MINISTRY OF PUBLIC WORKS RECONSTRUCTION AND HOUSING

FEDRAL REPUBLIC OF SOMALIA

SOMALIA ROAD INFRASTRUCTURE PROGRAMME

ADDITIONAL FINANCING (P-SO-DB0-007)

DRAFT ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT REPORT

FOR

THE REHABLITATION OF BELEDWEYNE-KALABEYR ROAD (22KM)

March 2025

ABBREVIATIONS AND ACRONYMS

AfDB	African Development Bank
AC	Asphalt Concrete
CBOs	Community Based Organizations
CBD	Convention on Biological Diversity
CoC	Code of Conduct
DBSD	Double Bitumen Surface Dressing
E&S OSs	Environmental and Social Operational Safeguards
EA	Environmental Audit
EHS	Environmental Health and Safety
EMPA	Environmental Management and Protection Act
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
FGDs	Focused Group Discussions
FGM/C	Female Genital Mutilation/Cutting
FGS	Federal Government of Somalia
FI	Financial Intermediaries
FMS	Federal Member States
GBV	Gender Based Violence
GCF	Green Climate Fund
GRC	Grievance Redress Committee
GM	Grievance Mechanism
HADMA	Humanitarian Affairs and Disaster Management Agency
IFC	International Finance Corporation
ILO	International Labor Organization
ISS	Islamic State in Somalia
MPWR&H	Ministry of Public Works Reconstruction and Housing
MoECC	Ministry of Environment and Climate Change
MoLSA	Ministry of Labour and Social Affairs
NGOs	Non-Governmental Organizations
OHS	Occupational Health and Safety
PPE	Personal Protective Equipment
RAP	Resettlement Action Plan
ROW	Right of Way
SDGs	Sustainable Development Goals
SEA	Sectoral Environmental Assessments
SEAH	Sexual Exploitation, Abuse and Harassment
SIF	Somalia Infrastructure Fund
SMP	Security Management Plan
SRCIP	Somalia Regional Corridors Infrastructure Programme
ToR	Terms of Reference
UNCBD	United Nations Convention on Biological Diversity
UNDP	United Nations Development Programmes
UNFCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations International Children's Emergency Fund
UNFPA	United Nations Population Funds Agency
URTI	Upper respiratory tract infection
USD	United States Dollar
UA	Unit of Account
VMGs	Vulnerable and Marginalized Groups
WB	World Bank

WHO	World Health Organization

UNITS

^{0}C	Degree Celsius
CO	Carbon Monoxide
dB(A)	Decibel Amperes
Km	Kilometers
km/h	Kilometer per hour
km2	Square Kilometer
m3	Cubic meter
USD	United States Dollar

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EXCUTIVE SUMMARY

Background and Context

Somalia has emerged from an extended period of conflict and instability and is currently focused on establishing public institutions. Following the collapse of the Somali Democratic Republic in 1991, all government institutions at various levels were dismantled and after nearly two decades of conflict and lawlessness the Federal Republic of Somalia (FRS) was formed in August 2012. Since then, the country has experienced different phases and efforts to re-establish governance and normalcy. The Provisional Constitution enacted in 2012 serves as the foundation for the country's governance and many of the policies and laws currently being created aim to improve the socio-economic landscape. Owing to improvements in social and political stability the country is seeing some investments in infrastructure by bilateral and multilateral donors, local communities, and the private sector. One notable initiative is the AfDB and European Union (EU) funded Somalia Road Infrastructure Programme (SRIP) designed to revive the country's main road corridors and build the capacity of the country's public works institutions. Activities funded by SRIP include:

1) Rehabilitation and surface dressing of 82 km (Beledweyne-Kalabeyr 22 km; and Dhusamareb-Qaradhi 60 km) of the existing 327 km, 7.3 m wide Beledweyne-Galkayo paved road.
2) Rehabilitation and surface dressing of 85 km (Galkayo-Faratoyo) of the existing 240 km, 7.3 m wide Galkayo-Garowe paved road.
3) Rehabilitation and construction of the existing 80 km, 7.3 m wide Luuq, Ganane-Dolow earth road to gravel road standard.
4) New construction of 100 km, 7.3 m wide Galkayo-Elgula (part of the 241 km Galkayo-Hobyo feeder road) to compacted gravel standard.
5) Feasibility study, environmental and social impact assessment, and detailed engineering design of 280 km Lowyaddo-Farddaha-Borama road.

Due to funding limitations all the above activities could not be implemented at the same. This ESIA has been prepared for a part of activity 1 in the above list, rehabilitation of the 22 km long Beledweyne-Kalabeyr Road which is now considered a standalone project for which Additional Finance is sought. In addition to construction/rehabilitation and feasibility studies the SRIP will also capacitate government officials providing training on i) community engagement in road sector development, and ii) guidelines for gender mainstreaming in infrastructure and leadership. Training on guidelines for mainstreaming Environmental and Social Risk Management in infrastructure projects.

About the Project

Beledwyne-Kalabeyr Road (22km) is part of the Beledweyne – Galkayo Corridor, an existing tarmac road and an important section of Somalia's North-South (NS) Corridor covering Mogadishu-Jowhar-Beledweyne-Galkaiyo and is a key link in the trunk road system towards Ethiopia and the Northern areas of the Somali peninsula. This road does not start at Beledweyne as the name may suggest it starts at Jente Kundishe which is 5.63 kms from Beledweyne. The rehabilitation of the Beledweyne-Kalabeyr Road will entail the following:

- Surfacing and sealing of the carriageway, including use of bitumen mixing plants where the road is to be sealed
- Water crossings, e.g. construction or upgrading of bridges and culverts, including concrete batching for structures
- Construction of road diversions
- Establishment or improvement of safety arrangements e.g., modification of camber, barriers, improving sight lines; and Landscaping, as required
- Temporary construction facilities (e.g. lay-bys or service areas, workshops, laydown areas, working corridors outside the road reserve, workers' accommodation, and burrow pits)
- Establishment of access roads within and between temporary facilities and the road being developed

Alternatives Considered

Do Nothing Scenario: The do-nothing approach will lead to missing an opportunity to enhance community lives along Beledweyne-Kalabeyr Road and the whole country in general.

Pavement Design: Three alternatives were considered for pavement design, namely (i) Triple Surface Treatment (TST); (ii) Asphalt Concrete (AC); and (iii) engineered gravel upgrade. For tropical and subtropical climates with high temperatures and rainfall, Asphalt Concrete is generally preferred for major roads due to its superior durability, performance, and ability to withstand extreme weather conditions.

Bridge: Due to structural issues affecting 6 existing bridges along the Beledweyne-Kalabeyr Road, the alternatives of rehabilitating or constructing new bridges were considered. Five bridges will be rehabilitated, and one will be constructed.

Scope and Objective of the Environmental and Social Impact Assessment (ESIA)

The purpose of this study is to assess the impacts that might result during the construction, operational and decommissioning phase of the proposed Beledweyne-Kalabeyr Road project. Specifically, the terms of reference (as guided by the Somalia Environmental Management and Protection Act of 2024) developed for this study shall cover:

- An analysis of international, national and regional environmental regulations.
- A thorough baseline assessment of the project area (physical, socioeconomic, biological environment).
- Clearly defined project objectives and expected benefits for the community/nation.
- Description of project technologies, design, and construction processes.
- Identification of potential environmental and social impacts throughout the project lifecycle (construction, operation, decommissioning).
- A comprehensive plan to avoid, minimize, or compensate for negative impacts.
- A plan to monitor key environmental and social parameters during project execution.
- An ESMP outlining actions to mitigate adverse impacts, including costs and responsibilities.
- A comprehensive Stakeholder Engagement Plan and the outcomes of the consultations
- A comprehensive ESIA report adhering to Somali regulations and international best practices.

- Knowledge Gaps & Uncertainties: Identified limitations in data collection and propose further research if needed.
- Address any specific requirements from the Somali Ministry of Environment and Climate Change.

The Study Methodology

This study was guided by the Somali Environmental Management and Protection Act, 2024, the Equator Principles and the AfDB's ISS, particularly E&S OS 1 (OS1): Assessment and Management of Environmental and Social Risks and Impacts E&S OS 2 (OS2): Labour and Working Conditions OS3: Resource Efficiency and Pollution Prevention and Management OS4: Community Health and Safety OS5: Land Acquisition, Restrictions on Access to Land and Land Use, and Involuntary Resettlement OS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources OS7: Vulnerable Groups OS8: Cultural Heritage OS10: Stakeholder Engagement and Information Disclosure. Given the scale of the proposed Beledweyne-Kalabeyr Road Project, classified as category A, an Environmental and Social Impact Assessment (ESIA) study was conducted to evaluate the ecological and biophysical implications of the road and its related amenities. Field visits occurred in 2021, 2024, and 2025.

Stakeholder Engagement

Stakeholder engagement commenced in 2021, however, due to lack of funding all project related activities were temporarily inactive and fully reactivated in 2024. Since then, stakeholder engagements with government officials (2024) and community members (2025) have been carried out to update the community and discuss project impact. Some of the issues raised or discussed include:

- Community members were provided with project information including project name, funding agency and objective of the project.
- The community was informed about the project's target locations and corridors, focusing on the rehabilitation and construction of major roads and bridges.
- The community will be protected from adverse project impacts through an ESMMP prepared for the project. The ESMMP was read to the community asking if they had additional input.
- Residents, businesses, and the entire community can report complaints through a dedicated GRC committee. A hotline number will be created and managed by the responsible community liaison officer.
- Additionally, the project will establish a workers' grievance system to ensure both worker safety and community well-being. A code of conduct will also be implemented, requiring all workers to sign and adhere to it.
- Compensation for losses will be provided at replacement cost, along with assistance to support the transition period and rehabilitation, based on the level of impact.
- To prevent damage from seasonal floods, flood-resistant construction materials and proper drainage systems will be used.
- Regarding implementation delays, sincere apology was extended for the delay, and community members were informed that the previous consultation had identified the construction of 22km roads and 6 bridges as a priority investment. The design for these

roads and bridges has been completed; however, due to a lack of available funds, construction could not commence. For this reason, we have returned to engage in further consultation with the community to inform them that additional financing is expected for the project.

Grievance Mechanism

A five tier grievance mechanism will be put in place to receive and address complaints related to the project. Grievance redress committees will be established.

Anticipated Impacts

The proposed Beledweyne-Kalabeyr Road Project is a critical initiative that is poised to facilitate significant socio-economic development and bring about transformative changes for the local communities and Somalia as a whole. This project is expected to address critical service requirements and foster an array of positive impacts that extend far beyond mere infrastructure enhancement including security. In addition to these fundamental impacts, the RIP offers the potential to enhance the Ministry of Public Works' capacity. Internships with the construction company and supervision firm will provide valuable experience to staff at the federal and state levels, thereby contributing to the long-term institutional strengthening.

Environmental and Social Management Plan

Table 1: Summary of the Negative Impacts and their Mitigation Measures

Potential Negative Impact	Mitigation Measure
Planning & Design Phase	
Conflict due to misunderstanding over land and the project proposed	Community dialogue.
Construction Phase	
water pollution: contamination of seasonal streams	• Implement sediment control measures like silt fences, sediment traps, and vegetative buffers along waterways. • Utilize proper construction techniques to minimize soil erosion. • Regularly maintain construction vehicles to minimize oil leaks and spills. • Develop and enforce a spill response plan.
air pollution: emanating from particulate matter from dust, emissions of noxious fumes and greenhouse gases	• Regularly maintain construction vehicles and equipment to minimize emissions. • Utilize dust suppression techniques like water spraying on unpaved roads and construction sites. • Enforce speed limits for construction vehicles to reduce dust generation. • Monitor air quality parameters like particulate matter concentration (PM10 and PM2.5) in the vicinity of construction activities.
noise and excessive vibration	• Ensure that all vehicles and construction machinery are kept in good condition all the time to avoid excessive noise generation. • Ensure that all workers wear ear muffs and other personal protective gear/equipment when working in noisy sections.

Potential Negative Impact	Mitigation Measure
	• Ensure machines are switched off when not in use. • Utilize low-vibration and low-noise equipment and construction techniques whenever possible • Restricting construction activities to designated working hours, avoiding noise-intensive work during nighttime or sensitive periods • Ensure the World Health Organization (WHO) bare minimum noise level is maintained for the eight working hours i.e. 85 dB. • Establishing noise barriers, particularly near sensitive areas (e.g., schools, hospitals
land degradation, pollution and loss of biodiversity	• Minimize land clearing and limit it to designated areas. • Project funded implementation of reafforestation plan to compensate for lost vegetation. • Control invasive species through appropriate management practices. • Properly dispose of construction waste to prevent soil contamination
health and safety risks	• Provide adequate safety training and personal protective equipment (PPE) for workers. • Implement strict safety protocols and procedures at construction sites. • Conduct regular safety audits and inspections. • Establish a comprehensive occupational health and safety management system • Implement a waste management plan
insecurity threats from terror groups such as Al Shabab	• Conduct thorough security assessments of the project area and identify high-risk zones. Project and contractor to prepare security management plans pre implementation and premobilization respectively. • Collaborate with local authorities and security forces to establish security protocols and response plans. • Implement security measures at construction sites, including perimeter fencing, security personnel, and access control systems. • Train workers on security awareness and emergency procedures. • Maintain open communication channels with local communities to gather intelligence and address potential threats.
social issues: social ills and moral decay loss of cultural identity and heritage community conflicts and pushback exclusion and marginalization	• Implement strict age verification procedures to prevent child labour. • Conduct awareness campaigns on gender-based violence and HIV/AIDS prevention. • Establish clear grievance mechanisms for reporting social issues. • Develop a cultural heritage management plan outlining preservation measures. • Integrate cultural elements into the project design where feasible. • Implement effective and inclusive community engagement strategies throughout the project lifecycle. • Establish a clear and accessible Grievance Mechanism (GM) to address community complaints effectively. • Develop and implement an inclusive employment policy that prioritizes hiring local workers, especially women and vulnerable groups.

Potential Negative Impact	Mitigation Measure
physical and economic displacement	• A Resettlement Action Plan (RAP) has been prepared, and the displacement impact is limited to the demolition of 6 roadside kiosks. • Compensation for loss of income and loss of structure at replacement cost to be provided prior to the commencement of civil works. • Identify and assess the number of people and assets potentially affected by displacement. • Develop compensation and resettlement packages that fairly address losses and ensure livelihoods are restored. • Provide support and assistance to displaced individuals and families during the resettlement process.
Operation Phase	
safety and traffic management	• Implement a comprehensive traffic management plan with clear signage, speed limits, designated pedestrian crossings, and traffic calming measures (e.g., speed bumps) in high-density areas. • Conduct regular road safety awareness campaigns and driver training programs, emphasizing responsible driving practices. • Designate safe areas for roadside vending and parking to minimize pedestrian-vehicle conflicts. • Install proper street lighting in populated areas to improve visibility at night. • Enforce traffic laws and regulations through regular patrols and speed monitoring
air and noise pollution	• Encourage the use of cleaner fuels and emission control technologies for vehicles. • Plant trees and vegetation along the roadside to act as natural noise and air pollution barriers. • Enforce regulations on excessive noise from vehicles, especially trucks and buses.
waste management	• Develop a comprehensive waste management plan that prioritizes recycling and reuse of materials whenever possible. • Establish a proper waste collection and disposal system along the road, including designated bins and regular collection services. • Ensuring the right amounts of materials and supplies are purchased and raw materials are effectively managed. • Whenever possible, re-use inert waste on-site in landscaping, construction, or as backfill material. • Implement proper disposal methods for non-recyclable waste to minimize environmental impact, potentially including designated landfills or waste-to-energy facilities. • Establish a proper waste collection and disposal system along the road, including designated bins and regular collection services. • Conduct public awareness campaigns on the importance of proper waste disposal, and provide education and training to the workforce • Partner with local communities to implement waste management initiatives.

Potential Negative Impact	Mitigation Measure
	• Conduct public awareness campaigns on the importance of proper waste disposal. • Partner with local communities to implement waste management initiatives.
Changes in land use patterns: improved accessibility may lead to increased development along the road corridor, potentially impacting agricultural lands and natural habitats.	• Develop and enforce land use plans that guide development along the road corridor, protecting sensitive areas and agricultural lands. • Promote sustainable development practices that minimize environmental impact.
Insecurity and terror attack threats	• Maintain a strong security presence along the road corridor in collaboration with local authorities and security forces. • Implement security measures at key infrastructure points like bridges. • Establish community watch programs and early warning systems to report suspicious activity. • Foster trust and collaboration between local communities and security forces through regular communication and engagement.
Competition for limited project benefits and resources can lead to severe social friction, especially considering that most of the local clan members are armed	• Implement a transparent and inclusive benefit-sharing plan that outlines clear mechanisms for equitable distribution of project benefits among local communities. • Prioritize local hiring and procurement of goods and services to maximize economic opportunities for residents. • Facilitate conflict resolution processes and mediation mechanisms to address potential clan-based tensions.
Maintenance and infrastructure degradation	• Develop a comprehensive road maintenance plan with regular inspections and repairs to address wear and tear. • Allocate sufficient budget and resources for ongoing maintenance activities. • Partner with local communities in road maintenance initiatives to ensure long-term sustainability.
Decommissioning Phase	
Waste generation	• Develop a comprehensive waste management plan that prioritizes recycling and reuse of materials whenever possible. • Implement proper disposal methods for non-recyclable waste to minimize environmental impact, potentially including designated landfills or waste-to-energy facilities.

Land degradation	• Develop a land rehabilitation plan to restore the decommissioned areas. This may involve measures like:
	  ○ Soil stabilization techniques to prevent erosion.
	  ○ Reforestation with native vegetation species to improve soil health and biodiversity.
	  ○ Landscaping to create green spaces or recreational areas.

Potential Negative Impact	Mitigation Measure
Loss of jobs	• Provide job retraining programs and support services to workers affected by job losses during decommissioning. • Encourage the creation of new job opportunities in the local community through alternative economic initiatives.

Economic downturn	• Encourage local businesses to diversify their economic activities and explore alternative income sources that are not solely reliant on the road traffic. This could involve:
	  ○ Supporting the development of new businesses and industries in the area.
	  ○ Promoting tourism or other economic activities that can benefit from the improved accessibility provided by the road during its operational phase.
	• Facilitate access to financial resources and support programs for businesses affected by the economic downturn.

1. INTRODUCTION

1.1 Background and Context

Somalia has emerged from an extended period of conflict and instability and is currently focused on establishing public institutions. Following the collapse of the Somali Democratic Republic in 1991, all government institutions at various levels were dismantled and after nearly two decades of conflict and lawlessness the Federal Republic of Somalia (FRS) was formed in August 2012. Since then, the country has experienced different phases and efforts to re-establish governance and normalcy. The Provisional Constitution enacted in 2012 serves as the foundation for the country's governance and many of the policies and laws currently being created aim to improve the socio-economic landscape. The country has embraced federalism and consists of the following five federal member states (FMS): Puntland, Galmudug, Jubaland, Hirshabelle, and South West.

These states are also working on developing their governmental institutions. One of the main challenges facing the FRS is insecurity due to the presence and control of insurgents in various regions, primarily in the south. Other challenges involve strained relations between the FRS and some FMSs, driven by the FMS' attempts to gain greater autonomy. Additionally, a political resolution is still needed for the separatist semi-autonomous region of Somaliland.

The African Development Bank's (AfDB) 2016 Africa Infrastructure Development Index places Somalia as the lowest ranking in infrastructure development among all African nations. The country lacks railway infrastructure, and coastal shipping is constrained. Although roads constitute Somalia's principal means of domestic transportation, investments in this infrastructure diminished in the late 1980s. As a result, out of Somalia's over 22,000 km road infrastructure, merely 2,860 km are paved, making the majority of rural regions, where over 63% of the population lives, inaccessible to motor vehicles, particularly during the rainy season. Owing to insufficient maintenance, nearly 90% of the 2,860 km of paved roads have deteriorated and are no longer designated as "all-season" highways.

Owing to improvements in social and political stability the country is seeing some investments in infrastructure by bilateral and multilateral donors, local communities, and the private sector. One notable initiative is the AfDB and European Union (EU) funded Somalia Road Infrastructure Programme (SRIP) designed to revive the country's main road corridor and build the capacity of the country's public works institutions. Activities funded by SRIP include:

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1.2 Project Description

Beledweyne-Kalabeyr Road (22km) is part of the Beledweyne – Galkayo Corridor, an existing tarmac road and an important section of Somalia's North-South (NS) Corridor covering Mogadishu-Jowhar-Beledweyne-Galkaiyo and is a key link in the trunk road system towards Ethiopia and the Northern areas of the Somali peninsula. This road does not start at Beledweyne as the name may suggest, it starts at Jente Kundishe which is 5.63 kms from Beledweyne (**Figure 1**).

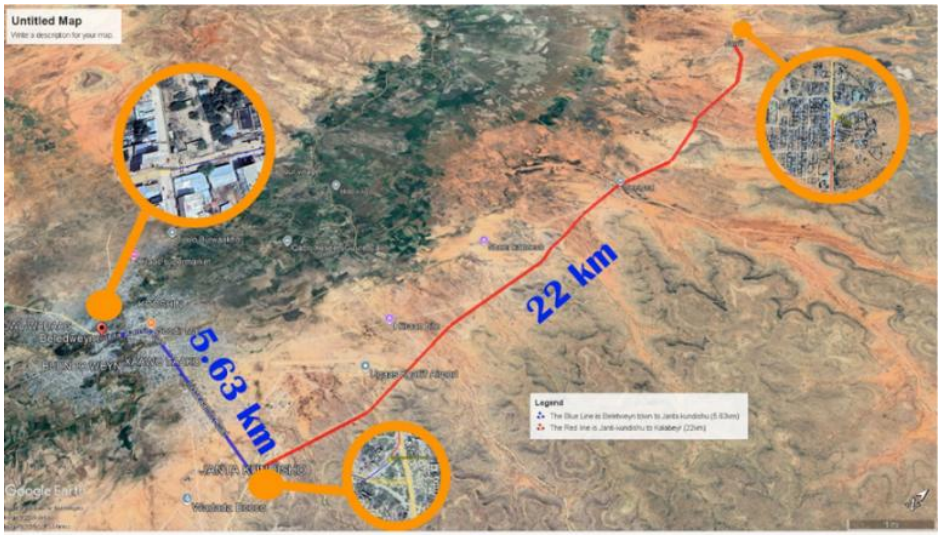


Figure 1: Project Location

The beginning and end points of the road are shown in the table below.

Table 2: Project Location Coordinates

Starting Coordinates		Ending Coordinates		Section length
Latitude	Longitude	Latitude	Longitude	KM
4°44.506'N	45°15.071'E	4°55.711'N	45°12.939'E	21.7

1.3 Objective of the ESIA

The purpose of this environmental and social impact assessment (ESIA) is to identify and assess potential environmental and social impacts of the proposed SRCIP and develop mechanisms to mitigate against potential adverse impacts and enhance potential project impacts. In addition, this ESIA evaluates alternatives and proposes management and monitoring measures.

1.4 Approach and Methodology

This section outlines the approach and methodology employed to conduct the Environmental and Social assessment to execute the Beledweyne-Kalabeyr Road Project ESIA. The methodology complies with the stipulations of the Somalia ESIA Regulations (2024) and aligns with international best practices, including the African Development Bank's Environmental and Social Performance Standards. This ESIA study employed an extensive data gathering technique to provide a full picture of the current environmental and socioeconomic conditions in the project region. This data serves as the foundation for assessing potential impacts and developing effective mitigation measures. The general steps followed during the assessment were as follows:

- Environmental screening, in which the project was identified as among those requiring Environmental and Social Impact Assessment
- Environmental scoping that provided the key environmental issues,
- Desktop studies
- Physical inspection of the project location and the surrounding areas,
- ESIA Public participation via the use of questionnaires, interviews, meetings, focused group discussion,
- Data analysis and report preparation.

Desktop Study

A thorough review of relevant documents, policies, and legislative frameworks was conducted to understand the nature of proposed activities and their potential implications. Key documents such as previous ESIA reports, environmental data, maps, Somali national and local laws, AfDB's Integrated Safeguard System, international standards (e.g., IFC Performance Standards and Equator Principles), and project designs were analyzed to inform the assessment process.

Environmental Screening

Initial screening was conducted to determine the necessity and extent of the environmental impact assessment as per the requirements outlined in the relevant legislation, including the Somali Environmental and Social Impact Assessment Regulations (2024). The screening process involved legal review and desktop studies to identify the project's scale, location, and potential impacts, aligning with the criteria specified in the Somali regulations.

Environmental Scoping:

The scoping phase focused on identifying and prioritizing key environmental and social issues that required detailed assessment. Utilizing an ESIA scoping checklist, critical aspects were identified,

categorized, and discussed with stakeholders, including local communities, project managers, and design engineers.

Site Assessment:

Field visits were carried out in 2021, 2024, and 2025 to physically inspect the project site and its surrounding areas to assess the existing environmental conditions and anticipate potential impacts. These visits facilitated primary data collection and provided insights into the local context, contributing to the overall assessment of environmental and social risks. Checklists, observation and photography are some of the tools and methods that were used in the assessments

Communication Consultation with Design Team

Consultation with design engineer and sharing of information was used to obtain details about the project component activities/ancillary works, project area influence. Design engineers were presented with measures to be taken to avoid significant E&S impacts and mitigation for design consideration were proposed.

