

## **Environmental and Social Management Plan (ESMP)**

**Rehabilitation of River Embankments in Bandar 1, Bandar 2, Barakaale, Bulo Adey &  
Sirinley1, Including Associated Auxiliary Structures  
Somalia Food Systems Resilience Project (S-FSRP)  
Jubba Land State – Bardeere District, Gedo Region**

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Under

Somalia Food System Resilience Program (S-FSRP)  
Technical Assistance  
Component 5: Contingency Emergency Response Component  
UTF/SOM/088/SOM

Date: April 2026

## LIST OF ABBREVIATIONS AND ACCRONYMS

Acronym	Definition
BoQ	Bill of Quantities
CHS	Community Health and Safety
C-ESMP	Contractor Environmental and Social Management Plan
CoC	Code of Conduct
EHS	Environmental, Health and Safety (World Bank Group Guidelines)
EPMA	Environmental Protection and Management Act (Somalia, 2024)
ESIA	Environmental and Social Impact Assessment
ESS	Environmental and Social Standard (World Bank)
ESF	Environmental and Social Framework (World Bank)
ESMP	Environmental and Social Management Plan
ESMF / FESM	Environmental and Social Management Framework (S-FSRP)
FAO	Food and Agriculture Organization of the United Nations
FGS	Federal Government of Somalia
GBV	Gender-Based Violence
GM	Grievance Mechanism
GRS	Grievance Redress Service (World Bank)
IDP	Internally Displaced Person (not used heavily in this ESMP but included for completeness)
ILO	International Labour Organization
LMP	Labor Management Procedures
MoAI-FGS	Ministry of Agriculture and Irrigation – Federal Government of Somalia
MoAI-JS	Ministry of Agriculture and Irrigation – Jubba Land State
MoECC	Ministry of Environment and Climate Change (Federal)
MIS	Management Information System
NPCU	National Project Coordination Unit (MoAI-FGS)

O&M	Operation and Maintenance
OHS	Occupational Health and Safety
PIU	Project Implementation Unit (State MoAI)
PPE	Personal Protective Equipment
SEA	Sexual Exploitation and Abuse
SEA/SH	Sexual Exploitation, Abuse, and Sexual Harassment
SEP	Stakeholder Engagement Plan
SH	Sexual Harassment
SMP	Security Management Plan / Framework
S-FSRP	Somalia Food Systems Resilience Project
SOP	Standard Operating Procedure
TA	Technical Assistance
TMP	Traffic Management Plan
UNCCD	United Nations Convention to Combat Desertification
WBG	World Bank Group
WMP	Waste Management Plan
WUC	Water User Committee
OIG	Office of the Inspector General for FAO

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## Executive Summary

This Environmental and Social Management Plan (ESMP) has been prepared for the rehabilitation of the clustered river embankment subprojects Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey located along the Juba River in Bardere District, Gedo Region, Jubaland State. The subprojects are financed by the World Bank under the Somalia Food Systems Resilience Project (S-FSRP) and implemented by the Federal Ministry of Agriculture and Irrigation (MoAI-FGS) through the National Project Coordination Unit (NPCU), in partnership with the Jubaland State Ministry of Agriculture and Irrigation Project Implementation Unit (MoAI-JS PIU).

In this context, the Food and Agriculture Organization of the United Nations (FAO) provides Technical Assistance (TA) under a formal TA Agreement, which includes technical assessments, hydrological and topographic surveys, detailed engineering designs, preparation of environmental and social safeguards instruments, construction supervision, incident reporting, and support to the project's Management Information System (MIS) and reporting platforms.

The rehabilitation of these embankments directly contributes to the S-FSRP development objective of strengthening resilience of agricultural production systems and reducing vulnerability to climate-related shocks, particularly recurrent riverine flooding associated with the Juba River and seasonal rainfall events in Bardere District.

### **Overview of the Clustered River Embankment Subprojects**

This ESMP covers five priority river embankment sections *Bandar 1 (185 meters)*, *Bandar 2 (330 meters)*, *Barakaale (300 meters)*, *Sarinley 1 (30 meters)*, and *Bulo Adey (50 meters)*, which are geographically located within Bardere District, technically similar in design configuration, and therefore assessed under a clustered ESMP approach. All locations represent high-risk flood-prone segments of the Juba River that have experienced embankment degradation, overtopping, localized breakages, erosion, sediment deposition, and structural weakening during seasonal peak flows and high discharge events.

As a result, floodwaters have caused recurrent damage to irrigation systems, productive farmlands located along the riverbanks, and nearby residential settlements. Bandar 1 directly affects approximately 400 households, Bandar 2 affects approximately 450 households, Barakaale affects approximately 500 households, Sarinley 1 affects approximately 150 households, and Bulo Adey affects approximately 255 households. In total, the consolidated program is designed to protect approximately *1,755 households* across the Bardere riverine corridor. Consequently, beyond household-level impacts, these sites pose systemic risks to agricultural productivity, local food security, and rural settlement stability within Bardere District.

The proposed interventions focus on proactive flood risk reduction and long-term structural stabilization. Specifically, the works include construction of engineered compacted soil embankments reinforced with gabion stabilization and geotextile protection to enhance structural integrity, erosion resistance, and slope stability. The embankments will generally be constructed to available widths averaging approximately 15–18 meters, with proposed heights varying between approximately 2.5 meters and 4.0 meters depending on site-specific hydraulic and topographic conditions. The total intervention lengths include 185 meters at Bandar 1, 330 meters at Bandar 2, 300 meters at Barakaale, 30 meters at Sarinley 1, and 50 meters at Bulo Adey.

In addition, Bandar 1, Bandar 2, Barakaale, and Bulo Adey incorporate engineered canal intake chambers to maintain controlled irrigation abstraction while preserving flood protection integrity.

Bandar 2 and Sarinley 1 include engineered drainage inlet structures with reinforced concrete elements, gated control mechanisms, gabion box protection, and geotextile reinforcement to regulate inland runoff discharge, prevent uncontrolled backflow, and reduce localized overtopping risks. Accordingly, these measures shift the intervention approach from reactive emergency repairs toward preventive, resilience-oriented riverbank stabilization and controlled water management.

Collectively, the subprojects are expected to reduce recurrent flood damage, protect agricultural production areas estimated to range between 250 and 400 hectares, safeguard residential settlements, strengthen irrigation system reliability, and lower long-term recovery costs associated with seasonal flooding in Bardere District.

### **Description of Individual Embankments**

1. **Bandar 1 River Embankment:** Located along the Juba River (coordinates provided in Section 2.2), this 185-meter embankment section has experienced overtopping and overflow during peak river flows, resulting in repeated damage to irrigated crops and nearby households. Progressive erosion, sediment deposition, and bank instability have increased flood exposure to adjacent farmland and settlement areas. The rehabilitation will include compacted soil embankment construction, gabion reinforcement along vulnerable sections, geotextile installation, and associated site preparation activities. The intervention is expected to directly protect approximately 400 households and associated agricultural land.
2. **Bandar 2 River Embankment:** Located along the Juba River (coordinates provided in Section 2.2), this 330-meter embankment section has been identified through joint technical assessment and community consultations as a priority overflow site. Flooding from the Juba River has adversely affected farmland and household welfare. Rehabilitation will include construction of a compacted soil embankment with engineered slope geometry, gabion stabilization, geotextile protection, and construction of intake chambers and drainage structures to maintain controlled irrigation connectivity while preserving embankment integrity. The intervention is expected to directly protect approximately 450 households and adjacent agricultural areas.
3. **Barakaale River Embankment:** Located along the Juba River (coordinates provided in Section 2.2), this 300-meter embankment section has experienced structural degradation, sediment accumulation impacts, and recurrent flooding affecting farmland and settlements. The rehabilitation will include compacted soil embankment works, gabion slope stabilization, geotextile installation, and intake chamber construction to ensure regulated irrigation abstraction. The intervention is expected to directly protect approximately 500 households and restore stability to adjacent agricultural lands.
4. **Sarinley 1 River Embankment:** Located along the Juba River (coordinates provided in Section 2.2), this 30-meter embankment section represents a localized high-risk breakage zone where river overflow and inland runoff converge. The rehabilitation will include compacted soil backfilling, gabion stabilization, geotextile reinforcement, and installation of an engineered drainage inlet structure with reinforced concrete elements and gated control mechanisms to regulate discharge and prevent uncontrolled flooding. The intervention is expected to directly protect approximately 150 households and reduce localized overtopping and environmental risks.
5. **Bulo Adey River Embankment:** Located along the Juba River (coordinates provided in Section 2.2), this 50-meter embankment section has been identified as a vulnerable riverbank

segment exposed to recurrent erosion and overflow. The intervention includes construction of a reinforced soil embankment with gabion stabilization, geotextile reinforcement, and construction of one intake chamber designed to maintain irrigation access while strengthening flood protection. The intervention is expected to directly protect approximately 255 households, associated farmland, and key community assets.

Through these coordinated interventions, the project establishes a technically sound, hydrologically balanced, and resilience-oriented flood protection system for the Bandar, Barakaale, Sarinley, and Bulo Adey areas of Bardere District.

### **Environmental and Social Risk Classification (ESS1 Requirement)**

Based on environmental and social screening conducted in accordance with the World Bank Environmental and Social Framework (ESF), the clustered rehabilitation of the five subprojects of are classified as Moderate Risk (see annex 1 E&S screening of each site).

This classification reflects the site specific and largely reversible nature of anticipated impacts, the absence of physical displacement or large-scale land acquisition, and the limited geographic footprint confined to existing embankment alignments. Moreover, the identified risks can be effectively mitigated through implementation of this ESMP and the Contractor's Environmental and Social Management Plan (C-ESMP).

### **Summary of Key Risks and Mitigation Measures**

Given the scale of earthworks and riverbank stabilization activities, several environmental and social risks have been identified.

**Environmental risks** include temporary soil erosion, sediment transport into the river during excavation, dust and noise emissions, improper spoil disposal, and risks of fuel or oil spills. These risks will be mitigated through staged excavation, controlled compaction, sediment containment measures, designated spoil disposal sites, bunded fuel storage, spill response kits, and continuous site supervision.

**Community health and safety risks** include temporary access limitations, risks to residents and livestock near active works, transport related hazards, and potential worker community interaction risks, including Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH). Accordingly, mitigation measures include fencing and signage, traffic management protocols, Codes of Conduct for workers, SEA/SH awareness training, and confidential reporting channels.

**Occupational health and safety risks** include excavation hazards, heavy machinery operation, manual handling of gabion materials, heat stress, and dehydration. Mandatory Personal Protective Equipment (PPE), daily toolbox talks, trained first aid personnel, and structured supervision will be enforced throughout construction.

### **Stakeholder Engagement and Consultation**

Stakeholder engagement was conducted in line with the S-FSRP Stakeholder Engagement Plan (SEP) and included consultations with the Jubaland MoAI-JS PIU, Bardere District authorities, technical staff, and community representatives including elders, farmers, women, youth, and Water User Committees.

Institutional stakeholders emphasized the urgency of addressing recurrent flood impacts affecting both rural settlements and urban areas, as well as the need for climate resilient embankment design.

Meanwhile, community members highlighted recurring crop losses, damage to irrigation infrastructure, and erosion of productive lands. They further stressed the importance of local employment opportunities, transparent communication, and long-term maintenance arrangements.

These inputs have been integrated into the ESMP through strengthened erosion control measures, phased construction planning to minimize disruption, prioritization of local labor consistent with the Labor Management Procedures (LMP), and operationalization of an accessible and confidential Grievance Mechanism (GM) consistent with Environmental and Social Standard 10 (ESS10).

#### Summary of the Grievance Mechanism (GM)

A project level Grievance Mechanism (GM) is established to ensure accessible, transparent, and timely resolution of concerns raised by community members and project workers. Complaints may be submitted verbally or in writing through community focal points, contractors, the PIU, FAO field staff, hotlines, or complaint boxes. Grievances are acknowledged within 48 hours and addressed within 7 to 14 days, depending on complexity.

Importantly, confidential and survivor centered SEA/SH reporting channels are available and handled exclusively by trained focal points in accordance with ESF requirements, ensuring inclusivity and protection of vulnerable groups.

#### **Institutional Roles and Responsibilities**

MoAI-FGS/NPCU provides overall oversight, ESMP approval, compliance monitoring, and reporting. The Ministry of Environment and Climate Change (MoECC) provides the national environmental regulatory framework. FAO serves as Supervising Engineer and Technical Assistance provider, responsible for safeguards verification and day to day supervision. The Jubaland MoAI-JS PIU leads field coordination and GM management at the state level. The contractor implements the ESMP and C-ESMP, including occupational health and safety, pollution prevention, and community safety measures. Community structures support communication and post rehabilitation operation and maintenance.

#### **ESMP Implementation, Monitoring, and Budget**

To ensure effective implementation of mitigation measures commensurate with the Moderate E&S Risk classification of the clustered river embankment subprojects Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulu Adey, a dedicated ESMP implementation budget has been allocated.

Accordingly, an allocation of **USD 8,000.00** has been set aside for Bandar 1, **USD 12,500.00** for Bandar 2, **USD 11,000.00** for Barakaale, **USD 3,500.00** for Sarinley 1, and **USD 1,513.13** for Bulu Adey, resulting in a total clustered ESMP budget of **USD 36,513.13**.

The allocated budget will cover OHS measures, environmental protection controls, community health and safety provisions, implementation of the SEP, operation of the GM including confidential SEA/SH reporting channels, capacity building, and periodic monitoring and supervision activities in accordance with the ESF. The full budget distribution and detailed work breakdown of each ESMP activity are presented in Section 10 of this document.

# 1. Introduction

## 1.1 Background

The Somalia Food Systems Resilience Project (S-FSRP), financed by the World Bank and implemented by the Federal Ministry of Agriculture and Irrigation (MoAI-FGS), supports the long-term resilience of Somalia's agricultural production systems through investments in climate-resilient infrastructure, institutional strengthening, and risk reduction measures. A core priority of the project is the rehabilitation and protection of critical irrigation and flood management infrastructure that safeguards productive assets and vulnerable communities exposed to climate-related shocks.

In Jubaland State, particularly in Bardere District along the Juba River, recurrent riverine flooding has become a major driver of agricultural losses, infrastructure damage, and displacement. The Bandar, Barakaale, Sarinley, and Bulo Adey riverine areas have experienced repeated flood events characterized by seasonal rainfall, elevated river hydrographs, sediment deposition, and localized breakages and overflow points along the riverbank. These events have resulted in embankment overtopping, structural breaches, expansion of sand and silt domes across farmlands, widespread inundation of agricultural areas, and damage to irrigation systems and residential settlements. Floodwaters have extended into productive zones and nearby villages, affecting livelihoods, disrupting agricultural production cycles, and increasing recovery costs for both households and district authorities.

In response to these recurring shocks, the FAO technical team, in collaboration with the Jubaland State PIU and MoAI-JS, undertook joint field assessments conducted prior to the preparation of this report to identify priority embankment failure points and overflow sections along the Juba River within *Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey*. While localized temporary repairs were previously undertaken at selected breakage points, several vulnerable segments remain structurally weak and not fully stabilized. Among the identified priority areas are the Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey embankment sections, which continue to pose significant flood risk to adjacent settlements, irrigation systems, and agricultural lands.

Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey represent high-risk riverbank segments characterized by erosion, uncontrolled inland overflow pathways, structural degradation, sediment accumulation over farmland, and localized confluence dynamics where rainwater and river floodwater converge. The consolidated intervention is designed to protect approximately 1,755 households across the Bardere riverine corridor, in addition to surrounding farmlands located along the riverbank. Moreover, the Sarinley 1 and Bandar 2 drainage sections represent critical hydraulic control points where unmanaged overflow would amplify exposure to agricultural lands and residential areas within Bardere District.

The proposed rehabilitation seeks to transition from reactive emergency repairs toward durable, engineered riverbank stabilization using compacted soil embankment systems reinforced with gabion box structures, geotextile reinforcement, compacted backfilling, and controlled intake and drainage inlet structures with gated mechanisms where required. These measures are designed to strengthen structural integrity, reduce erosion, regulate inland runoff, prevent uncontrolled backflow during peak river discharge, and ensure hydrologically balanced protection without generating adverse downstream impacts. The intervention therefore aligns with the S-FSRP objective of enhancing climate resilience and protecting productive agricultural systems from recurrent flood damage in Bardere District.

To support implementation, the Federal Government entered into a formal Technical Assistance Agreement with FAO. Under this agreement, FAO provides technical assessments, hydrological and topographic surveys, detailed engineering designs, preparation of environmental and social instruments, construction supervision, incident reporting, and support to the project’s MIS. FAO’s role remains strictly technical assistance and supervision, while MoAI-FGS, through the NPCU, retains overall implementation responsibility. At the state level, the Jubaland Ministry of Agriculture and Irrigation leads coordination through its PIU. MoECC serves as the national environmental regulatory authority in accordance with applicable environmental legislation.

The rehabilitation of Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey was prioritized following environmental and social screening conducted in accordance with the World Bank ESF and the S-FSRP Environmental and Social Management Framework. The clustered subprojects were classified as Moderate Risk, reflecting the site-specific, temporary, and manageable nature of anticipated impacts. Accordingly, a site-specific ESMP—rather than a full Environmental and Social Impact Assessment—is required to guide safe and compliant implementation in line with commitments under the Environmental and Social Commitment Plan.

Consistent with the ESF, including ESS4 and ESS10, and the S-FSRP SEA/SH Prevention and Response Action Plan, the project recognizes potential risks associated with labor influx and contractor-community interactions during construction. Although the subprojects are assessed as Moderate Risk, proactive SEA/SH prevention and response measures are integrated from the outset. These include mandatory Codes of Conduct, worker and community awareness sessions, confidential reporting channels within the GM, and referral pathways to appropriate service providers. Responsibilities for risk prevention, reporting, and monitoring are clearly defined among the contractor, FAO, MoAI-FGS/NPCU, and the Jubaland PIU.

## 1.2 Purpose of the ESMP

This Environmental and Social Management Plan provides the operational framework for identifying, preventing, mitigating, and monitoring environmental and social risks associated with the rehabilitation of the five river embankment subprojects in Bardere District. It aims to:

- Identify potential environmental and social risks and impacts arising from the embankment stabilization works in accordance with the ESF, national regulations, and S-FSRP screening procedures.
- Propose practical, site specific mitigation and monitoring measures that safeguard communities, workers, riverine ecosystems, agricultural lands, and the surrounding environment during construction and operation.
- Define clear institutional roles and coordination mechanisms among MoAI-FGS/NPCU, the Jubaland State PIU, FAO as TA provider, the contractor, district authorities, and local community structures.
- Ensure compliance with all relevant S-FSRP safeguard instruments, including the FESM, SEP, LMP, GM Framework, Security Management Framework, and the SEA/SH Prevention and Response Action Plan.
- Serve as the reference document for the Contractor’s C-ESMP, which will translate ESMP requirements into detailed worksite specific procedures covering OHS, labor standards, environmental protection, riverbank stabilization measures, community safety, access management, and emergency preparedness.

By doing so, the ESMP ensures that the rehabilitation works not only strengthen flood protection and safeguard agricultural livelihoods along the Shabelle River, but also uphold the principles of sustainability, climate resilience, inclusivity, and safeguards compliance throughout the project lifecycle.

### 1.3 Methodology

Preparation of this ESMP followed a structured, evidence based, and participatory methodology combining desk review, field assessments, hydrological and engineering analysis, and stakeholder engagement. A review of key documents, including the S-FSRP FESM, national environmental regulations, the TA Agreement, environmental and social screening results, and relevant baseline environmental and social information for Bardere District, provided the regulatory and safeguards foundation for the assessment.

Fieldwork was conducted jointly by FAO engineers, Jubaland State PIU technical staff, district authorities, and community representatives. These assessments examined existing embankment conditions, erosion patterns, breach points, overflow pathways, structural weaknesses, riverbank stability, inland drainage constraints, and areas exposed to seasonal flooding. Hydrological considerations, including river discharge variability, flood recurrence patterns, El Niño related rainfall impacts, sediment transport, and erosion dynamics, were integrated into both technical design and safeguards planning.

Socioeconomic consultations were conducted with elders, women, youth, farmers, agro pastoral households, internally displaced persons, and local leaders to understand flood history, livelihood impacts, land use patterns, vulnerable groups, safety concerns, and expectations for the embankment rehabilitation works.

Collected data were analyzed in relation to the ESF, national Environmental and Social Impact Assessment Regulations (2024), and the S-FSRP FESM to determine risk levels, ESS relevance, and appropriate mitigation measures. The ESMP also incorporates requirements from the SEP, LMP, GM Framework, Security Management Framework, SEA/SH Action Plan, and OHS guidance. Importantly, the ESMP is structured to support digital reporting through the S-FSRP MIS dashboard, enabling systematic tracking of environmental and social performance indicators during implementation.

Through this combination of technical analysis, regulatory alignment, and community participation, the ESMP provides a realistic, context appropriate, and operational safeguards framework for the successful rehabilitation of the 5 river embankment subprojects in Bardere District.

#### **Environmental and Social Screening Tool and Process**

The environmental and social screening for the five river embankment subprojects was conducted using the World Bank Environmental and Social Screening Tool as prescribed under the S-FSRP FESM. The screening tool systematically evaluates proposed activities against predefined environmental and social criteria, including land use, river morphology, biodiversity, water resources, labor and working conditions, community health and safety, vulnerability of affected groups, security context, and SEA/SH risk exposure. The tool also identifies the relevance of applicable ESS and determines the appropriate safeguards instrument required.

The screening was carried out through a combination of site inspections, stakeholder consultations, technical assessments, and review of baseline environmental and social conditions. Completed screening checklists and risk classification matrices are provided in Annex 1.

Based on the screening outcomes, the clustered subprojects were classified as Moderate Risk, thereby triggering preparation of a site specific clustered ESMP rather than a full ESIA. The screening results directly informed the scope of impact assessment, selection of mitigation measures, monitoring requirements, and institutional arrangements outlined in this ESMP.

### **Brief Explanation of Risk Ranking Methodology**

The ESMP uses a qualitative risk ranking methodology consistent with the World Bank Environmental and Social Framework (ESF). Risks are screened and ranked based on two core parameters:

#### **1. Likelihood (Probability of Occurrence)**

Assessed based on site conditions, past experience, and expert judgment.

- Low – Unlikely to occur
- Moderate – Could occur under certain conditions
- High – Likely to occur without mitigation

#### **2. Consequence (Severity of Impact)**

Reflects how serious the environmental or social impact would be if the event occurred.

- Low – Localized, reversible, minimal disruption
- Moderate – Manageable with standard mitigation but may affect communities or workers
- High – Significant, widespread, or long-term impact

#### **3. Risk Rating = Likelihood × Consequence**

The combined score categorizes each risk as:

- Low – Minor, routine mitigation required
- Moderate – Needs targeted management measures and monitoring
- Substantial/High – Requires enhanced mitigation, monitoring, and oversight (not applicable here since the project is Moderate)

#### **4. Screening Outcome Informs Management Instruments**

The final ranking guides:

- Which ESSs apply
- Whether ESMP or ESIA is required
- Level of monitoring and supervision
- Mitigation measures included in the ESMP

#### **5. Participatory and Evidence-Based**

Inputs come from:

- Field observations
- Engineering assessments
- Consultation with communities and authorities
- Review of baseline environmental and social conditions

## 6. Dynamic and Iterative

Risk ranking is updated throughout the project lifecycle as conditions change, new information emerges, or impacts evolve.

Through this combination of technical analysis, regulatory alignment, and community participation, the ESMP provides a realistic, context-appropriate, and operational safeguards framework for the successful rehabilitation of those three clustered water catchment subprojects.

### **Risk Classification Justification**

The environmental and social screening conducted for the Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulu Adey river embankment subprojects determined that the proposed interventions are appropriately classified as **Moderate Risk** under the World Bank ESF and the S-FSRP Environmental and Social Management Framework.

This classification reflects the nature, scale, location, and reversibility of anticipated impacts. The proposed works involve rehabilitation and reinforcement of existing river embankment alignments along the Juba River through compacted soil embankments, gabion stabilization, geotextile reinforcement, intake chambers, and drainage inlet structures. All activities are confined to existing embankment footprints located on confirmed public land, and no land acquisition, physical displacement, or economic displacement is anticipated under ESS5.

The anticipated environmental impacts are site-specific, temporary, and manageable through standard mitigation measures. These include localized soil disturbance, temporary dust and noise generation, erosion risk during excavation, construction waste management, and minor riverbank instability during works. Social risks are similarly moderate and relate primarily to community health and safety during construction, temporary restriction of irrigation access, labor management risks under ESS2, and potential SEA/SH risks associated with contractor-community interaction. These risks are predictable and can be effectively mitigated through implementation of the ESMP, Contractor's C-ESMP, LMP, SEP, GM, and SEA/SH Action Plan.

The subprojects are not located within protected areas or ecologically sensitive habitats, and the works do not involve large-scale habitat conversion or irreversible environmental impacts. Although Bardere District is exposed to climate variability, recurrent flooding, sediment deposition, and drought stress, the proposed intervention is itself a flood risk reduction measure designed to enhance resilience and reduce vulnerability of approximately 1,755 households and associated agricultural lands.

Furthermore, while the broader district context includes logistical constraints related to the collapsed Bardere bridge and a fragile security environment with AUSOM presence at the district airstrip, these factors relate to implementation management rather than intrinsic environmental or social risk escalation.

Based on the above considerations, the anticipated impacts are limited in scale, temporary in duration, reversible in nature, and readily manageable through established mitigation measures. Accordingly, the Moderate Risk classification is justified.

### **Clustered ESMP Justification**

The Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulu Adey river embankment subprojects are assessed under a clustered ESMP approach due to their geographic proximity, technical similarity, and consistent environmental and social risk profile.

All five subprojects are located along the same Juba River corridor within Bardere District and involve rehabilitation of existing embankment structures exposed to similar hydrological dynamics, including riverine flooding, sediment deposition, erosion, and localized overflow. The engineering design configuration across all sites is substantially similar, comprising compacted soil embankment works reinforced with gabion stabilization and geotextile layers, complemented by intake chambers and/or drainage inlet structures where required.

The nature of anticipated environmental and social impacts is also consistent across the sites. All subprojects involve comparable construction activities excavation, embankment compaction, gabion installation, drainage works, and operation of machinery resulting in similar temporary and manageable risks related to OHS, erosion control, dust and noise emissions, CHS, labor management, and stakeholder engagement. Each subproject was individually screened and classified as Moderate Risk, with no ESS5 implications and no sensitive habitat conversion identified.

Institutional arrangements are identical across the clustered sites, with implementation under MoA-FIGS/NPCU, state-level coordination through the Jubaland PIU, and FAO providing TA and safeguards oversight. Monitoring, reporting, GM operation, SEA/SH prevention measures, and contractor obligations will be applied uniformly across all sites.

Given the homogeneity in design, implementation arrangements, impact typology, mitigation measures, and risk classification, preparation of separate standalone ESMPs would not provide additional safeguards value. Instead, a consolidated clustered ESMP ensures consistency, efficiency, and proportionality while maintaining site-specific screening documentation in the annexes.

The clustered ESMP approach therefore remains technically sound, safeguards-compliant, administratively efficient, and aligned with the World Bank ESF and the S-FSRP Environmental and Social Management Framework.

## 2. Sub-project Description

### 2.1 Overview

The existing river embankment sections at Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey along the Juba River in Bardere District have experienced progressive deterioration due to repeated flood events, seasonal high rainfall, riverbank erosion, overtopping, localized structural degradation, sediment deposition, and insufficient reinforcement of embankment slopes. Under the **Somali Food Systems Resilience Project (S-FSRP)**, the Food and Agriculture Organization of the United Nations (FAO), in collaboration with the Ministry of Agriculture and Irrigation of the Federal Government of Somalia, conducted a comprehensive technical assessment of these riverbank sections to inform a structured rehabilitation program

Recent Gu and Deyr rainfall seasons have intensified hydrological pressures on the Juba River corridor in Bardere District, resulting in overtopping, uncontrolled inland overflow through natural drainage channels, and recurrent flooding of settlements, irrigation systems, and agricultural lands. As documented in the technical assessment all five sites are located within flood-prone zones and collectively protect approximately **1,755 households**, including both urban populations in Bardere town and rural agricultural communities.

Based on the approved BoQs, the embankment rehabilitation lengths are as follows:

- Bandar 1 – approximately 185 meters

- Bandar 2 – approximately 330 meters
- Barakaale – approximately 300 meters
- Sarinley 1 – approximately 30 meters
- Bulo Adey – approximately 50 meters

Although certain sections have previously received localized repair interventions, structural weaknesses persist, particularly in degraded embankment slopes, insufficient toe protection, and uncontrolled drainage inlets that allow backflow during elevated river levels. The proposed intervention therefore consolidates these five embankment sections into a coordinated flood protection program designed to strengthen riverbank stability and enhance climate resilience.

To reduce flood vulnerability and strengthen long-term resilience, the subprojects will rehabilitate and stabilize the embankment sections using engineered compacted soil embankments reinforced with gabion protection structures and geotextile filter layers behind the gabion baskets. The works will include excavation to receive gabion foundations, placement of well-graded hardcore beneath gabions, installation of 1.0-meter and 0.5-meter-thick gabion boxes filled with graded stone, compaction of backfill material in controlled layers to achieve structural density requirements, and installation of geotextile fabric to prevent soil migration and enhance durability.

Auxiliary hydraulic structures are integrated as follows:

- Bandar 1 – construction of one intake chamber
- Bandar 2 – construction of four intake chambers and one drainage inlet structure
- Barakaale – construction of intake chamber(s) consistent with BoQ scope
- Sarinley 1 – construction of one engineered drainage inlet structure
- Bulo Adey – construction of one intake chamber

These intake and drainage structures incorporate reinforced concrete foundations, masonry walls, slab elements, HDPE pipe fittings, and gated steel mechanisms where applicable to regulate surface runoff and irrigation connectivity while preventing uncontrolled river backflow during peak flood conditions.

The land on which the subprojects will be implemented is public land within the existing river embankment alignment, as confirmed through the technical assessment documentation. The rehabilitation works are confined to the current embankment footprints and associated auxiliary structures; therefore, no land acquisition, physical displacement, or economic displacement is anticipated.

### **Environmental, Social, Technical, and Security Risks**

#### **1. Environmental Risks**

- **Flooding and Hydrological Changes:** Temporary alteration of localized drainage patterns during excavation and embankment reshaping.
- **Soil Erosion and Sediment Runoff:** Earthworks along the riverbank may destabilize soils during rainfall if erosion control measures are not implemented.
- **Riverbank Disturbance:** Construction may temporarily affect river morphology and riparian vegetation.
- **Dust and Air Emissions:** Operation of equipment and transport of gabion materials may generate dust affecting nearby households and farmland.

- **Waste Management:** Improper disposal of excavated material or construction debris may obstruct drainage pathways or degrade surrounding land.

## 2. Social Risks

- **Temporary Access Disruptions:** Farmers and residents may experience restricted access to farmland or irrigation points during construction.
- **Community Health and Safety:** Open excavations, gabion placement activities, steel gate installation, and vehicle movements pose risks to residents and livestock.
- **Flood Exposure During Construction:** Incomplete embankment sections during rehabilitation may increase vulnerability if unexpected rainfall occurs.
- **Labor Influx and SEA/SH Risks:** Engagement of contracted workers may increase risks of gender-based violence or social tensions if not properly managed.
- **Conflict Over Water Flow:** Installation of drainage inlets and intake chambers may raise concerns among upstream or downstream users.

