Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 12-Oct-2021 | Report No: PIDC32579

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Sudan	P177538		Transport Sector Development Project (P177538)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
AFRICA EAST	Nov 01, 2022	Jan 24, 2023	Transport
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Ministry of Urban Development Roads and Bridges	National Highway Authority for Roads and Bridges	

Proposed Development Objective(s)

To facilitate the recovery and resilient development of the transport sector in Sudan for the benefit of all users

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	250.00
Total Financing	150.00
of which IBRD/IDA	150.00
Financing Gap	100.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	150.00
IDA Credit	150.00

Environmental and Social Risk Classification	Concept Review Decision
High	Track II-The review did authorize the preparation to continue

B. Introduction and Context

1. **Sudan is located within the arid and semi-arid part of Sub-Saharan Africa with rich endowment of water resources from the Nile river.** Sudan has a Sahelian belt with the desert in the far north, fertile land in the Nile valleys and across the rest of the country for farming and livestock herding. The country has a population of 43 million and occupies 1.89 million km^2, making it Africa's third largest country after Algeria and Democratic Republic of Congo. Sudan has a federal system of governance consisting of the central government, 18 states and 78 localities (Mahalias). Its GNI per capita made continuous growth over two decades and reached US$1,690 in 2015, but tumbled down to US$590 in 2019, resulting in downward revision of World Bank's income classification from 'lower-middle income' to 'low income'.

2. **Decades of exclusionary governance, economic mismanagement and political turmoil have placed Sudan among the lowest performing nations in terms of economic and social outcomes.** Social indicators have worsened, with Sudan ranked 139 out of 157 in the Human Capital Index (HCI) and 167 out of 189 countries based on the Human Development Index (HDI) in 2018. Trade has steadily declined, and remittances are limited due to restrictions and linkages with international financial sector. Basic commodities such as bread and fuels are in chronic shortage with soaring price. Access to basic services such as electricity and water is intermittent even in major urban centers. Decades of neglect of key productive sectors such as agriculture have contributed to economic decline and social strife, resulting in an estimated 9.6 million people in acute food insecurity and over half of the population under the national poverty line. In addition, the unemployment rate still remains above 40 percent especially among youth.

3. **Sudan's fragile political economy, compounded by high inflation, large trade and fiscal deficits, high unemployment and poverty, worsening food security, long history of conflict and violence, long-standing tension between the center and the periphery and the outbreak of the COVID-19 pandemic, is posing a considerable risk to Sudan's stability**. After losing 75% of its national revenues following the loss of oil exports due to the secession of South Sudan, Sudan is contending with a new reality that agriculture sector is key to job creation, improved incomes, poverty reduction, food security and boosting exports. The onset of the ongoing COVID-19 pandemic has added yet another layer of complexity for the GoS to address the country's fragile transition process. Sudan has been severely impacted by the pandemic and ranks as one of the top four African countries at highest risk due to the impacts of COVID-19. As of the beginning of September 2020, the GOS reported more than 13,000 confirmed COVID-19 cases and over 800 fatalities. The government responded to the COVID-19 crisis with a declaration of a state of health emergency and finalization of a national COVID-19 Preparedness and Response Plan on. The government also shut all schools and markets and banned all public gatherings and restricted international and inter-state travel. A revised draft federal budget for 2020 included a major emergency allocation of resources (US$ 370 million) for COVID-19 related expenditures. Despite these actions, COVID-19 has already worsened economic prospects, hampered key services, delayed political reforms, and have impacted public trust in government capacity.

4. **The 2019 revolution led to the establishment of a Transitional Government, which presents a unique opportunity for the country to address the decades of political, social, and economic turmoil.** However, the path for GoS during this transition is precarious with substantial challenges and high expectations from those who sparked and led the revolution. In the last year, the transitional government of Sudan (GoS) has moved to address internal conflicts, economic distortions and began earnest re-engagement with the international community. This creates a unique window of opportunity in Sudan to spur economic growth, rebuilding, resilience, and job creation, especially

for youth and women. The General Framework for the Program of Transitional Government sets out 10 priorities for the Government. One of these priorities is focused on 'addressing the economic crises and establishing the bases of sustainable development' and includes, amongst others, 'developing and promoting productive sectors (agriculture, livestock, industry). During this transition period, GoS is aiming to strengthen and re-establish institutions that have been eroded over the past few decades in order to adequately guide the country's economic, social, and political recovery.

5. **The Government of Sudan (GoS) has taken notable steps towards resolving long-standing internal conflicts, unwinding economic distortions, renewing the social contract, and re-engaging with the international community**. The removal of Sudan from the United States' List of State Sponsors of Terrorism in December 2020 ended 27 years of economic sanctions and is expected to open up avenues to integrate Sudan to the international economies and financial systems. On March 26, 2021, the Republic of Sudan cleared its arrears to the International Development Association (IDA), enabling its full re-engagement with the World Bank Group (WBG) after nearly three decades. This has paved the way for the country to access US$2 billion in IDA grants for poverty reduction and sustainable economic recovery. By clearing its arrears, Sudan has also completed a key step for receiving comprehensive external debt relief under the Heavily Indebted Poor Country (HIPC) Initiative.

6. **The private sector in Sudan remains underdeveloped. Business environment in Sudan is not conducive to enabling growth of the private sector, with both domestic enterprises and foreign investors facing multiple policy and infrastructure constraints.** The most pervasive problems for doing business include trade regulation, tax administration, political instability, tax rates, and corruption. Most existing private sector activities are linked to the agriculture sector. However, sector productivity remains very low. In addition, an increasing number of firms supply the growing domestic demand for a wide range of goods and services. At the same time, informal business activities have expanded in urban areas and now constitute a large segment of private sector activities. The country needs to create favorable conditions for private sector led growth to accelerate its economic recovery, increase its exports, and create new and better job opportunities for the Sudanese people.

7. **Sudan also faces significant climate change impacts and recent locust infestation as well as record floods.** The country is highly prone to weather shocks and climate change is putting increasing burden on the country's large agricultural sector. The desert locust upsurge that started in 2018/19 further illustrates the role climate plays in shocks to the agriculture and livestock systems as well as food security. These transboundary pests are endemic to Sudan, which is home to summer and winter breeding grounds, and normally the populations remain controlled. When conditions elsewhere stimulate excess population growth and swarming—as they did on the Arabian Peninsula and Somalia in 2018/19—the swarms can invade Sudan and devastate crops and pasture. Predictions of increasing rainfall and more extreme rainfall events in East Africa as the climate changes mean that the conditions for desert locust upsurges could become more common in Sudan and in neighboring countries. This will threaten productivity in the agriculture and livestock sectors and put millions of households at risk of increasing food insecurity. The country's heightened risk of disastrous weather events has been demonstrated by record, devastating floods towards the end of 2020. The flooding caused at least 100 fatalities and destroyed 100,000 homes, prompting the declaration of a state of emergency.

8. **Sudan has one of the world's lowest rankings for gender equality.** Sudan is ranked 168 out of 189 countries and territories and remains in the 'low human development category'. When disaggregated by sex, the Gender Development Index of Sudan is 0.837, placing it in the group of countries furthest from achieving gender parity (UNDP

2019). Several contributing factors to this gender equality in Sudan include (i) low levels of women's political participation (28 percent); unequal participation in the labor market (24.5 percent); unequal education attainment of adult women relative to adult men (15.3 percent); lack of inclusion and participation in official peace building and conflict resolution initiatives. Recent law changes to increase women's personal freedom and criminalize female genital mutilation are steps in the right direction, however more targeted, affirmative measures will be needed to bring about gender parity and inclusion.

Sectoral and Institutional Context

9. **Sudan's transport infrastructure is unevenly developed and not integrated**. Despite a few developed road corridors, a large share of Sudan is unconnected or lacks paved roads, resulting in one of the lowest road densities in the region. The earlier AICD estimated that Sudan needs 2,900 km of roads to meet regional connectivity standards (linking Khartoum to international frontiers); 5,300 km to meet national connectivity standards (linking all provincial capitals to the regional network); and a further 34,201 km to meet rural connectivity standards (linking land responsible for 80 percent of existing agricultural production value to the national network as well as linking land with the capability of producing 50 percent of the non-realized agricultural value).

10. **The National Road network consists of arterial roads connecting Khartoum with the different regions of Sudan**. The main roads link the capital with the coastal gateway of Port Sudan, Egypt and North Africa, Eritrean, and Ethiopian border. The existing road arteries originate from Khartoum and connect to the western region of Sudan. There are three major arterial roads with most roads radiating from them, one linking the states of Kurdufan and Darfur, the second linking Khartoum state to Red Sea state, and the 3rd major North-South corridor linking Khartoum to Egypt through the Northern State as well as River State. The south bound sector links Khartoum State to the agricultural rich States of Al Jazeera, Sennar, Blue Nile as well as White Nile up to the border of South Sudan.

