SOMALIA FOOD SYSTEMS RESILIENCE PROJECT (FSRP)

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

Activity Title:

Establishment of Demonstration Farm in Qardho District, Puntland

For:

Food Systems Resilience Project (FSRP) – Puntland Component

Date: February 2026

Project Coordinates:

9°33'34.4"N, 49°09'25.3"E

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LIST OF ABBREVIATIONS

Abbreviation	Meaning
EIA	Environmental Impact Assessment
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standard(s)
FSRP / S-FSRP	Somalia Food Systems Resilience Project
GBV	Gender-Based Violence
GM	Grievance Mechanism
IDP	Internally Displaced Person
MoAI	Ministry of Agriculture and Irrigation
MoERCC	Ministry of Environment, Range and Climate Change
MoLAH	Ministry of Livestock and Animal Husbandry
NAEP	National Agricultural Extension Policy
OHS	Occupational Health and Safety
PCU	ProjectICoordination Unit
PPE	Personal Protective Equipment
PV	Photovoltaic
SEA/SH	Sexual Exploitation and Abuse / Sexual Harassment

1. Executive Summary

The Qardho Demonstration Farm is a subproject of the Somalia Food Systems Resilience Project (S-FSRP), financed by the World Bank to strengthen food systems, promote climate-smart agriculture, and improve livelihoods across Somalia. The farm will be established on a 500 m × 500 m plot of public land on the outskirts of Qardho town, in Qardho District, Bari Region. The land is officially registered under Qardho District Administration and has been formally allocated for use as a government demonstration farm. The site is currently open pasture/rangeland with sparse shrubs, no houses or public facilities within 500 metres, and no existing private structures or livelihood assets inside the project footprint.

The subproject will convert this parcel into a fully equipped agricultural learning and production hub. Planned components include perimeter fencing and windbreaks; a main gate and security guard facility with washrooms; an administrative and training block; staff and extension residential facilities; warehouses and storage units; a machinery and tools workshop; orchard and field plots for vegetables and cereals; greenhouse production areas; a fruit tree nursery; composting and waste management areas; a borehole and water storage; irrigation systems (primarily drip and furrow); a solar photovoltaic (PV) power system; a mosque; a cafeteria; and basic meteorological and information display facilities. Together, these facilities will provide a platform for training, technology testing, and dissemination of climate-smart agricultural practices for farmers, youth, women, and extension officers.

Baseline assessments show that the site is largely flat with sandy-loam soils and gentle natural drainage. There are no surface water bodies or critical habitats within or immediately adjacent to the site, and no known physical cultural resources. The wider Qardho area is semi-arid and drought-prone, with livelihoods heavily dependent on agro-pastoralism, small-scale farming, petty trade, and remittances. Vulnerable groups, including IDPs, poor farmers, women-headed households, and unemployed youth, are present in the district and face persistent challenges related to water scarcity, low productivity, limited access to quality inputs, and weak extension services.

Environmental and social screening conducted under the S-FSRP Environmental and Social Management Framework (ESMF) classifies the Qardho Demonstration Farm as a **Moderate Risk** subproject. The farm is expected to deliver significant positive impacts, including improved agricultural productivity, enhanced access to quality seeds and seedlings, strengthened climate resilience through water-efficient irrigation and soil conservation practices, expanded training and employment opportunities for youth and women, and better collaboration between government institutions and communities on sustainable land and water management.

At the same time, the subproject may generate adverse impacts if not properly managed. During construction, key risks include vegetation clearance, soil disturbance and minor erosion, dust and noise emissions, generation of construction waste, small risks of pollution from fuels and materials, occupational health and safety (OHS) risks for workers, and community health and safety risks related to construction traffic and open excavations. During operation, potential impacts include over-abstraction of groundwater for irrigation, localized waterlogging or salinization from poor irrigation and drainage, mismanagement of fertilizers and agro-chemicals (if used), improper handling of solid and organic waste, ongoing OHS risks for farm staff, traffic and visitor safety concerns, and potential exclusion of vulnerable groups from project benefits.

To manage the above risks and impacts, the project will apply a combination of design measures, contractor controls, and operational procedures. During construction, the contractor will implement strong OHS and community safety measures, including site fencing and controlled access, PPE use, toolbox talks, safe equipment operation, and emergency preparedness, alongside traffic management, dust suppression, noise control, and good housekeeping. Construction waste will be segregated and disposed of at approved sites, with fuels, oils, and chemicals stored in secure, bunded areas and spill response measures in place. During operation, environmental and social risks will be reduced through routine maintenance of drainage and water systems; efficient water use and soil/land conservation measures; safe handling and storage of agro-inputs (where applicable); and proper management of solid and liquid wastes, including designated collection points and safe disposal arrangements. Stakeholder engagement and a functional grievance mechanism will be maintained throughout implementation to address community concerns promptly, prevent conflicts, and ensure continuous improvement of ESMP performance.

This Environmental and Social Management Plan (ESMP) has been prepared to identify and manage these risks in line with the S-FSRP ESMF, the World Bank Environmental and Social Framework (ESF), and relevant national and Puntland policies and laws. It identifies the applicable Environmental and Social Standards (ESS1, ESS2, ESS3, ESS4, ESS5, ESS6, ESS8 and ESS10), assesses the anticipated risks and impacts, and sets out a detailed mitigation, monitoring, and reporting framework for both construction and operation. The ESMP defines institutional roles for the FSRP ProjectICoordination Unit (PCU), Ministry of Agriculture and Irrigation (MoAI), Ministry of Environment, Range and Climate Change (MoERCC), Qardho District Administration, the construction contractor, farm management, and community representatives. It also includes a capacity building plan, an ESMP implementation budget, and a functioning Grievance Mechanism (GM). The report is fully aligned with the overall FSRP environmental and social framework and safeguard instruments.

Stakeholder consultations with Qardho District Local Government, community elders, farmers, women, youth, and representatives of vulnerable groups confirmed strong support for the demonstration farm. Stakeholders emphasized the importance of clear land documentation and boundary demarcation, sustainable management of groundwater resources, appropriate selection of crops and technologies suited to local conditions, robust management and maintenance of the farm, and inclusive access to training and benefits. Their views have been incorporated into the project design and this ESMP, including specific measures to promote inclusive participation, resource efficiency, good construction and operational practices, and transparent grievance handling.

With diligent implementation of this ESMP—particularly regarding OHS, water and soil management, waste management, inclusive stakeholder engagement, and the GM—the Qardho Demonstration Farm is expected to deliver substantial and long-lasting environmental, social, and economic benefits while keeping residual risks at an acceptable level and contributing meaningfully to resilient and sustainable food systems in Puntland.

2. Introduction

2.1 Project Background and Context

The Somalia Food Systems Resilience Project (S-FSRP) is a World Bank–financed programme designed to strengthen the resilience of food production systems, improve agricultural services, and enhance livelihoods across Somalia. The project supports investments that promote climate-smart agriculture, resilient infrastructure, and improved access to markets and services for farmers and pastoralists.

Within this framework, the Qardho Demonstration Farm is being developed as a strategic agricultural learning and innovation hub for Qardho District and the wider Bari Region. The farm will provide a practical platform where farmers, extension officers, youth, and other stakeholders can learn, test, and adopt improved technologies and practices related to irrigated crop production, seed systems, and climate-smart farming.

The subproject will establish a 500 m × 500 m government agricultural demonstration farm on public land located on the outskirts of Qardho town. The land has been formally confirmed as public land under the ownership of Qardho Local Government and allocated for the demonstration farm under S-FSRP see Annex **9.1 (Land ownership/allocation documentation)**.The site is currently open pasture/rangeland with sparse shrubs, no houses within 500 m, and no ongoing farming or residential uses inside the plot.

Qardho is an important agro-pastoral and commercial centre in Puntland. Local livelihoods depend on livestock rearing and trade, small-scale farming in peri-urban areas, petty trade, transport services, shops, restaurants, and remittances. The town also hosts internally displaced persons (IDPs), women-headed households, unemployed youth, and small farming families who face constraints such as water scarcity, low productivity, limited access to quality seed and inputs, weak extension services, and exposure to recurrent drought.

Against this backdrop, the Qardho Demonstration Farm is expected to play a central role in strengthening climate-smart agriculture, efficient water use, and sustainable land management, contributing directly to S-FSRP objectives and to improved food security and resilience in the district.

2.2 Purpose of the Environmental and Social Management Plan (ESMP)

The purpose of this Environmental and Social Management Plan (ESMP) is to provide a structured approach to identifying, assessing, and managing the environmental and social risks and impacts associated with the construction and operation of the Qardho Demonstration Farm.

This ESMP:

- Translates the requirements of the S-FSRP Environmental and Social Management Framework (ESMF) into concrete, site-specific measures for Qardho;
- Ensures compliance with the World Bank Environmental and Social Framework (ESF) and relevant Environmental and Social Standards (ESS);
- Aligns with national and Puntland State environmental, occupational health and safety, and labour regulations, including Environmental Impact Assessment (EIA) provisions;
- Provides a basis for integrating environmental and social requirements into project planning, design, procurement, construction, and operation.

The ESMP serves as a practical tool for government institutions, the Project Coordination Unit (PCU), Qardho Local Government, the contractor, and farm management to:

- Avoid, minimize, or mitigate adverse environmental and social impacts;
- Enhance positive impacts and development benefits;
- Assign clear roles and responsibilities for implementation;
- Establish monitoring, reporting, and supervision arrangements;
- Support budget planning for environmental and social measures.

2.3 Scope of the ESMP

This ESMP covers all activities associated with the Qardho Demonstration Farm from site preparation through construction and operation. It applies to:

- **Site preparation and land development** – clearing of sparse rangeland shrubs, basic leveling, internal access tracks, and initial drainage where needed;
- **Construction works** – perimeter fencing and windbreak establishment; main gate and access; guardhouse with sanitation facilities; administrative and training block; staff/extension residential units; warehouses and storage areas; machinery and tools workshop; mosque; cafeteria; composting and waste management structures; and other support facilities;
- **Production and demonstration units** – fruit tree nursery, greenhouse area, open-field fruit orchard, vegetable and cereal plots, and associated agronomic infrastructure;
- **Water supply and irrigation systems** – drilling and equipping of a borehole, installation of elevated water storage tanks and distribution pipelines, and development of drip and furrow irrigation systems to serve different production blocks;

- **Energy systems and support services** – solar PV system for irrigation pumps, lighting, and buildings; basic meteorological monitoring equipment; and site utilities;
- **Operational activities** – day-to-day farm operations, training sessions and field days, maintenance of infrastructure and equipment, and ongoing environmental and social risk management.

The ESMP is binding on all parties involved in the subproject and applies to both the construction phase and the operational phase.

2.4 Methodology

The ESMP for the Qardho Demonstration Farm has been developed using a combination of the following methods:

- Field visits and site assessments to collect biophysical and socio-economic information, including land use, soil type, vegetation, drainage, access, proximity to settlements and sensitive receptors, and existing infrastructure;
- Review of project documents, including the Qardho Demonstration Farm project description, engineering concept, ESMP Data Collection Checklist, and land confirmation letter from Qardho Local Government;
- Application of the S-FSRP ESMF screening process, including environmental and social risk screening, categorization, and identification of relevant ESS;
- Stakeholder consultations with Qardho District authorities, community elders and farmers, women and youth representatives, and local committees (farm association and development committee) to understand local priorities, expectations, and concerns;
- Impact assessment and analysis, categorizing potential impacts by phase (construction/operation), nature (positive/negative), magnitude, duration, and reversibility;
- Development of mitigation and monitoring measures consistent with the ESMF, World Bank ESF, and good practice in climate-smart agricultural infrastructure.

2.5 Activity Description and Components

The Qardho Demonstration Farm is designed as a comprehensive agricultural research, training, and production centre on a 500 m × 500 m site. The main components of the subproject are as follows:

1. Land Development and Site Protection

- Perimeter fencing around the entire 500 m × 500 m plot to secure the farm and regulate access;
- Establishment of live windbreaks and shelterbelts along the boundaries to reduce wind speed, protect crops, and improve the micro-climate, particularly given the high winds experienced in summer.

2. Core Buildings and Facilities

- **Administrative and Training Block** for farm management, record-keeping, training courses, workshops, and meetings;
- **Security Guard Facility with Washrooms** to ensure 24/7 site security and provide basic facilities for guards;
- **Staff/Extension Residential Facilities** to accommodate on-site technical staff, researchers, and extension officers, with water, sanitation, and solar-powered lighting;
- **Cafeteria and Dining Area** to serve staff, trainees, and visitors;
- **Mosque** to serve staff and trainees residing or working at the farm.