Public Participation:

Extensive public participation has been ongoing since 2021 up to now (February 2025) and will be ongoing through the project lifetime. The following methods were employed for public participation:

a. *Questionnaires and Standard Interview Schedules:* Standardized questionnaires and interview schedules were administered to gather data from local communities, government officials, and other stakeholders. This approach ensured consistency and facilitated data analysis.
b. *Key Informant Interviews (KII):* Targeted interviews were conducted with key informants possessing specialized knowledge about the project area's social or environmental aspects. These interviews provided in-depth insights into specific topics.
c. *Focus Group Discussions (FGDs):* Focused group discussions were held with representatives of various community groups to understand their concerns, perceptions, and expectations regarding the project.

Data Analysis, Reporting, and Documentation:

Both qualitative and quantitative data were used in the preparation of this report. Quantitative data, mostly obtained during FGDs and KIIs. These data were analyzed using content analysis and narrative analysis methods. Simple quantitative data, collected to strengthen the qualitative data, included length of road, number and number of bridges. The ESIA Study Report was compiled in accordance with the guidelines set forth by the Federal Republic of Somali, AfDB, and international standards, and applicable environmental agreements. Constant communication and consultation with the client were maintained throughout the assessment process to ensure alignment with project objectives and stakeholder expectations.

1.5 Project Justification

The rehabilitation of the Beledweyne-Kalabeyr Road is a critical initiative for Somalia's reconstruction and development. Upgrading this road aligns with this larger effort by complementing ongoing rehabilitation of other road corridors in the country. This project builds upon the ongoing Mogadishu-Afgoye rehabilitation, creating a more extensive improved road network. The road between Beledweyne-Galkayo is part of the North-South corridor and an important road connecting the main urban centers in Hiiraan and Galgaduud regions. The rehabilitation of the Beledweyne-Galkayo road will provide enhanced transport facilities that are reliable and cost effective, with a view to improving accessibility to services and transportation of persons and goods which will support economic and social development. This will also lead to improved access to health and education services and markets, reduced travel times and costs, increased economic productivity and employment opportunities. The rehabilitation of this road will significantly increase road safety, especially at stream crossings where six bridges will be built/rehabilitated to replace the dilapidated structures.

2. PROJECT ACTIVITIES

The project focuses on the rehabilitation and upgrade of the existing 22km, 7.3m wide Beledweyne-Kalabeyr Road. This project falls under the SRIP's initiative to improve transport connectivity across Somalia.

2.1 Planning and design phase

This is the initial phase of the road construction project, and it involves preliminary design and preparation and the detailed design.

The preliminary design entails the following:

i. Review of the existing data on the proposed road project and social and economic activities in the project area.

ii. Collection of social, environmental and physical data that is necessary to assist in the design of the project road.

iii. Preliminary engineering survey and design work for the optimum alignment and design standards which includes geometric and drainage design, material and geotechnical investigation and pavement design, topographical surveying, traffic and axle load surveys, economic evaluation of the road and reporting.

iv. To carry out an Environmental and Social Impact Assessment of the project area in relation to the proposed project which is the rationale for writing this report.

Proposed Construction Works

The rehabilitation of the Beledweyne-Kalabeyr Road will entail the following:

- Surfacing and sealing of the carriageway, including use of bitumen mixing plants where the road is to be sealed. **Figure 2** presents the civil works to be undertaken during the rehabilitation of the roads.

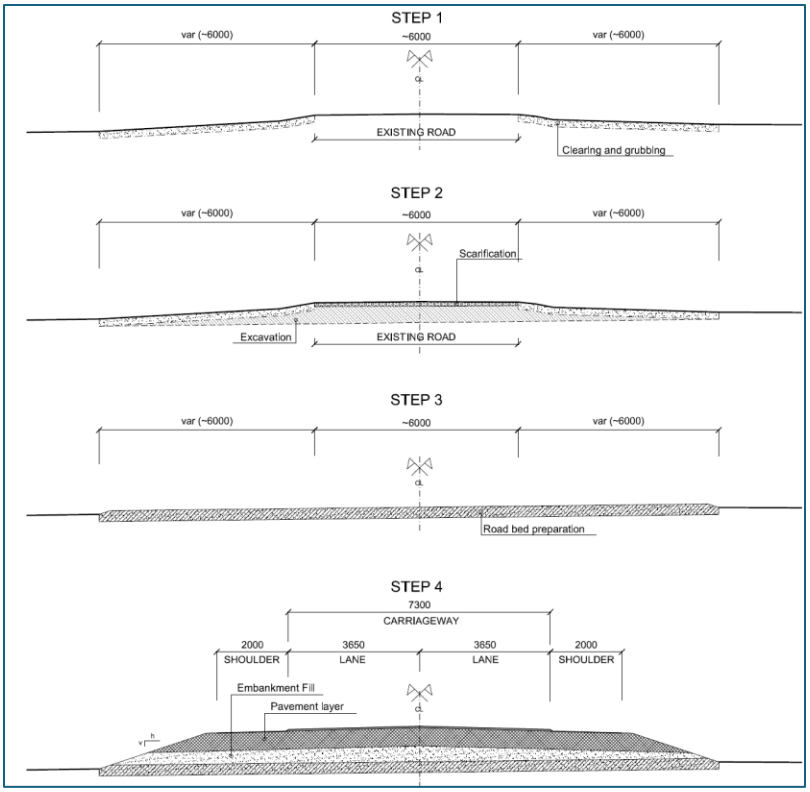


Figure 2: Actvities during road rehabilitation

- Water crossings, e.g. construction or upgrading of 6 bridges including concrete batching for structures
- Construction of road diversions
- Establishment or improvement of safety arrangements e.g., modification of camber, barriers, improving sight lines; and Landscaping, as required
- Temporary construction facilities (e.g. lay-bys or service areas, workshops, laydown areas, working corridors outside the road reserve, workers' accommodation, and burrow pits)
- Establishment of access roads within and between temporary facilities and the road being developed

Temporary works

In addition to the permanent works described above, some temporary works will be undertaken to facilitate construction. These include:

- Diversion roads to allow passage of traffic to be maintained along the full length of the construction works.
- A work camp for accommodation, offices, services, stores, workshops and parking of vehicles
- Production facilities such as concrete precast yard, timber and reinforced steel bending yards
- Temporary stockpile areas to be set aside for delivered or double-handled materials such as aggregates and sand.
- Spoil areas for disposal of unsuitable or surplus materials.

Construction Plant

The project would have the following machineries for construction purposes.

- Cat D6 Bulldozer or Equivalent with Dozer/Ripper attachment
- Cat 120H Motor Grader or Equivalent Complete with Scarifier
- Vibrating Roller (10 Tonnes)
- Hand Propelled Vibrating Roller 850 Kg
- Cat 950G Wheel Loader or Equivalent
- 10 Tonne Tipper Lorry
- 50 mm Delivery water pump and motor
- Concrete mixer 0.7m3/min.
- Concrete Vibrator (Poker Type)

Quarries, Burrow Pits, Stockpiles and Spoil Areas

The government will provide the contractor with land in pre-approved locations to set up workers' camps. In addition, the government will also provide areas to stockpile materials and dispose off spoil. An ESIA is mandatory for all burrow pits, worker camps, quarries, and sand harvesting sites before they can be established. Three burrow pit sites, (**Table 3**) have been identified.

Table 3: Burrow Pit Locations

SN	Names	KM	Latitude	Longitude
1	MS1 (Km. 5+500) RHS	5.5km	4°47'14.32"N	45°14'52.60"E
2	MS2 (Km 7+000) RHS	7km	4°48'34.55"N	45°14'47.88"E
3	MS3 (Km 15+200) RHS	15.2km	4°53'23.68"N	45°14'7.35"E

Safety and Public Health Requirements

Health, safety, and awareness will be a critical focus throughout construction. Previous projects have shown a tendency for contractors to overlook proper signage. To address this, warning signs, advisories, and safety signage will be a crucial aspect throughout this project, and the supervisory team will ensure strict adherence to all signage requirements.

Worker well-being is also a priority. The contractor will facilitate qualified professionals to conduct HIV/AIDS awareness training for workers. Additionally, regular statutory trainings will be conducted to enhance worker safety skills.

2.2 Operation Phase Activities

Once the road is operational, this phase focuses on monitoring and maintaining the entire project to meet its objectives. This includes repairs to damaged sections, addressing future expansion needs, developing and implementing maintenance policies for the road and its associated structures.

2.3 Decommissioning Phase

The project does not currently anticipate a decommissioning phase, as the road is intended for long-term use based on transportation needs in the area. However, following construction, the contractor will remove and salvage construction equipment and dismantled camp materials from the site.

2.4 Project Cost

The project implementation budget is 22 million Unit of Account (UA) which includes ESMP and RAP implementation.

3. PROJECT ALTERNATIVES

A crucial aspect of project development involves evaluating multiple options to ensure the most suitable approach. This proactive strategy, employed in environmental assessments, goes beyond minimizing the impact of a single design. It seeks to improve the project as a whole by considering alternative possibilities. While a comprehensive evaluation requires further data collection, several promising alternatives related to various project aspects have already been identified.

3.1 Do Nothing Scenario

The Beledweyne-Kalabeyr Road facilitates the movement of goods and people within and between the different states of Somalia and enhance cross border movement of the same between Ethiopia and Somalia. This is not a new road; it is pre-existing road that has contributed to the economic growth of the country and social integration between the different clans that live along this road. The current state of disrepair has led to increased travel cost/time and slowed the movement of goods and people. The rough condition of the road leads to vehicular damages significantly decreasing the life expectancy of the vehicles and presenting an economic burden to the owners and the community in general. More than often the prices of goods and services increase as the transport costs go up. The reduction of travel time will be one of the main benefits. The do-nothing approach will lead to missing an opportunity to enhance community lives along Beledweyne-Kalabeyr Road and the whole country in general. Since the road is pre-existing minimum adverse impacts are expected, both environmentally and socially.

3.2 Pavement Design

Three alternatives were considered for pavement design, namely (i) Triple Surface Treatment (TST); (ii) Asphalt Concrete (AC); and (iii) engineered gravel upgrade. The retained option in design stage the Consultant had considered two alternatives:

- **Double Bitumen Surface Dressing**
- **Asphalt Concrete**

Provided below is the rationale that Asphalt Concrete had preponderantly emerged as the alternative for Beledweyne– Kalabeyr Road pavement design:

In tropical and subtropical countries, the choice between Asphalt Concrete (AC) and Double Bitumen Surface Dressing (DBSD) in pavement design depends on various factors such as traffic load, climate, durability, cost, and maintenance requirements. Below is a comparative analysis of the two:

Table 4: Analysis Of Pavement Design Options Considered for The Project

Evaluation parameter	**Project alternative**	
	Asphalt Concrete (AC)	**Double Bitumen Surface Dressing (DBSD)**
Durability and Performance	• Provides a strong, durable, and smooth surface with high resistance to deformation under heavy traffic loads.	• Consists of two layers of bitumen binder and stone chips, making it more flexible

Evaluation parameter	Project alternative	
	Asphalt Concrete (AC)	**Double Bitumen Surface Dressing (DBSD)**
	• Well-suited for urban roads, highways, and high-traffic areas where longevity and performance are crucial. • Can withstand heavy rainfall and high temperatures typical of tropical and subtropical climates. • Requires well-compacted sub-base and base layers to prevent failures like cracking or rutting. • Provides a strong, durable, and smooth surface with high resistance to deformation under heavy traffic loads. • Well-suited for urban roads, highways, and high-traffic areas where longevity and performance are crucial. • Can withstand heavy rainfall and high temperatures typical of tropical and subtropical climates. • Requires well-compacted sub-base and base layers to prevent failures like cracking or rutting.	but less structurally strong than AC. • Suitable for low-traffic and rural roads where cost-effectiveness is prioritized over long-term durability. • More susceptible to damage from heavy traffic, leading to reveling, bleeding, or stripping under extreme temperatures. • Provides adequate skid resistance and surface waterproofing but does not offer the same structural strength as AC.
Climate Considerations	• Performs well under high temperatures but requires modified binders or proper mix design to prevent softening and rutting. • Resists heavy rainfall and moisture penetration when designed with proper drainage. • Less affected by oxidation compared to DBSD.	• More prone to bleeding under high temperatures and heavy traffic, leading to a slippery surface. • Can experience rapid deterioration due to oxidation and loss of aggregate in hot and humid conditions. • Better suited for regions with moderate traffic and lower temperature variations.
Cost and Construction Time	• Higher initial construction cost due to material and equipment requirements. • Longer construction time due to layering and compaction processes.	• Lower initial cost, making it ideal for low-budget projects. • Faster to construct since it requires only the application of

Evaluation parameter	Project alternative	
	Asphalt Concrete (AC)	**Double Bitumen Surface Dressing (DBSD)**
	Lower maintenance cost in the long run due to its durability.	bitumen and aggregate. • Higher maintenance frequency, leading to increased lifecycle costs over time.
Maintenance Requirements	• Requires periodic maintenance such as crack sealing, overlaying, or milling and resurfacing. • Well-maintained AC roads can last 15–20 years or more.	• Requires more frequent reapplication (every 3–7 years) due to aggregate loss and surface wear. • More susceptible to potholes and requires patching and resealing.
Traffic Load Consideration	• Suitable for high-traffic roads, highways, and urban streets with heavy vehicle loads. • Provides a smooth, comfortable ride and reduces vehicle wear and tear.	• Best for low to medium traffic roads, such as rural roads and feeder roads. • Not recommended roads with high volumes of heavy trucks or buses.

Conclusion: For tropical and subtropical climates with high temperatures and rainfall, Asphalt Concrete is generally preferred for major roads due to its superior durability, performance, and ability to withstand extreme weather conditions. Use Asphalt Concrete (AC) for:

- High-traffic roads, highways, and urban areas.
- Areas with extreme weather conditions (high heat, heavy rainfall).
- Long-term durability and lower maintenance costs.
- Use Double Bitumen Surface Dressing (DBSD) for:
- Low-traffic roads, rural roads, and temporary roads.
- Budget-conscious projects where initial cost is a major constraint.
- Quick road surface improvement with relatively short service life.

3.3 Bridge on Alignment Rehabilitation or Replacement

Due to structural issues affecting 6 existing bridges along the Beledweyne-Kalabeyr Road, the alternatives of rehabilitating or constructing new bridges were considered.

Bridge #1

Bridge's realignment Length L=970m - from KM 0+800 to KM 1+770. Realignment downstream the existing bridge at about 22.5 m.

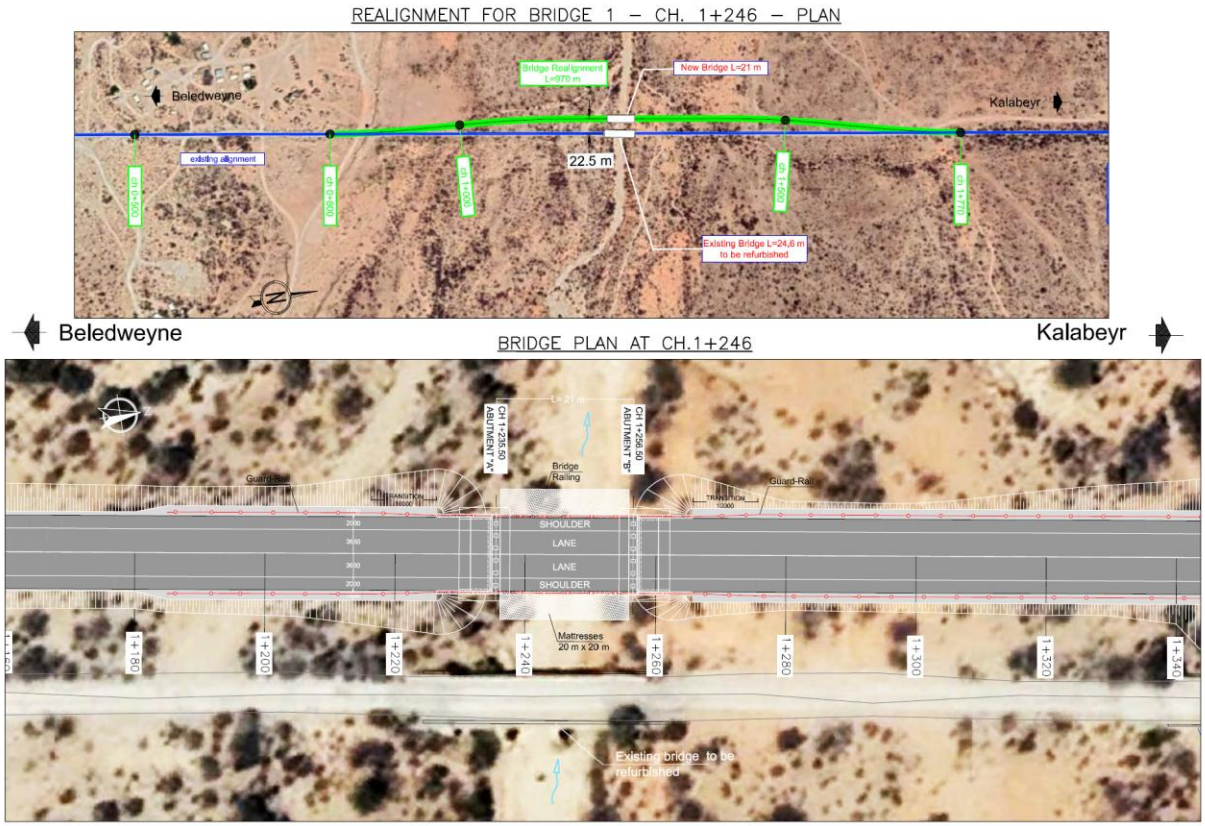


Figure 3: Bridge 1

Bridge #2

Bridge's realignment Length L=955m - from KM 3+865 to KM 4+820. Realignment upstream the existing bridge at about 22.5 m.

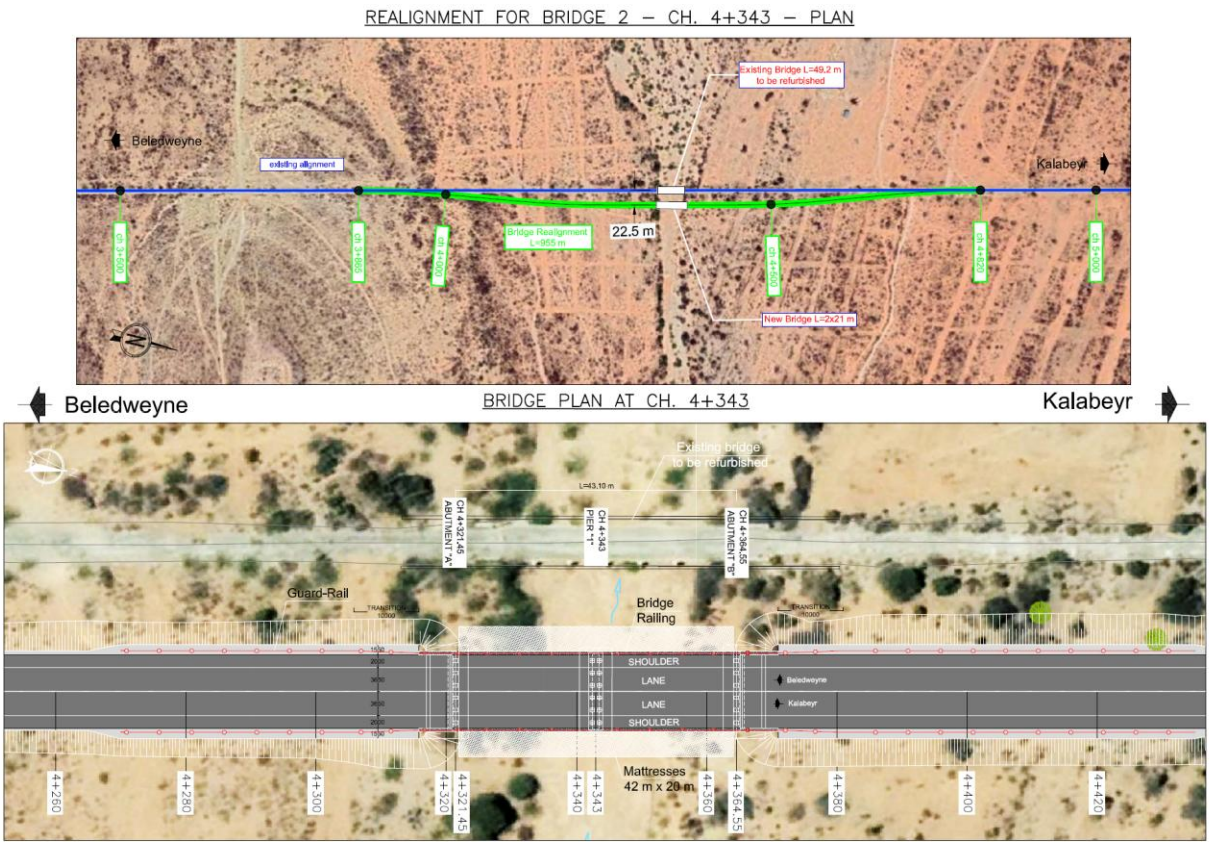


Figure 4: Bridge 2

Bridge #3

Bridge's realignment Length L=740 m - from KM 8+500 to KM 9+240. Realignment upstream the existing bridge at about 22.5 m.

Figure 5: Bridge 3

Bridge #4

Since the bridge number 4 is hydraulically not adequate and it is placed in an urban area, there is no possibility to do a realignment of the road without affecting the existing buildings. Due to

this, the bridge no.4 will be demolished, and the new bridge will be built on the actual alignment.

Figure 6: Bridge 4

Bridge #5

As for bridge n.5, which is hydraulically not adequate too, it will be kept in place. The presence of the existing bridge will result in a rise of the hydraulic level upstream the road, as can be easily seen in the water profile The new bridge must be built at a sufficient distance from the existing bridge to avoid negative effects. From the profile it is seen that 200m downstream is the minimum distance where the new bridge can be constructed as water's speed and levels will become as normal. For this reason, the new bridge alignment is shifted 225 meters downstream the existing

river crossing site. Bridge's realignment Length L=2000 m - from KM 15+000 to KM 17+000. Realignment downstream the existing bridge at about 225 m.

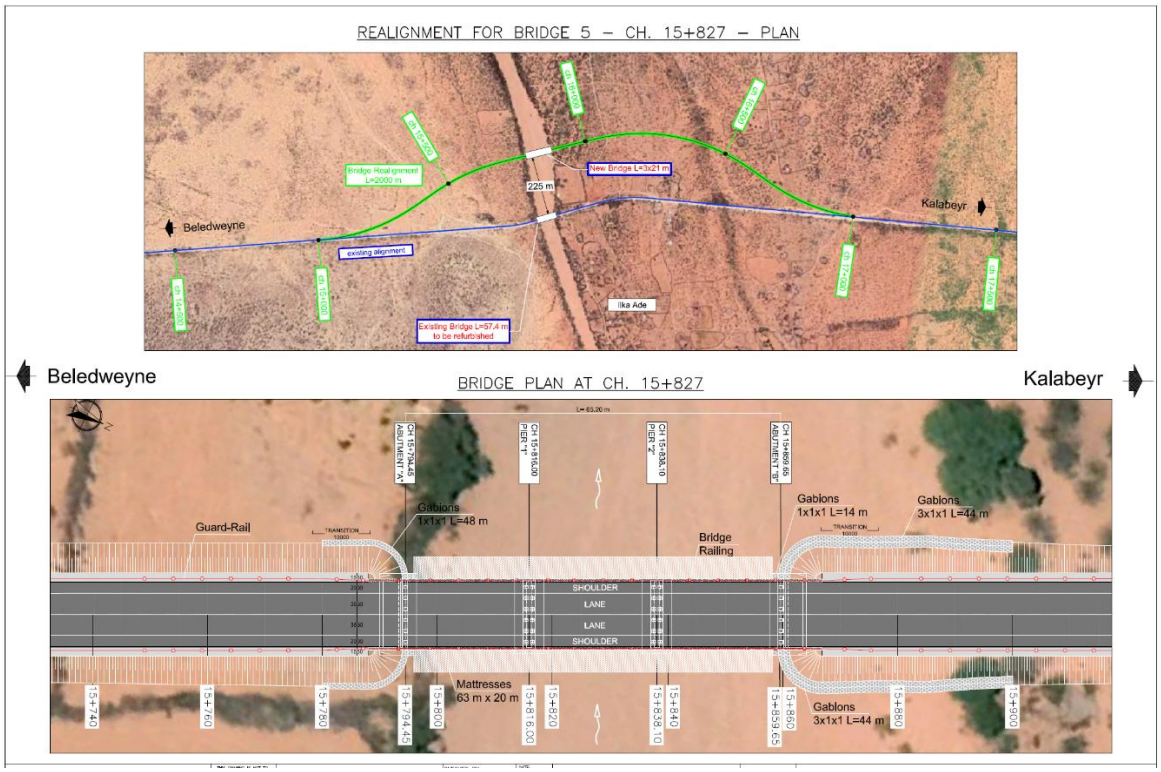


Figure 7: Bridge 5

Bridge #6

As for bridge 6, which is hydraulically adequate, it will be kept in place and the new alignment is placed 325 meters upstream to avoid some existing buildings. Bridge's realignment Length L=1730 m - from KM 19+870 to KM 21+600. Realignment upstream the existing bridge at about 325 m, near populated area.