11. **Road traffic accidents are the second leading cause of death in Sudan. 61% of Road Crash Fatalities and Injuries in Sudan are in the economically productive age groups (15 - 64 years).** The ratio of Male to Female Fatalities within the 15 - 49-year age group being the most vulnerable to fatalities. This is equivalent to 1749 life years affected due to disability from road crash injuries per 100,000 people. Road safety problems pose serious obstacles to population health, social development, and economic prosperity. Pedestrians are particularly at risk, with the burden being greatest for children and adolescents. Although there have been some investments and political interventions, the persistence of deaths and injuries on Sudanese roads calls for the creation of a new, resilient national road safety strategy. The issues Sudan sees today can be attributed to many factors, including the lack of surveillance, driver recklessness, and vulnerable roads. As such, a comprehensive road safety strategy must feature an infrastructural investment in rehabilitating heavily trafficked roads and improving public transportation, and a behavioral component targeting dangerous driver and pedestrian habits.

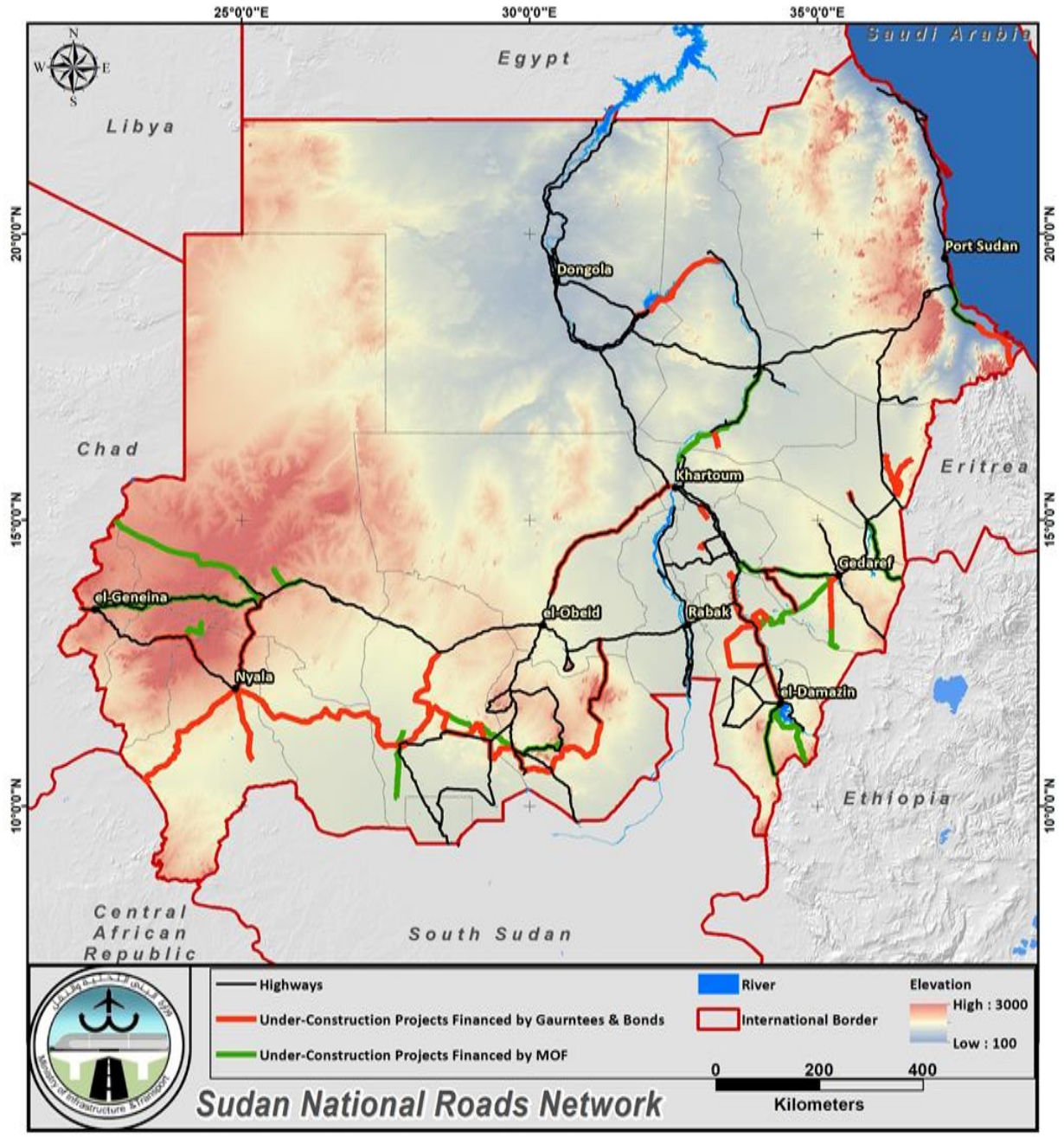


Fig1: Map showing Sudan Road Network

12. **Overall traffic volumes are low except between Red Sea and Khartoum states, and between Red Sea and Gadarif states**. The total length of the national road network is about 12,316 km excluding state and urban roads. Overall network condition is poor, with little or no recurrent expenditure on maintaining the network. Many highways traverse rolling terrain with many valleys and streams, and limitations in detailed engineering designs have made most roads more susceptible to climate and disaster risks. The last maintenance on the network was carried out in 2017 and only focused on traffic accident blackspots and sections where the pavement was failing.

13. **The National Road network is managed by the National Highway Authority under the Federal Ministry of Urban Development Roads and Bridges**. Secondary, tertiary, and urban roads are the responsibility of the respective states, and generally are in poor condition. Transport policy, and oversight of the other modes, is the responsibility of the Federal Ministry of Transport.

14. **The Railway Sector: Sudan's railways network is one of the longest in Africa with a 4,578 Km length, with a gauge of 1076 mm**. This rail network links the different regions of Sudan with the three main lines: Port Sudan –Atbara – Khartoum, Al Obayed – Nyala, and Atbara-Abuhamad-Half. The railway network comprises 2,225 bridges and culverts ranging between 6ft to 15ft in size and consist of pre-stressed concrete bridges & steel bridges, large span bridges sizes varying from 26ft- 250ft. There are 85 bridges of 15ft and 43 pipes culverts on the line between Seinnar / El Obied. Type of sleepers used throughout the network included solid wood, concrete, and steel. Only 46 percent of the railway lines are currently functioning (2108km out of 4578km).

