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Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 21-Feb-2025 | Report No: PIDA0263



BASIC INFORMATION

A. Basic Project Data

Project Beneficiary(ies)	Region	Operation ID	Operation Name
South Sudan	EASTERN AND SOUTHERN AFRICA	P179918	South Sudan Connectivity for Growth Project
Financing Instrument	Estimated Appraisal Date	Estimated Approval Date	Practice Area (Lead)
Investment Project Financing (IPF)	17-Feb-2025	10-Apr-2025	Transport
Borrower(s)	Implementing Agency		
Ministry of Finance	Ministry of Roads and Bridges, Ministry of Transport		

Proposed Development Objective(s)

The Project Development Objectives (PDOs) are to improve transport efficiency and reliability on the River Nile between the ports of Juba and Bor, and to strengthen the institutional capacity of the sector ministries to manage the transport infrastructure

Components

Inland Water Transport Infrastructure Development
Operations and Marketing Improvement, and Logistics Enhancement
Strategic Sector Studies and Initiatives
Institutional strengthening, and project management
Contingent Emergency Response Component

PROJECT FINANCING DATA (US\$, Millions)

Maximizing Finance for Development

Is this an MFD-Enabling Project (MFD-EP)?	Yes
Is this project Private Capital Enabling (PCE)?	Yes

SUMMARY

Total Operation Cost	100.00
Total Financing	48.00



of which IBRD/IDA	43.00
Financing Gap	52.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	43.00
IDA Grant	43.00

Non-World Bank Group Financing

Counterpart Funding	5.00
Borrower/Recipient	5.00

Environmental And Social Risk Classification

High

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

A. Introduction and Context

Country Context

South Sudan gained independence on July 9, 2011, but has faced significant challenges due to civil wars, ongoing violence, and political instability. These issues have hindered development and exacerbated humanitarian needs, leaving the country in a state of fragility, economic stagnation, and widespread poverty. The signing of the Revitalized Agreement on the Resolution of the Conflict in South Sudan (R-ARCSS) in 2018 and the formation of a Transitional Government in 2020 have provided some hope for recovery and peacebuilding, although the situation remains precarious. Decades of conflict and economic mismanagement have severely impacted South Sudan's economic and social outcomes, placing it among the lowest-performing nations globally. High logistics costs due to poor transportation infrastructure have led to soaring commodity prices and limited access to basic services like education, health and economic opportunities.

The economy, which is heavily reliant on oil, has been further strained by incessant floods, localized violence, and spillovers from the war in Sudan leading to a contraction in economic activities. Agriculture, which employs nearly half of the population, has also suffered due to flooding and other challenges. Despite some recovery following the 2018



peace agreement, recent shocks have stalled progress, with the most recent being the halt in operations in one of the country's two major oil fields, and damage to the key oil export pipeline to Port Sudan.

Living conditions deteriorated after the 2016 conflict and have not yet recovered. Between 2015 and 2021, real GDP per capita declined by 33 percent while living costs continued to rise. In 2021, the average consumer price was 131 times higher than its 2011 value. The poverty rates for urban and rural areas and camps are 58.4, 80.2, and 85.4 percent, respectively. Food insecurity has worsened in the past decade and affected nearly three-quarters of South Sudanese population in 2022. Among households, 53 percent are moderately food insecure, and an additional 20 percent are severely food insecure.

The country also hosts a large number of refugees and internally displaced persons (IDPs) due to prolonged conflicts in the country and in neighboring countries like Sudan. According to UNHCR data as of January 2025, South Sudan hosts 514,795 registered refugees, primarily from Sudan, and over 1.8 million IDPs¹. The refugees face unique development challenges in reestablishing their lives, with the vast majority, approximately 85%, located in the northern states of Unity and Upper Nile, near the border with Sudan.² Delivery of commodities and humanitarian supplies to these communities, as well as their mobility, in general, remains heavily constrained, due to the limited seasonal viability of road networks and high cost of air transport. As such, riverine modalities remain a critical lifeline.

