrective measures like shifting a risk category and eventually excluding the service supplier, ***(Participant 9-*** ***Afar-Science, Innovation and Technology Commission -November 09, 2022)***. |
| **RS2- Afar-BoWSA**  -We can use the GO-NGO forum as a point of entry to raise and implement project activities related to women.  - The women and children affairs coordination unit can work on reaching out to different sectors and thereby contribute to the proper implementation of the project.  -The GRM activities can be linked to the women development groups and can help to prevent GBV.  -Leaders and experts working on women and social affairs are not executing their respective activities at the needed level  -Women can work on coordination activities and increase the effectiveness of the project.  - A permanent committee on women and social affairs to the regional government council is not active.  -The regional cooperatives commission and small and micro-enterprises can work to organize women enterprises.  -The regional labor and skill bureau and TVET can provide training for staffs and beneficiaries.  -The project can provide an opportunity for women who are graduated in ICT and who are currently residing in zone 3, 2 and 1 of Afar region.  ***(Participant 12-*** ***Afar-BoWSA-November 10, 2022)***. |

6.3. Summary of Consultation with Community

**I. Summary of Issues Raised by Community representatives.**

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| **Issues raised** |
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| 1. **Benefits of the project:** |
| **Benefits:** the gadgets such as tablets, smartphones and computers that were necessary in accessing the digital services were too expensive for them. Also, the mobile internet service was weak, intermittent, and the services too expensive, it can have the following benefits:   * The project will help the youth gain better access and participation in the Digital Integration Enhancing teaching learning process * The youth can use the internet for research, studies, communication, and entertainment including sports. * The project is good and unlikely to negatively affect the HUCs, except for fences, kiosks other temporary business structures along the roads where fiber optic cables will be laid, but this they acknowledged will be temporary and rare. * At community level there is need for community centers with internet connections. It was argued that the best way to reach them with project information was through their clan leaders and local administrators. * The cost of accessing internet in the homes be reduced to improve usage, * Improved access to learning and teaching materials for HUCs learners * Access to weather information for better farming * Increased online business leading better returns and value for money * Reduce carbon emissions because with stable and affordable internet connections fewer people will travel for meetings or classes away from home or even to visit cyber cafes in towns. * Access to online jobs will reduce unemployment and poverty in the HUCs territories. * Contributing to solve social inequality related problems by integrating and including vulnerable groups   **Feedback by the assessment team**  The project is expected to have an important impact on the country’s resilience through increased digital access for consumption and production, through improved business information systems providing validated data and analyses to decision makers, and through increased drought preparedness. The project will contribute to improve pastoral and agro-pastoral livelihoods through community level sub-projects to increase digital access and use, involving targeted communities in the development, management, and maintenance of digital sector investments. |
| **Risks:** the project implementation can have the following risks:-   * May fail to include the interests of HUCs, youth, women and people living with disabilities (PLWDs) in the country, while also ensuring gender equity. * Exclusion of the HUCs from the project. This is likely to result from the HUCs’ current limited access to ICT equipment and internet services, inadequate awareness and inadequate on computing and the digital integration. * It affects ecologically sensitive areas like; forest and park. * If the E and S safeguards instruments are not managed properly and if the project hires large amount of laborers it may result on gender based violence problems. * Trenches for laying the fiber optic cables unless managed properly will pose safety challenges for humans and livestock. |
| **Communication methods:** we prefer to use local communication mechanism- *‘Dagu.’*  We can also use other communication mechanisms like radio transmission and community notice board. |
| **Grievance Redress Mechanism:**  There is locally established GM which is consisting of community leaders and elderly. We can integrate the project’s GRM with the local GRM mechanism. But capacity building support is vital.  ***Participants of the community consultation: 17 (12 Male and 5 Female) from Elidar Woreda, Afar Region November 18-21, 2022.*** |

**6.4. Disclosure and Dissemination Strategies**

Project-related information will be publicly disclosed throughout the project lifecycle using a range of channels, including the following:

• Periodic stakeholder consultations, such as public hearings

• Organizing community meetings, FGDs, participatory appraisal techniques, household interviews and social mobilization techniques as appropriate

• Project-related information will be posted on the notice boards at the public offices

• Information dissemination through social media such as Facebook, Messenger or WhatsApp and local communality radio, among others.

• Digital boards will also be placed on selected worksites to display up-to-date information regarding the project, ensuring that local people understand the information well.

• Development and distribution of project factsheet, information on the GRM, and FAQ in Amharic or other local language.

In addition, the draft and final version of the ULCPF/ULCDP will be disclosed to the stakeholders, including the affected UL communities through appropriate channel, and consulted with them to get their comments, concerns, and feedback on the draft ULCPF/ULCDP. The ULCPF/ULCDP will be finalized incorporating the relevant suggestions and feedback received from the representatives of UL communities and stakeholders. The final ULCPF/ULCDP will be disclosed once approved by concerned PIUs and World Bank.

7.0. PREPARATION OF THE ULCDP

7.1. Steps for ULCDP Preparation

Underserved Local Community Development Plan (UUCDP) will be prepared if it is determined that

HUCs are present in or have collective attachment to the subproject area. The steps for preparing an ULCDP are as follows:

1. Screening to identify whether Underserved Local-UL communities are present in or have collective attachment to the project area;

2. Social assessment and analysis to address the social concerns of the sub-project area from identified ULC groups;

3. Identifying the views of the affected UL communities at each stage of the project, and particularly during project preparation;

4. Where FPIC is determined to be required, conduct FPIC according to ESS7, with the FPIC process documented;

5. Where FPIC is determined to not be required, meaningful consultation is needed, and with the consultation process;

6. Determining institutional arrangements (including capacity building wherever necessary) for screening project-supported activities, evaluating their effects on ULC, preparing ULCDP (if required), and addressing grievances; and

7. Preparation the ULCDP and obtaining approval of and disclosure by PIU and the World Bank

8. Conducting monitoring and reporting.

7.1.1. Screening

During the planning and design phase of the subproject, a screening survey will be carried out based on group discussions with the communities in the sub project area to identify the presence of any UL communities which have a collective attachment to the subproject area. Apart from consultations with community members, consultations andin-depth interviews will also be carried out with the NGOs working in the area and with representatives of local self-government. The screening will look into the details of ULC/HUC households, assessing the number of such households in proposed sub project area. If the result shows that there are UL communities, issues related to the community will be included in the scope of ESIA exercise.

7.1.2. Social Impact Assessment

If the screening findings confirm likely impacts on UL communities, the project will engage qualified and experienced experts to carry out a social assessment of the affected UL families and community as a part of the site-specific ESIAs. The project will be responsible for conducting the ESIA and the development of an action plan with the help of UL communities and organizations working for them. Discussions will focus on both positive and negative impacts of the sub project. The suggestions and feedbacks of the community taken through meaningful consultations will be incorporated on the design hence to ensure the broader community support for the project. The ESIA will gather relevant information on demographic, social, cultural, economic, and networking aspects of each household and needs of the community as a whole and will assess the likely impacts on ULCs. The impacts on UL communities should be considered significant, if the project or project component positively or negatively: (i) affect their customary rights of use and access to land and natural resources; (ii) change their socio-economic status and livelihoods; (iii) affect their cultural and communal integrity; (iv) affect their health, education, sources of income and social security status; and/or (v) alter or undermine the recognition of indigenous knowledge.

7.2. Suggested Format and Contents for the ULCDP

The suggested format for the ULCDP is as follows:

• Summary of targeted social assessment, including the applicable legal and institutional framework and baseline data. Baseline data to include: gender disaggregated data on number of ULC households by impact category; social, cultural and economic profile of the households/communities; land tenure information;

• Description of sub projects and implications for UL communities;

• Summary of the results of meaningful consultations tailored to UL communities;

• Summary of FPIC exercise when relevant (since FPIC is not expected to be required, consultation exercise needs to be documented);

• Findings of the needs assessment of the UL communities;

• Community development plan based on the results of need assessment;

• Modalities to ensure regular and meaningful engagement with the community;

• Institutional arrangements and linkages with other national or state level programs;

• Institutional mechanisms for monitoring and evaluation of ULCDP implementation and grievance redress;

• Implementation schedule and cost estimate for ULCDP implementation.

7.3. Sub-Project Approval

In the event that the sub-project has an ULC group in its subproject area, the project shall not approve the subproject until a satisfactory ULCDP has been prepared and shared with the affected UL community. When a standalone ULCDP is not needed because the majority of beneficiaries of the sub project are specific ULC HHs, the project design should ensure that all elements of ESS7 are incorporated into the sub-project level ESMP as recommended by ESIA.

The FPIC will be required on any matters that may affect the rights and interests, lands, resources, territories (whether titled or untitled to the people in question) and traditional livelihoods of the indigenous peoples concerned. When an FPIC process is required, a stakeholder consultation process will need to be initiated to define and agree on an FPIC process. The indigenous peoples who may be affected by the Project will have a central role in defining the FPIC process. The consultation process should be launched as early as possible to ensure full, effective and meaningful participation of Indigenous Peoples. The FPIC must be obtained before the subproject activities requiring FPIC can be started, although the focus is to screen out such activities requiring FPIC.

8.0. MONITORING AND REPORTING

The goal of monitoring activities is to measure the success of the activities described in the Social Development Plan and determine whether interventions have prevented or mitigated adverse risks and impacts of EA-RDIP SOP II Project on HUCs and VFGs, and to determine whether further interventions are required to mitigate adverse impacts or monitoring is to be extended in some areas. The goal of regular inspection activities is to ensure that sub-component activities comply with the plans and procedures laid out in this ULCPF and SDP prepared for the project.

The effective implementation of the ULCPF and SDP for EA-RDIP-SOP II for Ethiopia fall under the management functions and responsibilities of both the project implementing agency, i.e., MInT. The Social Specialist of the PIU at MInT is responsible for the overall management functions of this SA and SDP. This management function requires incorporating the defined SDP activities into the project’s environmental and social management system.

The main monitoring responsibilities and inspection activities will sit with the PCU, which will administer the overall project-related E&S monitoring and implementation as laid out in the different ESRM instruments. The PCU will have overall responsibility for the implementation of the mitigation measures, as well as for monitoring for compliance. The PIU Social Specialists will assess progress of activities against the SDP defined in the ULCPF and will report any non-compliance to MInT PIU management. Indicators are identified and will be used as a baseline for assessing progress on the ULCPF and SDP implementation. Some relevant indicators of monitoring will include:

* Adequacy and quality of stakeholder engagement and information disclosure activities, incorporating HUCs and VDGs,
* Implementation of consultations and related processes to obtain Free, Prior, Informed Consent (FPIC),
* Adequacy and responsiveness of complaint handling,
* Overall implementation of the SDP in addressing impacts, including capacity building and awareness raising interventions,
* Implementation of specific measures developed under the project ULCPF and SDP,
* Any conditions that were not anticipated during the preparation of SDP but could disadvantage HUCs and VDGs but and require further corrective actions/ adjustment,
* Level of satisfaction of target HUCs and VDGs with the project implementation scope.

The result of the M&E will be documented in the quarterly E&S performance progress reporting structure, which will outline key recommendations and specific time-bound action items to strengthen the implementation of the SDP. In addition to capturing the progress on the ULCPF and SDP, the report will capture lessons learnt and best practices . As part of the project technical support, the World Bank will also periodically supervise the implementation of the ULCPF and the stipulated SDP activities. Necessary technical support and expertise will be mobilized at the request of the project implementing entity, MInT.

* 1. CONCLUSION AND RECOMMENDATIONS
  2. Conclusion

## 

## The EA-RDIP SOP II Project will provide beneficial effects on the surrounding social setting. In the Ethiopian context, Afar, Ethiopian Somali, Benishangul-Gumuz Gambella as well as pastoralists and semi-pastoralist in parts of Oromiya and former SNNPR Regional States are categorized as Historically Underserved Communities (HUCs),that meet the criteria set under ESS7. This ulcpffocused on the locations recognized as HUCs as well as VDGs in the study areas. The results of the Underserved Local Community Planning Framework (USLCPF) has shown that the project activities from planning, design, construction stage will have minimum negative impacts to the social-economic environment provided that the recommended mitigation measures in this report are implemented. The impacts from construction and operation will be manageable and no insurmountable impacts are predicted, The ULCPF study shows that the EA-RDIP SOP II Project will have few and limited adverse impacts combined with significant social and digital service benefits.