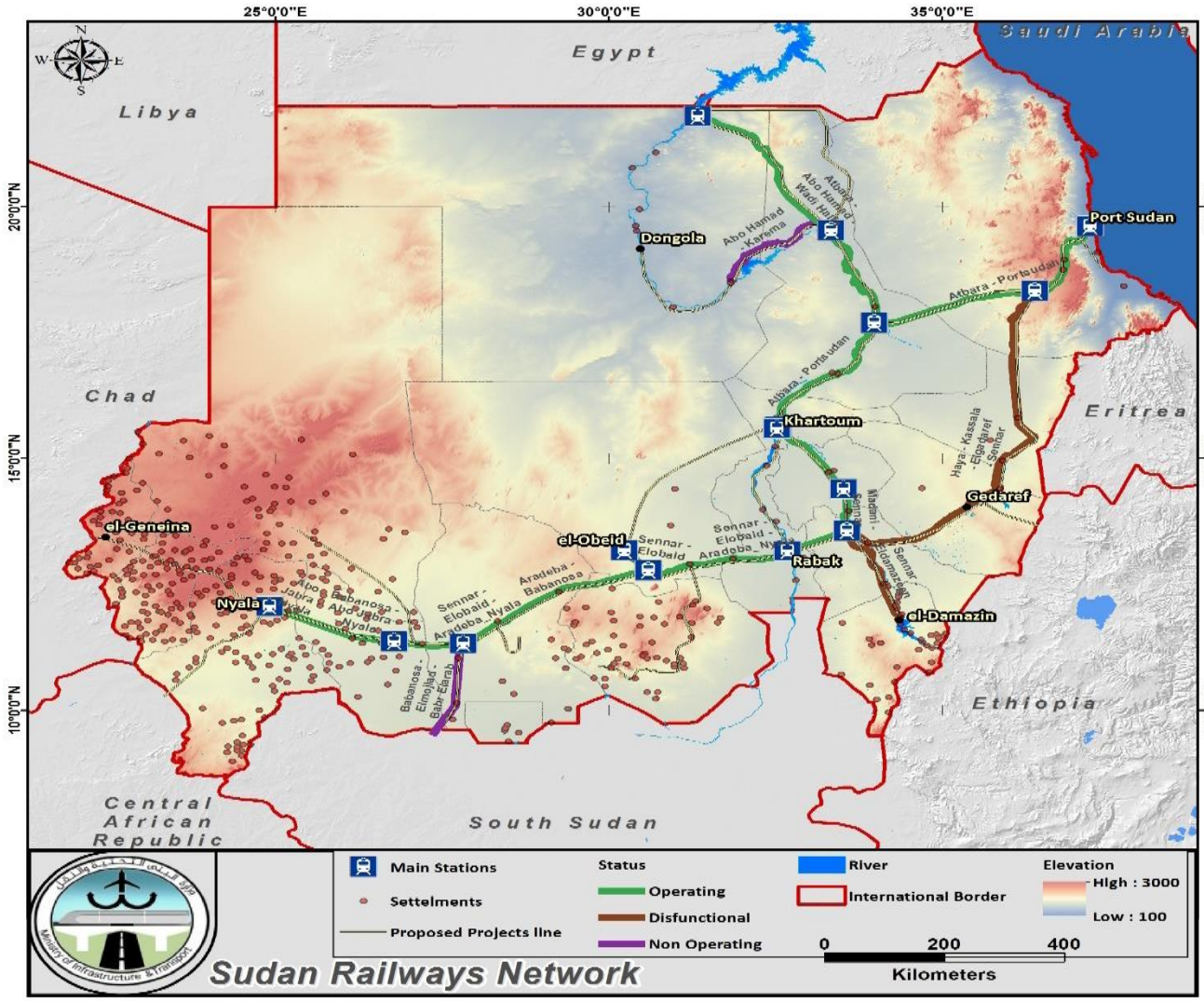


Fig 2: Map showing Sudan Railways Network

Table 1 Status of Sudan's railway lines

Railway Line	Construction date	Length in Kms.	Rail Weight	Status
Wadi Halfa- Abu Hamed	1898-1897	350	93 Kms. 75 lb. yard 257 Kms. 50 lb . yard	Functioning
Abu Hamed – Atbara	1899	244	244 Kms. 75 lb .yard	Functioning
Atbra – Khartoum	1900 – 1898	313	313 Kms. 90 lb. Yard	Functioning
Atbra – Port Sudan	1906- 1904	474	474 Kms. 90 lb. Yard	Functioning
No.(10) Karima	1905	222	222 Kms. 50 lb. Yard	Not Functioning
Khartoum – Kosti – El Obied.	1911 – 1909	689	573 Kms. 75 lb. Yard 116 Kms. 90 lb. Yard	Functioning
Haiya – Kassala	1924 – 1923	347	347 Kms. 75 lb. Yard	Not Functioning
Kassala – Gedarif	1928 – 1924	218	218 Kms. 75 lb. Yard	Not Functioning
Gedarif – Sennar	1929 – 1928	237	237 Kms. 75 lb. Yard	Not Functioning
Sinnar – Damazine	1954 – 1953	227	227 Kms. 50 lb. Yard	Not Functioning
Alrahad - Babanousa	1957 – 1956	354	346 Kms. 75 lb. Yard 8 Kms. 90 lb. Yard	Functioning
Babanousa – Nyala	1959 – 1957	335	325 Kms. 50 lb. Yard 10 Kms	Functioning
Babanousa – Wau	1962 – 1959	446	446 Kms. 50 lb . yard	Not Functioning
Girba – Digiam	1962	70	70 Kms. 50 lb. Yard	Not Functioning
Muglad – Abu Gabra	1995	52	52 Kms. 50 lb. Yard	Not Functioning
Total length		**4578**		

15. **The Inland Water Transport Sector (IWT) in Sudan**. The history of river transport in Sudan dates back more than 150 years since the introduction of steam vessels during the Turkish and English-Egyptian periods. Over the years, navigation was restricted to between Kosti and Juba, which also ceased after the outbreak of the civil war in the south and after the secession of South Sudan. Much of the river transport infrastructure and the shipbuilding equipment in Khartoum Bahri has since been destroyed. There are two functioning river ports in Sudan: Halfa port in the Nubian lake which operates the line that connects Sudan to Egypt (Halfa/ Aswan) with total length of 350 Km. The annual tonnage of commodities is above 111,000 tons, and over 60 passengers' trips per month between Sudan and Egypt. The traffic on Halfa port is directly connected to the function of the Eshkeet Border crossing. Halfa port is managed by a joint entity

between Sudan and Egypt called the Nile valley corporation. Kosti port which operates the line that links Sudan and South Sudan (Kosti/ Juba) with total length of 1436 Km. Currently the main activity at Kosti port is shipping humanitarian aid to South Sudan by UN agencies and other Organizations. However, the Governments of Sudan and South Sudan have agreed to open the port to regular trade after 11yrs of closure.

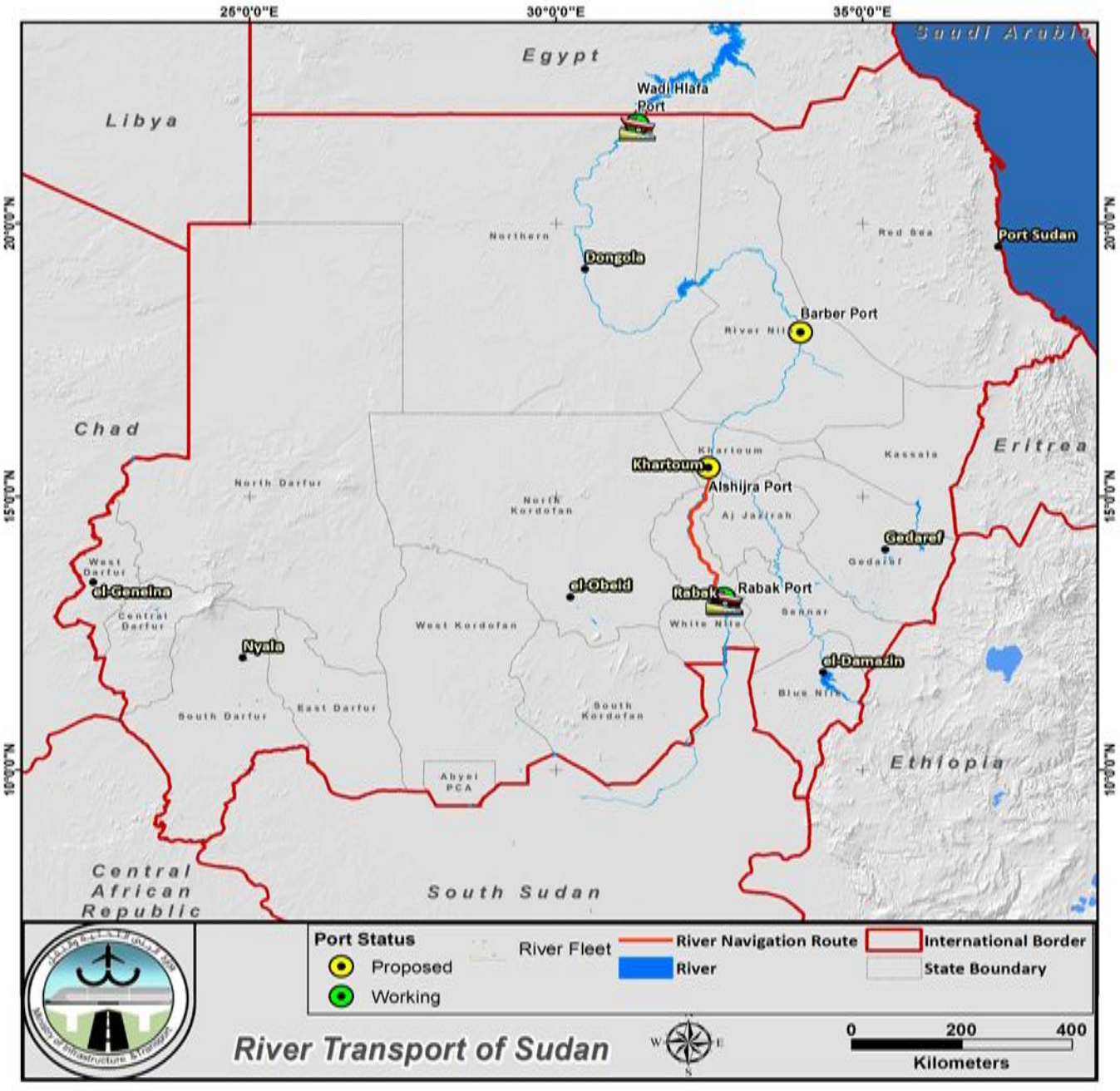


Fig 3: Map showing river navigation routes and ports in Sudan.

