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PROJECT: SOMALIA REGIONAL CORRIDORS INFRASTRUCTURE PROGRAMME (SRCIP)

COUNTRY: SOMALIA

ESIA AND RAP SUMMARY FOR THE PROPOSED SOMALIA REGIONAL CORRIDORS INFRASTRUCTURE PROGRAMME (SRCIP)

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PROJECT TITLE:	**Somalia Regional Corridors Infrastructure Programme (SRCIP)**
PROJECT NUMBER:	**P-SO-DBO-005**
COUNTRY:	**SOMALIA**
CATEGORY:	**1**

1. INTRODUCTION

1.1. Somalia has about 21,933km long road network in poor to very poor condition. 90 % of the primary roads serving major regions including those under SCRIP have deteriorated and are well past their designed life-span of 30 years (National Development Plan, 2017-19). With many years of protracted armed conflicts and recently formed weak Central and State federal governments pose, a huge maintenance backlog to road infrastructures in the country. In such context, long term development of infrastructure sector largely depends on international community beside humanitarian support for recovery process and sustainable development of Somalia.

1.2. By large, the road sector faces serious budgetary constraints due to country's inability to access international financing for large-scale infrastructure projects which also limited the possibilities of investment in the road sector besides lack of a centralized coordination and regulatory mechanism, haphazard sector development activities hamper the realization of the long term national vision, underpinned and delivered through systems based approach to long term national infrastructure planning. Furthermore, there are no significant budget allocations for the maintenance of infrastructure investments.

1.3. The Somalia Regional Corridors Infrastructure Programme (SRCIP)'s developmental objective is to support Somalia's economic growth by providing enhanced transport facilities that are reliable and cost effective and to improve connectivity, accessibility and transportation of goods, persons and service thereby supporting economic and social development as well as stability of the country as a whole. Further, the programme aims to improve the management of the road sector at the national and regional levels by reinforcing the capacities of federal and regional institution ns that manage road infrastructure.

1.4. The project includes rehabilitation and construction of four priority roads identified for intervention, namely

i. BeledWeyne - Galkayo existing 327 km, 7.3 m wide paved road (proposed intervention: rehabilitation and Triple Surface Treatment –TST – 90 km selected stretch);
ii. Galkayo - Garowe existing 240 km, 7.3 m wide paved road (proposed intervention: rehabilitation and TST 85 km selected stretch);
iii. Galkayo - Hobyo 241 km, 3.65 m wide gravel feeder road (proposed intervention: construction of 100 km of compacted gravel road); and
iv. Luuq, Ganane-Dolow existing 80 km, 7.3 m wide earth road (proposed intervention: grading and compacting the entire 80km).

A major part of the investment in the roads and transport program in major towns can deliver livelihoods, trade and cash transfer benefits to already impoverished/vulnerable population. Largely agreed, this could help create employment, link markets, and reduce the cost of doing business, making Somali enterprises more competitive.

1.5. Given the characteristics of the project area and the nature of the works and services to be carried out, the civil works component of the project will be executed individually via the traditional

route of ***design-tender-and-construct.*** By having each road project as a "stand alone" package, assignments and works on the various roads can start simultaneously after due consideration of security risks in each project areas. To enhance the management of the road sector, the project will provide technical assistance and capacity building to the FGS's MPWR&H and to public works ministries in Galmudug, Hirshabelle, Jubaland, Puntland and South West State.

1.6. ESIA Requirements: In accordance with the AFDB's ISS policy and Environmental and Social assessment procedures, the project is classified as Category 1. The justification for this categorization relates to: (i) the scope of the project (above 50 km); (ii) the presence of environmental sensitive receptors in the Project area. **In Somalia, Environmental and Social Impact Assessment guidelines were found missing at the time of assessment, given the fragile /political situation currently in the country.** Thus, in absence of the Environmental Assessment Guidelines at both State and national level in such a context, the environmental and Social Impact Assessment report of the anticipated Somalia Regional Corridors Infrastructure Programme was prepared in line with the National Development Plan of Somalia, in particular focusing on the visions, plans and initiatives of the Federal States of Somalia (2017-19) while taking provisions from African Development Bank Environmental Safeguard Guidelines for Infrastructure funded projects, Country Environmental Profile of Somalia for development partners to integrate environment assessment in the project cycle where specific legislations on environment are sparse and non-existence. Thus, the review predominantly used the international environmental assessment guidelines of the AfDB, UNEP, the World Bank and FAO complemented with some specific local indicators for harmonizing the environmental impact thresholds.

2. POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK

2.1. Somalia's current constitution addresses the management of the environment. Particularly articles recognizes the followings:

a. Article 24 guarantees fair labour relation and provides protection against abuse of environment;
b. Article 25 states that "[every Somali] 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." Further indicating "[every Somali] 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."
c. The right to own property and the right to compensation is addressed in Sections 1 and 2 of Article 26 which state:
    - Every person has the right to own, use, enjoy, sell, and transfer property;
    - The state may compulsorily acquire property only if doing so is in the public interest;
    - Any person whose property has been acquired in the name of public interest has the right to just compensation from the State as agreed by the parties or decided by a court
d. Article 43 provides guidelines for policy development designed to ensure "land is utilised without causing harm to the land"
e. Article 45 highlights the government's responsibility in prioritizing "… the protection, conservation, and preservation of the environment against anything that may cause harm to natural biodiversity and the ecosystem." This article also mentions the duty of the people "… to safeguard and enhance the environment and participate in the development, execution, management, conservation and protection of the natural resources and environment."

2.2. The specific laws that contain aspects which provide social and environmental protection include:

a. Law No. 65 of 18 October 1972 to promulgate the Labor Code.
b. **Somali** Fisheries **Law** (**Law No**. 23 of November 30, 1985)
c. Somali national Water Law of 11 November 2017

Among the Federal Member States which the corridors pass through, Puntland has enacted several laws related to the environment. Article 96 of the State's constitution addresses environmental protection capturing key elements such as deforestation, soil erosion and pollution and the prohibition on the urbanization of unsuitable lands. The Puntland government has enacted the following environmental regulations, polices and strategies:

a. Environmental Policy (2014);
b. Environmental Management Act (2016);
c. EIA Act and Regulation (2016); and
d. Puntland Climate Change Strategy (2016)

2.3. At the international level Somalia has ratified both the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto protocol. Other important international conventions to which the country is signatory include:

a. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES);
b. Convention for the protection, Management and Development of the Marine and Coastal; Environment of the Eastern Africa Region (Nairobi Convention);
c. UN Convention on the Law of the Sea;
d. Regional Convention for the Conservation of the Red Sea and the Gulf of Aden Environment; and
e. Convention on the Conservation of Migratory Species of Wild Animals

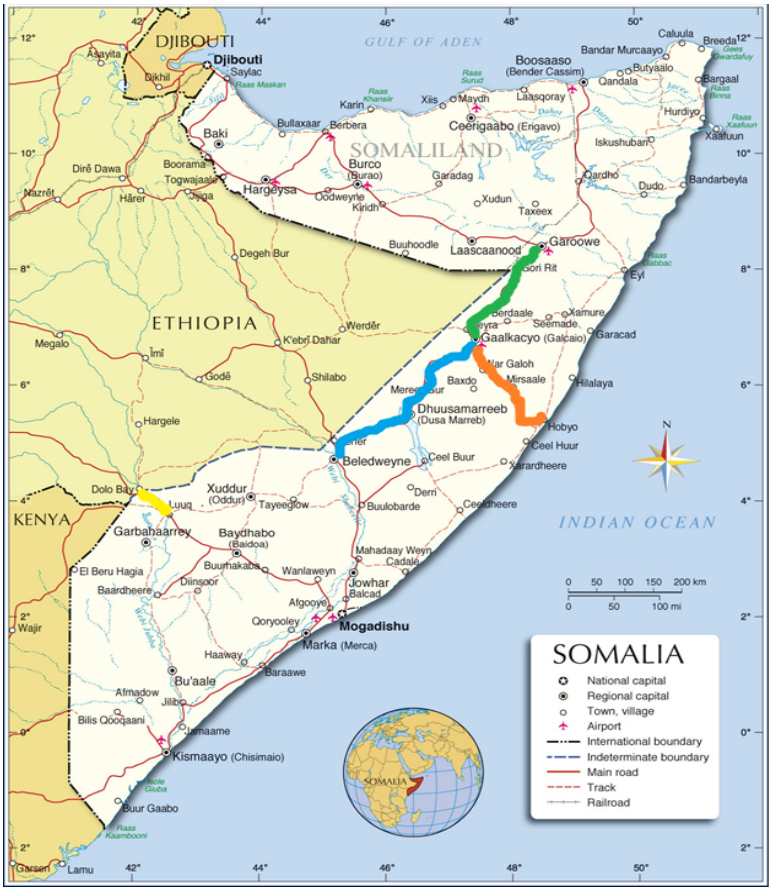
2.4. The project triggers all the Operational Standards in the African Development Bank's Integrated Safeguard Policy including

- *Operational Safeguard 1*: Environmental and social assessment – The project is Category 1 requiring a full environmental and social assessment.
- *Operational Safeguard 2*: Involuntary resettlement land acquisition, population displacement and compensation – The project will lead to involuntary resettlement and a resettlement action plan has been developed.
- *Operational Safeguard 3*: Biodiversity and ecosystem services – The project location includes water systems, forests and communities, the application of the mitigation hierarchy is key in ensuring the sustainability of the project
- *Operational Safeguard 4*: Pollution prevention and control, hazardous materials and resource efficiency – The project will handle hazardous waste that has to handled well in order to minimize pollution
- *Operational Safeguard 5*: Labor conditions, health and safety – The project is implemented through a contract and workers welfare and safety is key to the successful implementation process.

