



**NORTHERN CORRIDOR
TRANSPORT
OBSERVATORY**

RELIABLE PERFORMANCE DATA

BIANNUAL NORTHERN CORRIDOR TRANSPORT OBSERVATORY PERFORMANCE DASHBOARD

January to June 2023



Contents

1	SPECIAL FEATURE: Enhancing Connectivity; Exploring the Cross-Border Transport Infrastructure along the Northern Corridor	6
1.1	Introduction:	6
1.2	The Northern Corridor	6
1.2.1	Key Elements of the Northern Corridor Transport Infrastructure:	6
1.3	Current Systems and Improvement Projects, Ongoing and Planned.	7
1.3.1	Border Posts along the Northern Corridor	7
1.3.3	Railway Network	22
1.3.4	Pipeline Network	23
1.3.5	Inland Waterways Transport Network	25
1.4	Conclusion	27
1.5	Recommendations	27
1.6	Thematic Coverage of Previous Special Features	27
2	INTRODUCTION.	28
2.1	Introduction.	29
2.2	Demographic and Macroeconomic Indicators for Northern Corridor Member States	29
3	VOLUME AND CAPACITY AT THE PORT OF MOMBASA	31
3.1	Cargo Throughput	32
3.2	Volume per Country Destination through the Port of Mombasa	33
4	MARITIME INDICATORS	35
4.1	Ship turnaround time	36
4.2	Vessel waiting time before berth at the port of Mombasa	37
5	PORT INDICATORS	39
5.1	Containerized Cargo Dwell Time at the Port of Mombasa	40
5.2	Time for clearance under the Integrated Customs Management Systems (iCMS)	41
5.3	Rwanda Revenue Authority (RRA) Customs Time and Delays	42



6 CORRIDOR INDICATORS44

 6.1 Weighbridge performance in terms of Traffic along the Northern Corridor 45

 6.2 Weighbridge performance in terms of compliance along the Northern Corridor . 47

 6.3 Transit time in Kenya from the port to the borders. 49

 6.3.1 Transit Time from Origin to various border points 50

 6.4 Transit time in Rwanda 51

 6.5 Transit time in Uganda 52

7 REFERENCES54



List of Tables

Table 1: Common Border Posts Designated along the Northern Corridor by the NCTTA	7
Table 2: Key Macroeconomic Indicators	30
Table 3: Mombasa port volume performance for January to June various years	33
Table 4: Throughput as a share of market per destination various years	33
Table 5: Clearance time under iCMS	42
Table 6: RRA SCT Customs Time and Delays at the Port of Mombasa (Hours)	42
Table 7: Average daily traffic through Kenyan weighbridges	46
Table 8: Weight compliance at the Kenyan weighbridges	48
Table 9: Transit Time from Origin to various border points in Hours	50
Table 10: Average Transit time in Rwanda	51
Table 11: Average transit Time from Kampala in hours	52



List of Figures

Figure 1: Ship turnaround Time at the port of Mombasa in hours37

Figure 2: Average Vessel Waiting Time before Berth in hours at the port of Mombasa38

Figure 3: Average containerized import dwell time in hours41

Figure 4: Process of cargo clearance under SCT43

Figure 5: Transit time from Mombasa to Malaba in hours49

Figure 6: Transit time from Mombasa to Busia in hours50

Maps

Map 1: Northern Corridor Multimodal Transport Map19

Map 2: Northern Corridor Railway and Pipeline Map24

Map 3: Northern Corridor Roads and Inland Waterways Map26



1 SPECIAL FEATURE: Enhancing Connectivity; Exploring the Cross-Border Transport Infrastructure along the Northern Corridor

1.1 Introduction:

Cross-border infrastructure consists of various sub-sectors, including both physical (hard infrastructure) and non-physical (soft infrastructure). In this special feature, we delve into the dynamic and crucial cross-border hard transport infrastructure that forms the backbone of the Northern Corridor. This vital trade route facilitates the movement of goods, people, and services across multiple countries, playing a pivotal role in fostering regional integration and economic growth. From roads, and railways to ports and border crossings, we explore how this intricate network operates and examine the ongoing efforts around various borders to enhance connectivity and streamline cross-border transportation.