16. **The management and development of the IWT sector in Sudan is the responsibility of the River Navigation Department under the supervision of the Ministry of Transport**. Established in 1980, the aim of the authority is to activate and regulate river navigation along the 4,000 km of potentially navigable waterway and to de-monopolize public operations by encouraging the private sector to invest in river transport and provide conducive conditions to attract investment. Since the establishment of the department, it has not been able to fully play its role either because of shortcomings in the law, or the lack of budgets and plans that would enable it to execute its mandate. The department has few specialized staff since its inception. However, the authorities seen the benefits and are committed to supporting the development of the sector, within an integrated multi-modal transport system.

17. **The Aviation Sector**. Sudan's air transport is relatively developed as compared to other African countries and is largely driven by intercontinental traffic. The contribution of air transport to national GDP decreased in the four years, preceding the COVID-19 pandemic, despite the increase in domestic carriers operating between local and international destinations. Prior to the pandemic, air transport in Sudan amounted to over 10,000 international passenger flights and over 380 cargo flights annually.

Airport Name	State	Airport type
Khartoum International Airport	Khartoum State	international
Port Sudan New International Airport	Red Sea State	international
El Fasher Airport	North Darfur State	international
Nyala Airport	South Darfur State	international
Geneina Airport	West Darfur State	international
El Obeid Airport	North Kurdufan State	international
Dongola Airport	Northern State	international
Merowe Airport	Northern State	international
Wadi Halfa Airport	Northern State	local airport
Kassala Airport	Kassala State	local airport
Atbara Airport	River Nile State	local airport
Damazin Airport	Blue Nile State	local airport
Kadugli Airport	South Kurdufan State	local airport
El Daein Airport	East Darfur State	local airport
El Debba Airport	Northern State	local airport
New Halfa Airport	Kassala State	local airport
Port Sudan Air Base	Red Sea State	military airbase
Wadi Seidna Air Base	Khartoum State	military airbase
Kosti Airport	White Nile State	Non-operating
Azaza Airport	Al Qadarif State	airfield
Shendi Airport	River Nile State	airfield
Zalingei Airport	West Darfur State	airfield
Gereida Airport	South Darfur State	airfield
Heglig Airport	South Kurdufan State	airfield
Kutum Airport	North Darfur State	airfield
Carthago Airport	Red Sea State	airfield
Dilling Airport	South Kurdufan State	airfield

Galegu Airport	Sinnar State	airfield
En Nahud Airport	North Kurdufan State	airfield
Gogrial Airport	Northern State	airfield
Khashm El Girba Airport	Al Qadarif State	airfield
En Nahud Airport	North Kurdufan State	airfield
Baleela Airport	South Kurdufan State	airfield
Songo Airstrip	South Darfur State	airfield
Wad Medani Airport	Al Jazirah State	airfield
Zalengei Heliport	West Darfur State	heliport

Table 2: Sudan's airports and airfields

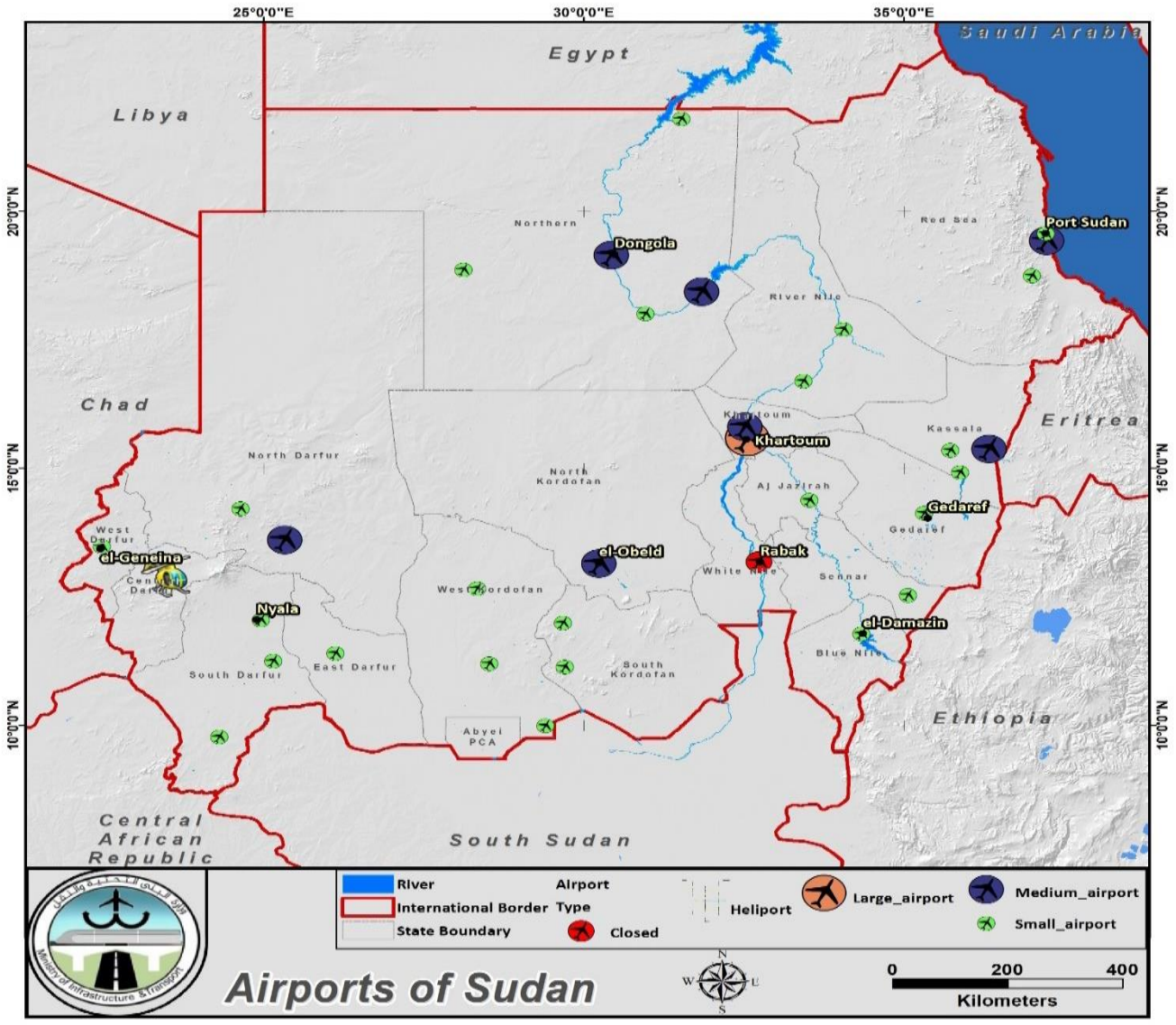


Fig 4: Map of Sudan's Airports and Airfields

18. **The Maritime Sector.** The main maritime gateway is located at Port Sudan in the city of Port Sudan and is the main seaport of the country. The port of Port Sudan was established in 1910 and occupies a strategic location in the center of the west coast of the Red Sea approximately 260km south west of Jeddah, Saudi Arabia. The harbor is in the mouth of a gulf continuing seaward through a coral-free channel 60–85 feet (18–26 meters) deep. The port is part of the of the 21st Century Maritime Silk Road that runs from the Chinese coast via the Suez Canal to the Mediterranean, there to the Upper Adriatic region of Trieste with its rail connections to Central and Eastern Europe. Port Sudan can be largely divided into four main components:

- The North Dock: includes 12 berths of a total 1,865m long with alongside depths ranging from -8.5m to -10.7m. Main products handled include general cargo, edible oils, and molasses.
- The South Dock: includes 6 berths, one berth for the handling of grains and the remaining berths for containerized traffic.
- The Green Terminal: includes 4 berths with a total length of 1,226m and a depth of -14.7m. Mainly handles dry bulk cargo and could accommodate vessels up to 50,000 DWT.
- The Al-Khair Oil Terminal: ability to receive tankers up to 50,000 DWT with a draft of -14.6m.