2.5. The administrative and institutional arrangements for environmental management for all sectors in Tanzania are stipulated in the Environmental Management Act No. 20 of 2004. There are seven (7) institutions mentioned by the act, of which the Minister Responsible for Environment is the overall in-charge for administration of all matters related to the environment. The legal institutions for environmental management include the National Environmental Advisory committee, the Minister responsible for Environment, VP Office, The Director of Environment, National Environment Management Council (NEMC) and Sector Ministries. The Regional Administration Act No. 9 of 1997 provides for Regional Commissioners to oversee Regional Secretariats, with District Commissioners directly supervising the District Councils. Local authorities oversee the local planning processes, including establishing local environmental policies.

3. DESCRIPTION OF PROJECT AND JUSTIFICATION

3.1. SRCIP involves the rehabilitation of several sections of Somalia's road corridors in Hirshabelle, Galmudug, Puntland, and Jubaland States of Somalia (See figure below). It is proposed that during the first phase of the project the whole length of each road would not be covered and only certain allocated lengths would be rehabilitated.



Beledweyne-Galkayo, 327km. Rehabilitate and overlay 90km section

Galkayo-Garowe, 240km. Rehabilitate and overlay 85km section

Galkayo-Hobyo feeder road, 241km. Construct 100km compacted gravel

Luuq-Dolow earth road, 80km. Grade and compact the entire 80km

3.2. For the Beledweyne - Galkaiyo section, out of its 395.2 km length, 90 km has been marked for construction. Similar information for the other roads is presented in Table 1. The choice of these roads was made through consultations undertaken during the development of the Somali National Development Plan 2017-2019. The criteria for choosing these roads were: 1) connectivity between the different regions of Somalia and 2) contribution to economic growth and development. The vicinities of these corridors and the general area are very sparsely occupied2 and have recognized but sometimes disputed boundaries demarcating ownership or areas of influence by different nomadic Somali clans. Scattered along the corridors are small to medium sized settlements including towns and villages which also have small populations. Since these are existing roads minimal negative environmental and social impacts are foreseen and their renovations will have to positively contribute to the social and economic development of the areas around the corridor and the whole of Somalia in general. The current state of disrepair resulting from more than 30 years of rehabilitation backlog has hampered the movement of both

people and goods along the corridors. Insecurity in some parts of the corridor might hinder or slow down the implementation of the project.

3.3. The Beledweyne-Galkaiyo road is 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. It links Southern Somalia and Ethiopia (via Beledweyne and Feerfeer). To the south, the road provides access to the Shabele region and Benadir region where the country's capital city and main business centre, Mogadishu, is located. This road provides great trade opportunities for goods coming from the interior. The Shabelle Valley is an area of high potential for intensive agriculture and improving access to this area will further elevate its food basket status and strengthen the country's food security. The road would also stabilise the area by making the preservation of security easier and more effective. This asphalt paved road traverses a total distance of 395.2 KM connecting Beledweyne town in Hirshabelle State and Galkaiyo town in Galmudug State (Road A, figure 2). One part of this road (Beledweyne-Matabaan) is in Hirshabele State and the remainder of the road is located in Galmudug State.

3.4. The Galkaiyo- Garowe road is asphalt paved covering a distance of 229.4 km between Galkaiyo and Garowe town in Galmudug and Puntland States. This road is a continuation of the North-South Corridor. Galkaiyo is located in the Mudug region of North Central Somalia. And the town is divided into two administrative areas located in Galmudug and Puntland States. The Puntland controlled area comprises of Garsoor, Horumar and Israac sub-districts while Wadajir sub-district is administered by Galmudug State. Garowe, the capital of Puntland State, is located in the Nugaal Valley and is bounded by gradually ascending high plateaus whose western part is crossed by several valleys and dry watercourses. In Galkaiyo there are no permanent structures on the RoW but there are some women vendors in the RoW. On the way to Garowe from Galkaiyo the community has taken the initiative to rehabilitate 1 km of the asphalt pavement. After the 1 km rehabilitated by the community the deterioration of the asphalt becomes noticeable and the earlier desribed pattern of road use by drivers whereby they drive on the shoulder or create diversions to avoid corrugations again becomes visible. The RoW is mostly clear at the small settlements on the way to Garowe.

3.5. This is true even for places like Cagaaran established in 1996 by native Puntland clans re-migrating from Ethiopia. Within this area, around the village Buur Salax, there is a junction to a road heading towards Ethiopia with the potential of becoming a cross-border corridor. In this section, up to the town of Bacaad Weyne, the asphalt is of mixed condition ranging from fair to completely damage. Not far from this section of the road there is an IDP settlement with permanent homes built of concrete. Upon reaching Harfo village the road is officially diverted due to 80 KMs rehabilitation works from Harfo village to Jalam village covering 80 KMs funded by the German development agency GIZ. The rehabilitation project was cancelled in September 2018 following several months of disputes over delays in project delivery linked to procurement and late start. The approach taken in the rehabilitation of the asphalt in this section is mixed and ranges from mill and overlay to full reconstruction. Along the way to Burtinle town and within the town itself the asphalt is severely worn out and the edges are no longer identifiable.

3.6. The Galkaiyo – Hobyo Section: This gravel feeder road is 264 km road and connects Galkaiyo to the port town of Hobyo which is under consideration to have its port built and funding commitments have been made by the government of Qatar. As such this feeder road will soon become an important corridor linking the port to Ethiopia. SRCIP involves the construction of a new feeder road that would link Galkaiyo to the port of Hobyo. The road corridor from the seaport of Hobyo via Galkaiyo (to Goldogob in Ethiopia), complements the seaport of Hobyo as gateway link to the hinterlands of the Horn of Africa and even, Eastern Africa. Linking the Somali trunk road system at Galkaiyo with the proposed port at Hobyo, and Galdogob on the Ethiopian border is immensely advantageous for the trade needs of the Ogaden Region in Ethiopia.

3.7. This intervention will complement the ongoing efforts that aim to build the port of Hobyo. It is envisaged that the feeder road would provide an essential route for livestock exports from the hinterland and improve the supply of fish to the interior providing sustainable livelihood to the local fishing communities. This road ascends towards the town of Wasiil passing through ravines and descend towards the Indian Ocean passing through flat grazing land. The beginning point of the road from Galkaiyo is not clear as there seems to be no proper clearly defined RoW but the surrounding areas are not occupied. This area is very sparsely populated and has a few villages on the road. From Galkaiyo, the beginning point of this road is not clear, there is ongoing community effort in building a gravel road from Hobyo to Galkaiyo. So far 60 km of gravel road has been built through community initiative. The local community organization, GOB, managing the construction project is funded through contributions from both the locals and Diaspora. The activities of this community organization are not limited to road construction, but also include the provision of technical and vocational training for the youth.

3.8. The Luuq – Dolow Section: This road connects Luuq and Dolow towns located in the Gedo region of Jubaland States. The construction of the Luuq-Dolow road contributes to the larger Mogadishu-Baidoa-Afgoye-Dolow road corridor rehabilitation. Luuq town is located on a wide meander of the Juba River nearly 70 km to the Southeast of Dolow town which is situated on the riverbank of the perennial Dawa River that merges with Ganaale Dorya River to form the Juba River. The border between Somalia and Ethiopia lies in the middle of the Dawa River, and the marker is on the bridge. This intervention will complement ongoing efforts for the rehabilitation of Mogadishu to Afgoye road. Afgoye is a town in the southwestern Somalia in the lower Shebelle region, a highly productive agricultural area. On the other hand, Baidoa, is the capital city of the South West State and is within the Bay Region, also an agriculturally important and productive region. Thus, an eventual link from Dolow to Baidoa and eventually, Afgoye will cut down transport costs on this section of a major road corridor in Somalia for food shipments northwards.

3.9. The Mogadishu-Baidoa-Afgoye-Dolow road eventually links up with the main road in Mandera and Elwak towns in Kenya (and also Dolow town in Ethiopia) which serves the export of farming produce such as sesame seeds. This road will contribute to the stabilization of the South-West and Jubaland States creating a favourable environment for the preservation of security in Somalia. There are two roads connecting Dolow to Luuq. A worn-out asphalt road built during the Italian colonial period and an informal earthen road. The old asphalt road (traces of asphalt are still visible) is 71.9 km long. Lack of maintenance ruined the asphalt pavement and exposed both the base and sub-base in some areas. Due to the condition of the road the locals use an informal earthen road which is mostly parallel to the old asphalt road but a little bit longer (90km). The seasonal road runs parallel to the old asphalt road on either the left or the right side depending on obstacles on the road. The earthen road is used during the dry season to avoid the roughness of the ruined asphalt road. However, as it becomes impassable during the wet season drivers resort to using the worn-out asphalt road.