1.2 The Northern Corridor

The Northern Corridor is a multimodal surface transport system linking the Great Lakes Region with the Kenya Sea Port of Mombasa. Member States of the Corridor include Burundi, DR Congo, Kenya, Rwanda, South Sudan, and Uganda. It also serves Northern Tanzania and Ethiopia. One of the corridor's key objectives is to guarantee the free movement of goods and persons through the respective territories of the Member States. It stretches from the port city of Mombasa in Kenya to landlocked countries in the interior, providing a lifeline for their import and export activities. The Northern Corridor transport infrastructure comprises infrastructure designated by the Member States for the Northern Corridor traffic. This includes the sea Port of Mombasa, roads, railways, oil pipelines, inland waterways, border stations, weighbridges, transit parking yards and inland freight stations used in the handling and clearance of internationally traded cargo. The corridor's significance lies in its potential to drive economic development, poverty reduction, and increased regional trade.

1.2.1 Key Elements of the Northern Corridor Transport Infrastructure:

- **Port and Maritime Connectivity:** The corridor begins at the Port of Mombasa, a vital gateway for international trade. The port's expansion and modernization efforts have led to increased cargo handling capacity and more efficient operations, ensuring a seamless flow of goods.
- **Road Networks:** A network of well-maintained roads and highways connects the various countries along the corridor. The road infrastructure is designed to accommodate heavy cargo and enable swift transportation, enhancing trade between landlocked nations and coastal ports.
- **Railway Systems:** The Northern Corridor is also serviced by rail networks, with a notable project being the Standard Gauge Railway (SGR) that connects Mombasa to Nairobi and further to Naivasha Inland Container Depot in Kenya. This railway system has significantly reduced cargo transportation time and costs.
- **Inland Waterways:** The Northern Corridor also has an intricate network of Inland waterways that silently play a vital role in trade and connectivity. These waterways, including Lake Victoria, Lake Tanganyika, Lake Albert, Lake Kivu, Lake Kyoga, River Nile and Akagera River, among others, form a natural avenue for transporting goods and people across the region.



- **Pipeline Network:** The Northern Corridor pipeline runs from Mombasa's oil refinery to Nairobi, Eldoret, and Kisumu in Kenya. In addition, it serves Uganda, Rwanda, Burundi, and the Eastern Democratic Republic of the Congo through tanker transshipment on the Northern Corridor highways and oil jetties at Lake Victoria in Kisumu. The pipeline network also consists of loading depots in various areas, including Mombasa, Konza, Nairobi's Industrial Area, Embakasi – Nairobi (Aviation depot), Nakuru, Eldoret, and Kisumu.
- **Border Crossings and Customs Procedures:** Efficient border crossings are crucial for uninterrupted movement of goods and people. Harmonizing customs procedures and reducing bureaucratic barriers have been ongoing efforts to expedite the process.

1.3 Current Systems and Improvement Projects, Ongoing and Planned

1.3.1 Border Posts along the Northern Corridor

The One Stop Border Post (OSBP) represents a fresh approach to immigration control and border management within the East African Community (EAC) region. Its core goals encompass enhancing trade facilitation, streamlining the movement of goods and people, reducing business costs, and expediting the movement of services within the community and neighboring nations. Operating as a shared border crossing point managed jointly by adjacent Partner States, the OSBP encourages collaboration among various border agencies, ensuring effective coordination to optimize operational efficiency. This approach consolidates the activities of government agencies responsible for border control procedures under a single roof, obviating the need for travelers and goods to undergo multiple clearances on both sides of the border.