## 3. Technical and Operational Risks

- **Design and Construction Quality Risks:** Improper compaction, inadequate foundation preparation, or poor gabion tying could compromise structural stability.
- **Drainage and Gate Performance:** Inadequate installation or maintenance of drainage inlet gates may reduce effectiveness in controlling backflow.
- **O&M Capacity Gaps:** Limited institutional or community capacity for routine inspection and maintenance may affect long-term embankment performance.
- **Extreme Flood Events:** Flood magnitudes exceeding design assumptions may challenge structural resilience.

## 4. Security and Fragility Risks

- **Theft or Vandalism of Materials:** Steel gate components, HDPE pipes, or stored materials may be vulnerable to theft.
- **Supply Chain Constraints:** Transport of gabion baskets, stone fill, and concrete materials may face logistical challenges due to road conditions or seasonal access limitations.

## 2.2 Location of the Sub-project

The five river embankment rehabilitation subprojects are located along the Juba River within Bardere District, Gedo Region, Jubaland State, Somalia. The embankment sections extend across both urban-adjacent and agricultural riverbank corridors, with Bandar 1 and Barakaale significantly influencing flood exposure within Bardere town, while Bulo Adey primarily protects village settlements and surrounding farmland areas.

The geographic coordinates of each embankment alignment, including start and end points, were recorded during the joint FAO–MoAI field assessment and are presented in the technical report. These coordinates confirm the precise spatial extent of the proposed rehabilitation works and form part of the safeguards’ documentation for monitoring and verification purposes.

Table 1: Embankment Location Coordinates – Bardere River Embankments

Embankment Name	Start Latitude	Point	Start Longitude	Point	End Latitude	Point	End Longitude	Point

Bandar 1	2°20'15.4088"	42°16'47.7967"	2°20'11.5184"	42°16'43.5138"
Barakaale	2°20'44.9754"	42°16'57.9794"	2°20'36.4209"	42°17'00.8075"
Bandar 2	2°19'16.1624"	42°16'04.5065"	2°19'5.39"	42°16'2.68"
Sarinley 1	2°21'14.7187"	42°16'51.0661"	2°21'13.9386"	42°16'50.8746"
Bulo Adey	2°18'37.6178"	42°15'47.1361"	2°18'36.4646"	42°15'47.2994"

All rehabilitation works will be implemented within the existing river embankment alignment and associated public land corridor along the Juba River, as documented in the technical assessment. The coordinates above, together with geo-referenced site photographs and engineering drawings (Annex 3), ensure traceability of the embankment sections and auxiliary hydraulic structures within approved implementation boundaries.

### 2.3 Scope of Works

The five river embankment rehabilitation subprojects involve stabilization and strengthening of existing flood protection structures along approximately:

- 185 meters at Bandar 1
- 330 meters at Bandar 2
- 300 meters at Barakaale
- 30 meters at Sarinley 1
- 50 meters at Bulo Adey

The scope comprises integrated civil, hydraulic, and structural activities designed to improve embankment stability, regulate inland runoff, reduce erosion, and enhance protection against seasonal flood events. The principal activities include:

- Site preparation and earthworks, including clearance, surveying, excavation to receive gabion and embankment foundations, reshaping of slopes, and compaction of fill material to specified density requirements.
- Construction of compacted soil embankments reinforced with engineered gabion retaining structures along river-facing slopes.
- Installation of 1.0-meter and 0.5-meter-thick gabion boxes filled with graded stone, tied and anchored in accordance with approved engineering specifications.
- Placement of well-graded hardcore foundation layers beneath gabions and drainage structures to ensure load stability and minimize settlement.
- Installation of geotextile fabric behind gabion structures to prevent soil migration and enhance filtration performance.
- Construction of intake chambers incorporating reinforced concrete foundations, masonry walls, plastering, slab casting, and HDPE pipe fittings.

- Construction of drainage inlet structures with reinforced concrete elements, steel gate mechanisms, protective wing walls, and hydraulic control components to regulate inland runoff and prevent river backflow.
- Post-construction site restoration, including disposal of surplus materials, stabilization of disturbed areas, and reinstatement of borrow areas in compliance with environmental safeguards requirements.
- Installation of project signboards displaying project identification details, implementing agencies, and donor information.

Collectively, these works will strengthen structural integrity along critical embankment sections, reduce breach and overtopping risks during seasonal floods, protect approximately **1,755 households**, safeguard agricultural lands and irrigation systems, and enhance climate resilience within Bardere District.

## 2.4 Duration and Workforce

The five river embankment rehabilitation subprojects at *Bandar 1*, *Bandar 2*, *Barakaale*, *Sarinley 1*, and *Bulo Adey* in Bardere District are expected to be completed within four to six months, depending on river discharge conditions, rainfall variability, seasonal accessibility, material delivery timelines, and site logistics along the Juba River corridor. Given the scale of excavation works, gabion installation, compaction activities, construction of intake chambers, and installation of drainage intake structures, implementation may be phased to ensure structural quality, worker safety, and compliance with environmental and social safeguards.

Construction activities will require an estimated workforce of approximately 70 to 85 personnel distributed across the five sites, including about 25 to 30 skilled workers such as site engineers, machine operators, masons, steel fabricators, carpenters, drainage structure technicians, and concrete specialists, together with approximately 45 to 55 unskilled laborers recruited by gender to support excavation, stone placement, embankment compaction, backfilling, masonry works, gabion installation, and general site activities. Daily construction activities will typically run from 8:00 a.m. to 5:00 p.m., six days per week, allowing adequate time for supervision, environmental monitoring, and adherence to OHS protocols.

To strengthen community ownership and support livelihood opportunities in flood affected areas, the contractor will prioritize hiring workers from Bardere town, Bandar, Barakaale, Sarinley, Bulo Adey, and surrounding communities. Women, youth, and vulnerable households will be considered for suitable non-technical roles in accordance with contractual bid clauses and the project's inclusion principles. Throughout implementation, the contractor will comply with the LMP, maintain a functional Worker GM, and ensure safe, fair, and non-discriminatory working conditions consistent with national labor legislation and ESS2 requirements.

## 2.5 Machinery and Materials

- **Machinery:** Excavators, bulldozers, tipper trucks, wheel loaders, backhoe loaders, graders, compactors, vibratory rollers, concrete mixers, plate compactors, lifting equipment for gabion placement, steel cutting and fabrication tools for intake and drainage gate installation, and associated site equipment required for embankment stabilization works.

- **Materials:** Gabion boxes (1.0 meter and 0.5-meter thickness), graded stone fill, geotextile fabric, cement, aggregates, hardcore, reinforcement steel, rubble stones, concrete materials for intake chambers and drainage structures, HDPE pipes and fittings, steel gate plates, threaded spindles, protective coatings, and project signboard materials. All materials will be sourced from licensed and approved suppliers to ensure structural quality and durability.
- **Fuel and Lubricants:** Procured from authorized vendors and stored in properly banded, secure areas with spill containment measures in compliance with OHS and environmental management requirements. Refueling and maintenance activities will be conducted in designated areas to minimize contamination risks along the riverbank.
- **Water Use:** Water required for construction activities, including concrete mixing, curing, compaction, and dust suppression, will be sourced from approved local boreholes or municipal supplies. Water abstraction from the Juba River during peak flood conditions will be managed to avoid interference with community irrigation and domestic use.
- **Waste Handling:** Excavated soil suitable for reuse will be utilized for embankment shaping and backfilling. Surplus non-hazardous construction waste will be transported to designated disposal sites approved by district authorities. Hazardous wastes such as used oils, oily rags, filters, and chemical residues will be managed under a site-specific Waste Management Plan and disposed of through licensed waste contractors in accordance with ESF requirements.

## 2.6 Project Alternatives

The analysis of project alternatives examined several technical and design options to identify the most appropriate, environmentally sound, and socially supported solution for rehabilitating the *Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey* river embankment subprojects in Bardere District. The options reviewed included maintaining the existing weakened embankments without structural reinforcement, undertaking partial soil backfilling of breached sections only, constructing full compacted earth embankments without slope protection, installing reinforced concrete retaining walls, and adopting soil embankments reinforced with gabion-based riverbank stabilization and controlled intake and drainage structures. Each option was assessed in terms of its ability to withstand seasonal flood peaks along the Juba River, resist erosion, regulate inland runoff, minimize long term maintenance costs, and provide durable protection to adjacent settlements and agricultural lands.

During the assessment process, consultations were conducted with the Jubaland State PIU, Bardere District authorities, and community representatives from Bandar, Barakaale, Sarinley, and Bulo Adey. Stakeholders emphasized that previous emergency repairs relying solely on compacted soil embankments were insufficient to withstand prolonged high discharge levels and seasonal flood events. Communities reported that purely earthen embankments tend to erode rapidly during overtopping or high velocity flow conditions, particularly at hydraulically sensitive locations where rainwater and river floodwater accumulate, requiring repeated rehabilitation and increasing long term costs.

Based on technical evaluation and community feedback, strong preference was expressed for the use of reinforced soil embankments incorporating gabion protection along the river-facing side, combined with geotextile reinforcement at critical sections, and engineered intake and drainage inlet structures with gated control mechanisms. This integrated design approach reflects established practice in Bardere and has been implemented by FAO and other development partners in previous flood

protection interventions along the Juba River. The gabion structures provide enhanced erosion resistance under high flow conditions, while the compacted soil embankment mass improves slope stability. Drainage inlets and intake chambers provide additional structural stability and controlled discharge capacity at hydraulically sensitive locations. Communities indicated that this method is more durable and reliable than unreinforced soil embankments during peak flood seasons.

Reinforced concrete retaining walls were considered; however, this option was assessed as cost intensive, less adaptable to localized settlement or differential movement, and more complex to repair under field conditions. Similarly, reliance on soil embankment alone was determined to be technically inadequate for high velocity riverbank sections and more vulnerable to scouring, toe erosion, and breach formation.

Accordingly, the selected design includes construction of compacted soil embankments reinforced with gabion stabilization and geotextile filtration layers, construction of intake chambers at Bandar 1, Bandar 2, Barakaale, and Bulo Adey, and construction of drainage inlet structures at Bandar 2 and Sarinley 1. This integrated approach enhances structural integrity, reduces erosion risk, improves resilience to rainfall variability and high discharge events, and aligns with established best practice for flood defense structures in Bardere District. The selected alternative therefore reflects the technically sound, locally accepted, and jointly agreed solution to strengthen riverbank protection and reduce recurrent flood impacts across the Bardere subproject sites.

<b>Aspect</b>	<b>With Project Scenario</b>	<b>Without Project Scenario</b>
Flood Protection Capacity	Structural stabilization of 185 m at Bandar 1, 330 m at Bandar 2, 300 m at Barakaale, 30 m at Sarinley 1, and 50 m at Bulo Adey using compacted soil embankments reinforced with gabion stabilization and geotextile reinforcement.	Continued structural weakness, localized breaches, and high probability of embankment overtopping during seasonal floods along the Juba River.
Household Protection	Direct protection of approximately 1,755 households across Bardere District, including adjacent agricultural lands and irrigation systems.	Recurrent flooding of residential areas and farmlands, resulting in repeated losses, livelihood disruption, and displacement risks.
Agricultural and Irrigation Protection	Improved protection of irrigation systems and productive farmland through installation of intake chambers and regulated drainage structures.	Continued damage to irrigation infrastructure, sediment deposition on farmland, and reduced agricultural productivity.
Riverbank Erosion	Installation of gabion facing and geotextile reinforcement improves erosion resistance, slope stability, and structural durability under high discharge conditions.	Ongoing riverbank erosion, scouring, and progressive degradation of earthen embankments.

Drainage Regulation	Drainage inlet structures allow regulated inland runoff discharge and reduce overtopping and backflow risks.	Unregulated overflow and backflow during peak discharge, increasing inland flood damage and waterlogging.
Livelihood Protection	Reduced crop losses, improved irrigation reliability, and strengthened agro pastoral productivity.	Continued crop damage, irrigation disruption, and increased vulnerability of farming and pastoral livelihoods.
Climate Resilience	Enhanced resilience to rainfall variability and high discharge events through durable structural reinforcement.	Increasing exposure to high intensity flood events and greater economic losses under changing climate conditions.
Infrastructure Sustainability	Reinforced soil embankments with gabion stabilization and controlled intake/drainage structures provide durable, locally proven, and field adaptable flood defense solutions.	Repeated emergency soil repairs with limited durability and escalating maintenance costs.

## 2.7 Access and Logistics

Access to the Bardere sub-project areas will primarily rely on the Bardere–Belet Hawo and Bardere–Luuq road corridors, which function as the main transportation routes within Gedo Region. Although certain segments are unpaved and subject to seasonal wear, they remain passable for construction vehicles and are not expected to cause significant delays to the transport of materials, machinery, or workforce. From the main roads, access to the embankment alignments is through existing rural tracks connecting Bandar, Barakaale, Sarinley, and Bulo Adey to the Juba River and surrounding farmlands.

Construction activities will involve the movement of excavators, trucks, gabion materials, stone fill, concrete materials, and HDPE components along these routes, and the contractor will coordinate closely with community leaders to minimize disturbance to farmland and daily movement. Temporary storage areas for gabion baskets, reinforcement steel, pipes, and construction materials will be identified in consultation with the community, ensuring safety and avoiding interference with agricultural activities.

To ensure community health and safety, appropriate signage, warnings, and barriers will be used where machinery is in operation, and alternative footpaths will be provided when embankment works intersect commonly used access routes. These access and logistics arrangements will follow OHS guidelines and the requirements of World Bank ESS4.

All access and logistics arrangements will incorporate site and worker security measures in line with the project’s Security Management Framework. This includes controlled entry points, appropriate fencing, and coordination with local authorities to ensure the safety of personnel, equipment, and community members throughout construction. This aligns with World Bank ESS4 (Community Health and Safety) and complements the existing OHS measures.

## 2.8 Project Beneficiaries

The five river embankment subprojects will directly benefit households residing in Bandar, Barakaale, Sarinley, and Bulo Adey within Bardere District. Bandar 1 is expected to protect a significant portion of households located near Bardere town, Bandar 2 and Barakaale protect mixed urban and agricultural communities, while Sarinley 1 and Bulo Adey primarily safeguard village settlements and surrounding farmland areas. Collectively, the consolidated intervention is designed to protect approximately **1,755 households** across the Bardere embankment corridor.

Recurrent flooding in recent years, including seasonal high discharge events along the Juba River and localized accumulation of rainwater and river floodwater, has resulted in repeated damage to homes, farmlands, and irrigation infrastructure across these locations. Floodwaters have caused crop losses, erosion of cultivated land, sediment deposition, disruption of irrigation canals and intake points, and temporary displacement of affected households. Structural degradation, overtopping, and localized breakages along the embankments have further increased vulnerability of settlements and irrigation-dependent livelihoods to seasonal flood risks.

With the rehabilitation and structural reinforcement of the 185-meter embankment at Bandar 1, the 330-meter embankment at Bandar 2, the 300-meter embankment at Barakaale, the 30-meter embankment at Sarinley 1, and the 50-meter embankment at Bulo Adey, including associated intake and drainage structures, the subprojects will significantly reduce the likelihood of breach and overtopping during peak flood periods. The improved structural integrity, erosion resistance through gabion stabilization, controlled abstraction through intake chambers, and drainage regulation will enhance protection of residential areas, reduce agricultural losses, and strengthen livelihood stability for flood-exposed households.

In addition to enhanced flood protection, the project will generate short term employment opportunities during construction and contribute to long term resilience through strengthened embankment performance and improved flood risk reduction capacity. By reinforcing critical flood defense infrastructure along the Juba River, the subprojects are expected to support agricultural productivity, reduce recurrent recovery costs, and improve overall climate resilience in Bardere District.

## 3. Environmental and Social Baseline

### 3.1 Environmental Baseline

- **Living Environment (Flora & Fauna):** The clustered river embankment subprojects are located along the Juba River corridor in Bardere District, Gedo Region, within a riverine agro-pastoral landscape characterized by cultivated floodplain farms, riparian shrubs and trees near the riverbank, and degraded bushland further inland. Vegetation in the immediate embankment working corridor typically includes mixed riverine shrubs, scattered trees used for shade and windbreaks, and seasonal grasses that support livestock grazing during favorable rainfall conditions. Human settlement and long-term cultivation along the riverbank have reduced habitat continuity and wildlife presence in the immediate sites, with fauna largely limited to small reptiles, rodents, and common bird species adapted to human-dominated environments. No formally designated protected areas are expected within the direct footprint of the embankment alignments; however, a pre-construction walkover will be required to confirm absence of any sensitive habitats within the riparian edge.

- Non-Living Environment (Soils, Climate and Topography):** Bardere District lies within a hot semi-arid to arid climatic zone with strong rainfall variability and a history of recurrent droughts and episodic flood events associated with the Juba River system. Baseline conditions are defined by alternating dry seasons and rain periods that can trigger sharp river level rises, localized overbank flooding, and erosion of weak riverbanks. The Juba basin is also influenced by upstream catchment dynamics and sediment transport processes, which contribute to silt and sand deposition along riverine farmlands and can reduce cultivable area and accessibility over time. Soils along the river corridor are predominantly alluvial (sandy loams and silty deposits), productive under irrigation but highly susceptible to erosion, scouring, and sediment redistribution during peak flows and heavy rains. The subproject sites are generally low-lying and flat to gently sloping toward the river, which increases exposure to riverbank instability and inland waterlogging when drainage is constrained.
- Waste Management:** Bardere District has limited formal solid waste collection and disposal systems, and open dumping is common in peri-urban and rural settings. Construction waste streams expected under the clustered embankment works include excavated spoil (some reusable for backfilling and shaping), packaging waste, scrap steel off-cuts, damaged gabion wire, and small quantities of concrete debris from auxiliary structures. Without proper controls, unmanaged waste could obstruct drainage pathways and increase localized flood exposure during rainfall. Hazardous waste quantities are expected to be low but may include used oils, lubricants, oily rags, and filters from equipment maintenance, requiring secure storage and disposal through approved arrangements under the C-ESMP.
- Cultural Heritage:** No known archaeological or culturally important sites are expected within the embankment footprints; however, the Juba River corridor is historically significant for settlement and agriculture. A Chance Finds Procedure will therefore apply during excavation and foundation works, including immediate stop-work, site protection, and notification to relevant authorities if any cultural materials are encountered.
- Hydrology and Water Resources:** The Juba River is a principal surface water source in southern Somalia, supporting domestic water supply systems and extensive irrigation livelihoods. River flows fluctuate seasonally and can rise rapidly during intense rainfall events, including El Niño-linked flood periods, causing overtopping, riverbank erosion, and breakage formation along weak embankment sections. Flood risk monitoring and historic reports show that river levels around Bardere can exceed high-risk thresholds during flood periods, contributing to significant impacts on settlements and farmland. The clustered embankment rehabilitation sites are therefore situated in a hydrologically dynamic environment where both flood defense integrity and controlled drainage are essential for reducing inland impacts.
- Land Use and Land Cover:** Land use in the Bardere riverine zone consists of irrigated and rain-fed farming plots, riverbank gardens, grazing areas, and settlement clusters connected through the town and rural tracks. River dynamics and recurrent flooding have contributed to progressive sand and silt deposition along sections of the floodplain, expanding sediment-covered areas and reducing accessible cultivable hectares in some localities. This has reportedly pushed farmers to cultivate smaller plots and concentrate cropping on safer or more accessible strips of land.

- **Air Quality and Climate Stressors:** Baseline air quality in Bardere is primarily influenced by dust mobilization from unpaved roads, dry soils, windblown sediments, and seasonal land disturbance rather than industrial emissions. Climatic stressors include high temperatures, prolonged dry spells, and rainfall shocks that alternate between drought and flood extremes. Recent drought conditions across Somalia have intensified water scarcity, livestock stress, crop failure, and displacement pressures, with southern regions including Gedo identified among the significantly affected areas in national humanitarian updates and climate outlooks.
- **Noise and Vibration Baseline:** Ambient noise levels in the subproject areas are generally low to moderate, dominated by rural traffic, riverine activity, farming, and town-level commercial movement. Noise-sensitive receptors include riverine households, farm workers, small shops, mosques, and basic service points. Construction noise and vibration will be temporary and localized, typically limited to daytime working hours under the C-ESMP.
- **Surface and Groundwater Quality:** Surface water quality in the Juba River varies seasonally, with turbidity and suspended solids increasing during high flows due to sediment transport. Domestic water supply in Bardere relies heavily on abstraction from the river and subsequent treatment/filtration before distribution. Groundwater use exists but is generally secondary where river abstraction and private distribution systems are functional; quality constraints may occur, consistent with broader Somalia water sector challenges.
- **Geology and Seismic Risk:** Subsurface conditions along the Juba river corridor are mainly alluvial deposits shaped by fluvial processes. Seismic risk in Somalia’s riverine districts is generally considered low relative to primary tectonic zones; nevertheless, standard structural design and construction quality controls remain necessary to prevent settlement-related cracking and erosion-related failures.
- **Sensitive or Protected Areas:** No Ramsar sites or internationally designated protected areas are expected adjacent to the embankment footprints. The Juba River corridor remains the most ecologically significant feature locally due to riparian vegetation and riverine habitat functions, but the proposed works are confined to existing degraded/managed embankment alignments.
- **Climate Change Vulnerability:** Bardere District is highly exposed to climate variability, including recurrent droughts and episodic flood events. National drought reporting confirms intensified drought conditions, livestock losses, water scarcity, and displacement pressures, while flood monitoring frameworks indicate persistent flood risks along the Juba River system. The clustered embankment rehabilitation is therefore situated within a climate-vulnerable context where improved flood protection and controlled drainage are key resilience measures.
- **Visual and Landscape Characteristics:** The project landscape is predominantly rural riverine—flat floodplain farms with linear riverbank features, scattered vegetation, and settlement clusters. The embankment structures are typical flood defense features in this setting and will not significantly alter the broader landscape character; however, temporary construction activities (stockpiles, machinery, access tracks) may create short-term visual disturbance, managed through reinstatement and site housekeeping under the C-ESMP.

## 3.2 Social Baseline

- **Socio-Economic Context:** Bardere town is a major settlement in Gedo Region with surrounding riverine villages that rely on agriculture, livestock, and small trade. The district economy and movement of goods have been significantly disrupted by the collapse of the main vehicular bridge over the Juba River following heavy flood events, reducing connectivity, increasing transport costs, and constraining local commerce and labor opportunities. This disruption has compounded the economic and livelihood pressures already linked to recurrent flooding and climate shocks.
- **Livelihoods:** Livelihood systems in the subproject areas are predominantly agro-pastoral, combining irrigated farming along the Juba floodplain with livestock rearing and seasonal grazing. Recurrent flood impacts and sediment deposition have reduced accessible cultivable land in some riverine sections, contributing to smaller farmed plots and increased livelihood fragility. In the current drought context, pastoral and agro-pastoral households have faced pasture and water shortages, contributing to increased mobility and migration of livestock-keeping households toward better conditions or service areas.
- **Administration and Governance:** The subproject sites fall under Bardere District Administration and Jubaland State structures, with sector roles shared across relevant ministries and local authorities. Community governance commonly includes elders, religious leaders, and local committees involved in dispute resolution and coordination of shared resources, including water management and flood response actions. Coordination with these structures is essential for access management, labor recruitment, grievance handling, and sustained O&M arrangements for embankments and auxiliary structures.
- **Gender Considerations and GBV Risks:** Rural riverine communities in southern Somalia often have strong gender norms affecting participation and access to economic opportunities. Construction activities may increase SEA/SH exposure risks if not actively managed. The project will apply the GBV/SEA/SH risk management requirements within the ESF framework, including contractor Codes of Conduct, worker induction, safe recruitment practices, and confidential reporting channels under the GM.
- **Local Community Composition:** Communities in Bardere’s riverine corridor typically comprise long-term resident farming and pastoral groups, alongside households displaced by drought, flooding, or insecurity in the wider south-central regions. Social organization and customary decision-making influence local leadership, land use arrangements, and community engagement processes.
- **Vulnerable and Minority Groups:** Vulnerable groups may include drought-affected households, female-headed households, persons with disabilities, poor agro-pastoral households with reduced livestock holdings, and displaced families living in informal arrangements. These groups may face barriers to participation and benefit-sharing unless specifically targeted through inclusive consultation and fair labor recruitment practices.
- **Access to Water and Electricity:** Domestic water access in Bardere is strongly linked to the Juba River. Available assessments indicate that the main water source is the river and that private operators abstract and distribute treated/filtered water to users in town and nearby

areas. Electricity access is largely dependent on private supply arrangements typical of Somali towns, with limited coverage in peripheral villages and costs that constrain poor households.

- **Security Context:** Bardere District is located in a fragile operating environment typical of south-central Somalia, where localized security incidents may intermittently affect movement, logistics, and access to project sites. The district hosts AUSOM security presence at the Bardere airstrip/airport, with Ethiopian forces reported to be stationed there. These forces also conduct periodic movements into Bardere town when there are perceived security concerns or emerging threats, which may result in temporary checkpoints, heightened security measures, or short-term mobility restrictions for people and vehicles. Construction implementation will therefore require close coordination with the District Administration, local security authorities, and community leaders to ensure safe access, timely movement of materials and personnel, and clear communication on any security-related constraints. The contractor will apply site and worker security measures consistent with the project's Security Management Framework, including controlled site access, incident reporting procedures, and adherence to agreed movement protocols, in line with World Bank ESS4 (Community Health and Safety).
- **Health and Education Services:** Access to healthcare services in rural Bardere is generally limited to basic primary care points and referral to town facilities where available. Service availability and quality can be further strained during flood or drought emergencies due to displacement, waterborne disease risks, and reduced access routes. Education services are typically limited in rural villages, with stronger coverage in town centers; climate shocks and livelihood stress can reduce school attendance, particularly for girls.
- **Economic Indicators:** Household incomes are largely tied to farm production, livestock, casual labor, and small trade. Economic activity and market connectivity have been adversely affected by infrastructure disruption (including the bridge collapse), while recurrent flooding and sedimentation have constrained agricultural productivity in some riverine areas. Drought conditions reported nationally have also reduced livestock productivity and weakened purchasing power in affected regions.
- **Social Infrastructure:** Bardere's social infrastructure and movement rely on key transport links across the Juba River. Damage or failure of critical infrastructure (such as the main bridge) has reduced mobility, increased costs, and limited access to services and markets for surrounding communities. Rural feeder tracks may become difficult during rains, while drought conditions can reduce water access points and increase travel burden.
- **Cultural and Religious Practices:** Social life is strongly shaped by Islamic practices and customary norms, with religious leaders and elders playing central roles in community mobilization, information sharing, and dispute resolution. These structures will be engaged for consultation, information disclosure, and community safety messaging during implementation.
- **Conflict and Social Cohesion:** Resource pressures—especially related to water, grazing, and access to productive land—can increase during drought periods and after flood events. Community dispute resolution mechanisms typically rely on elders and customary

arrangements. The project's consultation processes and GM will help manage concerns related to construction impacts, access restrictions, and perceived inequities.

- **Migration and Mobility:** Seasonal and shock-driven mobility is common in Gedo, particularly among pastoral and agro-pastoral households. Recent drought reporting highlights increased displacement and movement linked to water scarcity, pasture depletion, and livestock stress, which can temporarily change village population profiles and service demands.
- **Food Security and Nutrition:** Food security conditions in Somalia have worsened under recurrent rainfall deficits and drought stress, with southern regions including Gedo affected by reduced crop production, livestock losses, and water scarcity. These conditions increase vulnerability among poor agro-pastoral households and can heighten reliance on humanitarian support during peak stress periods.
- **Access to Finance:** Formal finance access in rural districts is limited. Households commonly rely on informal credit, mobile money, shopkeeper credit, and family support. Drought and flood shocks can increase debt burdens and reduce savings and resilience capacity.
- **Community Organizations and Social Networks:** Community systems include elders, women's groups, youth groups, and informal livelihood networks. During flood and drought shocks, community coping often relies on social solidarity and external assistance mechanisms. Engagement with these groups supports inclusive consultation and effective risk communication.
- **Disaster Risk and Resilience:** Bardere District faces multi-hazard exposure, particularly river flooding along the Juba and severe drought conditions. Flood monitoring products identify persistent breakage risks along the Juba system, while recent humanitarian reporting confirms escalating drought stress and displacement. Strengthening embankments and auxiliary drainage controls is therefore directly linked to district-level resilience building and reduced recurrent losses.

## 4. Legal and Regulatory Framework

The relevant national environmental and social legislation, as well as the WB Environmental and Social Framework (ESF) under which the (S-FSRP) is financed will guide the implementation of this Environmental and Social Management Plan (ESMP) for the Subproject. Together, these frameworks ensure that project activities are carried out in a manner that safeguards the environment, promotes social inclusion, and upholds the principles of sustainability and accountability.

### 4.1 National Legal and Institutional Framework

#### **The provisional Constitution of Somalia:**

**Article 10 – Human Dignity:** Human dignity is the basis for all human rights. It is inviolable and must be protected by all. The State power must not be exercised in a manner that violates human dignity.

Article 11 – Equality: All citizens, regardless of sex, religion, social or economic status, political opinion, clan, disability, occupation, birth or dialect shall have equal rights and duties before the law. The State must not discriminate against any person on the basis of age, race, color, tribe, ethnicity, culture, dialect, gender, birth, disability, religion, political opinion, occupation, or wealth. Thus, all laws, or political and administrative actions that are designed to achieve full equality for individuals or groups who are disadvantaged, or have suffered from discrimination in the past, shall be deemed to be not discriminatory.

Article 24 – Labor Relations: Every person has the right to fair labor relations. All workers, particularly women, have a special right of protection from sexual abuse, segregation and discrimination in the workplace and, every labor law and practice shall comply with gender equality in the workplace.

Article 32 – Right of Access to Information: Every person has the right of access to information held by the state, and the right of access to any information that is held by another person which is required for the exercise or protection of any other just right.

Article 27 (1 & 5) – Economic and social rights- right to clean portable water. Women, aged, disabled, and minorities who have suffered discrimination to be supported to realize their full potential.

Article 43 Land: land is recognized as primary resource and the basis of the people’s livelihood; b) land shall be held, used and managed in an equitable, efficient, productive and sustainable manner; c) the FGS shall develop a national land policy, which shall be subject to constant review, d) no permit may be granted regarding the permanent use of any portion of the land, sea or air of the territory of the Federal Republic of Somalia, e) the FGS, in consultation with the FMS and other stakeholders, shall regulate land policy, and land control and use measures.

Article 45 (—Environment||) states that the government shall give priority to the protection, conservation, and preservation of the environment against anything that may cause harm to natural biodiversity and the ecosystem. Furthermore, all people have a duty to safeguards and enhance the environment and participate in the development, execution, management, conservation and protection of the natural resources and the environment. The FGS and the governments of the FMS affected by environmental damage shall take urgent measures to clean up hazardous waste dumped on the land or in the waters of the FGS; take necessary measures to reverse desertification, deforestation and environmental degradation, and to conserve the environment and prevent activities that damage the natural resources and the environment of the nation, among other measures.