4. DESCRIPTION OF PROJECT ENVIRONMENT

4.1. Somalia is located 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. Somalia has an area of 637,655 km².

4.2. Somalia's climate varies from arid to semi-arid and from tropical to sub-tropical depending on the spatial location. The climate varies among locations between tropical and sub-tropical, and between arid and semi-arid. Temperatures inland average 28°C, but may be as low as 0°C in the mountain areas and as high as 47°C along the coast. The average annual rainfall is about 280 mm, although this can reach 500 mm in some areas, such as the western Ogo highlands, and precipitation in generally both negligible and erratic, with seasonal totals being highly variable. Droughts occur every 2-

3 years and are often followed by devastating floods, particularly in the south where the Shabeelle and Jubba are vulnerable to heavy rains in the Ethiopian highlands.

4.3. Erratic and unreliable as they are, there are seasonal patterns of rainfall that are strongly influenced by the Inter-Tropical Convergence Zone (ITCZ), the north-south movement of which results in two dry seasons and two wet seasons each year. The Jilaal, from January to March, is the harshest dry season and results from dry north-easterly winds sweeping down from the Arabian Peninsula. This is followed by the Gu rainy season from April to June, then the Hagaa dry season from July to September, during which sea breezes from the Indian Ocean help cool at least the southern parts of the country. The cycle is completed by the Deyr, a short and unreliable wet season in October and November. The coastal region in the south around Mogadishu and Kismayo has an additional rainy season, the Xagaaye, in July and August, during which there may be isolated showers. Livestock husbandry and farming are adapted to this climatic regime, with herds being concentrated around water sources in the Jilaal, but driven to pastures deep in the interior during the Gu, when rainfed agriculture also becomes briefly possible (see map Somalia: Topography and drainage).

4.4. Somalia's terrain is mostly flat. The Guban plains that parallel the Gulf of Aden coast rise inward towards the rugged Karkaar mountain ranges whose elevation is between 1,800 meters and 2,407 metres above sea at Shimber Berris, the country's highest point5. Southward the mountains descend to the Ogo, an elevated plateau of broken mountain terrain and shallow plateau valleys. The Ogo gradually slopes toward the Indian Ocean and in central Somalia constitutes the Mudug Plain. At the eastern part of the plateau lies the Nugaal valley which has extensive network of intermittent seasonal watercourses. The western part of the Ogo slopes gently southward and gradually merges into the Haud region.

- The Beledweyne Galkaiyo Road Begins at about 600 ft above sea level ending at nearly 950 ft above sea level. The maximum elevation on this road is 1531 ft above sea level and the average elevation is 995 ft above sea level.
- The road between Galkaiyo and Garowe begins at an elevation of 939 ft above sea level in Galkaiyo ending at an elevation of 1642 ft in Garowe. The road gently rises towards reaching a maximum elevation of 2612 ft near Gori Rit 50 km away from Garowe after which it gradually descends towards Garowe. The average slope on this road is 04% - 0.6%.
- The road between Luuq and Dolow begins at an elevation of 480 ft above sea level near the Luuq bridge ending in Dolow bridge at an elevation of almost 600 ft. This road gently slopes upwards for 8 miles reaching an elevation of 573 ft. After one mile the road drives through a small basin that is 9 miles long before ascending to 666 ft above sea level, the highest point on the road. This is followed by a gentle descent towards the Dolow bridge. The maximum slope on this road is 4.5%-3.9%.
- Galkaiyo-Hobyo road starts at an elevation of 960 ft above sea level and gently descends to 127 ft above sea level at 96 miles away from Galkaiyo. Thereafter the road goes through almost half a dozen contours at Wisil before it briefly rises to a small plateau at Gawaan and finally descends to the port town of Hobyo.

4.5. Geology and Soils: Key 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.

4.6. The North Eastern part of the country is dominated by tertiary sedimentary from the Eocene period. Mudug Formation in which the middle part of the Beledweyne-Galkaiyo Corridor is found comprises of marly and biogenic limestones, calcarenites and sandstones. On the Western side of this corridor is the Beledweyne formations consisting of gypsum, marls and dolomites. On the Beledweyne to Galkaiyo Corridor the soils are Fluviol around the riverine area of Beledweyne and then briefly changing into arenosols. The remainder of the corridor is made up Gypsisols. From Galkaiyo to Garowe the soil types are mixed consisting of Leptosols, Calsisols, and Gypsisols. The Luq-Dolow Corridor has a mixture

of Fluvisols, Calcisols, Arenosols and Leptosols. The Galkaiyo to Hobyo Corridor lies on top of Gypsisols, Solonchaks and Regosols .

4.7. Water Resourcces and Hydrology: Rivers Juba and Shabele 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 mean annual runoff at the border between Ethiopia and Somalia is 5.9 BCM for the Juba River at Luuq and 2.3 BCM for the Shabelle River at Beledweyne (AfDB, 2010 & FAO, 2005). The Beledweyne to Galkaiyo Corridor goes through different aquifers with high to low to high productivity. At Beledweyne the sedimentary intergranular aquifer has high productivity. The corridor then passes through a large swath of basement aquifer which has low productivity. On this part of the road you also have unconsolidated aquifers with low to moderate productivity as is the case on the Galkaiyo to Hobyo corridor. From Galkaiyo to Garowe the road passes through different aquifers including basement and unconsolidated aquifers. At Garowe the sedimentary fracture has moderate to high productivity. The Luq-Dolow Corridor is dominated by the Sedimentary Intergranular Fracture Aquifer which has low to moderate productivity. Apart from the areas along the Shabelle and Jubba Rivers the rest of Somalia relies on groundwater for domestic use, livestock and small-scale farming. Boreholes are generally between 90 m ad 250 m deep and in some areas can be 400 m deep. The shallow wells are usually less than 20 m deep. While yields vary from one aquifer to another most shallow wells yield between 2.5 and 10 m^3/hr and boreholes yields are mostly between 5 to 20 m^3/hr.

4.8. The Luuq-Dolow road begins at the banks of the Jubba River in Luuq town and ends at the bank of River Dawa in Dolow Town. River Dawa forms part of the Somalia-Ethiopia boarder where the Luuq-Dolow Road ends at the bridge crossing the river. The Dawa joins Ganaale Dorya another perennial river from the Ethiopian highlands to form the Juba River on the outskirts of Dolow Town. This road runs parallel to the Juba River where the closest point to the river is about 5 km and the furthest nearly 14 km away. Along the Luuq-Dolow road significant streams include Togga Fuud Ambiyo. Drainage on this road is provided by more than 50 structures mostly in the form of culverts of which nearly a dozen are severely damaged. The Beledweyne-Galkaiyo Road begins from about 6 km northeast of the Shabelle River. There are several significant seasonal streams through which the road crosses such as Togga Saalax Jeele. These toggas are also found along the Galkaiyo-Garowe Road where the most significant stream is Togga Garowe.

4.9. Land Use: In Somalia, rangelands are estimated to be about 80 per cent of the nation's land area. On the Dolow-Luq Corridor land is used for grazing and for farming around the river. The same is the case for the first part of the Beledweyne-Galkaiyo Corridor. The rest of the land where the corridors cross is used for grazing. Between the main towns where trade occurs there are several villages and small towns that serve the nomadic communities and travellers along the corridors.

4.10. Land ownership is normally on a clan basis or *degaan*. Between 1969, after the coup of the civilian government, the military government took control of most of the collectively owned community lands. In the current constitution land is owned by the government, but again 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 is uniform comprising large towns such as Galkaiyo and Garowe on the corridor. Between these urban centres are scattered villages and small town that serve as trade centres for the pastoralist communities. On the riverine parts of the corridor, Beledweyne and Dolow areas, the communities can be described as agro-pastoralists.

4.11. Land Cover and Vegetation: 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). Figure 28 shows the land

cover in Somalia. In Southern Somalia particularly, the riverine areas of Kismayo there are some mangrove and acacias which are dwindling at a high rate due to over exploitation from charcoal trade. On the Galkaiyo to Garowe Corridor the land is mostly covered by various local shrubs and some areas that can be described as grassland. The Luuq-Dolow road is dominated by acacia with broad canopy. From Galkaiyo to Hobyo the land cover is dominated by shrubs.