3. Storage, Workshop and Support Structures

- **Warehouses and Storage Units** for seeds, inputs, tools, and harvested produce, designed with appropriate ventilation, safety, and pest management considerations;
- **Machinery and Tools Workshop** for repair and maintenance of tractors, irrigation pumps, and other agricultural machinery and equipment.

4. Production and Demonstration Units

- **Fruit Tree Nursery** for propagation of improved fruit tree seedlings (e.g. mango, citrus, guava, date palm) for distribution to farmers;
- **Greenhouse Production Area** for high-value horticulture, research trials, and climate-smart crop demonstrations under controlled conditions;

- **Orchard Field** to demonstrate best practices in fruit tree establishment, irrigation, pruning, and pest management;
- **Vegetable and Cereal Fields** for irrigated production of vegetables and cereals (e.g. maize, millet, sorghum), showcasing improved varieties, cropping systems, and soil fertility management.

5. Water Supply and Irrigation Infrastructure

- **Borehole development**, including drilling to the recommended depth, equipping with pumps, and installation of elevated storage tanks;
- **Distribution network** linking the borehole to all production blocks through pipelines;
- **Irrigation systems** combining drip and furrow irrigation, depending on crop and demonstration needs, to promote efficient water use and climate-resilient production.

6. Energy and Environmental Management Systems

- **Solar PV energy system** to power irrigation pumps, lighting, and essential electrical loads in the training and residential facilities, reducing operational costs and reliance on diesel generators;
- **Composting and Waste Management Zone** for recycling crop residues and, where applicable, livestock manure into organic fertilizer, alongside waste segregation and safe disposal for non-organic waste;
- **Basic drainage and run-off management measures** to prevent erosion and maintain soil stability.

7. Knowledge and Information Systems

- **Meteorological monitoring station or equipment** to collect basic climate data (rainfall, temperature, wind, humidity) for research and planning;
- **Demonstration and display areas** for improved seeds, technologies, and practices, supporting farmer learning and extension services.

Through these components, the Qardho Demonstration Farm will function as a practical and scalable model for climate-smart agriculture in Puntland and will be implemented in line with this ESMP and the broader S-FSRP environmental and social framework.

Qardho Demonstration Farm – Workforce Composition

The Qardho Demonstration Farm will employ a total of **60 workers** during peak construction and early operation phases. The workforce composition is summarized as follows:

- **Total workers:** 60
- **Skilled workers:** 22
- **Unskilled workers:** 35
- **Engineers and site management team:** 3

In terms of origin:

- **Local community workers:** 18 (primarily unskilled and semi-skilled labor)
- **Workers from outside the project area:** 3 (engineers and site management staff only)

The project will prioritize recruitment of local community members, particularly for unskilled and semi-skilled positions, in order to minimize labor influx and associated social risks, in line with ESS2 requirements.

2.5.1 Site and Design Specifics

The Qardho Demonstration Farm occupies a 25-hectare (500 m × 500 m) site organized into clearly defined functional zones to ensure efficient land use and operational flow. The masterplan includes production blocks for orchards, cereals, vegetables, greenhouse cultivation, and nursery development; a central cluster of core buildings comprising administration, training facilities, cafeteria, mosque, and residential units; designated storage and workshop areas; a composting and waste management zone; and a borehole with elevated water tank area. Internal access roads. The site perimeter extends approximately 2,000 linear meters, while internal roads will have an average width of 6-8 meters. Production areas will be subdivided into manageable irrigation zones to optimize water distribution and crop management.

Design and construction will follow applicable Puntland building regulations, irrigation engineering best practices, Occupational Health and Safety (OHS) standards, relevant Solar PV installation standards, and applicable Eurocode structural design principles where relevant.

Utility interfaces and off-site linkages include groundwater abstraction through a borehole system, connection to local access roads for transportation of inputs and outputs, coordination with agricultural extension service networks, and market linkages to facilitate demonstration output distribution and sustainability of farm operations.

2.5.2 Technical Sizing and Performance Targets

The irrigation system for the Qardho Demonstration Farm will be designed based on crop water requirements, local evapotranspiration rates, and seasonal demand patterns to ensure efficient and climate-resilient water use. Drip irrigation will be the primary method, targeting a minimum water-use efficiency of 90%. Periodic soil salinity monitoring will be undertaken to prevent salt

accumulation and maintain long-term soil productivity. The solar PV system will be sized to meet the operational demands.

The greenhouse will be constructed using UV-stabilized polyethylene covering, equipped with natural ventilation openings and an integrated drip irrigation system to support controlled-environment production. The nursery area will include shaded propagation zones with raised seedbeds and a controlled watering system to ensure healthy seedling development.

The composting and waste management facility will be appropriately sized to process crop residues and organic waste generated on-site.

2.5.3 Implementation Plan, Land and Access

The Qardho Demonstration Farm will be implemented in phases to ensure systematic development and quality control. The works will begin with borehole drilling, followed by installation of core infrastructure such as fencing and the elevated water tank. This will be followed by building construction, irrigation system installation, and establishment of production blocks including orchards, greenhouse, nursery, and crop fields.

Procurement and contracting will follow competitive procedures in line with World Bank procurement guidelines. A permits register will be maintained, including land documentation and ESMP approval prior to construction. Land ownership and boundary demarcation documents are referenced in Annex 9.1**,** and the site will be clearly marked and secured with fencing before works commence.

2.5.4 Operations Readiness, Risk, Compliance, and Sustainability

The Demonstration Farm will operate under an Operations and Maintenance (O&M) plan implemented from Day 1, covering irrigation systems, solar PV, water infrastructure, and buildings. The operational team will include a farm manager, irrigation technician, extension officers, security personnel, and maintenance staff. Pre-operation training will focus on irrigation management, solar PV operation, and Occupational Health and Safety (OHS). Asset handover will include testing of borehole yield, pump performance, irrigation pressure, and solar PV output to confirm readiness.

Risk and compliance measures will align with ESF/ESS requirements. Construction controls such as dust suppression, waste segregation, and traffic management will be implemented. Resource-efficiency targets include ≥90% water-use efficiency for drip irrigation and ≥70% solar energy coverage of operational demand. Safety measures will include controlled access to machinery areas, and the project will interface with the Grievance Mechanism (GM) during construction and operation.

Climate resilience is addressed through windbreak tree planting around the farm, efficient irrigation systems, and solar-powered infrastructure. Long-term sustainability will be supported through government management structures and revenue generated from farm production.

3. Policy, Legal and Institutional Framework

3.1 National and State Policy and Legal Framework

Implementation of the Qardho Demonstration Farm must comply with the applicable laws, regulations, and policy directions of the Federal Government of Somalia and Puntland State. Key frameworks include:

- **National Agricultural and Livestock Policies (2019–2025)**: A set of national agriculture-sector policies guide efforts to increase productivity, ensure food security, and promote climate-smart agriculture. These include, among others, the Somali National Fertilizer Policy (2019), Somali National Pesticides Policy (2019), National Irrigation Policy (2019), and the National Agricultural Extension Policy – NAEP (2025). Together, they promote improved extension services, responsible input use, and sustainable crop–livestock systems. The Qardho Demonstration Farm directly supports these aims by acting as a centre for training, technology transfer, and improved production systems.
- **Puntland Agricultural and Rangeland Policies and Laws (2014–2017)**: Puntland has adopted policies and legal instruments that guide agricultural land use, rangeland management, and sustainable production, including agricultural land legislation adopted around 2017. These frameworks support integrated crop–livestock systems, protection of productive land, and improved farmer support services. The demonstration farm is aligned with these policies by promoting good practices in irrigation, soil fertility, and integrated land use.
- **National Environmental Management Policies (2019–2020)**: The National Environmental Policy (2019) and the National Climate Change Policy (2020) provide overarching principles for environmental protection, climate resilience, and sustainable resource use. They require development projects to identify and manage environmental and social risks and to integrate climate change considerations into planning and implementation.
- **Puntland Environmental Management Policies (2014–2016)**: Puntland has developed its own environmental policy and strategies, including the Puntland State Environmental Policy (2014), the Puntland Climate Change Strategy (2016), the Puntland EIA Regulation (2016), and the Puntland Solid Waste Management Policy (2016). These provide the regional framework for environmental assessment, climate adaptation, and waste management and are directly relevant to the planning and operation of the Qardho Demonstration Farm.
- **Puntland Environmental Impact Assessment (EIA) Act (2023)**: This Act operationalizes environmental assessment obligations at state level and requires screening, preparation

and review of instruments such as ESMPs for projects with potential environmental and social impacts. The Ministry of Environment, Range and Climate Change (MoERCC) is mandated as the regulatory authority for these processes.

- **Water and Irrigation Frameworks (2021–2025)**: National and Puntland water resources strategies and regulations for the 2021–2025 period guide groundwater abstraction, borehole development, and irrigation management to ensure sustainable use and protection of water resources. These are particularly relevant for the planned borehole and irrigation systems at Qardho.
- **Land Administration and Land Use Arrangements (2000 onwards)**: Land administration laws and procedures, together with Voluntary Land Donation (VLD) and public land allocation guidelines, regulate allocation and use of public and community land. For Qardho, the demonstration farm is located on public land owned by Qardho Local Government and formally allocated for the project, with no physical or economic displacement.
- **Labour and Occupational Health and Safety Provisions (Labour Code 1972 and subsequent regulations)**: The Labour Code and related provisions require fair working conditions, non-discrimination, prohibition of child and forced labour, and provision of safe and healthy workplaces. These standards apply to construction workers and farm staff engaged in the project and are reflected in the ESMP's labour and OHS measures.
- **Public Health and Sanitation Regulations**: National and Puntland public health regulations set requirements for sanitation, wastewater and solid-waste management, and disease prevention. They underpin the ESMP measures for latrines, wastewater handling, and solid-waste management on the farm.
- **Gender and Social Protection Policies (from 2016 onwards)**: The **National Gender Policy (2016)** and related social protection frameworks promote participation and protection of women, youth, and vulnerable groups, and call for prevention of Gender-Based Violence (GBV) and Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) in development programmes. These are reflected in the ESMP's provisions on inclusive access, stakeholder engagement, Codes of Conduct, and the GM.

Together, these national and state frameworks provide the legal and policy basis for environmental and social management of the Qardho Demonstration Farm and guide implementation of this ESMP.

3.2 S-FSRP Environmental and Social Management Framework and World Bank ESF

The Somalia Food Systems Resilience Project (S-FSRP) is implemented under the World Bank Environmental and Social Framework (ESF)+10ESSs. At project level, an Environmental and Social Management Framework (ESMF) has been prepared to guide environmental and social risk management across all S-FSRP investments.

The ESMF:

- Defines the environmental and social risk classification process for subprojects;
- Provides screening tools and procedures for identifying relevant Environmental and Social Standards (ESS);
- Sets standard mitigation measures and good practice guidelines for common risks;
- Provides guidance on labour management, OHS, resource efficiency, pollution prevention, community health and safety, and land issues;
- Outlines requirements for stakeholder engagement and operation of the Grievance Mechanism (GM);
- Clarifies institutional roles and responsibilities for safeguards implementation, monitoring, and reporting.

The Qardho Demonstration Farm has been screened in line with the ESMF and classified as a **Moderate Risk** subproject. In accordance with the ESMF:

- This site-specific ESMP has been prepared to identify potential environmental and social risks and impacts;
- Appropriate mitigation and monitoring measures have been proposed for both construction and operation;
- Institutional responsibilities and reporting arrangements have been clarified;
- An indicative budget for ESMP implementation has been included.

The ESMP therefore serves as the operational tool that translates the ESMF's principles and requirements into practical actions at the Qardho Demonstration Farm site.