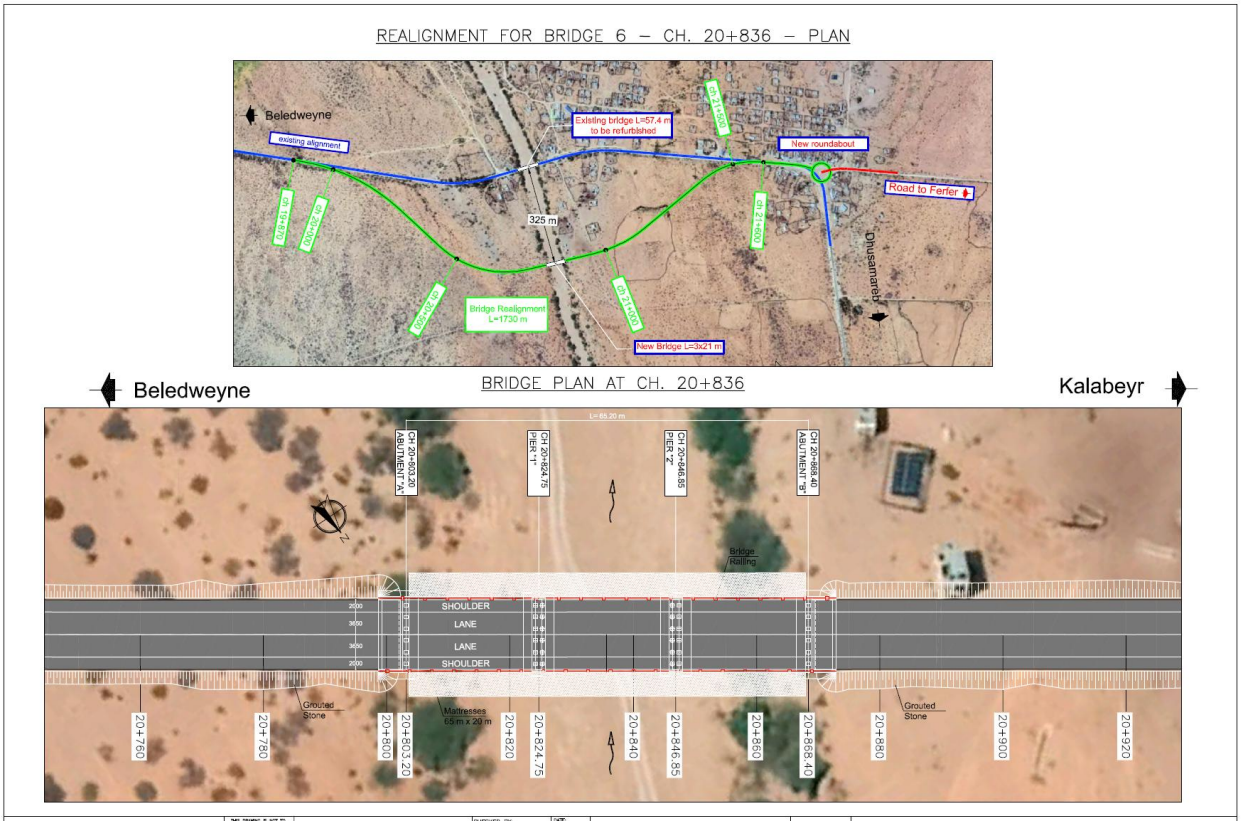


Figure 8: Bridge 6

3.4 Alternative Mode of Transportation

The Beledweyne-Kalabeyr Road serves a crucial function by providing a relatively fast and affordable means of land transport in the region. There are currently no viable alternatives that can match this combination of speed, affordability, and capacity for overland cargo and passenger movement. While air, rail, and water transport exist as general modes of transportation, they are not realistic options in this specific context. There is railway or navigable waterways within the project area. Air transport is not viable for such a short distance.

3.5 Analysis of Alternative Construction Designs, Materials and Technology

The current drainage structures are not operating at their intended capacity, necessitating critical decisions regarding their type and placement. The importance of addressing drainage structure concerns is exacerbated by shifts in climatic conditions, which have altered rainfall patterns in the Hiiran Region. Consequently, there may be a need to reevaluate the positioning and designs of existing pipes and cross culverts to ensure their effectiveness amidst changing weather patterns.

4. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

This Chapter presents the existing legislative and institutional framework to be considered in the design, implementation, monitoring and evaluation of the SRIP. This section begins with an overview of the existing framework at the state and federal government levels before capturing the several international treaties and conventions to which Somalia is also a signatory and presenting the AfDB policies.

4.1 Constitution of Federal Republic of Somalia (2012)

The constitution of the Federal Republic of Somalia is the supreme law of the country and provides the basis for enacting laws including for the management of environmental and social affairs. Articles that guide the development of laws affecting the implementation of the RIP include but are not limited to the following:

Article 25. Environment

Somalia's Constitution, Article 25, provides a strong foundation for the project where it states that:

1. Every person has the right to an environment that is not harmful to their health and well-being, and to be protected from pollution and harmful materials.
2. Every person has the right to have a share of the natural resources of the country, whilst being protected from excessive and damaging exploitation of these natural resources.

The project will be designed and constructed to minimize negative impacts on air, water, and soil quality. The project will also avoid using or generating hazardous materials. If unavoidable, safe handling, storage, and disposal plans will be incorporated.

The project will utilize natural resources like water and construction materials responsibly. This could involve using recycled materials, minimizing deforestation, and implementing water conservation measures during construction and operation.

Article 45. Environment

Chapter 3 on Land, Property and Environment; Article 45 states that:

1. The Federal Government shall give priority to the protection, conservation, and preservation of the environment against anything that may cause harm to natural biodiversity and the ecosystem.
2. All people in the Federal Republic of Somalia have a duty to safeguard and enhance the environment and participate in the development, execution, management, conservation and protection of the natural resources and environment.
3. The Federal Government and the governments of the Federal Member States affected by environmental damage shall:
    a. Take urgent measures to clean up hazardous waste dumped on the land or in the waters of the Federal Republic of Somalia

b. Enact legislation and adopt urgent necessary measures to prevent the future dumping of waste in breach of international law and the sovereignty of the Federal Republic of Somalia
c. Take necessary measures to obtain compensation from those responsible for any dumping of waste, whether they are in the Federal Republic of Somalia or elsewhere
d. Take necessary measures to reverse desertification, deforestation and environmental degradation, and to conserve the environment and prevent activities that damage the natural resources and the environment of the nation.

4. In consultation with the Federal Member States, the Federal Government shall adopt general environmental policies for the Federal Republic of Somalia.

The Beledweyne-Kalabeyr Project should demonstrably align with the principles enshrined in Article 45. The ESIA will achieve this by:

- *Throughout the project lifecycle, environmental protection and minimizing environmental impacts will be a priority.*
- *A comprehensive plan for waste management during construction and operation should be developed.*
- *The local communities were proactively engaged to understand and address their environmental concerns, and continuous engagement should be considered during the construction and operation phases*
- *The ESIA has incorporated measures to ensure the road's long-term operation and maintenance minimize environmental harm.*

Article 11. Equality

Article 11 of the Constitution of Somalia aims at ensuring that the project respects and upholds principles of equality and non-discrimination. The article states that:

1. All citizens, regardless of sex, religion, social or economic status, political opinion, clan, disability, occupation, birth or dialect shall have equal rights and duties before the law.
2. Discrimination is deemed to occur if the effect of an action impairs or restricts a person's rights, even if the actor did not intend this effect.
3. Government must not discriminate against any person on the basis of age, race, colour, tribe, ethnicity, culture, dialect, gender, birth, disability, religion, political opinion, occupation, or wealth.
4. All government programs, such as laws, or political and administrative actions that are designed to achieve full equality for individuals or groups who are disadvantaged, or who have suffered from discrimination in the past, shall not be deemed to be discriminatory.

The ESIA process ensured all community members, regardless of background, have an equal opportunity to voice their concerns and suggestions regarding the project. This involved using multiple communication channels to reach diverse groups and translating materials into different dialects where necessary.

The ESIA explored how the project will deliver benefits equitably.

When giving job opportunities, the contractor should ensure fair and inclusive hiring practices that don't discriminate based on factors mentioned in Article 11.

If the project requires land acquisition, the proponent should ensure fair compensation and resettlement processes that treat all affected individuals and communities equally.

Article 14. Slavery, Servitude and Forced Labor

Article 14 of the Somali Constitution directly prohibits slavery, servitude, and forced labor by stating that

'A person may not be subjected to slavery, servitude, trafficking, or forced labor for any purpose.'

The contractor should demonstrate the project's commitment to upholding ethical labor standards throughout construction and operation. This includes ensuring workers are freely employed and not forced into labor, paid fair wages and benefits, provided with safe working conditions and not subjected to any form of human trafficking.

The proponent should include measures for monitoring contractors and subcontractors to ensure they comply with ethical labor practices.

Article 15. Liberty and Security of the Person

Article 15 of the Somali Constitution safeguards the right to personal liberty and security. It states:

1. Every person has the right to personal liberty and security.
2. Every person has the right to personal security, this includes: the prohibition of illegal detention, all forms of violence, including any form of violence against women, torture, or inhumane treatment.

A security management plan for the project that minimizes disruptions to local communities' daily lives should be outlined and the contractor should address worker safety throughout the project lifecycle.

Article 24. Labour Relations

Article 24 of the Somali Constitution focuses on ensuring that labor rights are respected and protected throughout the project lifecycle. This is what it says:

1. Every person has the right to fair labour relations.
2. Every worker has the right to form and join a trade union and to participate in the activities of a trade union.
3. Every worker has the right to strike.
4. Every trade union or employers' organization or employer has the right to engage in collective bargaining regarding labour-related issues.

5. All workers, particularly women, shall have a special right of protection from sexual abuse, segregation and discrimination in the workplace. Every labour law and practice shall comply with gender equality in the workplace.

The project should acknowledge workers' rights to form and join trade unions.

The contractor should ensure the project adheres to fair wages and working conditions as outlined in Somali labor laws. This includes minimum wage requirements, reasonable working hours, overtime pay regulations and safe working conditions as mentioned in Article 15.

The project should uphold a non-discriminatory workplace environment.

The contractor should outline clear measures to protect workers, particularly women, from sexual abuse in the workplace.

Article 26. Property

Article 26 of the Constitution of Somalia enshrines the right to property, affirming that every individual has the right to own, use, enjoy, sell, and transfer property, stating that:

1. Every person has the right to own, use, enjoy, sell, and transfer property.
2. The state may only compulsorily acquire property if doing so is in the public interest. Any person whose property has been acquired in the name of the public interest has the right to just compensation from the State as agreed by the parties or decided by a court.

The proponent for the Beledweyne-Kalabeyr Road Project must ensure transparency and public consultation in the land acquisition process, providing fair compensation to affected individuals or communities and detailing a resettlement action plan. It should address obtaining permission for permanent as well as temporary land use and ensuring fair compensation for disruptions caused, while also acknowledging communal land ownership structures available in Somalia.

Article 31. Language and Culture

Article 31 of the Somali Constitution emphasizes the importance of promoting positive Somali traditions and cultural practices. It states:

1. The state shall promote the positive traditions and cultural practices of the Somali people, whilst striving to eliminate from the community customs and emerging practices which negatively impact the unity, civilization and wellbeing of society.
2. The state shall collect, protect and preserve the country’s historic objects and sites, whilst developing the know-how and technology that shall enable the fulfilment of such an obligation.
3. The state shall promote the cultural practices and local dialects of minorities.
4. The rights mentioned in this Article shall be implemented in accordance with the fundamental rights recognized in this Constitution.

During project consultations, actively seek input from local communities regarding their cultural heritage and traditions. If the project uncovers any historical or archeological sites during construction, the contractor should outline a plan for their protection and preservation.

Explore ways the project can create economic opportunities that celebrate Somali culture. Consider translating key project information and communication materials into local Somali dialects spoken in the affected communities. The ESIA should identify potential negative impacts on cultural practices and traditional livelihoods and develop mitigation strategies.

Article 42. Duties of the Citizens

Article 42 of the Somali Constitution outlines the duties of citizens. It is a guiding principle for framing the Beledweyne-Kalabeyr Road Project within a framework of civic responsibility. It states:

1. In Islam, justice requires a balance of rights and duties.
2. The exercise of equality, freedoms, and other rights is inseparable from duties. Accordingly, it is the duty of each citizen:
    a) To be patriotic and loyal to the country and to promote its development and well-being
    b) To engage in useful work for the good of the citizen, the family, and the common good, and to contribute to national development and to the well-being of the community where the citizen lives
    c) To foster national unity in harmony with others
    d) To promote accountability and the rule of law
    e) To become acquainted with the provisions of the Constitution and to uphold and defend the Constitution and the law

Community Ownership and Participation in the project will ensure they are doing their civic duties as enshrined in the constitution

Article 50. Principles of Federalism in the Federal Republic of Somalia

Article 50 of the Somali Constitution establishes the principles of federalism in Somalia stating that:

The various levels of government, in all interactions between themselves and in the exercise of their legislative functions and other powers, shall observe the principles of federalism, which are:

1. Every level of government shall enjoy the confidence and support of the people
2. Power is given to the level of government where it is likely to be most effectively exercised
3. The existence and sustainability of a relationship of mutual cooperation and support between the governments of the Federal Member States, and between the governments of the Federal Member States and the Federal Government, in the spirit of national unity
4. Every part of the Federal Republic of Somalia shall enjoy similar levels of services and a similar level of support from government
5. Fair distribution of resources

6. The responsibility for the raising of revenue shall be given to the level of government where it is likely to be most effectively exercised
7. The resolution of disputes through dialogue and reconciliation.

Ministry of Public Works, Housing & Reconstruction is the Somali government institution charged with the mandate to oversee and manage the project. It should ensure the above principles and guidelines are adhered to.

The Ministry of Environment and Climate Change is the operational focal point for multilateral environmental agreements and funds, such as GEF, and Green Climate Fund (GCF). It is also tasked with conducting Sectoral Environmental Assessments, EIAs and EAs.

The proponent should ensure the project fosters collaboration between the Federal Government and the relevant Federal Member State(s) involved in the Beledweyne-Kalabeyr Road Project

If the project involves utilizing resources managed by a specific Federal Member State, ensure adherence to any relevant regional regulations and permitting processes.

Ensuring that every level of government enjoys the confidence and support of the people is fundamental for the success of the road project.

4.2 National Policies and Laws

After many years without no fully functioning public institutions, the Federal government is making significant progress in translating the various articles of the Constitution into laws. Relevant laws and policies that have been formulated towards environmental and social protection are presented in this section.

National Environmental Policy

The Somali Cabinet, on February 13, 2020, approved the **National Environmental Policy**. The stated goal of this Policy is to improve the health and quality of life of the Somali people. The development of this policy was backstopped by the World Bank funded Global Environment Facility (GEF) and the United Nations Development Program (UNDP). This is the first time that an environmental policy has been developed and taken to Cabinet for approval since the collapse of the previous central administration in 1991. This was followed by the enaction of **Environmental Management and Protection Act of 2024**, which includes Environmental and Social Impact Assessment Regulation. The policy outlines guiding principles for environmental protection and sustainable development in Somalia.

The National Environmental Policy of Somalia outlines these guiding principles:

- **Environmental Right:** Everyone has the right to a clean and healthy environment.
- **Sustainable Development:** Use resources without compromising the ability of future generations to meet their own needs.
- **Public Participation:** People should be involved in developing and implementing environmental policies.
- **Precautionary Principle:** Take action to prevent environmental harm even if scientific certainty is limited.

- **Polluter Pays Principle:** The polluter should bear the cost of cleaning up pollution and compensating victims.
- **Legal Liability:** There should be legal consequences for environmental damage.
- **Decentralization:** Empower local authorities to address environmental issues relevant to their area.
- **Mainstreaming:** Consider environmental factors in all types of decision-making.
- **Preventive Action:** Prevent environmental damage whenever possible, rather than trying to fix it later

The policy establishes environmental quality standards for air, water, soil, and other aspects. It provides specific guidance on conducting environmental impact assessments. The policy also emphasizes the importance of public participation in environmental decision-making.

The ESIA has been aligned with the guiding principles for this policy, demonstrating the project's commitment to environmental responsibility. The environmental standards have been used as a benchmark when assessing the potential environmental impacts of the road project. Robust public participation was conducted during the ESIA process

Somalia National Climate Change Policy

The Somalia Climate Change Policy outlines the country's response to the challenges posed by climate change, recognizing its adverse impacts on various sectors and the need for sustainable development. The policy aims to achieve a prosperous and climate-resilient economy through adaptation and mitigation measures. It emphasizes promoting a harmonized response to climate change challenges, safeguarding citizens' safety and health, and enhancing resilience to climate variability. Objectives include adaptation, disaster preparedness, and mitigation, guided by principles such as sustainable development, equity, and community participation. Cross-sectoral themes like capacity building, research, and international cooperation are highlighted, along with strategic priorities areas for adaptation, disaster management, and mitigation efforts. The policy also addresses social aspects of climate change and outlines the climate governance structure, financing mechanisms, and monitoring and evaluation systems needed for effective implementation.

Beledweyne-Kalabeyr Road Project aligns with the national climate change goals. The use of solar streetlights and afforestation are some of the measures adopted in the project.

Environmental Protection and Management Act, 2024

The Act was promulgated in February 2024. The principles of the Act are similar to the principles contained in the National Environmental Policy of Somalia.

Chapter 6 on environmental pollution outlines comprehensive measures for addressing environmental pollution across various domains, including air, water, noise, and vibrations. It establishes principles for limiting emissions at their source. The regulations require licensing for emissions, with stringent penalties for non-compliance. The regulations also mandate the

submission of information on effluents and pollutants by relevant operators and the discharge of effluents only into approved sewage systems. Standards are set for noise and vibration emissions, criteria and procedures are established for controlling noxious smells, ensuring comprehensive protection of public health and the environment.

Chapter 11 outlines the requirements and procedures for conducting Environmental and Social Impact Assessments (ESIA) for projects within the country. It mandates that any person intending to carry out a project must conduct an ESIA before commencement, particularly for installations or projects with the potential for significant environmental pollution. The Ministry of Environment and Climate Change (MoECC) oversees the process, periodically reviewing the types of projects requiring assessment. The regulations establish criteria for the assessment process, including the preparation of an ESIA report by independent experts, submission to the Ministry, and consideration of existing conditions, proposed project measures, and potential impacts. An Environmental and Social Impact Assessment Committee advises the Ministry on technical matters, while the Ministry issues ESIA licenses based on the adequacy of the assessment report. The regulations ensure public access to the report, allowing inspection unless confidentiality is warranted for overriding interests. Additionally, the regulations outline provisions for cancellation or suspension of licenses and mechanisms for appeal.

Schedule 2 highlights the list of the international conventions that Somalia has ratified and/or signed

The project is under Schedule 1 on the Types of Projects and Programmes that should conduct environmental and Social Impact Assessment.

Environmental and Social Impact Assessment Regulation, 2024

The primary legal document guiding the ESIA for the Beledweyne-Kalabeyr Road Project in Somalia is the Environmental and Social Impact Assessment Regulation, 2024 (issued by the Federal Republic of Somalia Ministry of Environment and Climate Change)

Framework

This regulation outlines the legal requirements and procedures for conducting ESIAs in Somalia. It establishes the steps you need to follow, the information you need to gather, and the reports you need to submit. By adhering to the regulation, this ensures the ESIA is comprehensive, credible, and meets Somali government standards. This increases the project's chance of approval and avoids potential legal issues.

Guidelines

This regulation outlines the requirements for conducting ESIAs in Somalia, including:

- Projects requiring an ESIA
- Screening process to determine the level of assessment needed
- Content and format of the ESIA report
- Public consultation procedures
- Issuance of environmental and social impact assessment licenses
- Institutional framework

The regulation specifies the environmental and social factors you need to consider in the ESIA. This includes aspects like air and water quality, soil and vegetation, noise pollution, biodiversity and habitat, social impacts on communities, cultural heritage as well as public health and safety

In the First schedule, the Beledweyne-Kalabeyr Road Project falls under Type A projects that require full environmental and social impact assessment study ('Construction and/or expansion of trunk roads')

By following the regulation's guidance, the ESIA thoroughly assesses all potential impacts of the Beledweyne-Kalabeyr Road Project. This allows for the development of effective mitigation measures to minimize negative impacts and maximize positive ones.

Public participation

1. During the process of conducting the Environmental and Social Impact Assessment study, the proponent shall, seek the views of persons who may be affected by the project by:
    a. holding at least three (3) public meeting or such number as determined in the approved terms of reference under these regulations, with the affected parties and communities including the youth, persons with disability and other vulnerable groups in a venue convenient and accessible, and a language understandable by the various stakeholders to explain the project and its effects and to receive their oral or written comments
    b. ensuring that appropriate notices indicating the dates, times and venues of the meetings, are publicized to the affected communities and the other concerned parties at least fourteen (14) days prior to the meetings referred to in (a) above
    c. Posting posters in strategic public places and in the vicinity of the site of the proposed project informing the affected parties and communities of the proposed project
    d. Ensuring that the reports of the public meetings are annexed to Environmental and Social Impact Assessment study report.

Robust public participation was carried out in Beledweyne, Ceel Gaal, and Jawiil between 2021 and 2025. These meetings involved affected parties and communities, including youth, persons with disabilities, and other vulnerable groups, were held in accessible venues and conducted in a language understandable to all stakeholders. Adequate notice of these meetings, including dates, times, and venues, were publicized at least fourteen days in advance to ensure widespread participation.

Somalia Labour Code.

Somali Labour Code (1972) focuses on regulations governing employment contracts. The Labour Code of 1972 stipulates that all employment contracts must include: a) the nature and duration of the contract; b) the hours and place of work; c) the remuneration payable to the worker; and d) the procedure for suspension or termination of the contract. Furthermore, all contracts must be submitted to the competent Labour inspector for pre-approval.

By committing to following the Labour Code's stipulations regarding contracts, working conditions, and wages, the project will contribute to its social sustainability.

Occupational Safety and Health.

The legislation highlights the current state of occupational safety and health (OSH) regulations in Somalia. Legislation on occupational safety and health (OSH) in Somalia is limited, with the labour code known as Act No. 31 of 2004: Private Sector Act[1] as the main reference on occupational safety and health issues. This law addresses hours of work, holidays and rest periods, employees' pay and emoluments, contracts, recruitment procedures, etc., but does not directly address OHS concerns. Instead, the labour code establishes the general rights, duties and responsibilities of the parties of labour relations, as well as conditions for ensuring the safety and health of workers.

The revised draft Somalia Labour Code has more emphasis on occupational health and safety requirements. It makes the Director of Occupational Safety and Health (OSH) responsible for the registration of hazards and risks, regulation and supervision of all workplaces and monitoring or enforcing compliance with Labour Code and any other labour law to the extent that they regulate safety, health and welfare in the workplaces. Part VI of the Revised Draft Labour Code covers the administration of occupational accidents, injury and disease provisions at workplace, employer's general duties towards OSH, insurance requirements, employees' general duties, medical support, compensations, offenses, and penalties, etc.

The Code further stipulates that worker have the right to submit complaints and the employer must give the complaints due consideration. Remuneration must be adequate in view of the quality and quantity of the work delivered, and must be non-discriminatory regarding age, gender and other aspects. The maximum number of working hours per week is 8 hours per day and 6 days per week. Some work is considered dangerous and unhealthy and forbidden for women and youth (defined as 15-18 years of age). This includes the carrying of heavy weight or work at night. The Labour Code further forbids work for children below the age of 12 but allows employment of children between the ages of 12-15, but employment has to be compatible with proper protection, health and the moral of children. The Code also recognizes freedom of association. Employers are prohibited from engaging in any kind of discrimination or restriction of the right of freedom of association. Workers are allowed to join trade unions. Further, the Labour Code stipulates the right to equal pay for the same work and women are entitled to 14 weeks of maternity leave at half pay.

The ESIA for the road construction project has identified potential safety hazards such as the use of heavy machinery, working at heights, exposure to dust and fumes, and working in extreme weather conditions. Mitigation strategies have been developed to address these hazards, including providing workers with proper personal protective equipment, implementing safe work practices and procedures, and conducting safety training. Additionally, partnering with qualified professionals to develop a comprehensive OSH management plan further strengthens the project's safety measures and aligns with best practices. Despite limited current OSH regulations in Somalia, the ESIA's proactive approach underscores the project's dedication to worker safety.

[1] Referred to in Somali as "Wax ka Bedelka iyo Kaabista Xeerka Shaqaalha Rayidka (Xeer Lam 32/2004."

The Somali Penal Code

The Somali Penal Code of 1962 focuses on sexual violence, marriage, and gender equality. It criminalizes rape and other forms of sexual violence as well as forced prostitution. Articles 398-9 provide that 'carnal intercourse' and 'acts of lust committed with violence' are punishable with 5-15 years and 1-5 years of imprisonment, respectively. Abduction for the purpose of lust or marriage is prohibited under Art 401. The Family Code of 1975 sets the minimum age for marriage at 18 for males and females. Females between the age of 16 and 18 can marry with their guardian´s consent. Marriage is based on equal rights and duties.

The ESIA focuses on assessing the environmental and social impacts of the project. Social issues such as ensuring worker camps are safe and secure, with proper sanitation and security measures to prevent violence or exploitation should be considered.

Somalia National Gender Policy

Somalia National Gender Policy (2016) includes strategies to eradicate harmful traditional practices such as female genital mutilation/cutting (FGM/C) and child marriage and to improve services for the management of GBV/SEAH cases.

The policy aims to achieve gender equality and empower women. The contractor can demonstrate the project's commitment to this goal by promoting equal opportunities for women during the project cycle.

4.3 State Level Environmental and Social Regulations and Guidelines

The Federal Member States of Somalia are confronted with notable institutional deficiencies that are evident in the absence of crucial environmental and social laws. At FMS level, Jubaland, Hirshabelle, Galmudug, and South-West State lack substantial legislative frameworks for overseeing the management of the environment and natural resources sector. The same applies to Benadir Regional Administration (BRA), and it continues to be challenging to incorporate comprehensive policy, legislative, and institutional frameworks for states in this ESIA. The exception is Puntland State which is more advanced in both institutional capacities and enaction of pertinent legislation.