4.12. Natural vegetation along the project site is almost uniform and it is mainly Acacia Commiphora deciduous bushland. This vegetation type is a representative of Somali-Masai Acacia-Commiphora deciduous bushland found it Tanzania. It is being characterized by an assemblage of small trees and bushes growing on rocky soil with scattered emergent trees of Adansonia digitata (Boabab). Common trees found in this vegetation includes; Commiphora spp, Acacia senegalensis, Euphorbia tirucalli,E. candelabrum, Delonix elata and succulents species of Opuntia vulgaris, Cissus quadrangularis, Adenia volkensii as well as Adenium obesum. Settlements along the project site have alien plants which area characterized by ornamental plants and includes; Bouganvillea, Catharanthus rosea, Cenna siamea and Mangifera indica**.** Hobyo Grassland and Shrubland ecoregion consists of white and orange sand dunes dominated by perennial dune grasslands and sedges . This region also supports six endemic species of birds, mammals and reptiles. This ecoregion is a long, narrow coastal strip from just south of Mogadishu to some 250 km north of Hobyo. It is a low-lying area of coastal plain with dunes of white and orange sand and associated dune grassland. The dunes reach a maximum height of 60 m, and the dune field is about 10 to 15 km wide along its entire length. Inland, the habitat changes to dry savanna and semi-desert vegetation.

4.13. 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 four roads to be rehabilitated are goats, sheep and camels. The goats and camels are bred mainly in the central and South of the country and cows become more visible along the Luuq-Dolow road. The country has lost many of its wild mammals such as elephants to poaching. 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*). Other endemic mammal includes the silver dik-dik (Madoqua piacentinii), one of the world's smallest antelopes, and the Somali golden mole (Calcochloris tytonis). The country has several reptile species of which one of the most renown 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.* The country is estimated to have several hundred bird species including the ostrich and several dove species.

4.14. Population: The last official census of Somalia was in 1975, when the population was estimated at 3.2 million people. 2015 populations estimate by FAO show a total population of 10, 787, 000 comprised of 6,388,000 (59%) rural and 4,399,000 (41%) urban7. Current estimates from the World Bank shows a total population of 14, 742, 523 . At least 70 per cent of Somalia's population is under the age of 30.

4.15. Gender: 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% quoata declared for women representatives in both the lower and upper houses of the parliament. According to recent data from the UNDP10 the 2017 share of women seats in parliament was 24.3%. Traditionally the Somali women have been the "engineers" building the traditional homes, *aqal somali,* and "food processors" making preserved meat referred to as *oodkaq/muqmad*. They are also the fetchers of water for domestic use while it is the men who work at the well to provide water for the herds. Somali women are actively involved in business mainly trading in household goods, gold, and khat. Nearly all the khat vendors and tea stall owners along the corridors are women. When it comes to the Gender Inequality Somalia is ranked number four globally with a rating of 0.776 where 1 represents

complete inequality11 .Somalia's maternal mortality ratio shows 723 deaths per 100, 000 live births while the adolescent birth rate for teenagers aged between 15 and 19 is 100.1 per 1,000 births.

4.16. In labor market sector, the ILO puts on estimate employment to population ratios for Somalia at 41%. The labour force participation rate is estimated at 65.9% and 37.6% among males and females, respectively. In overall terms, Somalia suffers from high unemployment and under-employment. The country has relatively high vulnerable unemployment estimated at 59%, and a considerable unemployment rates for persons with upper primary level of education at 20.9% and those with secondary level of education an unemployment rate of 34.6%. Also, 41% of the employed in Somalia are in elementary occupations. The largest proportion of employed persons are elementary occupations (41%) followed by professional (15%), Skilled agricultural, forestry and fishery workers (10%) and craft and related trades workers (9%).

4.17. In environmental sector, the collapse of the State and governance structures as well as the lack of security, with resulting chronic conflict, low rule of law and an environment has placed enormous obstacles to the consistent and sustainable management of environmental resources. This has led to rapid deforestation creating the conditions for desertification in semi-arid livelihood zones. This condition is felt very acutely where forests have been depleted due to uncontrolled or managed charcoal production for export, despite a ban, and a growing domestic as charcoal remains the primary domestic cooking fuel. Equally, pastures and rivers are being unsustainably exploited, diminishing economic opportunities they could provide and diminishing essential resources required by the agricultural sector to manage times of crisis or stress.

4.18. Waste management remains a big challenge in Somalia. The are no functional solid and liquid waste management systems in nearly all of the country. Along the corridors waste dumping near the road on the outskirts of settlements is a common practice. This is also the case in riverine areas such as Dolow where waste is also dumped on the river banks.

4.19. Access to Social Services: 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 school13. 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. Somalia's healthcare provision is dominated by the private sector save for mother and child health centres funded by donors. Along the corridors nearly all the small settlements lack health care facilities and people are forced to travel to nearby urban areas to seek medical treatment.

4.20. Somalia's economy is built on pastoralism in which nearly 50% of the community participates. Historical data from the 1980's shows agriculture generating 66% of the GDP and Livestock and livestock products accounting for 51% of the GDP (World Bank, 2006). The manufacturing sector generating less than 5% of the economy.

5. SUMMARY OF PUBLIC AND STAKEHOLDER CONSULTATIONS

Project participants raised a number of expectations as detailed in section of the social benefits from the project. The majority of the regional authority and road site- affected and beneficiary communities are aware of the upcoming Project. Almost all respondents support the project, saying that currently infrastructure rehabilitation and employment opportunities for the vulnerable people especially IDPS in Somalia are urgent. They believe that upgrading the roads will help them join the country's mainstream socioeconomic development. With regard to the project impacts, almost all the respondents have no significant fear on the project impacts.

The consultation meetings led to the following suggestions: (i) work with government authority as much as possible; (ii) public awareness and notification to the community in the rock extraction areas and

market street where the pilot road will be constructed so as to cope with the likely social costs/negative consequences that may arise from the project; (iv) construct bypasses at congested road, especially wherever there are frequent and/or prolonged traffic jams; (v) provide sufficient cross drainage "Irish crossings" to avoid flooding and ensure natural flow of fresh and wastewater; (vi) local authority helps in screening the laborers for security risks; and (vii) local authority allocates the waste dump sites; blocking, policing of the construction site and solving disputes that may arise.

The meetings also recommended the following as remedies to the environmental concerns (i) trees should be planted along the areas of extraction; (ii) excavation and blasting activities should be controlled, especially avoiding grazing areas; (iii) Awareness, campaign to avoid areas with trees during extraction; (iv) the holes created should be refilled; (v) quarrying should be done alternatively to reduce over loading one area and causing significant vegetation/fodder losses; (vi) sensitizing people to boil water for drinking purposes; and (vii) leftover construction materials must be disposed off before leaving. Details of commitment and responsibility including monitoring.

Also, the stakeholders agreed that for the smooth implementation of SRCIP and ensuring the Project's objectives are met and sustainable, attention should be taken to account for the followings:

i. The choice of road sections to rehabilitated has to be done in a transparent manner that considers social-political and technical aspects;
ii. Damaged culverts and bridges along the roads have to be repaired especially in areas where the bridges are completely damaged and the road is impassable;
iii. During the design of the Galkaiyo-Hobyo road the current plans to build the port of Hobyo has to be taken into account given the likely increase of traffic particularly heavy trucks.

6. POTENTIAL ENVIRONMENT AND SOCIAL IMPACTS AND MITIGATION MEASURES

6.1. Negative Impacts

- **Involuntary displacement:** The main potential adverse impact of rehabilitating the corridors will be involuntary displacement of PAPs who have encroached on the RoW. This will lead to loss of assets and income. It is estimated less than 500 persons will be affected along all the corridors. These PAPs are mostly roadside vendors and owners of temporary structures and their number will be significantly reduced once the exact locations for rehabilitation are identified.
- **Generation of noise and vibration**: During the construction phase vibrations and noise caused by construction machinery will disturb both humans and animals. Currently noise from vehicles driving on the corridor leads to frightening of animals grazing nearby the roads. *In some cases, this results in the animals jumping into the roads and causing accidents. Death of livestock struck by vehicles has in some cases led to conflict between drivers and herdsmen.*
- **Pollution of water resources**: The corridors cut across many seasonal streams and this may result in pollution caused by construction materials such as concrete or even worse hazardous materials such as bitumen and oil. This type of pollution may also occur in places where the corridor is adjacent to rivers such as Dolow on the Ethiopian border. The risk of water pollution is exacerbated along the Galkaiyo to Hobyo road where villagers harvest water from the runoff.
- **Waste Generation:** Activities undertaken during construction and the presence of campsites will lead to the generation of waste including plastic containers, metal parts, and sanitary waste and used motor oil. The disposal of this waste will present a great challenge given the lack of waste management facilities along the corridors including settled areas where waste is currently dumped on the outskirts.
- **Increased insecurity**: In some parts of the corridor especially between Luuq and Dolow, and Beledweyne to Mataban areas where many insurgents are based. Campsites are likely to be susceptible to raids by the insurgents.