3.3 Applicable World Bank Environmental and Social Standards

Based on the nature of the Qardho Demonstration Farm, its location, and the proposed activities, the following **World Bank Environmental and Social Standards (ESS)** are considered relevant:

Table 1: WB ESS

ESS	Title	Relevance to Qardho Demonstration Farm
ESS1	Assessment and Management of Environmental and Social Risks and Impacts	**Relevant.** The subproject involves land development, construction of infrastructure, borehole drilling, irrigation systems, and continuous agricultural activities, which generate environmental and social risks that must be assessed and managed through this ESMP.
ESS2	Labour and Working Conditions	**Relevant.** Construction workers, farm staff, technicians, and security personnel will be engaged. Key issues include working conditions, occupational health and safety, prohibition of child and forced labour, Codes of Conduct, and access to a worker GM.
ESS3	Resource Efficiency and Pollution Prevention and Management	**Relevant.** The farm will use water for irrigation, energy (mainly solar), and agricultural inputs, and will generate solid waste during both construction and operation. Efficient resource use, pollution prevention, and safe handling and disposal of waste and hazardous materials are required.
ESS4	Community Health and Safety	**Relevant.** Construction activities and increased vehicle movements may pose safety risks to nearby communities. During operation, community health may be affected by farm traffic, storage and use of inputs, irrigation structures, and presence of visitors and trainees. Measures for traffic safety, site security, and emergency preparedness are required.
ESS5	Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	**Not triggered.** The site is public land owned by Qardho Local Government and allocated for the demonstration farm. No physical or economic displacement has been identified. The ESMP includes measures to maintain clear boundaries and prevent informal encroachment.
ESS6	Biodiversity Conservation and Sustainable Management of Living Natural Resources	**Relevant.** The site is currently rangeland with sparse vegetation and no known critical habitats. Vegetation clearance, water use, and farming practices must be managed to avoid land degradation and off-site impacts. The farm will promote sustainable and climate-smart agriculture consistent with ESS6.
ESS7	Indigenous Peoples/Sub-Saharan African	**Not relevant.** This standard is not triggered for the Qardho context under S-FSRP.

	Historically Underserved Traditional Local Communities	
ESS8	Cultural Heritage	**Partly relevant.** No known cultural heritage or physical cultural resources are present within the site, but ground disturbance during construction requires the application of chance-find procedures in case cultural or historical items are discovered.
ESS9	Financial Intermediaries	**Not relevant.** The subproject does not involve financial intermediaries.
ESS10	Stakeholder Engagement and Information Disclosure	**Relevant.** Stakeholder engagement has been conducted with district authorities, elders, farmers, women, and youth. Continued engagement, information disclosure, and a functioning GM are required throughout construction and operation to ensure that concerns are captured and addressed.

4. Baseline Environmental and Social Conditions

4.1 Overview of the baseline setting

The Qardho Demo Farm is situated in a semi-arid setting where environmental conditions and livelihoods are shaped by rainfall variability, drought cycles, and limited water resources. Land use in the wider area reflects a mix of rangeland grazing, settlements, and small-scale cultivation where water is available. The baseline conditions below are presented to support risk screening and to guide the design of practical mitigation and monitoring measures in the ESMP.

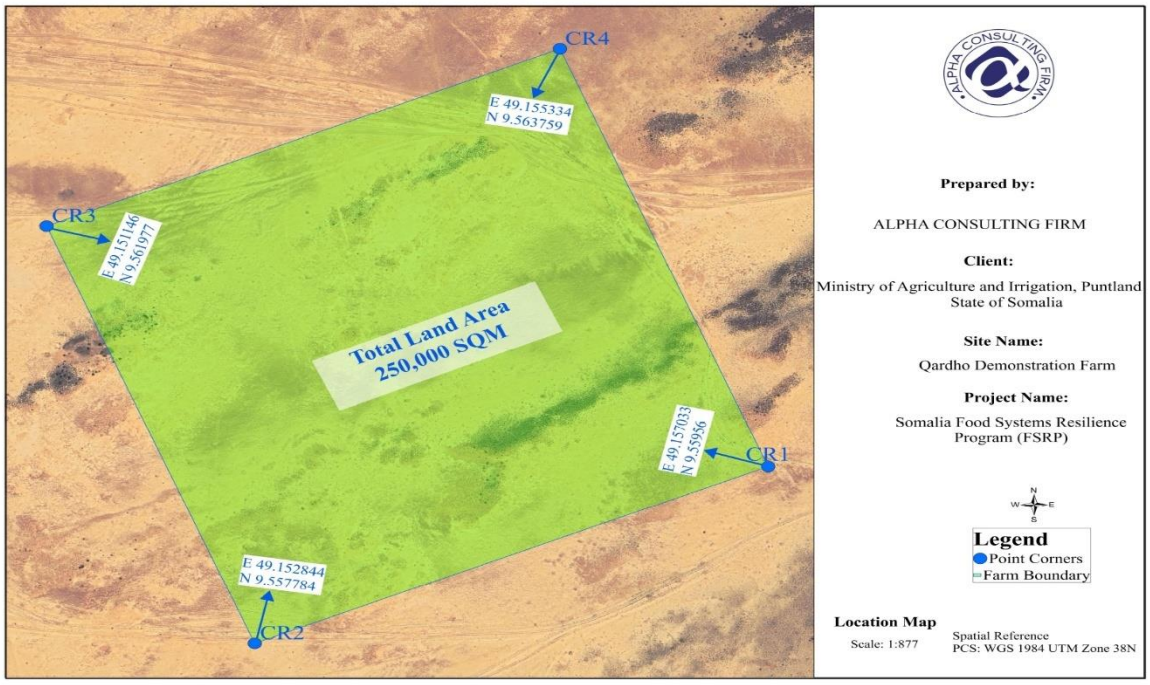

Figure 1: Qardho Demo farm - site map

4.2 Environmental Baseline

4.2.1 Climate and meteorology

The area has an arid to semi-arid climate with low and variable rainfall concentrated in seasonal rainy periods. Rainfall events can be short and intense, followed by extended dry spells. Temperatures are typically high for much of the year with strong solar radiation, creating heat-stress conditions for people and animals. Humidity is generally low, increasing temporarily after rainfall. Wind patterns can be strong in some seasons and contribute to dust generation and windblown materials, which are important considerations for construction activities, farm operations, and the management of exposed soils.

4.2.2 Topography and landform

The landscape is generally flat to gently undulating with localized low-lying areas and minor drainage paths that convey runoff during heavy rains. Slopes are typically mild; however, even small gradients can concentrate stormwater flow and cause localized erosion where soils are disturbed. Site grading and layout should ensure positive drainage away from infrastructure and demonstration plots, preventing waterlogging and uncontrolled runoff to neighboring areas.

4.2.3 Geology and soil characteristics

Soils are commonly sandy to sandy-loam with variable fertility and limited water-holding capacity. Disturbed soils are prone to wind erosion and dust generation during dry periods, and to surface erosion during intense rainfall events. Soil stability is generally suitable for typical farm infrastructure when proper compaction and foundation design are applied. Where irrigation is practiced, soil management must consider the risk of salinity build-up and reduced productivity if drainage and leaching are not appropriately managed.

4.2.4 Hydrology and water resources

Surface water is limited and largely seasonal, with runoff occurring primarily during rainy periods through ephemeral streams, channels, and depressions. Flood risk is typically localized and associated with heavy rainfall events that can cause short-duration flash runoff, especially where drainage is blocked or where sites are located in low-lying areas. Groundwater may be available through boreholes or shallow wells, but yields can vary and may be sensitive to seasonal demand. Because the demo farm's productivity depends on reliable water, the baseline highlights the importance of water efficiency, storage, and controlled abstraction to avoid overuse and to maintain availability during dry periods.

4.2.5 Air quality

Ambient air quality is generally good, with dust being the main concern. Dust levels can be elevated during dry seasons due to strong winds, livestock movement, unpaved roads, and exposed soils. Construction activities (excavation, transport, material handling) can temporarily increase dust if not controlled. Farm operations may also generate dust during land preparation, movement of vehicles, and dry surface disturbance. Dust control and good housekeeping are therefore important baseline considerations for both construction and operations.

4.2.6 Noise levels

The baseline noise environment is typical of peri-urban and rural settings with intermittent noise from vehicles, community activities, and livestock movement. Construction will temporarily increase noise levels due to machinery operation and transport vehicles. During operation, noise may arise from farm equipment, pumps, and routine farm activities, but is expected to remain

localized. Working-hour controls and equipment maintenance help manage noise nuisance near nearby receptors.

4.2.7 Water quality

Water quality can vary across sources and seasons. Groundwater may have elevated salinity and hardness, which can affect irrigation suitability and long-term soil productivity. Biological contamination risks can exist where wells are unprotected or where sanitation is poor. Physical parameters such as turbidity may increase after rainfall if surface runoff enters water points. The baseline therefore emphasizes the need for basic water quality screening, protection of water points, and proper management of wastewater to prevent contamination pathways.

4.2.8 Land use / land cover

The wider land cover reflects semi-arid rangelands dominated by shrubs, scattered trees, and seasonal grasses, alongside settlements, tracks, and small cultivated areas where water access permits. Grazing is the dominant land use, and land degradation pressures can occur near settlements and water points due to livestock concentration, biomass harvesting, and repeated disturbance. The demo farm site is within a human-influenced landscape; vegetation clearance should be minimized and managed to reduce erosion and dust.

4.2.9 Natural hazards

Key natural hazards include recurrent drought and water scarcity, which affect crop performance, pasture availability, and livelihoods. Flash floods can occur during intense storms, particularly in low-lying areas or where drainage is inadequate, leading to localized flooding, erosion, and damage to exposed soils. Windstorms and strong seasonal winds may increase dust levels and can damage lightweight structures. These hazards should be reflected in drainage design, water storage planning, shading and windbreak measures (where feasible), and operational preparedness.

4.3 Biological Environment

4.3.1 Flora (vegetation)

Vegetation in the area is typical of dryland ecosystems, consisting of drought-tolerant shrubs, scattered trees, and seasonal grasses. Vegetation density varies with rainfall and grazing pressure. While the project footprint is not expected to include sensitive habitats at the site scale, vegetation provides important functions for soil stabilization, erosion control, and dust reduction. Clearing should be limited to what is necessary, and revegetation/landscaping can improve microclimate and reduce windblown dust.

4.3.2 Fauna (wildlife)

Wildlife presence is generally limited in areas with human settlement and grazing pressure but may include small mammals, reptiles, amphibians in wetter micro-sites, and common bird species. Construction activities can cause short-term disturbance through noise and movement; impacts are expected to be localized and manageable through good housekeeping and prevention of open dumping that could attract nuisance animals.

4.3.3 Biodiversity and ecosystems

The broader ecosystem is a dry rangeland system that supports grazing-based livelihoods. No critical habitats or major migratory routes are expected within the immediate footprint of the demo farm; however, the project should avoid practices that degrade surrounding rangelands or create contamination pathways. Good management of wastes, runoff, and agro-inputs (where applicable) is essential to prevent indirect biodiversity impacts.

4.3.4 Protected areas / conservation zones

The project site is not expected to fall within a legally protected area or formal conservation zone. Nevertheless, the project should apply good environmental practice to avoid unnecessary vegetation disturbance, prevent pollution, and maintain buffers where sensitive land uses or ecological features are present nearby.

4.3.5 Invasive species (Prosopis juliflora)

The invasive species **Prosopis juliflora** is present in the broader area. It can spread aggressively, displace native vegetation, and reduce rangeland productivity, while also contributing to thorn-related injuries and access challenges. Project activities should avoid inadvertently spreading Prosopis through movement of contaminated soil, plant material, or equipment. Where feasible, site management should support control measures such as preventing seed dispersal, avoiding use of Prosopis material for landscaping, and coordinating with local authorities and community groups on safe management approaches.

4.4 Social Baseline Aspects

4.4.1 Population size and structure

Communities in the wider area typically include pastoral and agro-pastoral households with settlement patterns influenced by access to water, grazing, and services. Household sizes are often large, and youth represent a significant share of the population. Seasonal mobility may occur for herding and resource access, and drought periods can drive temporary movements toward water points and service centers.

4.4.2 Ethnic groups and social organization

Social organization is shaped by customary systems, clan/kinship structures, and community leadership arrangements. Elders and traditional leaders commonly play a key role in dispute resolution, community mobilization, and local decision-making. Community engagement should recognize these structures while ensuring inclusive participation of women, youth, and vulnerable groups.

4.4.3 Livelihoods and income sources

Livelihoods are primarily based on livestock production and related activities, complemented by small-scale agriculture where water permits, petty trade, wage labor, and service provision. Livestock is central to household income and food security, and market conditions, animal health, and climate variability strongly influence livelihood stability. The demo farm is expected to support improved practices, learning, and productivity, but it must be managed transparently to avoid local tensions over access and benefits.

4.4.4 Education levels and literacy

Education access varies by location and household economic status. Literacy levels can be mixed, particularly among older groups and women in some communities. Training and communication activities should therefore use accessible formats, including practical demonstrations, visual materials, and verbal communication through trusted channels.

4.4.5 Health status and healthcare services

Access to healthcare services can be limited outside major centers, and communities may rely on basic clinics and pharmacies where available. Public health sensitivities often relate to water quality, sanitation, and disease outbreaks that affect livestock and livelihoods. Project implementation should avoid creating sanitation risks and should promote safe water and hygiene practices in farm operations.