## **Recommendations**

Based on the findings of this ULCPF and supplementary information presented in this document, the Proponent (MInT) shall get approval and clearance from WB for the ULCPF so as implement the SDP for the project.As in other projects, the intended project has both positive and negative impacts during construction phase of the digital infrastructures. In order to ensure the viability of the project, the proposed mitigation and enhancement measures (the SDP) should be implemented in time to avoid and/or minimize the identified adverse social impacts of the project. The overall recommendations of this ULCPF are that:

1. The ULCPF be accepted by WB and MInT as the statement of the project’s social risks and impacts upon HUC and VDGs and how they will be mitigated.
2. The project impacts and implementation of mitigation measures be monitored as per the monitoring plan in the SDP.
3. Enhance outreach and awareness raising to ensure clarity on the project by all key stakeholders. Multiple means of communication (cultural and language appropriate) should be used to ensure that all members are reached including the HUCs and VDGs.
4. Work with local/village elders and religious leaders and other respected community leaders in project planning, implementation and M&E. The emphasis should be placed on working with people and groups trusted by the communities.
5. For the implementation and monitoring of SDP activities, collaborate with trusted local organizations, CSOs, NGOs, and other relevant institutions that have a history of good working relationships with the HUCs and VDGs and relevant experience in the implementation of such plans.

**Annex 1: List of ULCPF Study Participants**

**Annex 1.1. Stakeholder Consultation Participants**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No** | **Name** | **MDAs** | **Position** | **Cellphone No.** | **email** |
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| 11 | Mesfin Belachew (Ph.D) | Project Coordinator for Ethiopia Digital Foundations Project (EDFP) | MInT/PIU |  | Mesfin.belachew@mint.edu.et |
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| **Afar** | | | | | |
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| **18** | Mohamed Awol Ebrahim | Peace and Security | Director |  |  |
| **19** | Mohamed Ahmed | Trade & Industry | Director |  |  |
| **Somali** | | | | | |
| **20** | W/ro Fatuma Mohamed | MInT | Head |  |  |
| **21** | Ubha Abduirahaman | Women and Child Affair | Deputy Head |  |  |
| **22** | Mohamed Adem Ibrahim | EPA | Deputy Head |  |  |
| **23** | Mohamed Hassen Ahmed | MInT | Deputy Head | 0911661461 | Maxamund52@gmail.com |
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| **31** | Abdurahman Kamel | MInT | IT Director | 0911596487 | Abdurahmank41@gmail.com |
| **Gambella** | | | | | |
| **32** | Yonas Abebe | Peace and Security bureau (Previous Head for Environment bureau) | Deputy Head | 0965023516 | [yonasabebe021@gmail.com](mailto:yonasabebe021@gmail.com) |
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| **37** | Paul Gari | MInT | Commissionaire | 0944230048 | [pgoduru@gmail.com](mailto:pgoduru@gmail.com) |
| **No** | Name | Office | Position | Cell No | email |
| Afar Woreda Level | | |  |  |  |
| **38** | Fiyori Atnafe | Rural Land Administration | Engineer | 0935376025 |  |
| **39** | Ahmed Abdulkadir | Trade Office | Head | 0911664100 |  |
| **40** | Sultan Ahmed | Peace and Security Office | Head | 0912551650 |  |
| **41** | Seada Aminu | Women and Child Office | Head | 0925028187 |  |

**Annex 1.2. Community Consultation Participants**

|  |  |  |  |
| --- | --- | --- | --- |
| **No** | **Name** | **Social Status** | **Cell No** |
| **Community Level Consultation** | | | |
| 1 | Meriam Ebrahim | Student (8th) Grader | 0924453454 |
| 2 | Kamil Hmphre |  | 0961424775 |
| 3 | Yasin Ahmed | Clan Leader |  |
| 4 | Asia Ali | Housewife |  |
| 5 | Hamedu Ali | Clan Leader |  |
| 6 | Ahmed Mohamed | Community Member | 0910271758 |
| 7 | Adon Eile | Community Member | 0920323933 |
| 8 | Fatuma Ali | Community Member | 0942057843 |
| 9 | Mohamed Ali Haider | Community Member | 0977048977 |
| 10 | Edris Abdo | Community Member | 0920638233 |
| 11 | Umed Ahado | Community Member | 0961106265 |
| 12 | Ali Gedo | Community Member | 0992681725 |
| 13 | Ahmed Kebir | Community Member | 0942149101 |
| 14 | Abrham Mohamed | Community Member |  |
| 15 | Hamed Endris | Community Member |  |
| 16 | Teyba Umer Ali | Community Member | 0986688260 |
| 17 | Amina Ali | Women Affairs | 0911307363 |

# **ANNEX-N: GBV RISK ASSESSMENT AND ACTION PLAN**

1. **Introduction**
   1. **Project Background**
2. Eastern Africa Region is characterized by poor digital infrastructure. Lack of affordable and accessible broadband connectivity seriously hamper the regional connectivity market in the Eastern Africa. The region is home to countries with varying levels of connectivity infrastructure development, which explain spruce, performance, and broadband penetration differentials[[79]](#footnote-77). This constitutes a fundamental barrier for beginning to develop a more digital regional market suggesting for solution. National and regional connectivity markets could be better served through the development of open access and interconnected national backbone networks as well as the deployment of new cross-border links that would be key to eliminating pricing and quality differentials between coastal and landlocked countries. Supporting universal digital connectivity access in the region will also require a push to expand service provision (‘last mile’ access networks) to underserved or unserved rural and borderland areas.
3. The regional data market is characterized by absence of effective, trusted, and secure data transmission, storage, and governance. A data-EA-RDIP economy and development of an integrated data market in Eastern Africa will require that data can flow freely and securely across borders. Allowing data to be processed, analyzed, stored, or used anywhere in the region is an essential enabler for the scale-up of online services, including regional e-commerce and cross-border exchange of digital payments, but also relies on a well-developed and harmonized connectivity and data market. However, the region’s data frameworks and data infrastructure are underdeveloped to this end.
4. Backdrop to this, the Eastern Africa Regional Development Integration Project is a Series of Project (SOP) and will be implemented in two phases. At the country level, SOP-II would support the implementation of the World Bank Group Country Partnership Frameworks (CPFs) for Ethiopia and Djibouti. SOP-II will run parallel to, investments in SOP-I.The Ethiopia CPF (FY18-22, extended to FY23, Report No. 119576-ET), was discussed by the Board before the current, reforming government, took power in April 2018, and is dated[[80]](#footnote-78) but nevertheless it recognizes the ICT sector as a key factor in advancing productivity and structural transformation. The Djibouti CPF (FY22-26; Report No. 147787-DJ) notes that the telecom sector remains uncompetitive and would benefit from entry of the private sector to boost innovation and efficiency. Since the two CPFs were published, both countries have gained new IDA lending programs: Digital Ethiopia (P171034, US$200m) runs from 2021-2026 while Digital Djibouti (P174461, US$10m) runs from 2022-27. Therefore, the Series of Project phase two (SOP-II) is aimed to promote the establishment of an integrated digital market within and across the Eastern Africa countries including Ethiopia by increasing the cross-border flow of broadband, data traffic and digital services.
   1. **Description of the Project**
5. Despite its shared culture and common history, the Eastern African region that spanning from Sudan to Tanzania remains poorly integrated and there is scope to expand both intra- and inter-regional trade, on the back of further market integration. Addressing this, the project development objectives are to advance digital market integration in the Eastern Africa region by increasing affordable access to regional broadband connectivity and strengthening the enabling environment for cross-border digital services.
6. As with SOP-I, SOP-II project is designed around three integrated and mutually reinforcing components, which reflect the distinct but interconnected layers of an integrated regional digital market. Components 1, 2 and 3 will support respectively Connectivity Market Development and Integration; Data Market Development and Integration; and Online Market Development and Integration. Further, Component 4 will support Project Management and Implementation Support (at regional and national level), while Component 5 will provide a Contingent Emergency Response Component (CERC). These components include a menu of activities from which the Borrowers (Djibouti and Ethiopia), will select activities to be implemented under SOP-II, based on their most pressing needs and their regional interaction.

***Component 1: Connectivity Market Development and Integration***

1. This component will bridge existing network coverage and access gaps through infrastructure financing and support for an enhanced enabling environment to develop the regional broadband connectivity market.With the objective of expanding access, the financed activities will ensure that recipient countries also enhance network redundancy and cable route diversity, allowing the region to meet increasing demand for internet bandwidth. Cross-border, national backbone and backhaul, and access network infrastructure will be partially financed where there is a market failure, using various financing mechanisms depending on market need. Detailed country-level feasibility studies to be funded under this component will further define the precise arrangements under which the cooperation between the Government and the operators on infrastructure deployment will be further developed. To this end, component 1 has the following three sub-components.
2. ***Sub-component 1.1: Cross-border and national backbone network connectivity****:* This subcomponent will support the deployment of key missing cross-border and backbone fiber links to improve the resilience, coverage, and integration of regional connectivity networks.Support will be provided to deploy upwards of up to 3,000 kms of fiber network in Ethiopia, covering strategic cross-border and national backbone network links as well as their extension into borderland areas, with a view to creating an integrated regional backbone network allowing for reduced cost and improved quality of transmission of capacity throughout the region. Financing support will be provided to operators who will be expected to co-finance, design, build, and operate the network infrastructure. Infrastructure deployment will be based on key principles of providing services on an open access basis, while offering reasonable wholesale rates to support affordable service expansion to be detailed in a Commercial Transaction Manual (CTM). Project financing will cover:
3. TA for the (i) detailed network design including technical specifications for prioritized routes and network architecture/configuration, leveraging parallel deployment of linear infrastructure wherever possible and site selection of cell towers is informed by climate and disaster risk assessments (ii) develop a universal access market gap assessment including identifying sites to be connected along priority routes; and (iii) survey and providing quality assurance of deployed routes.
4. TA to (i) define financing options for deployment, ownership, management, and maintenance of the network between the Government and the operators to be detailed in a CTM and (ii) provide transaction advisory services to prepare related bidding documents and support for launching and administering the commercial transaction.
5. Financing associated with broadband network infrastructure deployment, including the construction and upgrade of cross-border terrestrial links and national backbone network infrastructure, subject to the adoption of a CTM. In Ethiopia: Up to 1,100kms of fiber links building greater resilience with up to five additional routes to the sea.
6. Financing digital infrastructure rehabilitation in the conflict affected area[[81]](#footnote-79) in Tigray, Ethiopia including rehabilitating cell towers, fiber optic links, transmission networks and related infrastructure.
7. ***Sub-component 1.2: Last mile connectivity including in borderland areas:*** This subcomponent will connect rural, borderland areas, where the commercial incentive for last-mile network expansion is insufficient to propel further infrastructure investment. By providing catalytic funding to stimulate demand by key user groups and in low-income market segments (including in refugee/IDP camps, conflict affected areas in Tigray in Ethiopia and locations in rural and borderland areas), this subcomponent will follow Mobilizing Finance for Development (MFD) approach to unlock further private sector infrastructure investment in unserved or underserved areas. The financed infrastructure will be deployed using a range of modalities, including reverse auctions, bulk purchase of capacity, and/or licensing arrangements that aim to maximize private sector financing. These mechanisms are expected to incentivize private sector investment in the rollout and maintenance of last-mile access networks that connect targeted locations/areas. They will also benefit the wider consumer base in the vicinity of connected sites, with national governments serving as the anchor tenant required for enhanced service provision. Project financing will cover the following:
8. Financing of connecting public institutions along fiber routes through pre-purchase of internet bandwidth capacity for public institutions, fiber deployment, and information technology (IT) equipment for government offices, schools, hospitals, and other public institutions.
9. Financing for backhaul and last-mile networks in borderland areas, and covering refugee, and IDP camps. In Ethiopia this will include establishing/upgrading broadband radio access networks (RANs, minimum 4G technology) in woredas, covering refugee/IDP camps on the Somalia-South Sudan border, their host communities and schools, health care facilities, humanitarian and relief agencies for host communities and IDP/refugee camps, and education facilities in Tigrayan region.
10. ***Sub-component 1.3: Enabling legal, regulatory, and institutional ICT environment:***This sub-component will provide upstream enabling policy, legal and regulatory support, as well as capacity building to stimulate broadband market development and harmonization at the national and regional level.Building on the regional harmonization efforts under SOP-I, activities under this sub-component will support the strengthening, modernization, and regional harmonization of the legal, regulatory, and institutional frameworks governing the telecom sector to foster competition and private sector investments and unlock the potential of the ICT sector nationally and across borders. Support will also be provided to increase capacity at the national level to implement these initiatives, working with national ICT regulatory authorities, agencies, and line ministries for ICT at the national level and through the RECs at the regional level. Project financing will cover the following:
11. TA, capacity building and financing of systems (information technology hardware and software) for and national telecom regulators and universal service access funds to support effective harmonization, implementation, and sustainability of connectivity investments under the project through technical trainings and additional advisory services. This activity would build on the feasibility study and recommendations for the operationalization of an ICT regulatory association in the Horn of Africa under SOP-I.
12. TA and capacity building to reduce and/or eliminate roaming charges on voice and data services in the region, building on the One Network Area (ONA) initiative of the EAC and the feasibility assessment and roadmap developed for the IGAD Member States under SOP-I.
13. TA to the telecom regulator in Ethiopia (ECA) on developing climate smart infrastructure, including e-waste management protocols, and rollout guidelines.
14. Capacity building to Ethiopia’s MinT’s to operationalize gender-specific recommendations outlined in Ethiopia’s (forthcoming) ‘National Digital Inclusion Strategy.’