There has been a gradual increase in the number of refugees crossing the border since October 2023 who comprise 29.5 percent of the arrivals as of January 19, 2024. The border areas, particularly in Upper Nile, Northern Bahr el Ghazal and Unity States, have seen a marked increase in the humanitarian assistance required to support the arrivals, including the growing number of refugees do not have support networks in South Sudan. Along with these states, Central Equatoria have been identified the intended destination of over 73 percent of the arrivals. UNHCR identifies that 16,800 of the population displaced to South Sudan as a result of the conflict in Sudan needs education assistance, 60,000 in need of food security-related support, and 90,000 in need of WASH facilities. Overcrowding in transit centers has increased health risks while accessibility constraints and related high costs continue to make relocation challenging.

South Sudan is recognized as having one of the most progressive refugee policy frameworks in East Africa. The Refugee Act of 2012, which provides the central legal framework for refugee protection in South Sudan, incorporates provisions that are in line with international and regional treaties. The Government has also maintained a policy of granting refugees' access to its territory, land for cultivation and livelihoods, and practical arrangements for their initial reception and registration, including freedom of movement in the country. Challenges exist, largely in the form of the Commission for Refugee Affairs' (CRA) capacity to effectively assume its protection responsibilities, as well as access to education and the status of LGBTIQ+ asylum-seekers.

The World Bank, following consultation with the United Nations High Commissioner for Refugees (UNHCR), confirms that the protection framework for refugees continues to be adequate in South Sudan. The project will work closely with UNHCR and South Sudan's Commission for Refugee Affairs (CRA) on the implementation of WHR-supported activities in refugee-hosting areas. Particularly in (i) identifying existing refugee and host community structures, community-based targeting method, (ii) sharing information on the activities implemented in the refugee camps and host communities by UNHCR and other agencies, (iii) participating on the coordination committees established at central and local Government levels, and (iv) participating on project implementation monitoring and supervision missions.

The Government of South Sudan's National Development Strategy (2018–2021) recognizes the need to increase productivity in non-oil export sectors to diversify sources of economic growth. The agriculture and livestock sectors are

¹ UNHCR. 2024. Operations Data Portal – Refugee Situations: South Sudan. <https://data.unhcr.org/en/country/ssd>

² As of January 2025, additional refugee and asylum seeker locations (by state), include Central Equatoria (28,619), Western Bahr el Ghazal (22,902), Western Equatoria (17,958), Jonglei (2,019), and Warrap (1,299).



crucial levers to alleviate food insecurity and poverty in South Sudan, while themselves potentially emerging as important drivers for economic growth and employment generation.

An inland waterway project is crucial for South Sudan's economic growth by supporting the safe, low-cost movement of people and goods including for the benefit of refugees and host communities. Improved transportation infrastructure would reduce logistics costs, lower commodity prices, enhance access to markets for major produce, and improve access to basic services and economic opportunities. For the agriculture sector in particular, benefits will accrue from boosts in productivity, enhancing access to markets and alleviating food insecurity. For refugees, better transportation would improve access to essential humanitarian aid and services and enhance opportunities for rebuilding their lives, while fostering stability and development in the host communities too.

Sectoral and Institutional Context

Access to basic services like education, health, and to other social and economic services and opportunities is constrained by a collapsed transport system in South Sudan. Road transport dominates with over 95 percent of cargo and passenger traffic volumes, but the roads are mainly unpaved (98 percent), and impassable for more than half the time in a year. Whole communities are cut off during the rainy season. A lack of good transport infrastructure and logistics, stands out as a major bottleneck to economic development and poverty alleviation efforts. Logistics costs are among the highest in the world at US\$0.20 per ton-km (more than five times those in developed countries). The road sector is also beset with governance challenges that currently leave in doubt whether the Government is getting the best value for money. Air transport is costly at more than 11 times the cost of road³, making it a non-viable alternative for the majority of passenger and cargo movements. The railway network is limited (less than 250 km total length), and has not been operational for over two decades. Inland waterway transport offers excellent opportunities in the short to medium term especially along the White Nile River sections between Juba and Renk. Removing transport constraints will contribute to economic development and poverty alleviation by unleashing the agricultural development potential of the country. This will be achieved through reduction in the costs of inputs (seeds, fertilizers, machinery), but more importantly through the efficient delivery of significant tonnage of farm and fisheries produce to local, regional, and international markets, benefiting local producers, transporters and communities.