4.4 International Covenants and Agreements Relevant to the Project

Somalia has officially ratified or signed a considerable number of international conventions, treaties, and agreements as evidenced in the Environmental Protection and Management Act, 2024 (Schedule 2). The objective of these conventions and agreements is to enhance the sustainable utilization of natural resources and prevent further environmental degradation. Important international conventions pertaining to the use and management of natural resources to which Somalia is a signatory include the following:

Convention on International Trade in Endangered Species of Wild Fauna and Flora

The project traverses areas with endangered wildlife species, CITES regulations on international trade of such species and their products apply here. *The ESIA should assess potential impacts on wildlife habitats and ensure construction activities don't disrupt the movement or breeding of endangered species*

UN Convention to combat desertification (UNCCD)

The ESIA should assess the project's potential to contribute to soil erosion or desertification. Mitigation measures like using vegetation cover and planting trees to prevent soil erosion might be necessary.

Kyoto Protocol and the UN Framework Convention on Climate Change (UNFCCC)

These agreements address reducing greenhouse gas emissions to mitigate climate change. *The ESIA should assess the project's potential greenhouse gas emissions (e.g., from construction equipment) and explore mitigation strategies (e.g., using energy-efficient vehicles during construction).*

Protocol on Substances that Deplete the Ozone layer (Montreal Protocol) and the Convention on the protection of the Ozone Layer (Vienna Convention)

These agreements focus on protecting the ozone layer by phasing out ozone-depleting substances. *The ESIA should ensure that construction activities comply with any restrictions on ozone-depleting substances.*

International Labour Organization

The following ix of the eight fundamental conventions of the International Labour Organization (ILO) have been ratified by Somalia, which is now an active member of the organization:

- **Tripartite Consultation (International Labour Standards) Convention 1976 (No 144)** - This convention promotes tripartite consultation between governments, employers, and workers' organizations in the development and implementation of labour standards.
- **Occupational Safety and health Convention (1981) No 155** - It establishes principles and guidelines for ensuring occupational safety and health in the workplace.
- **Promotional Framework for Occupational Safety and Health Convention (2006) (No. 187)** - This convention provides a framework for promoting a safe and healthy working environment through national policies, programs, and systems.
- **Violence and Harassment Convention 2019 (No 190)** - It addresses the prevention, protection, and redress of violence and harassment in the world of work.
- **Convention, Migration for Employment Convention (1949) (No. 97)** - This convention aims to ensure fair and humane conditions for migrant workers by regulating recruitment, conditions of employment, and social security.
- **Private Employment Agencies Convention 1997 (No 181) migration for Employment Convention (Revision) 1949 (No. 97)** - It regulates the operation and activities of private employment agencies to protect the rights and interests of workers.

Somalia's ratification of these eight ILO conventions creates a strong foundation for ensuring the social sustainability of the Beledweyne-Kalabeyr Road Project. Integrating these principles into the ESIA and project implementation demonstrates the project's commitment to fair labour practices and worker well-being.

In addition, the following instruments of the ILO are applicable in Somalia:

- **Freedom of Association and Protection of the Right to Organize (ILO Convention 87)** - This convention safeguards the right of workers and employers to form and join organizations of their choice without interference from the state or employers.
- **The Right to Organize and Collective Bargaining (ILO Convention 98)** - It protects the right of workers to organize and bargain collectively with employers for better working conditions and terms of employment.
- **Forced Labour (ILO Convention 29)** - This convention prohibits all forms of forced or compulsory labour, except in certain specified circumstances.
- **The Abolition of Forced Labour (ILO Convention 105)** - It aims to suppress and eliminate forced labour in all its forms as quickly as possible.
- **The Worst Forms of Child Labour (ILO Convention 182)** - This convention addresses the most egregious forms of child labour, including slavery, trafficking, hazardous work, and other harmful activities.
- **Discrimination (Employment and Occupation) (ILO Convention 111)** - It aims to eliminate discrimination in employment and occupation based on race, colour, sex, religion, political opinion, national extraction, or social origin.

While Somalia hasn't ratified these six ILO instruments, their applicability highlights the country's general alignment with international labour standards. By incorporating these considerations into the ESIA and project implementation, the Beledweyne-Kalabeyr Road Project strengthens its social sustainability credentials and fosters a positive working environment that respects the rights of all workers.

Sustainable Development Goals

The Sustainable Development Goals (SDGs) are a set of 17 global goals adopted by all United Nations Member States in 2015 as part of the 2030 Agenda for Sustainable Development. They serve as a universal call to action to end poverty, protect the planet, and ensure prosperity for all. The SDGs provide a comprehensive framework for ensuring that the project contributes positively to sustainable development.

Goal 9: Industry, Innovation, and Infrastructure - By improving road infrastructure, the project contributes to building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation.

Goal 11: Sustainable Cities and Communities - The road project can contribute to creating safe, inclusive, and resilient cities by improving transportation networks and enhancing access to essential services for urban and rural communities.

Goal 13: Climate Action - Implementing climate-resilient road infrastructure and adopting sustainable construction practices can help mitigate the project's carbon footprint and contribute to climate change adaptation efforts.

Goal 8: Decent Work and Economic Growth - The project can create employment opportunities, stimulate economic growth, and promote inclusive and sustainable economic development, thereby contributing to poverty reduction and livelihood improvement.

Goal 5: Gender Equality - Ensuring that women are actively involved in project planning, decision-making, and implementation can promote gender equality and empower women in the community.

By integrating the principles of sustainable development and aligning with the SDGs, the road project can maximize its positive impact on socio-economic development, environmental sustainability, and community well-being in Somalia.

AfDB Environmental and Social Operational Safeguards

The African Development Bank's (AfDB) Integrated Safeguards System (ISS) of 2023 guided the preparation and implementation of this ESIA. The AfDB requires the burrower to undertake an Environmental and Social Assessment (ESA) to assess the environmental and social (E&S) risks and impacts of a project throughout the project life cycle. The Bank has defined ten E&S Operational Safeguards (OSs), which are designed to maximize positive impacts and to avoid, minimize, reduce, mitigate or compensate for the adverse E&S risks and impacts of projects, including those related to climate change. In addition, the E&S OSs will also help burrowers/clients to strengthen their safeguards systems and develop the capacity to manage environmental and social risks. Projects supported by the Bank, Projects may include new and/or existing facilities or activities. Projects may include subprojects. Out of the ten E&S OSs, nine are applicable to the SRIP as shown in the below table.

Table 5: AfDB E&S OSs Triggered by the Project

Environmental and Social Operational Standard	Applicable?
OS1: Assessment and Management of Environmental and Social Risks and Impacts	YES
OS2: Labour and Working Conditions	YES
OS3: Resource Efficiency and Pollution Prevention and Management	YES
OS4: Community Health and Safety	YES
OS5: Land Acquisition, Restrictions on Access to Land and Land Use, and Involuntary Resettlement	YES
OS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	YES
OS7: Vulnerable Groups	YES
OS8: Cultural Heritage	YES
OS9: Financial Intermediaries (FIs)	NO
OS10: Stakeholder Engagement and Information Disclosure	YES

4.5 Gap Analysis

The activities in RIP, including the respective subprojects, need to comply with The Federal Republic of Somalia, constitution, laws, regulations and policies, and African Development Bank's (AfDB) Integrated Safeguards System (ISS) of 2023. This sub-section compares the national public sector environmental and social management rules, regulations and standards to the AfDB ISS of 2023. The main objective of this assessment is to help implement this ESIA more effectively in Somalia through an understanding of existing gaps.

Table 6 below summarizes a comparison focusing on the AfDB Operational Safeguards relevant to the project and gaps identified in existing Somali laws and regulations. Note: the E&S framework instruments indicated in the table refer to their most updated version

Table 6:Gap Analysis Between Somalia Legislation and AfDB Operational Safeguards

Environmental and Social Operational Standard	Somalia Government Laws and Policies	Gaps Identified	Gap Filling Measure
E&S OS 1 (OS1): Assessment and Management of Environmental and Social Risks and Impacts			
OS1 applies to all projects, activities, and other initiatives for which Bank financing is sought. It sets out the Burrower's responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by AfDB. The Bank requires that all E&S risks and impacts including climate vulnerability and adaptation of the operations be addressed as part of the ESA conducted in accordance with OS1	Environmental and Social Impact Assessment and Audit Regulations incorporated into recently enacted Environmental Management and Protection Act of 2024.	Regulations not available at FMSs of South-West State, Galmudug, Hirshabelle and Jubaland). Weakly captured in Puntland.	AfDB E&S OS 1 to be used in all cases, adoption in all FMSs
E&S OS 2 (OS2): Labour and Working Conditions			
This Standard recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Burrowers can promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions.	Labor Code of Somalia (Law Number 65, adopted in 1972) is the specific labor law governing all aspects of labor and working conditions, which covers the contract of employment, terms and condition, remuneration, and occupational health and safety, trade unions and labor authorities. The provisions of the Labor Code apply to all employers and employees in all project municipalities. The Labor Code is applicable to all project workers in SRIP	The Labor Code is broadly consistent with the OS2, while there is a significant gap in the enforcement aspect of the legislation.	Government to employ inspectors for enforcement
OS3: Resource Efficiency and Pollution Prevention and Management			

Environmental and Social Operational Standard	Somalia Government Laws and Policies	Gaps Identified	Gap Filling Measure
OS3 sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life cycle in a manner consistent with Good International Industry Practice (GIIP).	Not addressed.	There are no supporting legislative frameworks for pollution prevention and management.	AfDB E&S OS 3 to be used. Government to develop relevant legislation
OS4: Community Health and Safety			
This OS addresses potential risks to and impacts on communities that may be affected by project activities	Not addressed.	No provisions in existing national laws on road and traffic safety.	AfDB E&S OS 4 to be used. Government to develop relevant legislation
OS5: Land Acquisition, Restrictions on Access to Land and Land Use, and Involuntary Resettlement			
OS5 recognizes that project-related land acquisition, restrictions on land access or land use, and loss of property/assets can have adverse impacts on communities and persona, and it sets out procedures to be followed and steps to be taken to address the same. Among its objectives, OS5 dictates the need to avoid involuntary resettlement where feasible, or minimize resettlement impacts where involuntary resettlement is deemed unavoidable after all alternative project designs have been explored.	Laws governing land resources (including ownership) are either absent at both FGS and FMSs levels.	Therefore, there are no functional national or state policies guiding involuntary resettlement of persons affected by the project.	OS5 informed the Resettlement Policy Framework to guide the Burrower.
OS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources			
This (OS) outlines the requirements for the Burrower to: (i) identify and implement opportunities to conserve and sustainably use biodiversity and natural habitats; and (ii) observe, implement, and respond to requirements for the	Not addressed	There are no supporting legislative frameworks addressing biodiversity conservation	AfDB E&S O6 1 to be used. Government to develop relevant legislation

Environmental and Social Operational Standard	Somalia Government Laws and Policies	Gaps Identified	Gap Filling Measure
conservation and sustainable management of priority ecosystem services.			
OS8: Cultural Heritage			
OS8 sets out measures designed to protect cultural heritage throughout the project life cycle, and also sets out general provisions on the risks to and impacts on cultural heritage from project activities.	Not addressed	There are no explicit laws or regulations delineating sites as places of cultural importance.	AfDB E&S OS 8 to be used. Government to develop relevant legislation
OS10: Stakeholder Engagement and Information Disclosure			
This OS establishes a systematic approach to stakeholder engagement that will help Burrowers identify stakeholders, and build and maintain a constructive relationship and channels of communication with them, in particular project-affected parties. It promotes and provide the means for safe, effective, and inclusive engagement with project affected parties, inclusive of women's perspectives, in an equitable manner, and vulnerable groups, in a manner free of reprisal, throughout the project life cycle on issues that could potentially affect them. This OS recognizes the need to ensure that appropriate project information on E&S risks and impacts is disclosed to stakeholders in a timely, understandable, accessible, and appropriate manner and format. Provide project-affected parties with accessible and inclusive means to provide input, raise issues, questions, proposals, concerns, and grievances, and allow Burrowers to respond to and manage such grievances.	Not addressed in national legislation.	There are no laws, policies, or regulations prescribing the need for stakeholder engagement and information disclosure.	AfDB E&S OS 8 to be used. Government to develop relevant legislation

4.6 Institutional Arrangement

The implementation of this ESIA will require close coordination between government institutions at the federal, state and district level. In addition, there also will be a role for civil society organizations such as the chamber of commerce and women groups. The table below presents a profile of relevant institutions for the implementation the RIP in the Beledweyne-Kalabeyr Road Project.

Table 7: Institutional Roles

Institution	Role/Function
Ministry of Public Works Reconstruction and Housing	• Lead the infrastructure pillar working group to identify and prioritize infrastructure investments • Supervise Somalia road network, coordinating its development, operations and maintenance • Provide the project with general guiding policies and financial sources. • Provide the appropriate information as is required for the initial screening of the proposed project • Attend the scoping meeting; • Provide documents for official and public scrutiny; • Provide, at any stage of the project, for early public information according to the advice of the Authority on the appropriate means; take the required arrangement for public consultation;
Ministry of Environment and Climate Change	• Approve the ESIA Report • Carry out independent Audit to determine compliance with ESMP
Sectoral Ministries	• Co-operate with the Ministry of Environment and Climate Change in the ESIA process that is relevant to the specific sector
Engineering Supervision firm	• Will engage the following staff to support the project ✓ Project Engineer (Team Leader and Employer Representative) ✓ Environmental Safeguards Specialist ✓ Social Safeguards Specialist ✓ Gender Specialist • Will conduct induction and trainings for contractors and supervision staff on ESMP implementation, AfDB E&S OSs requirements, national environmental and social legislative framework requirements • Will carry out monthly supervision and monitoring of the ESMP implementation • Will review and approve CESMPs and other plans

Institution	Role/Function
	• Submit CESMPs and other plans to the Bank for review and clearance if necessary
Hiiran Regional Government	• Approve applications for Contractor's camp sites • Provide permits for quarries and burrow pit sites • Audit the Contractors camps and construction sites for safeguards compliance

5. BASELINE CONDITIONS

5.1 Physical Environment

Somalia is in the Horn of Africa where it lies between latitudes 2°S and 12°N, and longitudes 41° and 52°E. The country is bordered by Djibouti to the northwest, Kenya to the southwest, the Gulf of Aden to the north, Indian Ocean to the east, and Ethiopia to the west.

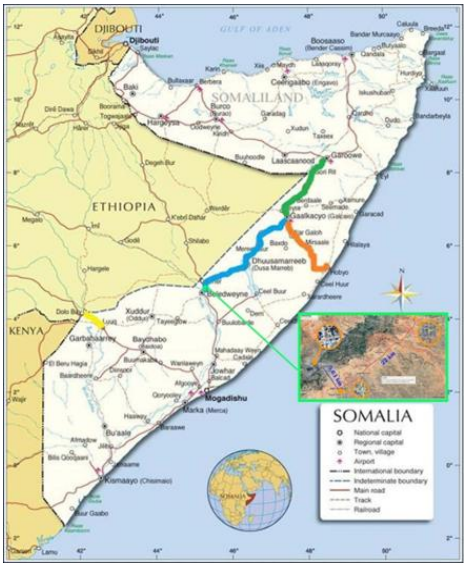


Figure 9: Hiiran Region and Beledweyne Town

Somalia has an area of 637,655 km². The 22 km long Beledweyne-Kalabeyr Road is in the Hiiran Region of Hirshabelle State. The first map in **Figure 9** shows the location of Hiiran Region and the second map shows Beledweyne town location. The below diagram shows the project location, from Jente Kundishe to Jawiil.

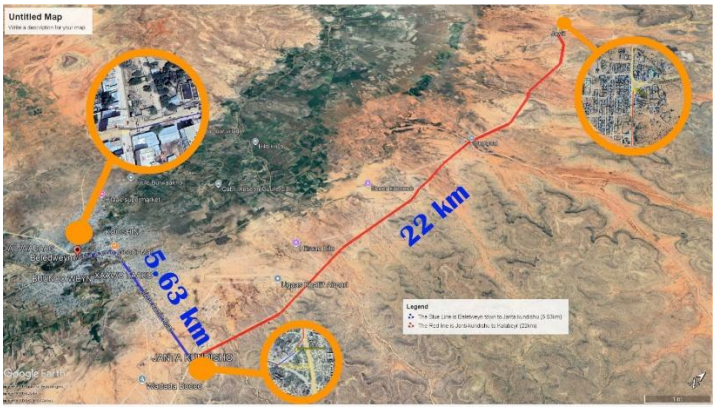


Figure 10: Project: Location

Topography

Beledweyne-Kalabeyr begins at an altitude of 650ft gently sloping down in the stream areas, except for one section and ends up at an altitude of 900ft **(Figure 11).**

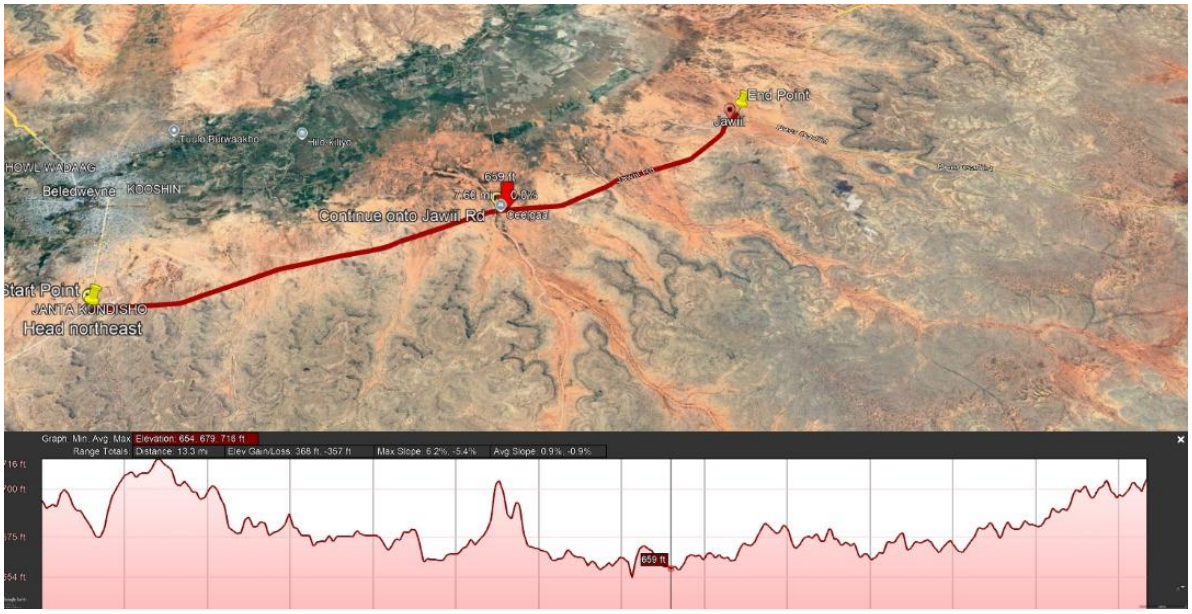


Figure 11: Beledweyne-Kalabeyr Road Topography

Climate and Meteorology

Somalia has two rainy seasons referred to as gu and deyr in Somali language and two dry seasons referred to as jiilaal and hagaa in Somali language. The rainfall within the project area is characterized of two seasons, March-April-May (MAM) and September- October and November (SON). The SON season always tend to have more average rainfall compared to MAM. The sky is usually clear and bright throughout the year. The lives of Somalis is for the most part shaped by the country's climate which is influenced by the Inter Tropical Convergence Zone (ITCZ). Somalia's climate varies from arid to semi-arid and from tropical to sub-tropical depending on the spatial location. The Beledweyne-Kalabeyr Road is in an arid area of Hiran Region.

The amount of rainfall in Somalia is usually no more than 500 millimeters annually ranging from 50 to 150 milometers in the North and 330 mm to 500 mm in South West. The gu rains starts around April lasting until June, and is followed by the dry hagaa occurring till September. The country experiences droughts every 2 to 3 years mostly followed by devastating floods. The dry hagaa season is followed by the deyr rains from October to November. Jiilaal, the driest season dreaded by the pastoralists, occurs from December until March. The Beledweyne-Kalabeyr \Road traverses an arid area characterized by low rainfall, averaging 255 mm annually.

The country's maximum mean daily temperatures range from 30° C to 40° C except along the Indian Ocean coast and the mountainous areas where the mean daily maximum temperatures range from 20° C to 30° C. Relative humidity in the coastal zones is about 70%[2]. The project area is characterized by semi-arid climate, which is generally hot, sunny and dry. Coldest average temperatures occur during the months of November to February, when thermometer readings range from 23 to 25 °C (73 to 77 °F). The weather slowly heats up in the spring, as

[2] http://countrystudies.us/somalia/34.htm , *U.S. Library of Congress*

the April rainy season begins. Average temperatures later reach a maximum of around 41 °C over the summer period. Come September, a gradual cooling starts to set in again. In the Project area the mean annual maximum temperature ranges from 29º to 34º C while the mean annual minimum is 25 º C.

Geology and Soils

Key soil formations in Somalia include alluvium from the Pleistocene to Holocene period whose general characteristic show Older Pleistocene alluvial sediments and recent alluvium including sandy clay with lenses of sand and fine gravel to coarse gravels and boulders. In some parts are fine sands forming dunes and red soils and calcerites. Quaternary unconsolidated sediments are mostly found in the southern coast and the riverine areas of Southern Somalia. The North-Eastern part of the country is dominated by tertiary sedimentary from the Eocene period. Mudug Formation in central Somalia comprises of marly and biogenic limestones, calcarenites and sandstone. The Project site geology is basically a sedimentary deposit of gravely silty sands and weathered limestone. Much of the limestone has disappeared and become cemented in the sand as soft gravels. The geology along the project road was investigated and found the following:

- Triassic rocks Formation mainly fossiliferous sedimentary sequence of sandstones, quartzite and conglomerates
- Jurassic rocks mainly limestone with intercalated shales
- Cretaceous rocks mainly siltstones and flaggy fine-grained sandstones overlain by a thick formation of cross bedded sandstones

The site geology is made up of silty gravelly sand that slightly vary in color from dark brown to yellowish-brown up to about 4.5m depth below the surface. Below this depth we have silty gravelly sand with soft limestone gravels and cobbles. The gravels and cobbles are white to green yellow and mottled with red. Mineralogical, the formation comprises of majorly calcium carbonates, feldspars, quartz, and clay minerals that bring the dark red coloration. The stratigraphy has a consistency varying from loose to medium dense with the bearing strength generally increasing with depth. There are three burrow pit sites identified as potential sources for construction materials.

Burrow Pit One: Located at Km. 5+500) RHS; 4°47'14.32"N & 45°14'52.60"E: The site is in a hilly area with a few scattered thorny bushes. The site is easily accessible from the existing road. Materials from this source are mainly lateritic gravel with traces of limestone. The suitable gravel is approximately 1M deep on average and is overlain with no overburden. The quantity of material available in-situ is approximately 60,000 m3. The results indicate that the average CBR-soaked material does not meet the minimum requirements for use as natural gravel subbase. The material can be blended with a bit superior material at a favorable to achieve the required specs but meets the minimum requirement for subgrade and below.

Burrow Pit Two: Located at Km 7+000 RHS; 4°48'34.55"N & 45°14'47.88"E: This site is located on a flat area with a few scattered thorny trees. The site is easily accessible from the road. Materials from this quarry are mainly lateritic GRAVEL. Suitable material was over 1m depth with no overburden but with scattered trees. The test results indicate that the material meets the requirements for natural gravel subbase. The PM is however marginally higher than

the requirements for natural material. Considering that this is a dry area, the material can be used as natural gravel subbase or base. The material also appears suitable for cement improvement for use as base if there need be.

Burrow Pit Three: Located at Km 15+200 RHS; 4°53'23.68" & N45°14'7.35"E: This site is a new burrow pit that is located on a sloping area with a few scattered thorny trees. The site is easily accessible from the existing road. Materials from this quarry are mainly weathered calcareous silty gravel, with traces of weathered coral limestone rocks. Suitable material is over 0.8m in depth with no overburden. From the test results, both the CBR soaked, and PI of the material meets the requirements for natural gravel subbase, but the PM is higher than the specified limits.

Water Resources[3]

Somalia is a water scarce country with approximately 411m^3 of renewable fresh water per capita as of 2017 (World Bank, 2020). This is a staggering decline over time from 2,087m^3 in 1962 (World Bank, 2020) which is far below the UN recommended threshold of 1000m^3 per capita per year[4]. Rivers Juba and Shabelle are the main sources of surface water in Somalia. These two perennial rivers originate from the Ethiopian highlands in the north and flow southwards towards the Indian Ocean. The Juba- Shabelle basin, has a total area of 810,427 billion square meters, of which one third each is in Ethiopia, Kenya, and Somalia. The project area is an arid in climate with limited water resources and water loss through evaporation is extremely high due to high temperatures in the area. There are six seasonal streams that cross the Beledweyne-Kalabeyr Road (**Table 8**).

Table 8: Location of Seasonal Streams in the Project Area

No.	Chainage	Latitude	Longitude
1	Km 1+240	4752558	45251041
2	Km 4+340	4780093	45249633
3	Km 8+845	4820411	45245562
4	Km 12+015	4848389	45240053
5	Km 15+816	4881836	45237272
6	Km 20+518	492048	45222763

The stream beds of these streams also provide access to water through shallow wells which are dug when the streams dry up (**Figure 12**).