***Component 2: Data market development and integration***

1. This component seeks to foster the development of a regional data market by enabling more affordable, secure, and seamless data management and sharing across borders.It will finance data infrastructure to reduce the latency and costs of data sharing within the region, as well as build on the regional harmonization efforts under SOP-I and enhance and harmonize data governance through improved national and regional frameworks, including in areas such as data protection, to support secure data processing and prevent misuse. Financing will also be provided to strengthen cybersecurity incident response, including through regional partnerships and frameworks. Support will be provided to enhance data management and hosting infrastructure, with a view to achieving economies of scale and strengthening climate resilient data management. Capacity building workshops and training will be supported for representatives of the public and private sector. All training and workshops conducted will be in formats compliant with accessibility standards (appropriate headers, landmarks, labeling, alternative text, etc.).
2. ***Sub-component 2.1: Cybersecurity frameworks, infrastructure and capacity:*** This subcomponent seeks to strengthen cybersecurity and incident response capabilities in the region.It will do so both by strengthening basic national frameworks and through coordination at the regional level, with a strong focus on skills development and pooled resources. The financed activities will support the development of best practice frameworks, enhanced technical and operational capabilities, as well as capacity building, grounded in an understanding of the regional and national cyber threat landscape and regional knowledge sharing, to help create a trusted online transaction environment and safeguard digital infrastructure and services. Project financing will cover the following:
   1. TA to introduce and strengthen national legal, strategic, and institutional frameworks for cybersecurity, including compliance standards, as well as their harmonization at the regional level. (Ethiopia, Djibouti)
   2. Support for the establishment of a Cybersecurity Emergency Response Team (CERT) in Ethiopia and Djibouti including related TA, hardware and software.
   3. Financing basic and advanced cybersecurity training, knowledge-sharing workshops, and public awareness campaigns, at the national and regional levels, targeting policy makers, public sector employees, members of regional bodies, the business community, and high-risk sectors (financial, telecom, and infrastructure) and the development of cyber training programs, with targets for the number of female beneficiaries.
3. ***Sub-component 2.2: Data exchange, governance, and protection:*** This subcomponent will support investments in enabling data infrastructure and governance frameworks that facilitate cost-effective and secure data exchange in the region. It will build on the regional harmonization efforts under SOP\_I and focus on adopting common frameworks for data protection and data governance, reducing barriers for data sharing within and across borders, and enabling and promoting interoperability. It will also introduce data infrastructure that helps facilitate reducing the costs and climate impact of data storage, processing, and sharing in the region. Similar to the approach taken under 1.1 and 1.2, financing of data infrastructure will go through a competitive tender to encourage private sector participation, unless there is restricted private sector interest or if there is justification of government ownership of that infrastructure. Project financing will cover the following:
4. TA to undertake data hosting (including adoption of a cloud-based approach) and data management needs assessments at the national level, looking at demand and supply, regional demand aggregation, and options for attracting private sector investment and scope for strategic partnerships, as well as reducing associated environmental and climate impacts.
5. Financing for deploying resilient and agile hybrid (cloud and on-premises) data hosting solutions (infrastructure and services) at the national level.

***Component 3: Online Market Development and Integration***

1. This component aims to build the regional online market by removing barriers to cross-border trade and payments, as well as investing in key enablers for expanded digital service delivery.Leveraging the regional harmonization efforts under SOP-I, it will support the development of regional and national legal and governance frameworks on e-commerce, trade, and payment systems to improve and expand national governments’ capacity to support growth of cross-border services, payments, and trade. Financing support will be provided to deploy digital public infrastructure and TA to ensure its adoption across ministries, departments, and agencies (MDAs) through targeted digital skills training. By enhancing the digital capabilities of public administrations, the project will expand government capacity to provide e-services and implement regional-level agreements and systems. This component will also develop the regionaldigital skills base more broadly, through support for National Research and Education Networks (NRENs) and new digital skills training programs in areas where digital skills gaps are identified.
2. ***Subcomponent 3.1: Digital enablers for cross-border trade, payments, and service delivery:*** This subcomponent aims to enhance readiness to expand digitally enabled cross-border trade and service delivery, by introducing key enablers. With a view to supporting the E-Commerce Protocol under African Continental Free Trade Area (AfCFTA) and leveraging the development of an E-commerce Strategy for IGAD under SOP-I, this subcomponent supports a regional approach to digital trade through the development of key protocols for e-commerce, and capacity building for national trade ministries. This subcomponent will also enable and facilitate cross-border transactions for goods and services by developing the mutual recognition of e-signatures and supporting regional standardization and consensus-building efforts to deepen the integration of regional payment systems, building on national efforts already supported by the World Bank. Support will also be provided at the national level to develop shared digital public infrastructure for scaled digital service delivery and e-commerce. Project financing will cover the following:
3. Capacity building for national line ministries for trade, commerce, and investments, to improve their readiness to participate in regional trade agreements, including through the development of e-commerce strategies, and development of national protocols pertaining to the ICT sector obligations for World Trade Organization and AfCFTA accession.
4. TA and capacity building towards the adoption of regionally harmonized frameworks for the mutual recognition of e-signatures and e-transactions, in line with best practice standards. The capacity building will leverage similar activities undertaken by IGAD and financed under SOP-I.
5. ***Subcomponent 3.2: Research and education networks and training for digital skills:*** This subcomponent will provide assistance to the regional activities of the Ethiopian National Education and Research Network (EthERNet).It will enable the expansion and strengthening of the regional infrastructure supporting higher education by establishing regional collaboration among NRENs, allowing for economies of scale and knowledge transfer. Support will be provided to enhance the capacity of universities and TVETs, in partnership with NRENs and governments, to deliver digital skills programs for civil servants and university faculty and students. All skills programs will be encouraged to adapt pedagogical tools and techniques with a view to being accessible for people with disabilities. Project financing will cover the following:
6. Financing capacity building for existing NRENs and their membership in key regional networks (for example, the Ubuntunet Alliance and the EU Africa Connect 3 program), including support for staffing, equipment, and business planning to expand services offered by NRENs to the education sector.
7. TA for the development of a long-term business plan for sustainable EthERNet expansion.
8. Collaboration between NRENs in the region, through regional capacity-building initiatives (study tours and workshops) and regional access to open educational resources.

***Component 4: Project Management and Implementation Support***

1. This component will finance project management and implementation of project-associated activities. It will cover the additional operating costs of the project implementation units (PIUs). This component will help strengthen the technical and functional capacity of the PIUs, including through the recruitment of expert consultants in key areas and the facilitation of on-the-job learning and competency transfer. It will support independent audits, monitoring and evaluation (M&E) and quality assurance to ensure compliance with best procurement and financial management (FM) practices. Support will be provided to enable collaboration between regional and national PIUs. This component will also support Environmental and Social Framework (ESF) compliance, with a particular emphasis on addressing the high security- and GBV-related risks associated with the deployment of infrastructure and civil works, including stakeholder consultation, a robust grievance redress mechanism, and development of site-specific assessments and plans. In Ethiopia, the PIU will be at the Ministry of Innovation and Technology (MinT), serving the Digital Ethiopia project since 2021.

***Component 5: Contingent Emergency Response***

1. This component will allow for rapid reallocation of uncommitted national IDA funds in the event of an eligible emergency declared in one of the participating countries. For the Contingency Emergency Response Component (CERC) to be activated and financing to be provided, the recipient will need to (a) submit a request letter for CERC activation, and the evidence required to determine eligibility of the emergency; (b) submit an Emergency Action Plan, including the emergency expenditures to be financed; and (c) meet the environmental and social requirements as agreed in the Emergency Action Plan and Environmental and Social Commitment Plan. By having Emergency Action Plan and allocating related budget, CERC will help strengthen the institutional capacity to respond to emergencies caused by climate and natural disasters, and support reinforcing the country’s resilience to climate and natural risks identified above.
2. The implementation of Components 1, 2 and 3 involve the construction of ***civil works*** large enough to be carried out by a contractor which can increase the risk of several forms of GBV. Component 1 will finance capital expenditure associated with the network infrastructure development, including the construction of terrestrial fiber optic (sub-component 1.1) and last-mile or backbone network infrastructure, transmission towers, and other fixed connectivity stations (sub-component 1.2). More importantly, sub-component 1.1 will undertake the construction of linear infrastructure involving roll-out of up to 1,100kms. Component 2 (as intends in sub-component 2.1) will involve the construction of cybersecurity infrastructure that helps facilitate reducing the costs and climate impact of data storage, processing, and sharing in the region. As proposed under sub-component 2.1, the project will finance the construction of digital infrastructure including on-premises for secure data exchange, data storage and data hosting solutions. Component 3 through sub-component 3.1 will support digital enablers for cross-border trade, payments, and service delivery. Financing support will be provided to deploy digital public infrastructure that facilitate cross-border transactions for goods and services. Support will also be provided at the national level to develop shared digital public infrastructure for scaled digital service delivery and e-commerce.
3. Therefore, as set out in World Bank Good Practice Note (2022), the SEA/SH Prevention and Response Action Plan is prepared for Components 1, 2 and 3. With regards to the civil works involving the three components, the document details the operational measures that will be put in place by the EA-RDIP to prevent and respond to project related GBV including managing related grievances. It incorporates codes of conduct for project workers and other strategies to prevent risks of GBV from occurring and establishes procedures for managing related grievances. The SEA/SH Prevention and Response Action Plan is part of the ESMF for the EA-RDIP which provides details of Ethiopia Legal, Regulatory and Institutional framework and the requirements of the ESF relevant for this Plan.
   1. **Objectives of the Assessment**
4. The preparation of this document aims to assess the risks of GBV based on an in-depth understanding of the country context. This includes an outline of the relevant risks, stakeholders related to it (including referral services) and develop a system for the project to handle respective risks (and incidents, if occurred). The specific objectives are to:

* Identify and assess the risks of SEA/SH in EA-RDIP SOP II, particularly Components 1, 2 and 3 including: undertaking social risk assessment at the community-level risks, assess capacity and availability of quality, safe and ethical services for survivors; review the capacity of the MinT to respond to SEA/SH risks, and rate the project for overall risk using the World Bank’s standard GBV risk assessment tool.
* Address the risks of SEA/SH of the EA-RDIP SOP II by identifying and implementing appropriate mitigation and monitoring measures. Based on the risks identified, devise the corresponding mitigation measures and implement actions suggested to mitigate project-related risks of SEA/SH. Monitor the effectiveness of the mitigation measures for corrective actions as appropriate.
* Respond by preparing project response actions for GBV cases. Provide essential services for survivors and report case through the GM as appropriate keeping survivor information confidential and anonymous.
  1. **Definition of GBV/SEA/SH**

1. The World Bank Good Practice Note defines GBV, SEA, and SH as follows[[82]](#footnote-80):

* ***Gender-based Violence (GBV):*** It is an umbrella term for any harmful act that is perpetrated against a person’s will and that is based on socially-ascribed gender differences. GBV includes acts that inflict physical, mental, sexual harm or suffering; threats of such acts; and coercion and other deprivations of liberty, whether occurring in public or in private life.

GBV disproportionately affects women and girls across their lifespan and takes many forms, including sexual, physical, and psychological abuse. It occurs at home, on the streets, in schools, workplaces, farm fields, and refugee camps; during times of peace as well as in conflicts and crises. The term GBV is most commonly used to underscore systemic inequality between males and females—which exists in every society in the world—and acts as a unifying and foundational term for most forms of violence perpetrated against women and girls (VAWG).