South Sudan, endowed with the White Nile and its tributaries, possesses significant potential for developing its inland waterways. Inland Waterways Transport (IWT). The 1300 km river section between Juba and Renk cuts across the country from South to North, with connections to major towns and is one of the most critical corridors in the country. There are seven functional river ports in South Sudan, namely Renk, Malakal, Shambe, Diam Diam, Bor, Mongalla, and Juba. Due to the poor road infrastructure and presence of land mines in some areas, most of the population finds river transport along the White Nile and its tributaries a practical and cost-effective option. Toward the north of the country, the poor river system remains the only link to the capital city of Juba. Apart from transporting people, the World Food Programme (WFP) is the main customer for barge owners as they supply humanitarian aid to communities affected by conflict and floods. IWT is recognized globally as a low-cost, energy-efficient, and environmentally friendly mode of transport. The energy consumption per kilometer for every ton of goods transported via IWT is approximately 17 percent of that of road transport and 50 percent of rail transport. Additionally, the overall costs for bulk transport using IWT are roughly 83 percent lower than road transport and 70 percent lower than rail transport. However, South Sudan IWT has not been spared by the conflicts and neglect with its river navigation system also suffering from a lack of investment and maintenance over the past 4 decades.

³ The cost of transporting 7,000 kilograms of sorghum from Juba to Wau is US\$1,583. During the rainy season, the poor state of the roads often forces aid to be transported by air, which costs US\$18,000



The refugee situation in South Sudan is also dire and leading to huge pressures on the country and on its transportation network. The arrival of individuals fleeing the conflict in Sudan has further increased the need for humanitarian and development assistance for displaced populations in the country. Since the outbreak of conflict in Sudan in April 2023, 1,006,001, refugees, refugee returnees, and asylum seekers have crossed the border into South Sudan.⁴ The limitations of current road networks, further inhibited by existent and ongoing seasonal rains and flooding, as well as the costliness of air transport, highlights the importance of improving riverine transport as a critical modality to address the growing needs of refugee and host community populations. As indicated by the International Organization of Migration (IOM) and UNHCR, river transport has been, and will likely remain, a critical modality to the movement of cross-border displacements from crossing points to their onward destinations as reception sites are overcrowded and provision of basic services is stretched.

The transport sector ministries: Ministry of Transport (MoT), and Ministry of Roads and Bridges (MRB) are the key sectoral entities overseeing the policy, regulatory and management of the sector. Both are in deep need of reforms, and of capacity strengthening to carry out their mandates given a low human capital base, and governance challenges that don't ensure full value for money.

South Sudan's transport sector is highly vulnerable to natural hazards and the impacts of climate change. Extreme temperatures, high precipitation variability, floods, and landslides damage transport infrastructure and affect the navigability of inland waterways. The increased frequency and intensity of heavy rainfall events result in floods and rapid water flows, changes in sedimentation levels and patterns, and bank erosion and accretion. Conversely, reduced annual mean precipitation levels and rising temperatures decrease river flow in the dry season, limiting the draft for vessel movements.