[3] https://somalia.unfpa.org/sites/default/files/pub-pdf/puntland_shds-report-2020.pdf
[4] https://reliefweb.int/report/somalia/federal-government-somalia-ministry-energy-and-water-resources- national-water

Figure 12: A young boy fetching water from a shallow well in a dry stream bed (ESIA Team, 2018)

Rainwater captured in natural depressions known as *balley*, artificial dams or *waaro*, and man-made cisterns locally known as *berkad* also provide water during the dry season. Along the project area there are three main boreholes located in Jente, Ceel Gaal, and Jawiil, which are within a one-kilometre range of the road. The survey revealed that along the Beledweyne-Kalabeyr towns, depending on the season, water table is around 50-80 mts deep. Whatever the existing boreholes flow, the contractors will have to drill new boreholes for use of the works. Large quantities of water will be required for the following activities: processing earthworks, sub grade and pavement layers; curing cement treated subbase and base materials; concrete works; laboratory and office uses; and human consumption. Water samples from Jente Kundishe, Ceel Gaal and Jawiil tested for suitability in road construction particularly in concrete works revealed the following: pH levels varied from 6.2 to 6.5. Sulphate content ranged from 1496 mg/l to 1561 mg/l. Dissolved solids varied from 2995 mg/l to 3120 mg/l.

5.2 Biological Environment

Flora

The Somalia flora is very rich in comparison with other arid areas in Africa, 1,092 species in 72 families have been recorded[5]. Among flora, the *Acacia* species is the most visible in the project areas (**Figure 13).** Rangelands (mainly grass and herbs but also including wood and bush-lands) are the most important ecosystem type in Somalia, as they are the natural resources and are the basis for pastoralism. In lower rainfall areas (below 400mm), such as the project area, these rangelands are dominated by annual grasses and herbs. Such rangelands "bloom" after

[5] Flora of Somalia, Mats Thulin, https://press.uchicago.edu/ucp/books/book/distributed/F/bo9855185.html

rain and constitute very important wet season grazing for pastoralist livestock herds. As rainfall is unevenly distributed spatially and temporally, pastoralists move to make optimal use of such rangelands.

Figure 13: Accacia near Jente Kundishe (ESIA Study Team, 2025)

About 2% of Somalia's total land cover is considered as arable land, and of this 18.7% is appropriate for irrigated agriculture (IUCN 1997). The vegetation along the road is dry thorny bushland characterized by *Acacia* and *Commiphora* species.

Fauna

Somalis are mostly pastoralists, and the country is home to several livestock species including the Somali goat, Somali Sheep, and dromedary camels. Commonly found along the Project road are goats, sheep and camels. The main wild mammals found in Somalia include giraffe, zebra, and hyena. One of the most famous endemic mammals in the country is the long naked garanuug (*Litocranius walleri*). Wild mammals in the Project area include dik dik, kudu, warthog, oryx grant gazelle, wild dogs, and spotted hyena.

The country has several reptile species of which one of the most renowned is the *Bitis arietans Somalica* commonly referred to as puff ader snake. Many Gecko species are also found in Somalia including the endemic *Hemidactylus taylori*. In the Project area, Somalia dwarf gecko and *Pristurus somalicus*, also known as Somali rock gecko or Somali semaphore gecko are present.

The country is estimated to have several hundred bird species including the ostrich and several dove species. Among the most prominent are: Somali Sparrow, Red-eyed Dove, Ring-necked Dove, Laughing Dove, Marabou Stork, White-headed Mousebird, Eastern Yellow-billed Hornbill, Northern Red-billed Hornbill, Lilac-breasted Roller, Superb Starling, Black-bellied Sunbird, Gabar Goshawk, Cape Crow, Great Cormorant, African Spoonbill, Guinea fowls. In the Project area doves, hornbills, and sterling were observed.

Climate Change

Somalia is at the forefront of climate change. In recent years, the prevalence and severity of climate-related shocks have risen. The unprecedented five-season drought that commenced in 2020 continues to impact millions of Somalis, resulting in acute food shortages, threatening agricultural livelihoods, escalating food prices, prompting extensive population displacement, and igniting a significant humanitarian crisis in various regions of the country. Staple and cash crops were destroyed by recurrent flooding of the Juba and Shabelle Rivers in April and May 2023. While flooding is not an issue for the road, the nearby Beledweyne town has been severely affected.

In 2023, Somalia suffered back-to-back extreme climatic shocks notably the worst drought in 40 years and once-in-a century floods due to El-Niño and a positive Indian Ocean Dipole. In November 2023 the United Nations indicated 4.3 million people, a quarter of Somalia's population, were at risk of "crisis-level hunger or worse" due to drought and flood. "The interlinkages between climate variability and climate change, environmental degradation and natural resource depletion, conflict, food insecurity, and poverty are more pronounced in Somalia than in almost any other country." Communities along the Project road, although settled, indicate they have been directly affected by the drought losing numbers of their livestock.

5.3 Social Environment

Governance and Administration

The Beledweyne-Kalabeyr Road is located in Hirshabelle State that consists of two regions, namely Hiiraan and Middle Shabelle. While Hirshabelle is led by a State President, Hiiran Region is led by Governor. The Project Road is located in Hiiran Region which is comprised of six districts. Along the Project road Jawiil is the only district and is led by a district commissioner while Ceel Gaal is categorized as a village led by a chief. The State is led by a president while the region is led by a governor.

Demographic Information

The last official census of Somalia was in 1975, when the population was estimated at 3.2 million people. 2021 estimates from World Bank show a total population of 16,359,500 with an annual population growth of 2.9% and at birth life expectancy of 58 years old[6]. According to the Population Estimation Survey for Somalia 2014, Hirshabelle State has a population of 1.03 million inhabitants, with 19 percent residing in urban, 37 percent in rural, and 34 percent in the nomadic areas[7]. The state hosts a large number of internally displacement persons (IDPs) from different regions of Somalia, constituting 10 percent of its population. The sex distribution for Hirshabelle indicates that 45 percent are male, while 55 percent are female. Along the Project Road Jawiil is the most populated area, however, estimates are not available.

Economy and Poverty

The United Nations had classified Somalia as a least developed country. Agriculture is the most important sector, which accounts for 65% of GDP and employs 65% of the workforce. The economy is based mainly on livestock and remittances/money transfers from abroad, and telecommunications. Livestock contributes about 40% to GDP and more than 50% of export earnings. Similarly, Somalia is the world's fourth-most remittance dependent country, which makes up about 20-50% of local economy. Remittances alone were estimated at USD $1.3 billion for the country as a whole, not only provide a buffer to the economy but also are a lifeline to large segments of the population cushioning household economies and creating a buffer against shocks. Agriculture and livestock farming are the primary source of livelihood for most of Hirshabelle State residents.

6 https://data.worldbank.org/country/SO

7 https://nbs.gov.so/wp-content/uploads/2023/07/Population-Composition-and-Demographic-Characteristics-of-the-Somali-People-%E2%80%93-Volume-2.pdf

Agricultural production is practiced along the Shabelle River. Hirshabelle state has a strong livestock sector, an underdeveloped but potentially promising fishery sector, and industries that can be rehabilitated and or revived, such as the Somali Textile Factory in Balad city. Hirshabelle has the greatest share of the 7.5 million goats exported annually than any other state in the Federal Republic of Somalia. Along the Project Road there is a large market in Jawiil used for trading consumables. There is also a livestock market.

Poverty levels in the country is very alarming. UNDP in its 2014 report mentioned that the country has a poverty rate of 73%, a life expectancy of 55 years, adult literacy of 31.8%, about 70% of the population is below the age of 30, and a youth unemployment rate of 67%. In its 2012 report, UNDP Somalia mentioned that the country had one of the lowest Human Development Index (HDI) in the world with a value of 0.285.

Inequality is high, driven by the difference in poverty incidence in urban settings (close to 60% in Mogadishu) and rural settings (52.3%) with IDP settlements (71.0%).

The food security situation has been worsened by the civil war and statelessness, and recurrent droughts, as farmers have lost access to agricultural inputs and services formerly provided by the state. The private sector has responded to a degree, but the lack of regulation might have led to misuse, and poor quality control. While industry can provide an increasingly important contribution to economic growth, it will be, for the foreseeable future, second to pastoralism

Telecommunication

Telecommunications in Somalia has been developed in the country primarily by private entrepreneurs. These facilities not only transmit electronic messages and data, these also are used to do money transfers. The 22km long Jawiil Road is served by Hormuud and has internet and telephone access.

Education

Prior to the civil war Somalis enjoyed free public education, however, since the collapse of the state only 30% of the children are in school and fewer than 50 % of girls attend primary school[8] Madrasas play a key role in providing education for young children. These Islamic schools which are abundant and easily accessible in nearly all parts of the country offer young children the opportunity to be literate. Along the Project Road Jawil has both Primary and secondary schools but college education is sought in Beledweyne. Ceel Gaal has a primary school. Islamic schools are widely present in the region and along the Project area. The Ceel Gaal Primary school is about a 1km away from the Project Road. In the Region, 66 percent of females and 65 percent of males aged 6 and above have never attended school. Three percent of female household members and 2 percent of male household members have completed primary education. Seven percent of men have attained secondary education, compared to 5 percent of women.

8 https://www.unicef.org/somalia/education.html

Health

As in other parts of Somalia, Hirshabelle is facing challenges in delivering health services to its population, including; poor health systems, inadequate qualified health professionals and lack of financial resources. Somalia's healthcare provision is dominated by the private sector save for mother and child health centres funded by donors. Along the Project Road, Ceel Gaal does not have a hospital and is served by private clinic while Jawil has a Hospital. The population along the corridor also seek medical services in Beledweyne and if not fully satisfied, those who can afford to seek treatment in Mogadishu.

The morbidity and mortality trends have remained the same over the years, with the general population affected by common diseases including diarrhea, acute respiratory infections (ARI), malaria, malnutrition, and other vaccine-preventable diseases. In addition, noncommunicable diseases and psychiatric diseases also exist though the magnitude is understated due to the lack of capacity of the health system infrastructure in diagnosis.

Overall, 5 percent of household members in Hirshabelle reported to be suffering from at least one chronic disease. There is a slight variation between the prevalence for males and females, at 4 and 6 percent respectively. Urban households have a slightly higher prevalence of chronic diseases at 8 percent compared to 3 percent each for rural and nomadic households. The prevalence of chronic diseases increases with an increase in age. The prevalence of chronic disease generally increases from 2 percent in the age group of 0-4 years to 36 percent in the 65-69 age group and drops to 26 percent among persons over the age of 70.

Most common chronic diseases are diabetes, pressure, and chronic headache. Thirteen percent of household members suffer from skin disease, while 11 percent suffer from kidney disease. Other common diseases include Arthritis and Anemia at 10 percent each, chronic back pain at 9 percent, inflammation/ulcers at 7 percent, heart disease at 6 percent, Asthma at 5 percent, and Mental/Psychological illness and liver diseases at 3 percent. The most common chronic diseases among women are headaches, pressure, and diabetes, at 23 percent, 19 percent, and 18 percent respectively. The leading chronic diseases among males are diabetes, pressure, and kidney disease at 19, 17 percent, and 13 percent, respectively. Regionally, household members in Hiiraan have a higher reported prevalence of chronic diseases at 7 percent compared to 3 percent in Middle Shabelle.

Disability

Among the six to be displaced households, two are headed with physical disabled individuals. According to the Somali Health and Demographic Survey of 2021, overall, 3 percent of Hirshabelle's population suffers from disabilities: sight, hearing, mobility, and mental are the most prevalent forms of disability at 38, 30, 19, and 17 percent, respectively[9]. The analysis indicates that ageing and congenital (birth-related) problems were thought to be the main causes of disability. Ageing accounts for 24 percent of disabilities while congenital factors account for 20 percent of disabilities. The prevalence of disability among females and males is the same, at 3 percent. In the youngest age group, 4 percent of under-fives suffer from disabilities. The prevalence of disability is slightly higher in rural areas at 4 percent compared

[9] https://somalia.unfpa.org/sites/default/files/pub-pdf/hshds_report_2021_24nov.pdf

to 3 percent in urban areas and 2 percent among nomads. Regionally, the prevalence of disability is slightly higher in Hiiraan compared to Middle Shabelle at 4 percent and 3 percent, respectively.

Land and Property Rights

In the current constitution land is owned by the government, but the central government does not have the ability to enforce this ownership, and land remains community property owned by the different clans living in a particular area. The settlement patterns across the country are uniform comprising large towns such as Beledweyne, followed by small urban areas as Jawil at the end of the Project Road, and villages such as Ceel Gaal. The Project Road will not lead to any physical displacement or land acquisition.

Energy Services

Somalia does not have a national power grid and electricity is mainly supplied in towns through private power lines using diesel generators. Although electricity is available, the poor only have access to battery lamps, while the middle access public and private power lines and battery lamps. The average cost per house per month is 10-15 USD. The better off generate their own electricity using private generators. The residents of Jawil receive electricity from a private power supplier charging USD 0.7 per kilowatt. In Ceel Gaal there is no electricity power supplier and the better off utilize diesel generators. There is minimal use of solar energy in both settlements. The Project will not interfere with the provision of or access to power services.

Water and Sanitation Facilities

Along the Project Road the main source of drinking water is boreholes. In Jawiil septic tanks are used. In the Region thirteen percent of households travel for at least 30 minutes or longer to get water. Nomadic household members travel the longest distances to get water. Fifty-seven percent of nomadic, 13 percent of the rural and 1 percent of urban households travel longer than 30 minutes, to access improved water sources.

Gender

Somalia has one of the highest gender inequalities in the world at 0.776 which ranks 4th in the world. The country has an extremely high maternal mortality (723 deaths per 100, 000 live births while the adolescent birth rate for teenagers aged between 44 15 and 19 is 100.1 per 1,000 births10. Rape, female genital mutilation and child marriage rates, and violence against women and girls is common. There one major women organization serving the Project area, HIWA, which focuses on women and child protection including the prevention of gender based violence. Culturally the role of women has been limited to domestic affairs, however as a result of legislative changes their participation in the country's governance and politics continues to grow. Currently there is a 30% quota declared for women representatives in both the lower and upper houses of the parliament. Somali women are actively involved in business mainly trading in household goods, gold, and khat. Along the Project Road women are the main khat vendors and tea stall owners.

10 http://hdr.undp.org/en/composite/GII

6. STAKEHOLDER CONSULTATION AND PARTICIPATION

The AfDB E&S OS establishes a systematic methodology for stakeholder engagement to identify stakeholders and foster and sustain constructive relationships and communication channels, particularly with project-affected parties. This method promotes the secure, effective, and inclusive engagement of project-affected stakeholders, encompassing women, youth, and marginalized groups' viewpoints, in an equitable and impartial manner, free from the fear of reprisal, throughout the project's entirety.

This operating system acknowledges and has been utilized to form a basis for the disclosure of relevant project information with regards to environmental and social risks and impacts to stakeholders in a timely, comprehensible, accessible, and suitable manner and style. It will ensure that individuals and groups impacted by the project have easy and inclusive ways to give their input, raise any issues, ask questions, make recommendations, express concerns, and file complaints, and enable the government and contractors to address and handle any grievances. The AfDB E&S OS in carrying out the stakeholder engagement process, most specifically include:

- **E&S OS 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities.** With regards to the project, there is need to ensure preservation of country the traditional local communities and indigenous in the project areas Galmudug, Hirshabelle, Jubaland, Puntland and South West regions of Somalia. The process includes acquiring consent from the local communities.

- **E&S OS 8**: **Cultural Heritage** which aims to lay out guidelines on project-related hazards and effects on cultural heritage. Given that the people in the project areas Galmudug, Hirshabelle, Jubaland, Puntland and South West regions of Somalia have deep set values, beliefs, knowledge and traditions it is paramount to ensure preservation of cultural heritage during the project implementation period.

- **E&S OS 10: Stakeholder Engagement and Information Disclosure** which fosters inclusivity and recognizes the importance of open and transparent communication and engagement between stakeholders and project implementers. AfDB as the project implementer aims to incorporate the stakeholder integration process early in the initial project implementation stages by formulating a Stakeholder Engagement Plan to guide the stakeholder consultation process. as well as establishing a favourable GM process that will take into account the community needs.

6.1 Objectives of stakeholder consultations

Through meaningful and inclusive stakeholder engagement, AfDB aims to promote accountability, transparency as well as confidence. AfDB has adopted a participatory approach through establishing a two-way communication channel between project implementers (AfDB) and the stakeholders. The local communities as well as other stakeholders have been included in the project's design process, to be part and parcel of the identification of the good and negative effects of the project.

The participatory approach emphasizes the following are the objectives:

- To educate stakeholders and the general public including the local community and the vulnerable and marginalised groups (VMGs) on the project, with particular emphasis on the project description, social and environmental project impacts, dynamics and sustainability
- To create public awareness and information as well as incorporate the local expertise in the project aspects i.e. culture.
- To incorporate all the data and information gathered from the ESIA Survey to establish community agreement and approval for the suggested project.
- Obtain feedback, recommendations, and concerns from the project affected persons and other relevant stakeholders.
- To include community involvement in the formulation of an inclusive and acceptable grievance mechanism for the community

6.2 Stakeholder identification and mapping

Stakeholders are individuals or organizations that are directly or indirectly affected by a project, as well as those who may be interested in the project and/or have the power to positively or negatively impact its conclusion.

Stakeholder mapping is used to comprehend the many stakeholders' interests, expectations and areas of interest regarding a project. An extensive stakeholder mapping was carried out to identify all parties that are either directly or indirectly involved in the project. Project stakeholders are classified into two categories:

- **Primary stakeholders**: These are individuals or entities who are directly or indirectly affected by a project. Primary stakeholders include the local community groups including the VMGs (people with disability, internally displaced persons, women, children, the youth and female headed households) in the areas where the road traverses i.e. Galmudug, Hirshabelle, Jubaland, Puntland and South West regions of Somalia.
- **Secondary stakeholders:** These are project participants who may not always be immediately influenced by the project but who may have a direct or indirect influence on it. The following are among the secondary stakeholders that were identified:
    - The Federal Government of Somalia,
    - Federal Member State of Hirshabelle (FMS) - Jubaland State, Puntland State, Galmudug State, South West State, and Hirshabelle State
    - The Ministry of Environment, Agriculture and Climate Change (MoECC).
    - Ministry of Public Works Reconstruction and Housing
    - Hiiran Regional Government

6.3 Stakeholder Engagement Methodology

The stakeholder consultations employed the method of public consultation meetings, which were carried out in Beledweyne, Jente Kundishe, Ceel Gaal, and Jawil between 2021 and 2025. The community members in attendance were given an explanation of the project by the project team including other relevant information i.e. the project design drawings.

Given that the project was still in its preparatory stage in 2021 where significant studies and drawings were not yet fully available (e.g. Detailed Design drawings) the stakeholder engagement of 2021 aimed at:

- Notifying the stakeholders of the planned road project enhancement and soliciting their feedback.
- Informing stakeholders about upcoming consultations when more details on the road design and when they would be available.
- Providing an overview of the project information including its development objectives.
- Informing the stakeholders about the African Development Bank's E&S Operational Safeguards (OSs) and present potential adverse and positive environmental and social impacts.
- Providing information on potential positive and adverse project impacts

6.4 Consultation with Community

Table 9: Schedule of Community Consultations

Activity	Date
Consultations in Beledweyne Town (covering Jente Kundishe)	05 Sep 2021
Consultations in Ceelgal & Jawil Towns	06 Sep 2021
Consultations in Eel gal	02 Feb 2025

It is important to note that a significant amount of time had lapsed between the first consultation of 2021 and the second consultation of 2025 (**Table 9**).

Summary of Main Community Consultations of 2021

Table 10: Main Issues Raised During Consultations

Community Consultation September 6, 2021		
SN	**Perceptions, Concerns, Suggestions**	**Responses/mitigation measures provided**
1.	Project Information	Community members were provided with project information including project name, funded agency and objective of the project. It was indicated RIP is an initiative aimed at enhancing the country's road network and strengthening the management of the road sector at both federal and regional levels.
2.	Project Target location and districts	The community was informed about the project's target locations and corridors, focusing on the rehabilitation and construction of major roads and bridges. The rehabilitation efforts include the Beledweyne to Galkayo Road, covering a total of 82 km, with the Beledweyne-Kalabeyr section spanning 22 km and the Dhusamareeb-Qaradhi section extending 60 km. The Galkayo to Garowe Road is undergoing rehabilitation of 85 km, while the Luuq to Dolow Road covers 80 km. In addition to these rehabilitation projects, the

Community Consultation September 6, 2021		
		construction of a new road from Galkayo to Elgula Feeder Road, spanning 100 km.
3.	Does this project have an impact to community living near the roads, what is the plan for project?	Yes, this project has a significant impact on communities living near the roads. Improved road infrastructure enhances transportation efficiency, reduces travel time and costs, and provides better access to essential services such as healthcare, education, and markets. It also stimulates economic growth by facilitating trade, increasing business opportunities, and creating jobs during and after construction. Additionally, improved roads enhance security, emergency response times, and overall mobility, leading to an improved quality of life for residents. The project will boost agricultural productivity by enabling efficient transportation of goods, create employment opportunities, and foster social development by connecting communities.
4.	What happens to community residents near the roads and surrounding areas? And how to manage negative impact	The community will be protected from adverse project impacts through an ESMMP prepared for the project. The ESMMP was read to the community asking if they had additional input.

Beledweyne

Ceel Gaal

Jawil Consultations

Figure 14: Sample photos from community consultations

Summary of Main Community Consultations Of 2025

Table 11: Summary of Main Community Consultations of 2025

Community Consultation 2nd February 2025		
SN	**Perceptions, Concerns, Suggestions**	**Responses/ mitigation measures provided**
1.	Repeated consultations, no construction, and promises not fulfilled	A sincere apology was extended for the delay, and community members were informed that the previous consultation had identified the construction of 22km roads and 6 bridges as a priority investment. The design for these roads and bridges has been completed; however, due to a lack of available funds, construction could not commence. For this reason, we have returned to engage in further consultation with the community to inform them that additional financing is expected for the project.
2.	Start date of the road project	The Project is funded by an AfDB project. The Bank's process will take some time to reach the Board for approval. After approval, the procurement process will begin, followed by the construction of the roads.
3.	Will there be phases of construction, and how long will each phase last?	Yes, the project will be completed in phases. Each phase is expected to last approximately 12 Months, depending on the complexity.
4.	Community participates in decision-making	Since these priorities were first identified through community consultations in 2021, we are now conducting the same consultations again. We have also engaged various stakeholders, including local government representatives, as well as state and federal authorities.
5.	Complaint mechanism of the project	Residents, businesses, and the entire community can report complaints through a dedicated GRC committee. A hotline number will be created and managed by the responsible community liaison officer. The currently established GRC includes representatives from different community groups and actively participates in resolving all community complaints. Additionally, the project will establish a workers' grievance system to ensure both worker safety and community well-being. A code of conduct will also be implemented, requiring all workers to sign and adhere to it.
6.	Effect of construction local businesses	Businesses may experience reduced customer flow, access issues, and noise disturbances. The project team will work to minimize disruptions and provide clear communication. Loss of income and structure identified after the cut-off date of 31 December 2021would be compensated.

Community Consultation 2nd February 2025		
SN	**Perceptions, Concerns, Suggestions**	**Responses/ mitigation measures provided**
7.	Can the road side vendors move back to their place when the civil works is completed	The government has agreed they can move back and while construction is ongoing, they can operate from adjacent areas that would not have safety concerns.
8.	How to address disruptions such as noise, dust, air pollution or vibrations, road closures	Yes, noise, dust, and vibrations are expected but will be managed through environmental protection measures and scheduling restrictions. Measures will include limiting working hours, implementing traffic management plans, and ensuring proper waste management. Road closures will be announced before construction begins, with estimated timelines for reopening. Environmental control measures, such as water spraying, sound barriers, and limited working hours, will be implemented. alternative detour routes will be provided, along with clear signage to guide traffic and pedestrians.
9.	Compensation and assistance as well as land disputes or property acquisitions be handled	Compensation for losses will be provided at replacement cost, along with assistance to support the transition period and rehabilitation, based on the level of impact. Land disputes will be addressed through legal processes, community engagement, and fair compensation for affected residents.
10.	Employment and Fair treatment	The project will implement a fair and transparent compensation mechanism for those whose properties are affected by the construction. It will also provide employment opportunities for local workers and youth, contributing to the community's economic growth. The inclusion of women and vulnerable groups will be closely monitored, and the project will facilitate skill transfer to benefit the community.
11.	Concern of Floods on construction	To prevent damage from seasonal floods, flood-resistant construction materials and proper drainage systems will be used. A long-term maintenance and sustainability plan will be developed to ensure the road remains functional and in good condition. Additionally, ongoing consultations will be conducted to address evolving concerns as the project progresses.

6.5 Consultations With Government Officials

The consultation with the Federal, State, and Local Government Ministries of Public Works conducted 29 -30 April 2024 on the Road Infrastructure Project (RIP) in Somalia focuses on fostering collaboration and ensuring that the project aligns with national and regional development priorities. This initiative aims to enhance road infrastructure, improve

accessibility, and support economic growth in Somalia's underserved areas. By bringing together different levels of government, the consultation seeks to streamline project implementation, address infrastructure challenges, and promote sustainable development.

Summary of Government Consultations

A key aspect of the discussion among the various government officials, during a steering committee consultation (**Figure 15**), revolved around defining the roles and responsibilities of various government ministries to ensure a coordinated approach to infrastructure planning and execution .