* ***Sexual Exploitation and Abuse (SEA):*** It composes two key terms, namely: sexual exploitation (SE) and sexual abuse (SA). The definition of both is given in the context of Bank-financed operations/projects as follows. ***Sexual exploitation*** occurs when access to or benefit from Bank-financed goods, works, non-consulting services or consulting services is used to extract sexual gain. Whereas, ***sexual abuse*** occurs when a project worker (contractor staff, subcontractor staff, supervising engineer) uses force or unequal power *vis-à-vis* a community member or colleague to perpetrate or threaten to perpetrate an unwanted sexual act.
* ***Sexual Harassment (SH):*** In Bank-financed operations/projects, sexual harassment occurs within the context of the company of a subcontractor or contractor and relates to employees of the company experiencing unwelcome sexual advances or requests for sexual favors or acts of a sexual nature that are offensive and humiliating among the same company’s employees.
* ***SEA versus SH:*** SEA occurs against a beneficiary or member of the community. SH occurs between personnel/staff and involves any unwelcome sexual advance or unwanted verbal or physical conduct of a sexual nature. The distinction between the two is important so that agency policies and staff training can include specific instructions on the procedures to report each.

1. There may be different categories of GBV that may be exacerbated by World Bank-financed IPF involving major civil works. However, since SEA and workplace SH are the types of GBV most likely to occur in or be exacerbated by IPF, the risk identification and mitigation of these forms of GBV are the primary focus of the SEA/HA Prevention and Response Action Plan for the EA-RDIP.
   1. **Methodology**
2. This GBV (SEA/SH) Prevention and Response Action Plan is prepared based on both the primary and secondary data sources:

* As primary sources of data: (a) key informant interview with leaders of the women Organizations (Ministry of Women and Social Affairs, Women and Social Affairs Bureau in the respective project target regions, Women and Social Affairs Office in Elidar Woreda (Afar) has been conducted from October 12 to November 13, 2022 on the issues of EA-RDIP related GBV risks; (b) separate interview has been arranged for the vulnerable and disadvantaged groups including women; and (c) community consultation in Haweli Kebele in Halli-Dalho along Ethiopia-Djibouti connectivity route has been conducted. It was held at the Galafi village on November 18, 2022 in which 18 participants took part. With the aim to capture the views and concerns of all segments in the local community including disadvantaged or vulnerable groups, the participants were composed of clan leader, religious leaders, community representative, women, youth, person with disability and refugee. ***Annex 1*** provides the guiding questions for gender-based violence (SEA/SH) risk assessment. ***Annex 3*** provides the attendance of the participants of community consultation. Accordingly, the inputs from these primary sources are incorporated in the preparation of this GBV Risk Assessment and SEA/SH Preventive and Response Action Plan.
* Likewise, relevant secondary data sources have been reviewed including the World Bank Good Practice Note on Addressing Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) in Investment Project Financing involving Major Civil Works; the Ethiopian Demographic and Health Survey (EDHS 2016), and previous empirical studies on the Ethiopian context GBV risks situating to the EA-RDIP target areas.

1. **Review of Legal and Policy Framework**
   1. **National legislations**
2. ***Gender-Based Violence under the Ethiopian Constitution:*** In addition to ratifying the international legal instruments including the Universal Declaration of Human Rights (UDHR), International Covenant on Economic, Social, and Cultural Rights (ICESCR), International Covenant on Civil and Political Rights (ICCPR), the Convention on the Rights of the Child (CRC), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and other soft laws such as Beijing Platform for Action (BPA)**,** the Ethiopian Constitution (Article 9) has made these treaties to be an integral part of the law of the land. The Constitution (Article 13) also affirms the fundamental rights and freedoms shall be interpreted in a manner conforming to the principles of the Universal Declaration of Human Rights, International Covenants on Human Rights, and other international instruments adopted by Ethiopia. To meet its commitments to international obligations and to protect the rights of women, Ethiopia has made different gender-sensitive constitutional provisions:

* The Constitution (Article 6) duly recognizes the equal citizenship status to men and women and it [the Ethiopian Constitution] under (Article 7) set out in the masculine gender shall also apply to the feminine gender.
* The Constitution (Article 25) guarantees equality before the law and prohibits sex-based discrimination.
* Article 34 addresses marriage rights, affirming women’s equal rights during marriage, divorce decision-making during the marriage.
* The notable provision of the Constitution (Article 35) is devoted exclusively to the rights of women and enlists the specific rights of women. These rights, which the Constitution grants to women *inter alia* includes equal protection of the law, equality in marital affairs, protection from harmful traditional practices, maternity rights in employment, the right to consultation, property rights, employment rights, and access to family planning information and services, etc.
* The Constitution (Article 35(4)) has made the state to be responsible to protect women from any act of violence and obligates the state to eliminate the influences of harmful customs, laws, and practices that oppress or cause bodily or mental harm to women.

1. ***The Ethiopian Federal Revised Family Code:*** In addition to the constitutions, some other more specific gender-based laws have been enacted to protect the rights of women in general and to end gender-based violations. The Ethiopian Federal Revised Family Law which is one of such laws enacted in 2000 and is used to protect and safeguard equality between sexes in their relation concerning marriages (Proc. No. 213/2000). The Revised Family Law has played a great role and has influenced some of the parts of the Civil Code that deal with marriages. Subsequently, it has abolished most of the discriminatory articles in the 1960 Code concerning marriage. For instance:

* It abolished provisions from the 1960 Code that neutralized gender hierarchy by stating that a wife “owes [her husband] obedience on all lawful things which he orders (Article 635: 2), that “the husband was to give protection to his wife” (Article 644: 1) and that the husband “watch over [the wife’s] relations and guide her in here conduct” (644: 2).
* The 2000 Revised Family Law raised the legal age of marriage from 15 in the 1960 Code to 18, footing women’s equal rights in selecting their family residence, and granted them equal footing in family administration and decisions about family property. The progress in the Family Law requires respect, support, assistance, faithfulness between the couples and requires the joint management of the family (Revised Family Law, 2000: Articles 49, 50 & 56) (Code, 2000).
* The legal age of marriage for women and men is 18 years old (Family Code, Art. 7). Child marriage is prohibited (Family Code, Art. 7 and Criminal Code, Art. 648).

1. ***The Revised Criminal Code of Ethiopia:*** The Criminal Code is another instrument that can be refereed to make judicial measures and corrective justice on perpetrators in Ethiopia. The Criminal Code has been revised in line with the constitutional provisions and essences in a way to confirm that those articles deal withwomen's rights and their protection against any form of violence:

* Unlike the 1957 Penal Code, the revised Code incorporated explicit provisions tackling violence against women. The Code has elaborated the ambiguous conceptions and provisions of gender-based violence, incorporating new offenses, redefining the elements of these offenses, andrevising the penalties applicable in cases of violation.
* The Revised Criminal Code has criminalized those forms of violence against women including rape (Articles 620-28), trafficking women (Article 597), prostitution of another for gain (Article 634), and physical violence within marriage or in an irregular union (Article 564), and abduction (Articles 587- 590). Traditional practices including Female Genital Mutilation (Articles 565-6), and early marriage (Article 649) are also considered as harmful traditional practices and lead to a penalty for contraventions.
  1. **Relevant World Bank’s Provisions**

1. The Environmental and Social Framework (ESF), which applies to all World Bank Investment Project Financing (IPF) on or after October 1, 2018, is an important policy foundation for the Bank’s commitment to address SEA/SH. The ESF’s ten Environmental and Social Standards (ESSs) set out the requirements for MInT relating to the identification, assessment, and mitigation of environmental and social (E&S) risks and impacts associated with the ED-RDIP SOP II. While the ESF itself does not address SEA/SH as a separate area of social risk, various ESSs contain requirements for the MInT that are directly relevant to SEA/SH including:

* As per the provision in ESS1, the Environmental and Social Assessment (ESA) identifies potential environmental and social impacts early on in project preparation and is usually the primary vehicle for assessing SEA/SH risks on an IPF involving major civil works. In line with this requirement, the project implementing agency MInT carries out an ESA of the project to assess its environmental and social risks throughout the project life cycle.
* ESS2, paragraph 13, has the requirement for non-discrimination and equal opportunity. As set out in this provision, the employment of the project workers will be based on the principle of equal opportunity and fair treatment, and there will be no discrimination with respect to any aspects of the employment relationship, such as recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, termination of employment, or disciplinary practices on the basis of personal characteristics such as gender. The same paragraph further stipulates that the project labor management procedures will set out measures to prevent and address gender based harassment, intimidation, and/or exploitation.
* ESS4 states the general provision that when the MInT retains direct or contracted workers to provide security to safeguard its personnel and property, it will assess the risks posed by these security arrangements to those within and outside the project site including GBV. Likewise, ESS5 has the requirement for the MInT to ensure in the consultation process that women’s perspectives are obtained and their interests factored into all aspects of resettlement planning and implementation.
* Yet, as required in the ESS10, the process of preparing the Stakeholder Engagement Plan (SEP) should be inclusive, to accommodate the needs and circumstances of different stakeholders, paying special attention to identified disadvantaged or vulnerable individuals or groups including women.

1. To supplement the provisions in the aforesaid ESSs, the World Bank provides a Good Practice Note (GPN) on Addressing Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) in Investment Project first published in 2018 and revised twice in 2020 and 2022. The GPN recommends that the MInT consult with local organizations, women’s groups, and nongovernmental organizations (NGOs) to: (a) understand the types of GBV that are present in the project-affected community and that may be exacerbated due to the undertaking of the project; (b) map services and safe spaces available to survivors of GBV; (c) define the specific ways that SEA/SH risks are to be addressed in the project by identifying prevention and mitigation measures, including the development of a SEA/SH Action Plan; and (d) consider other ongoing efforts to prevent and respond to GBV more broadly, including ongoing efforts to prevent sexual and physical violence against children, how the project will complement/use them, and how the project SEA/SH prevention interventions linked wherever possible with existing activities in the health sector and other GBV service providers, such as justice/security, psychosocial support and economic empowerment programming.
2. **Findings of the GBV Risk Assessment** 
   1. ***Ethiopian Context GBV Risks: Findings of the Desk Review***
3. As reported in the 2016 EDHS[[83]](#footnote-81), in Ethiopia, violence against women and girls continues to be a major challenge and a threat to women’s empowerment. Women and girls face physical, emotional, and sexual abuses that undermine their health and ability to earn a living; disrupt their social systems and relationships; and rob them of their childhood and education. In line with this, the findings of the EDHS on Ethiopian context GBV risks assessed as follow.
4. As to the ***prevalence of GBV***: (a) 23% of women age 15-49 have experienced physical violence since age 15, and 15% have experienced physical violence in the past 12 months before the survey; (b) 10% of women age 15-49 reported that they have experienced sexual violence at some point in their lives, and 7% reported that they had experienced sexual violence in the past 12 months before the survey. Five percent of women had experienced sexual violence by age 18, including 2% who had experienced sexual violence by age 15; and (c) women may experience a combination of different forms of violence. Sixteen percent of women experienced physical violence only, 3% experienced sexual violence only, and 7% experienced both physical and sexual violence. Overall, 26% of women age 15-49 have experienced either physical or sexual violence, or both.
5. The findings of the 2016 EDHS on the ***patterns of GBV*** by background characteristics showed: (a) the youngest women (age 15-19), women with no children, and never married women are less likely to have experienced physical violence since age 15 than most other women; (b) rural women are only somewhat more likely (24%) than urban women (21%) to have experienced physical violence since age 15; (c) women’s experience of sexual violence has a linear relationship with age. The percentage of women who have experienced sexual violence increases from 4% for women age 15-19 to 14% for women age 40-49; (d) urban women (7%) are less likely than rural women (11%) to experience sexual violence; (e) women with no education are four times as likely to have experienced violence during pregnancy as women with more than secondary education; and (e) women with more than secondary education (5%) are half as likely to have ever experienced sexual violence as women with no education (13%).
6. As to the ***perpetrators of GBV,*** the findings of 2016 EDHS showed enormous percentage of close partners. Accordingly, in line with perpetrators of physical violence, among all ever-married women age 15-49 who have experienced physical violence since age 15, 68% report their current husbands/partners as perpetrators of physical violence, and 25% report former husbands/partners as perpetrators. For perpetrators of sexual violence, among ever-married women age 15-49 who had ever experienced sexual violence, 69% reported their current husband/partner and 30% reported former husbands/partners as perpetrators. Perpetrators of different forms of GBV are exclusive to marital control by current husband/partner (if currently married) or most recent husband/partner (if formerly married): about 39% of ever-married women reported that their husbands/partners are jealous or angry if they talk with other men, 33% reported that their husbands/partners insist on knowing where they are at all times, 16% reported that their husbands/partners try to limit their contact with their families, 15% reported that their husbands/partners do not permit them to meet their female friends, and 13% reported that their husbands/partners frequently accuse them of being unfaithful. Overall, 16% of ever-married women reported that their husbands/partners display three or more of the specified behaviours.
7. Studies (Deribe et al. 2012[[84]](#footnote-82); EDHS 2016[[85]](#footnote-83); Marisa et al. 2018[[86]](#footnote-84)) on the GBV risks in Ethiopian context, emphasized that there is no single driver of GBV, including SEA/SH but multiple risk factors for GBV at the individual, relationship, community, institutional and policy levels. As to the studies, these multiple factors are rooted in two major causes. The first driver of GBV is root in the patriarchy system that prevails across societies in Ethiopia. It is a form of mental, social, spiritual, economic and political organization/structuring of society produced by the gradual institutionalization of unequal gender relation, maintained and reinforced by different institutions linked closely together to achieve consensus on the lesser value of women and their roles. The institutions of patriarchal system are interconnect not only with each other to strengthen the structures of domination of men over women, but also with other systems of exclusion, oppression and/or domination based on the social construction of gender. The second driving force of GBV in Ethiopia is rooted in the weak policy enforcement. In this regard, the 2016 EDHS justified that Ethiopia has many laws in place at all levels of the legal system that guarantee equal rights and prohibit most forms of GBV, including women’s equal property rights, female genital mutilation (FGM), child marriage, most forms of rape, and some intimate partner violence. However, for many reasons, including the often-discordant levels of the formal and informal legal system, the general culture of acceptance of GBV, the poor training of law enforcement and judges, and the lack of institutional support behind the enforcement of the bans, the policies are widely ineffective at preventing GBV, including SEA and SH.
8. Therefore, assessing the EA-RDIP SOP II related SEA/SA risks involves two essential issues. First, the Ethiopian and/or regional context in which the project will operate, and second, the potential risks that the implementation of the EA-RDIP SOP II may bring. As set out in the WB’s requirement for the MInT, these SEA/SH risks need to be assessed throughout the project’s life by monitoring the situation, assessing the effectiveness of risk mitigation measures, and adapting them accordingly.
   1. ***Brief Summary of Findings of Stakeholder Consultation***
9. To consider the views and concerns of women separate interview has been conducted with them. They were also proportionately included in the selection of the participants for community consultation. Further, organizations for disadvantaged or vulnerable groups such as Ministry of Women and Social Affairs and the line regional bureau and woreda office were consulted to express the special concerns of women regarding the project related SEA/SH. Accordingly, a brief summary of findings are stated as follows:

* In line with the community context GBV risks, informants and participants of community consultation invariably expressed the disproportionate impacts on women due to the overall patriarchal socio-cultural system that gives domination of men. Informants expressed how this can be reflect in the EA-RDIP. Women have limited capacity to defend their interest in and benefits from the project. For instance, women may not equal benefits from the resettlement packaged associated with Components 1, 2 and 3 as the existing system of property relation precludes women from holding land titles. Also, as men who make decision and represent the household in public spheres, women’s opportunity to take part in the planning and implementation of the project is very much limited.
* EA-RDIP specific GBV Risks expressed by informants and participants of community consultation include: women have no capital or access to credit to participant and benefit from the ICT related business activities proposed in the project; women have no ICT knowledge and skills to benefits from the proposed ICT business activities; and limitation to express project related grievances in fear of husbands reaction.
* Informants from Women Organizations expressed the inability of the local capacity to prevent and respond to GBV, including SEA/SH, and the availability of safe and ethical service provision for survivors as a serious problem.
  1. **Gender-Based Violence-SEA/SH in EA-RDIP SOP II**

1. **GBV risk factors**
2. The implementation of the EA-RDIP can increase the risk of SEA/SH both in public and private spaces, by a range of perpetrators and in a number of ways. Thus, the WB’s ESF and GPN have provisions that set out the requirement for the project to assess the GBV risk factors related to the implementation of Components 1, 2 and 3 and identify and implement prevention and response mitigation measures to address those risk factors. Accordingly, a preliminary assessment was conducted using the Ecological Framework Model (EFM). Applying this model entails two critical issues in the assessment of the GBV risks related to the EA-RDIP and devising mitigation measures for the identified risk factors:

* First, when considering SEA/SH risks, there are different “areas of impact” that influence both the nature of the risk and the appropriate prevention and mitigation measures that the project can implement. These are: (a) the project site, it is the location where the EA-RDIP’s activities are being undertaken. This includes both the actual locations where civil works of the Components 1, 2 and 3 are conducted; (b) communities adjoining the project, that is, the area of impact beyond the project site. This extends beyond the specific location where civil works are being carried out and the adjoining communities are at risk of SEA/SH, particularly when the EA-RDIP project workers are highly mobile; and (c) there are also regional and national areas of impact that will not be affected by the specific interventions of the EA-RDIP but may benefit through institutional strengthening and other efforts to address SEA/SH risks. An assessment at the regional and/or national level can give MInT an understanding of those experiencing GBV in the region or country, as well as the type and scale of violence, and its acceptability, in the EA-RDIP project-affected communities.
* Second, there are a number of SEA/SH risk factors for the EA-RDIP SOP II that cut across several spheres including communities and institutions and, depending on their scope, they can exacerbate existing risks or can create new ones.

1. Taking the aforesaid broader and multifaceted context, the assessment identified the following GBV risk factors for the prevention and response action plan of the Components 1, 2 and 3 of the EA-RDIP SOP II:

* *Local context GBV risk factors*: The project area context GBV risks factors manifest in many ways: (a) women and girls are at particularly high risk of GBV because of societal norms that perpetuate power differentials between males and females and support or condone males’ violence against women and girls; (b) several other local context GBV risk factors that aggravate the vulnerability of women and girls to SEA committed by project workers include: high levels of poverty in the project area; large population of young women; low levels of education among women and girls; low rates of employment among women; and high crime levels/violence in the larger community; and (c) due to unequal treatment of the existing patriarchal system of property ownership, women have limited capacity to defend their interest in and benefits from the project resettlement packages.
* *Labour influx*: Labour influx is an important GBV risk factor associated with the civil works of the Components 1, 2 and 3 of the project. Labor influx and the extent to which the affected community has capacity to absorb labor influx, as well as the inflow of income to workers, can exacerbate already existing inequities between workers and community members for SEA/SH risks. Thus, the risks from the project labor influx can be expected in many ways: (a) large influx of workers may increase the demand for sex work; (b) increased risk of early marriage in project-affected communities where marriage to an employed man is seen as the best livelihood strategy for an adolescent girl; (c) relative higher wages for project workers can lead to an increase in transactional sex; and (d) the risk of incidents of sexual activity between laborers and minors, even when it is not transactional, can also increase.
* *Weak local capacity for GBV prevention and response mechanism*: Prevention and response to project-related risks of GBV require multipronged efforts and sectors, including the government who are critical to ensuring that SEA and SH prevention and accountability mechanisms are in place. However, the assessment of the local capacity to prevent and respond to GBV, including SEA/SH, and the availability of safe and ethical service provision for survivors are found to be low across all the EA-RDIP SOP II implementing areas.

1. **GBV Risks**
2. The findings of the assessment based on the desk review and stakeholder consultation show the following GBV risks associated with the Components 1, 2 and 3 of the EA-RDIP SOP II:

* *SEA risks:* Some of the forms of SEA that may be committed by the project workers against women and girls in the project-affected community include: rape and sexual assault; sexual harassment; unwanted sexual advances including touching; physical violence/assault; use of abusive, demeaning or culturally inappropriate language; transaction sex; and other forms of humiliating, degrading or exploitative behavior.
* *SH risks related to the project working environment:* Risk factors for SH for the EA-RDIP SOP II include female laborers working alongside male laborers without adequate supervision of work sites; without separate latrine and other sanitation facilities for males and females; and without specific mechanisms, for females to share concerns about their working environments, including concerns about sexual harassment. Given the nature of the EA-RDIP activities, additional SH may be environments that are stringently hierarchal, give significant and/or undue power to management, and do no promote and reflect female leadership.
* *Security posed GBV risks*: Given the fragile and conflict affected situation of in most project target areas, it is likely that the government (federal, regional, or local government) to engage security personnel to safeguard the project workers, assets and activities. Thus, both project physical security measures and security guards can have particularly significant impacts on women, who are likely to be traversing distances for domestic tasks. They may be disproportionately affected by the presence of (typically male and potentially armed) security guards, whom they may encounter daily in following their routine.

1. ***GBV risk rating***
2. The World Bank Good Practice Note(GPN) on Addressing Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) in investment project financing (IPF)involving Major Civil Works set out that where major civil works such as Components 1, 2 and 3 of the EA-RDIP are part of IPF, the SEA/SH tool of Infrastructure Projects will applicable. Accordingly, in the table below, the GBV risk rating for the EA-RDIP SOP II is done using the SEA/SH risk screening questions based on Infrastructure Projects.

***GBV Risk Screening for the EA-RDIP SOP II (Components 1, 2 and 3)***

|  |  |  |  |
| --- | --- | --- | --- |
| ***Project Context*** | ***Response Answer*** | ***Risk Rating*** | ***Comment Risk Response mechanism*** |
| Is the project in an area with an active emergency or humanitarian situation? | Yes | Substantial Risk | Most of the project area is an already fragile region. Over the past few years, consecutive shocks among them poor rainfall, flooding, macroeconomic crises, and armed conflict have contributed to a significant level of vulnerability in pastoralists and agro-pastoralist woredas. This mostly is in the project target regions, Afar, Somali, and Gambella. |
| How much infrastructure construction, upgrading or rehabilitation does the project entail? | Yes | Substantial Risk | The networking of fiber connectivity in Dollo-Ado route will cover 105.4 km, Halli-Balho route 85.6 km, and Bameza-Abugedaf route 102 km. Besides, both sub-component 1.1 and sub-component 1.2 involves the construction of access roads to transmission towers and other fixed connecting stations. Likewise, all the sub-components under Component 2 and Component 3 will involve civil works: the constructions of cyber security infrastructure; secure exchange and data storage infrastructure; across-borders payment systems infrastructure; and Research and Education Networks. Yet, the investments in new digital infrastructure development through PCM stimulated by Component 2 and Component 3 will have civil works. |
| What is the extent of the influx of labor associated with project activities? | Yes | Substantial Risk | The project is expected to cause labour influx due to the labour demands for the project civil works under Components 1, 2 and 3 mentioned just before. |
| During the preparation of the project, were consultations carried out with local residents, associations of women and children? | No | Moderate Risk | Women and women's associations were not consulted during the initial phase and during the preparation of the project because it was carried out as an emergency. Consultation with vulnerable and disadvantaged groups including women has been conducted at Haweli Kebele along the Halli-Balho connectivity route Afar Region. Likewise, key informant interview with leaders of the women Organizations (Ministry of Women and Social Affairs, Women and Social Affairs Bureau in the respective targeting regions, Women and Social Affairs Office in Aldar Woreda (Afar) has been conducted to assess their views on EA-RDIP related GBV risks. Accordingly, the inputs are incorporated in the preparation of the ESMF, SA, RF, SEP and SEA/SH Preventive and Response Action Plan for the project. |
| During the consultations, were aspects of gender-based violence raised by the participating women? | Yes | Substantial Risk | No, but consultation with women as been conducted during the E&S risks assessment and the inputs from participating women are incorporated in the preparation of the ESMF, SA, RF, SEP and SEA/SH Preventive and Response Action Plan for the project. |
| Will military forces or private security agents be recruited under this project? | Yes | Substantial Risk | As the project civil works, particularly the linear construction works under Component 1 traverse areas with security risks, the project Security Risk Management proposed the use of both public and private security personnel. |
| Does the project area include areas of high poverty? | Yes | Substantial Risk | All the three connective routes proposed in the project are areas of predominant pastoralist communities with the lowest development indicators and the highest incidence of poverty in Ethiopia. |
| Is the project located in regions that are difficult to supervise (remote or difficult to access areas)? | Yes | Substantial Risk | All the three fibre connectivity routes proposed for the EA-RDIP in Ethiopia are remote pastoral areas with poor infrastructure and means of communication. |
| Is the project located in an urban, peri-urban or rural area? | Mostly  Rural | Substantial Risk | The project is predominantly located in rural areas which affects access to service providers. |
| Are project activities on a school route or other routes that women and girls use to carry out their daily activities | Yes | Substantial Risk | The construction of the fiber networks in each connectivity route traverses towns and several rural villages of pastoral communities. Besides, the linear civil works of the project will be undertaken along the existing road ways. Therefore, it is highly likely that the project activities will be undertaken on a school route or other routes that women and girls use to carry out their daily activities. |
| Are women working near men without supervision? | Likely | Moderate Risk | Project workers will be supervised but there is the possibility that men and women may work in close proximity given the nature of activities. |
| Is there a National Action Plan on Addressing Violence Against Women and Girls/GBV | No | Moderate Risk | There is no national action plan on GBV prevention and response. However, there are action plans to address harmful traditional practices such as early marriage. |
| Is there at the national level GBV Working Group | Yes | Moderate Risk | There is national GBV sub-cluster co-lead by UNFPA/UNICEF and the Ministry of Women and Social Affairs. However, the sub-cluster mainly focuses on coordinating GBV prevention and response in emergency and conflict affected settings |
| Is there a national referral protocol for GBV Service Provision | Yes | Low Risk |  |
| Does the project have the capacity to monitor the risks of harassment and gender-based violence throughout the scope and cycle of the project? | Yes | Low Risk | Yes, the project will take into account the Prevention Plan against Sexual Harassment and Abuse and Sexual Exploitation. Resources will be made available to the project. |
| **Overall Evaluation of Risk for Components 1, 2 and 3** | **Substantial** | | |

