

REPUBLIC OF SOMALILAND



Ministry of Agriculture Development

Somaliland-Food Systems Resilience Project (SL-FSRP)

Integrated Pest Management Plan (IPMP) for Livestock Treatment in Selected Project Locations

Project ID: P177816

Client Address

Office of Project Coordination Unit
Next to Assod Hotel, Hargeisa, Somaliland

Contact: info@sl-fsrp.org

Project Website: www.sl-fsrp.org

Landline; 523446



Acronyms

CAHWs	Community Animal Health Workers
EHSGs	Environment, Health and Safety Guidelines
ESF	Environmental and Social Framework of the WB
ESMF	Environmental and Social Management Framework
ESSs	Environmental and Social Standards
GRM	Grievance Redress Mechanism
IPM	Integrated Pest Management
IPMP	Integrated Pest Management Plan
MoAD	Ministry of Agriculture Development
MoLRD	Ministry of Livestock and Rural Development
PIM	Project Implementation Manual
PMP	Pest Management Plan
SEP	Stakeholders Engagement Plan
WB	The World Bank
SL-FSRP	Somaliland Food Systems Resilience Project
PDO	Project Development Objective
CERC	Contingency Emergency Response Component
VPP	Veterinary Para-Professional
PCU	Project Coordination Unit
VDC	Village Development Committee
ESIA	Environmental and Social Impact Assessment
GBV	Gender-Based Violence
SOP	Standard Operating Procedures
SEAH	Sexual Exploitation, Abuse and Harassment
PPE	Personal Protective Equipment
LMP	Labor Management Procedures
EHS	Environmental Health and Safety
CoC	Code of Conduct

Table of Contents

Acronyms	2
Executive Summary.....	5
Section 1: Introduction	6
1.1. Project Background.....	6
1.2. Rationale of the Planned Activity.....	6
1.3. Objective and Scope of the IPMP.....	7
1.4 Expected Outcome of the IPMP Implementation.....	8
Section 2. General Description of the Sub-Project Activity	9
2.1. Target Beneficiaries and Coverage	9
2.2 Locations of the Sub-project Area	9
2.3 Target Diseases and Procured Drugs	11
2.4 Implementation Arrangements	15
2.5 Teams Composition	16
2.5 Fieldwork Activities	18
2.6 Monitoring and Documentation	19
2.7 Management and Reporting.....	20
Section 3. Relevant National Legal Frameworks and World Bank ESF	21
Section 4. Stakeholder Engagement and Public Participation.....	22
4.1 Stakeholder Consultation.....	22
4.2 Objectives of the Consultation.....	23
4.3 Key Issues from the Stakeholder Consultation	23
Section 5. Environmental and Social Risks and Mitigation Measures	25
5.1. Introduction	25
5.2 Anticipated Environmental and Social Risks During Treatment Exercise	25
5.3 Anticipated Environmental and Social Risks in the Post-Treatment Phase.....	27
SECTION 6: ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN	28
Annex 1: Attendance Sheet for Consultation	47
Annex 2: Schedule and Workplan.....	48
Annex 3: Livestock Treatment Algorithms and Clinical Decision Guide	51
Annex 4: Antibiotic Stewardship Guardrails (AMR)	52
Annex 4: Monitoring and Evaluation Results Framework	53

Annex 5: PPE Matrix by Task..... 55

Executive Summary

The Somaliland Food Systems Resilience Project (SL-FSRP) is a World Bank–financed initiative designed to strengthen the resilience of food systems and enhance Somaliland’s preparedness for food insecurity in targeted project areas. The project supports investments in resilient agricultural and livestock production capacity, sustainable natural resource management, market access, institutional strengthening, and emergency response. Through these interventions, the SL-FSRP aims to improve productivity, enhance livelihoods, and build long-term resilience among pastoral, agro-pastoral, and farming communities.

In line with the above objectives, the Ministry of Livestock and Rural Development (MoLRD) is planning to conduct livestock treatment that will be implemented across 29 project selected sites in seven districts within four main regions (Marodijeh, Sahil, Awdal, and Togdheer), targeting approximately 4,500 pastoral and agro-pastoral households. Around 300,000 animals are expected to receive treatment, including interventions for internal and external parasites and other clinically diagnosed conditions.

Livestock is the backbone of rural livelihoods in Somaliland, with a significant proportion of the population depending on pastoral and agro-pastoral systems for income and food security. However, the sector faces major challenges, including high disease prevalence, limited access to veterinary services, and recurrent climate shocks. This livestock treatment activity aims to improve animal health, protect household assets, and enhance resilience by expanding access to preventive and curative veterinary services in underserved areas.

This Integrated Pest Management Plan (IPMP) has been developed to identify, characterize and manage potential environmental and social risks and impacts associated with the livestock treatment activity. The objective of this IPMP is to provide management strategies and actions to mitigate adverse risks and impacts in consistence with national legal and policy frameworks, relevant WB Environmental and Social Standards (ESSs) and the Environmental, Health and Safety Guidelines (EHSGs).

As part of the preparation of this IPMP, stakeholder consultation was conducted with MoLRD technical staff, including veterinarians and Veterinary Para-Professionals (VPPs) that will be involved in the treatment exercise. The consultation aimed to identify potential environmental and social risks, discuss mitigation measures, and strengthen awareness of safeguard requirements, including GBV prevention and grievance management.

The IPMP identified potential environmental and social risks associated with the treatment campaign, including improper handling and disposal of medical wastes, biohazard risks, limited community awareness and engagement, occupational health and safety concerns, and possible exclusion of vulnerable groups. Key mitigation measures proposed include staff training, provision of personal protective equipment (PPE), safe storage and disposal of medical waste, inclusive community engagement and awareness raising, and implementation of an accessible Grievance Redress Mechanism (GRM).

Section 1: Introduction

1.1. Project Background

Somaliland Food Systems Resilience Project (SL-FSRP) is part of a regional initiative by the World Bank to provide a comprehensive framework for intervention at both the national and regional levels. This Multi-phase Programmatic Approach (MPA) aims to tackle the underlying structural challenges of food insecurity and reduce beneficiaries' vulnerability to unpredictable climate, crisis, and conflict events

The Project Development Objective (PDO) of the project is 'to increase the resilience of food systems and the Somaliland's preparedness for food insecurity in project target areas. The project has six components namely: Component 1: (Re-)Building Resilient Agricultural Production Capacity; Component 2: Supporting the Sustainable Development of Natural Resources for Resilient Agricultural Landscapes; Component 3: Getting to Market; Component 4: Promoting a Greater Focus on Food Systems Resilience in National and Regional Policymaking; Component 5: Contingent Emergency Response Component; Component 6: Project Coordination and Management.

The Somaliland FSRP will directly benefit an estimated 65,000 of small farmers, agro-pastoralists, and nomadic pastoralists, at least 30 percent of which will be women. In addition, the project will support value chain stakeholders including women-owned agribusiness enterprises, financial services providers, disruptive Agriculture Technology start-ups, agricultural research and extension institutions. Within the public sector, the project will also build the capacity of Ministry of Agriculture Development, Ministry of Livestock and Rural Development and Ministry of Environment and Climate Change, and other institutions to implement resilience- focused policies.

1.2. Rationale of the Planned Activity

Livestock production is the backbone of livelihoods and the rural economy in Somaliland, with the majority of the rural population depending directly or indirectly on livestock for income, food security, and employment. According to the latest figures from the Ministry of Livestock and Rural Development, it is estimated that 60% of Somaliland's population are engaged in pastoral and agro-pastoral livelihood systems, and those households rely primarily on livestock and livestock products as their main source of income and subsistence. The livestock sector is predominantly characterized by pastoral and agro-pastoral production systems, supporting an estimated livestock population of about 18–19 million heads, including camels, sheep, goats, and cattle, which constitute the principal household asset base.

Livestock contributes significantly to national food supply through the provision of meat and milk, generates household income through domestic and export markets, and serves as a key social and economic safety net for rural communities, particularly during drought periods. From an economic perspective, according to the figures from the Ministry of Investment and Trade, the livestock sector is the single largest contributor to Somaliland's economy, accounting for around 60% of the GDP and over 80% of export earnings, mainly through live animal exports to Gulf countries. As such, livestock production plays a central role in economic growth, employment generation, and foreign exchange earnings.

Despite its high economic and social importance, the livestock sector faces persistent and interrelated constraints that undermine productivity and resilience. Key challenges include the high prevalence of livestock diseases, limited access to quality veterinary and extension services, low adoption of improved animal health practices, and recurring climate-related shocks, particularly drought. These constraints contribute to elevated morbidity and mortality rates, reduced milk and meat production, declining herd productivity, and increased vulnerability of pastoral and agro-pastoral households. Limited availability of timely, affordable, and accessible public veterinary services in remote and underserved areas further exacerbates disease outbreaks and livelihood losses. Strengthening livestock health systems through preventive and curative animal health services is therefore essential to improving productivity, safeguarding household assets, and enhancing resilience to climate- and disease-related shocks.