## 4.2. Relevant National legislation

Environmental Protection and Management Act (April 2024), National Health Professionals Council Act (LR. 31/2020) and Law No. 9 of 26 January 1989; Draft National Environmental and Social Impact Assessment Regulations

Environmental Protection and Management Act, 2024: The act guarantees the right to a clean, safe and healthy environment, provides requirements for waste management including hazardous wastes. The act requires the application of the polluter pay and precautionary principle in environment management. The construction project is required to adhere to all the relevant requirements prescribed by the act.

Environmental and Social Impact Assessment and Audit Regulations (ESIA) 2024: Part III, regulations 13, 16 and 17, guides public participation, collection and incorporation of views from the public.

the Somali Labour Code (Law No. 36 of 2024), the Public Health legislation, Somalia National Gender Policy (2016) includes strategies to eradicate harmful traditional practices such as female genital mutilation/cutting (FGM/C) and child marriage and to improve services for the management of GBV/SEAH cases.

Institutionally, environmental and social management responsibilities are shared among several entities. The Federal Ministry of Agriculture and Irrigation (MoAI) provides overall project oversight, while FAO Somalia supervises day-to-day implementation and safeguards compliance, and the State MoAI facilitates local coordination, security, and grievance management. In parallel, the Federal Ministry of Environment and Climate Change (MoECC) serves as the national authority for environmental and social regulation in accordance with the Environmental Protection and Management Act (2024). Collectively, these institutions ensure compliance with Somalia’s environmental and social laws throughout the project cycle.

### 4.3 The World Bank Environmental and Social Framework (ESF)

As the Subprojects are risk-rated as having a "Moderate" environmental and social risk, a full Environmental Impact Assessment (EIA) is not required. This site-specific **Environmental and Social Management Plan (ESMP)** will serve as the primary instrument for identifying, assessing, and managing all potential risks and impacts.

In the absence of specific Somali national standards for air quality, water quality, or noise, or where such standards are less stringent, the project will adhere to internationally recognized benchmarks, including the WB ESF, **World Bank Group’s General EHS Guidelines** and, where applicable, **World Health Organization (WHO)** standards. These standards will guide all management and monitoring activities throughout the project lifecycle.

**World Bank Environmental and Social Framework (ESF):** The following Environmental and Social Standards (ESSs) are relevant to this project.

*Table 2: Summary of Potential Environmental and Social Risks*

ESS	Specific Relevancy (Risks Only)
<b>ESS1:</b> Assessment and Management of Environmental and Social Risks and Impacts	<ul style="list-style-type: none"> <li>- Addresses the risk of riverbank erosion, embankment instability, and structural failure during excavation and installation of gabion structures.</li> <li>- Addresses the risk of hydrological alterations such as localized backflow, overtopping, or inadequate drainage intake control.</li> <li>- Addresses the risk of temporary restriction of river access for irrigation abstraction during construction works.</li> <li>- Addresses the risk of improper gabion installation, inadequate compaction, or failure of geotextile filtration layers leading to structural weakness.</li> <li>- Addresses the risk of cumulative impacts arising from recurrent flood events combined with climate variability.</li> </ul>

	<ul style="list-style-type: none"> <li>- Addresses the risk of water access tensions among upstream and downstream irrigation users during construction phase disruptions.</li> <li>- Addresses the risk of uncontrolled runoff concentration or poor slope stabilization leading to downstream erosion.</li> <li>- Addresses the risk of weak ESMP and C-ESMP implementation across clustered embankment sections.</li> <li>- Addresses the risk of poor coordination between the Contractor, FAO, NPCU, and State PIU leading to unmanaged environmental and social impacts.</li> <li>- Addresses the risk of inadequate monitoring of embankment performance and drainage functionality following rehabilitation.</li> <li>- Addresses the risk of exclusion of vulnerable households, IDPs, women, and minority groups from consultations and employment opportunities.</li> <li>- Addresses the risk of failing to establish and operationalize a functional GM and confidential SEA/SH reporting mechanism.</li> <li>-</li> </ul>
<p><b>ESS2: Labor and Working Conditions</b></p>	<ul style="list-style-type: none"> <li>- Addresses the risk of child labor or forced labor due to informal recruitment practices in rural settings.</li> <li>- Addresses the risk of unfair or non-transparent recruitment, including exclusion of women, youth, and vulnerable households from employment opportunities.</li> <li>- Addresses the risk of delayed wage payments and labor-related grievances.</li> <li>- Addresses the risk of workers operating without written contracts or clear employment terms.</li> <li>- Addresses the risk of injuries from heavy machinery, deep excavations, embankment slope collapse, and gabion installation works.</li> <li>- Addresses the risk of exposure to excessive heat, dehydration, and heat stress during peak construction periods.</li> <li>- Addresses the risk of inadequate provision or inconsistent use of PPE.</li> <li>- Addresses the risk of unsafe lifting and handling of heavy gabion boxes, stones, and reinforcement materials.</li> <li>- Addresses the risk of unsafe internal site access routes and poor material storage organization.</li> <li>- Addresses the risk of weak implementation of the LMP and absence of a confidential Worker GM.</li> <li>- Addresses the risk of inadequate OHS incident reporting, root cause analysis, and record keeping.</li> <li>-</li> </ul>

<p><b>ESS3:</b> Resource Efficiency and Pollution Prevention and Management</p>	<ul style="list-style-type: none"> <li>- Addresses the risk of dust emissions from excavation, vehicle movement, and dry soil surfaces.</li> <li>- Addresses the risk of noise and vibration affecting nearby households and farm users, even if impacts are minor in a rural agropastoral setting.</li> <li>- Addresses the risk of air emissions (smoke, diesel fumes) from poorly maintained machinery, even if overall impacts are limited.</li> <li>- Addresses the risk of fuel and oil spills contaminating soil and canal water.</li> <li>- Addresses the risk of increased turbidity and sediment loads in irrigation canals and drainage channels.</li> <li>- Addresses the risk of accumulation of construction debris and vegetation waste along the catchment inlet canal.</li> <li>- Addresses the risk of inadequate waste segregation, including hazardous versus non-hazardous materials.</li> <li>- Addresses the risk of waste disposal in unauthorized locations and community exposure to unsafe waste piles.</li> <li>- Addresses the risk of erosion and sedimentation affecting river embankment systems.</li> </ul>
<p><b>ESS4:</b> Community Health, Safety, and Security</p>	<ul style="list-style-type: none"> <li>- Addresses the risk of community exposure to construction hazards including heavy machinery, excavation zones, and embankment works.</li> <li>- Addresses the risk of unsafe access along riverbanks during partial construction or incomplete stabilization.</li> <li>- Addresses the risk to children and livestock moving near excavation pits and unfinished embankment slopes.</li> <li>- Addresses the risk of accidental drowning in the river near active construction zones.</li> <li>- Addresses the risk of disruption to irrigation access points during construction.</li> <li>- Addresses the risk of increased traffic along feeder roads leading to accidents involving pedestrians and livestock.</li> <li>- Addresses the risk of tension between communities over restricted river access during construction.</li> <li>- Addresses the risk of misconduct or intimidation if security personnel are deployed for asset protection.</li> <li>- Addresses the risk of labor influx generating social tension or unmanaged worker–community interactions.</li> <li>-</li> </ul>
<p><b>ESS5:</b> Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement</p>	<ul style="list-style-type: none"> <li>- ESS5 is not triggered because both embankment sections are located entirely on existing government-owned land along the river corridor.</li> <li>- Addresses temporary risks such as short-term restriction of access to farmland edges, irrigation abstraction points, and footpaths during construction.</li> <li>- Addresses the risk of farmers experiencing temporary difficulty accessing river water for irrigation.</li> <li>- Addresses the risk of perceived inequity if embankment height is misunderstood as limiting water abstraction.</li> </ul>

	<ul style="list-style-type: none"> <li>- Addresses the risk of disputes over embankment alignment if work areas are not clearly demarcated.</li> <li>- Addresses the risk of informal encroachment or misunderstanding regarding riverbank boundaries.</li> <li>-</li> </ul>
<b>ESS6: Biodiversity Conservation</b>	<ul style="list-style-type: none"> <li>- Addresses the risk of minor vegetation clearance along the riverbank beyond what is strictly necessary.</li> <li>- Addresses the risk of temporary disturbance to riparian habitats and small fauna during construction.</li> <li>- Addresses the risk of localized habitat alteration due to excavation and spoil placement.</li> <li>- Addresses the risk of sediment discharge affecting aquatic habitats during peak works.</li> <li>- Confirms that no protected areas, critical habitats, or known sensitive species have been identified within or near the project sites.</li> <li>- Acknowledges that impacts are expected to be localized, site specific, and reversible with proper mitigation.</li> </ul>
<b>ESS8: Cultural Heritage</b>	<ul style="list-style-type: none"> <li>- Addresses the risk of chance finds of cultural or historical materials during excavation (e.g., pottery, graves, artifacts).</li> <li>- Addresses the risk of damaging culturally important trees, markers, or unrecorded burial sites.</li> <li>- Addresses the risk of community conflict if cultural heritage is discovered and not reported or managed appropriately.</li> </ul>
<b>ESS10: Stakeholder Engagement and Information Disclosure</b>	<ul style="list-style-type: none"> <li>- Addresses the risk of excluding women, youth, minority groups, and vulnerable households from consultations and project decision-making.</li> <li>- Addresses the risk of poor communication leading to confusion about project objectives, benefits, and construction schedules.</li> <li>- Addresses the risk of insufficient information disclosure on temporary water disruptions, access restrictions, and safety risks.</li> <li>- Addresses the risk of low awareness or poor access to the GM, resulting in unresolved grievances.</li> <li>- Addresses the risk of weak coordination and miscommunication between MoAI-FGS, Jubba Land MoAI, district authorities, FAO, and community leaders.</li> </ul>
<b>SEA/SH – Sexual Exploitation, Abuse, and Harassment (Cross-cutting: ESS1, ESS2, ESS4, ESS10)</b>	<ul style="list-style-type: none"> <li>- Addresses the risk of SEA/SH incidents involving workers and community members, particularly women and girls.</li> <li>- Addresses the risk of increased vulnerability to SEA/SH due to worker–community interaction around the project area.</li> <li>- Addresses the risk of underreporting of SEA/SH due to stigma, fear of retaliation, or lack of confidential reporting channels.</li> <li>- Addresses the risk of misconduct by security personnel or project workers that could lead to exploitation, abuse, or harassment.</li> </ul>

**World Bank Group EHS Guidelines:** The project will adhere to the WBG's General Environmental, Health, and Safety (EHS) Guidelines (EHSs). The Subproject's commitment to adhering to the World

Bank Group's General Environmental, Health, and Safety (EHS) Guidelines is a cornerstone of its risk management strategy. These guidelines are technical reference documents that define **Good International Industry Practice (GIIP)** for managing EHS issues in a sustainable manner.

For this civil works project, they are critically important as they provide a practical and authoritative framework for implementing effective mitigation measures related to **Occupational Health and Safety** (e.g., use of PPE, site safety protocols), **Community Health and Safety** (e.g., site security, traffic management), and **Environmental Pollution Control** (e.g., managing dust, noise, and waste) during construction and operation. Their application ensures the Subproject is implemented to a high standard of safety and environmental stewardship. In cases where Somali regulations and World Bank policies differ, the World Bank Standards will prevail and will be applied. This ESMP, along with the associated plans, S-FSRP Frameworks, and Manuals (ESMF, RPF, IPMP, LMP, WMP, GM, SEP, etc.), is legally binding on the contractor. The Contractor is required to prepare their C-ESMP upon signing the work contract and before commencing work. This preparation is based on the proposed management framework of this document (ESMP), the World Bank Environmental and Social Framework (ESF), and the Good International Industry Practice (GIIP) included in the EHSGs.

Detailed gap analysis has been developed with the project approved ESMF, refer to the following link: [https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099101123104521377/p1778160d5cf1003093810fb7fa9629a42?utm\\_source=chatgpt.com](https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099101123104521377/p1778160d5cf1003093810fb7fa9629a42?utm_source=chatgpt.com)

## 5. Environmental and Social Risks and Impacts – Overview

E&S screening determined that the Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey river embankment subprojects are classified as Moderate Risk activities (see Annex 1a, 1b & 1c) under the WB ESF and the S-FSRP FESM. The project is expected to generate substantial long-term environmental and socio-economic benefits for Bandar, Barakaale, Sarinley, Bulo Adey residents and surrounding riverine communities in Bardere District. In particular, rehabilitation and structural reinforcement of the embankments will reduce recurrent flood impacts, protect residential settlements and irrigated farmland, stabilize agricultural production affected by sediment deposition and land degradation, and enhance climate resilience in line with S-FSRP objectives.

However, as with all civil works involving excavation, riverbank stabilization, gabion installation, soil compaction, geotextile placement, intake chamber construction, drainage inlet installation, and operation of heavy machinery, a range of short-term E&S risks may arise during construction. These include soil disturbance, temporary riverbank instability, dust and noise emissions, temporary restriction of river access for irrigation abstraction, CHS risks associated with excavation and machinery operations, labor-related risks under ESS2, and localized access disruptions in a context already affected by transport constraints following the Bardere bridge collapse. This section provides an overview of anticipated positive and negative impacts and links them to the applicable ESSs, together with the management measures to be implemented through this ESMP and the Contractor's C-ESMP.

### 5.1 Positive Impacts

The Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey River Embankment Rehabilitation Subprojects will significantly strengthen flood protection, safeguard agricultural livelihoods, and improve community resilience in Bardere District. Key positive outcomes include:

- **Improved flood protection and reduced embankment failure risk:** Construction of compacted soil embankments reinforced with gabion stabilization and geotextile protection along 185 meters at Bandar 1, 330 meters at Bandar 2, 300 meters at Barakaale, 30 meters at Sarinley 1, and 50 meters at Bulo Adey will substantially enhance riverbank stability. The reinforced embankments are expected to reduce the likelihood of breach and overtopping during peak discharge periods along the Juba River and seasonal high rainfall events.
- **Protection of households and agricultural lands:** The rehabilitation will directly protect approximately 1,755 households across the Bardere riverine corridor, in addition to safeguarding adjacent irrigated farmland and irrigation systems along the Juba River. Reduced flood exposure will minimize crop loss, soil erosion, sediment deposition impacts, infrastructure damage, and displacement risks affecting agro-pastoral households.
- **Improved drainage regulation and controlled river access:** Construction of intake chambers at Bandar 1, Bandar 2, Barakaale, and Bulo Adey, together with drainage inlet structures at Bandar 2 and Sarinley 1, will maintain controlled irrigation abstraction while preserving flood protection integrity. These measures will facilitate regulated inland runoff discharge, prevent uncontrolled backflow, and reduce localized overtopping risks, particularly in areas affected by sediment accumulation and reduced farmland accessibility.
- **Employment creation and income generation:** Construction activities will generate short term employment opportunities for skilled and unskilled laborers, with priority given to local community members, including youth, women, IDPs, and vulnerable households, in line with the LMP. This will provide temporary income support and stimulate local economic activity in a district where market movement has been constrained by infrastructure disruption and recurrent climate shocks.
- **Reduced recurrent recovery costs and strengthened resilience:** By reducing flood-related damage to homes, crops, irrigation systems, and riverbank infrastructure, the subprojects will lower emergency repair costs, decrease reliance on humanitarian assistance during flood seasons, and strengthen long term resilience to climate variability, sedimentation pressures, and high river discharge fluctuations.

Collectively, these benefits will contribute to stabilized agricultural production, improved household income security, reduced displacement risks during flood and drought cycles, strengthened irrigation reliability, and enhanced flood resilience for riverine communities in Bardere District.

## 5.2 Potential Negative Impacts

Although overwhelmingly beneficial, the subprojects may generate localized and temporary negative environmental and social impacts, primarily during the construction phase. These impacts are site specific, predictable, reversible, and can be effectively managed through the mitigation measures outlined in this ESMP and the contractor's C-ESMP.

### **Potential Environmental Risks include:**

- ✦ Soil disturbance, slope instability, and localized erosion associated with excavation along the riverbank, gabion foundation trenching, soil compaction, installation of geotextile layers, construction of intake chambers, and temporary stockpiling of excavated material.

- ✦ Risk of sediment discharge into the Jubba River during excavation and slope stabilization works, potentially increasing turbidity and suspended solids if not properly controlled.
- ✦ Risk of runoff related contamination, including accidental discharge of cement washout, concrete slurry, fuel residues, oils, or lubricants into surrounding soils or the river during construction.
- ✦ Generation and improper disposal of construction wastewater, including equipment washing water and wastewater from temporary worker sanitation facilities if not properly managed.
- ✦ Temporary air quality impacts such as dust emissions from excavation, stone placement, backfilling, compaction, and vehicle movement along feeder roads and river access routes.
- ✦ Noise and vibration impacts from heavy machinery, stone filling operations, welding of steel gate components, and material transport affecting nearby households and farmland users.
- ✦ Vegetation disturbance, including clearing of shrubs and grasses along the riverbank beyond what is strictly necessary, potentially affecting localized grazing patterns.
- ✦ Risk of localized obstruction of natural drainage pathways due to improper spoil placement or temporary works, potentially increasing flood risk during rainfall events.
- ✦ Fuel storage, fire, and spill hazards related to improper storage of diesel and lubricants or absence of spill containment measures at worksites.
- ✦ Climate related risks, including embankment instability during intense rainfall events, river level fluctuations during construction, and heat stress risks for workers.
- ✦ Biodiversity related risks, including temporary disturbance to riparian vegetation and small fauna inhabiting the riverbank corridor.

**Potential Social, Community Health, and Safety Risks include:**

- ✦ Temporary disruption of community access to irrigation abstraction points and farmland edges during embankment construction.
- ✦ Risks to children, pedestrians, and livestock where open excavations and active construction zones intersect with daily movement routes along the riverbank.
- ✦ Risk of accidental drowning or injury near the river during active construction.
- ✦ Community health and safety risks associated with increased movement of heavy machinery and material transport vehicles along feeder roads and rural access tracks.
- ✦ Temporary access barriers for elderly persons and persons with disabilities during construction related restrictions.
- ✦ Potential social tension related to labor engagement, including perceptions of unfair recruitment between local and non-local workers.
- ✦ Risk of misunderstanding or concern regarding embankment height and its effect on water accessibility if not clearly communicated.

**Labor and Occupational Health and Safety Risks (ESS2) include:**

- ✦ Manual handling injuries from lifting and placing gabion boxes, stone fill, reinforcement steel, and drainage gate components.
- ✦ Risks associated with deep excavation works along unstable riverbanks and heavy machinery operation near slopes.
- ✦ Heat stress, dehydration, and fatigue due to high ambient temperatures during peak construction periods.
- ✦ Inadequate worker welfare facilities including sanitation, rest areas, and potable water if not properly managed.
- ✦ Chemical exposure risks from fuels, lubricants, paints, and construction materials.
- ✦ Risk of falls, slips, and trips along uneven terrain and embankment slopes.

**Land, Livelihood, and Cultural Risks include:**

- ✦ Temporary restriction of access to farmland edges and irrigation abstraction points during construction.
- ✦ Short term disruption of irrigation scheduling and water abstraction patterns.
- ✦ Risk of disturbance to unmarked graves, culturally significant features, or historically sensitive areas during excavation works.

**Stakeholder Engagement and Grievance Related Risks (ESS10) include:**

- ✦ Limited participation of women, youth, IDPs, and minority households if consultation outreach is not inclusive.
- ✦ Literacy and language barriers affecting effective use of written grievance channels.
- ✦ Risk of rumors or misinformation regarding project benefits, embankment alignment, employment opportunities, or water access arrangements.
- ✦ Risk of underreporting of grievances, including SEA/SH related concerns, if confidential reporting channels are not clearly communicated.

All identified risks will be addressed through the contractor’s C-ESMP, LMP, WMP, OHS measures, SEA/SH Action Plan, SMF, and the project GM, in accordance with the WB ESF.

Overall, based on the environmental and social screening conducted on October 13<sup>th</sup>, 2025 and supported by field assessments and community consultations, the Bender 1 & 2, Barakaale, Sarinley 1 & Bulo Adey river embankment subprojects are classified as Moderate Risk activities (see Annex 1a, 1b & 1c). The potential adverse impacts are temporary, localized, and fully reversible with effective implementation of the ESMP and contractor C-ESMP.

Furthermore, the long-term benefits of the project including strengthened flood protection, reduced crop loss, protection of residential settlements, improved agricultural stability, and enhanced climate resilience significantly outweigh the temporary construction phase impacts. The project is therefore expected to contribute positively to sustainable livelihoods and flood risk reduction in those subproject areas and the broader Bardere District.

## 6. Environmental and Social Management Plan

The Environmental and Social Management Plan outlines the specific mitigation measures required to address the environmental and social risks associated with the rehabilitation and structural reinforcement of the above-mentioned river embankment sections in under Bardere District. These measures are aligned with the WB ESSs and the S-FSRP FESM.

The ESMP provides clear institutional responsibilities, practical mitigation approaches, monitoring arrangements, and implementation timelines to ensure that all anticipated impacts related to riverbank excavation, gabion installation, geotextile placement, soil compaction, construction of intake and drainage structures, slope stabilization, and associated civil works are avoided, minimized, or properly managed throughout the construction and early operational phases.

Given that the three subprojects are technically similar in design, scope, and structural configuration, this ESMP applies a clustered safeguards approach, ensuring consistent environmental and social risk management across both embankment sections while maintaining flexibility to address site-specific conditions, including drainage requirements and river access considerations.

The mitigation measures address risks related to riverbank erosion, slope instability, sediment discharge into the Shabelle River, occupational health and safety hazards, community safety risks associated with heavy machinery and excavation, labor management, SEA/SH prevention, temporary irrigation access restrictions, and stakeholder engagement requirements.

Table 4 below summarizes the key environmental and social risks and the corresponding mitigation measures for each applicable ESS, together with responsible parties and monitoring requirements to ensure effective implementation during the subproject lifecycle.

Table 3: Environmental & Social Mitigation Plan

Risks / Impacts	Mitigation Measures	Methods / Tools / Resources	Responsibility	Project Phase	Timeline / Frequency	Mitigation Budget
<i>ESS1 – Assessment and Management of Environmental and Social Risks and Impacts</i>						
<p><b>A. Environmental Risks:</b></p> <ul style="list-style-type: none"> <li>- risk of riverbank erosion, embankment instability, and structural failure during excavation and installation of gabion structures.</li> <li>- Addresses the risk of hydrological alterations such as localized backflow, overtopping, or inadequate drainage intake control;</li> <li>- risk of temporary restriction of river access for irrigation abstraction during construction works.</li> <li>- Addresses the risk of improper gabion installation, inadequate compaction, or failure of geotextile filtration layers leading to structural weakness.</li> <li>- Addresses the risk of cumulative impacts arising from recurrent flood</li> </ul>	<p><b>A. Environmental:</b></p> <ul style="list-style-type: none"> <li>- Fully implement ESMP &amp; C-ESMP;</li> <li>- Stabilize catchment banks &amp; excavated areas immediately;</li> <li>- Schedule works outside peak rains;</li> <li>- Provide temporary water access to irrigate near farmlands;</li> <li>- Daily inspection of embankment and erosion-sensitive areas</li> <li>- Maintain existing drainage pathways and avoid blocking natural flow routes (inlets &amp; outlets) during excavation;</li> <li>- Restrict heavy machinery movement to designated access routes and catchment alignment only;</li> <li>- Regrade and fully compact disturbed banks &amp; surfaces to restore natural flow patterns.</li> <li>- Designate approved spoil disposal areas away from inlet channels, Household settlement and grazing land;</li> </ul>	<ul style="list-style-type: none"> <li>- ESMP &amp; C-ESMP</li> <li>- Sediment/flow control tools</li> <li>- FAO inspection checklists</li> <li>- Conflict mapping tools;</li> <li>- GM logs &amp; communication sheets</li> <li>- Site drainage layout review;</li> <li>- Compaction control checklists;</li> <li>- Spoil management maps;</li> <li>- FAO supervision checklists.</li> <li>- Water use monitoring logs;</li> <li>- Community consultation records;</li> <li>- FAO supervision reports.</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Contractor (primary)</li> <li>- FAO Supervising Engineer</li> <li>- NPCU – MoAI (oversight)</li> <li>- Jubba Land State PIU (coordination)</li> </ul>	Construction	<ul style="list-style-type: none"> <li>- Daily inspection (Contractor);</li> <li>- Weekly supervision (FAO SE)</li> <li>- Continuous during critical works</li> </ul>	<ul style="list-style-type: none"> <li>- Included in contract price;</li> <li>- Included in FAO supervision &amp; management budget</li> </ul>

<p>events combined with climate variability.</p> <ul style="list-style-type: none"> <li>- Addresses the risk of water access tensions among upstream and downstream irrigation users during construction phase disruptions.</li> <li>- Addresses the risk of uncontrolled runoff concentration or poor slope stabilization leading to downstream erosion.</li> </ul> <p><b>B. Social Risks:</b></p> <ul style="list-style-type: none"> <li>▪ Water use conflicts among irrigation farmlands during temporary closure or restricted access to river bank;</li> <li>▪ Tension between farm owners and households over water access sequencing during rehabilitation;</li> <li>▪ Exclusion of vulnerable households, women, IDPs, and minority groups from water access planning;</li> <li>▪ Increased pressure on shared water resources due to temporary worker presence.</li> </ul>	<ul style="list-style-type: none"> <li>-</li> </ul> <p><b>B. Social:</b></p> <ul style="list-style-type: none"> <li>- Conduct conflict mapping prior to works;</li> <li>- Transparent targeting of vulnerable/marginalized groups;</li> <li>- Maintain daily communication with WUCs;</li> <li>- Use GM to record/resolve grievances;</li> <li>- Coordinate water distribution schedules.</li> <li>- Provide advance notice of temporary water access restrictions.</li> </ul> <p><b>C. Administrative &amp; Cumulative</b></p> <ul style="list-style-type: none"> <li>- Weekly FAO supervision + non-compliance notices;</li> <li>- Contractor keeps daily logs &amp; ESMP checklists;</li> <li>- Monthly E&amp;S refresher training for workers;</li> <li>- Strengthen C-ESMP using FAO TA tools/templates.</li> <li>- Prohibit abstraction of community drinking water sources for construction use;</li> <li>- Source construction water from approved locations;</li> </ul>					
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<p><b>C. Administrative Risks:</b></p> <ul style="list-style-type: none"> <li>▪ Weak ESMP and C-ESMP implementation at site level;</li> <li>▪ Poor coordination between Contractor, FAO, NPCU and Jubba Land State PIU;</li> <li>▪ Inadequate supervision of embankment shaping and lining works;</li> <li>▪ Delayed E&amp;S monitoring and reporting;</li> <li>▪ Risk of non-operational GM during construction;</li> <li>▪ Weak documentation of environmental <i>inspections and corrective actions</i>.</li> </ul> <p><b>D. Cumulative and Indirect Risks:</b></p> <ul style="list-style-type: none"> <li>▪ Increased demand on local water sources due to construction water needs;</li> <li>▪ Perceived employment expectations leading to social tension;</li> <li>▪ Indirect degradation of farmlands due to uncontrolled machinery movement;</li> </ul>	<ul style="list-style-type: none"> <li>- Clearly communicate that employment opportunities are limited and temporary;</li> <li>- Coordinate with local leaders to manage expectations and prevent informal settlements;</li> <li>- Monitor population influx indicators during construction.</li> </ul>					
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ESS2 – Labor and Working Conditions

<p><b>A. Labor Risks:</b></p> <ul style="list-style-type: none"> <li>- Risk of child labor or forced labor;</li> <li>- Unfair recruitment practices and exclusion of women, youth, and vulnerable groups;</li> <li>- Delayed payment of wages leading to disputes;</li> <li>- Lack of written contracts and unclear employment terms.</li> </ul> <p><b>B. Occupational Health &amp; Safety (OHS) Risks:</b></p> <ul style="list-style-type: none"> <li>- Injuries from machinery, open excavations, unstable banks;</li> <li>- Exposure to excessive noise and vibration;</li> <li>- Heat stress, dehydration, and unsafe working hours;</li> <li>- Lack of PPE and inconsistent use;</li> <li>- Poor site layout and unsafe access paths;</li> <li>- Exposure to dust during excavation and backfilling;</li> <li>- Electrical hazards during installation of solar panels, inverters, and pumping systems;</li> </ul>	<p><b>A. Labor Standards:</b></p> <ul style="list-style-type: none"> <li>- Implement the project’s LMP in full;</li> <li>- Verify worker ages (18+ only);</li> <li>- Establish and publicize a confidential worker GM;</li> <li>- Promote inclusion of women, youth and minority groups;</li> <li>- Communicate payment schedules clearly to avoid disputes.</li> </ul> <p><b>B. Occupational Health &amp; Safety:</b></p> <ul style="list-style-type: none"> <li>- Provide full PPE (helmets, gloves, boots, reflective vests, ear protection);</li> <li>- Conduct daily toolbox talks and weekly OHS sessions;</li> <li>- Provide clean drinking water, shaded rest areas, and sanitation facilities;</li> <li>- Implement heat-stress management (adjust shifts, rest breaks);</li> <li>- Train machinery operators and enforce licensing requirements;</li> <li>- Conduct Safety Risk Assessments and update site layout;</li> <li>- Keep accident and near-miss logs and conduct Root Cause Analysis (RCA);</li> </ul>	<ul style="list-style-type: none"> <li>- Labor Management Procedures (LMP);</li> <li>- Code of Conduct (CoC);</li> <li>- Worker GM tools;</li> <li>- PPE sets;</li> <li>- OHS toolbox talk templates;</li> <li>- Accident/incident logs;</li> <li>- Payment monitoring tools;</li> <li>- Safety Risk Assessment forms;</li> <li>- Training attendance registers</li> </ul>	<ul style="list-style-type: none"> <li>- Contractor (primary implementer);</li> <li>- FAO Technical Assistance team (training, oversight);</li> <li>- FAO Supervising Engineer (verification)</li> <li>- NPCU – MoAI (labor compliance oversight);</li> <li>- Jubba Land State PIU (worker engagement/support)</li> </ul>	<p>Construction &amp; Operation</p>	<ul style="list-style-type: none"> <li>- Daily OHS toolbox talks;</li> <li>- Weekly OHS inspections by contractor;</li> <li>- Weekly FAO supervision</li> <li>- Monthly labor audits</li> </ul>	<ul style="list-style-type: none"> <li>- Included in contract price</li> <li>- Supported under FAO supervision budget;</li> <li>- Included in MoAI operational costs</li> </ul>
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<p><b>C. Administrative and Compliance Risks:</b></p> <ul style="list-style-type: none"> <li>- Poor implementation of Labor Management Procedures (LMP);</li> <li>- No worker GM or weak confidential reporting system;</li> <li>- Lack of OHS incident reporting, RCAs, and training; Labor standards not aligned with national laws or EHSGs;</li> <li>- Inadequate record-keeping (hours worked, incidents, contracts).</li> </ul>	<p><b>C. Administrative Measures:</b></p> <ul style="list-style-type: none"> <li>- Monthly refresher training for all workers;</li> <li>- Maintain up-to-date labor registers, GM records, OHS logs;</li> <li>- Enforce Code of Conduct (CoC) for all workers with clear penalties;</li> <li>- Continuous supervision by FAO to ensure compliance.</li> </ul>					
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*ESS3 – Resource Efficiency and Pollution Prevention*