1. **GBV – SEA/SH Risk Mitigation, Prevention and Response for EA-RDIP SOP II-Ethiopia**
2. The WB Good Practice Note recommended SEA/SH Prevention and Response Action Plan for Moderate, Substantial and High-Risk Projects. Based on the GBV Risk Screening for EA-RDIP SOP II above, the project is determined as substantial with regard to-SEA/SH and hence, the project requires to devise appropriate SEA/SH risk mitigation and ongoing monitoring measures. As a requirement to integrate SEA/SH Prevention and Response measures to EA-RDIP SOP II, key element of the plan include:

* Emphasize prevention: Adopt risk-based approaches that aim to identify project-related key risks of SEA/SH and to undertake measures to prevent or minimize harm.
* The project ESMPs lays the first building blocks for addressing SEA/SH risks and should provide the basis of the Action Plan by integrating GBV risk prevention and response mechanism into every components of each ESMP.
* Updating ESMPs and C-ESMPs to include the SEA/SH prevention and response Action Plan.
* Create awareness on SEA/SH mitigation and response mechanisms within the implementing agency (IA) and contractors.
* Stakeholder consultations including the participation of the community that will take place throughout the life of the project, every six months, which will help to inform GBV risks mitigation in the project.
* Publicly post or otherwise disseminate messages clearly prohibiting SEA/SH in all project implementation sites during the construction and operation period of the project, whether the project workers are perpetrators or survivors. This can include the development, adaptation, translation and dissemination of communication materials (through local radio, posters, banners, at community forums etc.) outlining unacceptable behavior on SEA/H and where relevant referencing existing staff rules for civil servants that may already be in place.
* Build on existing local knowledge: Engage community partners—local leaders, civil society organizations, gender and child advocates—as resources for knowledge on local-level risks, effective protective factors and mechanisms for support throughout the project cycle.
* Enable continuous monitoring and learning: Ensure operations integrate mechanisms for regular monitoring and feedback to track effectiveness and to build internal knowledge of what works to prevent, mitigate and respond to SEA/SH.
* Project-level measures to address SEA/SH risks consider other ongoing efforts to prevent and respond to GBV more broadly, including ongoing efforts to prevent sexual and physical violence against children, and how the project will complement/use them. For instance, project SEA/SH prevention interventions be linked wherever possible with existing activities in the health sector, and other GBV service providers, such as justice/security, psychosocial support and economic empowerment programing.
* Project staff will sign Codes of Conduct:
* CoC can be mentioned in routine project protocol briefings.
* Include session on SEA/SH awareness training, in the training and capacity building of the response team.
* Focus will be sharing key messages (as above) with project staff
* Establish GBV sensitive channels for reporting in the Grievance Redress Mechanism (GRM).
* Clearly define the GBV requirements and expectations in the bid documents and the necessary actions in the CoCs.
* The project site will ensure that separate toilet and hygiene facilities are available and functional for men and women working on the site, including inside-locking doors and appropriate lighting.
* Coordinate with school communities and organize activities/disseminate information on SEA targeting adolescent girls.

1. **Operationalization of this SEA/SH Prevention and Response Plan: Project Annual Work Plan and Budget**
2. MInT will ensure the commitments and planned activities in this SEA/SH Prevention and Response Plan are operationalized through the project annual work plan and budget. MInT must include environmental and social activities in this SEA/SH Prevention and Response Plan with estimated budget in the annual work plan and budget. The project annual work plan and budget passes through a review by task team leaders and environmental and social specialists prior to issuance of no objection. The below table presents details of SEA/SH Prevention and Response Action Plan for the EA-RDIP-Ethiopia.

***Detailed SEA/SH Prevention and Response Action Plan for the EA-RDIP SOP II-Ethiopia***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | ***Activity to Address SEA/SH risk*** | ***Steps to be taken*** | ***Timelines*** | ***Responsible*** | ***Monitoring (Who will monitor)*** | ***Output indicators*** | ***Estimated Budget*** |
| *1* | ***Capacity building of the PIU on SEA / SH Responsibilities and Key Actions*** | | | | | | |
| 1.a | Capacity building sessions for the PIU (Management/ leadership) on GBV, SEA/SH. The training is intended for management teams, committees/taskforces and managers responsible for the implementation of Components 1, 2 and 3 activities.  Each training will be a Three -Days training on:   * Gender based violence (GBV), SEA and SH * Developing a comprehensive approach to Prevention of and Response to project related GBV, SEA and SH in the implementation of Component Two and the EARDIP project * Build Scenarios, case studies and field experience relevant to the subject * Review of the Code of Conduct /disciplinary action for violation of CoC, * Roles and responsibilities of actors involved in the project, including coordination mechanisms internal to the project to ensure adequate attention to and monitoring of GBV, SEA and SH risks * Internal GBV, SEA and SH case-reporting mechanism, accountability structures, and referral procedures within agencies * Community-based reporting of GBV, SEA cases related to project staff by community members * Services available/referral pathway. | * Prepare training modules and materials * To prepare for the training using the developed module and materials * The civil work Contractors’ procurement document and contractual agreement to be reviewed in terms of the capacity for prevention and response to project SEA/SH * Human resource manuals and staff capacity to be assessed in term of the prevention and response to project SEA/SH * Conduct training for targeted audience * Develop a work plan on enhancing prevention and protection * To appoint an internal focal point in charge of reporting (who might include one in HR dept) | Quarter 1 for the initial training  Once every quarter as a short term follow training which will include sharing of practical experiences | PIU Gender Specialist | PIU Gender Specialist | * Number of trainings conducted * Number of PIU (Management/leadership) members trained * Focal point identify * Work plan developed * Code of conduct prepared | 9,000 USD |
| 1.b | Code of Conduct | * Prepare project code of conduct documents * Deliver training for employers | Start in quarter one and continuous | PIU | PIU | * Document prepared * Number of employers/ individuals received training on code of conduct | 20,000USD |
| 1.c | Ongoing Oversight Measures in the Project, and under that activity include ensuring that SEA and SH are regular agenda items on PIU meetings; | * Ensure the Organized regular PIU meetings include:   + SEA & SH agenda   specifically on status, problems, successes in the implementation of mitigation measures and discussion can also be made on trend in cases, however, the meeting should not discuss individual cases and incidents as they are confidential.   * + Reports and updates   + Follow up actions | Start in quarter one and continuous | PIU | Gender/GBV Specialist | * Number of monitoring of project meetings held with SEA/SH as an agenda item * Percentage of cases/issues/ concerns followed up | 3000 USD |
| **2** | ***Mapping out GBV/SEA prevention and response service providers*** | | | | | | |
| 2.a | Mapping of GBV Service providers will be undertaken in the project implementation woredas. The mapping exercise will include government social services, CBOs, NGOs, and other civil society organizations.  Map woredas where the project is implemented for referral services for survivors of GBV, SEA and SH | * Conduct field visits and or remote review (desk) to identify and map the existing services, gap analysis, entry points for survivor assistance, and local actors working on the prevention of and/or response to gender-based violence. * Towards achieving this, the following will be undertaken:   + Conduct a desk review of GBV service providers in hosting woredas and communities. Including the prevention and response mechanism   + Field visits   + Stakeholder consultations * Analyze the services for survivors available in all project locations and assess their quality as per standards, including health care, psychosocial support, police and legal/justice services | Within the first quarter from effectiveness | The respective Regional Women and Social Affairs Bureau under the overall guidance and supervision of the PIU Gender Specialist | PIU | * The Mapping Report | 10,000 USD |
| 2.b | Based on service mapping findings, Develop/Review and update a multi-sectoral GBV referral pathway(s) in line with the National systems and global standards  The survivors will have a place to go and report. Where confidentiality can be done. | * Considering the mapped out GBV prevention and response service providers, a referral pathway for service providers will be developed/updated * Disseminate the referral pathway/list to stakeholders including service providers * Information dissemination on existing GBV response services and the importance of timely reporting will be conducted | Within the first quarter of the kickoff of the work plan  To be frequently updated and maintained throughout project implementation.  Throughout the project period | The respective Regional Women and Social Affairs Bureau and Woreda Women and Social Affairs Office under the overall guidance and supervision of the PIU Gender Specialist | PIU | * Woreda specific referral pathway developed/updated * sessions conducted * Number of people (disaggregated by sex) reached by information dissemination sessions |
| 2.c | Capacity building of multi-sectoral GBV service providers on relevant GBV response topics. | The capacity building plan will be developed based on service mapping findings and appropriate budget will be allocated. | Within the third quarter and continuous | PIU Gender Specialist | PIU | * Capacity building plan developed (for service providers) |
| **3** | **Capacity Building of Workers** | | | | | | |
| 3.a | Conduct GBV/SEA orientation training for project staff specifically in touch with the communities in implementation of component two. In line with the Good Practice Note recommendations, the training will cover the following topics:   1. Defining Gender-Based Violence، its Forms, manifestations and Consequence 2. Highlights of the frameworks addressing SGBV 3. Principles of Reporting Gender-Based Violence 4. Scenarios and field experience relevant to the subject 5. The CoC and the laid down guidelines and possible disciplinary action for violation of CoC 6. Roles and responsibilities of the key actors involved in the project, 7. Case-reporting mechanism, accountability structures, and referral procedures within agencies 8. Community members reporting processes on issues related to project staff 9. Services available/referral pathway. 10. GRM | * prepare training materials/modules * Conduct training for project staff * Retrain where appropriate during the implementation | Within the third quarter and throughout the project (annually) | Gender Specialist and the PIU | PIU | * Number of training conducted for project staff * Number of workers (Male/female) trained * Percentage of workers that have attended training. | 5000 USD |
| 4 | **Undertake Community Awareness Raising to Support Prevention of and Response To SEA & GBV Related to the Project** | | | | | | |
| 4.a | Community-awareness on the risks of sexual exploitation and abuse (SEA) & GBV. This focus will include:   * GBV * SEA * Reporting mechanisms and channels * Available services at the project implementation woredas, at regional and national levels * **Explain rights and entitlements** ensuring that people do not fail to report on GBV and SEA out of fear of losing much-needed material assistance. The awareness will primarily highlight as communities, they are entitled to receive and that their rights will not be affected by their potential complaints. | * Develop a community engagement plan (including strategies to engage those in isolated locations) * Engage the administrative leadership, chiefs, elders, and women groups and focus on their level of knowledge on GBV, SEA, conduct awareness and sensitize the leaders * Identify and establish partnerships with existing CSO’s * Collaborate with CSOs undertaking similar community forums and awareness raising with bid to concur on content and delivery of the messaging * Develop a Community GBV/SEA sensitization program, material and messages * Conduct community sensitization | Quarterly activity and to begin in the first quarter  Ongoing throughout Project implementation period. | PIU/Gender Specialist at the project level  Focal point(s) assigned at the woreda level by implementers  PIU/Environmental & Social Specialist  CSOs  PIU/Environmental & Social Specialist | PIU | * No. of meeting with the local government administrators * No of partnerships formed with CSOs * No. of forums conducted * No. of forums conducted with communities in isolated locations * No. of woredas reached | 5000 USD |
| 4.b | In collaboration with Woreda Women and Social Affairs offices, provide targeted training for volunteer champions (women leaders, girls).Involve at least 5 champions per woreda; cluster them into groups of 5 woredas to have population of approx. 20-25 participants per training. To thus have 5 pieces of training for all the targeted woredas.  The training to be for a two day period and focus on:   * Awareness – TOTs who can create awareness back at the community * To have community owner processes that can easily deal with the issue of potential gatekeepers and opinion shapers * Making use of existing community-relevant informal structures   The benefits for the champions is that:   * They will likely use the same language for ease of awareness * Champions will remain as a community resource ensuring sustainability * They provide a data base of those that can be reached to provide awareness eg on radio programme. | * Develop criteria to identify potential champions/volunteers on issues of gender equality * Identifying and contacting the champions per woreda * Prepare for the training using the already developed module and materials * Conduct training * Share information, education and communication (IEC) materials for further dissemination * Develop champions / Stakeholder Engagement Plan for SEA related issues | Within the third quarter of project implementation. | PIU Gender Specialist | Local woman led CBO (or as will be agreed during the champion’s training) | * Number of champions trained * Stakeholder Implementation plan developed and implemented * Number of activities conducted by champions * Number of women, men, boys and girs reached by champions led activities |
| 4c | Develop audience specific IEC/BCC materials and disseminate awareness materials for community engagements, awareness and information | * Collect and select relevant and applicable existing materials on prevention & response to SEA. The material will enhance awareness on PSEA for staff as well as for communities * Dissemination be undertaken the target woredas | Within the first quarter of the kickoff of the work plan  Dissemination will be conducted throughout the project period | PIU Gender Specialist & volunteers | PIU | * Number and type of GBV/SEA IEC material gathered * Number of avenues that the dissemination has been effected | 3000 USD |
| 4d | Organize orientations campaigns in schools to mitigate risks of GBV against school girls. The focus will be   * GBV * Reporting mechanisms and channels * Available services at the project implementation woredas, at regional and national levels * **Explain importance of timely reporting to access lifesaving GBV services in case of Rape/Sexual assault.**   The training will be conducted by the champions (women & girls) who will participate in the ToT trainings. | * Identifying and contacting the schools in the targeted woredas * Prepare for the training using the already developed module and materials * Conduct training * Share information, education and communication (IEC) materials for further dissemination | Throughout the project period on regular basis | ToT trained Woreda level champions | Gender/GBV Specialist | * Number of schools targeted by campaigns |
| ***5*** | ***GBV/SEA Responsive Reporting GRM(Coordinating Team and the Grievance Response Management)*** | | | | | | |
|  | Review and input into the existing GRM within the Ethiopia Digital Foundations Project (P171034).  The intention is to have the project utilise common GRM that is purposed and responsive to GBV issues. This will include training GRM committee members on GBV guiding principles. This will ensure more effectiveness and without risk of a survivor moving through different systems.  Establish safe and confidential SEA/SH reporting channels (multiple entry points for reporting  Relevant measures/procedures will be included in the GRM to address the special needs of people living in isolated locations  The input will be into the GRM by the Social Impact Team, for specific GBV/SEA/SH procedures  GBV reporting mechanism will multi-pronged: to enable survivor-centered, appropriate, adequate, sensitive, consensual and confidential service | * Undertake internal review of the existing GRM for GBV/SEA mitigation responsiveness and where need be, input * Train GRM committee members on GBV guiding principles * Put in place mechanisms/procedures to Ensure GBV complaints are handled in safe and confidential manner * Inform employees and the community on how to report cases of GBV related to the project. * Inform on what constitutes of CoC breaches to the GRM, and how such cases are handled * Develop / enhance where they already exist (and where feasible) mechanisms to hold accountable alleged perpetrators including possible disciplinary action for violation of the CoC | review of existing GRM and making adjustment part of the project preparation  Ongoing throughout Project implementation period. | PIU Gender Specialist | PIU Gender Specialist | * A GBV/SEA responsive and integrated GRM * Number of GRM committee members trained on GBV guiding principles * Number of information dissemination sessions on GRM * No. of referrals of GBV incidents made | 2000 USD |
| 6 | **Monitoring of SEA/ SH & GBV Incidences and or Reports: The monitoring will be towards assessing the status and performance in terms of compliance, emerging issues and proposing recommendations for improvement as the situation will present. The monitoring process will be objective, with no bias.** | | | | | | |
|  | **Purposed and continuous monitoring** of the cases reported or occurring in the respective communities.  Comprehensive monitoring will be undertaken. This will enable supervision and verification that the project implementation meets the standards. This approach will strengthen monitoring and evaluation systems.  The monitoring will be towards:   * Ensuring prompt, confidential response to SEA, SH & GBV matters * Securing requisite support to SEA, SH & GBV survivors * Supporting the GRM teams to adhere to rules around consent and confidentiality of the survivor * Ensuring vulnerable groups’ safe access to services (livelihoods) | * Develop a monitoring tools * Undertake time to time assessment of the Referral pathway for effectiveness and vigilance to survivor centered approach * Paying attention to Community/beneficiaries response and feedback * The monitoring will be on a continuous basis and the days can be applied on a need basis which will be from time to time be referenced from the guidance note | Ongoing throughout Project implementation period. | PIU | Gender Specialist | * Safe and confidential measures are in place to manage reported cases * The swiftness in response to feedback received * The level and quality of services accorded to the survivors | 3000 USD |
| 7 | **Reporting** | | | | | | |
|  | Periodic Reports will be done  Recommendations will be made, and proposals given towards enhancing the relevance, effectiveness and appropriateness of the response to SEA and SH | * Periodic reports will be developed and shared with the PIU. Documented and recorded reports will be buttressed with the evidence of the findings and results of the activities. * The reports will focus on the prevention, protection and response mechanism, the appropriateness of handling the survivors and the areas of improvement where necessary | Ongoing throughout Project implementation period but at a minimum every 6 months | PIU Gender Specialist | PIU | Periodic Reports, bi-annual | No need of budget |
| 8 | **Define and reinforce GBV/SEA/SH requirements in procurement processes and contracts** | | | | | | |
| 8a. | Incorporate GBV/SEA/Requirements and expectations in the contractor and consultants’ contracts. | Ensure that GBV/SEA issues are incorporated in all contracts signed by contractors and consultants | During project implementation. | PIU Gender Specialist and PIU | MInT  World Bank Team | GBV/SEA standards in procurement/contract document | 1000 USD |
| 8b. | Allocation of funds for GBV/SEA/SH related costs in procurement documents. | Clearly define SEA/SH requirements and expectations in the bid documents | During preparation of bid and Contract documents | PIU Gender Specialist and PIU | World Bank Team | Bid documents with clearly defined SEA/SH requirements  Contract documents with clearly defined SEA/SH clauses/requirements |
| 8c. | Workers (Contractor/consultant) sensitization on GBV/SEA. | Develop a training plan for workers, contractors and consultants  Conduct training on GBV/SEA risks, responsibilities and legal/policy requirements | Quarter 2 after commencement of the project  During project implementation. | PIU Gender Specialist and Project Area Focal Person, | PIU | Number of contractors’ and consultants staff trained, |  |
| 9. | **Separate toilet and shower facilities for men and women and GBV/SEA-free signage** | | | | | | |
|  | Provide separate facilities for men and women and display signs, posters and pamphlets around the project site that signal to workers and the community that the project site is an area where GBV/SEA is prohibited | Provide separate facilities  Design and print pamphlets and posters.  Distribute the pamphlets and posters to the project site  Install signage on the facilities Visit Project gangs/camps to check on the availability and usability of separate sanitary facilities. | At the commencement of the project and continuous throughout the project implementation | Project contractors | PIU Gender Specialist and Project Area Focal Person, | Number of separate toilet and shower facilities for men and women  Display signs/IEC materials | The cost will be covered by Project contractors |