Figure 15: Consultations with Federal and State Government Officials

- Identifying priority projects, assessing funding sources, and strengthening institutional capacity are also essential topics.
- The need for an effective governance framework, clear policies, and regulatory mechanisms to ensure smooth project execution.
- Financial and resource allocation is a crucial part of the discussions, focusing on how government funding, donor contributions, and public-private partnerships can be utilized efficiently.
- Transparency and accountability in budget management and expenditure tracking are emphasized to prevent mismanagement and ensure equitable distribution of resources.
- Capacity building is also a priority, as improving technical expertise within government institutions is necessary for effective project oversight and sustainability.
- Community engagement is another fundamental pillar of the consultation, ensuring that rural populations are actively involved in decision-making and project planning.
- Addressing issues related to security, logistical challenges, and environmental sustainability is also critical in mitigating risks that could hinder project progress.
- Long-term maintenance strategies, ensuring that infrastructure assets remain functional and beneficial to communities beyond the project's completion.

7. IDENTIFICATION OF PROJECT IMPACTS

This section presents significant and potential impacts of the proposed project on the physical, biological and socio-economic environment. The project will have both positive and negative impacts as highlighted in the next sections. A breakdown of the different actions or activities of the project under study was done in order to identify the implications. The following categories of activities and related impacts were identified based on the phases of the project's implementation: i.e. phases of construction, operation, and decommissioning.

7.1 Anticipated positive impacts

The rehabilitation of the Beledweyne-Kalabeyr Road presents broad positive impacts for the people of Hiiran Region and the country as a whole. In addition to the positive impacts usually associated with the construction of roads, this project also presents an opportunity for capacitating the Ministry of Public Works staff from both the FGS and FMS who will gain experience through internship with both the construction companies and supervision firm. Benefits that will arise from the rehabilitation of this road during both the construction and operational phases are presented below.

Pre-construction/Construction Phase

- Creation of employment opportunities benefiting communities currently experiencing high unemployment rates, especially unskilled youth, minimizing radicalization risks normally linked to unemployment.
- Boosting of the economy in Hiiran Region: materials for the road works will be sourced from the Project area, contributing to an economic upswing for suppliers, transporters, and the larger value chain.
- Skill development for government and local community. It is anticipated that engineers from the ministry of public works from the FGS and the FMS will have an internship opportunity to gain practical experience in areas such as surveying, materials testing, and supervision. Unskilled local community members will be provided with training opportunities in areas such as machinery operation, and concrete work**.**

Operation Phase

- Rehabilitation of the Beledweyne-Kalabeyr Road will improve road safety.
- Reduced travel time from one hour to forty minutes which will provide the people of Hiiran Region with more time to engage in other activities.
- Reduced vehicular maintenance cost due to improved road conditions that translates to lower transport cost for goods, services and passengers.
- Reduction in greenhouse gas emissions. Various researchers have shown that the fuel economy of a vehicle varies with its speed. At lowers speeds fuel consumptions are significantly higher speeds of between 50 and 90 km/hour. Rehabilitating the corridors will allow vehicles to drive at optimal speeds for lower CO_2 emissions thus reducing impact of greenhouse gases on the climate.
- Better access to social services and community amenities since most of the small villages along the road do not have basic services such as health care and these services

are sought at nearby urban centres. Rehabilitation of the corridors will increase the willingness of the sick, especially the elderly, to seek medical assistance.

- Increased household incomes due to reduced transport cost.
- Improved government image and visibility in incentivizing tax payments by the community.

7.2 Anticipated adverse impacts

The Beledweyne-Kalabeyr Road is an existing road that is being rehabilitated and as such the nature of the civil works will most likely lead to minor environmental impacts which will be temporary in nature and easily reversible. Presented below are the various environmental and social risks anticipated from the implementation of the Beledweyne-Kalabeyr Road project:

Insecurity and terror attack threats

- The project may face security risks, including the threat of terrorist attacks targeting development projects by groups such as Al-Shabab.
- There is high presence of Al-Shabab in the region
- Ongoing wars between the government and Al-Shabab
- Local communities are also directly fighting Al-Shabab to free themselves from the group's exorbitant taxes and tyranny
- This can impact the safety of workers, construction activities, and project progress.

Mitigation measures:

- *Prepare and implement a security management plan (SMP) in line with the ISS*
- *Closely coordinate with security authorities and local communities*
- *Fence camp sites and install lights around the perimeter*
- *Staff awareness raising*
- *Deploy police officers to provide site security for the workers and deploy undercover police officers where necessary*
- *Avoid large gatherings*
- *Limit working hours to between 7 am and 5 pm*

Air pollution

- Will emanate from particulate matter from dust, and emissions of noxious fumes and greenhouse gases caused by the operations of construction vehicles and heavy equipment
- Emissions that would lead to health issues such as upper respiratory tract infections (URTI) and eye infections.

Mitigation measures:

- *Provide construction workers with comprehensive knowledge regarding the detrimental effects of air pollution on human health, as well as the most effective techniques for preventing, minimizing, and alleviating its presence*
- *Water to be sprinkled during the construction phase on excavated areas, diversion routes, and temporary access roads leading to burrow pits*
- *Utilize tarpaulin or other heavy materials to cover road base materials and construction debris during transportation to limit dust emissions*

- *Reduce the duration of soil exposure*
- *Restrict and minimize slash-and-burn practices*
- *Ensure proper storage of road base materials, such as soil and gravel*
- *Prohibit needless idling of vehicles and machinery*
- *Use of well-maintained vehicles and equipment that are in good condition*
- *Carry out air quality tests Monitor air quality parameters like particulate matter concentration (PM10 and PM2.5) in the vicinity of construction activities.*
- *Enforce speed limits for construction vehicles to reduce dust generation.*

Water pollution

- Contamination of the seasonal streams due to soil erosion and construction activities
- Pollution at riparian locations which have an extensive wetland area due to sub-surface ponding during flooding episodes

Mitigation measures:

- *Ensure appropriate and safe storage of contaminants such as lubricants and fuel*
- *Installation of Oil/fuel inceptors at vehicle service workshops*
- *Avoid washing of construction vehicles near the streams*
- *Establish designated places for vehicle/machine cleaning within vehicle service workshop*
- *Ensure appropriate and safe storage of contaminants such as lubricants and fuel*
- *Establish designated places for vehicle/machine cleaning within vehicle service workshop*

Waste Generation

- High volumes of waste expected from campsite and civil works related activities including:
    - Inert waste: Mostly construction and demolition waste (CDW) such as: aggregates, soil, construction debris, rubble, asphalt, bitumen, and concrete.
    - Organic waste: Mostly from campsite, for example, food scraps, paper, tea bags, fruit and vegetable peels, and cardboard.
    - Hazardous waste: Mostly from the operation of machinery and trucks, motor oil and lubricants, contaminated soil and may also include pesticides and insecticides

Mitigation measures:

- *Develop a comprehensive waste management plan that prioritizes recycling and reuse of materials whenever possible.*
- *Ensuring the right amounts of materials and supplies are purchased, and raw materials are effectively managed.*
- *Whenever possible, re-use inert waste on-site in landscaping, construction, or as backfill material.*

- *Implement proper disposal methods for non-recyclable waste to minimize environmental impact, potentially including designated landfills or waste-to-energy facilities.*
- *Establish a proper waste collection and disposal system along the road, including designated bins and regular collection services.*
- *Conduct public awareness campaigns on the importance of proper waste disposal, and provide education and training to the workforce*
- *Partner with local communities to implement waste management initiatives*

Land Degradation and Loss of Biodiversity

- Land degradation and loss of biodiversity

Mitigation measures:

- *Develop a land rehabilitation plan to restore the decommissioned areas. This may involve measures like:*
    a. *Soil stabilization techniques to prevent erosion.*
    b. *Reforestation with native vegetation species to improve soil health and biodiversity.*
    c. *Landscaping to create green spaces or recreational areas.*
- *Project funded implementation of reafforestation plan to compensate for lost vegetation.*
- *Control invasive species through appropriate management practices.*
- *Properly dispose of construction waste to prevent soil contamination*

Vibration and Noise pollution

- Construction activities involving the operation of heavy machinery, vehicles, and equipment can generate high levels of noise, disrupting the surrounding environment and affecting the well-being of nearby residents. In both Ceel Gaal and Jawiil there are mosques, residential homes and schools, located within 200m radius off the road. These include Jaame masjid in both locations, madrasas, and the Jawiil hospital.
- The use of heavy machinery and equipment during construction can produce vibrations. Excessive vibration levels can damage nearby buildings that are visibly feeble , infrastructure, and sensitive equipment. Additionally, vibrations can cause discomfort and nuisance to residents living in close proximity to the construction site.

Mitigation measures:

- *Proper maintenance of construction vehicles and machines including regular application grease to moving parts*
- *Ensure hours of operation are limited to between 7 am and 5 pm*
- *Conduct ground and structure integrity surveys prior to construction works to identify highly susceptible sites*
- *Plan and schedule unavoidable major blasting and appropriately sensitize community*
- *Vibration monitoring, analysis and control during construction*
- *Ensure appropriate and safe storage of contaminants such as lubricants and fuel*

Health and Safety risks

- Unsafe working conditions i.e. the risks of unsafe and poor working conditions are high in Somalia including security risks.
- OHS risks associated with road construction and related civil works including trips and falls, fall from height, cuts, injuries from operation of construction tools and machinery, electrocution, collision with moving vehicles and parts.

Mitigation measures:

- *Fulltime OHS Officer/s engaged and always present at site.*
- *An appropriate and functional contractor OHS strategy must be in place.*
- *Safety induction for workers during onboarding process and ongoing OHS training for workers and specialized OHS training for workers with specific risks (e.g., heavy equipment operators)*
- *All workers to be provided with appropriate PPE and 100% compliance enforced*
- *Regular maintenance of machinery and equipment to ensure optimal and safe functionality*
- *Provision of adequate signage and communication of risk to workers and communities in Somali language*
- *Ensure all workers have appropriate insurance coverage*
- *Provide and maintain appropriate first aid and other equipment required for high OHS risks*
- *Provision and Maintenance of firefighting equipment*
- *Provision of sanitary facilities for workers including gender segregated toilets and change rooms for male and female employees*
- *Provide drinking water especially during hot jilaal season*
- *Put in place procedures for the transportation of injured worker to nearby health facilities*
- *Ongoing monitoring and reporting of OHS performance*
- *Appropriate investigation of all worker accidents, and implementation of corrective measures*
- *Establish emergency response plan/procedure in case of emergencies such as Al Shabab attack, flooding etc.*

Social ills and moral decay

- Child labour risks exacerbated by lack of identity cards and birth certificates to be used for age verification.
- High gender-based violence (GBV) risks including SEA and SEAH and cultural norms that perpetuate gender inequality in the project areas through which the road traverses. The situation may be worsened by construction workers who are most likely to come from outside of the region.
- Spread of sexually transmitted diseases (STDs), including HIV, among workers and local community members.

- Family conflicts and marriage breakages, teen pregnancies and school dropouts.

Mitigation measures:

- *Training and public sensitization programs*
- *Construction workforce should be sensitized cultural practices and upholding high moral standards*
- *Employees deployed for long durations to be given leave days to visit their families*
- *Institute and enforce punishment measures for employees who breach code of conduct*
- *Prepare and execute labour management procedures (LMP) that encompass the following:*
    - *The contractor must maintain a labour record of all contractual workers, including age verification.*
    - *Age verification must be conducted before hiring workers and recorded.*
- *Ensure there is supply of HIV/AIDS protection measures such as male and female condoms Construction workforce should be sensitized cultural practices and upholding high moral standards*
- *Employees deployed for long durations to be give leave days to visit their families*
- *Institute and enforce punishment measures for employees who breach code of conduct*
- *Develop GBV action plan*
- *Develop codes of conduct (CoC) for project workers and train workers on the same*
- *Awareness raising on GBV and SEAH/SEA for both the community and project workers*
- *Establish confidential process for reporting and grievance registration*
- *Establish a clear and accessible Grievance Mechanism (GM) to address community complaints effectively.*

Physical and Economic Displacement

The Project will lead to the economic displacement of six kiosks illegally encroaching on the right of way in Ceel Gaal.

Mitigation measures:

- *Develop a Resettlement Plan as per E&S OS 5*
- *Ensure all resettlement issues are resolved prior to the start of construction (including payment of compensation)*

Competition for Limited Project Benefits and Resources

- Individual local community members expect to directly benefit from the project, for example, through jobs, and material supply contracts, may lead to severe social friction especially since almost every household is armed with an AK 47.
- There will be limited job opportunities given high illiteracy rates in the area and lack of skills.

Mitigation measures:

- *Implement a transparent and inclusive benefit-sharing plan that outlines clear mechanisms for equitable distribution of project benefits among local communities.*
- *Prioritize local hiring and procurement of goods and services to maximize economic opportunities for residents.*

- *Facilitate conflict resolution processes and mediation mechanisms to address potential clan-based tensions.*

Operation Phase

Safety and Traffic Management

- Increased traffic volume: The improved road will likely lead to a significant increase in traffic flow, raising the risk of accidents.
- Pedestrian safety concerns: Road rehabilitations may lead to speeding and reckless driving as seen in other government projects in Somalia such as Benadir Region where the number of accidents and speed related deaths, to both human and animals, have increased following the rehabilitation or construction of roads, This includes the need for proper signage, speed limits, and pedestrian crossings, especially in areas with high population density. The risks would be higher for children, the elderly, and people with disability.

Mitigation measures:

- *Incorporate road safety measures into the design e.g.:*
  - *Speed bumps in settled areas*
  - *Pedestrian crossings*
  - *Rod furniture to include road signage*

Environmental Impacts

- Air and Noise Pollution: Continued use of the road by vehicles, including trucks, buses, and cars, can contribute to ongoing air and noise pollution. Vehicle emissions, including particulate matter and greenhouse gases, can degrade air quality and impact the health of nearby residents.
- Waste management: Increased traffic and roadside activities can lead to littering and improper waste disposal, impacting the surrounding environment.

Mitigation measures:

- *Encourage use of low emission vehicles*
- *Put in place vehicle inspection measures*
- *Place waste collection bins in settled areas*

Social and Economic Impacts

- Changes in land use patterns: Improved accessibility may lead to increased development along the road corridor, potentially impacting agricultural lands and natural habitats.
- Social and cultural changes: Increased interaction with people from outside the region may lead to changes in social dynamics and cultural practices.

8. ENVIRONMENTAL AND SOCIAL MANAGEMENT AND MONITORING PLAN

8.1 ESMMP Table

The environmental and social management and monitoring plan (ESMMP) is a living/dynamic document subject to any changes in the project of the project implementation. It will be reviewed every 6 months to identify any required amendments. The table below presents the project ESMMP.

Table 12: Environmental and Social management and Monitoring Plan

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
E&S OS 2 (OS2): Labour and Working Conditions						
All Phases	**Insecurity Threat**					
	The project area has a significant presence of terror groups e.g. Al-Shabab who pose a threat to both the project workers and community members directly or indirectly involved in the project	Prepare and implement a security management plan (SMP) in line with the ISS	Approved SMP and updated	One off	20,000 (preparation of plan and first training)	**SMP Preparation:** • FGS MPWR&H in close collaboration with the different security agencies at the FGS and FMS, Contractor, and supervision firm **SMP Monitoring:** • Contractor and supervision firm, OHS officers
		Closely coordinate with security authorities and local communities	Presence of security officers at the site	Continuous	1, 000 per month	
		Fence camp sites and Install lights around the perimeter	Perimeter fences and security lights around campsites	One off	60,000	
		Staff awareness raising	Records of awareness raising workshops/ seminar for police officers on proportionate use of force	Quarterly	5,000	

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
		Deploy police officers to provide site security for the workers and deploy undercover police officers where necessary	Number of Code of Conduct (CoC) signed by police officers	Continuous	5,000 per month (added as line item in the bill of quantities)	• Hiiran Region Government, OHS officer
		Avoid large gatherings	Frequency of events exceeding a set maximum number of attendees	Quarterly	No additional cost	
		Limit working hours to between 7 am and 5 pm	Percentage of work hours occurring outside the designated time frame	Monthly	No additional cost	
	Occupational health and safety (OHS)					
Preconstruction, Construction and Decommissioning	Health and safety risks	Fulltime OHS Officer/s engaged and always present at site.	Presence of OHS officer at site	Continuous	3,000 per month	• Supervision firm OHS officer • Hiiran Region Government OHS officer • Contractor OHS Officer
		An appropriate and functional contractor OHS strategy must be in place.	Presence of OHS strategy	Quarterly	No additional cost	
		Safety induction for workers during onboarding process and ongoing OHS training for workers and specialized OHS training for workers with specific risks (e.g., heavy equipment operators)	Record of Induction and Training Activities	Quarterly	5,000	

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
		All workers to be provided with appropriate PPE and 100% compliance enforced	Use of PPE by workers	Daily	20,000 (PPE purchase)	
		Regular maintenance of machinery and equipment to ensure optimal and safe functionality	Vehicle and machinery inspection reports	Weekly	No additional cost	
		Provision of adequate signage and communication of risk to workers and communities in Somali language	Public Alert/Warning signs	Continuous	1,000 per month	
		Ensure all workers have appropriate insurance coverage	Workers having Insurance policies	Quarterly	3,000 per month (insurance coverage)	
		Provide and maintain appropriate first aid and other equipment required for high OHS risks	Presence of functional First Aid Kits	Bi-weekly	1,000 per month	
		Provision and Maintenance of firefighting equipment	Presence of functional Fire extinguishers	Monthly	1,200 per year	
		Provision of sanitary facilities for workers including gender segregated toilets and change rooms for male and female employees	Availability of separate male and female sanitary facilities	One off	5,000	
		Provide drinking water especially during hot jilaal season	Presence of portable drinking water supply	Continuous	1,000 per month	

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
		Put in place procedures for the transportation of injured worker to nearby health facilities	Emergency response vehicle at site	Continuous	No additional cost	
		Ongoing monitoring and reporting of OHS performance	OHS performance report	Quarterly	No additional cost	
		Appropriate investigation of all worker accidents, and implementation of corrective measures	Accident logs	Monthly	No additional cost	
		Establish an emergency response plan/procedure in case of emergencies such as Al Shabab attack, flooding etc.	Emergency Response/Action plan	Quarterly	20,000 (preparation of plan and first training)	
	Non OHS labor risks					
Pre-construction, Construction and Decommissioning	Labor influx, social tensions, conflict related to employment terms and conditions, and child labor risks	Prepare and execute labor management procedures (LMP) that encompass the following: • The contractor must maintain a labor record of all contractual workers, including age verification. • Age verification must be conducted before hiring workers and recorded.	• Approved LMP • Labour registry with desegregated and detailed information on project workers (age, gender, vulnerability, contact info, etc.)	One-off	30,000 (preparation and first training)	• MoLSA officer Hiiran Regional Government • Construction supervision firm (social officer)

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
		Establish and implement a grievance mechanism (GM) to efficiently resolve workplace grievances of project workers	Review workers' grievance register and inquire if nonregistered grievances are in place	Monthly	30,000 (preparation of plan and first training) No additional cost for monitoring	
		Ensure equitable employment conditions in contracts that align with the national Labour Code.	Review of employment contracts	Quarterly	No additional cost	
E&S OS 3 (OS3): Resource Efficiency and Pollution Prevention and Management						
	Air Pollution					
	Dust Emissions	• Provide construction workers with comprehensive knowledge regarding the detrimental effects of air pollution on human health, as well as the most effective techniques for preventing, minimizing, and alleviating its presence • Water to be sprinkled during the construction phase on excavated areas, diversion routes, and temporary access roads leading to burrow pits • Utilize tarpaulin or other heavy materials to cover road base	• Water sprinkling conducted • Trucks covered • Absence of dust clouds • Complaints from community	Continuous	2000 per month	• Supervision firm environmental officer • Hiiran Region Government environmental officer • Contractor environmental officer

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
		materials and construction debris during transportation to limit dust emissions • Reduce the duration of soil exposure • Restrict and minimize slash-and-burn practices • Ensure proper storage of road base materials, such as soil and gravel				
	Vehicle and equipment emissions	Prohibit needless idling of vehicles and machinery Use of well-maintained vehicles and equipment that are in good condition	Vehicle Service Sheets	Monthly	No additional cost	Contractor
		Carry out air quality tests	Total suspended particles or PM2.5 and PM10 (Conformity to standards)	Monthly	3,000 per month	Contractor's Environmental Officer
	Water Pollution					
	Contamination/spills	Ensure appropriate and safe storage of contaminants such as lubricants and fuel Installation of Oil/ fuel Inceptors at vehicle service workshops	Safe Storage places for contaminants	Continuous	No additional cost	Contractor
	Washing of Construction vehicles in the river	Avoid Washing of Construction vehicles in the river	Availability and use of designated vehicle/machine cleaning places	Random site inspection	No additional cost	• Supervision Firm Environmental Officer

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
		Establish designated places for vehicle/machine cleaning within vehicle service workshops				• Contractor
	Waste generated during project implementation	Collection and Proper disposal of Solid Waste generated during project at the project Site	• Contract with Licensed waste collector • Solid waste Collection points	Continuous	500 per month	Contractor's Environmental Officer
		Diligent precautions made to avoid contaminating boreholes, rivers, streams, and other water sources	Physical inspection of rivers and water sources	Quarterly	No additional cost	
		Keep a record of all notable discharges into surface or groundwater	A record of all notable discharges from project activities and their management	Monthly	No additional cost	
		Carry out Water Quality of Surface Water Sources	Physical- Chemical Composition of the water (Conformity of results to Standards)	Monthly	3,000 per month	Contractor's Environmental Officer
	Noise Pollution and Excessive Vibrations					

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
Construction and Decommissioning	Noise from Construction Vehicles (Hooting, Noise due Friction in moving parts)	• Sensitize drivers to avoid unnecessary hooting • Proper maintenance of construction vehicles and machines including regular application grease to moving parts	• Records of work ethics sensitization meetings and code of conduct documents • Complaints from local community • Vehicle Service Sheets	Monthly Bi-weekly Monthly	No additional cost	• Supervision firm environmental officer • Contractor environmental officer
	Operating beyond normal working period	Ensure hours of operation are limited to between 7 am and 5 pm	• Complaints from local community • Employees Check in and Check out time	Bi-weekly	No additional cost	• Supervision firm environmental officer
Construction and Decommissioning	Rock blasting activities and movement of Heavy Machinery and road compaction activities	Conduct ground and structure integrity surveys prior to construction works to identify highly susceptible sites	Ground and structure integrity reports	One-off	15,000	• Supervision firm environmental officer • Contractor environmental officer
		Plan and Schedule unavoidable major blasting and appropriately sensitize community	Complaints from local community	Bi-weekly	No additional cost	
		Vibration monitoring, analysis and control during construction	Vibration monitoring reports	Quarterly	10,000	
	Increased Waste Generation					
Construction and	Waste from packaging material, construction material	Prepare waste management plan for each waste stream and implementation of the waste hierarchy.	Approved waste management plans in place	One-off	20,000	

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
	remnants and domestic waste at campsites	Educate workers on proper waste collection, storage and disposal	Certificates of trained workers or evidence of training on the handling of waste	Quarterly	10,000 for training and sensitization	• Supervision firm environmental officer • Hiiran Region Government environmental officer • Contractor environmental officer
		Provision of waste bins at the project sites	Presence of waste/recycling bins at the sites	Continuous	5,000	
		Ensure waste are recycled/reused before opting to dispose.	Waste manifest forms	Quarterly	No additional cost	
		Appropriate quotation of construction material and purchase on demand basis to avoid excesses	Material Quotation Estimates and utilization records	Continuous	No additional cost	
	Stock piling	Use the stock piles for earth filling, top soiling and burrow pit rehabilitation	• Absence of Stockpiles • Rehabilitated burrow pits and backfilled areas	Weekly	No additional costs	• Supervision firm environmental officer

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
Construction and Decommissioning	• Management of chemicals and hazardous Materials	• Provide comprehensive training to workers on the appropriate handling and disposal of chemicals • Ensure that only competent and well trained staff are responsible for waste separation and segregation • Ensure the availability of a suitable storage facility for chemicals and hazardous materials • Pesticides used in material storage areas or work camp, should not contain active ingredients that are banned • Hazardous waste from the project to be disposed at sites authorized by the Hiiran Region Government	• Certificates of trained workers or evidence of training on the handling of hazardous waste • Existence of a hazardous waste management plan	Continuous	Hazardous Waste Management plan(preparation of plan and first raining) No additional cost for monitoring	• Supervision firm environmental officer • Hiiran Region Government environmental officer • Contractor environmental officer
Construction, Operation and Decommissioning	**Soil Erosion and Land Degradation**					
	• Soil Erosion	Carry out soil stability assessment before commencement of works	Soil Stability Assessment report	One-off	20,000 for assessment	• Supervision firm environmental officer
		Implementation of effective measures to prevent and manage soil erosion	Drainage works made of pitched stones with silt sieves and in good condition	Monthly	No additional cost	

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
		Establish a Storm water Management Plan (SWMP)	Record of storm water measures implemented as per SWMP	Quarterly	20,000 (preparation of plan and training)	• Contractor environmental officer
E&S OS 4 (OS4): Community Health, Safety and Security						
	Worker & Community Health and Safety					
All Phases	Spread of infectious diseases e.g. HIV and STIs	• Carry out awareness raising on infectious diseases and measures to mitigate their spread • Train all workers in respiratory hygiene e.g. cough etiquette and hand hygiene. • Avoid overcrowding • Training and public sensitization programs • Ensure there is supply of HIV/AIDS protection measures such as male and female condoms	• Evidence of awareness raising activities for project workers and community • Record of Training and Sensitization Programs • Availability of condom dispensers	Monthly	10,000 per month	• Contractor public health officer • Supervision firm OHS officer • Hiiran Region Government OHS officer
All Phases						• Contractor OHS Officer • Supervision firm OHS officer • Hiiran Region Government OHS officer
All Phases	Traffic and Road Safety	Development of an elaborate Traffic Management Plan	Approved traffic management plan	One off	30,000 (for the plan preparation and 1st training)	• Contractor OHS Officer • Supervision firm OHS officer