<p><b>A. Pollution Risks:</b></p> <ul style="list-style-type: none"> <li>- Dust emissions from excavation, vehicle movement, dry soils;</li> <li>- Noise and vibration from machinery and equipment;</li> <li>- Air emissions (smoke, diesel fumes) from poorly maintained machinery (negligible);</li> <li>- Fuel and oil spills contaminating soil and water sources;</li> <li>- Risk of contamination of partially filled catchments from construction runoff;</li> </ul>	<p><b>A. Pollution Control:</b></p> <ul style="list-style-type: none"> <li>- Use water sprinklers to suppress dust on required access roads and work sites;</li> <li>- Maintain vehicles and machinery regularly (oil change, tuning, filter replacement);</li> <li>- Limit noisy activities to daytime hours and notify nearby households;</li> <li>- Store fuel/oil in bunded, labeled containers away from waterways;</li> <li>- Keep spill kits on site and train workers on their use;</li> <li>- Prevent runoff from entering partially filled catchments.</li> </ul>	<ul style="list-style-type: none"> <li>- Waste Management Plan (WMP);</li> <li>- Water truck / sprinklers;</li> <li>- Fuel/oil bunds;</li> <li>- Spill kits;</li> <li>- Water testing kits (TDS, TSS);</li> <li>- Training materials</li> </ul>	<ul style="list-style-type: none"> <li>- Contractor (primary implementer)</li> <li>- FAO Supervising Engineer (verification);</li> <li>- NPCU – MoAI (oversight);</li> <li>- Jubba Land State PIU (coordination &amp; local enforcement)</li> </ul>	<p>Construction &amp; early operation</p>	<ul style="list-style-type: none"> <li>- Daily pollution checks;</li> <li>- Weekly waste &amp; fuel inspections;</li> <li>- Monthly reporting by contractor;</li> <li>- Continuous monitoring during excavation &amp; earthworks</li> </ul>	<ul style="list-style-type: none"> <li>- Included in contract price;</li> <li>- Included in FAO supervision budget</li> </ul>
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<ul style="list-style-type: none"> <li>- Increased turbidity and sediment load within catchment basins during excavation;</li> <li>- Improper storage of construction materials near water bodies.</li> </ul> <p><b>B. Waste Management Risks:</b></p> <ul style="list-style-type: none"> <li>- Accumulation of construction debris and vegetation waste;</li> <li>- Lack of proper waste segregation (hazardous vs non-hazardous);</li> <li>- Disposal of waste in unauthorized locations;</li> <li>- Community exposure to unsafe waste piles;</li> <li>- Improper disposal of geomembrane off cuts and packaging materials;</li> <li>- Lack of segregation between hazardous and non-hazardous waste;</li> <li>- Disposal of waste in grazing areas;</li> </ul> <p><b>C. Water &amp; Soil Quality Risks:</b></p> <ul style="list-style-type: none"> <li>- Erosion and sedimentation entering river/canal systems (low);</li> </ul>	<p><b>B. Waste Management:</b></p> <ul style="list-style-type: none"> <li>- Implement Waste Management Plan (WMP);</li> <li>- Clearly label waste bins: general waste, hazardous waste, organic waste;</li> <li>- Identify authorized disposal sites in collaboration with WUC &amp; State MoAI;</li> <li>- Remove debris regularly and ensure safe transport to disposal sites;</li> <li>- Prohibit burning of waste;</li> <li>- Reuse suitable excavated material for embankment shaping where feasible</li> </ul> <p><b>C. Water &amp; Soil Quality Safeguards:</b></p> <ul style="list-style-type: none"> <li>- Minimize vegetation disturbance to avoid exposed soils.</li> <li>- Install erosion control measures (brush barriers, silt fences were required);</li> <li>- Conduct TDS/TSS analysis before allowing irrigation water use;</li> <li>- Avoid using water with TDS &gt; 1,500 ppm for irrigation;</li> <li>- Monitor turbidity during excavation near water inlets.</li> <li>- Restore surface contours after trench closure;</li> </ul>				
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<ul style="list-style-type: none"> <li>- High Total Dissolved Solids (TDS) water used for irrigation causing soil salinization;</li> <li>- Increased Total Suspended Solids (TSS) in canal water;</li> <li>- Contamination of shallow water sources;</li> <li>- Localized waterlogging caused by altered surface drainage during trenching and backfilling;</li> <li>- Soil productivity loss due to compaction in grazing land/cultivated plots adjacent to works.</li> <li>- Soil salinization risks if poor quality water accumulates;</li> </ul>	<ul style="list-style-type: none"> <li>- Monitor post rainfall drainage conditions and correct pooling immediately.</li> </ul>					
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*ESS4 – Community Health, Safety, and Security*

<p><b>A. Community Health &amp; Safety Risks:</b></p> <ul style="list-style-type: none"> <li>- Exposure to construction hazards (machinery, trucks, excavations);</li> <li>- Unsafe access around open trenches, axillary structures (Water storage, geomembrane sheet, silt trap, troughs &amp; kiosk reconstruction /rehab specified sites) and unstable banks;</li> </ul>	<p><b>A. Community Health &amp; Safety Measures:</b></p> <ul style="list-style-type: none"> <li>- Install robust fencing, barriers, and warning signage around all hazardous zones;</li> <li>- Restrict unauthorized entry into the construction area except for workers;</li> <li>- Conduct community awareness sessions on construction risks, especially targeting women, youth, and farmers;</li> </ul>	<ul style="list-style-type: none"> <li>- Security Management Plan (SMP);</li> <li>- Traffic Management Plan (TMP);</li> <li>- Fencing, barriers &amp; signage;</li> <li>- Debris removal procedures;</li> <li>- EHSg safety guidelines;</li> <li>- GM system (including security channel);</li> </ul>	<ul style="list-style-type: none"> <li>- Contractor (primary implementer);</li> <li>- FAO Supervising Engineer (verification &amp; compliance enforcement);</li> <li>- FAO Technical Assistance (training &amp; oversight);</li> <li>- Jubba Land State PIU (community coordination);</li> <li>- WUC (local communication)</li> </ul>	<p>Construction</p>	<ul style="list-style-type: none"> <li>- Daily safety checks (Contractor);</li> <li>- Weekly FAO supervision;</li> <li>- Monthly security reviews;</li> <li>- Continuous community sensitization</li> </ul>	<ul style="list-style-type: none"> <li>- Included in contractor’s BoQ;</li> <li>- Included in project management &amp; FAO supervision budget</li> </ul>
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<ul style="list-style-type: none"> <li>- Child safety risks when children walk near the site or along farm paths;</li> <li>- Livestock injury risks due to unstable embankments or open excavation zones;</li> <li>- Temporary disruption of livestock movement routes and watering access;</li> <li>- Electrical hazards during installation and testing of solar panels, inverters, and pumps;</li> <li>- Community exposure to dust and noise during peak excavation works.</li> </ul>	<ul style="list-style-type: none"> <li>- Provide safe and clearly marked temporary access routes including footpaths, vehicle bypasses, and pedestrian crossings around all work areas involving water storage, troughs, kiosk and excavated sections of the catchment;</li> <li>- Install perimeter fencing around rehabilitated catchments to prevent uncontrolled access;</li> <li>- Ensure proper embankment compaction and slope stabilization;</li> <li>- Remove debris regularly following EHS guidelines;</li> </ul>	<ul style="list-style-type: none"> <li>- Training materials (security, GBV, community safety);</li> <li>- Community awareness materials</li> <li>- Asset inventory logs;</li> <li>- Incident reporting forms.</li> </ul>				
<p><b>B. Security Risks:</b></p> <ul style="list-style-type: none"> <li>- Misconduct, intimidation, or abuse by security personnel;</li> <li>- Tension or conflict between hired guards and communities;</li> <li>- Excessive or disproportionate security practices;</li> <li>- Theft or vandalism of solar panels, pumps, and electrical equipment during or after installation;</li> <li>- Sporadic insecurity affecting material transport routes and workforce safety.</li> </ul>	<p><b>B. Security Management Measures:</b></p> <ul style="list-style-type: none"> <li>- Implement and monitor the Security Management Plan (SMP);</li> <li>- Hire the security guards from the local community &amp; train human rights, respectful engagement, and proportional use of force to avoid conflicts;</li> <li>- Require guards to sign and comply with a Security Code of Conduct;</li> </ul>					

<p>-</p> <p><b>C. Fragility, Conflict &amp; Social Tension Risks:</b></p> <ul style="list-style-type: none"> <li>- Harmful inward migration driven by perceived project benefits;</li> <li>- Community dynamics disrupted by labor influx;</li> <li>- Clashes or friction between villages over canal access, water distribution, or workforce selection;</li> </ul> <p><b>D. Traffic and Road Safety Risks:</b></p> <ul style="list-style-type: none"> <li>- Increased traffic from machinery, trucks, and service vehicles;</li> <li>- Accidents involving children, livestock, or farmers using the same paths;</li> <li>- Unsafe turning points, blind spots, and unregulated movement of heavy equipment.</li> </ul>	<ul style="list-style-type: none"> <li>- Secure storage of solar panels and equipment in fenced and guarded areas;</li> <li>- Install solar infrastructure only when site security arrangements are in place;</li> <li>- Coordinate material transport schedules with district authorities and local leaders;</li> <li>- Implement night-time security patrols where required;</li> <li>- Report security incidents immediately through the project GM and SMP channels.</li> </ul> <p>-</p> <p><b>C. Fragility &amp; Social Risk Mitigation:</b></p> <ul style="list-style-type: none"> <li>- Base targeting decisions on FINA findings and transparent vulnerability criteria;</li> <li>- Conduct consultations with local authorities, village elders and WUCs/Canal Committee to reduce tension;</li> <li>- Track population influx risks and adjust site management plans accordingly;</li> <li>- Provide clear communication on project benefits and eligibility.</li> </ul>				
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	<p><b>D. Traffic and Road Safety Controls:</b></p> <ul style="list-style-type: none"> <li>- Develop and implement a Traffic Management Plan (TMP);</li> <li>- Enforce strict speed limits around work zones;</li> <li>- Install traffic warning signs at key points used by pedestrians, trucks and livestock;</li> <li>- Train vehicle operators and road workers on safety risks;</li> <li>- Maintain access routes clear and safe for community use.</li> </ul>					
<i>ESS5 – Land Acquisition, Restrictions on Land Use and Involuntary Resettlement</i>						
<p>- <b>ESS5 is not triggered.</b> The three catchments lie fully within existing public land owned by the Government, as confirmed in <i>Annex 2 – Land Ownership Confirmation Letter</i>. No land acquisition, displacement, or loss of assets is required or taken place.</p> <p><b>Temporary Risks Only:</b></p> <ul style="list-style-type: none"> <li>- Short-term access disruption to catchment banks and footpaths during excavation;</li> <li>- Temporary difficulty accessing catchment areas during construction;</li> </ul>	<ul style="list-style-type: none"> <li>- Maintain open community access routes and farm paths wherever possible;</li> <li>- Use temporary bypass paths and clearly mark safe pedestrian areas;</li> <li>- Provide advance notice (48–72 hours) before temporary flow interruptions or access restrictions;</li> <li>- Coordinate daily with the WUC to manage water distribution schedules;</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- Consultation records;</li> <li>- Access route signage;</li> <li>- WUC/Canal Committee coordination logs</li> <li>- GM system</li> </ul>	<ul style="list-style-type: none"> <li>- Contractor (implementation);</li> <li>- State PIU (liaison &amp; awareness)</li> <li>- FAO Supervising Engineer (verification);</li> <li>- NPCU (oversight)</li> </ul>	Pre-construction & Construction	<ul style="list-style-type: none"> <li>- Daily access checks;</li> <li>- Weekly community updates</li> </ul>	- Included in contractor's BoQ;

<ul style="list-style-type: none"> <li>- Temporary restriction of livestock movement routes;</li> <li>- Perceived concerns about fairness in water access during rehabilitation;</li> <li>- Misunderstanding regarding site boundaries if work areas are not clearly demarcated.</li> </ul>						
<p>ESS6 – Biodiversity Conservation</p>						
<ul style="list-style-type: none"> <li>- Temporary disturbance to livestock and small fauna using canal corridors;</li> <li>- Short-term alteration of micro-habitats during excavation.</li> <li>- Clearing of invasive species (<i>Prosopis juliflora</i>) without controlled disposal may lead to seed spread and re-infestation;</li> <li>- Minor vegetation clearance within catchment footprints and embankment areas;</li> <li>- Temporary disturbance to grazing areas used by livestock;</li> <li>- Disturbance to small fauna including birds, reptiles, and rodents common in semi-arid rangelands;</li> <li>- Temporary alteration of micro habitats due to</li> </ul>	<ul style="list-style-type: none"> <li>- Limit vegetation removal to areas strictly needed for catchment shaping;</li> <li>- Avoid harming livestock; maintain access routes for grazing animals;</li> <li>- Ensure machinery operates only within the existing catchment footprint;</li> <li>- Prohibit dumping spoil in vegetated or grazing areas.</li> <li>- Remove <i>Prosopis juliflora</i> using controlled cutting techniques;</li> <li>- Collect, transport, and dispose of <i>Prosopis</i> biomass at approved disposal sites;</li> <li>- Prohibit leaving cut <i>Prosopis</i> material on site;</li> <li>- Maintain temporary livestock crossing points where catchment works interrupt grazing routes;</li> </ul>	<ul style="list-style-type: none"> <li>- Hand tools with controlled clearing techniques were required;</li> <li>- Site supervision checklists</li> <li>- Controlled clearing tools;</li> <li>- Supervised biomass disposal procedures;</li> <li>- Daily site supervision logs.</li> </ul>	<ul style="list-style-type: none"> <li>- Contractor (implementation);</li> <li>- FAO Supervising Engineer (monitoring);</li> <li>- State PIU (coordination)</li> </ul>	<p>Construction</p>	<ul style="list-style-type: none"> <li>- Daily supervision during clearing;</li> <li>- Weekly monitoring by FAO SE</li> </ul>	<ul style="list-style-type: none"> <li>- Included in contractor's BoQ;</li> </ul>

<p>excavation and spoil placement;</p> <ul style="list-style-type: none"> <li>- Risk of uncontrolled disposal of cleared vegetation leading to land degradation;</li> <li>- Increased livestock concentration around rehabilitated catchments potentially affecting surrounding vegetation.</li> </ul> <p><b>Note:</b> No sensitive species or critical habitats identified during the baseline survey. Impacts are <i>site-specific and fully reversible</i>.</p>	<ul style="list-style-type: none"> <li>- Supervise excavation to prevent unnecessary disturbance of natural areas;</li> <li>- Restore disturbed surfaces after construction;</li> <li>- Monitor embankment slopes for erosion and revegetate where required.</li> </ul>					
<i>ESS8 – Cultural Heritage</i>						
<ul style="list-style-type: none"> <li>- Low probability of encountering cultural or historical materials during excavation</li> </ul> <p><b>Note:</b> No known cultural heritage sites are located within the project’s footprint, but <i>chance finds remain possible</i>.</p>	<ul style="list-style-type: none"> <li>- Apply the WB Chance Finds Procedure;</li> <li>- Immediately stop work if artifacts or bones of dead bodies are discovered;</li> <li>- Notify State MoAI PIU, NPCU and elders;</li> <li>- Resume works only after official written clearance.</li> </ul>	<ul style="list-style-type: none"> <li>- Chance Finds Procedure;</li> <li>- Reporting forms;</li> <li>- Barrier tape/fencing materials</li> </ul>	<ul style="list-style-type: none"> <li>- Contractor (implementation);</li> <li>- FAO Supervising Engineer (verification);</li> <li>- NPCU – MoAI (oversight)</li> </ul>	Construction	<ul style="list-style-type: none"> <li>- Activate procedure <i>only if triggered</i>;</li> <li>- Immediate reporting within same day</li> </ul>	<ul style="list-style-type: none"> <li>- Contractor cost (no additional budget required)</li> </ul>
<i>ESS10 – Stakeholder Engagement and Information Disclosure</i>						
<p><b>A. Inclusion &amp; Participation Risks:</b></p>	<p><b>A. Inclusion Measures:</b></p>	<ul style="list-style-type: none"> <li>- Stakeholder Engagement Plan (SEP);</li> </ul>	<ul style="list-style-type: none"> <li>- NPCU – MoAI (oversight);</li> </ul>	Pre-construction	<ul style="list-style-type: none"> <li>- Weekly community updates;</li> </ul>	<ul style="list-style-type: none"> <li>- Included in project</li> </ul>

<ul style="list-style-type: none"> <li>- Exclusion of women, youth, minority, and vulnerable groups from consultations and project decisions;</li> <li>- Poor communication causing confusion about project benefits or schedules;</li> </ul> <p><b>B. Information Disclosure Risks:</b></p> <ul style="list-style-type: none"> <li>- Insufficient dissemination of project information to farmers and water users;</li> <li>- Limited understanding of temporary water disruptions or construction impacts;</li> </ul> <p><b>C. GM Risks:</b></p> <ul style="list-style-type: none"> <li>- Low awareness or poor access to the grievance mechanism;</li> <li>- Difficulty monitoring social harm or addressing complaints promptly.</li> </ul>	<ul style="list-style-type: none"> <li>- Implement the Stakeholder Engagement Plan (SEP) throughout project stages;</li> <li>- Hold inclusive consultations ensuring participation of women, youth, elders, WUC members, and vulnerable groups; Provide schedules, updates, and notices in simple local Somali language.</li> </ul> <p><b>B. Information Disclosure:</b></p> <ul style="list-style-type: none"> <li>- Regularly inform communities of construction timelines, flow interruptions, and safety precautions;</li> <li>- Share updates through WUCs, village leaders, and State PIU;</li> <li>- Display key information on boards at site and village centers.</li> </ul> <p><b>C. GM Strengthening:</b></p> <ul style="list-style-type: none"> <li>- Disseminate/publicize GM channels widely (phone numbers, focal persons, complaint boxes);</li> <li>- Maintain GM logs at PIU &amp; contractor level;</li> <li>- Provide feedback to complainants and close cases promptly;</li> </ul>	<ul style="list-style-type: none"> <li>- GM tools (register, hotline, complaint forms);</li> <li>- Consultation attendance sheets;</li> <li>- Community information boards</li> </ul>	<ul style="list-style-type: none"> <li>- Jubba Land State PIU (community engagement);</li> <li>- FAO Technical Assistance (support &amp; training);</li> <li>- Contractor (on-site disclosure, GM awareness)</li> </ul>	<p>&amp; Construction</p>	<ul style="list-style-type: none"> <li>- Monthly GM reviews;</li> <li>- Consultations as needed</li> </ul>	<p>managem ent budget;</p> <ul style="list-style-type: none"> <li>- Included in contractor obligations</li> </ul>
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	- Monitor GM performance monthly and escalate cases if unresolved.					
<i>SEA/SH – Sexual Exploitation, Abuse &amp; Harassment</i>						
<ul style="list-style-type: none"> <li>- Risk of SEA/SH involving workers and community members;</li> <li>- Worker–community interaction increasing vulnerability of women and girls;</li> <li>- Underreporting due to stigma or fear;</li> <li>- Security personnel misconduct;</li> </ul> <p><i>Cross-cuts ESS1, ESS2, ESS4 &amp; ESS10.</i></p>	<ul style="list-style-type: none"> <li>- Implement and monitor the SEA/SH Action Plan;</li> <li>- Mandatory Code of Conduct (CoC) for all workers and security staff;</li> <li>- Conduct SEA/SH awareness and prevention sessions for workers and communities;</li> <li>- Provide confidential, survivor-centered SEA/SH GM reporting pathway;</li> <li>- Train SEA/SH community focal points;</li> <li>- Ensure separate sanitation facilities for men and women on site;</li> <li>- Immediate referral of survivors to appropriate support services.</li> </ul>	<ul style="list-style-type: none"> <li>- SEA/SH Action Plan;</li> <li>- Signed CoCs;</li> <li>- Confidential GM channels;</li> <li>- Training &amp; sensitization materials;</li> <li>- Focal point appointment letters</li> </ul>	<ul style="list-style-type: none"> <li>- Contractor (implementation);</li> <li>- FAO Technical Assistance (training &amp; oversight);</li> <li>- FAO Supervising Engineer (verification);</li> <li>- State PIU (community awareness);</li> <li>- NPCU (compliance)</li> </ul>	Construction	<ul style="list-style-type: none"> <li>- Monthly worker training</li> <li>- Continuous GM availability;</li> <li>- Weekly supervision</li> </ul>	<ul style="list-style-type: none"> <li>- Included in contract price;</li> <li>- Included in TA &amp; project management budget</li> </ul>

## 6.1 Environmental & Social Monitoring Plan

The Environmental and Social Monitoring Plan describes how the implementation of mitigation measures will be tracked and verified during construction. Monitoring ensures that safeguards commitments are being followed, emerging issues are addressed promptly, and corrective actions are taken when required. It also clarifies the roles of the Contractor, FAO, the State PIU, and the NPCU in supervising compliance with environmental and social requirements. All monitoring activities are covered under the ESMP budget and project supervision costs. The table 5 below presents the indicators, methods, responsibilities, and reporting arrangements for continuous monitoring of ESMP implementation.

Table 4: Environmental & Social management Plan

ESS / Area	Monitoring Indicators	Monitoring Method	Responsibility	Frequency	Reporting To
<b>ESS1 – E&amp;S Risk Management</b>	<ul style="list-style-type: none"> <li>- Embankment stability and absence of erosion</li> <li>- Water flow continuity during construction</li> <li>- Implementation status of ESMP/C-ESMP</li> <li>- Conflict incidents logged and resolved</li> <li>- Drainage pathways maintained (no waterlogging observed)</li> <li>- Soil compaction observed in grazing land/cultivated areas</li> <li>- Spoil disposed only in approved locations</li> <li>- Evidence of cumulative impacts (resource pressure, population influx)</li> </ul>	<ul style="list-style-type: none"> <li>- Routine site inspections</li> <li>- Photographic evidence (before/after works)</li> <li>- Daily contractor site logs</li> <li>- GM database review</li> <li>- post-rainfall drainage checks</li> </ul>	Contractor / FAO Supervising Engineer / State PIU	Daily / Weekly	NPCU & FAO
<b>ESS2 – Labor &amp; Occupational Health &amp; Safety (OHS)</b>	<ul style="list-style-type: none"> <li>- PPE availability and proper use</li> <li>- Worker attendance, contracts, and age verification</li> <li>- Toolbox talks conducted as scheduled</li> <li>- Worker GM cases registered and resolved</li> <li>- OHS incidents and RCA reports</li> <li>- Heat-stress prevention measures implemented</li> <li>- Safe handling of pipes, machinery, and excavations</li> </ul>	<ul style="list-style-type: none"> <li>- Direct observation</li> <li>- Review of worker registers and contracts</li> <li>- OHS logs and accident registers</li> <li>- GM review</li> <li>- Heat-stress and excavation safety checklists</li> </ul>	Contractor / FAO Supervising Engineer	Daily / Weekly / Monthly	NPCU
<b>ESS3 – Pollution Prevention &amp; Resource Efficiency</b>	<ul style="list-style-type: none"> <li>- Dust and noise levels within acceptable limits</li> <li>- Compliance with approved spoil disposal locations</li> </ul>	<ul style="list-style-type: none"> <li>- Visual inspections</li> <li>- Water and soil quality testing</li> <li>- Waste Management Plan</li> </ul>	Contractor / FAO Supervising Engineer	Daily / Weekly	State PIU / NPCU

	<ul style="list-style-type: none"> <li>- Proper waste segregation (hazardous and non-hazardous)</li> <li>- TDS/TSS water quality test results</li> <li>- Fuel and oil spill incidents recorded and addressed</li> <li>- No contamination of surface or groundwater observed</li> <li>- No localized water pooling due to altered drainage</li> </ul>	<ul style="list-style-type: none"> <li>(WMP) records</li> <li>- Spill incident logs</li> <li>- post-backfilling surface inspections</li> </ul>			
<b>ESS4 – Community Health, Safety &amp; Security</b>	<ul style="list-style-type: none"> <li>- Safety signage, fencing, and barriers in place</li> <li>- Traffic control measures functioning</li> <li>- Construction debris promptly removed</li> <li>- Security conduct logs maintained</li> <li>- Traffic incidents involving people or livestock</li> <li>- Security incidents (theft, vandalism, intimidation)</li> <li>- Safe access routes maintained for pedestrians and farmers</li> </ul>	<ul style="list-style-type: none"> <li>- Safety audits</li> <li>- Community feedback sessions</li> <li>- GM review</li> <li>- Incident and security logs</li> <li>- WUC coordination records</li> </ul>	Contractor / FAO Supervising Engineer	Weekly	NPCU
<b>ESS5 – Temporary Access Management</b>	<ul style="list-style-type: none"> <li>- Access routes and farm paths kept open where possible</li> <li>- Temporary bypass paths functional</li> <li>- No unresolved complaints on blocked access</li> <li>- Advance notice provided before water or access disruptions</li> </ul>	<ul style="list-style-type: none"> <li>- Site inspections</li> <li>- WUC coordination and communication logs</li> <li>- GM review</li> </ul>	Contractor / FAO Supervising Engineer	Daily	State PIU / FAO
<b>ESS6 – Biodiversity Conservation</b>	<ul style="list-style-type: none"> <li>- Vegetation clearance minimized and controlled</li> <li>- Livestock access and grazing routes maintained</li> <li>- <i>Prosopis juliflora</i> removed and disposed of properly</li> <li>- No spread of invasive species observed</li> </ul>	<ul style="list-style-type: none"> <li>- Field observations</li> <li>- Site supervision checklists</li> <li>- Biomass disposal verification</li> </ul>	Contractor / FAO Supervising Engineer	Weekly	NPCU

<b>ESS8 – Cultural Heritage</b>	<ul style="list-style-type: none"> <li>- Chance finds managed according to procedure</li> </ul>	<ul style="list-style-type: none"> <li>- Review of Chance Finds records and reports</li> </ul>	Contractor / FAO Supervising Engineer	If triggered	NPCU
<b>ESS10 – Stakeholder Engagement &amp; Information Disclosure</b>	<ul style="list-style-type: none"> <li>- Community consultations conducted as per SEP</li> <li>- Project information displayed at site and village level</li> <li>- GM usage and case closure rate</li> <li>- Community awareness of safety measures and water interruptions</li> <li>- Timely feedback provided to complainants</li> </ul>	<ul style="list-style-type: none"> <li>- SEP records</li> <li>- Consultation attendance sheets</li> <li>- GM monitoring and reports</li> </ul>	State PIU / FAO Technical Assistance	Weekly / Monthly	NPCU
<b>SEA/SH – Cross-cutting (ESS1, ESS2, ESS4, ESS10)</b>	<ul style="list-style-type: none"> <li>- Code of Conduct signed and enforced</li> <li>- SEA/SH training delivered to workers and communities</li> <li>- SEA/SH GM cases managed confidentially</li> <li>- Survivor-centered referral pathways functional</li> <li>- Separate sanitation facilities for men and women available</li> </ul>	<ul style="list-style-type: none"> <li>- Training records</li> <li>- CoC compliance logs</li> <li>- Confidential GM review</li> </ul>	Contractor / FAO Technical Assistance / State PIU		

## 6.2 Capacity Building and Training Plan

Effective implementation of this ESMP depends on the capacity of the contractor, supervising institutions, and community structures to understand and apply the environmental and social requirements. The capacity-building activities will:

- Familiarize all actors with the ESMP, World Bank ESF requirements, and relevant national regulations.
- Strengthen the contractor’s ability to prepare and implement a Contractor ESMP (C-ESMP), including OHS, GM, SEA/SH, and waste management.
- Equip the PIU and supervising engineers to monitor ESMP compliance and report effectively.
- Build the capacity of the Canal/Water User Committee and community representatives to support operation and maintenance (O&M), use the GM, and promote GBV/SEA/SH awareness.
- Ensure all workers receive induction and continuous toolbox talks on OHS, Code of Conduct, GM, and SEA/SH prevention.

These trainings will be delivered jointly by FAO with the State MoAI PIU, and the contractor’s OHS/E&S team

Table 5: Summary of Capacity Building Plan

Target Group	Training Topic(s)	Timeline / Frequency	Type / Modality	Lead Facilitator(s)	Cost / Responsibility
Prospective Contractors (bidders)	Key E&S clauses in bidding documents; ESMP and ESF obligations; minimum OHS, LMP and SEA/SH requirements	Once, during pre-bid / pre-contract briefing	Short indoor or virtual session	FAO E&S Specialist, NPCU/PIU	Covered under FAO TA / project preparation
Contractor’s Project Manager, Site Engineer, OHS/E&S Officer, Foremen	C-ESMP preparation and implementation; OHS procedures and emergency response; Waste Management Plan; Worker and Community GM; SEA/SH Action Plan and Code of Conduct	At project start (mobilization)	Half-day face-to-face workshop plus on-site practical session	FAO E&S Specialist and State PIU E&S staff	Covered under FAO TA / PIU operating budget
PIU E&S Specialist and Supervising Engineer (State MoAI / NPCU)	Supervision and monitoring of ESMP/C-ESMP; WB ESF and national ESIA requirements; review of contractor E&S reports; use of simple monitoring tools	At start of works and one mid-term refresher	Face-to-face or online training session	FAO E&S Specialist	Covered under FAO TA / PIU operating budget
Catchment/Water User Committee and Community Representatives (elders, women, youth)	Basic canal O&M; community role in ESMP monitoring; GM access and referrals; GBV/SEA/SH awareness;	Once during mobilization and one refresher before completion	On-site participatory training in the canal village	FAO and PIU E&S staff, with WUC	Covered under FAO TA / PIU community engagement budget

	community safety around works				
All Construction Workers (including drivers and security staff)	OHS (PPE use, site rules, safe excavation, traffic management); Code of Conduct; worker GM; SEA/SH prevention and sanctions; appropriate security behavior	Induction for all new workers and weekly toolbox talks	On-site toolbox talks / tailgate sessions	Contractor's OHS/E&S Officer, supervised by supervising engineer / FAO	Included in contractor's contract cost

## 7. Implementation Arrangements

Effective implementation of the subprojects rehabilitation activities require close coordination among the Federal MoAI, the Jubba Land State MoAI PIU, FAO as the Technical Assistance provider, the contractor, and community structures. Responsibilities have been organized to ensure that environmental and social measures are applied consistently and in full alignment with the World Bank ESF and national regulations.

The main institutional responsibilities are as follows:

- ✦ **MoAI-FGS / NPCU:** Provides overall oversight, approves the ESMP and the Contractor ESMP (C-ESMP), ensures compliance with the Environmental and Social Commitment Plan (ESCP), consolidates E&S performance reports, and submits official updates to the World Bank.
- ✦ **FAO Somalia (Technical Assistance and Supervision):** Leads technical assessments, safeguards training, and construction supervision. As the Supervising Engineer, FAO conducts regular site inspections, verifies compliance with the ESMP and C-ESMP, issues non-compliance notices, monitors corrective actions, and reports environmental and social indicators through the S-FSRP MIS and dashboard.
- ✦ **Jubba Land State MoAI PIU:** Facilitates field operations, supports community engagement, maintains the state-level grievance register, accompanies supervision missions, and ensures that community-level safeguard commitments and notifications are consistently applied.
- ✦ **Federal Ministry of Environment and Climate Change (MoECC):** The Federal Ministry of Environment and Climate Change (MoECC) serves as the national authority for environmental and social regulation in accordance with the Environmental Protection and Management Act (2024) and related regulations, which guide the preparation and implementation of the ESMP.
- ✦ **Construction Contractor:** Implements all ESMP requirements through an approved C-ESMP. Core responsibilities include environmental protection, occupational health and safety, labor management in line with the LMP, maintaining a worker grievance mechanism, enforcing SEA/SH Codes of Conduct, and applying community safety and traffic measures. The contractor must maintain daily logs, incident records, OHS documentation, and weekly reports.
- ✦ **Community Structures (Water User Committee and village leaders):** Support construction access, communicate schedules, assist with handling minor grievances, monitor water distribution during temporary interruptions, and contribute to long-term operation and maintenance of the rehabilitated canal.