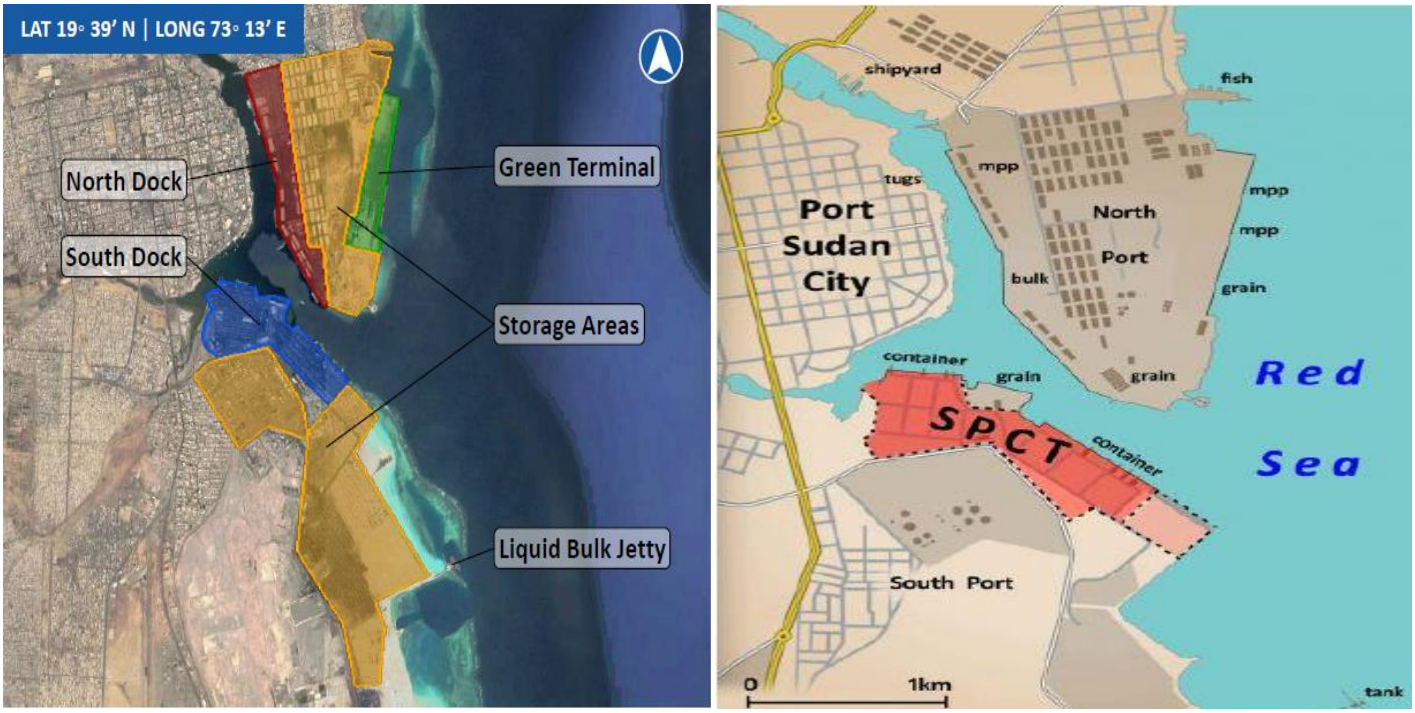


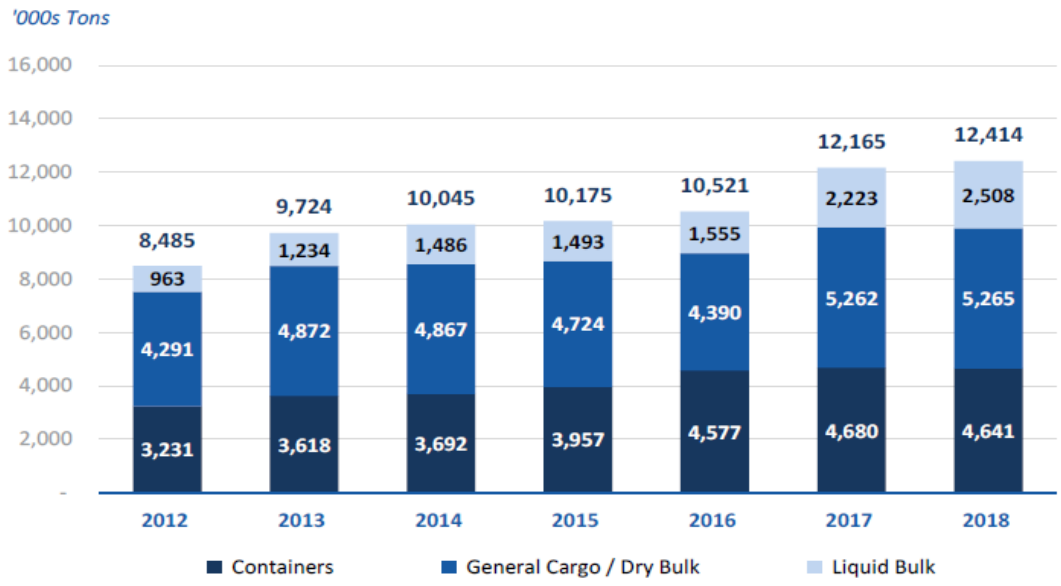
Fig 5. Overview of Port Sudan

Item	No
Number of registered Marine units	1059
Number of driving licenses	742
Check points	204
Marine units manufacturing workshops	16

Companies & Corporations transporting goods	18
Companies & Corporations transporting passengers	7

Table 3: A few facts about Sudan Marine sector

The port is handling containers, oil products, general cargo, livestock, cement, grains, pesticides, and ro-ro. Imports include machinery, vehicles, fuel oil, and building materials. Cotton, gum Arabic, oilseeds, hides and skins, and senna are the chief exports. Total volumes increased from 8.5 million tons in in 2012 to 12.4 million tons 2018, equal to a Compound Annual Growth Rate (CAGR) of 6.6 percent. Over the same period, container throughput increased from 3.2 million tons (402,000 TEU) in 2012 to 4.6 million tons (452,000 TEU) in 2018, equal to a CAGR of 5.3 percent (2.0 percent in TEU).



Item	Unit	2012	2013	2014	2015	2016	2017	2018
Containers	TEU	401,521	449,699	434,445	481,815	465,355	487,336	451,712

Fig 6: Port Sudan volumes

19. **The Sea Ports Corporation of Sudan (SPC) is an independent state corporation that governs, constructs, and maintains the ports, harbors, and lighthouses in the Republic of Sudan.** The Government of Sudan founded the company in 1974 to be the national port operator and port authority. All ports located in Sudan eventually fall under the Ministry of Transport. In January 2019, ICTSI signed a 20-year concession agreement with SPC to operate, manage, and develop SPCT. As such, SPC was to become the landlord and supervisory authority for the container terminal. Following, the military coup in April 2019, the Transitional Military Council issued a presidential decree in May2019 to suspend and cancel the contract with ICTSI under increasing unrest and pressure from port workers. SPC signed a contract in 2021 with Hamburg Port Consult, who are tasked with identifying short term improvements to spatial and operating efficiency, and urgent investments in the superstructure in Port Sudan. These could be financed through the project, and this and the review of the digitalization capacity of the SPC, will be conducted during project preparation.

20. **The 2020 Flooding.** During the fall of 2020, Sudan experienced some of the worst flooding in decades. Over 875,000 people were affected, 120 people were left dead, and flood-related damages amounted to over USD 3.34 billion. The magnitude and impacts of the seasonal flooding were unprecedented. The floods affected all eighteen States of the country. The Nile States and the capital Khartoum, located at the confluence of the White and the Blue Nile, were particularly affected by the overflow of rivers in the Nile basin. Heavy rains and flash flooding also affected non-Nile States, especially North Darfur, where the floods compounded the already dire humanitarian situation. The floods impacted virtually every sub sector of Transportation. Floods damaged more than 55Km of the road network in 130 locations, and over 230 locations of the railway network. Kosti port was shut down temporarily, and there was damage to aviation infrastructure in a many location. The Government of Sudan addressed much of the immediate damage through emergency interventions, but substantial improvement and greater resilience remains a priority to ensure access to maintain the integrity of the network and ensure resilient all-season access. A Contingent Emergency Response Component is proposed for the project, which will be confirmed in subsequent discussions with the client.