- **Loss of tree cover**: In this project, a number of areas likely to be negatively impacted on the natural and physical environment; ranges from: The loss of tree cover from sites where rock extraction for SCRIPS would be taken. Participants consulted agreed that a considerable quantities of vegetation and woodland are being lost by the ongoing stone quarrying and would be further affected during the construction phase by the following actions; i) rock excavation and earthworks, ii) transportation of materials, construction of temporary facilities at sites, iii) and land clearance. Construction work will cause loss of vegetation mainly from quarry sites where there are uncultivated grassland and shrub lands.
- **Increased incidences of water borne diseases like malaria, diarrhoea and Cholera**. During stone excavation, deep holes are created and left uncovered. These are prone to water logging during rainy seasons and become mosquito breeding grounds thus increasing incidence of malaria in the community. The water itself can be used for drinking in households and if not boiled may risk spreading Acute Water Borne Diseases (AWDs) like cholera, Diarrhea and Typhoid.
- **Pastures/fodder for livestock is lost**: Similarly, in the process of stone excavation, trees/shrubs which are used as fodders for livestock feeding are destroyed. We observed that livestock (camel, goats and sheep) were not grazing in areas where stone extraction was taking place and/ or in the old and abundant quarry sites due to lost vegetation cover. The elders interviewed also agreed that in 30-40 years ago, the land in Somalia used to be very green and livestock would not track long distances to get the fodders unlike recently due to the destruction going in the environment.
- Injuries to people involved in stone extraction and chiseling related activities (very high in magnitude). Through Focus Group Discussions held, more than 50% of participants were observed to have injuries in one form or another e.g. on nails, fingers, eyes and other body parts associated to stone extraction and/ or chiseling activities. Cases of injuries are associated with use of rudimentary/ traditional tools and improper skills among workers;
- **Other noticeable changes to the environment included, the loss of fuel wood** in the community as a results of extraction activities; disturbance to the natural habitat for wild animals increasing the cases of snakes and scorpion bites. Also in a long run, the land is left bare prone to erosion and deep gullies are created leading to siltation of streams and water bodies during operation phase of the project.

6.2. Positive Impacts: New water sources emerging (livestock and domestic purposes). Stakeholder agreed that the holes created can harbor water during rainy season which are used for both livestock and domestic used including drinking purposes. This is particularly important in a region which on record experience recurrent drought causing catastrophic humanitarian emergencies as observed in IDPs. Other positive impacts include:

- Reduction of travel time during transportation;
- Reduction of greenhouse gas emissions due to less travel time and consumption of fossil fuel for vehicles; besides improved trade/Small Scale Medium Sized Enterprises which will substitute forest extraction for firewood as alternative livelihoods;
- Improved access to community services like hospitals, schools and markets
- Increased income & employment to workers and input suppliers (extractors, chiselers, construction companies, and IDPs, food suppliers for causal workers);
- Reduction in Vehicle Repair costs;
- Improved trade to will improved revenue collection to the government from taxes;
- New water sources/points are emerging for livestock and domestic purposes as a result of water collecting in the holes created from excavation activities;
- The truck activities itself in the process of picking stones, is creating new road networks in the community. This is important especially for a region where government is weak and unable to construct new roads and maintain;

- Creating good public image of the Federal Government as becoming capable to deliver public goods and services to the community; this will all consolidation of power for lasting peace and recovery of the country;
- Improved road safety due to reduce accident rates.

7. MITIGATION MEASURES

ACTIVITY PHASE	ENVIRONMENTAL AND SOCIAL ISSUES	REMEDAL MEASURES	APPROXIMATE LOCATION	TIME FRAME	MITIGATION COSTS
CONSTRUCTION PHASE	Trees are lost from the land where rock extraction will take place	1) Awareness campaign to avoid areas covered with trees 2) Tree planting in areas of excavation 3) Extracting rocks in alternate manner to avoid over concentrating the losses on one place	Quarry sites	During rock extraction	To be included in Project preparation cost
	Caves are being created at the quarry sites, creating gullies and sometimes water logging (causing malaria and cholera cases)	1) Sand filling holes created 2) Awareness campaign to ensure refilling the holes	Quarry sites	During rock extraction	To be included in Project preparation cost
	Increased traffic jam, noise, dust along the street, community during construction,	1) Blocking the area under construction 2) Police to monitor and block the road 3) Putting road signs and indicators 4) Diversion of the roads access to the city	Pilot roads under construction	During design, contract and tendering stage	To be included in Project preparation cost
	Pastures/fodders for livestock grazing are lost	1) Quarrying should not be in grazing areas	Quarry sites	During rock extraction	To be included in Project preparation cost
		2) Awareness campaigns to avoid extraction in grazing areas			
CONSTRUCTION PHASE	Increased incidence of child labour especially in IDPs because road works with provide alternative sources of livelihoods	1) Food provision at school to encourage attendance 2) Awareness to avoid children working at the construction sites	Quarry sites	During construction stage	To be included in Project preparation cost
	Natural habitats for animals are disturbed e.g. for snakes and scorpions thus more cases of animal bites	Killing of snakes and scorpions	Quarry sites	During stone extraction	To be included in Project preparation cost
	Injuries as a result of using traditional tools in extraction and chiseling process	1) Procuring right equipments for workers 2) Training workers on appropriate methods	All project corridor i.e. at quarry sites and pilot road	During rock extraction, chiseling and construction stage	To be included in Project preparation cost
	Accumulation of solid waste during construction	Dumping off site solid waste	Outside the municipality	During design and contract	To be included in Project preparation cost
	Littering and waste generated from workers	1) Sensitization /awareness on proper solid waste management 2) Dig incinerator for dumping wastes	Along the pilot road	During design and contract	To be included in Project preparation cost
CONSTRUCTION PHASE	Workers causing depletion and polluting of water used by local communities for domestic water supply	Contractor providing water to their workers	All water resources likely to be impacted along the project corridor.	During design and contract	To be included in Project preparation cost
	Workshop construction and operations: Contamination of both surface and groundwater	Constructing oil sock pit to collect the waste oils	All water resources likely to be impacted	During design and contract	To be included in project preparation cost

	through oil spills Inflow of foreign equipments and technology for road construction/workshop construction		along the project corridor.		
	Workshop construction and operations :Air and noise pollution from workshop construction and operations	1)Closing the road, people avoided from using the road 2)Using exhaust maniple which reduces noise	All along the Project corridor	During design and contract	To be included in project preparation cost
	Demolition of structures within road reserves is associated with: air and noise pollution and if not carefully handled, collapsing building and debris may injure workers and general public	Awareness of the community to avoid areas of construction	Along the roads under construction	During design and contract	To be included in project preparation cost
	Hauling of construction materials such as gravel, fill materials, water may result; staining of household goods and dust	1) Community awareness to avoid such areas 2) Blocking the construction sites & policing	Along the roads under construction	During design and contract	To be included in project preparation cost
CONSTRUCTION PHASE	Hauling of construction materials such as gravel, fill materials, water may result; communication problems due to noise	1) Awareness of community to avoid such areas 2) Blocking the street under construction & policing	Along the roads under construction	During design and contract	To be included in project preparation cost
	Hauling of construction materials such as gravel, fill materials, water may result; disruption of sleep	Working only day time	Along the roads under construction	During design and contract	To be included in project preparation cost
	Traffic diversion will cause: congestion, traffic accidents along the diversion roads	Vehicles will be allocated a wider road as diversions	Municipality especially along business streets	During design and contract	To be included in project preparation cost
	Flooding of the road due to disruption of natural water flow during construction	Construction of Irish crossings to ensure smooth flow of water	Along the roads under construction	During design and contract	To be included in project preparation cost
	Selection of stone quarry sites and construction workers; perceived unfairness by some community members	Use of quarry Cooperatives to ensure equally supply of the stones from different sites	Along quarry corridor	During design and contract	To be included in project preparation cost
	Selection of stone quarry sites and construction workers; negative attitude towards government initiatives by some groups	Informed the people that is donor project, a banner will be printed for better awareness	Along quarry corridor	During design and contract	To be included in project preparation cost
	Chiseling-breaking and shaping stones into small pieces lead to; increased deposits of stone wastes in the environment	1) Training on proper chiseling by Trainers of Trainers, Providing training manuals. 2) Wastes generated will be used for casting concrete, backfilling the floor of the houses and back filling the road	Along quarry corridor	During design, contract and tendering stage	To be included in project preparation cost
CONSTRUCTION PHASE	Stone/rock excavation leads to; excessive exposure of workers to extreme weather (cold or heat)	Shades provided against heat & blankets against coldness provided to workers	Along quarry corridor	During design and contract	To be included in project preparation cost
	Vehicular traffic causes: human and livestock accidents, disrupting communication in hospitals and places of worship due to noise from traffic	1)Sensitizing the community about the road work and requested to adopt to the situation	Along project corridor / municipality and the quarry sites)	During design and contract	To be included in project preparation cost

		2) Making slowing point/ridges along the road to reduce over speeding 3) Road signs /indicators			
	Vehicle emissions increases air pollution causing: increased incidences of respiratory and eye infections	1) Providing masks to workers 2) Sensitizing /mobilization to avoid community accessing the site 3) Posters to avoid inhaling dust/ smoke	All project corridor	During design and contract	To be included in project preparation cost
	Medium and light grading disrupts traffic flows: increasing pressure on water sources used by the community	Contractor provides the water	All water resources likely to be impacted along the project corridor.	During design and contract	To be included in project preparation cost
OPERATIONAL PHASE	Gully formation and water logging providing breeding grounds for vectors and incidences of diseases	1) Supplying insect sprays. 2) Mobilization and sensitizing on use of clean water, boiling	Quarrying communities	During design and contract	To be included in project preparation cost
	Siltation of streams swamps by soil washed away from excavation sites.	Sand filling the holes created	Quarrying communities	During design and contract	To be included in project preparation cost

8. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

8.1. Environmental and Social Management Plan (ESMP) intends to set forth "environmental and social conditions" that the Project proponent shall adhere to. It aims at ensuring effective implementation of the proposed mitigation measures. The monitoring programme will be used during the preconstruction, construction, and operation phases. Specific environmental and social aspects to be monitored will include:

- Number of jobs created and locals employed in the project;
- Level of women participation in the project;
- Number of community consultations and awareness campaigns carried out;
- Recruitment of environmentalists to monitor the works;
- Level of involvement of the State governments in monitoring the works;
- Number of accidents;
- Number of complaints registered with the grievance redress committees;
- Levels water and air quality; and
- Compensation of PAPs

8.2. The contractor's environmental and social officer will carry out daily surveillance to ensure implementation of social and environmental management measures identified in the bid documents and requirements included in the works contract. The environmental and social officer from the engineering supervision firm will have the responsibility of ensuring the contractor's compliance on a daily basis. Monitoring will be led by an ESIA consultant specifically hired to monitor ESIA & RAP implementation in accordance with the Bank OS policies.