Reporting follows a coordinated structure: the contractor submits weekly updates to FAO and the State PIU; FAO verifies compliance and prepares consolidated supervision notes; and the NPCU compiles and submits environmental and social performance reports to the World Bank. Serious incidents or accidents must be reported within 24 hours in line with ESF and project protocols.

At the end of construction, FAO and the State PIU will conduct a joint inspection with the contractor and community representatives to confirm that all works meet design and safeguards requirements. Following this, the rehabilitated

subprojects will be handed over to the Jubba Land State MoAI and the Water User Committee for continued operation and maintenance, with periodic post-construction monitoring to ensure sustainability.

## 8. Public Consultation and Disclosure

Stakeholder engagement for the **Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey river embankment rehabilitation subprojects** in **Bardere District, Gedo Region** was conducted in accordance with the S-FSRP SEP and included consultations at both government and community levels. Key stakeholders engaged during the assessment included MoAI-FGS/NPCU, MoAI-JS PIU, Bardere District Administration, village elders, irrigation representatives, women, youth, IDPs, agro-pastoral households, and other vulnerable groups. Discussions focused on the current condition of the existing embankments along the Juba River, recurrent flooding impacts, agricultural losses, expansion of sand and sediment deposition (sand dome formation) over farmlands, the socio-economic effects of the Bardere bridge collapse, environmental and social risks, proposed soil embankment reinforcement works with gabion stabilization and geotextile protection, intake and drainage structures, mitigation measures, implementation arrangements, and the functioning of the project-level GM.

### 8.1 Consultations with MoAI-JS

As part of the technical assessment mission conducted prior to preparation of this ESMP, consultations were held with MoAI-JS and Bardere District authorities to review the proposed scope of works and confirm alignment with district and state flood resilience priorities. The discussions emphasized the increasing frequency and severity of riverine flooding along the Juba River, recurrent embankment overtopping and breakages at Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey, damage to irrigated farmland, expansion of sediment and sand domes over productive land, and the urgent need for engineered stabilization of vulnerable riverbank sections.

The consultations further highlighted the broader economic disruption following the collapse of the Bardere main bridge after the 2021 El Niño floods, which significantly constrained transport, market access, and movement of agricultural goods. Authorities noted that strengthening flood protection infrastructure is critical not only for agricultural protection but also for stabilizing local livelihoods in a district already facing mobility and market challenges.

The consultations clarified institutional roles and responsibilities related to oversight, community mobilization, GM coordination, environmental compliance, and security liaison under the SMF. Government representatives endorsed the prioritization of the Bardere River Embankment sections under S-FSRP and expressed commitment to facilitating contractor access, supporting community coordination, and ensuring smooth implementation and supervision throughout construction and early operation.

### 8.2 Community Consultations in Bardere Riverine Villages

Community consultation meetings were conducted in Bandar, Barakaale, Sarinley, and Bulo Adey with participation from elders, irrigation users, women, youth, IDPs, and other vulnerable groups. The communities confirmed several key issues:

- Recurrent flooding due to weakened embankment sections at Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey;
- Expansion of sand domes and sediment deposition across riverine farmlands, reducing accessible cultivable hectares and limiting crop production;
- Repeated crop losses and soil erosion affecting agro-pastoral livelihoods;
- Temporary displacement and damage to irrigation infrastructure during high discharge periods;
- Economic hardship linked to the collapse of the Bardere bridge, affecting transport of farm produce and access to markets;
- Prolonged drought conditions leading to livestock migration from Bardere and surrounding villages;
- Concerns regarding embankment height and its potential impact on access to river water for irrigation;

- The need for intake chambers and regulated drainage structures to ensure continued irrigation abstraction and controlled inland runoff;
- Safety risks during construction, particularly related to excavation, gabion installation, and heavy machinery;
- Interest in local employment opportunities; and
- The need for transparent grievance reporting and clear communication of project timelines.

Communities expressed strong support for the use of reinforced soil embankments with gabion box structures and geotextile protection, noting that durable engineered stabilization is necessary to address both flood damage and progressive land degradation caused by sediment accumulation. They further agreed to facilitate site access and coordinate with the contractor through local leadership structures.

### 8.3 Key Issues Raised and How They Are Addressed

Participants raised several priority concerns, including recurrent flood damage, sand dome expansion over farmland, embankment height and water accessibility, construction safety, temporary restriction of irrigation access, bridge-related transport constraints, labor selection transparency, and clarity regarding the GM and SEA/SH reporting channels.

***These concerns have been addressed through:***

- I. Installation of engineered compacted soil embankments reinforced with gabion stabilization and geotextile protection along 185 meters at Bandar 1, 330 meters at Bandar 2, 300 meters at Barakaale, 30 meters at Sarinley 1, and 50 meters at Bulu Adey to enhance flood protection and structural stability;
- II. Incorporation of intake chambers at Bandar 1, Bandar 2, Barakaale, and Bulu Adey and drainage inlet structures at Bandar 2 and Sarinley 1 to maintain controlled irrigation access and regulate inland runoff while preventing river backflow;
- III. Implementation of construction safety measures including signage, temporary barriers, supervised excavation, and traffic management;
- IV. Provision of temporary coordination mechanisms to minimize disruption to irrigation abstraction during works;
- V. Transparent local recruitment procedures aligned with the LMP, prioritizing affected agro-pastoral households and vulnerable groups;
- VI. Establishment and dissemination of a functional GM at community and PIU levels, including confidential SEA/SH reporting channels and enforcement of Codes of Conduct; and
- VII. Engagement with district authorities to coordinate logistics planning in light of transport and bridge constraints to minimize delays and ensure material access.

All consultation forms, attendance sheets, photographic records, and contact details of participants are included in Annexes 4a and 4b.

A summary of meetings held with stakeholders is presented in Table 7 below.

*Table 6: Stakeholder Meeting Summary*

Date	Stakeholder Group	Location	Purpose	Main Points Raised	Answers Provided
10/10/2025	MoAI-JS	Bardere District	Discuss project prioritization and review technical considerations	Recurrent flooding; embankment overtopping and breakages; sand dome expansion; agricultural losses;	- Confirmed prioritization under S-FSRP. - Endorsed reinforced soil embankment and

				bridge collapse impacts; need for durable stabilization; institutional coordination	gabion stabilization approach. - Agreed on inclusion of intake chambers and drainage structures. - Clarified coordination roles among MoAI, FAO, PIU, and District Administration.
19/11/2025	Community Representatives (Elders, Women, Youth, IDPs, Irrigation Users)	Bandar, Barakaale, Sarinley, Bulo Adey	E&S screening and field assessment	Recurrent flood damage; sand dome impacts; drought and livestock migration; concern over embankment height; need for water access; safety risks; employment expectations; clarity on GM	- Confirmed installation of reinforced soil embankments with gabion stabilization and geotextile protection. - Confirmed inclusion of intake chambers and drainage inlets for irrigation access. - Assured implementation of construction safety measures. - Explained local recruitment aligned with LMP. - Explained GM and SEA/SH reporting mechanisms.

Minutes and attendance sheets are provided in Annexes 4c and 4d.

#### 8.4 Information Disclosure

Once approved, the ESMP will be shared with MoAI-JS, the State PIU, and community representatives in Bender, Sarinley, Bulo Adey and Barakaale Villages. Copies will be displayed at the MoAI office in Bardere and at public gathering points in the village, including village meeting areas and locations agreed upon with elders and irrigation representatives.

Prior to construction, the project team will conduct community awareness sessions to explain the scope of works, embankment rehabilitation timelines, temporary irrigation access arrangements, safety measures around excavation zones and heavy machinery operations, and procedures for submitting grievances. Specific emphasis will be placed on explaining the embankment design, the inclusion of intake chambers and drainage inlet structures for controlled water access, and construction phase safety protocols.

The ESMP will also be submitted to the NPCU and the WB for broader public disclosure in accordance with S-FSRP requirements.

This approach ensures continuous community access to project information and maintains a transparent and inclusive platform for feedback throughout implementation.

## 9. Grievance Mechanism (GM)

The Grievance Mechanism (GM) provides an accessible and transparent process for community members, workers, and other stakeholders to raise concerns related to the rehabilitation of the subprojects. Its objectives are to enable timely and fair resolution of issues, strengthen communication between the project and the community, identify recurring concerns that may require adjustments to project implementation, provide confidential channels for sensitive complaints including SEA/SH, and ensure that no one is excluded from project benefits due to fear of retaliation.

### 9.1 GM Structure and Process

The GM follows a simple pathway that prioritizes resolving issues as close as possible to the community level. Complaints may be submitted verbally or in writing to the Water User Committee focal persons, the Jubba Land MoAI PIU representative, FAO field staff, the contractor's environmental or OHS officer, or trusted community leaders. Each concern is recorded in the SFSRP GM register or the standard digital template used across the project.

Once a grievance is received, the responsible focal point acknowledges receipt ordinarily within 48 hours and conducts an initial assessment to determine the nature and severity of the issue. Minor matters such as noise, disturbance, or simple clarifications can often be resolved immediately at this stage. Issues requiring further investigation are reviewed jointly by the State PIU and FAO, and where necessary, the contractor. A proposed resolution is typically provided within 7 to 14 days, depending on complexity. If a matter cannot be resolved locally or if the complainant remains dissatisfied, it may be escalated to the NPCU or, for serious or unresolved cases, to the World Bank's Grievance Redress Service. After a resolution is agreed upon, the case is formally closed in the GM register. All GM tools, registers, and standard complaint templates referenced in this section are provided in *Annex 6: Grievance Mechanism Tools and Templates*

### 9.2 Handling of SEA/SH-Related Cases

Complaints involving gender-based violence, sexual exploitation, or harassment follow a confidential survivor-centered process. They are reported directly to the designated GBV focal point or through any confidential channel, without requiring personal details or written statements. Such cases are never handled by community leaders or recorded with identifying information. The GBV focal point immediately refers survivors to appropriate service providers and ensures their safety and dignity. All contractor workers are required to sign the Code of Conduct and undergo compulsory training on respectful behavior and SEA/SH prevention. Therefore, regular refresher trainings will be conducted, and sanctions including suspension or termination are applied in cases of Code of Conduct violations, in line with contractual obligations and national law.

### 9.3 GM Accessibility and Communication

The mechanism is designed to be easily accessible. Stakeholders may submit grievances directly to WUC or PIU focal points, through phone calls or written submissions, via designated complaint boxes in public locations, or verbally during mobilization and community meetings. FAO field teams also receive complaints during supervision missions. Information on GM procedures will be shared regularly in community sessions, displayed on notice boards, and reinforced during pre-construction awareness activities. Dissemination of GM information in local languages, engagement of female focal points, separate confidential channels for SEA/SH cases (including hotline numbers), targeted outreach to women, youth, IDPs, and persons with disabilities, and monitoring of GM accessibility using sex- and vulnerability-disaggregated data.

## 9.4 Roles and Responsibilities

Community representatives and the Water User Committee serve as the first point of contact and support the receipt, recording, and referral of grievances. All grievances will be acknowledged within five (5) working days of receipt and assessed for resolution. The Jubba Land MoAI PIU maintains the official Grievance Mechanism (GM) register, ensures proper documentation of each case (including the nature of the complaint, actions taken, timelines, and outcomes), coordinates follow-up actions, and communicates resolutions to complainants within fifteen (15) working days, unless the case requires additional investigation. FAO provides technical guidance, participates in investigations as needed, and verifies that corrective actions have been effectively implemented. The contractor is responsible for addressing grievances related to construction activities, labor conditions, occupational health and safety, and worker conduct, in accordance with the Labor Management Procedures. All complainants are protected against retaliation, and grievances may be submitted anonymously if desired.

Sensitive complaints, including those related to Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH), will be handled through separate, confidential, and survivor-centered channels (see the full guidelines & Steps in Annex 6), using trained focal points and referral pathways, without requiring disclosure to community structures. Escalated or unresolved cases are referred to the NPCU, which oversees higher-level resolution and reports significant grievances to the World Bank in line with ESF requirements. The GM will be subject to periodic performance monitoring and reporting, including analysis of grievance types, resolution rates, and timelines, using sex- and vulnerability-disaggregated data to assess accessibility and effectiveness of the mechanism.

## 9.5 Monitoring, Reporting, and Improvement

The GM is monitored continuously to track the nature of complaints, their frequency, and the time taken to resolve them. The State PIU prepares monthly summaries for FAO, which are consolidated into NPCU's quarterly environmental and social performance reports to the World Bank. As implementation progresses, the project team will review the mechanism's performance and introduce improvements where needed, including additional training, enhanced community communication, or adjustments to reporting tools.

## 10. ESMP Implementation Budget.

To ensure effective implementation of mitigation measures commensurate with the Moderate Environmental and Social Risk classification of the clustered river embankment subprojects (Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey), a dedicated ESMP implementation budget has been allocated.

For safeguards consistency, proportionality, and contract administration, the ESMP allocation for each subproject has been set at 5% of the respective BoQ contract value as follows:

- **USD 8,000.00** for Bandar 1
- **USD 12,500.00** for Bandar 2
- **USD 11,000.00** for Barakaale
- **USD 3,500.00** for Sarinley 1
- **USD 1,513.13** for Bulo Adey

The allocation approach reflects the differing scope, embankment length, hydraulic complexity, and auxiliary structure requirements of each section, while maintaining consistent safeguards cost distribution structure across all subprojects.

Table 7: ESMP Budget Distribution – Bandar 1

ESMP Component	Description of Activities Covered	Estimated Cost (USD)
1. OHS Implementation	PPE, safety signage, excavation barriers, first aid kits, heat stress mitigation, toolbox talks	1,872.00
2. Environmental Measures	Erosion control, sediment management, spoil disposal, dust suppression, spill prevention	1,624.00
3. Social Safeguards	Community awareness, SEA/SH messaging, Code of Conduct enforcement, community safety measures	952.00
4. GM Management	Complaint boxes, hotline operation, GM registers, confidential SEA/SH channels	452.00
5. Monitoring and Reporting	Joint monitoring missions, compliance verification, safeguards reporting	1,208.00
6. Stakeholder Engagement (SEP)	Community consultations, disclosure materials, coordination meetings	904.00
7. Capacity Building	Training on ESF, OHS, LMP, SEA/SH, and GM	988.00
<b>Total ESMP Cost (Bandar 1)</b>		<b>USD 8,000.00</b>

Table 8: ESMP Budget Distribution – Bandar 2

ESMP Component	Description of Activities Covered	Estimated Cost (USD)
1. OHS Implementation	PPE, safety signage, excavation barriers, first aid kits, heat stress mitigation, toolbox talks	2,925.00
2. Environmental Measures	Erosion control, sediment management, spoil disposal, dust suppression, spill prevention	2,537.50
3. Social Safeguards	Community awareness, SEA/SH messaging, Code of Conduct enforcement, community safety measures	1,462.50
4. GM Management	Complaint boxes, hotline operation, GM registers, confidential SEA/SH channels	693.75
5. Monitoring and Reporting	Joint monitoring missions, compliance verification, safeguards reporting	1,875.00
6. Stakeholder Engagement (SEP)	Community consultations, disclosure materials, coordination meetings	1,406.25
7. Capacity Building	Training on ESF, OHS, LMP, SEA/SH, and GM	1,600.00
<b>Total ESMP Cost (Bandar 2)</b>		<b>USD 12,500.00</b>

Table 9: ESMP Budget Distribution – Barakaale

ESMP Component	Description of Activities Covered	Estimated Cost (USD)
1. OHS Implementation	PPE, safety signage, excavation barriers, first aid kits, heat stress mitigation, toolbox talks	2,574.00
2. Environmental Measures	Erosion control, sediment management, spoil disposal, dust suppression, spill prevention	2,244.00
3. Social Safeguards	Community awareness, SEA/SH messaging, Code of Conduct enforcement, community safety measures	1,287.00
4. GM Management	Complaint boxes, hotline operation, GM registers, confidential SEA/SH channels	605.00
5. Monitoring and Reporting	Joint monitoring missions, compliance verification, safeguards reporting	1,650.00
6. Stakeholder Engagement (SEP)	Community consultations, disclosure materials, coordination meetings	1,232.00
7. Capacity Building	Training on ESF, OHS, LMP, SEA/SH, and GM	1,408.00
<b>Total ESMP Cost (Barakaale)</b>		<b>USD 11,000.00</b>

Table 10: Table 10: ESMP Budget Distribution – Sarinley 1

ESMP Component	Description of Activities Covered	Estimated Cost (USD)
1. OHS Implementation	PPE, safety signage, excavation barriers, first aid kits, heat stress mitigation, toolbox talks	819.00
2. Environmental Measures	Erosion control, sediment management, spoil disposal, dust suppression, spill prevention	717.50
3. Social Safeguards	Community awareness, SEA/SH messaging, Code of Conduct enforcement, community safety measures	409.50
4. GM Management	Complaint boxes, hotline operation, GM registers, confidential SEA/SH channels	217.00
5. Monitoring and Reporting	Joint monitoring missions, compliance verification, safeguards reporting	525.00
6. Stakeholder Engagement (SEP)	Community consultations, disclosure materials, coordination meetings	420.00
7. Capacity Building	Training on ESF, OHS, LMP, SEA/SH, and GM	392.00
<b>Total ESMP Cost (Sarinley 1)</b>		<b>USD 3,500.00</b>

Table 11: ESMP Budget Distribution – Bulo Adey

ESMP Component	Description of Activities Covered	Estimated Cost (USD)
1. OHS Implementation	PPE, safety signage, excavation barriers, first aid kits, heat stress mitigation, toolbox talks	354.07
2. Environmental Measures	Erosion control, sediment management, spoil disposal, dust suppression, spill prevention	309.19
3. Social Safeguards	Community awareness, SEA/SH messaging, Code of Conduct enforcement, community safety measures	181.58
4. GM Management	Complaint boxes, hotline operation, GM registers, confidential SEA/SH channels	87.75
5. Monitoring and Reporting	Joint monitoring missions, compliance verification, safeguards reporting	227.00
6. Stakeholder Engagement (SEP)	Community consultations, disclosure materials, coordination meetings	169.47
7. Capacity Building	Training on ESF, OHS, LMP, SEA/SH, and GM	184.07
<b>Total ESMP Cost (Bulo Adey)</b>		<b>USD 1,513.13</b>

The ESMP implementation costs presented above for Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey are embedded within the respective contractor’s contract price and cover site-level environmental and social mitigation measures, including OHS provisions, environmental controls, erosion management, GM implementation, stakeholder engagement, and capacity building at the subproject level.

Supervision, safeguards oversight, compliance verification, and institutional monitoring by FAO and the State PIU are financed separately under the Technical Assistance and PIU operational budgets and are therefore not included within the contractor’s ESMP allocation.

## 11. References:

1. FAO (2023). *ESIA for Bardere Flood Protection and Irrigation Rehabilitation – SFSRP*. Mogadishu: FAO Somalia.
2. FAO (2023). *Simplified Environmental and Social Management Plan (ESMP) for Canal Rehabilitation in Southwest State, Jubba Land , and Jubba Land*. FAO Somalia
3. FAO SWALIM (2021). *Hydrological Data and Flood Risk Mapping for the Shabelle Basin*. Nairobi: FAO SWALIM.
4. MoAI (2022). *Shabelle River Basin Flood and Irrigation Profile*. Mogadishu: Ministry of Agriculture and Irrigation.
5. MoAI (2025) *Environmental and Social Management Plan (ESMP): Construction of Office Building for the Ministry of Agriculture and Irrigation (MoAI)*
6. MoEWR (2022). *Somalia National Environmental Outlook*. Mogadishu: Ministry of Environment and Water Resources.

## Annex 1: Environmental and Social Screening

### Annex 1A: Environmental and Social Screening – Bandar 1 River Embankment

Project Name	Somalia Food System Resilient project (SFSRP) (P177816)		
Project Description	This subproject under the S-FSRP involves the rehabilitation and stabilization of approximately 185 meters of degraded river embankment at Bandar 1 in Bardere District, Gedo Region, Jubaland State, along the Juba River. The intervention will reinforce the structurally weakened section using compacted soil embankment works supported by gabion box stabilization and geotextile reinforcement to reduce erosion, prevent overtopping, and protect nearby settlements and agricultural land from recurrent flooding and sediment deposition impacts. The subproject was screened in November 19 <sup>th</sup> 2025 and classified as <b>Moderate Risk</b> due to temporary and site-specific construction-related impacts including soil disturbance, sediment runoff, dust and noise emissions, localized access disruption, community health and safety risks, and occupational health and safety hazards. These risks are reversible and will be effectively managed through implementation of a site-specific ESMP and the contractor’s C-ESMP in accordance with the WB ESF.		
Prepared By	Shuaib Muse Cidhere	Date of Preparation	19/11/2025
Approved By		Date of Approval	

No	Question	Yes	No	E&S risk rating, -Low, Moderate, Substantial & High	Documents Required	Remarks/Comments
<b>ESS1: Assessment and Management of Environmental and Social Risks</b>						
1	Does the project affect downstream water flows?		No	Low	ESMP	There will be temporary interruption during implementation, such as abstraction of river access for irrigation water.
2	Does it require clearing of trees, pasture/browse?	Yes		Low	ESMP	Little vegetations along the river banks.
3	Is an Environmental and/or Social Assessment required?	Yes		Moderate	ESMP	ESMP to cover OHS, waste, community safety.
4	Is there a risk of diversion of project benefits?	Yes		Moderate	SEP + GM	Possible during temporary water disruptions.

5	Is there a risk of lack of monitoring due to remoteness/insecurity?		No	Moderate	SMP	Liaising with local authorities while considering Bardere/ Somali's general context.
6	Will the project generate dust, noise, or air pollution?	Yes (minor)		Low	ESMP	Manage by water spraying & restricting to daytime works.
<b>ESS2: Labour and Working Conditions</b>						
7	Any risk of child/forced labour?		No	Low	LMP	Community-based monitoring.
8	Does the activity include construction?	Yes		Moderate	ESMP	Works involve canal excavation.
9	Risk of lacking OHS for workers?	Yes		Moderate	OHS Plan	Toolbox talks, PPE, safe procedures.
10	Are workers provided PPE?	Yes (mandatory)		Moderate	OHS Plan	Helmets, boots, gloves, vests.
11	Are workers trained on safety/machinery?	Yes (mandatory)		Moderate	OHS Plan	Induction + toolbox training.
12	Risk of delayed/underpayment?	Yes (Possible)		Moderate	LMP	Ensure fair contracts, monitor payments.
13	Are women equally included in work opportunities?	Yes (to be ensured)		Moderate	LMP + GBV Plan	Promote equal access; monitor gender inclusion.
<b>ESS3: Resource Efficiency and Pollution Prevention</b>						
14	Will the project use large volumes of materials?	Yes		Low	ESMP	Mainly soil/water for excavation.
15	Will it use water reducing community supply or water during or after construction, which will reduce the local availability of ground water and surface water?		No	Low	ESMP	River has sufficient flow; use mainly for curing/dust suppression.
16	Will it create solid/vegetation wastes?	Yes		Low	WMP	Spoil & vegetation debris cleared in/around the canal banks
17	Will it create hazardous waste (fuels, oils)?	Yes (fuels/lubricants)		Moderate	ESMP + WMP	Store in bunded areas far from canal; spill kits available.
18	Will it result in wastewater discharges?		No	Low	ESMP	Canal follow water and rainwater may disturb the excavation. Use settling pits before release.

19	Will it disturb flora/fauna?		No	Low	–	Agricultural setting; no critical habitats nearby.
20	Will it require chemical inputs (pesticides/fertilizers)?		No	Low	–	Not applicable.
21	Risk of accidental spills/leaks?	Yes		Low	ESMP	Spill prevention measures, bunding, fire extinguishers.
<b>ESS4: Community Health and Safety</b>						
22	Risk of community exposure to physical hazards (open excavation)?	Yes		Moderate	ESMP	Fence off site, signage, and safe crossing points.
23	Risk of traffic/road accidents?	Low		Low	ESMP	Limited traffic; monitor transport routes.
24	Risk of GBV/SEAH due to labor influx?	Yes		Low	GBV Action Plan	Awareness, code of conduct, reporting channels.
25	Risk of spread of communicable diseases (due to labor influx, sanitation, or hygiene issues)	Yes		Moderate	ESMP	Hygiene, PPE, awareness campaigns.
26	Is an area where there has been insecurity incidents in the past 12 months?		No	Moderate	Security Management Plan	Coordinate with authorities, proportionate security.
<b>ESS5: Land Acquisition, Restrictions on Land Use, Resettlement</b>						
27	Will land be acquired?		No	Low	–	Works within canal footprint.
28	Will households/assets be displaced?		No	Low		no assets/households be displaced
29	Will there be restriction of access?	Yes		Moderate	ESMP	Temporary during canal excavation and rehab/reconstruction of auxiliary structures
30	Risk of loss of income, assets or livelihoods?		No	Low		No risk of assets, income loss or livelihoods.
31	Involve significant excavations, demolition, and movement of earth, flooding, or other environmental changes?	Yes		Low	ESMP	Excavation of canal bed only and

32	Will IDPs/vulnerable groups be affected?		No	Low	SEP + GM	No direct, but ensure IDPs and vulnerable groups are included in consultation and compensation processes, if impacts arise.
<b>ESS6: Biodiversity Conservation</b>						
33	Will the project affect sensitive ecosystems (e.g., intact natural forests, mangroves, wetlands) or threatened species?		No	Low	–	Canal lies in agricultural setting; no critical habitats nearby.
34	Will it cause soil erosion/degradation?	Yes (minor)		Low	ESMP	
35	Affect habitats/migration routes?		No	Low	–	No wildlife corridors nearby.
36	Spread invasive species via spoil?	Yes		Low	WMP	Approved spoil disposal only.
<b>ESS7: Indigenous Peoples / Historically Underserved Communities</b>						
37	Are Indigenous Peoples or historically underserved traditional communities present in or around the project area?		No	N/A	–	No such groups identified communities in Bardere District/ Jubaland State or in generally Somalia
38	Could the project affect Indigenous Peoples' rights, lands, resources, or culture?		No	N/A	–	Not applicable in Somalia context
<b>ESS8: Cultural Heritage</b>						
39	Is site near archaeological/cultural heritage?		No	Low	–	None identified.
40	Potential for chance finds?	Yes	Low		Chance Find Procedure	Contractor to apply chance find protocol.
<b>ESS9: Financial Intermediaries</b>						
42	Is the project implemented through financial intermediaries (banks, MFIs)?		No	N/A	–	It is a direct rehabilitation activity, not financial intermediation.
43	Will financial intermediaries on-lend funds to sub-projects?		No	N/A	–	Not applicable.
<b>ESS10: Stakeholder Engagement and Disclosure</b>						
44	Risk of exclusion of women/youth in consultations?	Yes (Possible)		Moderate	SEP	Ensure equal participation.