4.4.6 Vulnerable groups

Vulnerable groups may include women-headed households, the elderly, persons with disabilities, very poor pastoral households, and other marginalized groups with limited access to resources and services. Engagement and benefit-sharing approaches should be inclusive, with attention to barriers related to mobility, literacy, safety, and social norms.

4.5 Land and Resource Use

4.5.1 Land tenure arrangements

Land tenure may involve a mix of formal administration and customary arrangements. Clear documentation and transparent communication of land boundaries and use rights are important to prevent misunderstandings. The demo farm should maintain clear demarcation of the site, clarify access rules, and maintain a grievance mechanism to manage complaints and prevent conflict.

4.5.2 Agricultural practices

Agricultural activity is typically small-scale and seasonal where practiced, influenced by rainfall availability and access to irrigation. Common practices may include cultivation of drought-tolerant crops and use of simple irrigation methods where water is available. Soil fertility constraints, water scarcity, and recurrent drought are key limiting factors, making demonstration of climate-smart and water-efficient practices particularly relevant.

4.5.3 Pastoral and grazing patterns

Pastoralism and agro-pastoralism shape land use. Grazing patterns vary seasonally, with movement between wet-season grazing areas and dry-season fallback areas near more reliable water points. Drought periods tend to increase herd mobility and concentrate grazing around limited resources, increasing degradation risks and the importance of managed rangeland practices.

4.5.4 Water use and accessibility

Water is accessed mainly through boreholes, shallow wells, and communal water points, with temporary surface water available after rains in some areas. Access constraints include distance, pumping reliability, seasonal fluctuations, and cost. Competition for water can increase during drought. The demo farm should manage water use efficiently and avoid creating conflict by clarifying water allocation for farm operations and ensuring that project water use does not negatively affect community access.

4.5.5 Natural resource dependence

Households rely on natural resources such as fuelwood, limited charcoal use, and construction materials (sand, stones, poles). In dry periods, reliance on woody vegetation may intensify, contributing to localized degradation. Construction sourcing should be controlled and approved to prevent informal extraction and environmental damage.

4.6 Community Infrastructure and Services

4.6.1 Transport infrastructure

Transport access is typically via gravel and earth roads, with footpaths connecting settlements, farms, and water points. Roads may be difficult during rains and dusty during dry seasons.

Construction traffic may temporarily increase safety risks and dust; traffic management, speed controls, and signage are therefore important.

4.6.2 Markets and economic facilities

Economic activity includes livestock and agricultural trade, small shops, and local service providers. Market access is important for livelihoods and influences farm input supply and product marketing. The demo farm may support improved production and learning, but it should avoid creating unrealistic expectations about employment or input distribution by communicating project scope clearly.

4.6.3 Water and sanitation infrastructure

Water and sanitation infrastructure is often basic, with varying access to improved water points and latrines. Wastewater disposal and solid waste management systems may be limited. The project should provide adequate sanitation at the demo farm and ensure safe wastewater handling to prevent pollution and nuisance conditions.

4.6.4 Energy access

Electricity access may be limited or unreliable, with increasing use of solar for lighting and basic power. Biomass remains common for cooking. Farm operations that require energy (e.g., pumps, lighting, training facilities) should use reliable, safe installations and consider renewable options where feasible.

4.6.5 Communication networks

Mobile phone coverage is generally available but may vary by location, while internet access can be limited. Communication constraints can affect service coordination and community information flow. Engagement should use multiple channels such as local leaders, notice boards, community meetings, and phone messaging where feasible.

4.7 Cultural and Heritage Aspects

4.7.1 Cultural heritage sites

No known cultural heritage sites are expected within the project footprint; however, culturally significant sites such as graves, sacred trees, or traditional meeting locations may exist in the wider area. A chance-find procedure should be applied during excavation to ensure any unexpected cultural materials or sites are protected and reported appropriately.

4.7.2 Traditional practices, norms, and values

Traditional norms and customary systems influence land use, livestock management, decision-making, and dispute resolution. Community engagement should respect local norms while

ensuring inclusive participation of women and vulnerable groups. Training activities should consider cultural appropriateness and practical delivery methods.

4.8 Security and Governance

4.8.1 Local administration structures

Local administration typically involves district authorities working alongside customary leaders and community committees. These structures play key roles in community coordination, conflict resolution, and communication. Effective coordination with these structures supports smooth project implementation and oversight.

4.8.2 Conflict dynamics and social cohesion

Tensions may arise around land boundaries, water access, grazing rights, and resource use, especially during drought. Social cohesion is often maintained through customary mechanisms, but climate shocks can increase stress. Transparent communication, clear site management rules, and accessible grievance handling are essential to prevent and manage disputes.

4.9 Stakeholders and Community Engagement

4.9.1 Key stakeholder groups

Key stakeholders include relevant government ministries and local authorities, nearby communities, pastoralists and agro-pastoralists, farmers' groups, women and youth groups, local traders and service providers, and any local CSOs/CBOs involved in livelihoods, environment, or extension services.

4.9.2 Community priorities, expectations, and concerns

Community priorities commonly include reliable and equitable access to project benefits (training, demonstration support), water access, transparency in management, and local employment opportunities during construction. Typical concerns include dust and noise during works, traffic safety, clear site boundaries and access rules, fair and inclusive participation, and prevention of conflict over resources. A functional grievance mechanism and continuous engagement will help manage expectations and address concerns promptly.

4.10 Environmental and Social Sensitivity

Based on the ESMP data collection checklist and field observations:

- **Environmental sensitivity of the site is assessed as medium.** The setting is semi-arid with dust-prone soils, sparse to moderate dryland vegetation, strong seasonal winds, and high exposure to drought. While no critical habitats or protected areas are anticipated within

the project footprint, key sensitivities include **soil erosion and dust generation**, **localized runoff/flash-flood pathways during intense rains**, **water availability and potential salinity concerns for irrigation**, and the need to prevent the **spread of invasive Prosopis juliflora** through movement of soil or plant material.

- **Social sensitivity is assessed as medium.** Livelihoods are closely tied to livestock production and climate-sensitive natural resources, and communities may include vulnerable groups such as women-headed households, youth, elderly persons, persons with disabilities, and drought-affected poor households. Project benefits (training, demonstrations, access to services) must be delivered through **inclusive and transparent participation arrangements**, with clear communication to manage expectations and prevent tensions related to access and benefit-sharing.
- **Land ownership risk is considered low.** The project is located on public land with formal allocation/confirmation by Qardho Local Government, and the site boundaries and use arrangements will be clearly communicated and demarcated to reduce disputes.
- **Community health and safety risks are considered medium.** Construction activities may create OHS hazards (excavation, machinery use, working at height, electrical works), as well as community risks such as dust nuisance, vehicle movement, and access safety around the worksite. Operational risks may include accidents around farm equipment, water storage areas, and controlled access to demonstration plots and facilities.
- **GBV/SEA/SH risk is assessed as low to moderate.** While the project scale is limited, risks can increase where workers interact with community members, particularly women and youth, or where there are perceived inequities in access to benefits. Risks will be managed through **worker Codes of Conduct**, awareness-raising, supervised worksite behavior, safe and inclusive engagement approaches, and a functioning **GM** with confidential referral pathways where needed.

5. Evaluation of Environmental and Social Impacts

5.1 Introduction

This section evaluates the potential environmental and social impacts associated with the construction and operation of the Qardho Demonstration Farm. The assessment is based on:

- The site characteristics and baseline conditions described in Section 4;
- The planned activities and components outlined in Section 2;
- Findings from the ESMP data collection checklist and stakeholder consultations;
- The requirements of the S-FSRP Environmental and Social Management Framework (ESMF) and the World Bank Environmental and Social Standards (ESS).

Impacts are categorized as positive or negative, direct or indirect, and short-term or long-term. The overall environmental and social risk is classified as Moderate, with impacts considered site-specific, reversible, and manageable through the mitigation measures proposed in this ESMP.

5.2 Positive Environmental and Social Impacts

The Qardho Demonstration Farm is expected to generate significant positive environmental, social, and economic benefits at local and regional level, including:

a) Improved Agricultural Productivity and Food Security

- Demonstration of improved crop varieties and climate-smart technologies for irrigated cereals, vegetables, and fruit trees;
- Increased adoption of improved agronomic practices, leading to higher yields and more reliable production;
- Better availability of quality seeds and seedlings for farmers in Qardho and surrounding areas.

b) Strengthened Climate Resilience

- Promotion of drought-tolerant varieties and water-efficient irrigation systems (e.g. drip irrigation);
- Training on soil moisture conservation, mulching, crop rotation, and integrated soil fertility management;
- Improved capacity of farmers and extension staff to manage climate risks such as drought and high temperatures.

c) Capacity Building and Knowledge Transfer

- Regular training sessions, field days, and demonstrations for farmers, youth, extension officers, and local institutions;
- Practical learning opportunities on nursery management, orchard establishment, greenhouse production, composting, and farm business management;
- Enhanced technical capacity within Qardho District to support climate-smart agriculture over the long term.

d) Economic Benefits and Livelihood Diversification

- Short-term employment opportunities during construction (skilled and unskilled labour);
- Long-term jobs in farm management, security, nursery operations, field work, and maintenance;
- Increased income opportunities for farmers through improved yields, better quality produce, and access to improved planting materials;
- Opportunities for small-scale enterprises linked to input supply, seedling sales, and value addition.

e) Inclusion of Women and Youth

- Targeted inclusion of women in training related to horticulture, seedling production, and household food production;
- Skills development and employment opportunities for youth as farm workers, technicians, and extension assistants;
- Potential to reduce youth unemployment and encourage positive engagement in productive agriculture.

f) Environmental Benefits and Sustainable Resource Use

- Rehabilitation of degraded rangeland into productive, well-managed farmland;
- Use of solar PV to power pumps and buildings, reducing greenhouse gas emissions compared to diesel-based systems;
- Promotion of composting and organic soil amendments, reducing reliance on synthetic fertilizers and improving soil health;
- Demonstration of integrated land and water management practices that can be replicated in other locations.

g) Institutional Strengthening

- Stronger collaboration between Qardho Local Government, MoAI, MoERCC, and local communities in managing a public agricultural asset;
- Enhanced capacity of government institutions to plan, implement, and monitor climate-smart agricultural investments;
- Contribution to the practical implementation of national and state agricultural and environmental policies.

5.3 Negative Environmental and Social Impacts

Although the overall net impact of the project is expected to be positive, the construction and operation of the Qardho Demonstration Farm may generate a number of **adverse environmental and social impacts** if not properly managed. These potential impacts are summarized below by project phase, together with the relevant Environmental and Social Standards (ESS).

Table 2: Negative Environmental and Social Impacts

Project Phase	Potential Negative Impacts / Impact-Risk	Relevant ESS
Construction	Clearance of sparse shrubs and ground vegetation within the 500 m × 500 m plot, leading to localized loss of vegetation cover and minor habitat disturbance.	ESS1, ESS2, ESS6
Construction	Soil disturbance, compaction and minor erosion from site levelling, excavation, and movement of vehicles and machinery, particularly along the access track.	ESS1, ESS2, ESS3
Construction	Increased dust emissions from earthworks, truck movement, and material handling, affecting air quality for workers and road users, especially during dry and windy conditions.	ESS3, ESS2, ESS4
Construction	Temporary noise and vibration from trucks, mixers and other machinery, potentially disturbing nearby roads users and the outskirts of Qardho town.	ESS3, ESS2, ESS4
Construction	Generation of construction waste (excavated spoil, packaging, wood, metal, plastics, cement bags) and risk of improper disposal or open dumping.	ESS1, ESS3
Construction	Risk of minor spills and contamination from fuels, lubricants, paints, and other construction materials if not stored and handled properly.	ESS3
Construction	Occupational health and safety (OHS) risks to workers, including falls, injuries from tools and machinery, exposure to dust and noise, and manual handling risks.	ESS2

Construction	Community health and safety risks from construction traffic, open excavations, and unauthorized entry to the site, particularly for children.	ESS4
Construction	Temporary disturbance to local traffic and access routes due to movement of construction vehicles and delivery of materials.	ESS4
Construction	Small labour influx for skilled workers from outside Qardho, with potential for social tensions or inappropriate behaviour if not managed through Codes of Conduct.	ESS2, ESS10
Construction	Low but potential risk of SEA/SH if labour–community interactions are not properly controlled.	ESS2, ESS10
Operation	Increased groundwater abstraction from the borehole for irrigation and domestic use, with a risk of overuse if not monitored and managed efficiently.	ESS3
Operation	Inefficient irrigation or inadequate drainage, potentially leading to localized waterlogging, soil salinization, or structural instability of fields and access tracks.	ESS3, ESS6
Operation	Misuse or overuse of fertilizers and agro-chemicals (if used), posing risks of soil and water contamination and health risks for workers and nearby communities.	ESS3, ESS4
Operation	Generation of solid waste (plastic seed bags, containers, packaging, food waste) and risk of littering or open dumping if waste is not segregated, recycled, or properly disposed of.	ESS3
Operation	Poorly managed composting or organic waste handling leading to odour, flies, and localized pollution if heaps are not properly sited and managed.	ESS3
Operation	OHS risks for farm workers linked to manual handling, machinery operation, electrical systems, agro-chemical exposure (if used), working at height, and fieldwork in hot conditions.	ESS2
Operation	Community health and safety risks associated with increased vehicle movements to and from the farm, use of access roads, and presence of visitors and trainees on-site.	ESS4
Operation	Potential exclusion of women, youth, IDPs and other vulnerable groups from training, employment, and benefit-sharing if participation is not actively supported and monitored.	ESS10
Operation	Possible disputes or encroachment at the farm boundaries if demarcation is unclear or community roles are not maintained.	ESS10
Operation	Low but present risk of GBV/SEA/SH related to interactions between staff, trainees, and community members if Codes of Conduct and awareness measures are not enforced.	ESS2, ESS10

6. Environmental and Social Management Plan (ESMP)

The ESMP provides the framework for managing environmental and social risks and impacts associated with the construction and operation of the Qardho Demonstration Farm. It translates the requirements of the S-FSRP ESMF, the World Bank ESF, and national/state regulations into practical measures, responsibilities, and budgets at site level.