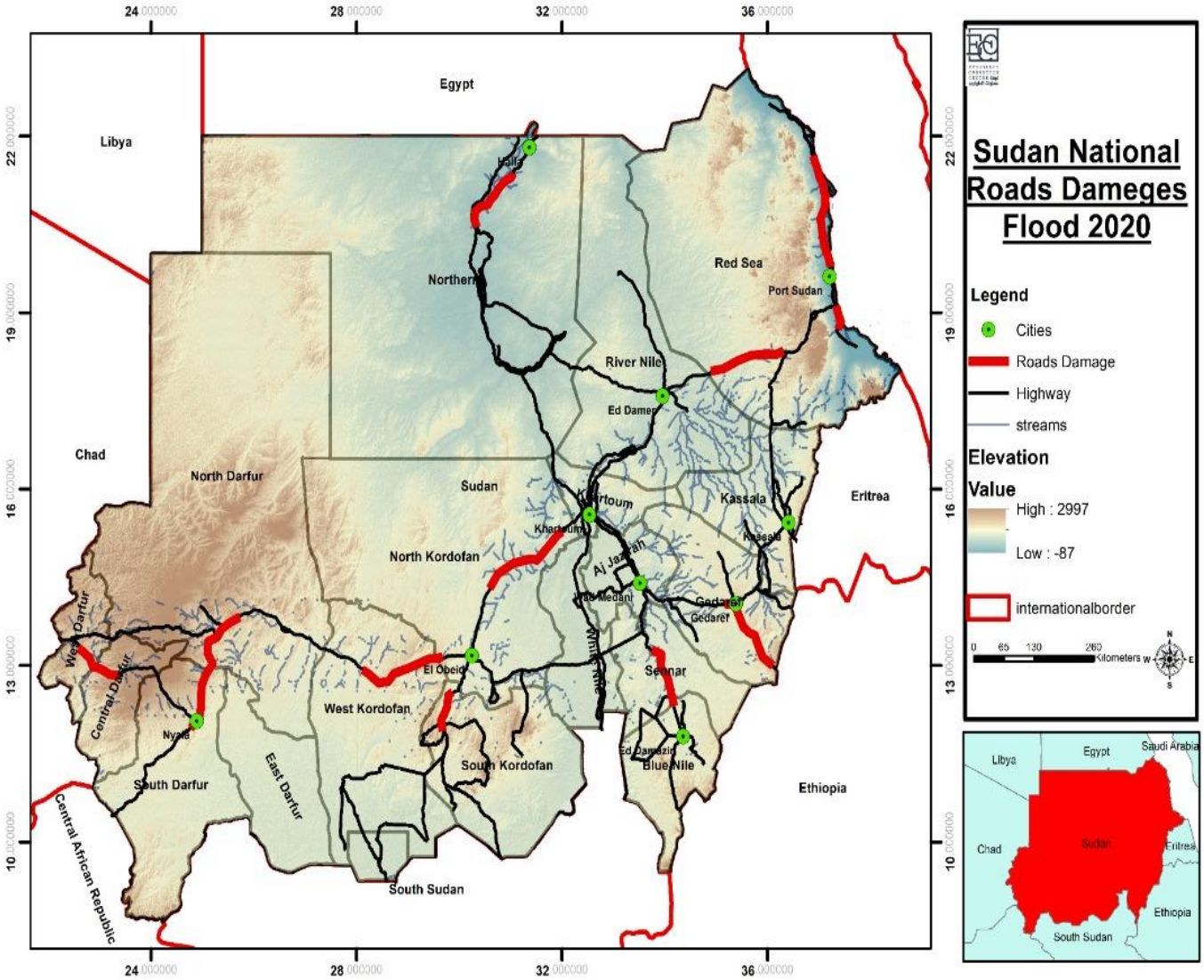


Fig.7: Map showing National Roads damaged by the floods

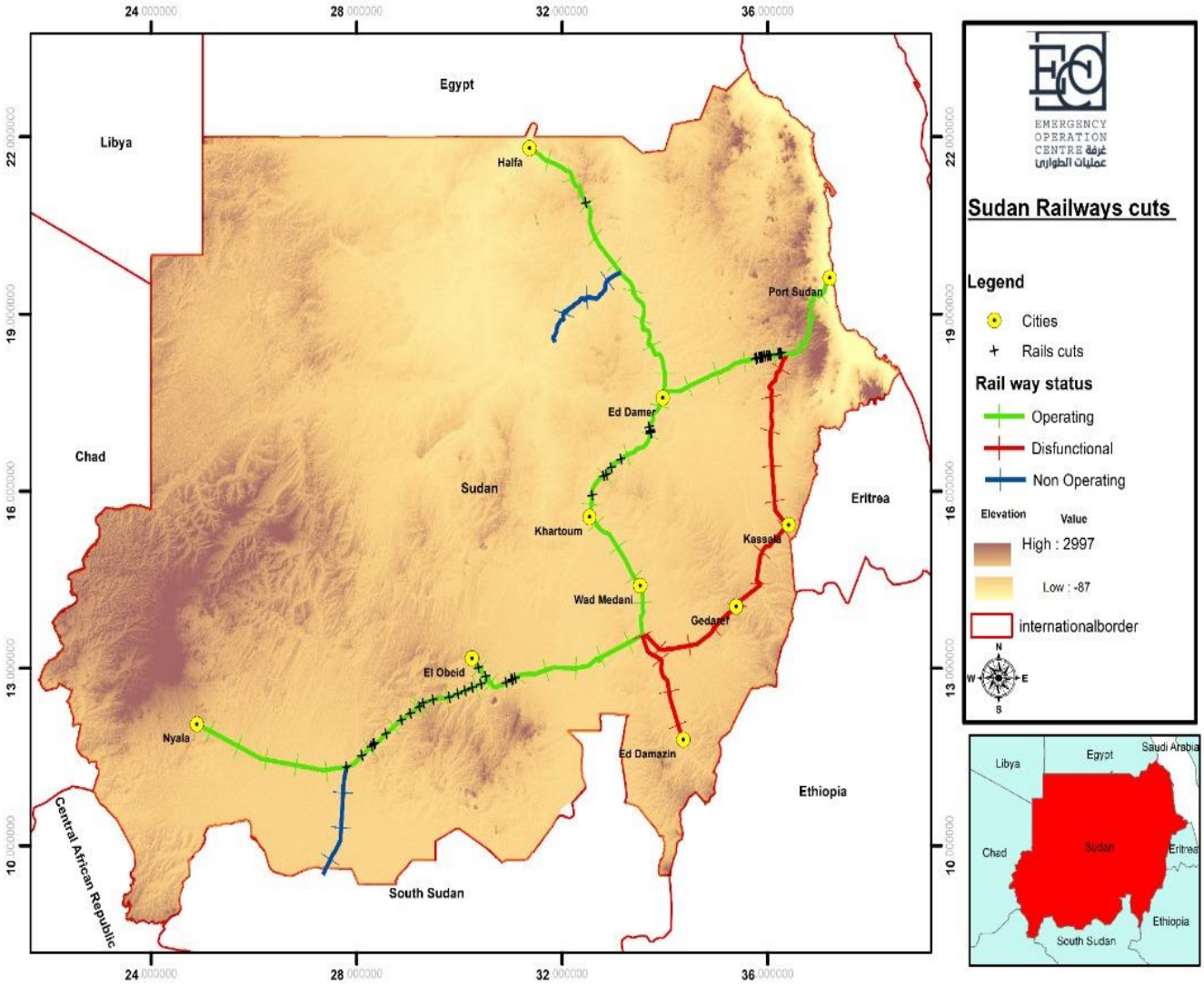


Fig. 8: Map showing damages to the railway network due to the floods

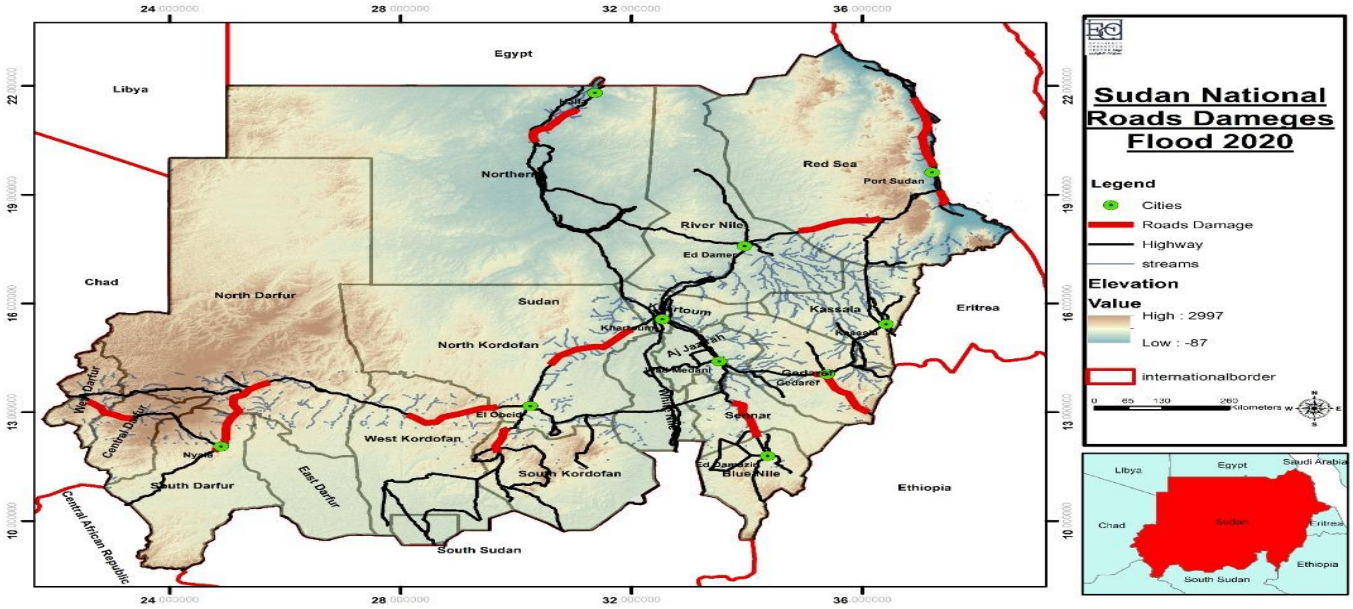


Fig.7: Map showing National Roads damaged by the floods

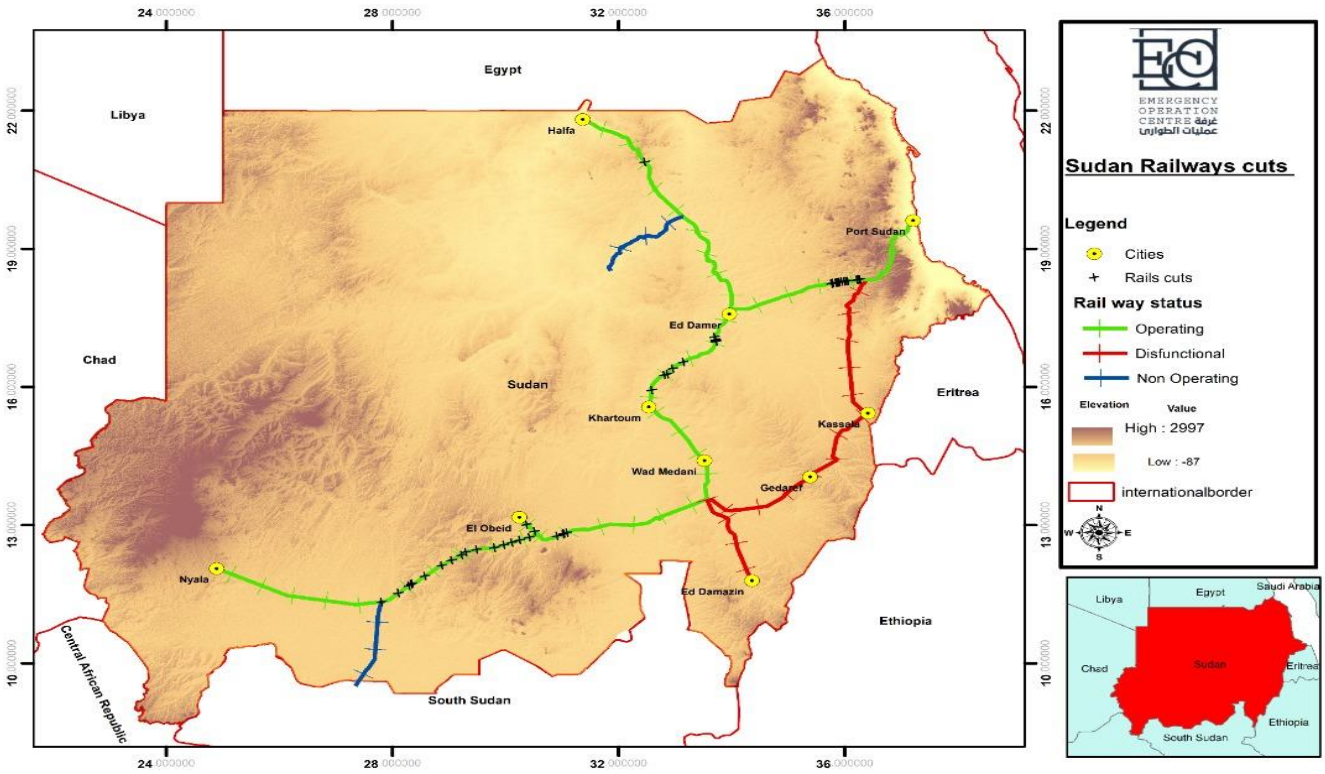


Fig. 8: Map showing damages to the railway network due to the floods

A. Proposed Project Development Objective(s)

To facilitate the recovery and resilient development of the transport sector in Sudan for the benefit of all users

B. Key Results

21. **Progress will be measured against the following PDO-level results indicators:**

(a) Travel time along the selected sections of national road network.

(b) New Transport Sector Strategy and Masterplan taken in account of multi-modal transport and regional connectivity.
(c) Number of people living in areas benefitting from resilient all-season road access; and