45	Lack of grievance redress?		No	Low	GM	Functional GM in place.
46	Lack of government consultation?	Yes (generally weak)		Moderate	SEP	Continuous engagement with local authorities.
47	Historical exclusion of disabled persons?	Yes (Possible)		Moderate	SEP	Ensure accessibility & inclusion.
48	Lack of social baseline data?	Yes		Moderate	ESMF	Use rapid participatory appraisal + FAO data.
<b>EHS Screening (Environmental, Health &amp; Safety)</b>						
49	Does intervention cause dust/noise/air pollution?	Yes (minor)		Low	ESMP	Water spraying is required where necessary.
50	Large volumes of construction materials?	Yes		Low	ESMP	Locally sourced where possible.
51	Solid waste properly managed?	Yes		Low	WMP	Contractor to implement WMP.
52	Are chemicals (fuel/lube) properly handled?	Yes		Moderate	ESMP	Bunded storage, away from the canal.
53	Wastewater discharge risks?	Yes (rainwater)		Low	ESMP	Settling pits before release.
54	Excavations/tunnels?	Yes		Low	ESMP	Open canal excavation, control spoil & restore canal banks.
55	Risk of over-exertion?	Yes		Moderate	OHS Plan	Task rotation, rest breaks, hydration.
56	Slips & falls risk?	Yes		Moderate	OHS Plan	Safe walkways, signage.
57	PPE availability?	Yes		Moderate	OHS Plan	Enforced PPE use, monitoring.
58	Workers trained in OHS?	Yes		Moderate	OHS Plan	Toolbox talks, induction.
59	High-risk activities?	Yes		Moderate	OHS Plan	Excavation, machinery, working near water; mitigation required.
60	Traffic Risks?	Yes		Moderate	OHS Plan	Temporary – Community (pedestrian), workers and trucks will require safe paths near rehab/reconstructing activities during implementation.
<b>E&amp;S Screening</b>		<b>Results and Recommendation</b>				

Screening Results: Summary of Critical Risks and Impacts Identified	<b>Risk/Impact</b>	<b>Individual Risk/ Impact Rating</b>	<b>Mitigation</b> At the end of the screen process, tabulate the mitigation measures in an ESMP Format (see below)
	<b>Moderate</b>	<b>C</b>	<b>Summary of Screening Result Justification</b>
Is Additional Assessment Necessary? Evaluate the Risks/Impacts and reflect on options (see below)	<b>Screening Result</b>		
	<ul style="list-style-type: none"> <li>- Environmental and/or Social Assessment required where project is undertaken</li> <li>- Water interruptions during excavation and rehab/reconstruction of auxiliary structures</li> <li>- Soil Erosion and Degradation</li> <li>- Community Health and Safety</li> <li>- Worker Health and Safety (OHS)</li> <li>- Noise from construction machinery and culvert construction may disturb nearby farmers and workers and prolonged exposure could cause hearing issues for laborers</li> <li>- Gender/social exclusion risks</li> </ul>		Mitigation measures will follow <b>CERC ESMF</b> : <ul style="list-style-type: none"> <li>- SEP</li> <li>- GM</li> <li>- SMP</li> <li>- LMP</li> <li>- OHS</li> <li>- SMP</li> <li>- GBV Action Plan</li> </ul>
	No ESIA is required.		
			<b>This project was classified as Category C- Moderate</b>
	No ESIA & full ESMP is required		<b>Simplified ESMP will be needed</b>

Annex 1B: Environmental and Social Screening – Bandar 2 River Embankment

Project Name	Somalia Food System Resilient project (SFSRP) (P177816)		
Project Description	This subproject under the S-FSRP involves the rehabilitation and stabilization of approximately 330 meters of degraded river embankment at Bandar 2 in Bardere District, Gedo Region, Jubaland State, along the Juba River. The intervention will reinforce the structurally weakened section using compacted soil embankment works supported by gabion box stabilization and geotextile reinforcement to reduce erosion, prevent overtopping, and protect nearby settlements and agricultural land from recurrent flooding and sediment deposition impacts. The subproject was screened in November 19 <sup>th</sup> 2025 and classified as <b>Moderate Risk</b> due to temporary and site-specific construction-related impacts including soil disturbance, sediment runoff, dust and noise emissions, localized access disruption, community health and safety risks, and occupational health and safety hazards. These risks are reversible and will be effectively managed through implementation of a site-specific ESMP and the contractor’s C-ESMP in accordance with the WB ESF.		
Prepared By	Shuaib Muse Cidhere	Date of Preparation	19/11/2025
Approved By		Date of Approval	

No	Question	Yes	No	E&S risk rating, -Low, Moderate, Substantial & High	Documents Required	Remarks/Comments
<b>ESS1: Assessment and Management of Environmental and Social Risks</b>						
1	Does the project affect downstream water flows?		No	Low	ESMP	There will be temporary interruption during implementation, such as abstraction of river access for irrigation water.
2	Does it require clearing of trees, pasture/browse?	Yes		Low	ESMP	Little vegetations along the canal banks.
3	Is an Environmental and/or Social Assessment required?	Yes		Moderate	ESMP	ESMP to cover OHS, waste, community safety.
4	Is there a risk of diversion of project benefits?	Yes		Moderate	SEP + GM	Possible during temporary water disruptions.
5	Is there a risk of lack of monitoring due to remoteness/insecurity?		No	Moderate	SMP	Liaising with local authorities while considering Bardere/ Somali’s general context.
6	Will the project generate dust, noise, or air pollution?	Yes (minor)		Low	ESMP	Manage by water spraying & restricting to daytime works.
<b>ESS2: Labour and Working Conditions</b>						

7	Any risk of child/forced labour?		No	Low	LMP	Community-based monitoring.
8	Does the activity include construction?	Yes		Moderate	ESMP	Works involve canal excavation.
9	Risk of lacking OHS for workers?	Yes		Moderate	OHS Plan	Toolbox talks, PPE, safe procedures.
10	Are workers provided PPE?	Yes (mandatory)		Moderate	OHS Plan	Helmets, boots, gloves, vests.
11	Are workers trained on safety/machinery?	Yes (mandatory)		Moderate	OHS Plan	Induction + toolbox training.
12	Risk of delayed/underpayment?	Yes (Possible)		Moderate	LMP	Ensure fair contracts, monitor payments.
13	Are women equally included in work opportunities?	Yes (to be ensured)		Moderate	LMP + GBV Plan	Promote equal access; monitor gender inclusion.
<b>ESS3: Resource Efficiency and Pollution Prevention</b>						
14	Will the project use large volumes of materials?	Yes		Low	ESMP	Mainly soil/water for excavation.
15	Will it use water reducing community supply or water during or after construction, which will reduce the local availability of ground water and surface water?		No	Low	ESMP	River has sufficient flow; use mainly for curing/dust suppression.
16	Will it create solid/vegetation wastes?	Yes		Low	WMP	Spoil & vegetation debris cleared in/around the canal banks
17	Will it create hazardous waste (fuels, oils)?	Yes (fuels/lubricants)		Moderate	ESMP + WMP	Store in bunded areas far from canal; spill kits available.
18	Will it result in wastewater discharges?		No	Low	ESMP	Canal follow water and rainwater may disturb the excavation. Use settling pits before release.
19	Will it disturb flora/fauna?		No	Low	–	Agricultural setting; no critical habitats nearby.
20	Will it require chemical inputs (pesticides/fertilizers)?		No	Low	–	Not applicable.
21	Risk of accidental spills/leaks?	Yes		Low	ESMP	Spill prevention measures, bunding, fire extinguishers.
<b>ESS4: Community Health and Safety</b>						

22	Risk of community exposure to physical hazards (open excavation)?	Yes		Moderate	ESMP	Fence off site, signage, and safe crossing points.
23	Risk of traffic/road accidents?	Low		Low	ESMP	Limited traffic; monitor transport routes.
24	Risk of GBV/SEAH due to labor influx?	Yes		Low	GBV Action Plan	Awareness, code of conduct, reporting channels.
25	Risk of spread of communicable diseases (due to labor influx, sanitation, or hygiene issues)	Yes		Moderate	ESMP	Hygiene, PPE, awareness campaigns.
26	Is an area where there has been insecurity incidents in the past 12 months?		No	Moderate	Security Management Plan	Coordinate with authorities, proportionate security.
<b>ESS5: Land Acquisition, Restrictions on Land Use, Resettlement</b>						
27	Will land be acquired?		No	Low	–	Works within canal footprint.
28	Will households/assets be displaced?		No	Low		no assets/households be displaced
29	Will there be restriction of access?	Yes		Moderate	ESMP	Temporary during canal excavation and rehab/reconstruction of auxiliary structures
30	Risk of loss of income, assets or livelihoods?		No	Low		No risk of assets, income loss or livelihoods.
31	Involve significant excavations, demolition, and movement of earth, flooding, or other environmental changes?	Yes		Low	ESMP	Excavation of canal bed only and
32	Will IDPs/vulnerable groups be affected?		No	Low	SEP + GM	No direct, but ensure IDPs and vulnerable groups are included in consultation and compensation processes, if impacts arise.
<b>ESS6: Biodiversity Conservation</b>						
33	Will the project affect sensitive ecosystems (e.g., intact natural forests, mangroves, wetlands) or threatened species?		No	Low	–	Canal lies in agricultural setting; no critical habitats nearby.
34	Will it cause soil erosion/degradation?	Yes (minor)		Low	ESMP	

35	Affect habitats/migration routes?		No	Low	–	No wildlife corridors nearby.
36	Spread invasive species via spoil?	Yes		Low	WMP	Approved spoil disposal only.
<b>ESS7: Indigenous Peoples / Historically Underserved Communities</b>						
37	Are Indigenous Peoples or historically underserved traditional communities present in or around the project area?		No	N/A	–	No such groups identified communities in Bardere District/ Jubaland State or in generally Somalia
38	Could the project affect Indigenous Peoples' rights, lands, resources, or culture?		No	N/A	–	Not applicable in Somalia context
<b>ESS8: Cultural Heritage</b>						
39	Is site near archaeological/cultural heritage?		No	Low	–	None identified.
40	Potential for chance finds?	Yes	Low		Chance Find Procedure	Contractor to apply chance find protocol.
<b>ESS9: Financial Intermediaries</b>						
42	Is the project implemented through financial intermediaries (banks, MFIs)?		No	N/A	–	It is a direct rehabilitation activity, not financial intermediation.
43	Will financial intermediaries on-lend funds to sub-projects?		No	N/A	–	Not applicable.
<b>ESS10: Stakeholder Engagement and Disclosure</b>						
44	Risk of exclusion of women/youth in consultations?	Yes (Possible)		Moderate	SEP	Ensure equal participation.
45	Lack of grievance redress?		No	Low	GM	Functional GM in place.
46	Lack of government consultation?	Yes (generally weak)		Moderate	SEP	Continuous engagement with local authorities.
47	Historical exclusion of disabled persons?	Yes (Possible)		Moderate	SEP	Ensure accessibility & inclusion.
48	Lack of social baseline data?	Yes		Moderate	ESMF	Use rapid participatory appraisal + FAO data.
<b>EHS Screening (Environmental, Health &amp; Safety)</b>						
49	Does intervention cause dust/noise/air pollution?	Yes (minor)		Low	ESMP	Water spraying is required where necessary.

50	Large volumes of construction materials?	Yes		Low	ESMP	Locally sourced where possible.
51	Solid waste properly managed?	Yes		Low	WMP	Contractor to implement WMP.
52	Are chemicals (fuel/lube) properly handled?	Yes		Moderate	ESMP	Bunded storage, away from the canal.
53	Wastewater discharge risks?	Yes (rainwater)		Low	ESMP	Settling pits before release.
54	Excavations/tunnels?	Yes		Low	ESMP	Open canal excavation, control spoil & restore canal banks.
55	Risk of over-exertion?	Yes		Moderate	OHS Plan	Task rotation, rest breaks, hydration.
56	Slips & falls risk?	Yes		Moderate	OHS Plan	Safe walkways, signage.
57	PPE availability?	Yes		Moderate	OHS Plan	Enforced PPE use, monitoring.
58	Workers trained in OHS?	Yes		Moderate	OHS Plan	Toolbox talks, induction.
59	High-risk activities?	Yes		Moderate	OHS Plan	Excavation, machinery, working near water; mitigation required.
60	Traffic Risks?	Yes		Moderate	OHS Plan	Temporary – Community (pedestrian), workers and trucks will require safe paths near rehab/reconstructing activities during implementation.
<b>E&amp;S Screening</b>		<b>Results and Recommendation</b>				
Screening Results: Summary of Critical Risks and Impacts Identified	<b>Risk/Impact</b>	<b>Individual Risk/ Impact Rating</b>		<b>Mitigation</b>		
	<b>Moderate</b>	<b>C</b>		At the end of the screen process, tabulate the mitigation measures in an ESMP Format (see below)		
Is Additional Assessment Necessary? Evaluate the Risks/Impacts and reflect on options (see below)	<b>Screening Result</b>			<b>Summary of Screening Result Justification</b>		
	<ul style="list-style-type: none"> <li>- Environmental and/or Social Assessment required where project is undertaken</li> <li>- Water interruptions during excavation and rehab/reconstruction of auxiliary structures</li> <li>- Soil Erosion and Degradation</li> <li>- Community Health and Safety</li> </ul>			Mitigation measures will follow <b>CERC ESMF</b> : <ul style="list-style-type: none"> <li>- SEP</li> <li>- GM</li> <li>- SMP</li> <li>- LMP</li> </ul>		

	<ul style="list-style-type: none"> <li>- Worker Health and Safety (OHS)</li> <li>- Noise from construction machinery and culvert construction may disturb nearby farmers and workers and prolonged exposure could cause hearing issues for laborers</li> <li>- Gender/social exclusion risks</li> </ul>	<ul style="list-style-type: none"> <li>- OHS</li> <li>- SMP</li> <li>- GBV Action Plan</li> </ul>
	No ESIA is required.	
		<b>This project was classified as Category C- Moderate</b>
	No ESIA & full ESMP is required	<b>Simplified ESMP will be needed</b>

Annex 1C: Environmental and Social Screening – Barakaale River Embankment

<b>Project Name</b>	Somalia Food System Resilient project (SFSRP) (P177816)		
<b>Project Description</b>	This subproject under the S-FSRP involves the rehabilitation and stabilization of approximately 300 meters of degraded river embankment at Barakaale in Bardere District, Gedo Region, Jubaland State, along the Juba River. The intervention will reinforce weakened riverbank sections using engineered compacted soil embankment systems supported by gabion stabilization and geotextile reinforcement to reduce erosion, control overflow, and safeguard agricultural lands and settlements from recurrent flooding and sand deposition. The subproject was screened in November 19 <sup>th</sup> 2025 and classified as Moderate Risk due to temporary and site-specific construction-related impacts including soil disturbance, erosion risk, dust and noise emissions, localized access limitations, community health and safety risks, and occupational health and safety hazards. These risks are reversible and will be effectively managed through implementation of a site-specific ESMP and the contractor’s C-ESMP in accordance with the WB ESF.		
<b>Prepared By</b>	Shuaib Muse Cidhere	Date of Preparation	19/11/2025
<b>Approved By</b>		Date of Approval	

No	Question	Yes	No	E&S risk rating, -Low, Moderate, Substantial & High	Documents Required	Remarks/Comments
<b>ESS1: Assessment and Management of Environmental and Social Risks</b>						
1	Does the project affect downstream water flows?		No	Low	ESMP	There will be temporary interruption during implementation, such as abstraction of river access for irrigation water.
2	Does it require clearing of trees, pasture/browse?	Yes		Low	ESMP	Little vegetations along the canal banks.
3	Is an Environmental and/or Social Assessment required?	Yes		Moderate	ESMP	ESMP to cover OHS, waste, community safety.
4	Is there a risk of diversion of project benefits?	Yes		Moderate	SEP + GM	Possible during temporary water disruptions.
5	Is there a risk of lack of monitoring due to remoteness/insecurity?		No	Moderate	SMP	Liaising with local authorities while considering Bardere/ Somali’s general context.
6	Will the project generate dust, noise, or air pollution?	Yes (minor)		Low	ESMP	Manage by water spraying & restricting to daytime works.
<b>ESS2: Labour and Working Conditions</b>						

7	Any risk of child/forced labor?		No	Low	LMP	Community-based monitoring.
8	Does the activity include construction?	Yes		Moderate	ESMP	Works involve canal excavation.
9	Risk of lacking OHS for workers?	Yes		Moderate	OHS Plan	Toolbox talks, PPE, safe procedures.
10	Are workers provided PPE?	Yes (mandatory)		Moderate	OHS Plan	Helmets, boots, gloves, vests.
11	Are workers trained on safety/machinery?	Yes (mandatory)		Moderate	OHS Plan	Induction + toolbox training.
12	Risk of delayed/underpayment?	Yes (Possible)		Moderate	LMP	Ensure fair contracts, monitor payments.
13	Are women equally included in work opportunities?	Yes (to be ensured)		Moderate	LMP + GBV Plan	Promote equal access; monitor gender inclusion.
<b>ESS3: Resource Efficiency and Pollution Prevention</b>						
14	Will the project use large volumes of materials?	Yes		Low	ESMP	Mainly soil/water for excavation.
15	Will it use water reducing community supply or water during or after construction, which will reduce the local availability of ground water and surface water?		No	Low	ESMP	River has sufficient flow; use mainly for curing/dust suppression.
16	Will it create solid/vegetation wastes?	Yes		Low	WMP	Spoil & vegetation debris cleared in/around the canal banks
17	Will it create hazardous waste (fuels, oils)?	Yes (fuels/lubricants)		Moderate	ESMP + WMP	Store in bunded areas far from canal; spill kits available.
18	Will it result in wastewater discharges?		No	Low	ESMP	Canal follow water and rainwater may disturb the excavation. Use settling pits before release.
19	Will it disturb flora/fauna?		No	Low	–	Agricultural setting; no critical habitats nearby.
20	Will it require chemical inputs (pesticides/fertilizers)?		No	Low	–	Not applicable.
21	Risk of accidental spills/leaks?	Yes		Low	ESMP	Spill prevention measures, bunding, fire extinguishers.
<b>ESS4: Community Health and Safety</b>						

22	Risk of community exposure to physical hazards (open excavation)?	Yes		Moderate	ESMP	Fence off site, signage, and safe crossing points.
23	Risk of traffic/road accidents?	Low		Low	ESMP	Limited traffic; monitor transport routes.
24	Risk of GBV/SEAH due to labor influx?	Yes		Low	GBV Action Plan	Awareness, code of conduct, reporting channels.
25	Risk of spread of communicable diseases (due to labor influx, sanitation, or hygiene issues)	Yes		Moderate	ESMP	Hygiene, PPE, awareness campaigns.
26	Is an area where there has been insecurity incidents in the past 12 months?		No	Moderate	Security Management Plan	Coordinate with authorities, proportionate security.
<b>ESS5: Land Acquisition, Restrictions on Land Use, Resettlement</b>						
27	Will land be acquired?		No	Low	–	Works within canal footprint.
28	Will households/assets be displaced?		No	Low		no assets/households be displaced
29	Will there be restriction of access?	Yes		Moderate	ESMP	Temporary during canal excavation and rehab/reconstruction of auxiliary structures
30	Risk of loss of income, assets or livelihoods?		No	Low		No risk of assets, income loss or livelihoods.
31	Involve significant excavations, demolition, and movement of earth, flooding, or other environmental changes?	Yes		Low	ESMP	Excavation of canal bed only and
32	Will IDPs/vulnerable groups be affected?		No	Low	SEP + GM	No direct, but ensure IDPs and vulnerable groups are included in consultation and compensation processes, if impacts arise.
<b>ESS6: Biodiversity Conservation</b>						
33	Will the project affect sensitive ecosystems (e.g., intact natural forests, mangroves, wetlands) or threatened species?		No	Low	–	Canal lies in agricultural setting; no critical habitats nearby.
34	Will it cause soil erosion/degradation?	Yes (minor)		Low	ESMP	

35	Affect habitats/migration routes?		No	Low	–	No wildlife corridors nearby.
36	Spread invasive species via spoil?	Yes		Low	WMP	Approved spoil disposal only.
<b>ESS7: Indigenous Peoples / Historically Underserved Communities</b>						
37	Are Indigenous Peoples or historically underserved traditional communities present in or around the project area?		No	N/A	–	No such groups identified communities in Bardere District/ Jubaland State or in generally Somalia
38	Could the project affect Indigenous Peoples' rights, lands, resources, or culture?		No	N/A	–	Not applicable in Somalia context
<b>ESS8: Cultural Heritage</b>						
39	Is site near archaeological/cultural heritage?		No	Low	–	None identified.
40	Potential for chance finds?	Yes	Low		Chance Find Procedure	Contractor to apply chance find protocol.
<b>ESS9: Financial Intermediaries</b>						
42	Is the project implemented through financial intermediaries (banks, MFIs)?		No	N/A	–	It is a direct rehabilitation activity, not financial intermediation.
43	Will financial intermediaries on-lend funds to sub-projects?		No	N/A	–	Not applicable.
<b>ESS10: Stakeholder Engagement and Disclosure</b>						
44	Risk of exclusion of women/youth in consultations?	Yes (Possible)		Moderate	SEP	Ensure equal participation.
45	Lack of grievance redress?		No	Low	GM	Functional GM in place.
46	Lack of government consultation?	Yes (generally weak)		Moderate	SEP	Continuous engagement with local authorities.
47	Historical exclusion of disabled persons?	Yes (Possible)		Moderate	SEP	Ensure accessibility & inclusion.
48	Lack of social baseline data?	Yes		Moderate	ESMF	Use rapid participatory appraisal + FAO data.
<b>EHS Screening (Environmental, Health &amp; Safety)</b>						
49	Does intervention cause dust/noise/air pollution?	Yes (minor)		Low	ESMP	Water spraying is required where necessary.

50	Large volumes of construction materials?	Yes		Low	ESMP	Locally sourced where possible.
51	Solid waste properly managed?	Yes		Low	WMP	Contractor to implement WMP.
52	Are chemicals (fuel/lube) properly handled?	Yes		Moderate	ESMP	Bunded storage, away from the canal.
53	Wastewater discharge risks?	Yes (rainwater)		Low	ESMP	Settling pits before release.
54	Excavations/tunnels?	Yes		Low	ESMP	Open canal excavation, control spoil & restore canal banks.
55	Risk of over-exertion?	Yes		Moderate	OHS Plan	Task rotation, rest breaks, hydration.
56	Slips & falls risk?	Yes		Moderate	OHS Plan	Safe walkways, signage.
57	PPE availability?	Yes		Moderate	OHS Plan	Enforced PPE use, monitoring.
58	Workers trained in OHS?	Yes		Moderate	OHS Plan	Toolbox talks, induction.
59	High-risk activities?	Yes		Moderate	OHS Plan	Excavation, machinery, working near water; mitigation required.
60	Traffic Risks?	Yes		Moderate	OHS Plan	Temporary – Community (pedestrian), workers and trucks will require safe paths near rehab/reconstructing activities during implementation.

E&S Screening		Results and Recommendation		
Screening Results:  Summary of Critical Risks and Impacts Identified	<b>Risk/Impact</b>	<b>Individual Risk/ Impact Rating</b>	<b>Mitigation</b>	
	<b>Moderate</b>	<b>C</b>	At the end of the screen process, tabulate the mitigation measures in an ESMP Format (see below)	
Is Additional Assessment Necessary?  Evaluate the Risks/Impacts and reflect on options (see below)	<b>Screening Result</b>		<b>Summary of Screening Result Justification</b>	
	<ul style="list-style-type: none"> <li>- Environmental and/or Social Assessment required where project is undertaken</li> <li>- Water interruptions during excavation and rehab/reconstruction of auxiliary structures</li> <li>- Soil Erosion and Degradation</li> <li>- Community Health and Safety</li> </ul>		Mitigation measures will follow <b>CERC ESMF</b> : <ul style="list-style-type: none"> <li>- SEP</li> <li>- GM</li> <li>- SMP</li> <li>- LMP</li> </ul>	

	<ul style="list-style-type: none"> <li>- Worker Health and Safety (OHS)</li> <li>- Noise from construction machinery and culvert construction may disturb nearby farmers and workers and prolonged exposure could cause hearing issues for laborers</li> <li>- Gender/social exclusion risks</li> </ul>	<ul style="list-style-type: none"> <li>- OHS</li> <li>- SMP</li> <li>- GBV Action Plan</li> </ul>
	No ESIA is required.	
		<b>This project was classified as Category C- Moderate</b>
	No ESIA & full ESMP is required	<b>Simplified ESMP will be needed</b>

Annex 1D: Environmental and Social Screening – Buula Adey River Embankment

<b>Project Name</b>	Somalia Food System Resilient project (SFSRP) (P177816)		
<b>Project Description</b>	This subproject under the S-FSRP involves the rehabilitation and stabilization of approximately 50 meters of degraded river embankment at Buula Adey in Bardere District, Gedo Region, Jubaland State, along the Juba River. The intervention will reinforce weakened riverbank sections using engineered compacted soil embankment systems supported by gabion stabilization and geotextile reinforcement to reduce erosion, control overflow, and safeguard agricultural lands and settlements from recurrent flooding and sand deposition. The subproject was screened in November 19 <sup>th</sup> 2025 and classified as Moderate Risk due to temporary and site-specific construction-related impacts including soil disturbance, erosion risk, dust and noise emissions, localized access limitations, community health and safety risks, and occupational health and safety hazards. These risks are reversible and will be effectively managed through implementation of a site-specific ESMP and the contractor’s C-ESMP in accordance with the WB ESF.		
<b>Prepared By</b>	Shuaib Muse Cidhere	Date of Preparation	19/11/2025
<b>Approved By</b>		Date of Approval	

No	Question	Yes	No	E&S risk rating, -Low, Moderate, Substantial & High	Documents Required	Remarks/Comments
<b>ESS1: Assessment and Management of Environmental and Social Risks</b>						
1	Does the project affect downstream water flows?		No	Low	ESMP	There will be temporary interruption during implementation, such as abstraction of river access for irrigation water.
2	Does it require clearing of trees, pasture/browse?	Yes		Low	ESMP	Little vegetations along the canal banks.
3	Is an Environmental and/or Social Assessment required?	Yes		Moderate	ESMP	ESMP to cover OHS, waste, community safety.
4	Is there a risk of diversion of project benefits?	Yes		Moderate	SEP + GM	Possible during temporary water disruptions.
5	Is there a risk of lack of monitoring due to remoteness/insecurity?		No	Moderate	SMP	Liaising with local authorities while considering Bardere/ Somali’s general context.
6	Will the project generate dust, noise, or air pollution?	Yes (minor)		Low	ESMP	Manage by water spraying & restricting to daytime works.
<b>ESS2: Labour and Working Conditions</b>						

7	Any risk of child/forced labour?		No	Low	LMP	Community-based monitoring.
8	Does the activity include construction?	Yes		Moderate	ESMP	Works involve canal excavation.
9	Risk of lacking OHS for workers?	Yes		Moderate	OHS Plan	Toolbox talks, PPE, safe procedures.
10	Are workers provided PPE?	Yes (mandatory)		Moderate	OHS Plan	Helmets, boots, gloves, vests.
11	Are workers trained on safety/machinery?	Yes (mandatory)		Moderate	OHS Plan	Induction + toolbox training.
12	Risk of delayed/underpayment?	Yes (Possible)		Moderate	LMP	Ensure fair contracts, monitor payments.
13	Are women equally included in work opportunities?	Yes (to be ensured)		Moderate	LMP + GBV Plan	Promote equal access; monitor gender inclusion.
<b>ESS3: Resource Efficiency and Pollution Prevention</b>						
14	Will the project use large volumes of materials?	Yes		Low	ESMP	Mainly soil/water for excavation.
15	Will it use water reducing community supply or water during or after construction, which will reduce the local availability of ground water and surface water?		No	Low	ESMP	River has sufficient flow; use mainly for curing/dust suppression.
16	Will it create solid/vegetation wastes?	Yes		Low	WMP	Spoil & vegetation debris cleared in/around the canal banks
17	Will it create hazardous waste (fuels, oils)?	Yes (fuels/lubricants)		Moderate	ESMP + WMP	Store in bunded areas far from canal; spill kits available.
18	Will it result in wastewater discharges?		No	Low	ESMP	Canal follow water and rainwater may disturb the excavation. Use settling pits before release.
19	Will it disturb flora/fauna?		No	Low	–	Agricultural setting; no critical habitats nearby.
20	Will it require chemical inputs (pesticides/fertilizers)?		No	Low	–	Not applicable.
21	Risk of accidental spills/leaks?	Yes		Low	ESMP	Spill prevention measures, bunding, fire extinguishers.
<b>ESS4: Community Health and Safety</b>						

22	Risk of community exposure to physical hazards (open excavation)?	Yes		Moderate	ESMP	Fence off site, signage, and safe crossing points.
23	Risk of traffic/road accidents?	Low		Low	ESMP	Limited traffic; monitor transport routes.
24	Risk of GBV/SEAH due to labor influx?	Yes		Low	GBV Action Plan	Awareness, code of conduct, reporting channels.
25	Risk of spread of communicable diseases (due to labor influx, sanitation, or hygiene issues)	Yes		Moderate	ESMP	Hygiene, PPE, awareness campaigns.
26	Is an area where there has been insecurity incidents in the past 12 months?		No	Moderate	Security Management Plan	Coordinate with authorities, proportionate security.
<b>ESS5: Land Acquisition, Restrictions on Land Use, Resettlement</b>						
27	Will land be acquired?		No	Low	–	Works within canal footprint.
28	Will households/assets be displaced?		No	Low		no assets/households be displaced
29	Will there be restriction of access?	Yes		Moderate	ESMP	Temporary during canal excavation and rehab/reconstruction of auxiliary structures
30	Risk of loss of income, assets or livelihoods?		No	Low		No risk of assets, income loss or livelihoods.
31	Involve significant excavations, demolition, and movement of earth, flooding, or other environmental changes?	Yes		Low	ESMP	Excavation of canal bed only and
32	Will IDPs/vulnerable groups be affected?		No	Low	SEP + GM	No direct, but ensure IDPs and vulnerable groups are included in consultation and compensation processes, if impacts arise.
<b>ESS6: Biodiversity Conservation</b>						
33	Will the project affect sensitive ecosystems (e.g., intact natural forests, mangroves, wetlands) or threatened species?		No	Low	–	Canal lies in agricultural setting; no critical habitats nearby.
34	Will it cause soil erosion/degradation?	Yes (minor)		Low	ESMP	

35	Affect habitats/migration routes?		No	Low	–	No wildlife corridors nearby.
36	Spread invasive species via spoil?	Yes		Low	WMP	Approved spoil disposal only.
<b>ESS7: Indigenous Peoples / Historically Underserved Communities</b>						
37	Are Indigenous Peoples or historically underserved traditional communities present in or around the project area?		No	N/A	–	No such groups identified communities in Bardere District/ Jubaland State or in generally Somalia
38	Could the project affect Indigenous Peoples' rights, lands, resources, or culture?		No	N/A	–	Not applicable in Somalia context
<b>ESS8: Cultural Heritage</b>						
39	Is site near archaeological/cultural heritage?		No	Low	–	None identified.
40	Potential for chance finds?	Yes	Low		Chance Find Procedure	Contractor to apply chance find protocol.
<b>ESS9: Financial Intermediaries</b>						
42	Is the project implemented through financial intermediaries (banks, MFIs)?		No	N/A	–	It is a direct rehabilitation activity, not financial intermediation.
43	Will financial intermediaries on-lend funds to sub-projects?		No	N/A	–	Not applicable.
<b>ESS10: Stakeholder Engagement and Disclosure</b>						
44	Risk of exclusion of women/youth in consultations?	Yes (Possible)		Moderate	SEP	Ensure equal participation.
45	Lack of grievance redress?		No	Low	GM	Functional GM in place.
46	Lack of government consultation?	Yes (generally weak)		Moderate	SEP	Continuous engagement with local authorities.
47	Historical exclusion of disabled persons?	Yes (Possible)		Moderate	SEP	Ensure accessibility & inclusion.
48	Lack of social baseline data?	Yes		Moderate	ESMF	Use rapid participatory appraisal + FAO data.
<b>EHS Screening (Environmental, Health &amp; Safety)</b>						
49	Does intervention cause dust/noise/air pollution?	Yes (minor)		Low	ESMP	Water spraying is required where necessary.

50	Large volumes of construction materials?	Yes		Low	ESMP	Locally sourced where possible.
51	Solid waste properly managed?	Yes		Low	WMP	Contractor to implement WMP.
52	Are chemicals (fuel/lube) properly handled?	Yes		Moderate	ESMP	Bunded storage, away from the canal.
53	Wastewater discharge risks?	Yes (rainwater)		Low	ESMP	Settling pits before release.
54	Excavations/tunnels?	Yes		Low	ESMP	Open canal excavation, control spoil & restore canal banks.
55	Risk of over-exertion?	Yes		Moderate	OHS Plan	Task rotation, rest breaks, hydration.
56	Slips & falls risk?	Yes		Moderate	OHS Plan	Safe walkways, signage.
57	PPE availability?	Yes		Moderate	OHS Plan	Enforced PPE use, monitoring.
58	Workers trained in OHS?	Yes		Moderate	OHS Plan	Toolbox talks, induction.
59	High-risk activities?	Yes		Moderate	OHS Plan	Excavation, machinery, working near water; mitigation required.
60	Traffic Risks?	Yes		Moderate	OHS Plan	Temporary – Community (pedestrian), workers and trucks will require safe paths near rehab/reconstructing activities during implementation.