# **Annexes**

## **Annex 1: Guiding Questions for Gender-Based Violence (SEA/SH) Risk Assessment**

**Part I: Assessment of Community Context GBV Risks**

1. What kind of Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH) commonly prevail in the local community? ***Probe:*** Assess the prevalence of early marriage, rape, physical abuse (e.g. wife beating culture), psychological abuse (e.g. verbal insult, humiliation), actual or threatened physical intrusion of a sexual nature, and request for sexual favor for employment opportunity or in work place.
2. What are the social, cultural and economic factors of the local community that undermine the participation and active role of women in all spheres of life? ***Probe:*** assess who make decision in the household, who take part in community meetings, does property ownership system give equal right to women, and compare boys and girls in terms of school enrollment.
3. Assess how those discrimination justified in *question 2* adversely affect women’s active participation in the planning and implementation of the EA-RDIP.
4. Also, assess how those discrimination justified in *question 2* adversely affect women’s equal development benefits from the EA-RDIP?
5. Assess the awareness of the members of the local community on GBV. ***Probe:*** Do the local community know that those perceptions and acts justified in *questions 1-4* are gender based violence? Do victim women know where to report in case of GBV? Does proper GBV responding systems exist??
6. Given the discussions in *questions 1-5,* ask what the community consultation participants propose as the mitigation measures in the implementation of the EA-RDIP.

**Part II: Assessment of EA-RDIP Related GBV Risks**

1. What benefit do you expect from the EA-RDIP?

* Benefits for the communities?
* Benefits for vulnerable groups such as women, remote communities, refugees and IDPs?

1. What potential risks do you perceive as a result of the implementation of the project? ***Probe:*** Assess on what serious concerns participants express about the potential adverse impacts of the project such as involuntary displacement (physical and economic) due to project-related land acquisition on vulnerable groups such as women.
2. What possible mitigation mechanisms do you suggestion on addressing the above discussed potential risks/impacts of the project? Probe: Resettlement handling (valuation method, compensation payment, GRM)? And community engagement in planning the mitigation measures?
3. Actively engage the vulnerable and disadvantaged group. Probe: Take notes of what political, social and economic structures of the community are identified by the group to cause potential disproportionate adverse resettlement impacts of the project. What special needs they underscore for the mitigation measures in this regard? What are the role and participation of women and youth and other VGs in ICT/Digital services management in the context of implementation?

* In planning
* In implementing
* For actual benefits (e.g. promoting women owned business enterprises, promoting MVGs for job opportunities created by the project)

1. What methods of engagement/means of communication are preferred by the disadvantaged and vulnerable groups such as women? ***Probe:*** See if participants prefer community meeting, engaging through community representative, community notice board, local radio transmission, or other suggested means of communication.

## **Annex: Codes of Conduct for Contractors and the SEA/SH Prevention and Response Action Plan**

1. To build a system for SEA/SH risk prevention and mitigation, projects must:

* Have all employees of contractors (including sub-contractors), supervising Engineers and other consultants with a footprint on the ground in the project area sign codes of conduct (CoCs);
* Have an effective SEA/SH Action Plan so that workers understand behavior expectations and policies, as well as an effective GM. This Action Plan should include training and communication. It should also include plans to make the project-affected community aware of the CoC the project staff have just signed; and
* As part of the SEA/SH Action Plan, define accountability and response protocols, which set out the procedures followed for holding individuals accountable and penalizing staff that have violated SEA/SH policies.

**Codes of Conduct from SPD**

**Code of Conduct for Contractor’s Personnel (ES) Form**

***Note to the Employer****:*

***The following minimum requirements shall not be modified****. The Employer may add additional requirements to address identified issues, informed by relevant environmental and social assessment.*

*The types of issues identified could include risks associated with: labor influx, spread of communicable diseases,* Sexual Exploitation and Sexual Abuse (SEA) *etc.*

***Delete this Box prior to issuance of the bidding documents.***

**Note to the Bidder**:

**The minimum content of the Code of Conduct form as set out by the Employer shall not be substantially modified**. However, the Bidder may add requirements as appropriate, including to take into account Contract-specific issues/risks.

The Bidder shall initial and submit the Code of Conduct form as part of its bid.

**Code of Conduct for Contractor’s Personnel**

We are the Contractor, [enter name of Contractor]. We have signed a contract with [enter name of Employer] for [enter description of the Works]. These Works will be carried out at [enter the Site and other locations where the Works will be carried out]. Our contract requires us to implement measures to address environmental and social risks related to the Works, including the risks of sexual exploitation, sexual abuse and sexual harassment.

This Code of Conduct is part of our measures to deal with environmental and social risks related to the Works. It applies to all our staff, labourers and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each subcontractor and any other personnel assisting us in the execution of the Works. All such persons are referred to as “Contractor’s Personnel” and are subject to this Code of Conduct.