8.3. The ESIA consultant will be assisted by environmental and social officers in each of the four state governments where the project will be implemented. Each of these officers will on a weekly basis conduct random site inspection to verify implementation of the mitigation and enhancement measures identified for the project. The four environmental and social officers will prepare weekly reports for the ESIA &RAP consultant who in turn will submit monthly, quarterly progress reports and annual environmental monitoring reports to the Department of Environment at the Primes Minister's office, the Federal Ministry of Public Works and the Bank.

8.4. *The Civil Works Supervising Consultant* will be responsible for overall project management. The Consultant will be responsible for ensuring day to day implementation and compliance with the portions

of ESMP. The Engineer will ensure that the Contractors provide appropriate training for their staff on ESMP.

8.5. *The Contractor will ensure the control and limitations* of disturbance to the project site, routes, and its surrounding environment and communities during the construction cycle of the project. Within 60 days upon notification of contract award, the contractor shall prepare and submit site specific Environmental and Social Management Plan (SSESMP) and Health and Safety Plan (SSHSMP). The Plan shall describe measures to be followed to protect the environment, public, local communities, workers, and ecological habitat in proximity to the Project operational areas.

8.6. Monitoring Plan: *Environmental and Social Monitoring Plan is an objective, periodical, reliable, and continuing process of observation and assessment of environmental changes*. It is intended to ensure implementation of mitigation measures is done the way they have been proposed and in accordance with the regulations and standards. It is therefore based on monitoring indicators, which will have to be compared with targets to gauge the effectiveness of the mitigations plans. There will be two basic forms of monitoring as follows:

- Effects monitoring: This will record the consequences of activities on one or more environmental components. This will involve physical measurement of selected parameters or the execution of surveys to establish the nature and extent of induced changes.
- Measurement Based Inspection: This will involve evaluation of trends in the values of environmental and social parameters systematically measured and collected, to ensure that they are within acceptable legal and technical standards. This will involve collection of samples for analysis. In this, water and air samples will be collected and analyzed.

The main tools that will be used for monitoring are checklists, visual examinations, and quantitative measurements of environmental effects monitoring parameters. Written records will be kept detailing the dates that monitoring took place and the findings of the monitoring. To ensure effective implementation of the mitigations measures, the Engineer shall deploy an Environmental and Social Specialist for regular monitoring and reporting of day to day implementation of ESMP by the Contractor. The Environmental and Social Specialist will also advise the Resident Engineer on measures to take against the Contractor in the event that the Contractor fails to comply with SSHSMP and SSESMP as well as other environmental, social, and health and safety requirements of the Contract.

9. INSTIUTIONAL CAPACITY AND MITIGATION

9.1. The implementation of the project is associated with the following risks, as discovered in the survey.

- Poor security and working relationship between States Administration and the politicians with the Federal Government may affect SCRIP implementations
- Used of traditional tools associated with injuries on eye, nails and other body parts;
- Delayed shaping of stones associated with hardening and very difficult to forge into recommended shapes;
- Drudgery to women as they carry gravels on their backs using jerry cans;
- Far distance to access the quarry sites poses risks of exposure to clan militias and other groups opposed to constituted government;
- Clan militias if workers not screened well they may also join as causal laborers posing security threat.

9.2. Various institutions will be involved in the rehabilitation of the roads at both the state and federal levels of the government. For the most part these are the public works ministries and in some areas such as Puntland and Galmudug highway authorities will be involved. These institutions have limited capacity to carry out preparation of ESIAs and RAP and carry out related implementations. Currently in Somalia ESIAs ad RAP preparation are only undertaken when the funding agency's policies require such measures. This lapse has led to significant setbacks in some recently completed or ongoing road building

project in the country. *It is of high importance and significance that units capable of preparing ESIAs and RAPs are established at the federal and state public works ministries especially given the projected increase in infrastructure development activities in Somalia.*

10. COSTS: The estimated cost for ESMP implementation is USD 500,000.

11. CONCLUSIONS AND RECOMMENDATIONS

11.1. Almost the entire projects predicted no adverse and insignificant environmental impacts both during construction and operational phases. This is because, the sites of project activities are state owned former road reserves and located far from human settlements. Where the impacts are predicted, they are short term and reversible at reasonably very low costs with simple engineering solutions. These impacts are manageable; most of them can be minimized through engineering solutions easily incorporated into project design. However, it is necessary to ensure that the EMP and monitoring plan are well implemented.

11.2. In the absence of the projects, the impacts to both the social and environment will substantially be very high than with the projects; as infrastructure is highly linked to the people's livelihoods and environmental degradation. Without the project, the community will continue to degrade the environments e.g. charcoal burning as alternative livelihoods but will reduce as trade gets rejuvenated through improved access roads. Worst still failure to implement the projects will likely raises serious concerns on the legitimacy/governance of the Federal Government to effectively deliver public goods and services and more importantly threatening livelihoods situation to already impoverished population in Somalia. With SCRIP, the public image of Federal government will improved for the lasting peace and recovery process of the country. Since the projects locations have yet to be assessed by the engineering design, continued monitoring needs to be carried out to examine whether remedial actions are required to deal with unforeseen impacts, if any.

12. REFERENCE AND CONTACTS

Environmental and Social Impact Assessment Report for the Proposed Somalia Regional Corridors Infrastructure Programme
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PROJECT: **SOMALIA REGIONAL CORRIDORS INFRASTRUCTURE PROGRAMME (SRCIP)**

COUNTRY: SOMALIA

RESETTLEMENT ACTION PLAN SUMMARY FOR THE PROPOSED SOMALIA REGIONAL CORRIDORS INFRASTRUCTURE PROGRAMME (SRCIP)

Preparation Team	**Team Leader:**	J. KATALA, Senior Transport Engineer, RDGE.3 E.CHIEGINA, Consultant, Transport/ Somalia, RDGE3
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1. BACKGROUND

1.1. Somalia has about 21,933km long road network in poor to very poor condition. 90 % of the primary roads serving major regions including those under SCRIP have deteriorated and are well past their designed life-span of 30 years (National Development Plan, 2017-19). With many years of protracted armed conflicts and recently formed weak Central and State federal governments pose, a huge maintenance backlog to road infrastructures in the country. In such context, long term development of infrastructure sector largely depends on international community beside humanitarian support for recovery process and sustainable development of Somalia.

1.2. By large, the road sector faces serious budgetary constraints due to country's inability to access international financing for large-scale infrastructure projects which also limited the possibilities of investment in the road sector besides lack of a centralized coordination and regulatory mechanism, haphazard sector development activities hamper the realization of the long term national vision, underpinned and delivered through systems based approach to long term national infrastructure planning. Furthermore, there are no significant budget allocations for the maintenance of infrastructure investments.

1.3. The Somalia Regional Corridors Infrastructure Programme (SRCIP)'s developmental objective is to support Somalia's economic growth by providing enhanced transport facilities that are reliable and cost effective and to improve connectivity, accessibility and transportation of goods, persons and service thereby supporting economic and social development as well as stability of the country as a whole. Further, the programme aims to improve the management of the road sector at the national and regional levels by reinforcing the capacities of federal and regional institution ns that manage road infrastructure.

1.4. The project includes rehabilitation and construction of four priority roads identified for intervention, namely

v. BeledWeyne - Galkayo existing 327 km, 7.3 m wide paved road (proposed intervention: rehabilitation and Triple Surface Treatment –TST – 90 km selected stretch);
vi. Galkayo - Garowe existing 240 km, 7.3 m wide paved road (proposed intervention: rehabilitation and TST 85 km selected stretch);
vii. Galkayo - Hobyo 241 km, 3.65 m wide gravel feeder road (proposed intervention: construction of 100 km of compacted gravel road); and
viii. Luuq, Ganane-Dolow existing 80 km, 7.3 m wide earth road (proposed intervention: grading and compacting the entire 80km).