In response to these challenges, livestock treatment program was designed to implement in selected project areas. The activity aims to improve livestock health through targeted preventive and curative treatment interventions, reduce disease burden, enhance livestock productivity, and promote sustainable animal health management practices. By strengthening access to timely and affordable veterinary services, the program will directly support pastoral and agro-pastoral communities in protecting, maintaining, and improving their livestock assets, thereby contributing to improved livelihoods, food security, and resilience to climate- and disease-related shocks.

The proposed activity is fully aligned with **Component 1** of the Somaliland Food Systems Resilience Project (SL-FSRP), which focuses on building resilient livestock production capacity. Specifically, the livestock treatment intervention will contribute to the achievement of Intermediate Result Indicator 14 (IR14): Households reached with public veterinary services, with a target of 4,762 households. Through this contribution, the activity will support improved animal health outcomes, enhanced household resilience, and strengthened food security in the project areas. The following are the specific objectives of the activity:

- To reduce the prevalence and impact of major livestock diseases through targeted preventive and curative treatment interventions.
- To increase access of pastoral and agro-pastoral households to public veterinary services, particularly in underserved rural areas.
- To improve livestock productivity, including milk and meat production, by strengthening animal health management practices.
- To enhance the capacity of local veterinary service delivery systems to provide effective and sustainable livestock health services.
- To contribute to the achievement of **SL-FSRP Intermediate Result Indicator 14 (IR14): Households reached with public veterinary services**, targeting **4,762 households**.

1.3. Objective and Scope of the IPMP

This Integrated Pest Management Plan (IPMP) is prepared to address the use of chemicals and drugs for livestock treatment in the selected project locations under the SL-FSRP. The livestock treatment activity

is aimed to improve livestock health and productivity among pastoral and agro-pastoral households in the project-selected area by expanding access to quality, affordable, and timely public veterinary services, including preventive and curative treatments, disease surveillance, and basic animal health advisory services. Hence it should be noted that, this sub-project/activity should full fill the environmental and social management requirements. The primary objective of this IPMP is to provide management strategies and actions to mitigate adverse risks and impacts in accordance with the World Bank's Environmental and Social Standards (ESSs) and the Environmental, Health and Safety Guidelines (EHSGs) as well as relevant national legal and policy frameworks.

One of the Environmental and Social Management requirement, among others, that must be addressed before commencement of this activity, is to prepare, implement and monitor the IPMP in accordance with the Word Bank's Environmental and Social Framework (ESF) and the 10 ESSs (ESS1-ESS10).

1.4 Expected Outcome of the IPMP Implementation

The successful implementation of the Integrated Pest Management Plan (IPMP) for the proposed livestock treatment program is expected to result in a range of positive outcomes that contribute to the sustainability, safety, and social acceptance of the initiative. These outcomes include:

- a) Enhanced environmental and biosecurity compliance
- b) Minimization of human and animal health risks through safe treatment handling
- c) Strengthened stakeholder engagement and trust
- d) Equitable access to treatment services across the beneficiaries in the selected project locations
- e) Effective risk mitigation and grievance redress
- f) Enhanced proper waste management and disposal
- g) Continuous monitoring and evaluation of environmental and social performance, enabling real-time adjustments and evidence-based decision-making.

Section 2. General Description of the Sub-Project Activity

2.1. Target Beneficiaries and Coverage

The primary beneficiaries of the Livestock Treatment Activity are pastoral and agro-pastoral households residing in the selected project areas, whose livelihoods depend largely on livestock production. These households rely on camels, cattle, sheep, and goats as their main sources of food, income, and asset accumulation. As a result, they are highly vulnerable to livestock diseases, climate-related shocks, and limited access to quality veterinary services, all of which directly affect household resilience and food security.

Special attention will be given to underserved and vulnerable groups, including women-headed households, youth, and resource-poor pastoralists, who often face structural and financial barriers in accessing public veterinary services. The activity will promote inclusive participation by ensuring equitable access to livestock treatment services, mobile outreach, and community awareness campaigns tailored to the specific needs of different beneficiary groups. Community engagement mechanisms will be used to enhance awareness of disease prevention, proper animal husbandry practices, and timely reporting of animal health concerns.

Within a period of 20 field days (19 days dedicated to the provision of veterinary services and one day for community awareness and sensitization), approximately 150,000 sick or weak animals will be treated, with up to 150,000 animals receiving additional secondary treatment based on clinical assessment. Mandatory treatment will target animals exhibiting clinical signs of internal and external parasitic infestations, as well as signs of malnutrition. Secondary treatment will focus on animals presenting clinical signs of common bacterial infections, respiratory conditions, and wounds. The use of antibiotics will be strictly limited to cases where animals present clear clinical indications, in line with responsible antimicrobial use principles and standard veterinary protocols to minimize the risk of antimicrobial resistance.

The following are the number of beneficiaries:

- Approximately **300,000 animals** across the **29 project sites** will receive preventive and curative treatments, including deworming and ectoparasite control.
- Approximately **4,500 pastoral and agro-pastoral households** will benefit directly from the treatment interventions.
- **Modality:** mobile outreach to reach migrated livestock; prioritization of severely affected herds; on-site; mobile crushes at boreholes

2.2 Locations of the Sub-project Area

As a part of this intervention to improve animal health and enhance the resilience of pastoral and agro-pastoral communities, the SL-FSRP, in collaboration with the Ministry of Livestock and Rural Development

(MoLRD), will conduct a Livestock Treatment campaign. This vital intervention will be conducted in selected project sites across seven districts spanning the Marodijeh, Sahil, Awdal, and Togdheer regions. The campaign aims to benefit 4,762 households by treating a total livestock population of 300,000 animals, including sheep, goats, camels, cattle, and equine, thereby protecting livelihoods and strengthening local food systems.

The table below summarizes the region and districts targeted:

Table 1: Targeted districts and regions

Region	Districts	Targeted Sites/Villages	Targeted livestock population	Type of Animals/Livestock	Number of Target Households
Marodijeh	• Hargeisa	• Lafta-farawayne • Dhaboolaq • Maygaagta • Cadaadley • Dhamal	100,000	Sheep, Goats, Camels, Cattle, and Donkeys	1,500
	• Gabiley	• Taysa • Botor • Cadaad-dhadherey • Agabar • Galooley			
	• Salahley	• Higlada • Qool-bulale			
	• Baligubadle	• Gumar • Habaasweyn			
Sahil	• Berbera	• Abdaal • Laaso-dacawo • Dooxo-guban • Waabaha • Wadhka • Bookh	50,000	Sheep, Goats, Camels, Cattle, and Donkeys	750
Awdal	• Baki	• Cadaad • Dhuxunka • Baki • Sabawanaag	50,000	Sheep, Goats, Camels, Cattle, and Donkeys	750
Togdheer	• Burao	• Beer • Kabadheere • Warabeeye • Qoyta • Nasiye	100,000	Sheep, Goats, Camels, Cattle, and Donkeys	1,500
Total			300,000		4,500

The following map illustrates the geographical distribution of the seven targeted districts across the Marodijeh, Sahil, Awdal, and Togdheer regions where the Livestock Treatment campaign will be implemented.



Figure 1: Map of the targeted villages/sites

2.3 Target Diseases and Procured Drugs

The livestock treatment intervention will provide a comprehensive package of veterinary services addressing the primary disease categories undermining livestock health and productivity in the target pastoral and agro-pastoral areas. These include a heavy burden of external parasites (such as ticks, lice, and mange mites) which cause irritation, hide damage, and act as vectors for other pathogens, and internal parasites (including gastrointestinal nematodes, cestodes, liver flukes) which lead to chronic weight loss, anemia, and reduced milk production. The treatment campaign also targets prevalent bacterial and secondary conditions, such as wound infections, pneumonia, and opportunistic infections that commonly afflict weakened animals.

Finally, the intervention addresses nutrition and metabolic stress including mineral deficiencies, dehydration, and general debility which are exacerbated by recurrent droughts and directly impact animal survival and herd resilience. The selection of procured drugs (Table 3) was therefore guided by the need to provide a comprehensive response to this specific spectrum of challenges.

The table below summarizes the target diseases during the treatment exercise:

Table 2. Targeted Diseases

Category	Specific Diseases / Conditions
External Parasites	Ticks, Lice, Mange mites Trypanosomiasis
Internal Parasites	Gastrointestinal Nematodes, Cestodes, Liver flukes, Other Flukes (e.g., Paramphistomes) Trichostrongylus, Ostertagia ostertagi, Haemonchus contortus
Viral	Cowpox, Camelpox (<i>Note: Antibiotics are used only to treat secondary bacterial infections that may occur when the animal's immune system is weakened by the viral disease.</i>)
Bacterial & Secondary	Wound Infections, Opportunistic respiratory/enteric infections, Pneumonia (Cattle & Camel) Pasteurellosis, Footrot,
Nutrition & Metabolic	Mineral deficiency, General debility (Drought-related) Bloat to metabolic conditions.