This Code of Conduct identifies the behavior that we require from all Contractor’s Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation

**REQUIRED CONDUCT**

Contractor’s Personnel shall:

1. carry out his/her duties competently and diligently;
2. comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor’s Personnel and any other person;
3. maintain a safe working environment including by:
4. ensuring that workplaces, machinery, equipment and processes under each person’s control are safe and without risk to health;
5. wearing required personal protective equipment;
6. using appropriate measures relating to chemical, physical and biological substances and agents; and
7. following applicable emergency operating procedures.
8. report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
9. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
10. not engage in Sexual Harassment, which means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Contractor’s or Employer’s Personnel;
11. not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;
12. not engage in Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;
13. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
14. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH);
15. report violations of this Code of Conduct; and
16. not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the grievance mechanism for Contractor’s Personnel or the project’s Grievance Redress Mechanism.

**RAISING CONCERNS**

If any person observes behavior that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contact [enter name of the Contractor’s Social Expert with relevant experience in handling sexual exploitation, sexual abuse and sexual harassment cases, or if such person is not required under the Contract, another individual designated by the Contractor to handle these matters] in writing at this address [ ] or by telephone at [ ] or in person at [ ]; or 2.
2. Call [ ] to reach the Contractor’s hotline (if any) and leave a message.
3. Use the existing GRM to report any breach of the CoC

The person’s identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behavior prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

**CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT**

Any violation of this Code of Conduct by Contractor’s Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

FOR CONTRACTOR’S PERSONNEL:

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [enter name of Contractor’s contact person(s) with relevant experience] requesting an explanation. Name of Contractor’s Personnel: [insert name]

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: (day month year): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Countersignature of authorized representative of the Contractor:

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: (day month year): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## **Annex 3: Attendance of Community Consultation Participants in Afar Region Eildar Woreda Haweli/Galafi Kebele**

1. **Attendance Sheet**

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2. Ibid., p. 10. [↑](#footnote-ref-2)
3. EDHS 2016, p. 306. [↑](#footnote-ref-3)
4. Ibid., pp.283 and 284 [↑](#footnote-ref-4)
5. Where existing rights of way are not available, the project may use alternative technologies for backhaul, such as low-earth orbit satellites, which would not require construction work. [↑](#footnote-ref-5)
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7. There were 5,142,000 internal displacements due to conflict in 2021 and 3,589,000 other IDPs as of the end of 2021. (IDMC (Internal Displacement Monitoring Centre), “[Global Internal Displacement Database](https://www.internal-displacement.org/database/displacement-data),” IDMC, Geneva (2022). [↑](#footnote-ref-7)
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22. See ESDP V for all national targets on education. [↑](#footnote-ref-22)
23. Ministry of Education (MoE), ESAA 2011 E.C. (2018/19). An NER higher than 100 per cent is strange, because it would mean that more 7- to 14-year-old students are enrolled than there are in Gambella. [↑](#footnote-ref-23)
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28. EDHS 2016 p. 133-160 and Mini-EDHS 2019 page 14 [↑](#footnote-ref-28)
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37. Only Addis Ababa and Harar recorded a higher GER. [↑](#footnote-ref-37)
38. The National Regional State of Tigrai, GTP II 2015/16–2019/20, p. 51. [↑](#footnote-ref-38)
39. A NER higher than 100 per cent is strange, because it would mean that more 7- to 14-year-old students are enrolled than there are in Tigray. The Socio-Economic Baseline report (2018) also provides the GER and NER for primary and secondary school. Note that to make a valid comparison with the other regions in Ethiopia, the rates provided in the ESAA are leading [↑](#footnote-ref-39)
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    # **Annex II: E-waste Management Plan**

    |  |  |  |  |  |
    | --- | --- | --- | --- | --- |
    | **No** | **E-waste Risks/Impacts** | **Mitigation Measures** | **Responsible Monitoring MDAs** | **Timing** |
    | **Positive Environmental and Social Impacts of proper E-waste Management** | | | | |
    | **1** | Create space: as sustainable waste management use controlled and confined space |  |  |  |
    | **2** | Saves and makes money: recycling waste reduce disposal cost |  |  |  |
    | **3** | Enhance Sustainability: As it enables to manage energy and water. |  |  |  |
    | **4** | Control pollution: as it is recycling will end up reuse |  |  |  |
    | **5** | Make human better responsible: help human to handle waste carefully, effectively, and sustainably. |  |  |  |
    | **6** | Job Creation: E-waste recycling creates new job for professional recyclers and creates a second market for recycled materials |  |  |  |
    | **Adverse Environmental Risks/Impacts due to Improper handling of E-waste** | | | | |
    | **1** | Generation of leachate and the release of pollutants and heavy metals to the environment | -Temporary storage containers shall be available on site until transported into their final storage location.  -E-waste shall be stored in closed containers, each depending on type and composition away from direct sunlight, rain, wind, electrical fixtures, water systems and in an area where ventilation system is not circulated to other rooms or facilities.  -The storage arrangement shall allow for inspection between containers to monitor leaks or spills. Examples could include insufficient space between incompatible e-waste | MInT/PIU and F/R EPA | Periodical Inspection |
    | **2** | Contamination and acidification of agricultural soil, affecting soil fertility and agricultural yield. | E-waste shall be stored in closed containers, each depending on type and composition away from direct sunlight, rain, wind, electrical fixtures, water systems and in an area where ventilation system is not circulated to other rooms or facilities.  Minimizing hazardous e-waste generation by implementing stringent waste segregation to prevent the commingling of non-hazardous and hazardous e-waste to be managed.  All e-waste containers designated for off-site transport shall be secured in the designated storage location and shall be labelled. | MInT/PIU  F/R EPA | Quarterly inspection |
    | 3 | Water, air, and soil pollution due to the release of environmental pollutants such as Persistent, Bio-accumulative Pollutants (PBT), and Persistent Organic Pollutants (POPs), furans, lead, mercury, polybrominated flame retardants, lithium, dioxins, and Polycyclic Aromatic Hydrocarbons (PAHs) among others. | Procure electronic devises from credible to avoid purchasing second hand refurbished or obsolete devices with a short shelf life or already categorized as e-waste. Apply WBG procurement procedures and GIIP.  Establish e-waste collection centers and including collection bins, receptacles.  Implement stringent e-waste segregation to prevent the commingling nonhazardous and hazardous e-waste to be managed. | F/REPA | Periodical |
    | 4 | Improper e-waste recycling practices are done for scavenging resale cables, components, and parts, therefore causing environmental pollution due to the burning of cables, random disposal of wastewater from the recycling processes, and random dumping of irretrievable e-waste. | Contract a licensed e-waste firm/or liaise with appropriate authorities for two timely remove e-waste for treatment and/ or at permitted facilities.  Instituting good housekeeping and operating practices, including inventory control to reduce the amount of e-waste resulting from materials that are out-of-date, off specification, contaminated, damaged, or excess to operational needs.  Awareness and sensitization of project staff who will use the electronic devices on the proper disposal once they become damaged, irreparable or at their end of life is vital. Awareness and sensitization will also be extended to contractors in the event they generate e-waste. | MInT/PIU and F/R EPA | Periodical |
    | **Adverse Social Risks/Impacts of the Improper Risk Management** | | | | |
    | 1 | Nuisance to communities due to aesthetical and visual pollution | - Waste Minimization and Prevention  -Temporary storage on site far from residences and offices | MInT/PIU  F/R EPA | Weekly visual inspection |
    | 2 | Contamination of drinking water, underground water resources with heavy metals, and other POPs. | -Minimizing hazardous e-waste generation by implementing stringent waste segregation to prevent the commingling of non-hazardous and hazardous e-waste to be managed.  -Awareness and sensitization of project staff who will use the electronic devices on the proper disposal once they become damaged | F/R EPA | Periodical |
    | **3** | Child labor and gender Based Violence Impacts associated with employing children and women in collection and primitive recycling of e-waste. | Awareness and sensitization of project staff who will use the electronic devices on the proper disposal once they become damaged.  Strict application of the LMP for EARDIP | MInT/PIU and regional implementing agency | Weekly |
    | **4** | Workers aiming to recover valuable materials such as copper, and gold, are at risk of exposure to over 1000 harmful substances, including Lead, Mercury, Nickel, Brominated Flame Retardants, Polycyclic Aromatic Hydrocarbons (PAHs) | Ensure that receiving entities or firms are contractually committed to provide their workers with all necessary requirements or provisions in accordance with the LMP, PLL, and ESS2.  Contract a licensed e-waste firm/or liaise with appropriate authorities for two timely remove e-waste for treatment and/ or at permitted facilities. | F/R EPA | Quarterly |
    | 5 | E-waste mixes with ponds, lakes, and ground water. Communities that directly depends on these sources of water for their domestic use and their livestock | -E-waste shall be stored in a way that prevents and controls accidental release to natural resources (air, soil, and water). The Following measures are to be followed in the storage of e-waste  -Contract a licensed e-waste firm/or liaise with appropriate authorities for two timely remove e-waste for treatment and/ or at permitted facilities.  -Institutionalizee-waste management practices  Awareness creation and sensitization on e-waste management is for the community is important | MInT/PIU/WB | Periodically |
    | Health risks due to improper E-waste Management | | | | |
    |  | The various health risks posed by the improper E-waste management are still birth, premature birth, high blood pressure, neurotoxicity, skin irritation, change in immune system, kidney, lung and liver damage. | -Awareness and sensitization of project staff who will use the electronic devices on the proper disposal once they become damaged, irreparable or at their end of life is vital. Awareness and sensitization will also be extended to contractors in the event they generate e-waste and the community too.  -E-waste shall be stored in a way that prevents and controls accidental release to natural resources (air, soil, and water). The Following measures are to be followed in the storage of e-waste  -E-waste shall be stored in closed containers, each depending on type and composition away from direct sunlight, rain, wind, electrical fixtures, water systems and in an area where ventilation system is not circulated to other rooms or facilities.  -Workers directly participated in the E-waste collection, sorting, dismantling, recovery and reuse and disposal should be provided with proper PPE. | MInT/PIU and F/R EPA in collaboration with other partner agency e.g. Ministry of Health | Annually |

    # **Annex III: Inspection Form Templet**

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    | **E-Waste generated** |  | **Hazardous content (Pb, Hg, PAH…)** | **Segregated** | | **Stored** | | **Recycled/Reused /Recovered** | | **Disposed** | | **Satisfactory** | |
    |  |  |  | **Y** | **N** | **Y** | **N** | **Y** | **N** | **Y** | **N** | **Y** | **N** |
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50. This LMP is prepared by considering EA-RDIP implementation in Ethiopian Context. [↑](#footnote-ref-48)
51. International Basic Safety Standard for protection against Ionizing Radiation and for the Safety of Radiation Sources and its three interrelated Safety Guides. [↑](#footnote-ref-49)
52. For example ACGIH (2005) and International Commission for Non-Ionizing Radiation (ICNIRP). [↑](#footnote-ref-50)
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55. Section 2 of the General Environmental Health and Safety Guidelines (EHSGs) on Occupational Health and Safety applies to all projects and can be found at http://www.ifc.org/wps/wcm/connect/9aef2880488559a983acd36a6515bb18/2%2BOccupational%2BHealth%2Band%2BSafety.pdf?MOD=AJPERES. Each of the industry-specific guidelines addresses the OHS issues relevant to the particular industry. Links to each of these guidelines can be found at http://www.ifc.org/wps/wcm/connect/topics\_ ext\_content/ifc\_external\_corporate\_site/ifc+sustainability/our+approach/risk+management/ehsguidelines [↑](#footnote-ref-53)
56. These arrangements will be coordinated with the Emergency Preparedness and Response measures established under ESS4. [↑](#footnote-ref-54)
57. Such remedies should take into account, as applicable, the wage level and age of the project worker, the degree of adverse impact, and the number and age of dependents concerned. [↑](#footnote-ref-55)
58. In the Ethiopian context, Afar, Ethiopian Somali, Benishangul-Gumuz Gambella as well as pastoralists and semi-pastoralist in parts of Oromiya and former SNNPR Regional States are categorized as Historically Underserved **Communities** (HU**Cs**), that meet the criteria set out under ESS7.  [↑](#footnote-ref-56)
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65. All camps were established in the Anywaa zone except the reception centres. A reception centre is a location with facilities for receiving and attending to the immediate needs of refugees or asylum-seekers as they arrive at Ethiopian borders. After going through the first level registration, the asylum-seekers are transported to refugee camps. The processes of transporting refugees to refugee camps can take from a week to a couple of weeks depending on the number of asylum-seekers and the logistic capacities of the UN agencies, the Authority of Refugees and Returnees’ Affairs in Ethiopia (ARRA), and other NGOs working on refugee protection. [↑](#footnote-ref-63)
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