6.1 ESMP Objectives

The main objectives of the ESMP are to:

- Identify practical measures to avoid, minimize, or mitigate adverse environmental and social impacts during construction and operation;
- Ensure compliance with the World Bank ESF, relevant Environmental and Social Standards (ESS), and national/Puntland legislation (EIA, labour, OHS, public health, land);
- Promote safe and healthy working conditions for all workers and protect the health and safety of surrounding communities;
- Support resource efficiency, climate-smart water use, and sustainable land management at the demonstration farm;
- Clarify institutional roles and responsibilities for ESMP implementation, monitoring, and reporting;
- Strengthen the capacity of implementing agencies, the contractor, and farm management to manage environmental and social risks;
- Promote inclusive access to project benefits for women, youth, IDPs, and vulnerable households;
- Ensure effective stakeholder engagement and operation of a functional Grievance Mechanism (GM) throughout the project lifecycle.

6.2 Mitigation Plan

The tables below summarize the key mitigation measures for the main environmental and social risks identified in Section 5, including responsibilities, timing, indicators, and indicative costs.

Table 3: ESMP Plan

Project Phase	Impact / Risk (with relevant ESS)	Mitigation Measures	Responsibility	Timing	Monitoring Indicators	Cost (USD)
Construction	Clearance of shrubs and ground cover within 500 m × 500 m plot (ESS1, ESS6)	Limit vegetation clearance strictly to demarcated farm boundary; avoid unnecessary removal of shrubs; retain some natural vegetation where feasible; establish windbreaks and shelterbelts as part of site development.	Contractor, Supervising Engineer, PCU	Site preparation	Area cleared vs. approved layout; number of trees/shrubs planted as windbreaks	1,200
Construction	Soil disturbance, compaction and minor erosion from levelling, excavation, and vehicle movement (ESS1, ESS3)	Plan earthworks to follow natural contours; limit movement of heavy machinery to designated areas; avoid earthworks during heavy rains; stabilize and compact backfilled areas; install basic drainage channels.	Contractor, Supervising Engineer	Construction	Evidence of erosion (rills/gullies); stability of embankments; functioning drainage	900
Construction	Dust emissions from excavation and traffic, especially during dry/windy conditions (ESS3, ESS4)	Lightly water work areas and access road during peak dust periods; cover fine materials during transport; enforce low speed limits (≤20 km/h) on access roads; minimize unnecessary vehicle trips.	Contractor	Daily during works	Visible dust levels; records of watering; speed control observed	700

Construction	Noise and vibration from trucks and machinery (ESS3, ESS4)	Restrict noisy works to daytime hours; maintain machinery; avoid unnecessary idling; inform local authorities and community representatives about periods of intense activity.	Contractor, Supervising Engineer	Construction	Noise complaints; maintenance records	400
Construction	Construction waste (spoil, packaging, metal, plastics, cement bags) and poor disposal (ESS1, ESS3)	Segregate waste into reusable, recyclable, and residual fractions; reuse suitable spoil for levelling; store waste in designated areas; transport residual waste to approved disposal sites; prohibit open burning and random dumping.	Contractor, PCU Safeguards	Throughout construction	Waste storage areas organized; disposal receipts; clean site conditions	1,200
Construction	Spills and contamination from fuel, lubricants, and other materials (ESS3)	Store fuel and lubricants in bunded areas; use drip trays during refuelling; keep spill kits on-site; train workers on spill prevention and response; clean up spills immediately and dispose contaminated material appropriately.	Contractor	Throughout construction	Presence of bunds and spill kits; absence of visible spills	800
Construction	Worker OHS risks (falls, cuts, machinery, dust, noise, heat stress) (ESS2)	Provide and enforce use of PPE (helmets, boots, gloves, masks, high-visibility vests); conduct induction and regular toolbox talks; implement safe work procedures (work at height, lifting, excavation); provide shaded rest areas and drinking water; maintain first-aid kits and trained first-aiders; keep incident log.	Contractor, PCU Safeguards	Daily during construction	PPE usage; OHS training records; incident/near-miss reports	2,000

Construction	Community health and safety risks (traffic, open excavations, unauthorized access) (ESS4)	Fence or cordon off active work areas; provide warning signs at entry points and along access road; use flaggers when trucks enter/exit; backfill or cover excavations promptly; restrict access to authorized personnel only.	Contractor, District Authority	Throughout construction	Fencing and signage in place; records of community incidents	1,000
Construction	Temporary disturbance to traffic on access road (ESS4)	Schedule deliveries to avoid busy periods; coordinate with local authorities; ensure at least one lane remains passable; maintain access for community users during works.	Contractor	As needed	Number of traffic complaints/incidents; access road condition	500
Construction	Labour influx, tensions or misconduct including SEA/SH (low risk) (ESS2, ESS10)	Prioritize hiring of local unskilled labour; enforce Codes of Conduct for all workers; conduct awareness on respectful behaviour and GBV/SEA/SH; use the GM for community complaints; prohibit child and forced labour.	Contractor, PCU Safeguards, District Administration	Throughout construction	Share of local workers; CoCs signed; absence of serious labour/SEA/SH complaints	700
Operation	Over-abstraction of groundwater for irrigation and domestic use (ESS3)	Design borehole and pumping regime based on hydrogeological advice; install water meter(s); prepare and implement irrigation schedules and water budgets; periodically review abstraction vs. crop needs; promote efficient irrigation technologies.	Farm Management, MoAI / PCU	Continuous	Meter readings; irrigation schedules; no reports of nearby wells drying	2,500

Operation	Waterlogging, salinization or soil degradation due to poor irrigation and drainage (ESS3, ESS6)	Provide adequate field drainage; avoid over-irrigation; promote soil conservation practices (mulching, cover crops, contour beds); monitor soil condition; rotate crops and avoid continuous monocropping.	Farm Management, Extension Services	Continuous	Visual signs of waterlogging/salinization; functioning drainage	2,000
Operation	Misuse or overuse of fertilizers and agro-chemicals (if used) (ESS3, ESS4)	Prioritize compost and organic amendments; if fertilizers/pesticides are used, ensure they are approved and used at recommended doses; store agro-chemicals in locked, ventilated stores; train staff and farmers on safe handling and application; manage containers safely (triple-rinse, puncture, safe disposal).	Farm Management, MoAI	Continuous	Training attendance; proper storage; record of inputs used; absence of misuse incidents	2,500
Operation	Solid waste generation (plastics, packaging, food waste) and risk of open dumping (ESS3)	Segregate waste at source (organic vs. inorganic); compost organic residues; reuse/recycle plastics where possible; dispose residual waste at approved municipal sites; prohibit burning and dumping on open land.	Farm Management, Qardho Municipality	Continuous	Cleanliness of site; visible segregation and composting; disposal records	2,000
Operation	Poorly managed composting causing odour and flies (ESS3)	Locate composting area away from residences and offices; construct simple platforms or pits; regularly turn compost; maintain appropriate moisture; avoid mixing with non-organic waste.	Farm Management	Continuous	Condition of compost heaps; absence of odour complaints	1,000

Operation	Worker OHS risks (machinery, agro-chemicals, electrical, manual handling, heat) (ESS2)	Maintain and implement farm OHS plan; provide ongoing OHS training; ensure PPE use; maintain machinery and electrical systems; schedule field work to avoid peak heat; provide shade and drinking water; maintain first-aid and emergency procedures; keep incident log.	Farm Management, MoAI	Continuous	PPE usage; OHS training records; incident reports	3,500
Operation	Community health and safety risks (traffic, farm visitors, trainees) (ESS4)	Enforce speed limits for farm vehicles; provide signage on access road and inside farm; designate safe pedestrian and visitor routes; guide trainees and visitors during field days; maintain secure site boundaries and gate control.	Farm Management, District	Continuous	Traffic behaviour; incident records; adequacy of signage	1,500
Operation	Exclusion of women, youth, IDPs and vulnerable groups from benefits (ESS10)	Set participation targets for women, youth and vulnerable groups; schedule training at times suitable for women and youth; prioritize vulnerable households in beneficiary selection; monitor participation disaggregated by gender, age and vulnerability status.	Farm Management, PCU, District	Continuous	Training and employment records disaggregated by sex/age; feedback from vulnerable groups	1,800
Operation	Boundary encroachment or land disputes (ESS10)	Clearly demarcate farm boundaries with fencing or markers; maintain coordination with Qardho Local Government and community elders; use the GM to address any land-related concerns; keep land	Farm Management, Qardho Local Government, Elders	Continuous	Clear boundary demarcation; no unresolved land complaints	1,000

		documentation updated and accessible.				
Operation	GBV/SEA/SH risks related to staff, trainees and community interaction (low) (ESS2, ESS10)	Enforce Codes of Conduct; conduct GBV/SEA/SH awareness sessions; ensure the GM can receive sensitive complaints confidentially; establish and use referral pathways for survivors.	Farm Management, PCU Safeguards	Continuous	Staff trained; CoCs signed; appropriate handling of any reported cases	1,500

6.3 ESMP Implementation Institutional Arrangement

Effective ESMP implementation requires coordination among several actors. Roles and responsibilities are as follows (in bullet form, as you prefer):

- **FSRP PCU (Puntland / MoAI)**
    - Provide overall coordination and oversight of ESMP implementation;
    - Ensure ESMP requirements are integrated into designs, bidding documents and contracts;
    - Conduct periodic safeguards monitoring missions to Qardho;
    - Consolidate site-level reports and submit environmental and social performance reports to FGS-NPCU for onward submission to the World Bank.
- **Ministry of Agriculture and Irrigation (MoAI)**
    - Provide technical guidance on farm design, irrigation, and agronomic practices;
    - Support implementation of climate-smart agriculture and sustainable land and water management measures;
    - Participate in capacity building, supervision, and evaluation of the demonstration farm.
- **Ministry of Environment, Range and Climate Change (MoERCC)**
    - Act as environmental regulator for ESMP and EIA-related compliance;
    - Conduct environmental inspections and audits as required;
    - Advise on land degradation, water abstraction, pollution prevention, and climate adaptation.
- **Qardho Local Government (District Administration)**
    - Confirm and safeguard public land allocation for the farm;
    - Support community engagement, communication, and GM processes;
    - Participate in monitoring of environmental and social performance and enforcement of local regulations.
- **Farm Management (Qardho Demonstration Farm Management Unit)**
    - Lead day-to-day implementation of operational ESMP measures;

- Manage OHS, water and soil management, waste management, and inclusive access;
- Maintain records (training, incidents, GM, waste, water consumption) and report to PCU.

- **Contractor (Construction Phase)**
  - Prepare C-ESMP and monitor its implementation to ensure compliance
  - Implement all construction-phase mitigation measures and OHS provisions;
  - Provide and enforce use of PPE;
  - Keep records on incidents, training, waste disposal, and labour conditions;
  - Cooperate with Supervising Engineer, PCU, MoAI and MoERCC during supervision missions.
- **Supervising Engineer / Consultant**
  - Supervise construction works and ensure ESMP clauses are implemented;
  - Monitor contractor performance on environmental, social and OHS issues;
  - Report non-compliance and recommend corrective actions.
- **Community Representatives, Elders and Local Committees**
  - Support information sharing between the community and project;
  - Monitor local impacts and help identify emerging issues;
  - Participate in GM processes and joint problem solving when community-level grievances arise.