The core principle of this campaign is the responsible use of antimicrobials. In line with the national policies on Antimicrobial Resistance (AMR):

- Targeted Treatment: Antibiotics will only be administered to animals presenting clear clinical signs of bacterial infection following examination by a veterinary doctor. Prophylactic or blanket use of antibiotics is strictly prohibited.
- Diagnosis: Veterinarians will conduct clinical examinations to inform diagnosis and treatment choice.
- Withdrawal Periods: Before any treatment, livestock owners will be clearly informed of the mandatory withdrawal periods for milk and meat to ensure food safety and public health. This information will be reinforced with verbal instructions and simple, visual aids.
- Completion of Course: The MOLRD regional teams will implement the follow-up protocol described above to ensure that animals receiving multi-dose treatments complete the full course, thereby mitigating the risk of developing AMR.

The Project has already completed procurement of the required drugs and supplies shown on table 3 below.

Table 3. Available drugs and supplies

Item N°	Item	Unit	Quantity
1	Oxytetracycline 20%	Glass bottle	2,000
2	Tyozine 20%	Glass bottle	2,000
3	Ivermectin 1%	Glass bottle	4,000
4	Albendazole 10%	Plastic bottle	2,000
5	Multivitamin	Glass bottle	3,000
6	Alymacyine Aerosol spray	Cans	1,000

7	Stop bloat	Plastic bottle	200
8	Tetracycline Eye Ointments tubes.	Tube	500
9	Samorine 1gm	Glass bottle	500
10	Syringes with needles	Box	100
11	Gloves	box	100
12	Iodine solution	Plastic bottles	50
13	Drenching guns	Mil	100
14	Suture materials	Pcs	100
15	Facemasks	box	100
16	Cotton wool	Pcs	100
17	Vet Coats	Pcs	100 (L= 30 pcs, XL= 30 pcs, and XXL = 40 pcs)

The already procured drugs comply with established quality assurance and anti-counterfeit controls to ensure safety and effectiveness. The products are registered for use in Somaliland, and imported with the necessary regulatory waivers where applicable, and were sourced exclusively from licensed and authorized suppliers. Each product is accompanied by a Certificate of Analysis, and batch numbers and expiry dates will be systematically recorded in the treatment register to ensure full traceability and prevent the use of substandard or counterfeit medicines.

Within 20 field days (19 days for the provision of veterinary services and one day for community awareness and sensitization), approximately 300,000 sick/weak animals will be treated, with 150,000 of them receiving additional secondary treatment. Mandatory treatment will target animals by exhibiting clinical signs of internal and external parasites, as well as malnutrition. Secondary treatment will target animals presenting clinical signs of common bacterial infections, respiratory infections, and wounds. Treatment with antibiotics will only be limited to animals presenting clinical signs.

The table below summarizes the treatment, including the types of veterinary drugs to be administered and the target animal species for each intervention.

Table 4: Treatment Allocation – Category 1

Treatment allocation				
(Treatment per species) – MINIMUM REQUIREMENTS				
Internal & external parasites – Albendazole (Minimum requirements)	Sheep/Goats	80,000		
Internal & external parasites – Ivermectin (Minimum requirements)	Cattle	20,000		
Internal & external parasites – Ivermectin (Minimum requirements)	Camel	50,000		
Total number of Animals treated against Internal and/or Internal & External parasites)		150, 000		

Table 5: Treatment Allocation – Category 2

Total number of animals receiving secondary veterinary services through treatments against Bacterial infections, Vitamin deficiencies, and Trypanosomiasis			
Supplementation with multivitamins	Sheep/Goats	70,000	
Supplementation with multivitamins	Cattle	20,000	
Supplementation with multivitamins	Camel	30,000	
Bacterial infection – Tylosin	Sheep/Goats	10,000	
Bacterial infection - Oxytetracycline 20%	Sheep/Goats	5,000	
Bacterial infection - Oxytetracycline 20%	Cattle	3,000	
Bacterial infection - Oxytetracycline 20 %	Camel	5,000	
Wounds - Tetracycline spray	Sheep/Goats	3,000	
Wounds - Tetracycline spray	Cattle	2,000	
Wounds - Tetracycline spray	Camel	2,000	
Total number of animals to be treated against infectious diseases		150, 000	

Albendazole and Ivermectin were preferred choices for internal and external parasites. The project initially considered farmer-applied external sprays like Amitraz. However, injectable Ivermectin was prioritized (meaning Amitraz has not been included in the procurement of the vet drugs) to ensure professional oversight and dual-action efficacy. While future phases may consider Amitraz for farmer self-application, this approach is now discouraged by the ministry due to significant public health risks associated with non-professional use:

- **High Illiteracy Rate:** With over 60% of the population unable to read, farmers cannot be relied upon to safely interpret usage instructions, storage requirements, or disposal protocols.
- **Health and Environmental Risks:** Improper handling by untrained individuals poses risks of toxicity to humans and livestock, as well as environmental contamination.
- **Ministry Directive:** Aligning with the Ministry of Livestock's (MOLRD) position, acaricides should not be deployed in the field unless administered by a veterinary doctor. The focus remains strictly on professional administration to ensure safety and efficacy."

The following table also summarizes withdrawal periods by drug and species. During this period, milk, meat, or other animal products should not be consumed or sold until drug residues have cleared from the animal's system. The project will provide clear verbal guidance and simple communication materials to ensure farmers understand and follow these requirements.

Table 6: Withdrawal period

Drug	Species	Meat Withdrawal	Milk Withdrawal
Oxytetracycline	Cattle	28 days	7 days
Oxytetracycline	Sheep/Goats	28 days	7 days
Oxytetracycline	Camel	35	14 days
Tylosin	Cattle	21 days	3 days
Tylosin	Sheep/Goats	21 days	3 days
Tylosin	Camel	28	14 Days
Ivermectin	Cattle	28 days	28 days
Ivermectin	Sheep/Goats	21 days	21days
Ivermectin	Camel	35	28
Albendazole	Cattle	14 days	4 days
Albendazole	Camel	21	10 days
Albendazole	Sheep/Goats	10 days	3 days

Note: Camels metabolize drugs more slowly than cattle or sheep, which is why the meat withdrawal is longer (Albendazole). Camels producing milk for human consumption should not be treated. Trials have not been conducted to demonstrate safety in breeding camels. (Ivermectin).

To ensure consistent clinical decision-making across all treatment teams, standardized treatment guide/algorithms have been developed and provided in **Annex 3: Livestock Treatment and Clinical Decision Guide**.

2.4 Implementation Arrangements

The treatment exercise will be organized and implemented by the Ministry of Livestock and Rural Development through its qualified veterinary doctors. Veterinary teams will be deployed to the targeted

project sites according to the schedule to conduct clinical examinations, confirm diagnoses where necessary, and administer all treatments (injectables and controlled substances) in line with national veterinary guidelines. Community Animal Health Workers (CAHWs) will be engaged to support community mobilization, animal handling, crowd control, and logistics; however, all treatments will be carried out under the direct supervision and administration of qualified veterinary professionals.

Recognizing the importance of completing antibiotic courses to prevent antimicrobial resistance, the following protocol will be implemented: Veterinary teams will prioritize the use of long-acting antibiotic formulations where clinically appropriate, for treatments requiring multiple doses over several days, the veterinary team will either: (a) schedule a return visit to the same site within the 20-day window to administer follow-up doses, or (b) in exceptional circumstances, identify and train a specific CAHW at the site to administer the final dose under strict, pre-defined supervision from the vet. All animals receiving treatment will be clearly marked, and owners will be provided with both verbal and written (or pictorial) instructions regarding the treatment schedule and mandatory withdrawal periods. The treatment plan will be recorded for each animal to ensure continuity.

The livestock treatment activities will be implemented over a **twenty-day field mission**, which will be delivered to pastoral and agro-pastoral households. The interventions will be carried out across **29 selected project sites**, which have been identified based on the livestock disease mapping data provided by the Ministry of Livestock and Rural Development (MoLRD), which identifies the most prevalent diseases across different regions and districts based on routine laboratory diagnostic records from the Ministry's regional and district veterinary offices. The Ministry will be responsible for coordinating, implementing, and overseeing the livestock treatment Activity. MoLRD will

- Provide guidance and support to the implementation team
- Identifying target communities and beneficiaries
- Mobilizing pastoral and agro-pastoral households
- Conducting and supervising treatment campaigns
- Collecting and reporting data on households and livestock treated

The field teams will compose of the following:

- Veterinarians (veterinary doctors)
- Veterinary Para-Professionals (VPPs)
- Community Animal Health Workers (CAHWs)
- Monitoring Teams

2.5 Teams Composition

The livestock treatment will be conducted by twenty-two teams, and each team consists of five members including doctors as detailed in Table 6 below:

Table 1. Team Composition vs Regional Distribution

Team Description	Regions vs Team Members vs Number of Days			
	Maroodi-Jeex	Sahil	Awdal	Togdheer
Treatment Team	40 members (8 teams, 5 members in each team, for 14 sites) for 20 days	15 members (3 teams, 5 members in each team, for 6 sites) for 20 days	15 Members (3 teams, 5 members in each team, for 4 sites) for 20 days	40 members (8 teams, 5 members in each team, for 5 sites) for 20 days
M&E & Supervision team	6 members for 2 days	6 members for 2 days	6 members for 3 days	6 members for 3 days
Government Officials (DG and Minister) – supervision and awareness	5 days	5 days	5 days	5 days

The teams will undergo training on Environmental and Social Safeguards including the Integrated Pest Management Plan (IPMP), and all officers will be required to wear protective gear (overalls, gumboots, mask and gloves) all the time during the field activity.