Functioning as a pivotal trade facilitation tool, the OSBP concept champions a unified approach to promoting trade, simplifying people's movement, and enhancing security. By eliminating the requirement for individuals and cargo to stop twice for border crossing formalities, this concept not only expedites the process but also fosters a coordinated and integrated approach to border operations. In 2016, the East African Community enacted the One-Stop Border Posts Act, reflecting the collective aspiration to establish and implement OSBPs across the region to bolster efficient trade and movement. The Northern Corridor Transit and Transport Agreement (NCTTA) also designates specific border points along different routes for the Northern Corridor, reinforcing the strategic significance of OSBPs.

For successful OSBP operation and efficient trade promotion, several key components play a vital role: the East African Community One Stop Border Posts Act of 2016, both physical and soft infrastructure, political support, constructive collaboration with the private sector, and the establishment of Joint Border Committees and cooperation with border communities. These elements collectively contribute to the effective implementation and seamless operation of the OSBP approach.

Table 1: Common Border Posts Designated along the Northern Corridor by the NCTTA

	Borders Between	Border	Status
1	Kenya /Tanzania	Namanga	OSBP on both sides
2	Kenya /Tanzania	Lunga Lunga/Horohoro	
3	Kenya /Tanzania	Taveta/Holili	OSBP on both sides
4	Kenya / Tanzania	Isebania/Sirari	
5	Kenya / Uganda	Malaba	OSBP on both sides
6	Kenya / Uganda	Busia	OSBP on both sides
7	Kenya / Uganda	Lwakhakha	
	Kenya / Uganda	Suam	OSBP under construction
8	Kenya / Uganda	Lokiriana/Nakiloro	
9	Kenya / South Sudan	Nadapal	



	Borders Between	Border	Status
10	Uganda / South Sudan	Nimule/Elegu	OSBP on Uganda side
11	Uganda / South Sudan	Oraba	
12	Uganda / DRC	Goli/Mahagi	OSBP construction 90% completed
13	Uganda / DRC	Mpondwe/Kasindi	OSBP on Uganda side
14	Uganda / DRC	Paidha/Padea	
15	Uganda / DRC	Ishasha	
16	Uganda / DRC	Ntoroko	OSBP on Uganda side
17	Uganda / DRC	Vurra	
18	Rwanda/ Uganda / DRC	Ruhengeri / Bunagana	Feasibility is done for OSBP
19	Uganda /Rwanda	Katuna/ Gatuna	OSBP on both sides
20	Uganda /Rwanda	Kyanika/Cyanika	OSBP on both sides
21	Uganda /Rwanda	Mirama Hills/Kagitumba	OSBP on both sides
22	Rwanda / Burundi	Nemba/Gasenyi	Straddled OSBP
23	Burundi / Rwanda	Akanyaru/Kanyaru	
24	Burundi / Rwanda	Ruhwa	OSBP on both sides
25	Rwanda / DRC	Rubavu/Goma	OSBP on both sides
26	Rwanda / DRC	Rusizi / Ruzizi	OSBP under construction
27	Burundi / DRC	Gatumba / Kavimvira	
28	Rwanda/ Burundi	Nemba/Gasenyi	OSBP on both sides
29	Uganda / Tanzania	Mutukula	OSBP on both sides

Source: NCTO Compilation

The status of infrastructure development at some of the key border crossings along the Northern Corridor is discussed in the following sub-sections;

1.3.1.1 Malaba

A One-Stop Border Post (OSBP) facility at Malaba border between Kenya and Uganda on the Northern Corridor. Border type: Juxtaposed. Malaba/Busia-Jinja are planned for rehabilitation by the Government of Uganda.

An access road that was constructed to connect to the new bridge was completed and has been open to traffic since June 2019. The road access was done but it is not connected to the bridge, which requires an overhaul. The gatehouse, landscaping and paving have not been done.

Improvements have been made at the Malaba One Stop Border Post to enhance trade facilitation and streamline processes. These enhancements include the installation of a drive-through cargo scanner, which enables non-intrusive inspections of cargo and helps in reducing instances of concealment. Additionally, a baggage scanner has been installed to improve the clearance of passengers' belongings.