6.4 Capacity Building Plan

Targeted capacity building will be provided to ensure effective ESMP implementation.

Table 4: Capacity Building Plan – Qardho Demonstration Farm

Training Topic	Target Group	Key Content	Responsible Institution	Estimated Cost (USD)
ESMP implementation, ESF/ESS	PCU staff, MoAI, MoERCC, Qardho District, Farm Management	Overview of ESF and ESS; ESMP obligations; roles and responsibilities;	PCU Safeguards Team	1,500

requirements and reporting		reporting formats; monitoring and supervision requirements.		
Construction-phase OHS, labour management and Codes of Conduct	Contractor management and workers; Supervising Engineer	Hazard identification; PPE and safe work procedures; heat stress management; labour rights; CoCs; GBV/SEA/SH prevention; worker GM.	PCU Safeguards, Contractor	1,400
Climate-smart agriculture and sustainable land and water management	Farm Management, extension officers, selected lead farmers and youth	Efficient irrigation; soil and water conservation; soil fertility management; drought-resilient varieties; crop rotation; composting and organic inputs.	MoAI / Extension Services	1,600
Farm OHS and safe handling of inputs (fertilizers, agro-chemicals, machinery, solar systems)	Farm staff, technicians, guards	Safe storage and handling of inputs; PPE; machinery and electrical safety; emergency response; first aid; incident reporting.	Farm Management, MoAI	1,200
GM operation, stakeholder engagement and inclusion of vulnerable groups	Farm Management, District GM focal points, community representatives	GM procedures and documentation; communication and feedback; confidential handling of sensitive complaints; inclusion of women, youth, IDPs and vulnerable households.	PCU Safeguards, District	900

6.5 ESMP Implementation Budget

The ESMP implementation budget covers construction and five years of operation. (What happens after the project ends – how do you ensure sustainability of the project?

Table 5: ESMP Implementation Budget

Cost Category	Description	Estimated Cost (USD)
Construction Phase Mitigation Measures	Dust and noise control, fencing and signage, basic drainage, OHS (PPE, first aid), spill control, construction waste management, community safety measures.	9,000
Operational Phase Mitigation Measures (5 years)	Water use monitoring, drainage and soil conservation, composting and solid waste management, farm OHS, boundary maintenance, traffic and visitor safety, inclusion measures.	22,000
Monitoring and Supervision	Periodic site visits and supervision missions by PCU, MoAI, MoERCC and District; data collection tools; compliance checks and reporting.	8,000
Capacity Building (Table 7)	Training, materials, facilitation, and logistics for ESMP-related capacity building.	6,600
GM Implementation	GM awareness campaigns, complaint boxes, registers, focal point support, communication costs, follow-up meetings.	2,400
Total ESMP Implementation Budget		**48,800 USD**

Sustainability of ESMP monitoring after FSRP completion will be ensured by mainstreaming environmental and social monitoring into the routine operations of the Qardho Demonstration Farm under the Ministry of Agriculture and Irrigation, with continued regulatory oversight by the Ministry of Environment, Range and Climate Change. Monitoring responsibilities and costs will be absorbed into regular farm management and extension service functions rather than treated as a standalone project activity.

6.6 Grievance Mechanism (GM)

A project-level Grievance Mechanism (GM) has been established to enable workers, community members, and other stakeholders to raise concerns related to the construction and operation of the Qardho Demonstration Farm. The GM is accessible, transparent, and culturally appropriate, and aligns with World Bank ESS10. Its purpose is to provide timely resolution of complaints, strengthen accountability, and maintain constructive engagement with affected communities.

The GM includes a **SEA/SH-sensitive reporting channel** with confidential handling, survivor consent, data protection, and referral to qualified GBV/SEA/SH service providers. **SEA/SH-related complaints will not be mediated with alleged perpetrators** and will be managed using a survivor-centered approach.

Grievances may relate to construction impacts such as dust, noise, waste, labour issues, or community safety, as well as operational concerns such as water use, irrigation practices, traffic on access roads, or access to training and farm services. All complaints—verbal, written, or anonymous—will be received respectfully and handled without discrimination or fear of retaliation.

Complaints may be submitted to the PCU during construction or to the Farm Management during operation. Additional channels include community leaders and a complaint box placed at the site. . All, grievances will be recorded in a GM register and acknowledged within 48 hours. Most cases should be resolved within 7–14 days. Unresolved cases will be escalated to the District Administration and subsequently to the PCU Safeguards Team. As a last resort, complainants may seek redress through the formal legal system or the WB Grievance Redress Services (GRS).

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Information on the GM, including procedures and contact details, will be shared through community meetings and posters displayed at the construction site and farm premises. A designated GM focal person will manage registration and follow-up. Sensitive cases such as SEA/SH or GBV will be handled confidentially and referred to qualified service providers using a survivor-centered approach.

The PCU will periodically review grievance records, ensure corrective actions are implemented, and prepare summary reports to support continuous improvement of environmental and social performance.

7. Stakeholder Consultation

7.1 Introduction

Stakeholder consultation is a core element of the environmental and social assessment process and is essential to ensure that the Qardho Demonstration Farm reflects local priorities and is socially acceptable. Consultations for this subproject were carried out during the environmental and social screening visit, project description discussions, and follow-up meetings held with Qardho District authorities and community representatives in November 2025.

The consultation process aimed to inform stakeholders about the proposed demonstration farm, listen to their views on potential risks and opportunities, and integrate their feedback into the project design and this ESMP. The approach followed the principles of openness, inclusiveness, and transparency and aligns with World Bank ESS10 and the S-FSRP Stakeholder Engagement Plan.

Overall, stakeholders expressed strong support for the Qardho Demonstration Farm and welcomed it as a strategic investment to strengthen agricultural skills, improve access to quality seeds and technologies, and create new livelihood opportunities for farmers, youth, and vulnerable households. At the same time, they raised issues related to land allocation and documentation, sustainability and management of the farm, efficient water use, and equitable benefit-sharing.

7.2 Objectives of Stakeholder Consultation

The stakeholder consultation process for Qardho sought to:

1. Inform community members and local authorities about the purpose, location, and components of the demonstration farm;
2. Gather local knowledge and concerns related to land, water, farming practices, and potential environmental and social impacts;
3. Ensure meaningful participation of different groups, including elders, farmers, women, youth, and vulnerable households (e.g. poor farmers, IDPs);
4. Confirm public land allocation and verify that the site is public land with no physical or economic displacement linked to the farm;
5. Identify expectations regarding training, access to improved seeds and services, and short- and long-term employment opportunities;

6. Strengthen ownership and support for the project and build trust between the community, Qardho District Administration, and implementing ministries;
7. Establish a basis for continuous dialogue and use of the Grievance Mechanism (GM), including the national hotline 3060, throughout construction and operation.

7.3 Stakeholders Consulted

Consultations involved a range of stakeholders at district and community level, including:

- **Qardho District Local Government**
    - District Secretary and technical staff from the administration, who accompanied the site visit and confirmed land ownership and allocation.
- **Community Elders and Traditional Leaders**
    - Respected elders representing different areas of Qardho and surrounding rural settlements.
- **Farmers and Agro-pastoralists (men and women)**
    - Mixed group of smallholder farmers and agro-pastoralists who currently rely on livestock and small-scale farming for their livelihoods.
- **Women Farmers and Household Producers**
    - Women engaged in vegetable growing, household food production, and small-scale marketing who have a strong interest in training and access to improved seeds and seedlings.
- **Youth Representatives**
    - Young men and women involved in casual labour, farming, and small businesses who are seeking skills development and employment opportunities.
- **Local Committees and Community Representatives**
    - Community members and potential members of future farm user groups who will help monitor land use, support outreach, and link the farm with surrounding communities.

The consultations were conducted through:

- A meeting with Qardho District Local Government held on 10 November 2025, focusing on land status, coordination, and administrative support;

- A community consultation meeting held on 20 November 2025 with elders and farmers, including active participation of women farmers.

7.4 Issues Raised During Consultations

The main issues, comments, and expectations raised during stakeholder consultations are summarized below, based on the ESMP Data Collection Checklist and meeting notes.

a) Land Ownership and Site Allocation

- The District Secretary confirmed that the farm site is public land officially registered under Qardho District Administration and has been allocated for the demonstration farm under S-FSRP.
- Stakeholders emphasized the importance of clear boundary demarcation and proper documentation to avoid future misunderstandings or encroachment.
- Local government committed to issuing a formal land confirmation letter and to supporting land-related administrative processes.

b) Support for the Demonstration Farm

- Community members welcomed the project as a key opportunity to improve farming skills, access better seeds, and increase agricultural productivity in the district.
- Elders stressed that a practical training site where farmers can see and test technologies is more useful than purely theoretical training.
- Participants considered the farm a potential learning center for the wider Qardho area, not only for the immediate community.

c) Sustainability and Management

- Community members highlighted that some public facilities in the past faced management and maintenance challenges and requested strong, transparent management arrangements for the farm.
- There was a clear expectation that the farm should have long-term sustainability, including proper staffing, maintenance of infrastructure, and clear rules for use of services and resources.

d) Water Use and Irrigation

- The community expressed interest in the planned borehole and irrigation systems, emphasizing the need for efficient water use and careful monitoring of groundwater abstraction.

- Stakeholders asked that the farm become a model for water-saving technologies, such as drip irrigation and well-planned irrigation schedules.

e) Access to Seeds, Inputs and Training

- Farmers requested access to quality seeds and seedlings suitable for local climatic and soil conditions, and the possibility of obtaining planting material from the farm.
- They emphasized that all technologies and seed varieties demonstrated should be appropriate for Qardho conditions and tested before being promoted widely.
- Participants requested regular training and awareness sessions at the farm on production, irrigation practices, soil fertility, and farm management.

f) Inclusion of Women, Youth and Vulnerable Groups

- Women farmers underlined the need for active inclusion in training activities, particularly on vegetables, seedling production, and household nutrition-related farming.
- Youth participants asked for employment opportunities during both construction and operation, and for training that could help them start their own farming or agribusiness activities.
- Stakeholders requested that poor farmers, IDPs, and women-headed households be deliberately targeted in outreach and benefit-sharing so they are not left behind.

g) Environmental and Social Concerns

- Stakeholders raised concerns about dust and noise during construction and requested that the contractor manage impacts responsibly (watering, timing of works, traffic control).
- They stressed that waste from construction and farm operations should not be dumped near the community or along access routes, and asked for proper waste management and composting practices.

h) Governance, Communication and GM

- Participants requested regular updates on project progress, clear communication on who manages the farm, and how decisions will be made.
- They welcomed the introduction of the Grievance Mechanism (GM) and the national hotline 3060 as a way to raise concerns or complaints transparently.
- Community representatives committed to using the GM, taking part in community-led monitoring, and reporting problems early for resolution.

7.5 Consultation Summary Table

Table 6: Summary of Stakeholder Consultation

Stakeholder Group	Key Issues Raised	Expectations / Suggestions	Officer Responding /Institution	How Addressed in the ESMP / Project Design
Qardho District Local Government (District Secretary and staff)	Confirmation of land status; need for formal documentation; coordination with ministries.	Ensure land is clearly recognized as public land allocated to the farm; maintain close coordination during implementation.	Salad /MolAH	Land ownership and allocation confirmed by official letter; ESMP includes measures for clear boundary demarcation and continued coordination with district authorities (Sections 2, 4, 6).
Community elders and traditional leaders	Long-term status of the land; prevention of future disputes; need for strong management and sustainability.	Clear boundaries, rules and management arrangements; regular dialogue with community.	Mohamed/MoLAH	ESMP recommends fencing/markers, documentation of public land status, and ongoing engagement through meetings and GM (Sections 4, 6, 7).
Farmers and agro-pastoralists (men and women)	Need for improved seeds and technologies; relevance of crops; efficient water use; fair access to services.	Practical demonstrations of locally suitable crops and irrigation; access to seeds and training; sustainable groundwater use.	Abdullahi/MoAI	Farm components include nurseries, orchards, vegetable and cereal fields; ESMP includes water budgeting and efficient irrigation measures;

				training and extension activities prioritized (Sections 2, 5, 6).
Women farmers and household producers	Inclusion in training; access to seedlings; timing and modality of activities.	Dedicated training opportunities and scheduling that considers women's responsibilities; affordable access to inputs.	Abdullahi/MoAI	ESMP and capacity building plan promote inclusive participation and sex-disaggregated monitoring; outreach activities to target women specifically (Sections 5, 6, 7).
Youth representatives	Employment opportunities; skills development; involvement in farm operations.	Hiring of local youth for construction and farm operations; training that can lead to future jobs or self-employment.	Salad /MolAH	ESMP encourages local hiring during construction and operation; capacity building plan and farm management arrangements include roles for youth where possible (Sections 5, 6).
Vulnerable households (poor farmers, IDPs, women-headed households)	Risk of exclusion from benefits; ability to participate in training and access services.	Targeted outreach and support; fair access to training, seedlings and information.	Mohamed/MoLAH	ESMP requires tracking of participation by vulnerability status and encourages prioritization of vulnerable groups in outreach and beneficiary selection (Sections 4, 5, 6).