Stakeholders that will be involved in the proposed livestock treatment program have been identified. The table below summarizes all individuals, groups and institutions that have a role in the successful planning, implementation, and monitoring of the livestock treatment program.

Table 4: Key Stakeholders in the livestock treatment program

Stakeholder	Role
SL-FSRP/PCU Team	Fund and coordinate the treatment exercise and supervise the implementation, grievance management
Regional Administration including the Governor	Provide regional oversight, political support, and facilitate coordination.
MoLRD Headquarter Staff including Minister, DG, and other Directors of Departments	Planning, technical oversight, treatment supply chain, technical support, monitoring & evaluation.
Local Government (district-level)	Facilitate community entry and mobilization; participate in community sensitization
MoLRD Regional Office	Coordinate regional implementation, supervise veterinary officers, and report progress.
Veterinary Doctors and Veterinary Para-Professionals (VPPs)	Direct treatment administration, technical oversight, training of assistants, animal handling and data collection.
Community Committees- Village Development Committees (VDCs),	Mobilize community members; assist in beneficiary identification and verification; disseminate program information; facilitate access to treatment sites; community-level grievance documentation and resolution.

including GRM Committees; CAHWs	
Farmers/ Livestock Owners	Provide livestock, assist with animal restraint, report adverse effects, and support mobilization.

2.5 Fieldwork Activities

The fieldwork activities for the proposed livestock treatment for the selected project sites include the following:

A. Community Mobilization and Sensitization

Prior to the commencement of the livestock treatment activities, comprehensive community mobilization efforts will be undertaken to engage livestock farmers, village and community leaders including the VDC and other stakeholders. This will be the responsibility of the PCU in partnership with the field teams from the Ministry of Livestock and Rural Development (MoLRD). The sensitization will involve the use of local administration structures, Village Development Committees (VDCs), and Community Animal Health Workers (CAHWs) to disseminate information about the purpose, schedule, and importance of the treatment exercise.

B. Briefing / training of the treatment campaign teams

Before the start of the treatment campaign, there will be:

- i. Briefing of the teams on the planned activities in the field.
- ii. Training of the veterinary doctors and veterinary para-professionals (VPP) on:
 - a) Proper livestock treatment handling, dosage requirements, and administration techniques.
 - b) Cold chain maintenance and management.
 - c) Biosecurity and biosafety practices.
 - d) Data collection, reporting procedures, and use of digital devices.
 - e) Environmental and social safeguards including implementation of the IPMP
 - f) Strategies for community engagement and effective communication.
 - g) Grievance management during and after treatment.
 - h) Monitoring and evaluation

C. Actual Livestock Treatment

The field teams will work closely with the VDC, CAHWs and other community structures to mobilize livestock farmers and organize them in certain locations. The livestock treatment activities will entail:

- a) Administration of the drugs and other required treatments by trained veterinarians and VPPs.

- b) Safe handling and disposal of medical waste (vials, syringes, and protective gear) in compliance with the World Bank's ESF guidelines.
- c) Recording treatment details including the number of livestock treated

2.6 Monitoring and Documentation

The Livestock Treatment Activity will be closely monitored to ensure that planned interventions are implemented effectively, reach the targeted beneficiaries, and achieve intended outcomes.

The key indicators that will be effectively monitored will include.

- The number of livestock treated (300,000 animals),
- The number of households reached (4,500 households),
- Improvements in livestock health and productivity.

Data will be collected through field treatment records, household surveys, supervisory checklists, and community verification, with a focus on **gender, youth, and social inclusion**. The Ministry of Livestock and Rural Development (MoLRD), together with regional and district livestock offices, will collect data, and the SL-FSRP M&E Specialist will analyse and prepare the consolidated findings and report by working closely with the MoLRD team. This activity aligns with **SL-FSRP Intermediate Result Indicator 14 (IR14)** on households reached with public veterinary services.

To balance the need for quality communications material with operational efficiency, the project will adopt a targeted approach to documentation, professional video and photographic documentation will be concentrated on the official campaign launch events where senior government officials are present and a representative sample of field treatment activities across different regions and livestock species. This will ensure high-quality content is captured for donor reporting, knowledge products, and public awareness campaigns without overextending resources.

For the remaining sites, documentation will focus on verification and routine monitoring. Field veterinarians and M&E officers will maintain systematic photographic records using standard cameras or smartphones to capture key activities, including animal handling and treatment, community participation, and observable health outcomes. These images will be geotagged where possible and stored alongside treatment data to provide a verifiable audit trail of activities across all 29 sites.

This two-tiered approach ensures that while comprehensive video coverage is not feasible across every location, the project maintains robust visual evidence for accountability while still producing high-impact communications materials from strategic events.

2.7 Management and Reporting

The management and reporting structure for the Livestock Treatment Activity under the Somaliland Food Systems Resilience Project (SL-FSRP) is designed to ensure effective coordination, accountability, and timely decision-making throughout the implementation period.

The project focal point and livestock specialist at the Ministry of Livestock and Rural Development (MoLRD) will serve as the primary coordinator for all livestock treatment interventions. The focal point will maintain a hierarchical reporting line to the Project Coordinating Unit (PCU), ensuring that all progress, challenges, resource use, and field-level implementation information is communicated promptly. The focal point will also submit a comprehensive report at the end of livestock treatment activities, detailing the number of households reached, livestock treated, geographic coverage, and any operational challenges to the project coordinating unit. The report will also include information on gender, social inclusion, and community feedback regarding the quality and accessibility of treatment services. The M&E Specialist will oversee and monitor these indicators, such as the number of livestock treated (300,000 animals), the number of households reached (4,500 households), and overall improvements in livestock health and productivity, working with the project focal point at the Ministry of Livestock and Rural Development.

Section 3. Relevant National Legal Frameworks and World Bank ESF

The implementation of the proposed livestock treatment activity by the MoLRD will be guided by both national legislations and international safeguard requirements including World Bank E&S policies and guidelines. At the national level, the sub-project activity is subject to the following laws and policies:

1. The Constitution of the Republic of Somaliland (2001): base for the formulation of policies and strategies relevant to environment protection, social development, and economic growth,
2. Somaliland National Environment Policy (2015)
3. Somaliland Environment Management Act
4. Environmental and social impact assessment guideline (ESIA)
5. National Livestock Policy
6. National Veterinary Code
7. National Disease Emergency Preparedness Plan
8. Somaliland Labour Act No. 31/2020

The sub-project activities will also align with the World Bank's Environmental and Social Framework (ESF), which sets out ten Environmental and Social Standards (ESS) designed to ensure that development interventions are environmentally sound, socially inclusive, and sustainable. The following are the ESS standards:

- **ESS1:** Assessment and Management of Environmental and Social Risks and Impacts
- **ESS2:** Labor and Working Conditions
- **ESS3:** Resource Efficiency and Pollution Prevention and Management
- **ESS4:** Community Health and Safety
- **ESS5:** Land Acquisition, Restrictions on Land Use and Involuntary Resettlement
- **ESS6:** Biodiversity Conservation and Sustainable Management of Living Natural Resources
- **ESS8:** Cultural, Historical, and Important Archaeological Sites
- **ESS10:** Stakeholder Engagement and Information Disclosure

Section 4. Stakeholder Engagement and Public Participation

4.1 Stakeholder Consultation

As part of the preparatory of this Integrated Pest Management Plan (IPMP), consultation meeting was conducted on 19th February with the MoLRD staff teams that will be involved in the livestock treatment program including directors of the departments of Animal Health, Livestock Production, Planning, and Rural Development as well as veterinarians and VPPs. The consultation meeting was participated by 18 staff members of which 7 were females and 11 were males (please see attached attendance sheet in **annex 1**). The primary purpose of the consultation was to identify the potential E&S risks that may be associated with the treatment campaign and ensure E&S considerations are fully integrated into the planning and implementation of the proposed livestock treatment activities in accordance with the stakeholder engagement process described in the project's approved Stakeholder Engagement Plan (SEP).



Photo 1: Consultation with the MoLRD staff teams for livestock treatment

4.2 Objectives of the Consultation

The consultation meeting was convened with the following specific objectives:

- To identify potential environmental and social risks and impacts associated with the livestock treatment program across the project sites.
- To create awareness and sensitize participants on Environmental and Social (E&S) safeguards, including Gender-Based Violence (GBV) prevention and response.
- To introduce and discuss the Grievance Redress Mechanism (GRM) process and its application during program implementation.

4.3 Key Issues from the Stakeholder Consultation

The meeting was officially opened by the Director of Animal Health of MoLRD, who welcomed participants and emphasized the importance of the livestock treatment program in supporting pastoral livelihoods and strengthening food security in Somaliland.