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
		Put speed limit of 30 km/hour at all sites	Signage on speed limits	Continuous	No additional cost	• Hiiran Region Government OHS officer
		Provide road safety awareness for contractor drivers, suppliers, and community members	Evidence of community awareness raising	Quarterly	8,000 per quarter	
		Install traffic calming measures e.g. bumps	Presence of bumps	Continuous	2,000	
		Install and maintain traffic and construction signs (in Somali language) and controls	Presence of road signage	Continuous	2,000	
		Drivers should be trained on how to respond to Al Shabab attacks/threats during delivery of supplies and materials	Safe driving awareness for construction drivers	Continuous	10,000 for training	
		Establish alternative routes/detours and diversions and notify public of planned road closures	Availability of diversions and detours	Continuous	20,000	
		Keep road and footpath free of construction wastes, materials or equipment	Clear road and footpath	Bi-weekly	250 per week	
Construction, Operation	Sexual exploitation and abuse (SEA), harassment and other forms of gender-	Develop GBV action plan	Approved GBV action plan	One off	30,000 for preparation of plan and 1st training	• Hiiran region government social officer

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
	based violence (GBV)	Develop codes of conduct (CoC) for project workers and train workers on the same	Signed project workers code of conduct	One off	5,000	• Supervision firm social officer
		Awareness raising on GBV and SEAH/SEA for both the community and project workers	Evidence of awareness raising activities for both the community and project workers	Quarterly	6,000	
		Establish confidential process for reporting and grievance registration	Number of cases reported	Monthly	1,000	
E&S OS 5 (OS5): Land Acquisition, Restrictions on Access to Land and Land Use, and Involuntary Resettlement						
	Displacements and Impact on Livelihoods					
Pre-Construction, Construction and Decommissioning	Physical and economic displacement, Loss of livelihoods	Develop a Resettlement Plan as per E&S OS 5	Approved and publicly disclosed Resettlement Plan	One off	40,000 (done)	• Hiiran region government social officer • Supervision firm social officer • Contractor social officer
		Avoid and minimize displacement through project selection and design processes	Number of people displaced	Quarterly	No additional cost	
		Ensure all resettlement issues are resolved prior to the start of construction (including payment of compensation)	Grievances recorded	Monthly	No additional cost	
E&S OS 6 (OS6): Habitat and Biodiversity Conservation and Sustainable Management of Living Natural Resources						
	Vegetation Disruption, Habitat damage and Loss of Biodiversity					

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
Pre-Construction, Construction and Decommissioning	Clearance of vegetation	Use of existing un-vegetated or disturbed areas for the Contractor's Camp, stockpiling of materials etc. shall be encouraged	Changes in land cover in the project area	Quarterly	No additional cost	• Supervision firm environmental officer • Hiiran Region Government environmental officer • Contractor environmental officer
		Trees should be trimmed rather than removed wherever possible and more trees planted	A count of number of trees cut and planted (quarterly)	Quarterly	400 per month	
		Areas to be cleared, especially burrow pits, Right of Way (RoW) and Camp sites must be cleared in such a way that damage to adjacent areas is prevented	Changes in population of target species along the project road	Quarterly	500 per month	
	Loss of Fauna	Educate workers and the sensitize the community on the importance of preserving wildlife	Record of sensitization workshops	Quarterly	5,000	• Supervision firm environmental officer • Hiiran Region Government environmental officer • Contractor environmental officer
		Enforce strict measures to deter the killing of animals and establish consequences for such actions.	Number of grievances recorded	Continuous	No additional cost	

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
Pre-Construction and Construction	Introduction of Invasive Species	Ensure that trucks and equipment are well cleaned before starting work or transferring to a different site to prevent the movement of invasive species seeds, such as prosodies.	Cleaned trucks before move to new sites (as necessary)	Monthly	No additional cost	• Supervision firm environmental officer • Contractor environmental officer
E&S Operational Safeguard 7 (OS7): Vulnerable Groups						
Pre-Construction and Construction	**Vulnerable Groups (VG) Marginalization**					
	Vulnerable groups not identified	Carry out stakeholder mapping (identification and analysis) including identification of disadvantaged groups in each subproject	Number of vulnerable groups/people in the area	One-off	15,000	• Hiiran region government social officer • Supervision firm social officer • Contractor social officer
	Exclusion from the project design and subproject identification consultations	Actively seek vulnerable groups to participate in the project preparation activities	Register of consultation to ensure participation of identified of vulnerable groups	Monthly	No additional cost	• Hiiran region government social officer • Supervision firm social officer • Contractor social officer
Pre-Construction	Employment discrimination and exclusion of VG	The contractor must be legally obligated to prioritize the recruitment of unskilled labor from communities	Record of VG inclusion in recruitment and Number of VG who are	Continuous	No additional cost	• Hiiran region government social officer

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
		living in the Beledweyne-Kalabeyr Road area with preference given to qualified individuals from project affected households and vulnerable groups	part of contactor's employees			• Supervision firm social officer • Contractor social officer
	Exclusion from decision making	Include vulnerable groups in different committee linked to the Project	Record of VG included in subproject committees	Monthly	No additional cost	• Hiiran region government social officer • Supervision firm social officer • Contractor social officer
E&S Operational Safeguard 8 (OS8): Cultural Heritage						
	Impact on Culture and Cultural Heritage					
	Moral Decay, Family conflicts and marriage breakages, teen pregnancies and school dropouts.	Construction workforce should be sensitized cultural practices and upholding high moral standards	Sensitization on Employee code of conduct guidelines	Quarterly	15,000	• Hiiran region government social officer • Supervision firm social officer • Contractor social officer
		Employees deployed for long durations to be given leave days to visit their families	Record of Employee off-days or leave day taken	Monthly	No additional cost	
		Institute and enforce punishment measures for employees who breach code of conduct	Number of employees to have undergone disciplinary action	Quarterly	No additional cost	

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
Pre-Construction and Construction	Damage, loss, or destruction of tangible and intangible cultural heritage assets	Prepare chance find procedures including: training of project personnel and project workers on applicable heritage laws. Stopping of works and fencing off the area of finds or sites to avoid further disturbance; notifying the relevant authorities of found objects or sites;	• Approved chance find procedure • Awareness of chance find procedures among project workers • Records of any findings	Quarterly	30,000 (preparation of plan and training)	• Hiiran region government • Supervision firm social officer • Contractor social officer
E&S Operational Safeguard 10 (OS10): Stakeholder Engagement and Information Disclosure.						
	Stakeholder Engagement and Information Disclosure					
All Phases	Lack of inclusive stakeholder engagement	Prepare stakeholder engagement plan (SEP)	Approved and appropriately disclosed SEP	One off	30,000 preparation of plan including consultations)	• Hiiran region government • Contractor
		Develop and sustain ongoing communication with communities, including marginalized groups, about important matters such as project design, selection of sites for contractor's camp, quarry/burrow pits, water supplies, diversion routes, road furnishings, speed control measures, etc.	Evidence of information disclosure	Continuous	No additional cost	

Project Phase	Potential E&S risks and impacts	Proposed Mitigation and Enhancement Measures	Indicators for Monitoring	Monitoring Frequency	Cost (USD)	Responsible Party
		Facilitate the participation of vulnerable groups to consultations (such as provision of transportation and accessible venues)	Presence of vulnerable groups members in different project committees	Continuous	10,000	
		Establish an inclusive and easily accessible grievance mechanism (GM)	Operational effectiveness of the Grievance Resolution Mechanism (GM) by reviewing the records of complaints and the corresponding measures implemented to address them (monthly)	One off	20,000 (establishment of GM)	
		Carry out regular consultations	Stakeholder consultation records	Continuous	40,000	
TOTAL COST OF ESMP (USD)					**545,150**	

8.2 Institutional Capacity Strengthening

Various institutions will be involved in the rehabilitation of the roads at both the state and federal levels of the government, in this case the FGS and Hirshabelle State ministries of public works will be taking the lead. While the project has a functional and capable competitively recruited implementation unit, these institutions lack the experience of implementing a project of this scale in all its different aspects from the preparation to the operation phases. This project presents a once in a lifetime opportunity to acquire large scale infrastructure project implementation experience for many of these institutions' staff. Listed below are some of the different areas in which capacity building can be provided through contractual clauses with both the contractor and the engineering supervision firm:

- Road design not relevant to develop ESIA/ESMP implementation capacity, hence avoid it
- Preparation of environmental and social safeguards documents
- Road construction engineering skills not relevant to develop ESIA/ESMP implementation capacity, hence avoid it
- Supervision skills
- ESIA disclosure

In addition to the above, training will also be provided on: i) community engagement in road sector development, and ii) guidelines for gender mainstreaming in infrastructure and leadership (combined training budget USD 50,000. Training on guidelines for mainstreaming Environmental and Social Risk Management in infrastructure projects. USD50,000. Training on i) community engagement in road sector development, and ii) guidelines for gender mainstreaming in infrastructure and leadership USD 50,000.

Note: The total cost indicated is for the first year of the project. Subsequent years will see a reduction in cost as certain expenses, such as mobilization, baseline data collection, and Resettlement Action Plans, are one-off costs incurred primarily in the first year. The Mitigation measures with the highest costs are the Resettlement Action Plans and the creation of alternative routes and detours.

9. GRIEVANCE MECHANISM

A grievance mechanism (GM) is an accessible and inclusive system, process, or procedure that receives and acts upon complaints and suggestions for improvement in a timely fashion and facilitates resolution of concerns and grievances arising in connection with a project. An effective grievance mechanism provides project-affected parties (users) with redress and helps address issues at an early stage.

The GM aims at creating an environment where everyone feels valued, heard, and for timely resolution of grievances. Broadly, the GM aims at: establishing a trusting and respectful relationship between the Project and the stakeholders; promoting early identification of concerns and grievances, and addressing these effectively and efficiently to better manage Project impacts; facilitating a learning culture by means of analysing trends and patterns to drive continuous performance improvement and reduce repeat grievances thus improving decision making; streamlining informal grievance processes to increase efficiency; resolving grievances, complaints as close to the point of origin as possible; reducing value erosion by preventing conflicts from escalating into litigation, protests, security incidents and regulatory challenges that could result in harm to people and Project delays; and minimize time, energy and resources spent on resolving grievances.

9.1 Grievance Resolution Committee

A grievance redress committee will be set-up by the Ministry of Public Works to address complaints arising from the implementation of the RAP in each of the towns in cooperation with the local government and the MPWR&H of Hirshabelle State. The committee will ensure that all complaints received in writing (or written when received verbally) are documented and addressed document showing such donation, if there is a problem on the land /property, the project will be held back until the problem is solved or an alternative site is provided. The composition of the committee will be as follows:

1. An official from the local government
2. A male and a female clan elders
3. 1 religious leader
4. 1 Member from women group
5. 1 member of a youth group

9.2 Grievance Redress Levels

Table 13: Grievance Redress Levels and Committee Composition

Grievance Level	Composition of the GRC	Description of the Level
First Level:	• Village chief • A male and a female clan elders • 1 religious leader • 1 member from women group	**Village Level**: Grievances at this level will be resolved by the GRC at the village. This level provides maximum accessibility to the grievance mechanism for the users and the possibility of resolving grievances in a timely and practical manner

	• 1 member of a youth group	
Second Level	• Director General of the Hirshabelle public works ministry • A male and a female clan elders at higher level in clan leadership hierarchy • 1 religious leader at state level • 1 member from state level women group • 1 member of the state youth committee	**Hirshabelle State Level:** Grievances that the GRC cannot resolve will be escalated to Hirshabelle Ministry of Public works Reconstruction and Housing. No grievance will be considered by Hirshabelle Ministry of Public works Reconstruction and Housing unless escalated by the village GRC
Third Level	• Director General the federal public works ministry • A male and a female clan elders from the national elders committee • 1 religious leader from the national council of Imams • 1 member from Somalia National Women Group • 1 member of Somali National Youth Group	**National Level:** Processes grievances that Hirshabelle Ministry of Public works Reconstruction and Housing is unable to resolve. No grievance will be considered at this level unless it has already been reviewed by Hirshabelle Ministry of Public works Reconstruction and Housing and the resolution proposed is not acceptable to the complainant
Fourth Level	**African Development Bank**	**Independent Recourse Mechanism (IRM): Grievances** not resolved at the national level will be escalated to the AfDB. No grievance will be considered at this level unless it has already been reviewed by the Federal Ministry of Public works Reconstruction and Housing and the resolution proposed is not acceptable to the complainant
Fifth Level (Legal):	**Law Courts**	**(Legal):** In case the extra-judicial mechanism does not allow an amicable agreement to be reached, the complainant (aggrieved party) can resort to the judicial system (and could at any time). This grievance mechanism does not constitute an obligation for finding a solution to all grievances, it does

		however constitute an obligation to receive, register, treat, and document all grievances with due effort.

9.3 Procedure for Operating the Grievance Mechanism

Table 14: Grievance Resolution Procedure

#	Step	Description
1	Uptake of grievance	• An aggrieved user will present a complaint at any uptake points and/or using any communication channels described in this strategy. The complaints will present their complaints/grievances in Somali, including local dialects. Uptake channels include a toll-free number, email, in person to grievance focal persons at village, state, or national level. • Aggrieved users who cannot read or write will be encouraged to bring along someone who can read/write at the time of lodging the complaint. Where the complainant cannot read/write and has nobody to bring along or the grievance is reported through telephone, the officer receiving the grievance at any of the uptake points will complete the grievance submission form on behalf of the complainant and read its contents back to the complainant for verification. • The receiving officer will explain to the complainant, in culturally in Somali and in culturally appropriate manner, the grievance redress process including the timing and the types of remedies that will be provided. • Individuals who submit grievances have a right to request that their identity be kept confidential. In such instances, the receiving officer shall categorise the grievance as confidential and inform the complainant of the measures put in place to ensure confidentiality, including using an alias or assumed name. Where grievance is anonymous, the same should be reflected in the register. • The officers recording grievances will allocate a unique reference number for each grievance so that it can be appropriately tracked.
2	Sorting and processing	• Categorise all the grievances to facilitate the necessary action appropriate to the type of grievance logged. • Asses the nature of the grievance within two working (2) days to determine whether the matter is legible or not. Where the grievance is deemed ineligible, it is rejected. • For eligible grievances, determine if the matter can be resolved immediately or if it requires further investigation and whether it needs to be escalated to the next level.
3	Acknowledgement and follow-up	• Prepare and furnish the complainant with an acknowledgement note in Somali.

#	Step	Description
		• Give acknowledgements within two (2) days of registration of the grievance through any of the multiple channels identified in this strategy. • Record the feedback in the register. • Explain to the complainant how to follow-up on the status of the grievance and the expected timeframe of redress, who will deal with the grievance, how the issue will be dealt with and actions to be taken if no resolution is reached, • Where the grievance is rejected, give reasons to the complainant justifying the rejection
4	Verification, investigation and redress action	• Where necessary, investigate complaints to provide evidence for analysis and to support to the resolution process. • Understand the complainant's perception of the issue and what should be done about it. • Examine the circumstances of the grievance through engagement and consultation with the affected. • Use the findings of investigation, compile a report of sufficient details about the recommended course of action. • Develop a response that is reasonable and proportional to the grievance taking into account cultural norms, gender and vulnerability. • Discuss the proposed redress action with the complainant and provide opportunity for acceptance or rejection of the proposal. Where necessary, offer alternatives for consideration. • Communicate all responses within five (5) days upon completion of the investigations, using the channels identified. • Where the response is rejected, advice the complainant on the next level of resolution mechanism, including use of the courts of law as a last resort. • Where the response is accepted, draw a plan of action and oversee its implementation. • Record the resolution shall be recorded in the grievance register.
	Closure	• Advice complainants of the closure of the grievance and actions implemented to realise it. Close-out occurs when implementation of an action has been verified and documented in the register. • Document the results and request the complainants' perception about the process. • Request for feedback from the complainant and other affected parties about the level of satisfaction with the grievance handling process and the outcome. • Sign off the grievance closure form or a form acknowledging closure.

9.4 Timelines for Grievance Resolution

Table 15: Indicative timeline for grievance resolution

Level	Timeline	Cumulative
Level 1 (Village GRC)	7	7
Level 2 (Hirshabelle State GRC)	5	12
Level 3 (National GRC	5	17
Level 4 (African Development Bank)	Unknown	Unknown

The above timelines do not include investigations, which might take longer. Where grievances take more than17 days to resolve, the new timelines will be communicated to the complainants. Claims that might not be resolved under the project implementation unit. GM is an effective mechanism, usually based on traditional dispute resolutions and conflict management as well as imbedded with the local cultural values. All grievances will be recorded and monitored at the federal MPWR&H.

10. CONCLUSION AND RECOMMENDATIONS

The 22 km long Beledweyne Kalabeyr Road Project funded by the AfDB and the EU will significantly contribute to the development of Somalia as the country struggles to build its infrastructure. This ESIA report prepared through extensive literature review, broad stakeholder engagement, and comprehensive fieldwork reveals that the project benefits far outweigh the potential adverse environmental and social impacts. Since the Beledweyne-Kalabeyr Road is an existing road, no irreversible adverse environmental impact is envisaged. Nonetheless, a detailed ESMMP has been provided to mitigate all risks and potential adverse impacts. Several alternatives have been considered in relation to project activities such as pavement design, bridge rehabilitation or construction of new bridges along with alignments. In establishing the right choice recommended in the document several factors were considered including longevity, cost, and avoidance of displacement and land acquisition. In addition to building infrastructure, the SRIP will also strengthen government institutions through capacitating relevant civil servants working for public works ministries.

Recommendations

To ensure effective implementation of this ESIA and enhance project implementation success the following recommendations ought to be considered:

- In the event that any further funding delays are anticipated the communities in the project area should be consulted and appropriately informed to manage expectations and limit any ill will.
- Before civil works begin the contractor should prepare a comprehensive environmental and social management (C-ESMP) to effectively address the various environmental and social risks and impacts that may occur during the construction phase of the project. Details of specific plans to be captured in the C-ESMP are outlined in annex 2.
- A comprehensive grievance mechanism (GM) should be developed and inclusive grievance redress committees (GRC) established, in Beledweyne, Ceel Gaal and Jawiil by the government before the commencement of the civil works.

11. APPENDICES

11.1 Road Cross Section

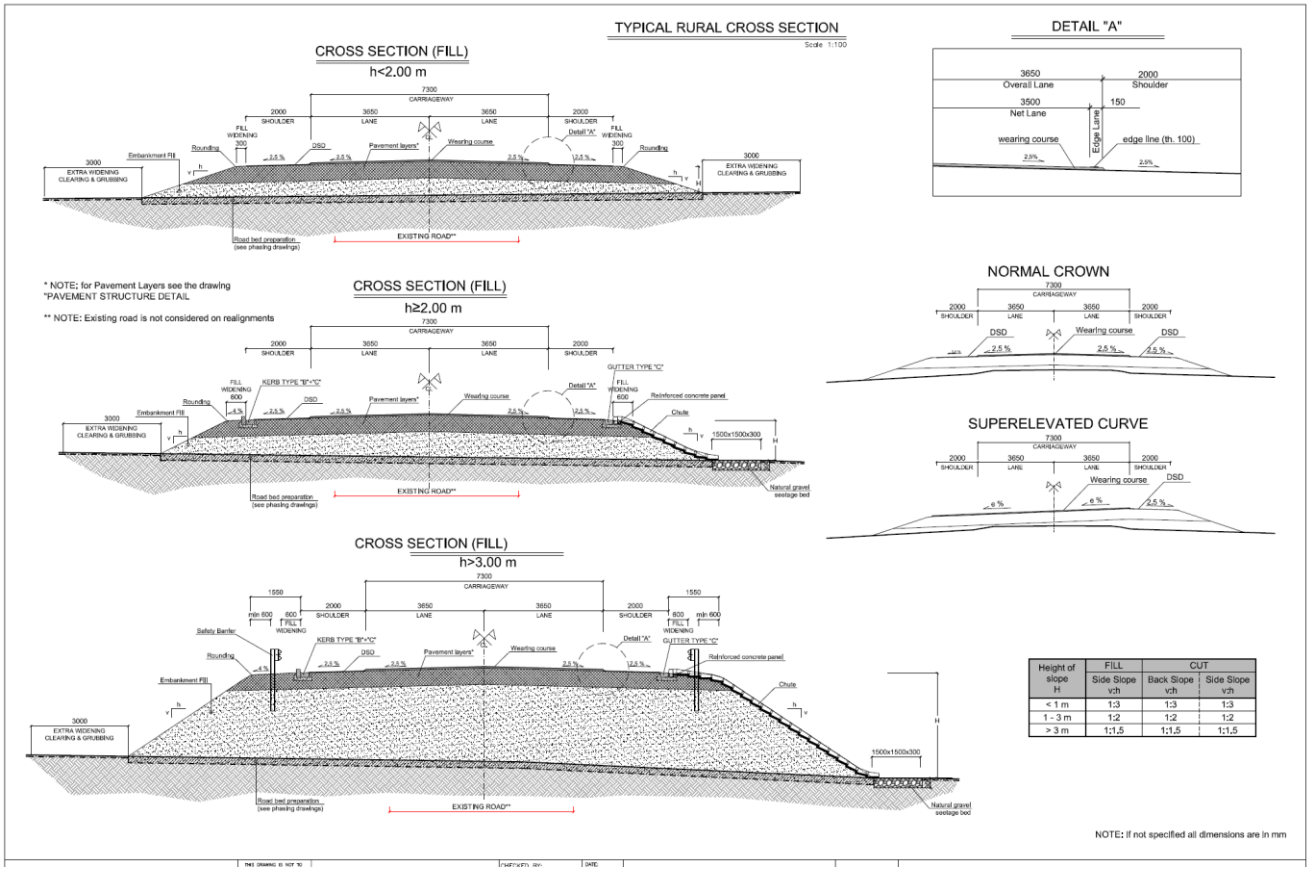


Figure 16: Road Cross-Section

11.2 Stakeholder Consultations Attendance Sheets

COMMUNITY CONSULTATION FOR ESIA AND RAP

GALMUDUG STATE OF SOMALIA

Date: 29 /08/2021

Attendance Sheet

No	Name	Organization	Telephone	Signature
1	Ahmed Mohamed Bear	Descon / AIC	615002862	[signature]
2	Abdulkadir Hussein Kahie	MOPWR&H	618447782	[signature]
3	Sauda Isse Siad	Wasaarada Haweenka	0615091645	[signature]
4	Farhia Ahmed Osoble	youth	0615538502	[signature]
5	Deka Abdikadir mohamed	youth	0618600900	[signature]
6	Farxiya ciise maxamud	youth	0615931926	[signature]
7	Sacdiya Cabdi Gedd	youth	0617921374	[signature]
8	Abdirizak Ali draahy	Gaalsoore	0615040093	[signature]
9	Mohamed Ali Araaye	AVVI	0615715354	[signature]
10	Mowliid Ahmed Hashi	MO fiar	0612111134	[signature]
11	Abdikani Arlan Mohamed	MoE	0615934441	[signature]

:Figure 17: Community Consultations Attendance Sheet.