(d) Improved efficiency in Port Sudan.

Problem statement: - Poor connectivity by road or rail to neighboring countries or region, road density is exceedingly low, poor-quality roads drastically undermine the efficiency of transport services, and many unpaved roads make movement of people and goods impossible during increment weather.

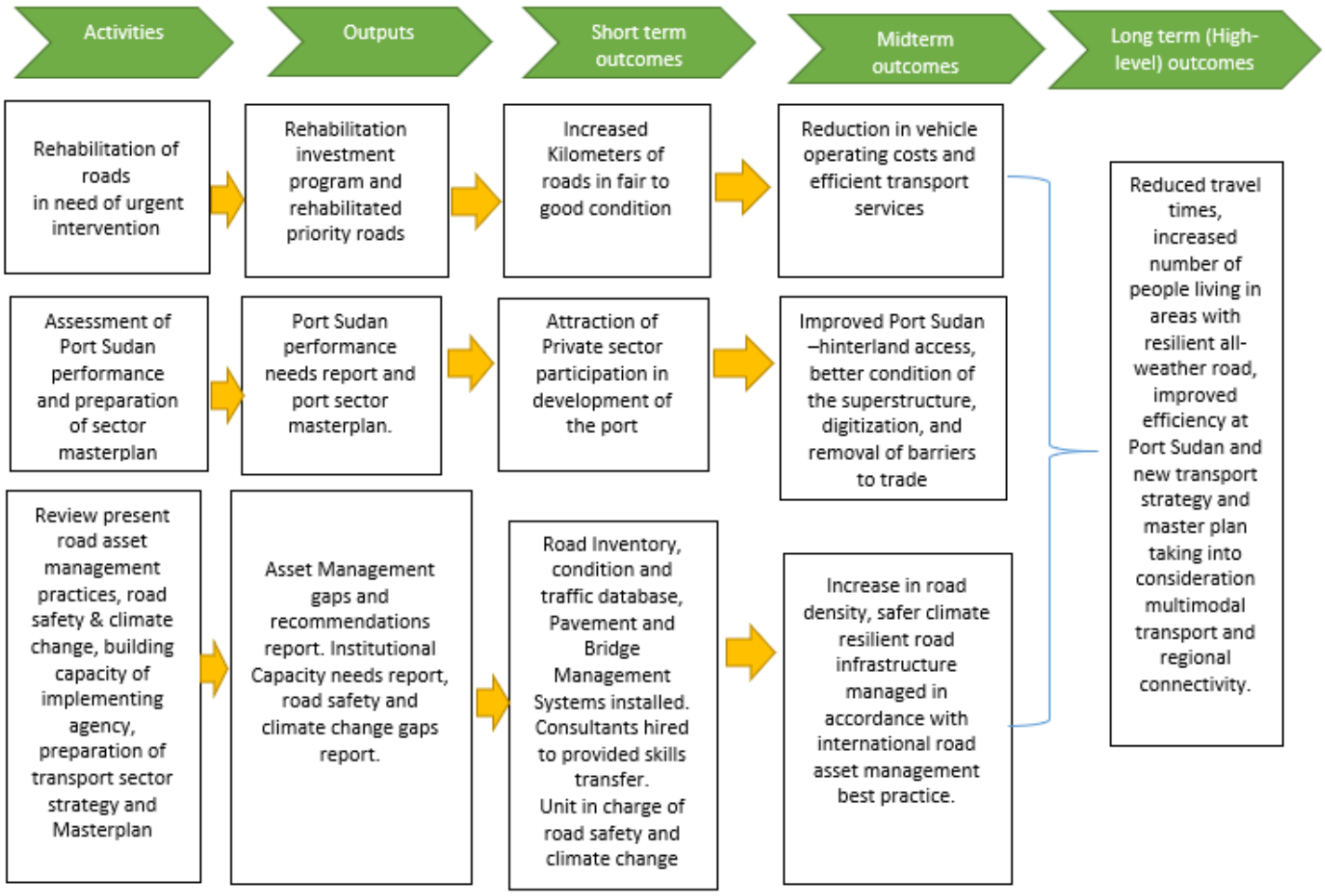


Fig.9 Theory of Change

D. Concept Description

22. **Potential financing sources.** The CPF has allocated US$150 million for the proposed project. However, this is markedly less than is needed to provide a resilient transport network, even with a lower 'level of service.' The Task team has already had discussions with potential co-financiers (e.g. JICA who asked to be kept in the loop) and will seek further sources during project preparation, as well as investigating the possibility of the Government to provide counterpart funding.