The SL-FSRP E&S team then presented an overview of the project's E&S safeguard framework, explaining the requirements under World Bank Environmental and Social Standards (ESS). Participants were introduced to key concepts including risk identification, mitigation planning, community engagement, and the importance of inclusive approaches that consider vulnerable groups such as women-headed households, IDPs, and minority groups. Awareness was also raised on Gender-Based Violence (GBV) risks and prevention, with emphasis on maintaining a safe and respectful working environment. Finally, the safeguarding team shared information on the Grievance Mechanism (GM) process and its importance, outlining the channels through which community/staff can submit complaints or concerns related to the livestock treatment exercise.

During the consultation, participants actively engaged in discussions and raised several important issues based on their field experience and understanding of local contexts. The following key issues were highlighted:

- Participants noted that some of the targeted villages are in remote areas with poor road infrastructure, which may affect timely delivery of veterinary services and supervision.
- Participants noted the importance of community engagement/consultation and awareness raising and informing livestock farmers not to use milk and meat of treated livestock for a period of time (withdrawal period) - the minimum time that must elapse after drug administration before milk, meat, or other animal products are safe for human consumption.
- Importance of the accurate and complete documentation of treated animals, including species, numbers, and treatments administered (the participants stated that they have previously used kobo-toolbox to collect data).

- Risk of accidental spills during transportation or mixing of chemicals.
- The need for ongoing disease surveillance after treatment to detect outbreaks early. They have stated that they have trained Community Animal Health Workers (CAHWs) in each village that usually reports in the case of disease outbreaks
- The participants have also stated that the MoLRD have incinerators in the regional offices, and these will be used for chemical waste destruction.
- Participants identified the list of other potential environmental and social risks and their possible mitigation measures:
 - ❖ Inadequate community consultation leading to misunderstandings or lack of ownership
 - ❖ Improper disposal of chemical containers and drugs leading to environmental contamination
 - ❖ Spread of diseases through contact
 - ❖ Chemical wastage or spoilage due to poor handling or storage

Section 5. Environmental and Social Risks and Mitigation Measures

5.1. Introduction

The proposed Livestock treatment program is a critical initiative for improving livestock health, improving farmer livelihoods, and strengthening food security. While the programme is largely beneficial, it carries certain environmental and social risks that must be carefully identified and managed to ensure sustainable and equitable implementation. This section therefore presents a systematic assessment of the potential environmental and social risks associated with the program and proposes mitigation measures to address them. The risk management approach is aligned with the World Bank's Environmental and Social Standards (ESSs) and the Environmental, Health and Safety Guidelines (EHSGs), ensuring that livestock treatment activities comply with national regulations and international best practices. The following are the anticipated Environmental and Social Risks:

5.2 Anticipated Environmental and Social Risks During Treatment Exercise

During the livestock treatment program, several environmental and social risks may emerge that require careful consideration and proactive management.

- a) **Insufficient stakeholder consultation:** This can be addressed through conducting inclusive consultations involving all stakeholders in every level including office of the governor, local authorities, community leaders, women and youth groups, and representatives from marginalized households. Consultation minutes and records of community feedback has to be properly documented.
- b) **Inadequate integration of E&S safeguards:** This can be addressed by designating a qualified E&S specialist within the team to oversee safeguard integration and provide technical guidance. Provide orientation and training to team members on E&S safeguard requirements, including community engagement, grievance redress, and risk management.
- c) **Inadequate Grievance Redress Mechanisms:** The livestock treatment sub-project will adopt a multi-tier grievance redress mechanism (GRM) to ensure that community members, farmers, team members of the field, and other stakeholders can raise concerns and have them addressed promptly, transparently, and fairly. At community level, already established GRM systems for the SL-FSRP can be used including:
 - GRM Committee including the GRM secretary for documenting grievances
 - GBV Focal Person
 - E&S focal person

The GRM procedures should be communicated to communities during initial consultations, including how to submit complaints, timelines for response, and overall processes. To manage grievances at community level, livestock, farmers will present complaints to the grievance management committee at the community-level. All grievances will be recorded in a grievance logbook and addressed within a specified timeframe.

For grievances that cannot be resolved at the community levels, cases will be escalated to the National GRM Committee in the Project Coordination Unit (PCU) and, if necessary, can be escalated to higher level authority such as the justice within Somaliland's legal system.

- d) **Lack of proper storage of drugs and other chemicals:** Use validated/ approved well insulated carriers for storage of drugs to keep drugs at room temperature. The exact standards and requirements can vary, but generally, a well-insulated box, and regular monitoring of the internal temperature are crucial.
- e) **Storage failure during transportation:** Develop standard operating procedures (SOPs) for storage management, including temperature monitoring protocols (keeping them at room temperature), contingency plans for equipment failure, and guidelines for handling temperature excursions. Train all personnel involved in transportation and storage on proper storage handling practices.
- f) **Vehicle breakdown or mechanical failure due to poor road infrastructure:** Use well-maintained vehicles and have contingency transport as a backup. This can also be solved by using all-train vehicles for last-mile delivery
- g) **Biological contamination/ Biohazard risk:** those handling the chemicals, drugs and medical equipment during transportation and storage are prone to exposure to biohazard risk especially when the chemicals leak; they should maintain strict hygiene and sanitation protocols and trained on biosecurity measures. Staff handling the chemicals/drugs should use PPEs (Please see **Annex 5: PPE matrix by task**).
- h) **Injury to veterinary staff or livestock due to difficulty in restraining animals:** this is anticipated especially given the fact that not all farms have livestock crush, the veterinary team should equip themselves with protective gear (gloves, boots, arm guards); avoid aggressive restraint of animals; ensure adequate space for safe handling of animal during treatment.
- i) **Exclusion of vulnerable or marginalized groups:** Inadequate attention to inclusivity during planning may result in the unintentional exclusion of vulnerable households, including women-headed households, IDPs, elderly individuals, persons with disabilities, and minority clans, from accessing program benefits. This could be solved through developing targeted outreach strategies to ensure these groups are informed about the program and encouraged to participate.
- j) **Improper disposal of sharps and biological waste:** Use safety boxes for sharps; transport used materials to designated disposal sites (e.g., incinerators); train staff on biohazard waste handling.
- k) **Spread of animal diseases through contact:** Equip teams with protective gear, including boots, gloves, and coveralls. Disinfect equipment and boots between farms; enforce basic biosecurity protocols.
- l) **Poor documentation of treated animals:** This will be mitigated by developing standardized, user-friendly data collection tools (paper-based forms and/or mobile data collection applications) prior to field deployment. Train all veterinary teams on proper documentation procedures, including how to complete forms accurately.

- m) **Increased GBV and SEAH risks:** Train all the personnel involved in the treatment exercise on GBV/SEAH prevention. Ensure all project staff, including veterinary doctors, para-professionals, and other team members, sign and adhere to a Code of Conduct that explicitly prohibits GBV and SEAH. Establish confidential and accessible reporting channels for GBV/SEAH complaints, linked to the project's grievance redress mechanism and referral pathways to health and protection services. Ensure survivor centered approach.
- n) **Lack of information on withdrawal period for livestock farmers:** Livestock farmers may not receive adequate information about withdrawal periods

5.3 Anticipated Environmental and Social Risks in the Post-Treatment Phase

- a) **Disease outbreaks despite treatment:** Following the treatment campaign, disease outbreaks may still occur due to factors such as incomplete coverage of target animals, re-infection from untreated neighboring herds, emergence of new pathogens, or limitations in the efficacy of administered treatments. In case of disease outbreak despite the treatment, the veterinary team should investigate outbreaks thoroughly and conduct diagnostic testing as well as develop and implement a post-treatment disease surveillance system to monitor disease in treated and surrounding areas. Maintain a rapid response capacity, including contingency stocks of essential veterinary supplies and a standby team of veterinary professionals, to respond quickly to any reported outbreaks.
- b) **Lack of adverse event reporting system:** Establish simple reporting channels (SMS, phone hotlines) after treatment, this will help get feed-back from farmers' post-treatment phase. Any reported case should be documented and investigated. Integrate adverse events reporting into the project's broader grievance redress mechanism (GRM) while ensuring specialized tracking of animal health-related incidents. Farmers should be sensitized on the channels for reporting and provided with contact details of these channels.
- c) **Disposal of remaining medical and bio-hazard wastes:** Safely dispose of remaining medical wastes as per World Bank's Environmental and Social Standards (ESSs) and the Environmental, Health and Safety Guidelines (EHSGs). Consult with the biomedical waste handler to incinerate the used sharps and other biomedical wastes.