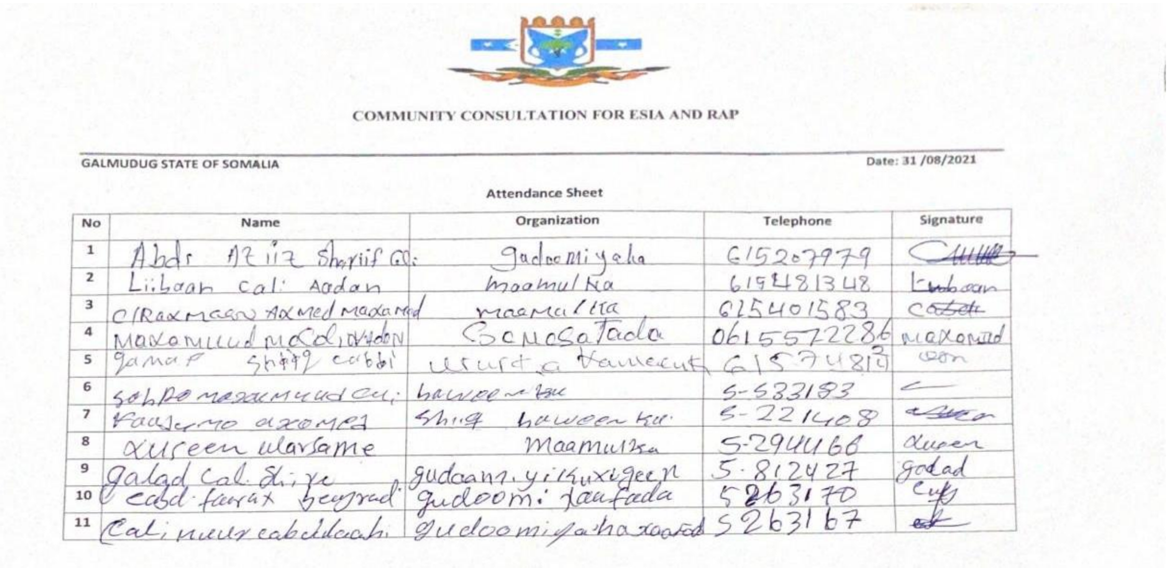
COMMUNITY CONSULTATION FOR ESIA AND RAP

GALMUDUG STATE OF SOMALIA

Date: 29 /08/2021

12	Abdulkadir Osman elm-	MoE- Krc	615430228	[signature]
13	Ahmed Mohamed Abdi	CSC	615594351	[signature]
14	Deeqo Abdirahmaan Ali	W. Arimaha Gudaha	0618268671	[signature]
15	Kin Ahmed mohamed	Madaxtoyo-	0612113695	[signature]
16	MOHAMED Abdi Elmi	Focal Point JPLG	0617199795	[signature]
17	Bare Maxamed/Muse	planning	0612222399	[signature]
18	Ismaaciil Cabdi mire	youth	0616203454	[signature]
19	musharaf Abdi Ahmed	youth	0617552200	[signature]
20	Alas Abdinur Burre	youth	0615833699	[signature]
21	Nabil Abdulkadir Aware	Descon / AIC	0615874740	[signature]
22				
23				
24				

Figure 18: Community Consultations Attendance Sheet



COMMUNITY CONSULTATION FOR ESIA AND RAP

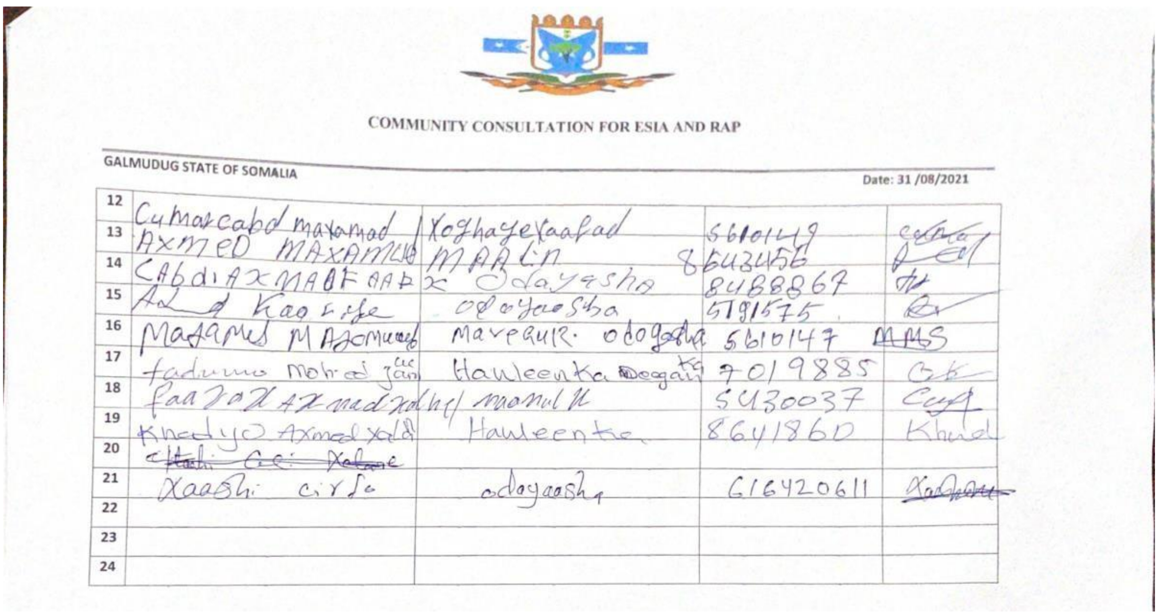
GALMUDUG STATE OF SOMALIA

Date: 31 /08/2021

Attendance Sheet

No	Name	Organization	Telephone	Signature
1	Abdi Aziiz Shariif Cali	Gudoomiyaha	615207979	[illegible]
2	Liibaan Cali Aadan	Maamulka	615481348	Liibaan
3	C/Raxmaan Axmed Maxamed	Maamulka	615401583	[illegible]
4	Maxamuud Mcalin Aadan	Gonosatada	0615572286	Maxamed
5	Jamac Shire Cabdi	Ururka Ganacsata	615748123	[illegible]
6	Sahro Maxamuud Cali	Haweenka	5-533183	[illegible]
7	Faadumo Axmed	Shirka Haweenka	5-221408	[illegible]
8	Xuseen Warsame	Maamulka	5-294466	Xuseen
9	Galad Cali Shire	Gudoonka yiilkuxigeen	5-812427	Galad
10	Cabdi Faarax Geeyrad	Gudoomi Laafada	5263170	[illegible]
11	Cali Nuur Cabdillaahi	Gudoomiyaha xoolaha	5263167	[illegible]

Figure 19: Community Consultations Attendance Sheet.



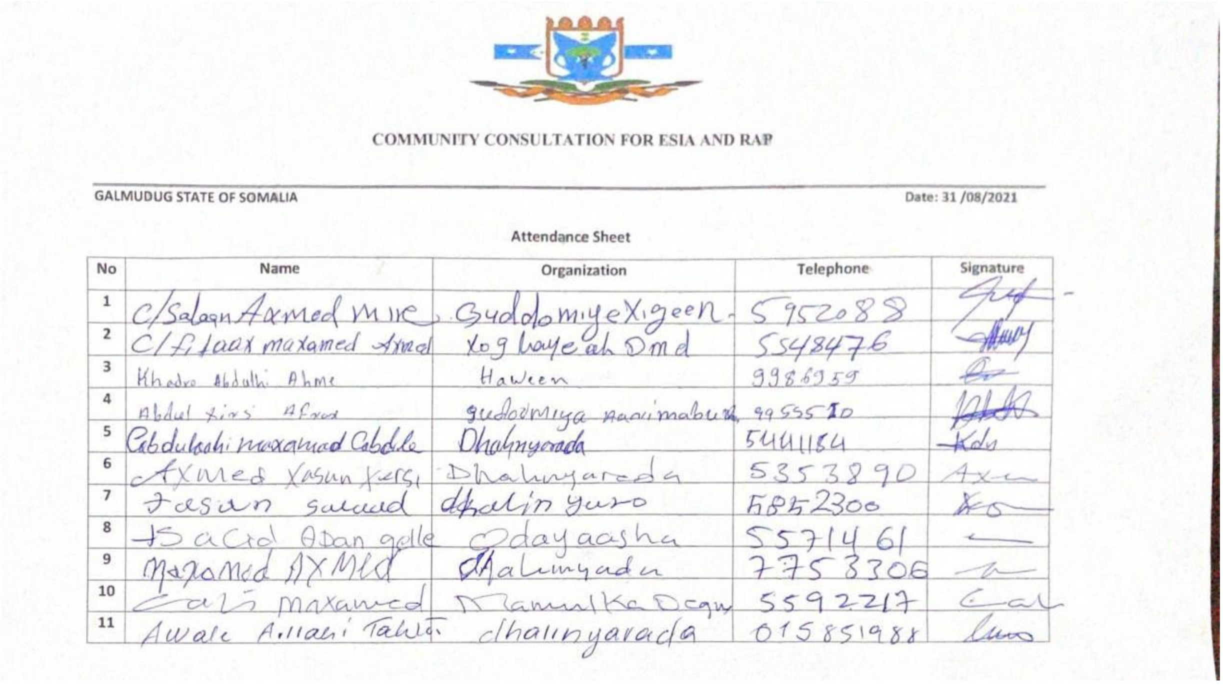
COMMUNITY CONSULTATION FOR ESIA AND RAP

GALMUDUG STATE OF SOMALIA

Date: 31 /08/2021

12	Cumar Cabdi Maxamad	Xoghaye Xaafad	5610149	[illegible]
13	Axmed Maxamud	Maalin	8643456	[illegible]
14	Cabdi Axmad Faarax	Odayasha	8488867	[illegible]
15	Axmed Kaafiye	Odayaasha	5791575	[illegible]
16	Maxamed Maxamuud	Mayerqur. odayasha	5610147	MMS
17	Faduma Moh'ed Jaamac	Hawleenka Degaanka	7019885	[illegible]
18	Faadumo Axmed Xadhig	Maamulka	5430037	[illegible]
19	Khadiyo Axmed Xalad	Hawleenka	8641860	Khadi
20	~~Xaashi Cali Xalane~~			
21	Xaashi Cirfo	odayaasha	616420611	[illegible]
22				
23				
24				

Figure 20: Community Consultations Attendance Sheet.



COMMUNITY CONSULTATION FOR ESIA AND RAP

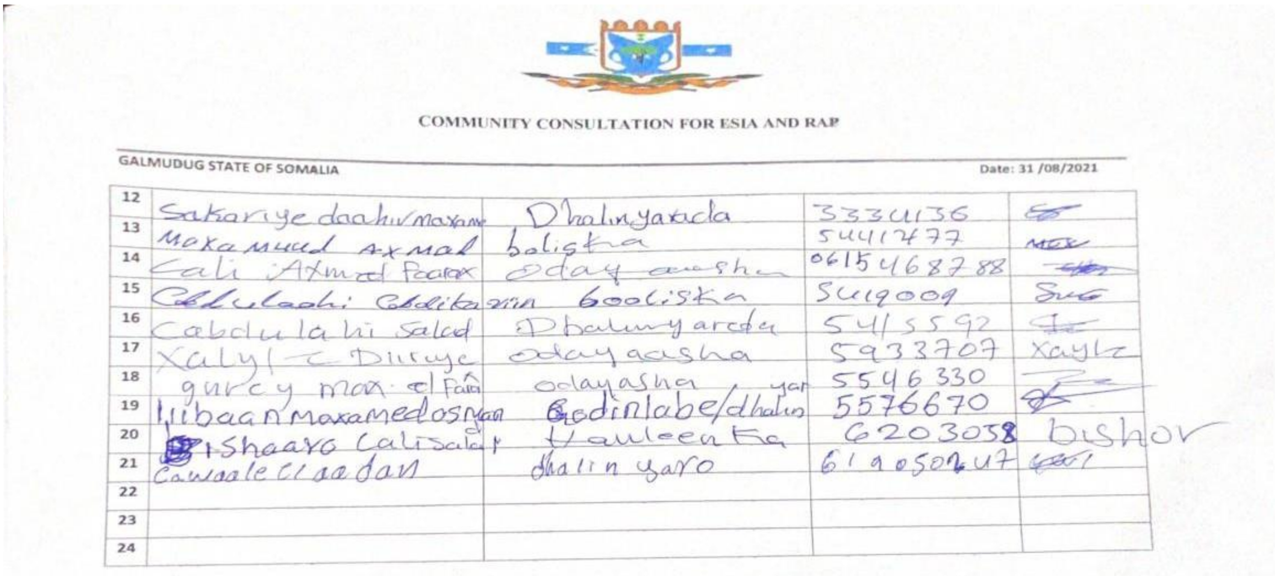
GALMUDUG STATE OF SOMALIA

Date: 31 /08/2021

Attendance Sheet

No	Name	Organization	Telephone	Signature
1	C/Salaan Axmed Miire	Guddomiye Xigeen	5952088	
2	C/fitaax maxamed Axmed	Xog haye ah Dmd	5548476	
3	Khadra Abdulli Ahme	Haween	9986959	
4	Abdul Xiris Afrax	guddomiya naaimabur	995551o	
5	Cabdulaahi maxamad Cabdile	Dhalinyarada	5441184	Kdy
6	Axmed Xasan Xersi	Dhalinyarada	5353890	Axm
7	Xasan Saiiid	dhalin yaro	5852300	
8	Isacid Adan golle	Odayaasha	5571461	
9	Maxamed AXMed	Dhalinyada	7753306	
10	Cali maxamed	Maamulka Degm	5592217	Cal
11	Awale Ailaahi Tahir	dhalinyarada	015851988	

Figure 21: Community Consultations Attendance Sheet.



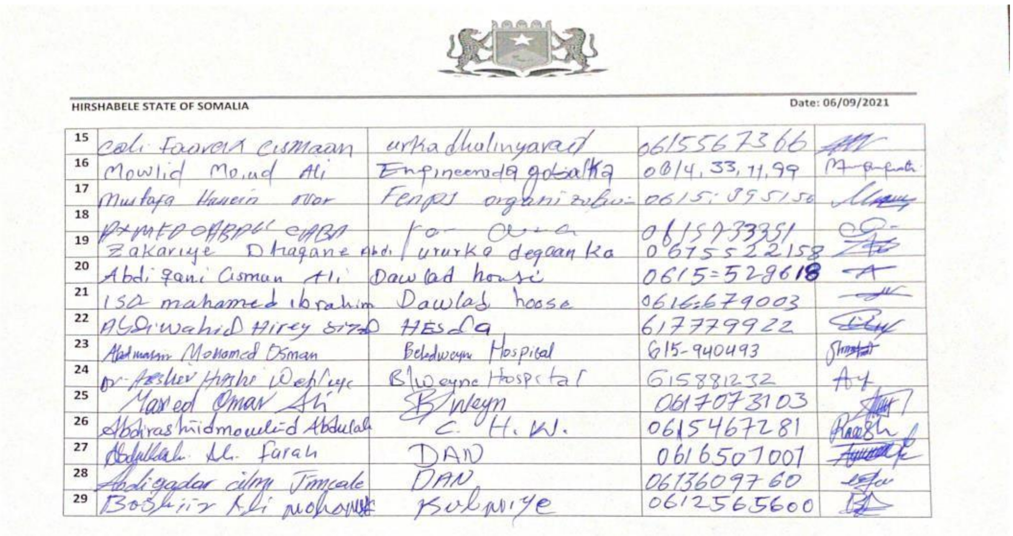
COMMUNITY CONSULTATION FOR ESIA AND RAP

GALMUDUG STATE OF SOMALIA

Date: 31 /08/2021

No	Name	Organization	Telephone	Signature
12	Sakariye daahir maxamed	Dhalinyarada	3334136	
13	Maxamuud Axmad	boliska	5441477	
14	Cali Axmed Faarax	oday aasha	0615468788	
15	Cabdullaahi Cabdiraxman	booliska	5449009	
16	Cabdulahi Salad	Dhalinyarada	5415592	
17	Xalyl Diiriye	odayaasha	5933707	Xaylz
18	gurey maxamed Faar	odayasha / yar	5546330	
19	Iibaan Maxamed Osman	Godinlabe/dhalin	5576670	
20	Bishaaro Cali Salad	Hawleenka	6203038	bishor
21	Cawaale Claadan	dhalin yaro	619050247	
22				
23				
24				

Figure 22: Community Consultations Attendance Sheet.

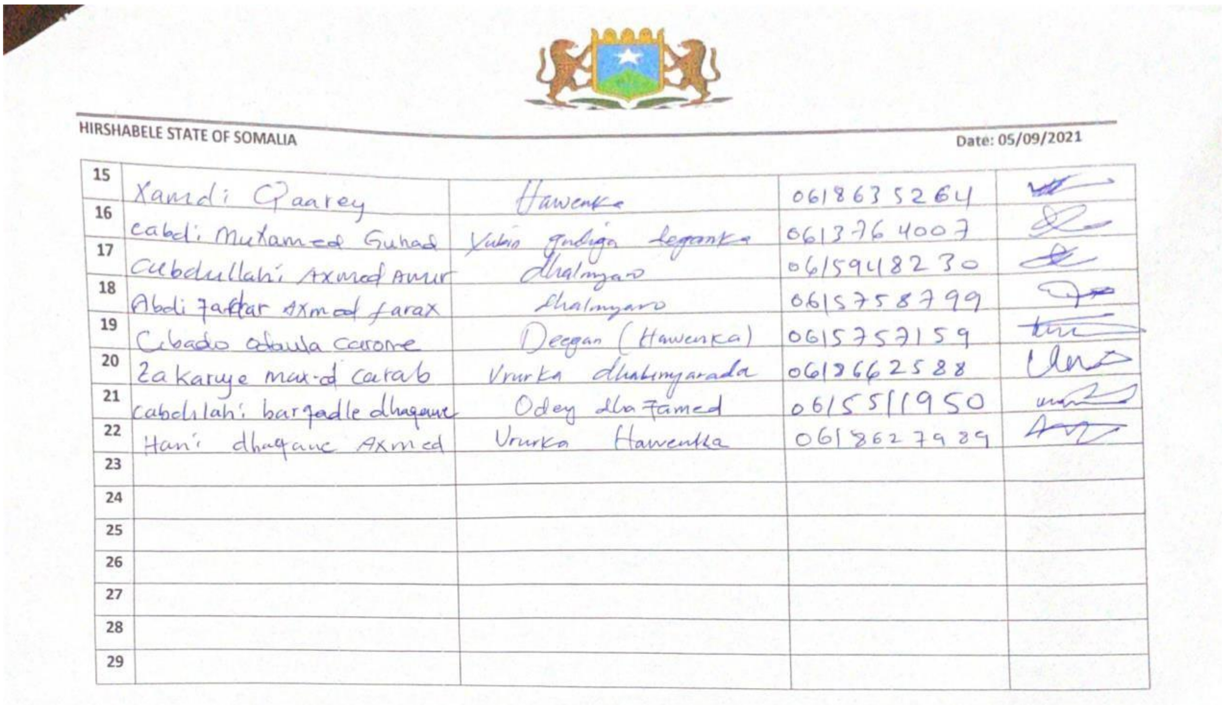


HIRSHABELE STATE OF SOMALIA

Date: 06/09/2021

15	Cali Faarax Cismaan	urka dhalinyarad	0615567366	
16	Mowlid Mo.ud Ali	Engineerada gobalka	0614,33,11,99	
17	Mustafa Hassan Nur	Fenps organizabu	0615:895150	
18	[illegible]	[illegible]	0615733351	
19	Zakariye Dhagane Abdi	urUrka degaan ka	0615522158	
20	Abdi gani Cisman Ali	Dawlad hoose	0615=529618	
21	Isa mahamed ibrahim	Dawlad hoose	0616:679003	
22	AbdiWahid Hirey [illegible]	HESDA	617779922	
23	Abdinasir Mohamed Osman	Beledweyne Hospital	615-940493	
24	Dr. Bashir Hashi Wehliye	B/Weyne Hospital	615881232	
25	Mared Omar Ali	B/Weyn	0617073103	
26	Abdirashiid moulid Abdulah	C. H. W.	0615467281	
27	Abdullahi Ali Farah	DAN	0616507001	
28	Abdiqadar cilmi Jimcale	DAN	0613609760	
29	Bashiir Ali Mohamed	Bulowiye	0612565600	

Figure 23: Community Consultations Attendance Sheet.



HIRSHABELE STATE OF SOMALIA

Date: 05/09/2021

15	Xamdi Qaarey	Hawenka	0618635264	
16	Cabdi Mukamed Guhad	Xubin guddiga [illegible]	0613764007	
17	Cabdullahi Axmed Amir	dhalinyaro	0615948230	
18	Abdi Jattar Axmed farax	dhalinyaro	0615758799	
19	Cibado abdulla Carone	Deegan (Hawenka)	0615757159	
20	Zakariye max-d Carab	Urur ka dhalinyarada	0618662588	
21	Cabdilahi barjadle dhagane	Odey dhaqamed	0615511950	
22	Hani dhagane Axmed	Ururka Hawenka	0618627989	
23				
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29				

Figure 24: Steering Commiitee Consultations Attendance Sheet

11.3 Government Officials Consultations Attendance Sheet

AFRICAN DEVELOPMENT BANK GROUP

AGENZIA ITALIANA PER LA COOPERAZIONE ALLO SVILUPPO

Road Infrastructure Programme Somalia (RIPs) ***Project Steering Committee of meeting***

Day two (September 10, 2023)

S/No	Full Name	Title/Position	Name Institution	Email	Signature
1	Mohamed Hussein	procurement officer	RIPS-MPWR&H	Jeermleexshe@gmail	
2	Maxame dAdan Jama	Cameraman	SNTV	mohaahoolle@gmail.com	
3	yahye Mohamed Hand	Highways Eng	MoPW-SWSS	yahyam76420@gmail	
4	Mubarak Hani	project Engineer	MoPW-JSS "Rips"	Shaacib1014@gm	
5	Abdishukri Arab	D-G	MoPW-JSS	Arabyare62@gmail	
6	Mohamoud Ahmed	highway Engin	MPWR&H	eng.warfaa@mail	
7	Ahmed Mohamed Barre	Technical officer	MoPWR&H-GSS	Ahmedbarre70@gmail	
8	Fos Ahmed Ibrahim	Statistical Officer	MPWR	fos.jamal@gmail.com	
9	Eng: Hassan M. Abuke	ESIA and M&E	M.PW.FG.S	Enghassanmoha...	
10	Abdulkadir Hussein Kahie	Surveyor	FGS	abdikadirkahie@gmail.com	
11	Ikraam Ibrahim Osman	Civil Society	W/KGS	Ikraamibrahim426@gmail	

Road Infrastructure Programme Somalia (RIPs) ***Project Steering Committee of meeting***

Day one (September 9, 2024)

S/No	Full Name	Title/Position	Name Institution	Email	Signature
1	ABDISALAM ALI	Minister (MPWR)	MPWR		[signature]
2	Jama Hussein Hashi	Minister	Hirshabelle		[signature]
3	Abdiwahab Ahmed	Minister	Jubaland		[signature]
4	Said Mohamed Mohamud	Wasiiru Dowle	MPWR		[signature]
5	Dahir Abdi Abdulahi	Wasir HKG	MoPW. SW		[signature]
6	AHMED DHUBLAWE ...	WASIIR	MoPW. GAlmudug	minister@mpwr.so	[signature]
7	Awale Imow Abdi	DG. MOPW JSS	MOPW&R	awaleimow@gmail.com	[signature]
8	MOHAMED Abdi Elmi	DG	MPWRH-GMS	dg@mpwr.so	[signature]
9	Mubarak Har	project Engineer	MPWRH JSS	mubarak@moprhjss	[signature]
10	Aldshun Arab	DG -	MoPWRH JSS	dg-mopwrh@jubaland	[signature]

12	Mohamed Mohamud	Operation	Somali chamber	maxamedcd1433@gmail.com	
13	maxamed Adan Jama	Cameraman	ZSTSN TV	mohaahawle@gmail.com	
14	Abdirisaq X Salebaan		SNTV		
15	Mohamed Abdiaziz	MPWR	Communications	Mohaa2750@gm	
16	Mohamud Abdimajid	WPWR	Protocol	haJiga1443	
17	yahye Mohamed Haji	Project Eng	Mopw-SWSS	yahyam76@gmail.c	
18	Mohamed Abdi Mohamed	Co-or Eng	MOPH - Hirshabelle	deeqcm@gmail.com	
19	Ikraam Ibraahim Cusman	Civil society DG	FGS	Ikraam Ibrahim 426 Gmail	
20	Abdulkadir Hasan Kahie	Surveyor Engineer	F.G.S	abdikadirkahie@gmail	
21	Hassan M. Abubakr	ESIA and ME	F.G.S	EngHassan...	
22	Fos Ahmed Ibrahim	Statistical Officer	MP WR	foosjamal@gmail.com	
23	Mohamed Osman Mohamed	Senior Advisor	MPWRH	senioradvisor@mpwr.gov.so	
24	Mahamoud Ahmed Med	Engineer MPWRSH	MPWRSH FGS	eng.warfaa@gmail	
25	Bishara Hussein	Procurement MPWRH RIP	MPWRH - RIP	... @gmail	
26	Ahmed Arashid musty	Sakurati	W.B.W.R.H	Barati kol mistar	
27	Mohamud Yusuf Hersi	MPWR	MPRH	mhersi2013@gmail	
28	Hamdi Yusuf Mohamed	Admin office	MPWRH	hamdi7y@gmail.com	Hamdi
29	Mohamed Ahmed Ali	Asst project Coordinator	MPWR&H	Salmanyare 73@gmail.com	

12	Kassim Ahmed	D.G.	MoPWR KGS	Kassimcade 2014	
13	Awale Imow Abdi	DG	MoPWER	Hirshabelle	
14	Mohamed Abdi Mohamed	Eng.	MoPWER	Hirshabelle	
15	Jama Hussien Hashi	Minister	MoPWER-	Hirshabelle	
16	Mohamed A. Aziz	Communication	MOPWR	Mohaaz750@gm	
17	Mohamed Ahmed A.	Asse project coordinator	mpwr	Salmanyare753@gm.	
18	Hamdi Yusuf Mohamed	Admin Rep	MoPWR	hamdi.7@gmail	
19	Abdirisaq X Salebar		Reporter SNTV	Abdirisak	
20	Bishara Hussein	Procurement Specialist	MPWRH - RIP	iqbishra@yahoo.com	
21	Ahmed Dhiblawe	Minister	MoPWR - Galmu	minister@mpwr.so	
22	Mohamed Osman Mohamed	Senior Advisor	MoPWRH	senioradvisor@mpwr.gov.so	
23	Mohamed Abdi Wajid	Secretary	WRDW		
24	Abdiwahab Ahmed	Ministry	MoPWRH-JSS.	minister@jubalandstate.so	
25	Dahir Abdi Abdullahi	ministry SWS	MoPW KGS		
26	Abdisalan Abdi Ali	Minister	MPWR, FGS	minister@mpwr.gov.so	
27	Mohamed Abdi Tir	DG.	MPWRH SMS	dg@mpwr.so	
28					
29					

11.4 Contractor Environmental and Social Management Plan

The Contractor will be required to prepare some standalone safeguards management plans before starting civil works (Contractors Environment and Social Management Plans). The following are to be included in the CESMP:

- Security Management Plan
- Stakeholder Engagement Plan
- Water Sharing/Quality Control Plan
- Dust Management / Suppression Strategy
- Biodiversity Management Plan
- Human Resource Management Plan
- Waste Management Plan
- Occupational Health and Safety Management Plan
- Community Health and Safety Plan
- Labour Management Plan
- Emergency Preparedness and Response Plan
- Traffic Management Plan
- HIV/AIDS and STIs Management Plan
- Chance Finds Procedures
- Site Restoration/ Decommissioning Plan