Significant improvements have been undertaken at the Malaba OSBP to streamline trade and enhance operational efficiency. Key enhancements include the installation of a drive-through cargo scanner for non-intrusive inspections, reducing the likelihood of concealed items. Similarly, a baggage scanner has been implemented to expedite passenger belongings' clearance. The adoption of an online clearance system via the Single Window System by various Partner Government Agencies (PGAs) has facilitated more efficient and continuous operations, with 24-hour availability.





Malaba One-Stop Border Post

Further infrastructure upgrades have been carried out, such as floodlight installations to enhance nighttime visibility, power backup systems (UPS and generators) to ensure uninterrupted operations, and a water purification system for clean water supply. Ongoing projects aim to amplify border post efficiency, including the installation of smart gates for streamlined entry and exit processes, converting the OSBP Canteen into a Service Delivery Centre, and constructing a Kenya Railways Transit Shed designed to manage a substantial volume of TEUs per week.

1.3.1.2 Busia

The Busia One-Stop Border Post (OSBP) was constructed with funding from the United Kingdom's Department for International Development (DFID) and additional support for systems and related infrastructure from Global Affairs Canada. This investment encompasses various essential structures such as office buildings, cargo verification bays, and ICT networks. Busia OSBP has a drive through cargo scanner, the unit scanner (for cars) as well as the baggage scanner. The Busia OSBP became operational in 2018, with the goal of establishing efficient border control mechanisms. By minimizing clearance time for goods between Kenya and its neighboring nation, the OSBP strives to stimulate trade, reduce transportation costs, and enhance transshipment cargo along the Central Corridor. This initiative has the potential to significantly decrease border-crossing time by approximately a third.

On the Kenyan side, the road from Kisumu to Busia, with two lanes but no shoulders, varies in condition and deteriorates closer to the Busia border station. The road's narrowness and poor state contribute to traffic congestion at the border, exacerbated by various activities taking place along the road. To enhance the overall efficiency and infrastructure of the Busia OSBP, several recommendations have been made, including upgrading the road leading to the OSBP to a dual carriageway, relocating vendors and Matatu stages away from the road, establishing a designated parking area for trucks carrying dangerous cargo, implementing stricter monitoring and regulation of fuel destined for Uganda at Kenyan fuel depots, expediting the construction of the Mundika Trailer Park, and developing a facility in Uganda for fuel tankers to clear before proceeding on their journey, thus alleviating parking congestion at the OSBP.



1.3.1.3 Taveta/Holili

The Taveta/Holili One Stop Border Post was inaugurated in 2016, facilitated by donor support from TradeMark Africa (TMA). This border post serves as a shorter route compared to the Busia or Malaba routes, saving more than 300 km to Bujumbura and Uvira, and over 200 km to Kigali. This advantage extends to goods transported to other parts of Eastern DRC via Kigali and Bujumbura, contributing to efficient trade. This route also reduces the number of border crossing points for Burundi from 3 to 2 and for Eastern DRC from 4 to 3 through the Gatumba/Kavimvira border. However, the lack of geo-fencing in some transit route sections has led to false alerts regarding cargo diversion, particularly in the Holili-Himo region on the Tanzanian side. The road infrastructure leading to the borders is generally in good condition, with a few sections in Tanzania being in fair condition.

Common imports from Tanzania to Kenya through this border include LPG gas, rough sawn timber, and various farm produce such as dry maize, beans, rice, onions, cabbages, groundnuts, ginger, and oranges. Raw materials like bauxite and cement bags are also imported from Tanzania to Kenya. Conversely, Kenya exports finished products like steel wool, slippers, bubble gum, sweets, coconut oil, enamels, and sufurias to Tanzania. Additionally, agricultural products such as bananas and coconuts are among the items exported from Kenya to Tanzania through this border point.