A major part of the investment in the roads and transport program in major towns can deliver livelihoods, trade and cash transfer benefits to already impoverished/vulnerable population. Largely agreed, this could help create employment, link markets, and reduce the cost of doing business, making Somali enterprises more competitive.

1.5. Given the characteristics of the project area and the nature of the works and services to be carried out, the civil works component of the project will be executed individually via the traditional route of ***design-tender-and-construct.*** By having each road project as a "stand alone" package, assignments and works on the various roads can start simultaneously after due consideration of security risks in each project areas. To enhance the management of the road sector, the project will provide technical assistance and capacity building to the FGS's MPWR&H and to public works ministries in Galmudug, Hirshabelle, Jubaland, Puntland and South West State.

1.6. Rationale for Selecting Priority Sections

The Federal Ministry of Public Works, Reconstruction and Housing, in consultation with counterpart State Miniseries, has selected the priority road rehabilitation sections. A combination of priority need, equity between States and use were used to select specific sections, including:

- The road between Galkayo and Garowe is an important road connecting between the main urban centers in Puntland. An 80 Km road rehabilitation initiative, funded by European Union and Germany, was initiated started between Jalam and Harfo villages near Garowe. It has been agreed that the 85Km of SRCIP program will focus on the road section between Galkayo and Faratoyo.
- Government official extensively uses the road section between Dhusmareeb and Adado. Dhusamareeb is the capital city of Galmudug state, while Adado is hosting city of the parliament.
- The road between Feefeer and Belet Wayne connects between Somalia and Ethiopia and is widely used to exchange of economic goods between the two countries. . Hirshabelle State has recommended rehabilitating this section of the road.
- The other two roads are gravel roads and will full rehabilitated. The local community initiated the road between Galkayo and Hobyo and 164 km of road gravel road has been rehabilitated. The SRCIP program will complete the remaining 100Km. The road corridor between Luuq and Dolow was a major agriculture production area and was used to call the breadbasket of Somalia. Priority was given to this road to encourage the agriculture production and marketing in the region

2. PROJECT IMPACTS

2.1. A number of measures were implemented to ensure that the impact of structures was minimized as follows:

- *Realignment of the road between Luuq and Dolow* to avoid both permeant and temporary structures, as well as community structures (Mosques) within the road right of way. The local government recommended instead of relocating and compensating all these PAPs, to use realignment with exiting road in the town. Additionally, the local government recommended to build a community market to prevent people occupying on the road right of way.
- In the Hirshabelle portion (Belet Wayne and Feer Feer– there are no PAPs. *No relocation is required*
- In the road section between Dhusamreeb and Adado (90km). The road rehabilitation start outside of the city of Dhusamareeb and no PAPs. There is a small village (Mareer Guur) in the middle and no PAPs. In the town of ADAD, few temporary structure and street vendors occupy in the right of way of the road. During the consultation, all PAPs suggested that they are willing to relocate if the government provide or build a local market. *Both community leaders and the local and state governments recommended building a community market place to prevent people in occupying the right of way of the road. If a new market is constructed, the PAPs might need assistance to move in and dismantle their existing temporary structures, the costs have been valued at the current market value;*
- Road between Galkao and Faratooyo - The road starts outside the city of Galkao and business or community structures will be affected in the city of Galkao. Between Galkao and Farayooyo, there is a small village (Bacad Wayne) and few temporary structures and street vendors will be affected. *Similarly, it has been suggested to build a community market.*
- The road to Hobyo - there are no PAPs within the road right of way.

- There is a strong support from all levels of governments, the community leaders and PAPS, to build a local community market, instead of compensating each PAPs. There is a potential probability these people will take compensation to relocate and within few days will re-occupy the road right of ways.

2.2. Project Affected Persons: : 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. As a result, no land take is expected from the project but hat *a total of 102 project affected persons will be economically and physically affected.*

3. POLICY AND LEGAL FRAMEWORK

3.1. The Somali national laws are still being developed and at the moment there are many parts, including land related matters such as expropriation, which are going through the parliamentary processes. Notwithstanding this, in the current federal state system the different levels of government have developed laws that address land issues or reverted to laws that existed prior to the collapse of the Somali Democratic Republic.

3.2. National Laws

The current supreme law in Somalia is the Provisional Constitution of 2012. The right to own property and the right to compensation is addressed in Sections 1 and 2 of **Article 26** which state:

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

3.3. Municipality of Mogadishu Laws

Law Number 10[1] of the Municipality of Mogadishu passed on 17/12/1980 deals with compensation related issues. **Article 15** states any building constructed without following the municipal due processes will be considered to be illegal. Section 1 of **Article16** indicates in the fulfillment of community standards, the Mogadishu Municipality can order the demolition of illegally constructed structures, whether single structures or whole estates, once such a decision is reached by the District Councils' Permanent Committees. According to Section 2 of **Article 16** the demolition of illegally constructed structures can take place in the case of one or both of the following reasons:

- In order to vacate the occupied land for purposes other than residential use; and/or
- Standardization of illegally constructed estate in compliance with urban planning

Section 3, **Article 16** states that: Illegally constructed structures cannot be used for the purpose of acquiring land and its eviction will not lead to compensation. But the municipal government can compensate the affected persons with residential land once the following conditions are met: the affected persons resided in the said structure for a period of not less than eight years; and the property was not constructed for the purpose of acquiring land.

Section 4, **Article 16** states that any compensation resulting from eviction or demolition of any structure or estates will be provided to the initial residents, and according to Section 5 the Municipal Government cannot allocate any such land to other parties as long as the affected persons are present.

Article 17, Section 1 indicates the Mayor of Mogadishu has the authority to order the eviction of legally occupied land for the purpose of communal use. According to Section 2 of **Article 17** any party evicted

[1]Presented in this document are translations of the Somali version

as a result of section 1 of this Article is entitled to compensation of value similar to the property, and the same size of land shall be granted to the affected person. Section 3 of **Article 17** indicates that when compensation is offered, the following will be taken into account: whether the structure is in compliance with the law concerning land used for permanent or temporary purposes and if it is not built in accordance with the above law the structure will be considered illegal and the owner not qualified for compensation. Section 4 of **Article 17** states that the process to be followed in the acquiring of private property for communal purpose shall be in accordance with Section 12 of law number 28 of the Democratic Republic of Somalia passed on the 28th of May 1955. Section 5 of **Article 17** indicates the expropriation of property for the purpose of communal use, while taking Section 4 of **Article 17** into account, can only be used for communal purpose and not for private use.

4. ELIGIBILITY AND ENTITLEMENTS

4.1. 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. As a result, no land take is expected from the project but hat *a total of 102 project affected persons will be economically and physically affected* based on the defined entitlement requirements below. The AFDB Safeguard Policies consider three groups of displaced people are entitled to compensation or resettlement assistance for loss of land or other assets taken for project purposes:

4.2. Those who have formal legal rights to land or other assets recognised under the laws of the country concerned. This category generally includes people who are physically residing at the project site and those who will be displaced or may lose access or suffer a loss in their livelihood because of project activities. This category is avoided through realignment.

4.3. Those who may not have formal legal rights to land or other assets at the time of the census/ evaluation but can prove that they have a claim that would be recognised under the customary laws of the country. This category may include people who may not be physically residing at the project site or persons who may not have any assets or direct sources of livelihood derived from the project site, but who have spiritual and/or ancestralties with the land and are locally recognised by communities as customary inheritors. Depending on the country's customary land use rights, they may also be considered to have a claim if they are sharecroppers, tenant farmers, and seasonal migrants or nomadic families losing user rights. According to the survey these were not encountered. *For the project, nomadic families were not captured but the project plans for livelihood restoration activities that will ensure that their entitlements are addressed. As indicated in the RAP report, a committee consisting from local government, community leaders and PAPS will be established to address this category.*

4.4. Those who have no recognizable legal right or claim to the land they are occupying in the project area of influence and who donot fall into either of the two categories described above, if they themselves or witnesses can demonstrate that they occupied the project area of influence for at least six months prior to a cut-off date established by the borrower or client and acceptable to the Bank. These groups may be entitled to resettlement assistance other than compensation for land to improve their former living standards (compensation for loss of livelihood activities, common property resources, structures and crops, etc. The project considered this category and the community market will be constructed all vendors that are currently occupying the right of way of the road. The scope of constructing community market is to protect and avoid the business loss of the existing vendors within the road right of way. Special attention will be given to women led households, minorities and vulnerable groups.

5. COMPENSATION PROCEDURES AND RESETTLEMENT ASSISTANCE

5.1. All permanent and temporary structures to be affected were valued at the current market value. Prior to the valuation, training was provided to all assessor to ensure consistent of the valuation

methods. PAPS were explained at the beginning the scope and the purpose of the valuation. The replacement option was consider as opposed to cash compensation, cash considered is the compensation to the PAPs for their structures and a budget of USD 544, 560 is planned for.

5.2. Resettlement Assistance: During the consultation, the local governments committed to provide land for the new markets. It has been identified that the available municipal land might be suitable for market and away from the city center. In this case, might be required to purchase. The Federal Ministry of Public Works, in collaboration with the state and local governments, will be responsible for managing the construction of community market. A budget of USD 750,000 is planned for including the cost of land and construction materials.