E&S Screening		Results and Recommendation		
Screening Results:  Summary of Critical Risks and Impacts Identified	<b>Risk/Impact</b>	<b>Individual Risk/ Impact Rating</b>	<b>Mitigation</b>	
	<b>Moderate</b>	<b>C</b>	At the end of the screen process, tabulate the mitigation measures in an ESMP Format (see below)	
Is Additional Assessment Necessary?  Evaluate the Risks/Impacts and reflect on options (see below)	<b>Screening Result</b>		<b>Summary of Screening Result Justification</b>	
	<ul style="list-style-type: none"> <li>- Environmental and/or Social Assessment required where project is undertaken</li> <li>- Water interruptions during excavation and rehab/reconstruction of auxiliary structures</li> <li>- Soil Erosion and Degradation</li> <li>- Community Health and Safety</li> </ul>		Mitigation measures will follow <b>CERC ESMF</b> : <ul style="list-style-type: none"> <li>- SEP</li> <li>- GM</li> <li>- SMP</li> <li>- LMP</li> </ul>	

	<ul style="list-style-type: none"> <li>- Worker Health and Safety (OHS)</li> <li>- Noise from construction machinery and culvert construction may disturb nearby farmers and workers and prolonged exposure could cause hearing issues for laborers</li> <li>- Gender/social exclusion risks</li> </ul>	<ul style="list-style-type: none"> <li>- OHS</li> <li>- SMP</li> <li>- GBV Action Plan</li> </ul>
	No ESIA is required.	
		<b>This project was classified as Category C- Moderate</b>
	No ESIA & full ESMP is required	<b>Simplified ESMP will be needed</b>

Annex 1E: Environmental and Social Screening – Sirinley 1 River Embankment

<b>Project Name</b>	Somalia Food System Resilient project (SFSRP) (P177816)		
<b>Project Description</b>	This subproject under the S-FSRP involves the rehabilitation and stabilization of approximately 30 meters of degraded river embankment at Sirinley in Bardere District, Gedo Region, Jubaland State, along the Juba River. The intervention will reinforce weakened riverbank sections using engineered compacted soil embankment systems supported by gabion stabilization and geotextile reinforcement to reduce erosion, control overflow, and safeguard agricultural lands and settlements from recurrent flooding and sand deposition. The subproject was screened in November 19 <sup>th</sup> 2025 and classified as Moderate Risk due to temporary and site-specific construction-related impacts including soil disturbance, erosion risk, dust and noise emissions, localized access limitations, community health and safety risks, and occupational health and safety hazards. These risks are reversible and will be effectively managed through implementation of a site-specific ESMP and the contractor’s C-ESMP in accordance with the WB ESF.		
<b>Prepared By</b>	Shuaib Muse Cidhere	Date of Preparation	19/11/2025
<b>Approved By</b>		Date of Approval	

No	Question	Yes	No	E&S risk rating, -Low, Moderate, Substantial & High	Documents Required	Remarks/Comments
<b>ESS1: Assessment and Management of Environmental and Social Risks</b>						
1	Does the project affect downstream water flows?		No	Low	ESMP	There will be temporary interruption during implementation, such as abstraction of river access for irrigation water.
2	Does it require clearing of trees, pasture/browse?	Yes		Low	ESMP	Little vegetations along the canal banks.
3	Is an Environmental and/or Social Assessment required?	Yes		Moderate	ESMP	ESMP to cover OHS, waste, community safety.
4	Is there a risk of diversion of project benefits?	Yes		Moderate	SEP + GM	Possible during temporary water disruptions.
5	Is there a risk of lack of monitoring due to remoteness/insecurity?		No	Moderate	SMP	Liaising with local authorities while considering Bardere/ Somali’s general context.
6	Will the project generate dust, noise, or air pollution?	Yes (minor)		Low	ESMP	Manage by water spraying & restricting to daytime works.
<b>ESS2: Labour and Working Conditions</b>						

7	Any risk of child/forced labor?		No	Low	LMP	Community-based monitoring.
8	Does the activity include construction?	Yes		Moderate	ESMP	Works involve canal excavation.
9	Risk of lacking OHS for workers?	Yes		Moderate	OHS Plan	Toolbox talks, PPE, safe procedures.
10	Are workers provided PPE?	Yes (mandatory)		Moderate	OHS Plan	Helmets, boots, gloves, vests.
11	Are workers trained on safety/machinery?	Yes (mandatory)		Moderate	OHS Plan	Induction + toolbox training.
12	Risk of delayed/underpayment?	Yes (Possible)		Moderate	LMP	Ensure fair contracts, monitor payments.
13	Are women equally included in work opportunities?	Yes (to be ensured)		Moderate	LMP + GBV Plan	Promote equal access; monitor gender inclusion.
<b>ESS3: Resource Efficiency and Pollution Prevention</b>						
14	Will the project use large volumes of materials?	Yes		Low	ESMP	Mainly soil/water for excavation.
15	Will it use water reducing community supply or water during or after construction, which will reduce the local availability of ground water and surface water?		No	Low	ESMP	River has sufficient flow; use mainly for curing/dust suppression.
16	Will it create solid/vegetation wastes?	Yes		Low	WMP	Spoil & vegetation debris cleared in/around the canal banks
17	Will it create hazardous waste (fuels, oils)?	Yes (fuels/lubricants)		Moderate	ESMP + WMP	Store in bunded areas far from canal; spill kits available.
18	Will it result in wastewater discharges?		No	Low	ESMP	Canal follow water and rainwater may disturb the excavation. Use settling pits before release.
19	Will it disturb flora/fauna?		No	Low	–	Agricultural setting; no critical habitats nearby.
20	Will it require chemical inputs (pesticides/fertilizers)?		No	Low	–	Not applicable.
21	Risk of accidental spills/leaks?	Yes		Low	ESMP	Spill prevention measures, bunding, fire extinguishers.
<b>ESS4: Community Health and Safety</b>						

22	Risk of community exposure to physical hazards (open excavation)?	Yes		Moderate	ESMP	Fence off site, signage, and safe crossing points.
23	Risk of traffic/road accidents?	Low		Low	ESMP	Limited traffic; monitor transport routes.
24	Risk of GBV/SEAH due to labor influx?	Yes		Low	GBV Action Plan	Awareness, code of conduct, reporting channels.
25	Risk of spread of communicable diseases (due to labor influx, sanitation, or hygiene issues)	Yes		Moderate	ESMP	Hygiene, PPE, awareness campaigns.
26	Is an area where there has been insecurity incidents in the past 12 months?		No	Moderate	Security Management Plan	Coordinate with authorities, proportionate security.
<b>ESS5: Land Acquisition, Restrictions on Land Use, Resettlement</b>						
27	Will land be acquired?		No	Low	–	Works within canal footprint.
28	Will households/assets be displaced?		No	Low		no assets/households be displaced
29	Will there be restriction of access?	Yes		Moderate	ESMP	Temporary during canal excavation and rehab/reconstruction of auxiliary structures
30	Risk of loss of income, assets or livelihoods?		No	Low		No risk of assets, income loss or livelihoods.
31	Involve significant excavations, demolition, and movement of earth, flooding, or other environmental changes?	Yes		Low	ESMP	Excavation of canal bed only and
32	Will IDPs/vulnerable groups be affected?		No	Low	SEP + GM	No direct, but ensure IDPs and vulnerable groups are included in consultation and compensation processes, if impacts arise.
<b>ESS6: Biodiversity Conservation</b>						
33	Will the project affect sensitive ecosystems (e.g., intact natural forests, mangroves, wetlands) or threatened species?		No	Low	–	Canal lies in agricultural setting; no critical habitats nearby.
34	Will it cause soil erosion/degradation?	Yes (minor)		Low	ESMP	

35	Affect habitats/migration routes?		No	Low	–	No wildlife corridors nearby.
36	Spread invasive species via spoil?	Yes		Low	WMP	Approved spoil disposal only.
<b>ESS7: Indigenous Peoples / Historically Underserved Communities</b>						
37	Are Indigenous Peoples or historically underserved traditional communities present in or around the project area?		No	N/A	–	No such groups identified communities in Bardere District/ Jubaland State or in generally Somalia
38	Could the project affect Indigenous Peoples' rights, lands, resources, or culture?		No	N/A	–	Not applicable in Somalia context
<b>ESS8: Cultural Heritage</b>						
39	Is site near archaeological/cultural heritage?		No	Low	–	None identified.
40	Potential for chance finds?	Yes	Low		Chance Find Procedure	Contractor to apply chance find protocol.
<b>ESS9: Financial Intermediaries</b>						
42	Is the project implemented through financial intermediaries (banks, MFIs)?		No	N/A	–	It is a direct rehabilitation activity, not financial intermediation.
43	Will financial intermediaries on-lend funds to sub-projects?		No	N/A	–	Not applicable.
<b>ESS10: Stakeholder Engagement and Disclosure</b>						
44	Risk of exclusion of women/youth in consultations?	Yes (Possible)		Moderate	SEP	Ensure equal participation.
45	Lack of grievance redress?		No	Low	GM	Functional GM in place.
46	Lack of government consultation?	Yes (generally weak)		Moderate	SEP	Continuous engagement with local authorities.
47	Historical exclusion of disabled persons?	Yes (Possible)		Moderate	SEP	Ensure accessibility & inclusion.
48	Lack of social baseline data?	Yes		Moderate	ESMF	Use rapid participatory appraisal + FAO data.
<b>EHS Screening (Environmental, Health &amp; Safety)</b>						
49	Does intervention cause dust/noise/air pollution?	Yes (minor)		Low	ESMP	Water spraying is required where necessary.

50	Large volumes of construction materials?	Yes		Low	ESMP	Locally sourced where possible.
51	Solid waste properly managed?	Yes		Low	WMP	Contractor to implement WMP.
52	Are chemicals (fuel/lube) properly handled?	Yes		Moderate	ESMP	Bunded storage, away from the canal.
53	Wastewater discharge risks?	Yes (rainwater)		Low	ESMP	Settling pits before release.
54	Excavations/tunnels?	Yes		Low	ESMP	Open canal excavation, control spoil & restore canal banks.
55	Risk of over-exertion?	Yes		Moderate	OHS Plan	Task rotation, rest breaks, hydration.
56	Slips & falls risk?	Yes		Moderate	OHS Plan	Safe walkways, signage.
57	PPE availability?	Yes		Moderate	OHS Plan	Enforced PPE use, monitoring.
58	Workers trained in OHS?	Yes		Moderate	OHS Plan	Toolbox talks, induction.
59	High-risk activities?	Yes		Moderate	OHS Plan	Excavation, machinery, working near water; mitigation required.
60	Traffic Risks?	Yes		Moderate	OHS Plan	Temporary – Community (pedestrian), workers and trucks will require safe paths near rehab/reconstructing activities during implementation.
<b>E&amp;S Screening</b>		<b>Results and Recommendation</b>				
Screening Results: Summary of Critical Risks and Impacts Identified	<b>Risk/Impact</b>	<b>Individual Risk/ Impact Rating</b>		<b>Mitigation</b>		
	<b>Moderate</b>	<b>C</b>		At the end of the screen process, tabulate the mitigation measures in an ESMP Format (see below)		
Is Additional Assessment Necessary? Evaluate the Risks/Impacts and reflect on options (see below)	<b>Screening Result</b>			<b>Summary of Screening Result Justification</b>		
	<ul style="list-style-type: none"> <li>- Environmental and/or Social Assessment required where project is undertaken</li> <li>- Water interruptions during excavation and rehab/reconstruction of auxiliary structures</li> <li>- Soil Erosion and Degradation</li> <li>- Community Health and Safety</li> </ul>			Mitigation measures will follow <b>CERC ESMF</b> : <ul style="list-style-type: none"> <li>- SEP</li> <li>- GM</li> <li>- SMP</li> <li>- LMP</li> </ul>		

	<ul style="list-style-type: none"> <li>- Worker Health and Safety (OHS)</li> <li>- Noise from construction machinery and culvert construction may disturb nearby farmers and workers and prolonged exposure could cause hearing issues for laborers</li> <li>- Gender/social exclusion risks</li> </ul>	<ul style="list-style-type: none"> <li>- OHS</li> <li>- SMP</li> <li>- GBV Action Plan</li> </ul>
	No ESIA is required.	
		<b>This project was classified as Category C- Moderate</b>
	No ESIA & full ESMP is required	<b>Simplified ESMP will be needed</b>



## Annex 2: Government Land Ownership Confirmation

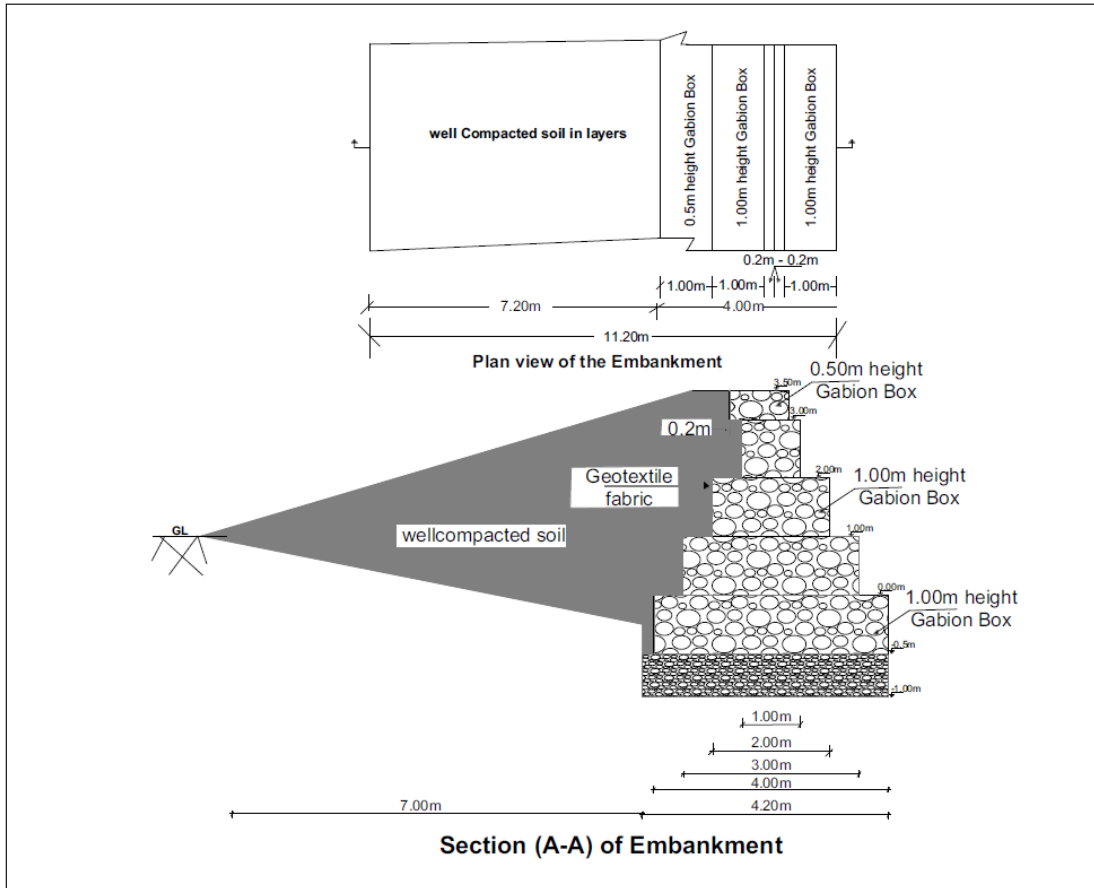
This annex contains the official land ownership confirmation letter issued by the Jubba Land Ministry of Agriculture and Irrigation, certifying that the *Jarmalka3 Pipe Canal* listed as Canal No. 1 in the letter and located in Bardere District is situated on public land fully owned and managed by the Jubba Land State Government. The letter confirms that no private land acquisition, claims, or involuntary resettlement are associated with the proposed rehabilitation works, in compliance with *World Bank ESS5*.



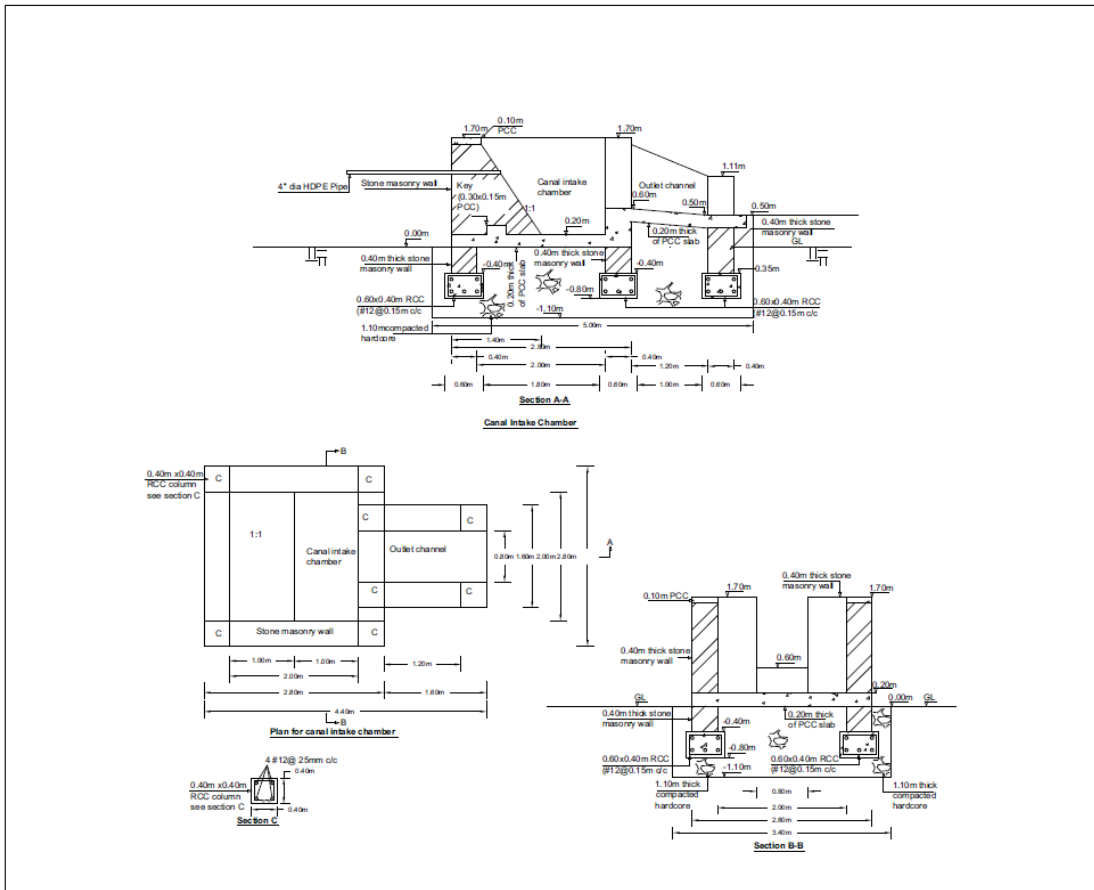
Land Ownership  
Bardere River Emban

# Annex 3: Drawings & Sections Layouts

## Annex 3A: Drawings & Sections Layouts – Bandar River Embankment

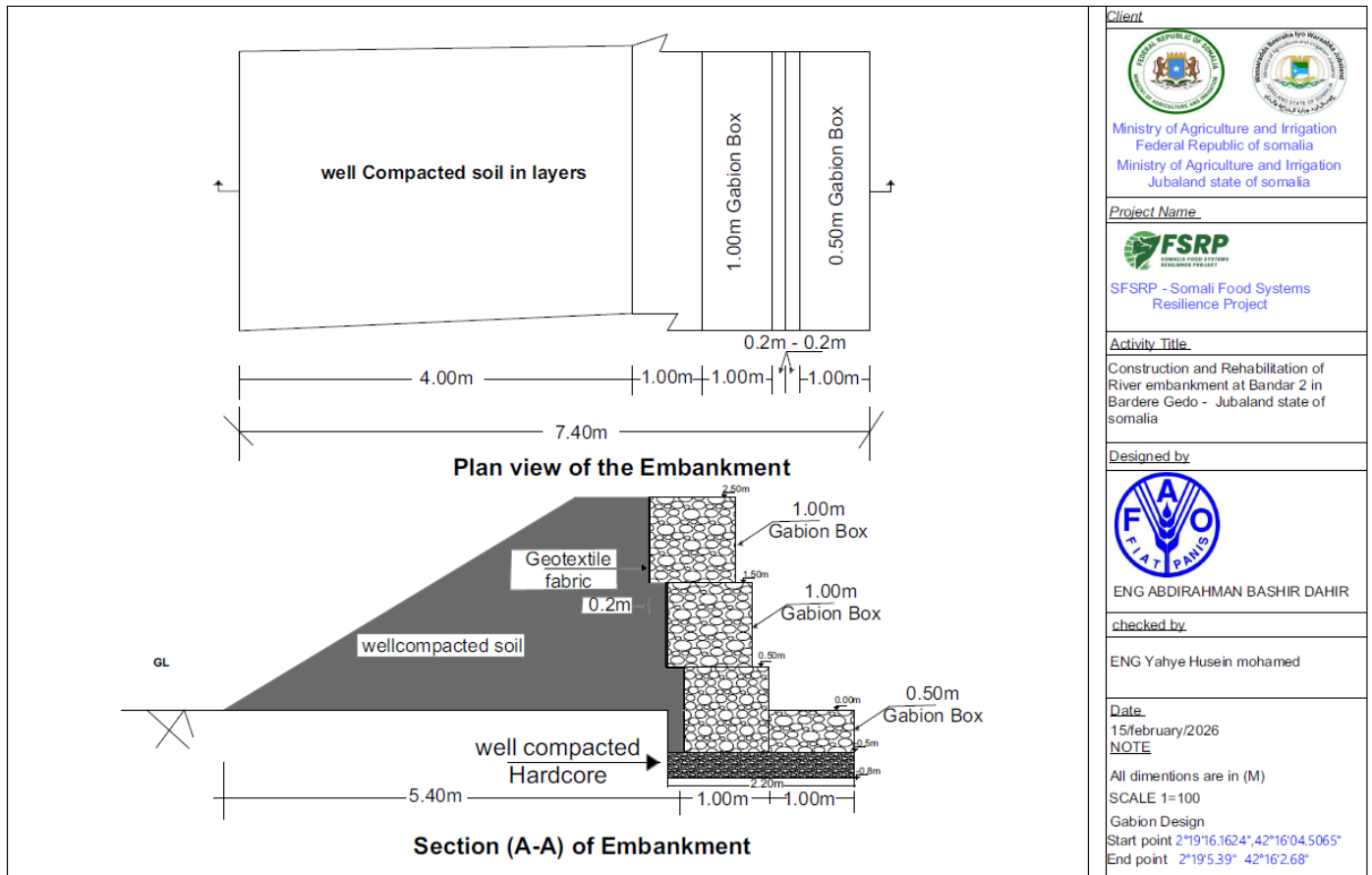


<b>Client</b>
<p>Ministry of Agriculture and Irrigation Federal Republic of Somalia Ministry of Agriculture and Irrigation Jubaland state of Somalia</p>
<b>Project Name</b>
<p>SFSRP - Somali Food Systems Resilience Project</p>
<b>Activity Title</b>
Construction and Rehabilitation of River embankment at Bandar1 in Bardere Gedo - Jubaland state of Somalia
<b>Designed by</b>
<p>ENG ABDIRAHMAN BASHIR DAHIR</p>
<b>checked by</b>
ENG Yahye Husein mohamed
<b>Date</b>
15/february/2026
<b>NOTE</b>
All dimensions are in (M) SCALE 1=100 Gabion Design Start point 2°20'15.4088", 42°16'47.7967" End point 2°20'11.5184", 42°16'43.5138"

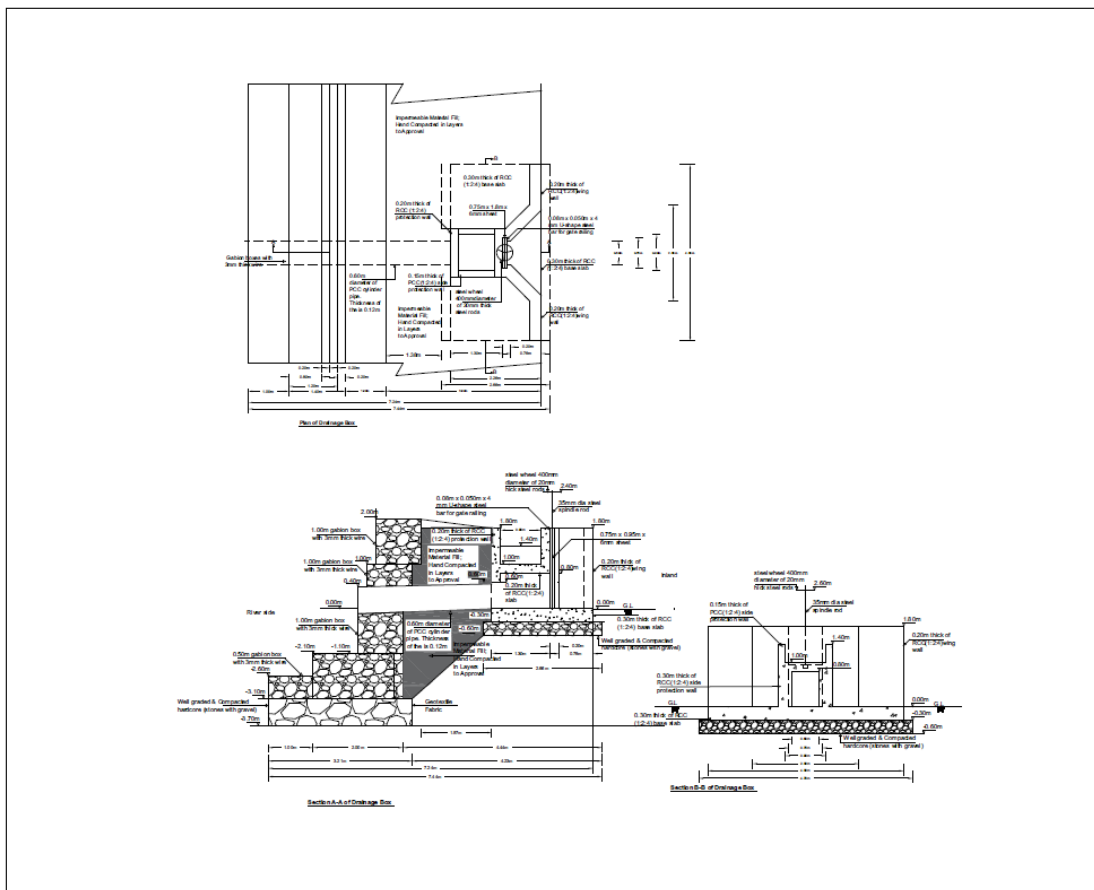


<b>Client</b>
<p>Ministry of Agriculture and Irrigation Federal Republic of Somalia Ministry of Agriculture and Irrigation Jubaland state of Somalia</p>
<b>Project Name</b>
<p>SFSRP - Somali Food Systems Resilience Project</p>
<b>Activity Title</b>
Construction and Rehabilitation of River embankment at Bandar1 in Bardere Gedo - Jubaland state of Somalia
<b>Designed by</b>
<p>ENG ABDIRAHMAN BASHIR DAHIR</p>
<b>checked by</b>
ENG Yahye Husein mohamed
<b>Date</b>
15/february/2026
<b>NOTE</b>
All dimensions are in (M) SCALE 1=100 Chamber Design

# Annex 3B: Drawings & Sections Layouts – Bandar 2 River Embankment

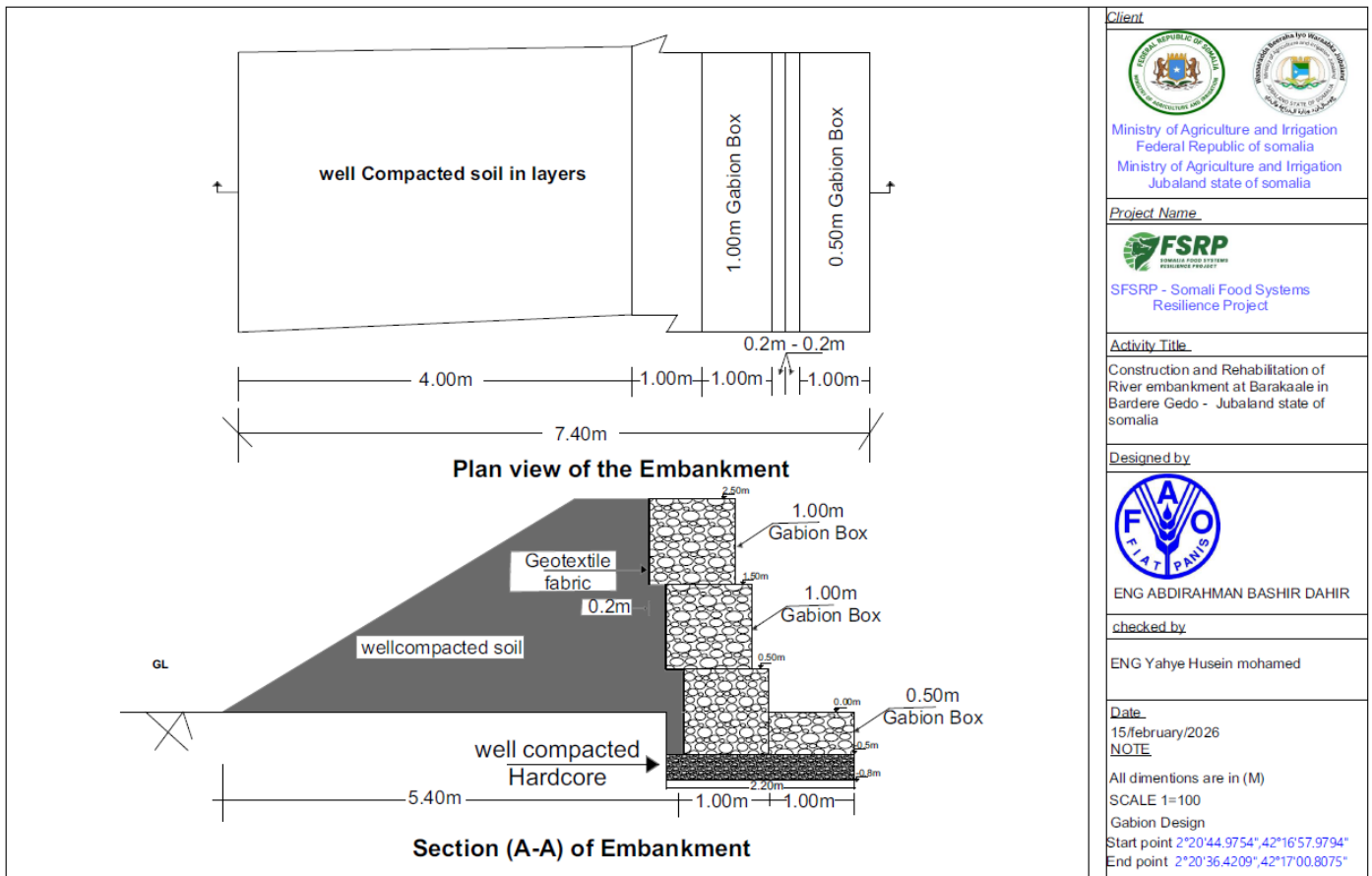


<b>Client</b>	<p>Ministry of Agriculture and Irrigation Federal Republic of Somalia Ministry of Agriculture and Irrigation Jubaland state of Somalia</p>
<b>Project Name</b>	<p>SFSRP - Somali Food Systems Resilience Project</p>
<b>Activity Title</b>	Construction and Rehabilitation of River embankment at Bandar 2 in Bardere Gedo - Jubaland state of Somalia
<b>Designed by</b>	<p>ENG ABDIRAHMAN BASHIR DAHIR</p>
<b>checked by</b>	ENG Yahye Husein mohamed
<b>Date</b>	15/february/2026
<b>NOTE</b>	All dimensions are in (M) SCALE 1=100 Gabion Design Start point 2°19'16.1624", 42°16'04.5065" End point 2°19'5.39" 42°16'2.68"