1.3.1.4 Mirama Hills/Kagitumba

The Mirama Hills/Kagitumba OSBP serves as a crucial link between Rwanda and Uganda, catering mainly to heavy commercial vehicles engaged in transporting international cargo. Positioned around 40 kilometres southeast of Ntungamo town in Uganda, this border post plays a pivotal role in facilitating trade activities. Trucks entering the OSBP undergo scanning procedures before proceeding with customs clearance, handling cargo destined for Kenya, the Democratic Republic of Congo (DRC), and South Sudan. The station deals primarily with goods like tea, coffee, hides, and skins, contributing significantly to cross-border trade facilitation.

The road section from Mbarara to Mirama Hills is currently in good condition, featuring speed-regulating humps. Discussions about transitioning from road humps to speed cameras are underway, considering the advantages and disadvantages of each approach. On a daily basis, around 30 trucks undergo clearance at the station, with only a small percentage being loaded. The resumption of operations at the Katuna/Gatuna OSBP has led more trucks to prefer that route for entering and exiting Rwanda from Uganda, despite its hilly terrain. Approximately 40 loaded cargo trucks are cleared daily to exit Uganda for Rwanda, with the process taking about 10 minutes per truck. The well-maintained truck parking yard at Kagitumba OSBP,



Mirama Hills/Kagitumba OSBP between Rwanda and Uganda

accommodating roughly 90 trucks, streamlines the border-crossing experience. Many arriving trucks are pre-cleared, further expediting the crossing process to less than 10 minutes per truck. Kagitumba OSBP also holds the potential to handle fuel products transported through Mahathi Oil Jetty for Rwandan fuel importers, offering an efficient alternative to the congestion and risks associated with petroleum product clearance at Katuna/Gatuna border. Despite a shorter transit route from Kagitumba to Rubavu/Goma via Rukomo/Gicumbi, this route is yet to be officially commissioned and recognized by Customs.

1.3.1.5 Mutukula

Mutukula, positioned along the Uganda-Tanzania border within the Central Corridor, holds a pivotal role as a significant border station. Serving as a crucial connection point between the Northern and Central Corridors, this border station offers an alternative transit route for cargo destined for Burundi and Rwanda through the Northern Corridor. It also stands as a strategic option for stakeholders in Burundi, the DRC, and Rwanda to import fuel via the Mahathi Oil Jetty, utilizing the route through Mutukula for quicker access. While the distances from Masaka and Kyotera to Mutukula are approximately 88km and 43km, respectively, a direct route from Mbarara to Mutukula bypassing Masaka could potentially reduce transit time and costs, although the unpaved nature and some poor sections pose challenges.

Traffic flowing through the Mutukula border station from Tanzania is on the rise, with around 170 loaded trucks entering Uganda from Tanzania daily. Notably, 90% of this cargo comprises local exports from Tanzania to Uganda and beyond, featuring goods such as rice, maize, groundnuts, and beans. However, it's important to highlight that the truck parking yard at Mutukula OSBP in Uganda is paved but the one outside the OSBP is unpaved and in poor condition. Contrarily, the road section from Masaka to Mbarara, continuing to Ntungamo and Mirama Hills, is generally well-maintained. Nonetheless, the segment between Mbarara and Ntungamo is characterized by several road humps.

1.3.1.6 Rubavu/ Goma

The Rubavu/Goma border, known for its high volume of daily crossings surpassing 50,000 individuals, holds a prominent position as one of the busiest borders in Africa. This border station encompasses two distinct crossing points: Petite Barrière mainly for pedestrians, and Grande Barrière known as La Corniche One Stop Border Post, predominantly serving heavy commercial vehicles. Ongoing improvements to the infrastructure are shaping the development of these border stations, which are now equipped to accommodate only a limited number of trucks awaiting clearance for border crossing.



Rubavu/Goma border

A significant concern arises regarding the insufficient options for parking yard expansion on both sides of the Goma/Rubavu border stations. The current infrastructure falls short in meeting the needs of trucks awaiting clearance to cross the border. To address this challenge, a proposal suggests the establishment of truck rest stops or parking yards for trucks in transit through the Goma/Rubavu border, located around 5 to 10 kilometers away from the border stations. This strategy ensures that only trucks with completed border documentation are allowed to proceed to the border crossing point, facilitating a streamlined transit to their respective destinations and alleviating congestion at the border itself.