SECTION 6: ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

Table 5: Environmental and Social Management Plan Matrix (During Treatment Phase)

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
ESS1: Assessment and management of Environmental and social risk and impacts								
	Risk of insufficient E&S integration and poor implementation of the mitigation measures and adherence to the set standards and procedures in the IPMP	Sensitize the MoLRD staff on E&S risks and implementation of IPMP Officially appoint E&S focal person to monitor the implementation of the IPMP Provide training to the MoLRD staff and E&S focal person working in the treatment exercise on understanding and implementing IPMP and requirements of WB's ESF and WBG's EHSs. Raise awareness of field staff (including VPPs, and drivers) regarding the implementation of the H&S and IPMP	PCU & MoLRD	Before the beginning of livestock treatment activity	-Cost of training to be conducted by the PCU is included in the project/ operational cost. - Cost of training to be conducted by the MoLRD to field staff is included in the budget of the activity	# of awareness sessions provided to the MoLRD staff and field teams # of E&S focal persons appointed # of training sessions provided to MoLRD staff and E&S focal persons	PCU E&S specialists and E&S appointed focal persons from MoLRD	Before the beginning of treatment activity

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	Poor documentation of treated animals	Develop and utilize user-friendly data collection tools (paper-based forms and/or mobile data collection applications) Train all veterinary teams on proper documentation procedures including how to complete the forms accurately	MoLRD	During the activity	Included in activities' budget	-User-friendly data collection tools developed # of staff trained in proper documentation and filling data collection tools	PCU E&S specialists / E&S appointed focal persons from MoLRD	During the activity (Bi-weekly)
ESS 2: Labour and Working Conditions								

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	Labor and working conditions are not in compliance with WB and Somaliland legislations	Implement the LMP and ensure the activity is implemented in a safe and disciplined manner designed to minimize impacts on staff and the environment. Provide necessary personal protective equipment (PPE) to all field staff and conduct training on the use of PPE (PPEs include gloves, boots, masks, vet coats, and arm guards)- Please see annex 5: PPE matrix by task Grievance Mechanism and hotlines introduced to the staff	MoLRD	Before and during the activity	Included in activities' costs	# of PPEs provided to workers # of safety training and the use of PPEs provided % of workers with appropriate PPE # of grievances and/or incidents reported	PCU Social Safeguards Specialist	Prior to commencement of the activity and during field activity (Bi-weekly)

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	Needle-stick injuries and minor accidents for staff	Implement needle-stick injury protocol: wash wound, disinfect, report incident, and seek medical care Record and maintain incident logbook. ensure availability of first aid kits in each vehicle Provide training in using first aid kits for the field staff Provide necessary PPEs (including gloves, boots and masks) and disinfectants. Please see annex 5: PPE matrix by task	MoLRD	During the treatment activity	Included in activities' costs	# of PPEs provided to workers -Aid kits provided to each vehicle or team # of training on the use of aid kits and PPEs provided % of workers with appropriate PPE # of incidents reported	PCU E&S specialists / E&S appointed focal persons from MoLRD	During the activity (weekly)

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	Heat stress and fatigue among staff	In case of very hot conditions, implement work-rest cycles (E.g., every 2 hours) If possible, provide shade tents at treatment sites Provide water to the field staff Carryout the fieldwork during cooler hours	MoLRD	During the treatment activity	Included in activities' costs	-Water provided to all field staff members -Shade facilities provided		
	Exposure of staff or livestock to physical injury due to difficulty in restraining animals	Provide field teams with necessary personal protective equipment (PPEs) including gloves, boots and arm guards Avoid aggressive restraint of animals Ensure adequate space for safe handling of animals during treatment Ensure minimum pen space	MoLRD	During the activity	Included in activities' costs	# of PPEs provided to all field staff % of workers with appropriate PPEs # of incidents reported	PCU E&S specialists / E&S appointed focal persons from MoLRD	Bi-weekly

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	Discrimination against women and vulnerable groups in employment	Provide the orientation of the labour management procedure guideline to the MoLRD staff Implement the LMP and comply with VVB labour procedures Grievance Mechanism and hotlines disseminated	MoLRD/PCU Social Safeguard Specialist	Before the commencement of the activity	Included in activities' costs Cost of training to be conducted by the PCU is included in the project/ operational cost.	# of orientation training on labour management procedures conducted # of women and vulnerable group workers # of grievances received	PCU Social Safeguards Specialist	Bi-weekly
ESS 3: Resource Efficiency and Pollution Prevention and Management								

	Improper <u>storage and disposal</u> of needles/sharps, syringes and biological waste	Use appropriate designated pathways and sites for transport and disposal of needles/sharps and biological waste (e.g., incinerators) Provide biohazard bins for collection and temporary storage of these wastes. Transport waste in sealed bins/containers Incinerate waste at approved incinerators with $\geq 850^{\circ}\text{C}$ primary chamber and refractory lining; ensure ash residue $< 10\%$ of waste mass; dispose ash in lined fenced pits Train staff on biohazard waste handling in consistency with the local and international requirements including WBG General EHS Guidelines. Ensure mechanisms exist for community to bring forth any	MoLRD	During the activities	Included in activities' budget	# of the waste collection tools (biohazard bins) provided for temporary storage of the sharps and biological waste # of waste transfers recorded # of staff trained on biohazard waste handling # of grievances filed related to waste management	PCU E&S specialists / E&S appointed focal persons from MoLRD	Bi-weekly
--	--	---	-------	-----------------------	--------------------------------	---	--	-----------

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
		complaints/grievance concerning the waste disposal						
	Biological Contamination/Biohazard risk due to the leak of chemicals	Maintain strict hygiene and sanitation protocols Train staff on biosecurity measures Staff handling chemicals should use PPEs (including gloves, boots and masks) and disinfectants.	MoLRD	During the activity	Included in activities' budget	# of PPEs provided to field staff % of field staff with appropriate PPEs -Provided staff with the required disinfectants	PCU E&S specialists / E&S appointed focal persons from MoLRD	Bi-weekly

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	Pollution of water sources from acaricide (if used)	Conduct awareness sessions on water pollution Maintain ≥ 30 m buffer from wells/streams mix chemicals only on impermeable surfaces prohibit disposal of leftover chemicals in water sources triple rinse containers and puncture before disposal through incineration	MoLRD	During the treatment activity	Included in activities' budget	# of awareness sessions conducted -Compliance with buffer zones	PCU E&S specialists / E&S appointed focal persons from MoLRD	Bi-weekly

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	Lack of proper storage of veterinary drugs and other chemicals	Store drugs strictly according to manufacturer instructions (typically 15–25°C protected from sunlight) Use validated/approved, and well insulated carriers to stabilize temperature during field transport. Avoid refrigeration/chilling drugs that require room temperature storage	MoLRD	Before and during the treatment activity	Included in the activities budget	# of validated and well insulated carriers used -Temperature logs within required range room temperature (15-25°C)	PCU E&S specialists / E&S appointed focal persons from MoLRD	Before the beginning and during the activity

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	Unsafe transport and handling of drugs	Develop standard operating procedures (SOPs) for handling and storage management, including temperature monitoring protocols. Use validated and well insulated carriers/boxes during transportation Use secondary containment for liquid drugs Equip vehicles with spill kits Prepare contingency plans for equipment failure during transportation Train drivers, handlers, and logistics coordinators in equipment care and handling. maintain chain-of-custody documentation for drugs and sharps	MoLRD	During the activity	Included in the activities' budget	-Transport logs maintained # of spill kits available for each vehicle # of trained staff on equipment handling -Reported incidents of equipment failure	PCU E&S specialists / E&S appointed focal persons from MoLRD	During the treatment exercise

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	Vehicle breakdown or mechanical failure due to poor road infrastructure	Use well maintained vehicles Equip each vehicle with basic repair toolkit and spare parts Conduct pre-trip vehicle inspections Use all-terrain vehicles or motorcycles for last-mile delivery	MoLRD	During the activity	Included in the activities' budget	# of vehicles provided with repair toolkits and spare parts Pre-trip vehicle inspections conducted before each trip	PCU E&S specialists / E&S appointed focal persons from MoLRD	During the treatment exercise
	ESS 4: Community Health and Safety							

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	Increased GBV/SEAH cases during the treatment exercise	Implementation and monitoring of GBV/ SEAH Action Plan All workers to sign CoCs Conduct awareness sessions for both MoLRD staff and fieldwork teams on GBV/SEAH prevention and reporting. Establish dedicated confidential reporting channel for victims through Project GRM including referral pathways to health and protection services Ensure survivor-centered approach Grievance Mechanism, hotlines and other confidential reporting channels disseminated	MoLRD/ PCU- Gender Specialist	During the treatment activity	-Included in the activities' budget -Cost of training to be conducted by the PCU is included in the project/ operational cost.	# of GBV-related awareness sessions held % of staff involved in the activity who signed the CoC # of GBV-related grievances recorded # of GBV-related incidents reported	PCU- GBV Specialist / E&S appointed focal persons from MoLRD	Bi-weekly

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	Spread of some animal diseases through human and other animal contact	Disinfect equipment and boots between farms Equip teams with full protective gears (PPEs) including gloves, masks and coveralls Enforce biosecurity protocols	MoLRD	During the treatment activity	Included in the activities' budget	# of PPEs provided to field staff including disinfectants % of field staff with appropriate PPEs -Disease outbreaks reported (post-treatment)	PCU- E&S Specialist / E&S appointed focal persons from MoLRD	During and after the activity (Bi-weekly)
ESS 10: Stakeholder Engagement and Information Disclosure								

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	Insufficient stakeholder engagement and public consultations	Implementation of Project SEP on stakeholder engagement especially those living around the office vicinity. Conduct consultations, providing information on the sub-project to all stakeholders including regional and local authorities, community leaders, women and youth groups, and representatives from marginalized households	MoLRD	Before starting the treatment activities	-Included in the activities' budget	# of consultations conducted	PCU- E&S Specialist / E&S appointed focal persons from MoLRD	Before starting the treatment activities