Community at large	Construction impacts (dust, noise, safety); waste management; communication and grievance channels.	Responsible construction practices; clean site; clear information and easy channels to complain if needed.	Salad /MolAH	Construction-phase mitigation measures address dust, noise, safety and waste; GM and hotline 3060 will be used; regular updates and signage planned (Sections 5, 6, 7).

7.6 Integration of Stakeholder Feedback into the ESMP

Stakeholder views have been systematically incorporated into both the project design and the ESMP in the following ways:

- **Land and boundaries:** Confirmation of public land status and the Mayor's land allocation letter have been reflected in the ESMP. The plan requires clear demarcation and fencing of the farm to prevent encroachment and disputes.
- **Water management:** Concerns about groundwater use are reflected in mitigation measures for efficient irrigation, water budgeting, and monitoring of water abstraction.
- **Technology and crop selection:** Requests to focus on suitable crops and technologies are addressed through emphasis on locally appropriate, climate-smart practices and the use of demonstration plots for cereals, vegetables, and fruit trees.
- **Inclusion of women and youth:** The ESMP and capacity building plan include specific actions to involve women and youth in training, employment, and decision-making, and require disaggregated monitoring of participation.
- **Environmental protection:** Community concerns on dust, noise, and waste are incorporated into construction and operation mitigation measures, including dust control, site housekeeping, composting, and safe waste disposal.
- **Communication and complaints:** The desire for ongoing information and a way to raise concerns is reflected in the GM provisions, the use of the 3060 hotline, and the commitment to continued stakeholder consultations throughout the project life cycle.

7.7 Future Community Engagement

Stakeholder engagement will continue throughout the construction and operation of the Qardho Demonstration Farm. Planned future engagement includes:

- Regular community meetings to provide updates on construction progress, farm activities, and training and employment opportunities;
- Involving community representatives and district authorities in site visits, supervision missions, and review of farm performance;
- Displaying information on the GM and contact persons at the farm and district offices, and through local notice boards and meetings;
- Using training events, field days, and demonstrations as platforms for two-way communication, allowing farmers to provide feedback on technologies and practices;
- Periodic review of stakeholder feedback and grievance records by the PCU and farm management to improve environmental and social performance over time;
- Maintaining close coordination with Qardho Local Government, elders, and community structures to support local ownership, conflict prevention, and sustainability of the demonstration farm.

8. Conclusion

The Qardho Demonstration Farm is a key subproject under the Somalia Food Systems Resilience Project (S-FSRP), designed to enhance agricultural productivity, build climate resilience, and strengthen livelihoods in Qardho District and the wider Bari Region. By converting a 500 m × 500 m public land parcel into a fully equipped agricultural learning and production hub, the project will provide farmers, youth, women, and local institutions with practical opportunities to test and adopt climate-smart technologies, improved seeds, and sustainable land and water management practices.

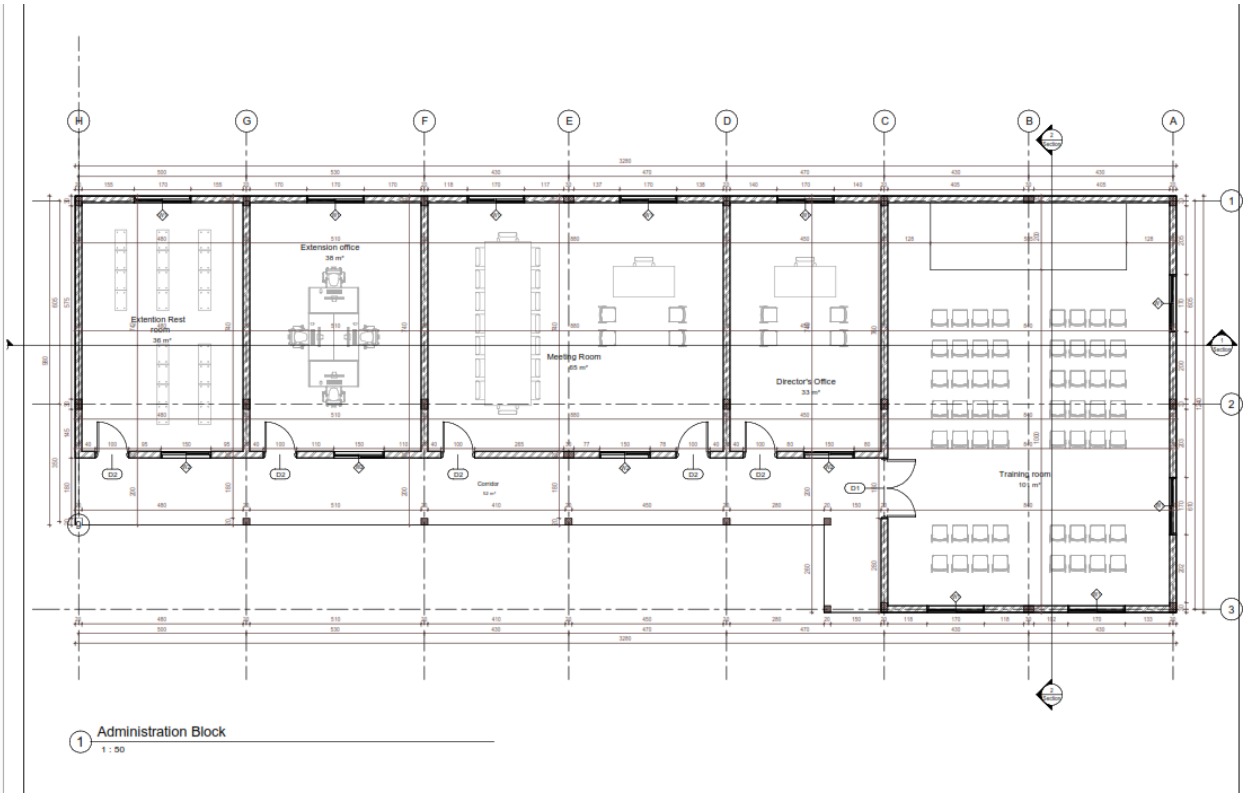
The environmental and social assessment conducted for this ESMP indicates that the subproject carries a **Moderate** level of risk. The main potential adverse impacts relate to vegetation clearance, soil disturbance, dust, noise, construction waste, water use and irrigation, solid waste and compost management, occupational and community health and safety, and the risk of excluding vulnerable groups from project benefits. These impacts are localized, predictable, and largely reversible, and can be effectively avoided or minimized through the mitigation measures proposed in this ESMP.

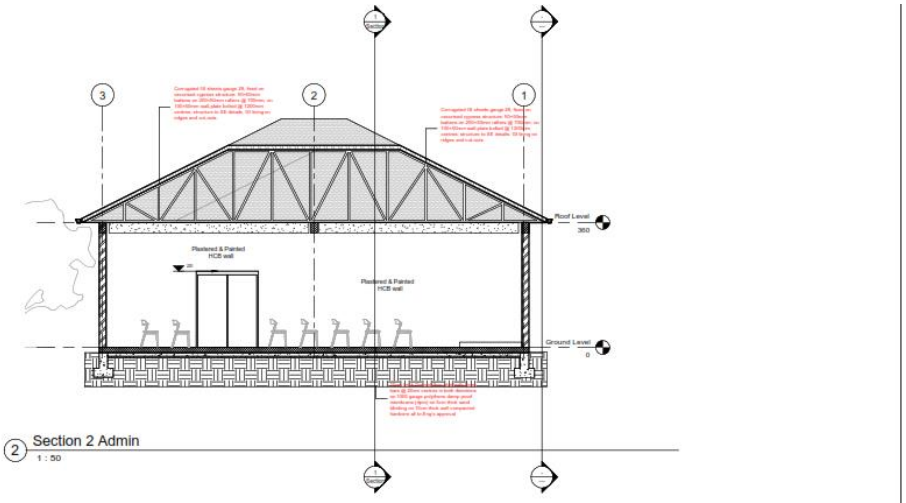
This ESMP provides a comprehensive framework for managing these risks in line with the S-FSRP Environmental and Social Management Framework, the World Bank Environmental and Social Framework, and relevant national and Puntland policies and laws. It sets out clear mitigation measures, monitoring indicators, and institutional responsibilities for both construction and operation, supported by a targeted capacity building plan, an ESMP implementation budget, and a functional Grievance Mechanism (GM).

Stakeholder consultations with Qardho District authorities, community elders, farmers, women, youth and vulnerable groups confirmed strong local support for the demonstration farm and have shaped the project's focus on sustainable water use, appropriate technology, inclusive access, and transparent management. With diligent implementation of this ESMP—particularly on OHS, resource efficiency, waste management, inclusive participation, and grievance handling—the Qardho Demonstration Farm is expected to deliver substantial and long-lasting environmental, social, and economic benefits while maintaining risks at an acceptable level and contributing meaningfully to resilient food systems in Puntland.

9. Annexes

9.1. Designs/ Layout Drawings





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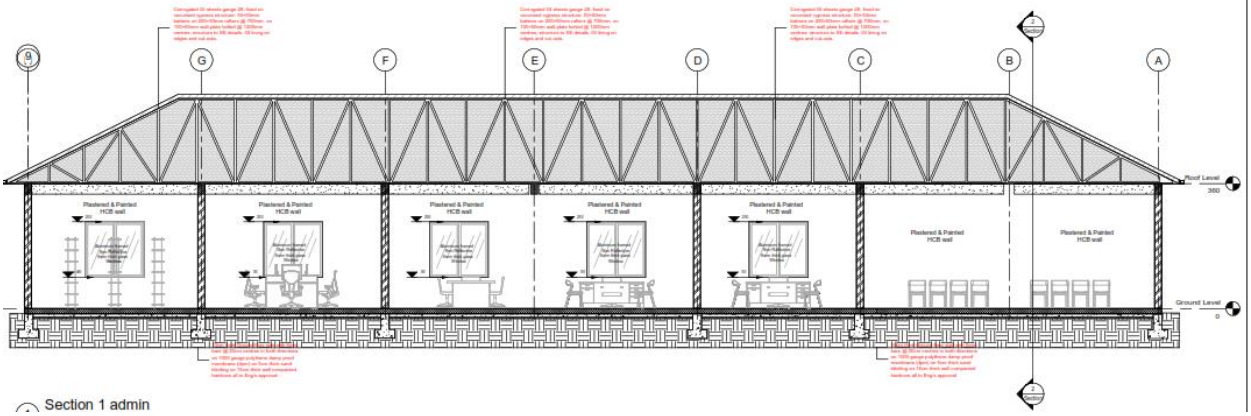

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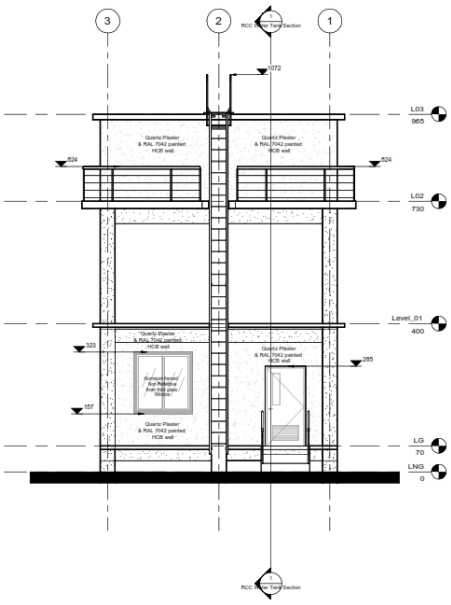