1.3.1.7 Cyanika/Kyanika

The Cyanika/Kyanika border station is grappling with the absence of a dedicated truck parking yard, resulting in temporary congestion as travelers and truckers complete their border formalities. The traffic flow through this border has notably surged, particularly in heavy commercial vehicles, which has increased from an average of 20 to around 60 trucks per day. This upsurge is partly due to the closure of the Bunagana border, leading trucks that once used Bunagana to opt for the Cyanika border instead.

A significant challenge at the Cyanika border station is the limited capacity of its parking yard. Roughly 70% of the traffic transiting from Uganda through Cyanika is bound for the DRC, while the remaining 30% is destined for Musanze, often carrying raw materials for the local cement factory. Given the mounting traffic, a proposal to upgrade the Cyanika/Kyanika border station to a One Stop Border Post (OSBP) is being considered. This upgrade is driven by the substantial increase in traffic and the need to effectively accommodate officers from both Uganda and Rwanda.

Despite the generally good condition of the road from Cyanika to Goma, there is a stretch between Cyanika and Musanze that requires attention due to its narrowness and the presence of a considerable number of cyclists and pedestrians. To enhance the efficiency of cross-border trade, issues such as non-harmonized levying of Road User Charges (RUC) among Partner States, storage inadequacies at various border stations, and challenges arising from poor internet connectivity are being addressed. The proposal includes measures to improve security with the installation of CCTV cameras, metal detectors, and scanners, while also streamlining the clearing process involving multiple agencies and sensitizing the public about border crossing requirements.

Cyanika Kyanika Border



1.3.1.8 Katuna/Gatuna

The Katuna/Gatuna border station has witnessed a significant improvement in physical infrastructure, largely due to the construction of One Stop Border Post (OSBP) facilities. These enhancements have led to a smoother flow of traffic at the border. After the complete reopening of the border station since COVID struck, there has been an increase in traffic passing through Katuna/Gatuna, with an average of 140 heavy commercial trucks being cleared daily as of October 2022. However, the efficient clearance process is hindered by the limited staffing at the station.

Despite these positive changes, ongoing infrastructure development at Katuna is still in progress, notably the completion of a crucial facility – the truck parking yard. Additionally, the lack of water supply at the station compromises its hygiene, which is concerning given the high and growing number of people using the border station. Interestingly, sufficient water supply is available on the Rwandan side of the border. Trucks parking along the road leading to the station pose challenges such as obstruction to other road users and lack of security lighting at night, making cargo susceptible to theft. This issue also impacts the safety of truckers. In terms of road infrastructure, the upcoming operationalization of the Rukomo – Byumba – Nyirangarama – Goma route will provide an alternative transit route from Katuna and Kagitumba to the Rubavu/Goma border station.



Katuna/Gatuna OSBP

1.3.1.9 Gatumba/Kavimvira

The Gatumba/Kavimvira border station, situated in the Gatumba region, presents unique challenges due to its lack of key features commonly found in other border stations. Unlike most border stations where all key stakeholders have offices at the crossing point, Gatumba/Kavimvira border station faces the issue of having essential DRC government agency offices located more than 3 kilometres away from the actual crossing point. This setup disrupts efficient services and collaborative efforts among border-crossing entities, particularly when addressing time-sensitive challenges.

Infrastructure deficiencies further compound the situation at the border station. The lack of a sufficient warehouse facility, especially the small warehouse at Gatumba, is a notable drawback. Additionally, hygiene facilities, especially washrooms for women, are notably absent at both the Gatumba and Kavimvira border stations. The border station also lacks a reliable water

supply. In terms of truck operations, the absence of a parking yard for trucks at the border station can lead to congestion and operational difficulties. In light of these challenges, urgent actions are required to address the existing deficiencies at Gatumba/Kavimvira border station. This includes restoring damaged Migration facilities and establishing a One Stop Center for all Government Agencies, both crucial steps toward enhancing service delivery and improving the overall functionality of the border station.