The transport sector accounts for a small share of South Sudan's total greenhouse gas (GHG) emissions, though its contribution is expected to increase with economic and population growth. Although the transport sector's contribution to national GHG emissions was only 1.2 percent in 2015⁵, this is expected to grow as the country develops its transport infrastructure and services to support economic growth and to meet the needs of a growing population. It is therefore crucial to prioritize low-carbon development strategies and options including enhancing the reliability, efficiency, resilience and overall attractiveness of low-carbon transport modes, such as inland waterways transport.

Even if labour force participation in South Sudan is almost equal between women and men, of the employed population, more women than men work in low-paying, low-skill elementary occupations (55 percent for women vs. 24 percent for men).⁶ The fisheries value chain provides an excellent opportunity to advance opportunities for women and enhance gender agency and empowerment.

The Project aims to make transport and logistics on the River Nile more efficient and reliable, through improved navigation, connectivity, and capacity-building initiatives. This endeavor will accelerate South Sudan's shift from a reliance on humanitarian aid to growth-led economic development. By improving connectivity along a key section of the Nile (focusing on the riverway section between the ports of Juba and Bor), the initiative is poised to unlock South Sudan's agricultural potential, boost productivity through market integration, and curtail logistics expenses, leading to a surge in trade for key agricultural value chains. Further, improving the efficiency of IWT will strengthen the state's capacity to provide security for communities, including economic security, through the enforcement of the rule of law and the delivery of essential social services to conflict- and flood-affected areas. Since the river is a lifeline link for the northern communities to access Juba, transport improvement will also be crucial in reducing social fragmentation and horizontal

⁴ [UNHCR \(2025\)](#)

⁵ [Republic of South Sudan. 2021. South Sudan's Second Nationally Determined Contribution \(NDC\). Available at URL.](#)

⁶ World Bank. 2018. Maximizing the Impact of the World Bank Group in Fragile and Conflict-Affected Situations (English). The World Bank, Washington DC



inequalities. It will also address and mitigate key climate risks along the river, ensuring the riverine infrastructure is resilient and promoting increased capacity in IWT management. The investment will also create job opportunities and promote economic opportunities, especially for women, in turn increasing inclusion and equity.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)

The Project Development Objectives (PDOs) are to improve transport efficiency and reliability on the River Nile between the ports of Juba and Bor, and to strengthen the institutional capacity of the sector ministries to manage the transport infrastructure.

Key Results

The Project seeks to measure the achievement of the PDO through the following proposed key indicators:

- Improved reliability of navigation along the River Nile between Juba and Bor (people benefiting from improved access to transport infrastructure and services: -total number, number female, number of refugees; and days that the riverway is available for safe transport operations per year)
- Improved efficiency of inland waterways transport between Juba and Bor (Reduction in costs of cargo transport, reduction in passenger transportation costs, reduction in cargo transit times, and increase in cargo volumes transported)
- Strengthened sector capacity through improved institutional structures and operations (establishment and operationalization of an inland water transport authority, and preparation of an updated National Transport Masterplan)

D. Project Description

The Project aims to make transport more efficient and reliable, and logistics on the River Nile more efficient, through improved navigation, connectivity, and capacity-building initiatives. This endeavor will accelerate South Sudan's shift from a reliance on humanitarian aid to growth-led economic development. By improving connectivity along the Nile, the initiative is poised to unlock South Sudan's agricultural potential, boost productivity through market integration, and curtail logistics expenses, leading to a surge in trade for key agricultural value chains. Further, improving the efficiency of IWT will strengthen the state's capacity to provide security for communities, including economic security, through the enforcement of the rule of law and the delivery of essential social services to conflict- and flood-affected areas. The investment will also create job opportunities and promote economic opportunities, especially for women, in turn increasing inclusion and equity. It will also address and mitigate key climate risks along the river, ensuring the riverine infrastructure is resilient and promoting increased capacity in IWT management. With the project interventions, the river navigation potential as a safer, cleaner, more environmentally friendly mode will be realized. The expectation is to increase from about 50,000 tons on the Juba-Bor section to at least 150,000 to 200,000 tons of IWT traffic on the Nile between 2029 and 2034 in the medium development scenario. The IWT corridor section complements the Juba-Bor Road by ensuring that bulk commodities like grains, fisheries, construction materials and food aid can be transported by a



safer, cheaper, cleaner mode, that also saves the road from being damaged by overloaded trucks⁷. The IWT corridor is also less susceptible to the effects of floods disrupting operations versus the road.