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
Exclusion of Women and other Vulnerable and Marginalized Groups (VMGs)	Conduct Targeted Outreach Strategies focusing on VMGs including women, people with disabilities, IDPs and minority groups Ensure balanced representation of VMGs among the beneficiaries. Ensure at least 30% of the beneficiaries should be women Schedule activities outside peak household hours Engage female CAHWs mobilizers	MoLRD	During the activity	Included in activities' budget	% of beneficiaries disaggregated by gender, household type (women-headed family), IDPs, people with disability and minority groups	PCU E&S specialists / E&S appointed focal persons from MoLRD	During the activity (Bi-weekly)	

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	Lack of information on withdrawal period – within the livestock farmers cannot use the milk and meat of the treated animal	Conduct pre-treatment community awareness sessions, informing the livestock farmers about the withdrawal period Deliver one-on-one messaging during treatment	MoLRD	Before starting the treatment activities	-Included in the activities' budget	# of awareness raisings conducted	PCU- E&S Specialist / E&S appointed focal persons from MoLRD	Before starting the treatment activities
	Inadequate GRM and lack of information on access to GRM leading to lack of accountability	Establish accessible and easy to reach GRM that is connected with the Project GRM Awareness raising on GRM and all the available channels	MoLRD / PCU Social Safeguards Specialist	Before the start of the activities	-Included in the activities' budget -Cost of awareness raising sessions to be conducted by the PCU is included in the project/ operational cost.	# of awareness sessions on GRM	PCU- Social Safeguards Specialist	Before the commencement of the activity

Table 6: Environmental and Social Management Plan (Post-Treatment Phase)

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	ESS 3: Resource Efficiency and Pollution Prevention and Management							
	Improper disposal of remaining medical and bio-hazard wastes	Safely dispose the remaining medical wastes as per World Bank's Environmental and Social Standards (ESSs) and the Environmental, Health and Safety Guidelines (EHSGs). Provide appropriate waste collection equipment (bio-hazard bins) Collect remaining safety boxes and transport to regional incineration facilities; incinerate according to technical standards; dispose of ash in lined fenced pits Provide the necessary PPEs for field staff	MoLRD	After completion of the treatment campaign	Included in the budget of the MoLRD	# of waste collection equipment (bio-hazard bins) provided # of waste disposal records # of training sessions on safe bio-hazard waste handling provided # of PPEs provided to field staff including disinfectants % of field staff with appropriate PPEs	MoLRD	Quarterly

WB ESS	E&S Risks and Impacts	Mitigation Measures	Responsibility for Implementation	Timing for Mitigation	Budget for mitigation (in USD)	Monitoring Indicators	Monitoring Responsibility	Monitoring Frequency
	ESS 4: Community Health and Safety							
	Disease outbreaks despite treatment	Investigate outbreaks thoroughly and conduct diagnostic testing Train and deploy community-based animal health reporters (CAHWs, VDC focal persons, others) Establish simple and accessible reporting channels (hotline, SMS and other appropriate channels) Maintain rapid response teams and contingency stocks of essential veterinary supplies	MoLRD	After completion of the treatment campaign	Included in the budget of the MoLRD	-Multiple reporting channels established (hotline, SMS and others) -Training provided to community-based animal health reporters # of rapid response teams established -Regular stock monitoring for ensuring enough contingency stocks of essential veterinary supplies	MoLRD	Quarterly

Annex 1: Attendance Sheet for Consultation



Ministry of Agricultural Development
Food Systems Resilience Project (SL-FSRP)

ATTENDANCE SHEET

Meeting: Consultation for IPMP preparation

Location: MoARD HQ office

Date: 19-02-2026

SN	Name	Gender	Title/ Position	Tel.	Signature
1	Mohamed Hassen Ahmed	M	Director	4441333	[Signature]
2	Mohamed Abdi Hussein	M	Director Planning	063-4003045	[Signature]
3	Mohamed Adam Abdi	M	D. gen. mgt.	063-4290920	[Signature]
4	Khader Mexed Farhi X	M	Sec. gen.	4438660	[Signature]
5	Mohamed Ahmed Abdurahman	M	one head officer	4170321	[Signature]
6	Saynab Labdi Ahmed	F	Co-ordinating Agent	4151913	[Signature]
7	Nimco Abdileahin Qawchen	F	H/section	4050490	[Signature]
8	Hoclo cali muhamed	F	H/section	4259718	[Signature]
9	Mohamed Aar Osman	M	Dr	4158988	[Signature]
10	Abdiprah Diale Abdi	M	H/section	4028446	[Signature]
11	Fatma Abdiharmam Warsame	F	w/zone	755960	[Signature]
12	Hoclan Hassan Ismail	F	Dr	6817858	[Signature]
13	Hoclo Hussein Harsi	F	w/HRM	4607385	[Signature]
14	Amam Ag Habi	F	Director	4182108	[Signature]
15	Osman Abdi Warsame	M	Advisor	4439236	[Signature]
16	Abdirahman Saed Abdi	M	DVM	4174212	[Signature]
17	Abdirahman Mohd Shaleh	M	Director	424132	[Signature]
18	Khader cabdi Aidan	M	Focal Point	4409461	[Signature]

Annex 2: Schedule and Workplan

SN	Region	District	Village	Date	Activity
1	Awdal	Baki	Baki	22-Mar-26	Conducting livestock treatment activities
2	Awdal	Baki	Baki	23-Mar-26	Conducting livestock treatment activities
3	Awdal	Baki	Baki	24-Mar-26	Conducting livestock treatment activities
4	Awdal	Baki	Baki	25-Mar-26	Conducting livestock treatment activities
5	Awdal	Baki	Baki	26-Mar-26	Conducting livestock treatment activities
6	Awdal	Awdal	Cadaad	27-Mar-26	Conducting livestock treatment activities
7	Awdal	Baki	Cadaad	28-Mar-26	Conducting livestock treatment activities
8	Awdal	Baki	Cadaad	29-Mar-26	Conducting livestock treatment activities
9	Awdal	Baki	Cadaad	30-Mar-26	Conducting livestock treatment activities
10	Awdal	Baki	Cadaad	31-Mar-26	Conducting livestock treatment activities
11	Awdal	Baki	Dhuxunka	1-Apr-26	Conducting livestock treatment activities
12	Awdal	Baki	Dhuxunka	2-Apr-26	Conducting livestock treatment activities
13	Awdal	Baki	Dhuxunka	3-Apr-26	Conducting livestock treatment activities
14	Awdal	Baki	Dhuxunka	4-Apr-26	Conducting livestock treatment activities
15	Awdal	Baki	Dhuxunka	5-Apr-26	Conducting livestock treatment activities
16	Awdal	Baki	Sabawanaag	6-Apr-26	Conducting livestock treatment activities
17	Awdal	Baki	Sabawanaag	7-Apr-26	Conducting livestock treatment activities
18	Awdal	Baki	Sabawanaag	8-Apr-26	Conducting livestock treatment activities
19	Awdal	Baki	Sabawanaag	9-Apr-26	Conducting livestock treatment activities
20	Awdal	Baki	Sabawanaag	10-Apr-26	Conducting livestock treatment activities
21	Maroodijeex	Baligubadle	Gumar	22-Mar-26	Conducting livestock treatment activities
22	Maroodijeex	Baligubadle	Gumar	23-Mar-26	Conducting livestock treatment activities
23	Maroodijeex	Baligubadle	Habaasweyn	24-Mar-26	Conducting livestock treatment activities
24	Maroodijeex	Gabiley	Agabar	25-Mar-26	Conducting livestock treatment activities
25	Maroodijeex	Gabiley	Agabar	26-Mar-26	Conducting livestock treatment activities
26	Maroodijeex	Gabiley	Botor	27-Mar-26	Conducting livestock treatment activities
27	Maroodijeex	Gabiley	Taysa	28-Mar-26	Conducting livestock treatment activities
28	Maroodijeex	Gabiley	Cadaad dhaadherey	29-Mar-26	Conducting livestock treatment activities
29	Maroodijeex	Gabiley	Galooley	30-Mar-26	Conducting livestock treatment activities
30	Maroodijeex	Hargeisa	Cadaadley	31-Mar-26	Conducting livestock treatment activities
31	Maroodijeex	Hargeisa	Cadaadley	1-Apr-26	Conducting livestock treatment activities
32	Maroodijeex	Hargeisa	Dhaboolaq	2-Apr-26	Conducting livestock treatment activities
33	Maroodijeex	Hargeisa	Lafta-Farawayne	3-Apr-26	Conducting livestock treatment activities
34	Maroodijeex	Hargeisa	Lafta-Farawayne	4-Apr-26	Conducting livestock treatment activities
35	Maroodijeex	Hargeisa	Meygaagta	5-Apr-26	Conducting livestock treatment activities
36	Maroodijeex	Hargeisa	Dhamal	6-Apr-26	Conducting livestock treatment activities
37	Maroodijeex	Hargeisa	Dhamal	7-Apr-26	Conducting livestock treatment activities