5.3. Sustainable Livelihoods Restoration and Peace Building: In line with the Bank's Safeguard Policies the displaced people will be provided with targeted resettlement assistance with the aim of ensuring that their standards of living, income-earning capacity, production levels and overall means of livelihood are improved beyond pre-project levels. To this end, a comprehensive livelihood improvement programme will be formulated and implemented as part of the Resettlement Action Plan. Strategies to improve livelihoods will involve providing access to training; adoption of appropriate technologies based on the needs with special emphasis on the nomadic systems. A budget of USD 200,000 is considered for a complete package including livelihood diversification through training based on the needs assessment with the aim of also supporting the construction industry, sustainable natural resource utilization and monitoring, gender, health, peace building and grievance management.

6. ROLES AND RESPONSIBILITIES

6.1. The Federal Ministry will implement the RAP in collaboration with the State Ministry. *An external party will be involved in monitoring and evaluation of the completeness of resettlement assistance and livelihood restoration activities.*

6.2. A safeguards specialist at the Federal Ministry will be responsible for the implementation, managing expectations and addressing potential grievances and reporting. In close collaboration with the contractor, the staff will sensitize communities on the project, impacts and planned mitigation measures and facilitate the formation of grievance management committees for the project.

7. COSTS AND BUDGET

7.1. Costs and Budget for Compensation is estimated as per table below:

	Budget Items	**Budget ($)**
1	Compensation cost,	544,560
2	Purchase of land for market construction	350,000
3	Construction materials (Market)	450,000
4	**Total**	**1,344,560**

8. STAKEHOLDER PARTICIPATION

8.1. Project participants raised a number of expectations as detailed in section of the social benefits from the project. The majority of the regional authority and road site- affected and beneficiary communities are aware of the upcoming Project. Almost all respondents support the project, saying that currently infrastructure rehabilitation and employment opportunities for the vulnerable people especially IDPS in Somalia are urgent. They believe that upgrading the roads will help them join the country's mainstream socioeconomic development. With regard to the project impacts, almost all the respondents have no significant fear on the project impacts.

8.2. The consultation meetings led to the following suggestions that have been integrated in the project design:

Issue Raised	Integration Aspect in the Project Design
The contractors to work with Government Authority as much as possible	the project design proposes building the capacity of Local
public awareness and notification to the community in the rock extraction areas and market street where the pilot road will be constructed so as to cope with the likely social costs/negative consequences that may arise from the project	Considered in the planned empowerment initiatives
construct bypasses at congested road, especially wherever there are frequent and/or prolonged traffic jams;	Will be integrated in the Works Contract
provide sufficient cross drainage "Irish crossings" to avoid flooding and ensure natural flow of fresh and wastewater	Will be integrated in the Works Contract
local authority helps in screening the laborers for security risks	Will be included as special condition to the contract
local authority allocates the waste dump sites; blocking, policing of the construction site and solving disputes that may arise.	The project has included in the design a comprehensive stakeholder and community engagement plant to be implemented by designated Safeguards Officer who will in turn support the community in developing project specific channels for feedback and grievance resolutions. The participation of traditional leaders will be underscored)

The meetings also recommended the following as remedies to the environmental concerns

(i) trees should be planted along the areas of extraction;
(ii) excavation and blasting activities should be controlled, especially avoiding grazing areas;
(iii) Awareness, campaign to avoid areas with trees during extraction;
(iv) The holes created should be refilled*;(the contractors will be required to develop restoration plans for material sources prior to commencement of works as guided by the Safegaurds specialist from the Construction Supervision Consultant with oversight from the Environmental and Social Safeguards Specialist at the Ministry).*
(v) Quarrying should be done alternatively to reduce over loading one area and causing significant vegetation/fodder losses; *(Communities will be supporting in developing structures that will oversee the extraction of materials with oversight from the Local Governments and project related staff.)*
(vi) Sensitizing people to boil water for drinking purposes; and
(vii) Leftover construction materials must be disposed of before leaving. Details of commitment and responsibility including monitoring.

Also, the stakeholders agreed that for the smooth implementation of SRCIP and ensuring the Project's objectives are met and sustainable, attention should be taken to account for the followings:

iv. The choice of road sections to rehabilitated has to be done in a transparent manner that considers social-political and technical aspects;
v. Damaged culverts and bridges along the roads have to be repaired especially in areas where the bridges are completely damaged and the road is impassable;
vi. During the design of the Galkaiyo-Hobyo road the current plans to build the port of Hobyo has to be taken into account given the likely increase of traffic particularly heavy trucks.

9. GRIEVANCE REDERSS MECHANISM

9.1. During the implementation of SCRIP project, it is inevitably give rise of disputes and

disagreement between the RAP implementers and the affected persons over the eligibility criteria of compensation, the amount, delays of disbursement, proposed relocation, and the quality of replacement site. Promptly addressing such grievances is critical to the success and the timely implementation of the project. The overall purpose of the grievance redress mechanisms is to provide opportunities and venues for PAPs to file their grievance and settle their complaints or claim effectively in amicable manner and without lengthy administrative and legal procedures. The intent of grievance procedures is:

(i) Provide an effective channel for expressing concerns and grievances for the RAP implementation;
(ii) Create opportunity for women, minorities and vulnerable groups to have equal access to grievance redress procedures;
(iii) To promote effective relationships between the project implementers and the local affected community; and
(iv) Ensure fair and transparent process to address concerns.

9.2. A grievance redress committee will be set-up by the Ministry of Public Works to address complaints arising from the implementation of the resettlement action plan (RAP). 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 Land Acquisition Assessment findings should be signed by the Assessor, the Local Community and the Ministry of Public Works.

10. MONITORING AND EVALUATION

10.1. It is the responsibility of the project proponent to conduct regular monitoring and evaluation of the resettlement performance operation (if any). This is to verify that the valuation of asset lost and compensation given has been carried out according to Somalia regulations and AfDB directives. If is also to verify that fund for compensation are used in accordance with the Resettlement and Compensation Committee. Normally, compensation is decided by special technical sub-committee selected by the Relocation and Compensation Committee including representatives of the impacted persons. The Monitoring and Evaluation Unit within the project in consultation and participation of local community representatives and the Government as well as the Implementing Company is shouldering this responsibility. The main indicators to be monitored and evaluated include:

(i) Compliance with approved regulations;
(ii) Payment or land compensation was carried out before implementation schedule; and
(iii) Information for grievance redress was made available to impacted persons.

10.2. The Federal Ministry of Public Works is responsible for the implementation and reporting of RAP action plan. The MPWRH will establish a Project Implementation Unit (PIU) responsible for the overall project implementation, including monitoring and evaluation components. The specific tasks of the PUI with regard to M&E include, but not limited:

(i) Provide timely and accurate information to the project board about the progress of RAP implementation and delivery of RAP compensation measures;

(ii) Appropriate coordination between governments levels involved in RAP implementation;
(iii) In collaboration with State-level Public Works Ministries, identify any grievances that have not yet resolved and may require resolutions at higher levels;
(iv) As required develop monthly, quarterly and annual reports on the RAP implementation progress;
(v) Document the completion of RAP resettlement actions in accordance with the requirements of the RAP plan as well as pending compensations; and
(vi) Identify mitigation measures for unanticipated adjustments.

10.3. Progress will be reported for the following tasks in accordance with AFDB guidelines:

- Internal monitoring;
- Expert/External Monitoring;
- Completion audit; and
- Compensation.

11. CONCLUSIONS AND RECOMMENDATIONS

11.1. Important legal frameworks in Somalia and AfDB environmental safeguard guidelines for infrastructural funded projects; provide a basis for resettlement and compensation. The Constitution of Somalia established structures at the states and Federal levels to resolve conflicts on development projects**.** Beside the Constitution, there are a large number of Sectoral Laws dealing with environment and land issues. All these sectoral laws provide procedures and details regarding land acquisition and rules governing assessment and payment of compensation. Customary land tenure is still dominant in the targeted localities and is organized by traditional leadership (Native Administration).

11.2. The Somalia legal requirements comply with the AfDB Guidelines in the sense that both require fair compensation for the impacted persons and set procedures to resolve conflicts starting from the lowest level to the court of law. The Resettlement Policy Framework (RPF) suggests arrangements for monitoring and responsibility of the project to conduct such monitoring in case of resettlement operation. Such monitoring must be participatory involving local leaders and representatives of the impacted persons.

11.3. Recommendations: For smooth land acquisition, the following are recommended:

- Involvement of local leadership particularly Tribal Administration and County Officials when selecting sites for public infrastructures;
- Pay attention to customary land tenure regulations;
- Obtain Consent of Tribal Authority to have a parcel of land deeded to the individual by the Government;
- Apply to Land Commissioner in the County in which the land is located;
- Within Government lands, consider right of use given to local communities; and
- In deciding the market value of land, it is important to involve experienced persons to decide on the land value

12. REFERENCE AND CONTACTS

Resettlement Action Plan for the Proposed Somalia Regional Corridors Infrastructure Programme
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