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

Summary of Screening of Environmental and Social Risks and Impacts

The Project is expected to improve transport efficiency and reliability on the Nile River for movement of goods and people and this will result in significant socio-economic benefits. However, implementation and operation of the Project will have direct and downstream environmental, health, and safety (EHS) risks and impacts, primarily from activities under Components 1 & 2. EHS risks and impacts from Component 1 activities include: (i) terrestrial and aquatic habitats alteration and impact on biodiversity due to vegetation clearing, dredging and waterway clearing, reclamation, river channel modification, permanent protection work, waste disposal, and water pollution; (ii) risk from dredging including release of contaminants to the water column due to re-suspension of sediments and risk from disposal of dredged materials; (iii) deterioration of river water quality due to increased sedimentation and turbidity, increased nutrients loading, oxygen depletion, and toxic algal proliferation; (iv) risk of soil erosion and land degradation due to construction activities including permanent river protection work and last mile connectivity to terminal; (v) air emissions during operation of construction vehicles, machineries, and equipment including fugitive dust and exhaust emissions; (vi) noise and vibration from construction activities including underwater noise and vibration; and (vii) impact of solid, liquid, and hazardous waste generation from various construction activities and disposal. EHS risks and impacts from Component 2 activities include: (a) terrestrial vegetation clearing and associated impact on biodiversity for construction of warehouses, shipyards, and other logistics facilities; (b) risk of soil erosion and land degradation from construction activities; (c) risk on river water quality from spill of hazardous chemicals at ports, from vessels, and from antifouling paints used on vessels; (d) water pollution risk due to release of ballast water used to stabilize vessels during unloading and also from bilge water; (e) air emission from diesel engines used by vessels and from land-based activities during handling of cargo using machines and vehicles; (f) impact of underwater noise and vibration during operation of vessels including its impact on aquatic organisms; (g) solid waste generated during operation and maintenance of ports and vessels; (h) generation of wastewater during operation of ports, other facilities, and from vessels; and (i) risk from natural disasters and climate change vulnerability including from flooding, river water level rise, and inundation. Both Components 1 and 2 activities will result in occupational health and safety (OHS) risks during construction and operation of the inland water transport facilities. Construction period OHS risks include excavation risks; work-at-height; risk of drowning while dredging and performing other water-based activities; exposure to air emission, noise, and vibration; exposure to hazardous chemicals; and manual handling. Operation period OHS risks include risks from use of heavy machineries and equipment to handle cargo; risk during lifting of loads; confined space entry including entry in vessels, storage silos, and tanks; safety risk of vessels; fugitive

⁷ For example, one river barge of 1500 tons capacity can replace fifty 30-ton trucks. Also facilitating river transport all the way from Juba to Renk would mean that there is no need to load trucks in Juba, offload them in Bor, reload them onto water vessels in Bor and offload them again in Renk.