38	Maroodijeex	Salahley	Higlada	8-Apr-26	Conducting livestock treatment activities
39	Maroodijeex	Salahley	Qool-Buulale	9-Apr-26	Conducting livestock treatment activities
40	Maroodijeex	Salahley	Qool-Buulale	10-Apr-26	Conducting livestock treatment activities
41	Sahil	Berbera	Abdaal town	22-Mar-26	Conducting livestock treatment activities
42	Sahil	Berbera	Abdaal town	23-Mar-26	Conducting livestock treatment activities
43	Sahil	Berbera	Abdaal town	24-Mar-26	Conducting livestock treatment activities
44	Sahil	Berbera	Dooxo-guban	25-Mar-26	Conducting livestock treatment activities
45	Sahil	Berbera	Dooxo-guban	26-Mar-26	Conducting livestock treatment activities
46	Sahil	Berbera	Dooxo-guban	27-Mar-26	Conducting livestock treatment activities
47	Sahil	Berbera	Laaso-dacawo	28-Mar-26	Conducting livestock treatment activities
48	Sahil	Berbera	Laaso-dacawo	29-Mar-26	Conducting livestock treatment activities
49	Sahil	Berbera	Laaso-dacawo	30-Mar-26	Conducting livestock treatment activities
50	Sahil	Berbera	Laaso-dacawo	31-Mar-26	Conducting livestock treatment activities
51	Sahil	Berbera	Waabaha	1-Apr-26	Conducting livestock treatment activities
52	Sahil	Berbera	Waabaha	2-Apr-26	Conducting livestock treatment activities
53	Sahil	Berbera	Waabaha	3-Apr-26	Conducting livestock treatment activities
54	Sahil	Berbera	Wadhka	4-Apr-26	Conducting livestock treatment activities
55	Sahil	Berbera	Wadhka	5-Apr-26	Conducting livestock treatment activities
56	Sahil	Berbera	Wadhka	6-Apr-26	Conducting livestock treatment activities
57	Sahil	Berbera	Bookh	7-Apr-26	Conducting livestock treatment activities
58	Sahil	Berbera	Bookh	8-Apr-26	Conducting livestock treatment activities
59	Sahil	Berbera	Bookh	9-Apr-26	Conducting livestock treatment activities
60	Sahil	Berbera	Bookh	10-Apr-26	Conducting livestock treatment activities
61	Togdheer	Burao	Beer	22-Mar-26	Conducting livestock treatment activities
62	Togdheer	Burao	Beer	23-Mar-26	Conducting livestock treatment activities
63	Togdheer	Burao	Beer	24-Mar-26	Conducting livestock treatment activities
64	Togdheer	Burao	Beer	25-Mar-26	Conducting livestock treatment activities
65	Togdheer	Burao	Kabadheere	26-Mar-26	Conducting livestock treatment activities
66	Togdheer	Burao	Kabadheere	27-Mar-26	Conducting livestock treatment activities
67	Togdheer	Burao	Kabadheere	28-Mar-26	Conducting livestock treatment activities
68	Togdheer	Burao	Kabadheere	29-Mar-26	Conducting livestock treatment activities
69	Togdheer	Burao	Qoyta	30-Mar-26	Conducting livestock treatment activities
70	Togdheer	Burao	Qoyta	31-Mar-26	Conducting livestock treatment activities
71	Togdheer	Burao	Qoyta	1-Apr-26	Conducting livestock treatment activities

72	Togdheer	Burao	Qoyta	2-Apr-26	Conducting livestock treatment activities
73	Togdheer	Burao	Waraabeeye	3-Apr-26	Conducting livestock treatment activities
74	Togdheer	Burao	Waraabeeye	4-Apr-26	Conducting livestock treatment activities
75	Togdheer	Burao	Waraabeeye	5-Apr-26	Conducting livestock treatment activities
76	Togdheer	Burao	Waraabeeye	6-Apr-26	Conducting livestock treatment activities
77	Togdheer	Burao	Nasiye	7-Apr-26	Conducting livestock treatment activities
78	Togdheer	Burao	Nasiye	8-Apr-26	Conducting livestock treatment activities
79	Togdheer	Burao	Nasiye	9-Apr-26	Conducting livestock treatment activities
80	Togdheer	Burao	Nasiye	10-Apr-26	Conducting livestock treatment activities

Annex 3: Livestock Treatment Algorithms and Clinical Decision Guide

Treatment Category	Indications	Treatment	Notes / Restrictions
1. Deworming (Albendazole / Ivermectin)	• Poor body condition • Diarrhea • Rough hair coat • Pale mucous membranes • Presence of worms in feces • High parasite burden in herd	• Albendazole: Oral drench • Ivermectin: Injectable (subcutaneous)	Do NOT deworm when: • Animals are severely dehydrated • Very weak animals unable to swallow • Last treatment occurred within previous 4 weeks
2. External Parasite Treatment (Ivermectin)	• Visible ticks or lice • Skin irritation • Hair loss patches • Mange lesions	• Ivermectin injection	Alternative: • Amitraz spray only under veterinary supervision
3. Antibiotic Treatment (Bacterial Infections)	• Fever (>39.5°C) • Respiratory distress • Nasal discharge • Wound infection with pus • Lameness with swelling	First-line: • Oxytetracycline Second-line: • Tylosin	Use second-line antibiotics only if respiratory infection is suspected or oxytetracycline is ineffective
4. Wound Care Only (No Antibiotics)	• Minor wounds • No fever • No systemic infection signs	• Clean wound • Apply iodine • Apply antibiotic spray • Monitor healing	Antibiotics are not required unless infection signs develop
5. Withhold Treatment / Refer	Cases requiring referral: • Severe dehydration • Neurological signs • Unknown poisoning • Advanced systemic illness • Fractures	Refer to veterinary clinic or senior veterinarian	Treatment should not be administered until proper diagnosis is made

Annex 4: Antibiotic Stewardship Guardrails (AMR)

To minimize the development of antimicrobial resistance (AMR), the livestock treatment campaign will strictly adhere to responsible antibiotic use protocols.

First-Line Antibiotic

- **Oxytetracycline 20%**
 - Indications: respiratory infections, wound infections, septicemia
 - Dose: 1ml per 10kg body weight
 - Route: intramuscular injection
 - Duration: 3–5 days depending on clinical response (frequency)

Second-Line Antibiotic

- **Tylosin 20%**
 - Indications: respiratory infections particularly suspected mycoplasma infections
 - Dose: 0.5-1ml per 20kg body weight
 - Route: intramuscular injection
 - Duration: 3–5 days (frequency)

Antibiotic Stewardship Rules

The following rules will strictly apply:

- No mass prophylactic use of antibiotics.
- No split or partial treatment courses.
- No extra-label drug use without supervision by a qualified veterinarian.
- Antibiotics will only be used after clinical examination and diagnosis.
- Treatment registers will record:
 - Animal identification
 - Drug name
 - Dose
 - Route
 - Start date
 - End date

Follow-Up for Mobile Herds

For herds that migrate during the campaign period:

- Animals will be marked using temporary paint or chalk.
- Treatment details will be recorded in the digital register.
- Veterinary teams will coordinate return visits where multi-dose treatments are required.
- CAHWs may assist with follow-up injections only under veterinary supervision.

Annex 4: Monitoring and Evaluation Results Framework

Indicator	Baseline	Target	Data Source	Frequency	Responsible Institution/ Persons
Number of livestock treated	0	300,000 animals	Treatment records / Kobo data	Daily reporting	MoLRD Veterinary Teams
Number of households reached	0	4,500 households	Household treatment records	Daily reporting	MoLRD / PCU
% of antibiotic treatments with full course recorded	0%	≥95%	Treatment register / Kobo system	Weekly	MoLRD Veterinary Teams
% of treatments with recorded drug batch numbers	0%	≥95%	Treatment register	Weekly	MoLRD
% of livestock owners receiving withdrawal period advice	0%	100%	Farmer confirmation record	Weekly	Veterinary Teams
% of treatment teams equipped with required PPE	0%	100%	Field supervision checklist	Weekly	PCU- E&S Specialist / E&S appointed focal persons from MoLRD
% of biomedical waste properly disposed of	0%	100%	Waste disposal logbooks	Monthly	MoLRD Regional Offices
% of women beneficiaries reached	0%	≥30%	Beneficiary records	Monthly	PCU Social Safeguards Specialist/ E&S appointed focal persons from MoLRD
Number of environmental, social or safety incidents reported	0	All incidents recorded and investigated	Incident reports form	Continuous	MoLRD / PCU

Number of staff trained on E&S safeguards and OHS	0	All treatment staff trained	Training attendance records	Before campaign	PCU
---	---	-----------------------------	-----------------------------	-----------------	-----

Annex 5: PPE Matrix by Task

Task	Required PPE
Drug administration (injections)	Gloves, vet coat, mask
Animal handling	Gloves, boots, arm guards
Waste handling	Gloves, mask, vet coat
Chemical mixing	Gloves, mask, eye protection
Transport of drugs	Gloves