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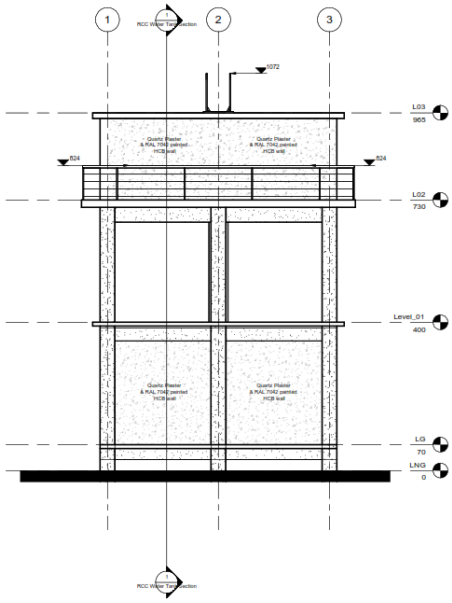

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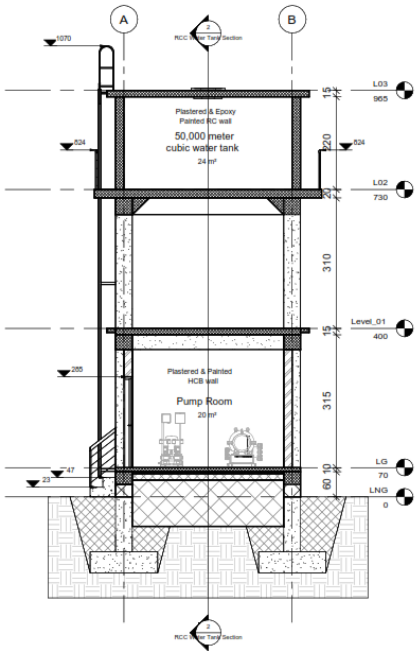

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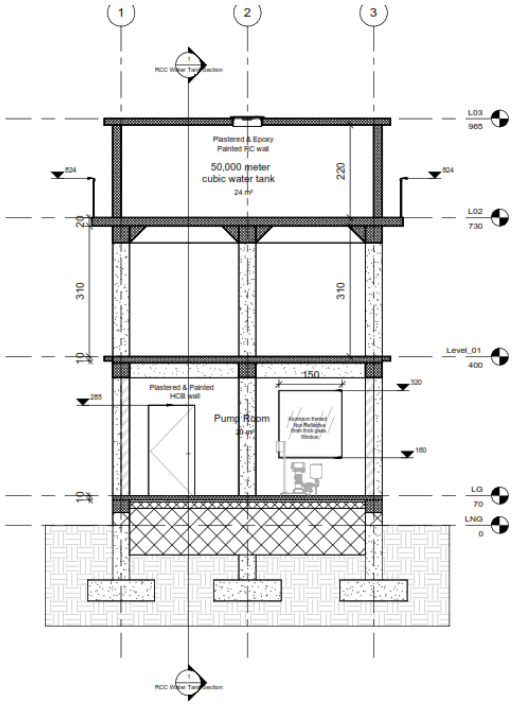

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9.2. Land ownership documents

DOWLADDA PUNTLAND SOMALIYA
DOWLADDA HOOSE
EE DEGMADA QARDHO
XAFIISKA DUQA

حكومة بونتلاند في الصومال
حكومة قرطو المحليه
مكتب العمدة

PUNTLAND GOVERNMENT OF SOMALIA
GARDO LOCAL GOVERNMENT
MAYOR OFFICE

Ref: MDQ/XG/385/2025 **Date: 26/11/2025**

To: Ministry of agriculture & irrigation Garowe

To: World bank Garowe

SUBJECT: CONFIRMATION OF GOVERNMENT LAND ALLOCATION FOR THE QARDHO DEMONSTRATION FARM

To whom it may concern,

This is to formally confirm that the land identified for the Qardho demonstration farm subproject located within Qardho district, measuring approximately 500 m by 500 m (250,000 m³), is public land under the ownership of the Qardho local government.

As the Gardo local government, we are formally allocated this land for the purpose of establishing the demonstration farm subproject under the Somali Food System Resilience Project (S-FSRP).

In Puntland state, implementation of the project is coordinated by the project coordination unit (PCU) under the ministry of agriculture & irrigation (MoAI) with financial and technical support of the World Bank.

The land is free from encumbrances, disputes, or private claims, and there are no residents, assets, or livelihood activities affected by this allocation. The local government has verified that the site is unoccupied, productive land suitable for the planned construction.

Attached herewith are:

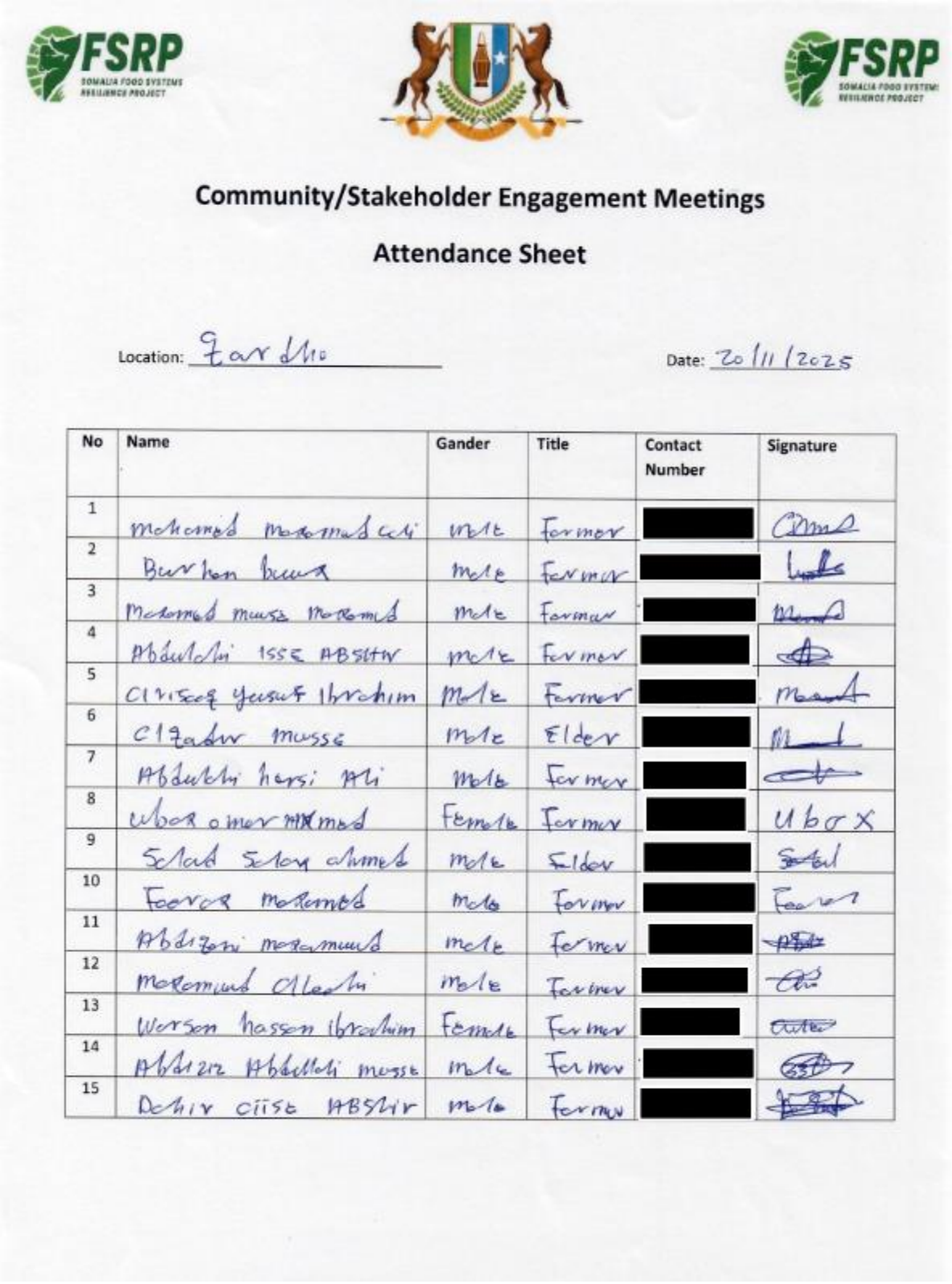
1. A copy of the official land ownership confirmation document issued by the Qardho local government. This confirmation has been issued in accordance with the World Bank's Environmental and Social Framework (ESF) requirement, ensuring voluntary, transparent, and legally valid documentation of public land use for the project implementation.

Gardo Mayor,

Cabdi Siciid Qaal

Wixi intaas dheer kala xiriri xafiiska Duqa degmadda ahna gudoomiyaha gollaha degaanka,
E-mail Mayor@qardho.pl.so 0907751536 gardhomayor@gmail.com

9.3. Stakeholder Consultation meetings' participant lists



Community/Stakeholder Engagement Meetings

Attendance Sheet

Location: Gardho Date: 20/11/2025

No	Name	Gander	Title	Contact Number	Signature
1	Mohamed Mohamed Ali	Male	Farmer	[redacted]	
2	Burhan Isma	Male	Farmer	[redacted]	
3	Mohamed Musa Mohamed	Male	Farmer	[redacted]	
4	Abdullahi Isse Abshir	Male	Farmer	[redacted]	
5	Ciriscaq Yusuf Ibrahim	Male	Farmer	[redacted]	
6	Cigadar Musse	Male	Elder	[redacted]	
7	Abdullahi Hersi Ali	Male	Farmer	[redacted]	
8	Ubax Omer Mohamed	Female	Farmer	[redacted]	
9	Salad Salan Ahmed	Male	Elder	[redacted]	
10	Faarax Mohamed	Male	Farmer	[redacted]	
11	Abdiqani Mohamud	Male	Farmer	[redacted]	
12	Mohamud Cilmi	Male	Farmer	[redacted]	
13	Warsan Hassan Ibrahim	Female	Farmer	[redacted]	
14	Abdiaziz Abdullahi Musse	Male	Farmer	[redacted]	
15	Dahir Ciise Abshir	Male	Farmer	[redacted]	

No	Name	Gander	Title	Contact Number	Signature
16	Mohamud Abdi Said	male	Farmer	[redacted]	MAHAMED
17	C/Llahi Mohamud	male	Farmer	[redacted]	CABDI
18	Aycanle Cabdi Mohamed	male	Farmer	[redacted]	[illegible]
19	Ahmed Ciise Said	male	Farmer	[redacted]	[illegible]
20	Said Aweale Cali	male	Farmer	[redacted]	[illegible]
21	Abdirashid Sh/re Ahmed	male	Farmer	[redacted]	C/rashid
22	Xaawo Mohamud Osman	Female	Farmer	[redacted]	Xaawo
23	Xalimo Cilaahi Yusuf	Female	Farmer	[redacted]	[illegible]
24	Khadra Hussein	Female	Farmer	[redacted]	KHADRA
25	Asmino Musse Ahmed	Female	Farmer	[redacted]	[illegible]
26	Xaawo Sahra Cali	Female	Farmer	[redacted]	XAWO
27	Werson Osman Yusuf	Female	Farmer	[redacted]	[illegible]
28	Qaali Mohamud ABDI	Female	Farmer	[redacted]	Qaali
29	Asmino Abshir Hussein	Female	Farmer	[redacted]	[illegible]
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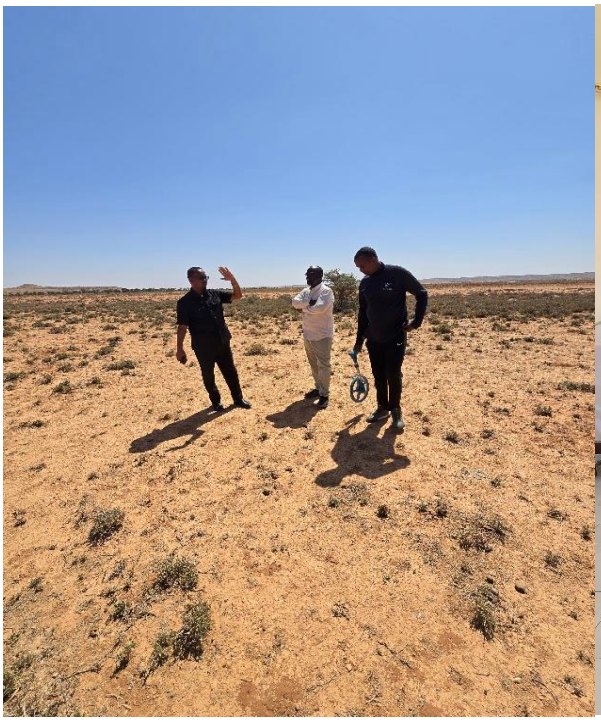
9.4 ES Screening Checklist

ESS Screening Form - Qardho.docx

9.5. Photos for Consultation Meetings



9.6. Photos for Site Observation