dust and noise emissions; exposure to chemicals used for operation of ports and vessels, and during hazardous goods handled. Community health and safety risks during operation of ports and vessels include risk of vessel capsizing and potential drowning; risk of fire on the vessels; potential downstream flooding risks from the permanent protection works between Juba and Bor; risk from lack of sufficient emergency handling procedures; and security risks. Also, there is a risk of loss of ecosystem services obtained from the terrestrial and aquatic environment affected by Project activities. The technical assistance (TA) activities under Component 3 include preparation of future investment projects, strategic sector studies, and strengthening borrower's capacity. These TAs could result in downstream EHS risks, as well as health and safety risks during strengthening borrower's capacities and Project management. The anticipated significant risks of the projects including risk from dredging activities, risk to biodiversity, and occupational and community health and safety risks during implementation and operation phases couples with the limited institutional capacity of the implementing agencies contributed to the High environmental risk of the project. The TA activities to be financed by the project do not have direct adverse social impacts. The project is not expected to impact staff within implementing entities or other institutions, or involve physical works. However, inadequate consultation and security related risks to workers who will be engaged for the TA activities can be risks of the project. While the activities identified in the project can be rated as low social risk, due to the down stream impact, the social risk for the project is rated as high. Road construction activities , if implemented following up the TAs to be supported by this project , may have impact on the assets and property of individuals; community health and safety, SEA/SH and security of workers, child labor and impact on underserved community. Another social risk could be weak grievance redress mechanism as well as in adequate consultation and participation of key stakeholders.

E. Implementation

Institutional and Implementation Arrangements

The Project will be implemented by MoT and MRB. These two sector ministries will collaborate with other key ministries and authorities, which will include the Ministry of Finance, the Ministry of Defense and Veterans Affairs, the Ministry of Water Resources and Irrigation, the Ministry of Livestock and Fisheries, the Ministry of Interior, the Ministry of Environment and Forestry, the Ministry of Trade and Industry, and state authorities. Within the MoT and MRB, the Project implementation structure in both implementing ministries will be three layered, consisting of minister to provide overall leadership, undersecretary who is the accounting officer, and Project coordinator responsible for day-to-day operations. MoT will be in charge of all components relating to the IWT and ports, while MRB will be in charge of all components relating to roads. Both ministries will be jointly in charge of the Transport Masterplan preparation.

The Project coordinators in MoT and MRB will oversee the 2 Project Implementation Units (PIUs). The PIUs will consist principally of staff from the respective ministries supported by combination of domestic and specialist international consultants hired for the project. These international consultants are a shared resource for both ministry PIUs providing expertise in technical, financial management, procurement, social and environment safeguards. The objective is that the seconded ministry staff and domestic staff in the PIUs will gradually acquire experience and expertise that they can pass on to other staff and also apply on similar projects. In this way, capacity is built through a learning-by-doing approach.

At the strategic level, oversight and guidance will be provided by a Project Steering Committee, chaired by the Vice President for the Infrastructure Cluster. This committee will comprise representatives from MoT, MRB, Ministry of Finance, the Ministry of Defense and Veterans Affairs, the Ministry of Water Resources and Irrigation, the Ministry of Livestock and Fisheries, the Ministry of Interior, the Ministry of Environment and Forestry, the Ministry of Trade and Industry, and state authorities. The committee is tasked with closely monitoring the project's execution, providing



strategic and policy guidance, and conducting quarterly evaluation meetings to ensure optimal project delivery and performance.

At the project-level, the implementation structure will comprise two dedicated committees: a Technical Committee and a Procurement Committee. These committees are tasked with monitoring and providing technical, strategic, and financial guidance to the project implementation team. They will convene on a quarterly basis and report their findings and recommendations to the Steering Committee. Depending on the committee, mandate includes the evaluation of project milestones, endorsement of the annual work plan, scrutiny of financial reports, and engagement with relevant stakeholders to support project performance. The technical and procurement committees will fall under the overall leadership of the respective Undersecretary for MoT or MRB. The Procurement Committee will be formed as stipulated in the Public Procurement and Disposal of Assets Act 2018 and the associated Regulation. Details will be included in the Project Operational Manual.

The project will work closely with UNHCR and South Sudan's Commission for Refugee Affairs (CRA) on the implementation of refugee and host communities-supported activities. Key focus areas will include: (i) identifying existing refugee and host community structures, community-based targeting method, (ii) sharing information on the activities implemented in the refugee camps and host communities by UNHCR and other agencies, (iii) participating on the coordination committees established at central and local Government levels, and (iv) participating in project implementation monitoring and supervision missions.

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