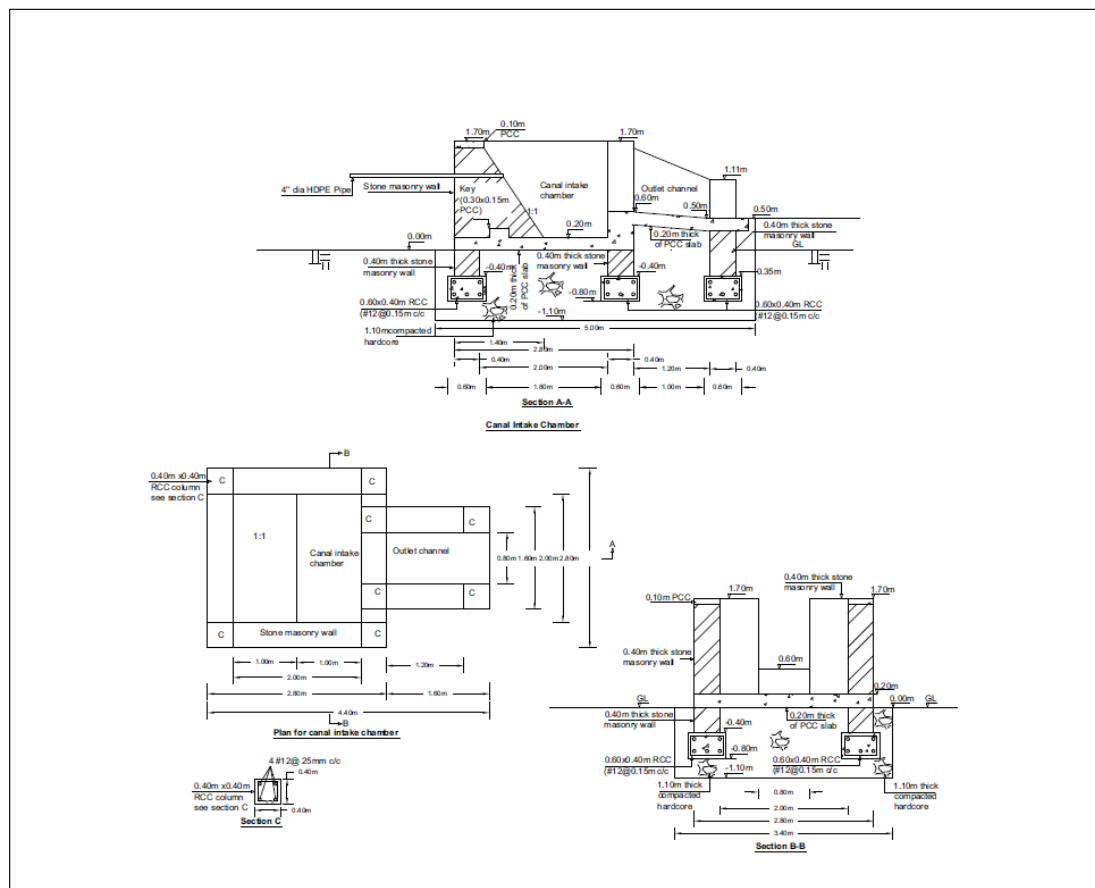


<b>Client</b>	<p>Ministry of Agriculture and Irrigation Federal Republic of Somalia Ministry of Agriculture and Irrigation Jubaland state of Somalia</p>
<b>Project Name</b>	<p>SFSRP - Somali Food Systems Resilience Project</p>
<b>Activity Title</b>	Construction and Rehabilitation of River embankment at Bandar 2 in Bardere Gedo - Jubaland state of Somalia
<b>Designed by</b>	<p>ENG ABDIRAHMAN BASHIR DAHIR</p>
<b>checked by</b>	ENG Yahye Husein mohamed
<b>Date</b>	15/february/2026
<b>NOTE</b>	All dimensions are in (M) SCALE 1=100 Drainage Design

# Annex 3C: Drawings & Sections Layouts – Barakaale River Embankment

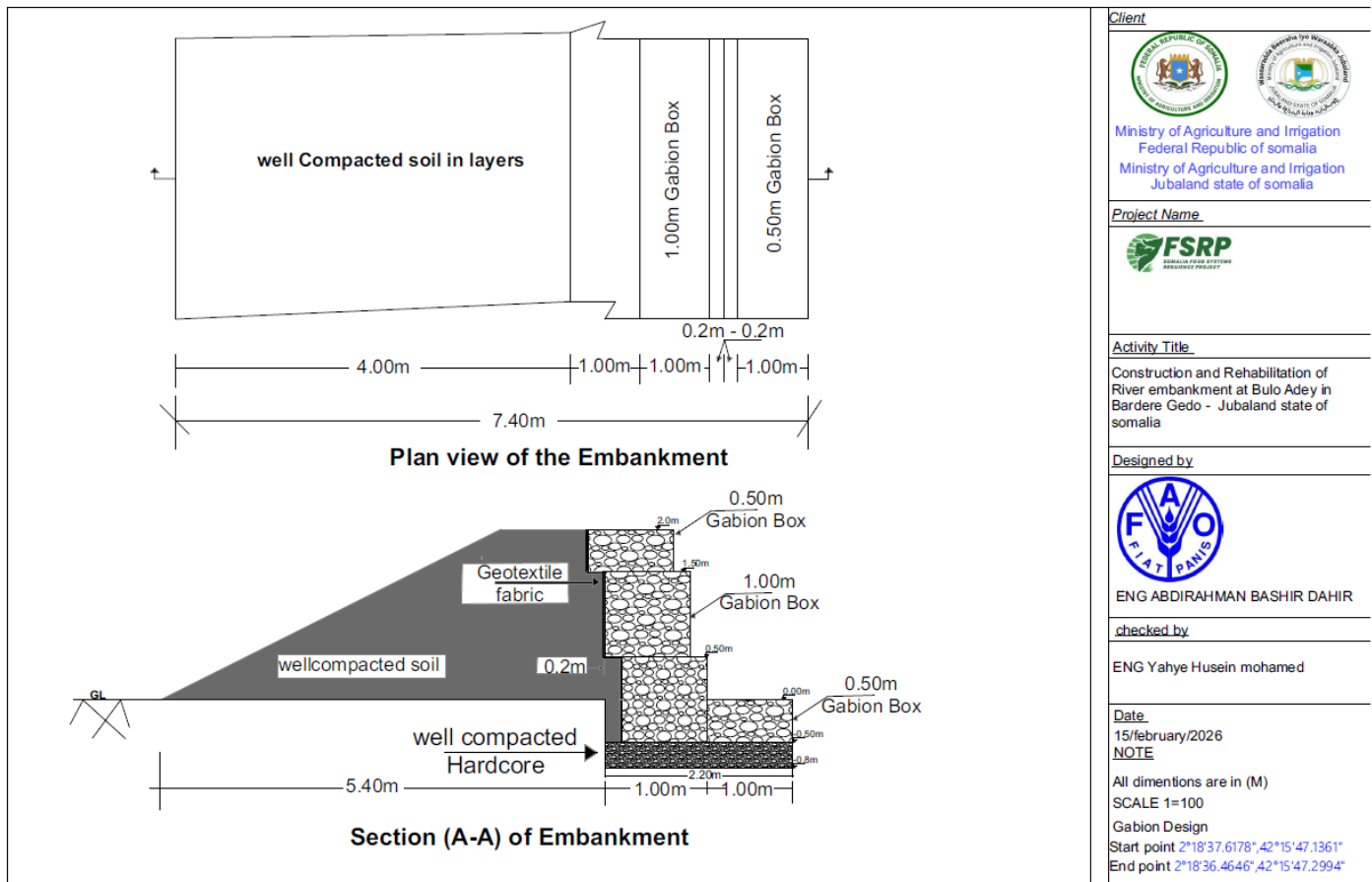


<b>Client</b>
<p>Ministry of Agriculture and Irrigation Federal Republic of Somalia Ministry of Agriculture and Irrigation Jubaland state of Somalia</p>
<b>Project Name</b>
<p>SFSRP - Somali Food Systems Resilience Project</p>
<b>Activity Title</b>
Construction and Rehabilitation of River embankment at Barakaale in Bardere Gedo - Jubaland state of Somalia
<b>Designed by</b>
<p>ENG ABDIRAHMAN BASHIR DAHIR</p>
<b>checked by</b>
ENG Yahye Husein mohamed
<b>Date</b>
15/february/2026
<b>NOTE</b>
All dimensions are in (M) SCALE 1=100 Gabion Design Start point 2°20'44.9754", 42°16'57.9794" End point 2°20'36.4209", 42°17'00.8075"

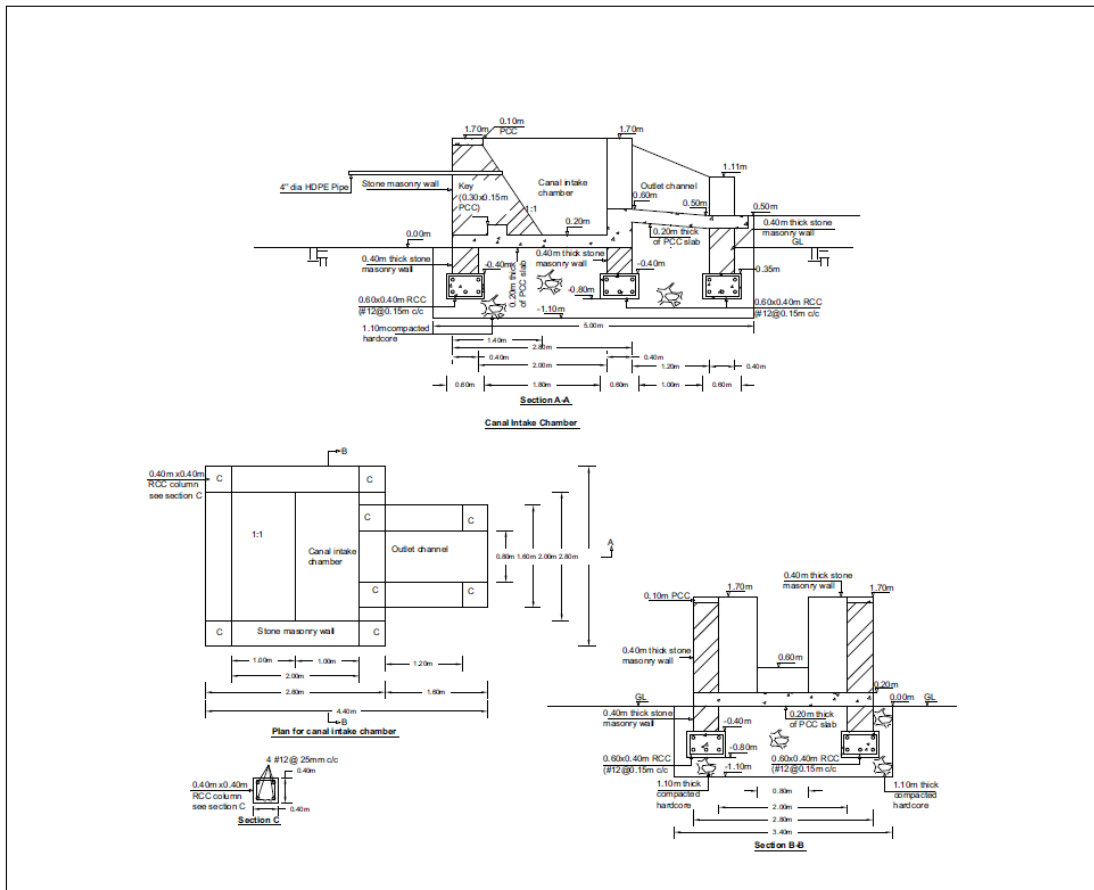


<b>Client</b>
<p>Ministry of Agriculture and Irrigation Federal Republic of Somalia Ministry of Agriculture and Irrigation Jubaland state of Somalia</p>
<b>Project Name</b>
<p>SFSRP - Somali Food Systems Resilience Project</p>
<b>Activity Title</b>
Construction and Rehabilitation of River embankment at Barakaale in Bardere Gedo - Jubaland state of Somalia
<b>Designed by</b>
<p>ENG ABDIRAHMAN BASHIR DAHIR</p>
<b>checked by</b>
ENG Yahye Husein mohamed
<b>Date</b>
15/february/2026
<b>NOTE</b>
All dimensions are in (M) SCALE 1=100 Chamber Design

# Annex 3D: Drawings & Sections Layouts – Buula Adey River Embankment



<b>Client</b>	<p>Ministry of Agriculture and Irrigation Federal Republic of Somalia Ministry of Agriculture and Irrigation Jubaland state of Somalia</p>
<b>Project Name</b>	<p>FSRP SOMALI FOOD SYSTEMS RESILIENCE PROJECT</p>
<b>Activity Title</b>	Construction and Rehabilitation of River embankment at Bulo Adey in Bardere Gedo - Jubaland state of Somalia
<b>Designed by</b>	<p>ENG ABDIRAHMAN BASHIR DAHIR</p>
<b>checked by</b>	ENG Yahye Husein mohamed
<b>Date</b>	15/february/2026
<b>NOTE</b>	All dimentions are in (M) SCALE 1=100 Gabion Design Start point 2°18'37.6178",42°15'47.1361" End point 2°18'36.4646",42°15'47.2994"



<b>Client</b>	<p>Ministry of Agriculture and Irrigation Federal Republic of Somalia Ministry of Agriculture and Irrigation Jubaland state of Somalia</p>
<b>Project Name</b>	<p>FSRP - Somali Food Systems Resilience Project</p>
<b>Activity Title</b>	Construction and Rehabilitation of River embankment at Bulo Adey in Bardere Gedo - Jubaland state of Somalia
<b>Designed by</b>	<p>ENG ABDIRAHMAN BASHIR DAHIR</p>
<b>checked by</b>	ENG Yahye Husein mohamed
<b>Date</b>	15/february/2026
<b>NOTE</b>	All dimentions are in (M) SCALE 1=100 Chamber Design



## Annex 4: Stakeholder Consultation Meeting Minutes and Attendances

### Annex 4a: Ministry Consultation & Meeting Minutes

1. **Consultation Date:** 10/10/2025
2. **Sub-project Types:** Canals, Water-catchments & River embankments rehabilitation activities
3. **Specific Name of the Project:** FSRP Government Consultation
4. **Place of Consultation: State:** Jubaland, **Region:** Lower Jubba, **District:** Bardere, **Village** (Specific site): Office of the MoAI-JS

**Purpose of Consultation:** The consultation was organized to engage the Jubaland State Ministry of Agriculture and Irrigation (MoAI) and the Bardere District Administration regarding the planned river embankment and canal rehabilitation activities under the Somalia Food Systems Resilience Program (SFSRP).

The meeting aimed to:

- Discuss the current condition and prioritization of proposed rehabilitation sites, including irrigation pipelines, water-catchments, and river embankments, and gather input on any additions or exclusions.
- Identify institutional and community concerns, potential environmental and social risks, and appropriate mitigation measures in line with the World Bank Environmental and Social Standards (ESS).
- Confirm the needs, priorities, and potential contributions of regional and district authorities, as well as community-level support.
- Inform stakeholders about upcoming technical, environmental, and social data collection activities required for the ESMP, including information on affected households, command areas, pipeline conditions, breakage points, flood exposure, and availability of local construction materials.
- Discuss key data requirements for irrigation systems (current and potential command areas, number of beneficiary farmers, preferred pipeline type and diameter, condition of existing pipes, valves, chambers, and road crossings) and for river embankments (breached sections, overflow points, and erosion-prone areas), in alignment with MoAI-JS and district priorities.

5. **Consultation Time Started** 9:15

6. **Consultation Method:** Interviewing and discussion (group discussions and individual interviews)

#### 7. Consultation Agendas/ Issues:

- Coordination mechanisms among Jubaland State MoAI, FAO/S-FSRP technical team, and future contractors to facilitate site access and smooth implementation.
- Rising river water levels during peak seasons and continued deterioration of weak embankment sections along the Jubba River.
- Community and government preferences for durable rehabilitation solutions, including pressurized HDPE pipeline systems, stone pitching, gabions, or compacted earth with vegetation cover, depending on site conditions and material availability.
- The importance of rehabilitating and upgrading intake structures to ensure reliable irrigation access, particularly after embankment elevation works.
- The need for proper drainage outlets to prevent waterlogging and stagnant water near agricultural lands.
- The importance of incorporating an elevated water tank at the highest elevation point along the prioritized pipeline canals to enable gravity-fed irrigation for downstream farmers.

#### 8. Additional Issues Raised During Consultation

- Several irrigation pipelines and canals within the district were reported to be in poor or deteriorated condition.
- Multiple breached and weak sections were observed along river embankments, contributing to overflow and localized flooding.

- Both government representatives and community leaders emphasized the urgency of rehabilitating irrigation infrastructure to improve agricultural productivity and strengthen flood protection.

#### 9. Agreed Agendas/ Issues

- The Jubaland State MoAI and the Bardere District Administration expressed full support for the rehabilitation of irrigation systems, water-catchments, and river embankments under the S-FSRP.
- Local authorities committed to providing security support and coordination during assessment, construction, and post-construction phases.
- It was agreed to incorporate an elevated water tank into the pipeline canal design to improve water distribution and equity for downstream users.
- All stakeholders agreed to cooperate fully with FAO/S-FSRP during implementation.
- The district administration committed to supporting communities in operation and maintenance (O&M) arrangements after rehabilitation.

#### 10. Disagreed Agenda/issues including Reasons for Disagreement

- No major disagreements recorded

#### 11. Consultation Ended Time: 15:30

#### Consultation Facilitators' Name & Role:

#### Signature:

1. Shuaib Muse Cidhere, FAO Civil Engineer -----
2. Abdi Shugri Abdullahi, MoAI of JS, Community mobilizer -----

Table 12: Summary MoAI Meeting Minutes

S/No	Issue	Name of Participant Who Raised It	Response	Name / Institution Where Response Came From
1	Institutional coordination among Jubaland State MoAI, Bardere District Administration, FAO/FSRP, and contractors	Mohamed Mursal Hersi	Full institutional coordination agreed	FAO/FSRP; Jubaland State MoAI
2	Poor condition of irrigation pipelines, water-catchments, and river embankments, including rising river levels and weak sections	Abdirashid Abdi	Rehabilitation and flood protection measures supported	Jubaland State MoAI
3	Need for durable, site-specific rehabilitation solutions for canals and embankments	Ismael Ali Ahmed	Site-appropriate solutions to be adopted	FAO/FSRP Technical Team
4	Need for intake structures, drainage outlets, and an elevated water tank to improve irrigation reliability	Mohamed Ibrahim Abdi	Intake, drainage, and water tank to be included in design	FAO/FSRP Technical Team

5	Security, implementation support, and post-construction operation and maintenance (O&M)	Shuaib Muse Cidhere	Security, cooperation, and O&M support confirmed	Bardere District Administration; Jubaland State MoAI
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**Participants List/Attendance:**



Food and Agriculture Organization of the United Nations

Date: 11/10/2025

Table 3: Consultation Attendants/ Participants: MoAI of Jubaland Meeting

No.	Name of Participants	Stakeholder (community/government)	Age	Sex	Position / Role	Mobil phone No	Signature/Thumb
1	Mohamed Mursal Hersi	MOAI		M	DG	615822169	
2	Abdirazak Abdi	MOAI		M	Admin	0617354864	
3	Yahye Hussein	FAO		M	Eng	0615942586	
4	Shuaib Muse Cidhere	FAO		M	Eng	0616032842	
5	Abdi Hirci Guraal	MOAI		M	Procure	0615105447	
6	Ismail Abi Mohamed	MOAI		M	social	0613130866	
7	Muhamad Ibrahim Ali	MOAI-		M	M&E	613020201	
8	Abdrahaman Bashir Dalin	FAO		M	Quality Assur	0614-855562	

## Annex 4b: Community Consultation Minutes & Attendances – Bandar, Barakaale, Bulo Adey & Sirinley Community

**Consultation Date:** 19/11/2025

**Sub-project Type:** River Embankment Rehabilitation

**Specific Name of the Project:** Rehabilitation of Bandar 1&2, Buulo Adey, Sirinley and Barakaale River Embankments

**Place of Consultation: State:** Jubba land, **Region:** Lower Jubba, **District:** Bardere, **Village (Specific site):** Bardere

**Purpose of Consultation:**

The consultation was conducted to engage the Bardere community and riverbank user representatives regarding the planned rehabilitation of Bandar 1, Bandar 2, Bulo Adey, Sarinley 1, and Barakaale River embankments under the Somalia Food Systems Resilience Project (S-FSRP). The meeting aimed to:

- Discuss the current condition of the existing embankments and recurrent flood impacts along the Juba River.
- Identify priority breakage and overflow points and structural weaknesses affecting settlements and farmland.
- Present the proposed soil embankment, stone pitching, gabion stabilization, drainage inlet structures, and intake chamber designs.
- Identify potential environmental and social risks and mitigation measures in line with the World Bank Environmental and Social Framework (ESF).
- Confirm community priorities, concerns, and support for the proposed works.
- Ensure inclusive participation of elders, women, youth, farmers, pastoralists, IDPs, and vulnerable households in accordance with the Stakeholder Engagement Plan (SEP).

### Consultation Method

- The consultation was conducted through participatory discussions, including group meetings and individual interviews with elders, women, youth, IDPs, agro-pastoralists, farmers, and Water User Committee representatives.

### Consultation Time Started: 11:30

Table 13: Key Issues Raised, Responses, and Agreements

Issues Raised	Raised By	Answer / Agreement Provided	Responded By (Officer / Institution)
Recurrent embankment breaches and overflow causing flooding of farms and residential areas at Bandar 1, Bandar 2, Barakaale, Sarinley 1, and Bulo Adey.	Elders, farmers	Confirmed that approximately 185m (Bandar 1), 330m (Bandar 2), 300m (Barakaale), 30m (Sarinley 1), and 50m (Bulo Adey) will be rehabilitated using compacted soil embankments with gabion stabilization and geotextile reinforcement at breakage sections to prevent erosion and structural failure.	FAO Technical Team
Expansion of sand domes along riverine farmland reducing cultivable hectares and blocking irrigation pathways.	Farmers, agro-pastoralists	Explained that embankment stabilization and controlled drainage structures will reduce uncontrolled flood deposition and help protect remaining productive farmland from further sand encroachment.	FAO Engineers

Concern that higher embankment sections may restrict direct river water access for irrigation.	Farmers, irrigation users	Agreed to incorporate intake chambers and controlled access points to ensure regulated and safe river water abstraction while maintaining flood protection integrity.	FAO Engineers
Temporary disturbance to farmland access and irrigation routes during construction.	Farmers	Confirmed that the contractor will coordinate with elders and land users to maintain access routes, provide advance notice of works, and minimize disruption.	PIU
Safety risks during excavation, gabion installation, and operation of heavy machinery.	Women, elders	Confirmed that safety signage, fencing of work zones, controlled access, PPE use, and community awareness sessions will be implemented in line with ESS4.	PIU / FAO Environmental Safeguards Officers
Economic movement constraints due to the collapse of the Bardere main bridge since the 2021 El Niño floods, affecting material transport and market access.	Community leaders, traders	Acknowledged logistical challenges and confirmed that construction scheduling and material delivery planning will consider alternative routes and coordination with district authorities to minimize disruption.	PIU / FAO
Prolonged drought leading to livestock migration and increased vulnerability of agro-pastoral households.	Pastoralists, elders	Confirmed that the embankment rehabilitation is part of broader resilience measures under S-FSRP to protect agricultural land and reduce climate vulnerability.	FAO / PIU
Request for prioritization of local labor and fair recruitment.	Youth representatives	Confirmed that local labor will be prioritized in line with the LMP and that recruitment will follow transparent procedures with clear communication of opportunities.	PIU
Need for clear and accessible GM channels, including confidential reporting.	Women, youth, IDPs	Confirmed that GM channels including hotline numbers, focal persons, and complaint boxes will be disclosed prior to construction. Confidential SEA/SH reporting mechanisms will also be operational.	FAO / PIU

Table 14: Buulo Guduud Community Meeting Summary

No	District	Location of Meeting	Date of Meeting	No. of Elders	No. of Women	No. of Men	Main Issues Raised	Agreed Actions	Names of Attendees
1	Bardere	Bardere	18-19/11/2025	8	5	17	Recurrent flooding; embankment erosion; access to river water;	Full support for gabion reinforcement; intake chamber inclusion; local labor	(Full attendance sheet attached in Annex)

							construction safety; labor opportunities	prioritization; GM operationalization ; coordination with farmland owners	
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**11. Disagreed Agenda/issues including Reasons for**

- No major disagreements were recorded. Some concerns regarding excavation scheduling and water disruptions were raised, but these were addressed by the commitment to phased works and advance community notifications.

**12. Consultation Ended Time: 15:05**

**Consultation Facilitators' Name & Role:**

**Signature:**


- Shuaib Muse Cidhere, Civil Engineer
- Abdi-Shugri Abdullahi, Community Mobilizer

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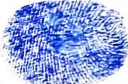
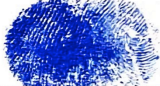

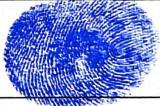
**Consulted Participant List/Attendance: Bandar**

*Bender area Embankment Community Attendance*

*Date: 19-11-2025*



Food and Agriculture Organization of the United Nations

1	Ibraahim Nuur Aaden	Community	55	M	Elder	0615373368	
3	Caladifatax Max'ed Aaden Max'ed	Community	42	M	Elder	061529827	
3	Abdi Bilow Cali	Community	71	M	Elder	0615491698	
24	Max'ed Aaden Max'ed	Community	61	M	Elder	0612357470	
25	Max'und Cali Max'und	Community	32	M	farmer	0615101654	

**Consulted Participant List/Attendance: Sirinley & Barakaale**

*Sirinley River-embankment Community*



Food and Agriculture Organization of the United Nations

Date: 18-11-2025

1	Barre Sh. Adan Buale	Community	61	M	Elder	0619408183	
2	Aden Xusseen Max'ed	Community	72	M	Elder	0615032807	
3	Max'ed Yuusuf Ibrahm	Community	25	M	Farmer	0611223686	
4	Axmed Cabdi Sh. Axmed	Community	41	M	Farmer	061302466	
5	Ibraahm Bilow Shookhow	Community	52	M	Farmer	0615706368	
6	Mahaad Yuusuf Ibrahm	Community	20	M	Farmer	0619810834	
7	Yuusuf Ibraahm Xusseen	Community	35	M	Farmer	0615812613	
8	Aden Axmed Nuur	Community	31	M	Farmer	6162630	

9	C/Karim Aden Xusseen	Community	25	M	Farmer	0613309063	
10	Max'ed Cabdi Jibril	Community	48	M	Farmer	0618563433	
11	Dhagame Cabdi Asman	Community	49	M	Farmer	0619345011	
12	Xusseen Cabdile Warsame	Community	50	M	Farmer	06193330831	
13	Dalmar Shine Ada	Community	31	M	Farmer	0615953616	

**Consulted Participant List/Attendance: Buulo Adey Community**

*Buulo-Adey Community*



Food and Agriculture Organization of the United Nations

Date: 19-11-2025

1	Max'ed Yaxye Buale	Community	51	M	Chair Elder	0619043297	
2	Xusseen Xusseen Gb	Community	49	M	Chair Elder	0613406094	
3	Bashir Xusseen Cabdi	Communa	52	M	Farmer	0618668723	
4	Cabdullah Macalin Achi	Community	43	M	Farmer	061200785	

## Annex 6: Grievance Redress Mechanism (GM) Tools and Templates

This annex summary presents the grievance process, reporting channels, and key contacts for the five River Embankment rehabilitation subprojects under S-FSRP. Stakeholders may submit complaints at any time, anonymously or openly. The GM flows these steps:

- ✦ **Step 1 – Submit a Complaint (Any Channel):** Complaints may be submitted verbally or in writing through community leaders, WUC focal persons, the contractor, FAO field officers, the State PIU, or the toll-free numbers. SEA/SH cases bypass local structures and go directly to the PIU GBV Focal Point or FAO/OIG.
- ✦ **Step 2 – Register and Acknowledge:** The Jubba Land State PIU registers all complaints and acknowledges receipt (normally within 48 hours). Initial screening determines whether the issue can be resolved immediately or requires escalation.
- ✦ **Step 3 – Assess and Resolve:** The State PIU, FAO, and contractor collaborate to investigate and resolve issues—typically within 7–14 days. Technical issues may be escalated to NPCU if needed.
- ✦ **Step 4 – Close or Escalate:** If a resolution is accepted, the case is closed. If the complainant is not satisfied, the grievance may be escalated to NPCU or FAO Compliance, and ultimately to FAO OIG or the World Bank’s GRS for serious cases.

Table 15: GM Contact List (Project, State, National & FAO/OIG)

Level	Contact Person / Office	Contact Details	Notes
Project Level	WUC / Community Focal Points	Local contacts	First point of intake
State PIU – Jubba Land MoAI	Social Safeguards & GBV Team	<b>Email:</b> <a href="mailto:gbv@fsrp.gov.so">/gbv@fsrp.gov.so</a>	State-level GM & GBV focal points
National PCU – MoAI-FGS	National FSRP GM Secretariat	<b>Hotlines:</b> 570 / 540 (toll-free)	National escalation channels
FAO Compliance Unit	Ibrahim Bare, AAP & Compliance Officer	<a href="mailto:ibrahim.bare@fao.org">ibrahim.bare@fao.org</a>	Responsible for FAO Somalia project accountability
	Head of Compliance, Risk Management, Accountability	<a href="mailto:Bakhta.Boualam@fao.org">Bakhta.Boualam@fao.org</a>	Escalation for sensitive cases
FAO Somalia Complaint Hotline	FAO Feedback Hotline	+252 633 550 120	Phone/SMS option
FAO OIG – Independent Oversight	Office of the Inspector General	<b>Online:</b> <a href="http://fao.ethicspoint.com">fao.ethicspoint.com</a> <b>Email:</b> <a href="mailto:Investigations-hotline@fao.org">Investigations-hotline@fao.org</a> / <a href="mailto:inspector-general-office@fao.org">inspector-general-office@fao.org</a> <b>Mail:</b> FAO OIG, Rome	Serious, confidential, or unresolved cases

Table 16: GM Intake/register

GM Code	Date Received	Complainant (Optional)	Location	Issue Summary	Category	Action Required	Responsible Unit	Status	Date Closed	Notes

## **SEA/SH Survivor-Centered Referral Pathway**

This pathway ensures survivors can report safely and confidentially, without fear of retaliation or exposure. No personal details or written statements are required.

### **1. Safe and Confidential Reporting Options**

Survivors may report directly to:

- State PIU GBV Specialist (confidential inbox): [/gbv@fsrp.gov.so](mailto:/gbv@fsrp.gov.so)
- FAO Compliance Unit: [Ibrahim.bare@fao.org](mailto:Ibrahim.bare@fao.org)
- FAO OIG (independent and confidential): [fao.ethicspoint.com](mailto:fao.ethicspoint.com)
- FAO OIG email: [Investigations-hotline@fao.org](mailto:Investigations-hotline@fao.org)

*Note:* SEA/SH cases **must not** be reported through community leaders or recorded in public registers.

### **2. Immediate Safety and Support**

The GBV focal point ensures:

- Immediate safety assessment
- Confidential conversation
- No personal identification recorded
- Referral to local service providers (health, psychosocial, case management)
- SEA/SH cases are not mediated with alleged perpetrators and are kept separate from the general GM.

### **3. Coordination and Follow-Up**

FAO and the State PIU coordinate discreetly to ensure the survivor receives assistance.

No project staff investigate SEA/SH cases — they are treated strictly through survivor support and professional services.

### **4. Accountability Measures**

The contractor must:

- Remove any implicated workers
- Retrain all personnel on the Code of Conduct
- Reinforce SEA/SH prevention during toolbox meetings
- Immediately remove any implicated workers from the site pending investigation.
- Apply contractual sanctions, including termination, in line with the Code of Conduct and national law.
- Report SEA/SH allegations promptly through confidential channels to the PIU/GBV focal point.
- Ensure non-retaliation against complainants and witnesses.

Jubba Land MoAI State meeting Photo @ Bardere District



Community Consultation photos @ Bardere District, Gedo Region Somalia

Name of the Community	Photo
Bandar	

Sirinley & Barakaale



Buula Adey