23. **Given the huge needs, the project design allocates resources based on most urgent transport connectivity needs and lays the ground for evidence-based interventions in the medium to long term.** The recent flooding and years of under investment in core transport infrastructure have significantly affected the transport network. Hence the project intervention is to facilitate recovery and resilience on the road network that has the largest immediate impact on the social and economic impact on Sudan, while facilitating a gateway through the Port of Sudan. In parallel, the project will also support capacity building and preparation of key documents to underpin national planning and strategy for the transportation network (including rail, inland waterways transportation, inland ports).

24. **Project Components.** The proposed PDO is to be achieved through the following proposed Components:

25. **Component 1: Emergency, remedial and rehabilitation works to maintain local and regional connectivity (estimated IDA financing US$100 million).** This Component will provide support to improve regional and local road connectivity in defined regions of Sudan in order to maintain safe, efficient, climate resilient and reliable infrastructure in selected sections of the National Road Network.

26. **Component 2: Maritime port and Logistics Development (Estimated IDA financing US$30 million).** This Component will support the improvement of Port Sudan through potential investments in the superstructure, access infrastructure and IT systems in Port Sudan, to improve spatial and operating efficiency, and lower the costs of international trade. It will encompass technical assistance to improve spatial and operating efficiency, review the level of digitalization, and provide support for the preparation of market assessments and barriers to trade, technical studies, environmental and social studies to further develop the port and logistics sector, including leveraging in private sector financing. The investments in this component are being coordinated with IFC which aims to attract private sector participation in internal port efficiency improvement, while the project resources and interventions will focus on the public role.

27. **Component 3: Strengthening Planning, institutional capacity and regulatory framework in the transport sector (estimated IDA financing cost US$15 million).** This component will support the strengthening institutional and operational capacity and investment planning in the transport sector at a national level:

(i) **Support for the development of an Integrated and Resilient Transport Sector Strategy and Masterplan**. Key activities will include: The review of the current system, and recommendations based on international best practice to the institutional framework (organization, legal, regulatory, policy) for transport, together with the capital and recurrent financing of the networks, and priority investments to deliver an integrated and resilient transport network for Sudan;

(ii) **Institutional capacity development for transport sector**. The key activities include: (a) review and strengthening of the current functional classification of the road network, and the design and construction

standards for the road sector to enhance resilience; (b) Capacity development to manage potential private sector participation in the maintenance of the national road network as part of the development of an appropriate Asset Management Strategy to preserve the asset in a sustainable shape; (c) Support to develop the road safety unit in the NHA to reduce the significant economic and social costs of road traffic crashes.

(iii) **Institutional strengthening and capacity development to address climate and gender gaps in transport and logistics sectors** – which may include technical training to upskill women, a study on the barriers women may face in the sector and current work environment dynamics that may hinder progress on gender equality, and actions that focus on human resource development reforms to improve the recruitment, retention and advancement of women in the sector. This componenet will also include a climate vulnerability assessment of the transport sector, capacity building in climate change mitigation and adapation, and preparation of priority program to improve the climate resilience of transport infrastrucure.

28. **Component 4: Project Management (estimated IDA financing US$5 million).** This Component will provide technical and operational assistance for strengthening safeguard capacity, the day-to-day management, monitoring and evaluation of the Project, and the carrying out of technical and financial audits. In addition, this component will provide support for compliance monitoring for environmental and social, including GBV and Labor Influx, COVID-19 and HIV.

29. **Component 5: Contingency Emergency Response (Estimated IDA financing US$0 million).** This component will provide immediate response to an eligible crisis or emergency, as needed. In the event of an eligible crisis or emergency, the World Bank to re-allocate project funds to support emergency response and recovery.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

Environmental Risk Rating (High): Emergency remedial and rehabilitation works (Component 1) could lead to loss of vegetative cover; modification of natural drainage patterns; landslides, soil erosion, and interference with movements of wildlife and livestock. Adverse environmental impacts can also occur in both construction and maintenance activities because of air from fugitive dust and other emissions (e.g., from vehicle traffic, land clearing and movement, and materials stockpiles); noise from construction equipment and blasting; and soil pollution by hazardous materials and oil spills associated with heavy equipment operation and fueling activities. Solid waste may be generated during maintenance of roads. Significant quantities of rock and soil materials may be generated from earth moving during construction activities. Solid waste generation during operation and maintenance activities may include road resurfacing waste (e.g., removal of the old road surface material); road litter, illegally dumped waste, or general solid waste from rest areas; and vegetation waste from right-of-way maintenance. Water pollution could result from spills or accumulated contaminants on road surfaces. Road construction and maintenance personnel can be exposed to a variety of physical hazards, from operating machinery and moving vehicles but also working at elevation on bridges. Other physical hazards (e.g., exposure to weather elements, noise, work in confined spaces, trenching, falls from

machinery or structures, and risk of falling objects). Community health and safety issues during the construction of roads include, among others, dust, noise, and vibration from construction vehicle transit, and communicable disease associated with the influx of temporary construction labor.

Similarly, Component 2, Maritime Port and Logistics Development, can have various environmental, health and safety risks during construction and operation phases. The construction and operation of port facilities can lead to changes in coastal processes resulting in alterations to seabed and coastal geomorphology because of these structures on water currents, wave patterns, and water levels. Resultant impacts could include adverse changes to land erosion, sediment transport and deposition, and coastal inundation profiles; impacts to the safety of navigation and docking activities at the port; impacts to ecosystem services (for example aquaculture); and adverse impacts to water quality and aquatic and terrestrial habitats during construction activities and/or over longer periods of time during operations. Construction and operations of port facilities can have a significant impact on water quality. Construction activities (such as clearing of vegetation, dredging, reclamation, paving, and construction of buildings), and operational activities (such as maintenance dredging, ship maintenance, and ship effluent disposal) can result in increased turbidity via suspension of sediment in the water column. In addition, the introduction of pollutants can have adverse impacts on aquatic flora and fauna (including benthic communities), and human health, for example excessive nutrient loading leading to eutrophication, oxygen depletion, and toxic algal blooms. There are also a range of occupational health and safety issues relevant to port operations including physical hazards; chemical hazards; confined spaces; exposure to organic and inorganic dust; and exposure to noise.

There are also potential downstream environmental risks that may result from the technical assistance activities under Component 3, especially support for the development of an Integrated and Resilient Transport Sector Strategy and Masterplan. In light of the above potential risks, the environmental risk of the project is rated as high at this stage.

Social Risk Rating (High): The construction, rehabilitation and operation of road and port projects will benefit different stakeholders including the locals, investors, businesses, and exporters by enhancing connectivity and accessibility. It will also create employment opportunity. Apart from the benefits, the project could pose social risks which needs early identification and management. The project is not expected to include large scale infrastructure rather follow the existing right of way in the rehabilitation of roads and use the existing railway line connecting the port area. However, where that is not the case and if land is acquired for the roads and port related constructions, there could be potential for physical or economic displacement of the local people. Additional risks anticipated are related to labor influx and Sexual Exploitation and Abuse(SEA) during construction activities under component 1 and 2, limited institutional capacity and security concerns. With the board geographic scope of the project,the project's implementation could also be challenged if implemented in areas of conflict.The project social risk is thus considered to be high. To properly address the risks, relevant safeguards instruments will be prepared. These include SEA/SH risk Assessment and Action Plan and Security Management Plan as part of the ESMF ,Resettlement Policy Framework(RPF for component one where specific location is unknow and RAP when specific site is determined) and for component 2 ,contingent to ESIA finding, preparation of RAP to minimize and properly manage these risks.

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