1.3.1.10 Lwakhakha and Suam River Borders

The Lwakhakha border holds strategic importance, with Uganda investing in a Class A road connecting it to the Tororo – Mbale highway, complemented by a bridge capable of accommodating heavy commercial vehicles. Plans are in place to enhance connectivity further, urging Kenya to upgrade the Kimaeti to Lwakhakha transit route to a Class A road. The border access road is also due for dual and realignment, complete with pedestrian walkways, ensuring safety and convenience for motorists and pedestrians alike. While Lwakhakha border station has essential facilities for clearing heavy commercial vehicles, the road from Webuye – Malaba Highway to Lwakhakha needs upgrading to accommodate such vehicles.

Promising road upgrade projects are underway, including the conversion of the Kapchorwa to Suam River border road to bitumen standards in Uganda, and Kenya's upgrading of the Kitale to Suam River border road. Additionally, KeNHA is fast-tracking the transformation of the Kimaeti – Lwakhakha road to international trunk road standards to facilitate the transit of heavy commercial vehicles. Safety concerns around the Lwakhakha bridge approaches are being addressed by redesigning the Kenyan side to eliminate hazardous tight curves during road upgrades.

A vision to develop Lwakhakha into an OSBP is unfolding, with plans for constructing staff quarters for government agencies and the potential establishment of a dedicated truck parking area. In the interim, Uganda and Kenya aim to implement OSBP operations using existing facilities while awaiting standardized OSBP infrastructure, a move that will streamline border procedures and enhance trade efficiency.

Kenya and Uganda are collaborating to transform the Suam one-stop border Customs and immigration post into a comprehensive one-stop-border post. This project, funded by the African Finance Development Bank and supported by both governments, involves China State Engineering Construction Corporation as the main contractor. In Uganda, efforts have been directed towards upgrading the Suam-Bukwo-Kapchorwa road, a project aimed at enhancing the regional economy. The road on the Uganda side is however steep and risky calling for the need to implement safety measures. Although the upgrades for the border post and the Kitale-Suam road are being carried out by separate entities, they are progressing concurrently and are expected to be completed in 2023.

1.3.1.11 Lokirima/Nakiloro

The Lokirima/Nakiloro border station, strategically positioned between Kenya and Uganda, aims to bolster interstate trade by facilitating smoother cross-border transportation. Both the Kenyan and Ugandan governments are actively involved in infrastructure development to ensure efficient connectivity and enhance trade relations.

In Kenya, the government is upgrading the roads connecting Lodwar to Lokirima/Nakiloro border and Lodwar to Todonyang border, intending to elevate them to international trunk roads with bitumen standards. Similarly, Uganda is making efforts to develop the road leading to the Nakiloro/Lokirima border with Kenya. These infrastructure improvements on both sides of the border are focused on fostering trade and connectivity, making movement of goods and people between the two countries more seamless. Although the operational status of the Lokirima/Nakiloro border station is not explicitly stated, it's evident that both governments are committed to its development to enhance trade and connectivity in the region.



1.3.1.12 Nadapal

Nadapal border, located between Kenya and South Sudan, is undergoing infrastructure development to enhance connectivity and trade between the two nations.

Construction work is progressing on the road from Kainuk to Nadapal in Kenya, with a significant portion of the road already completed. Similarly, the road from Juba to Nadapal in South Sudan is also in the process of construction, with efforts focused on improving transportation links between the two countries.

A notable highlight is the 1-kilometre stretch at Nadapal, situated between the government offices of Kenya and South Sudan. This section is recognized as a challenging part of the road due to its condition. Priority has been emphasized for the completion of this stretch to facilitate a smoother alternative transit route for heavy commercial vehicles.

In addition, there are calls for South Sudan to expedite the upgrading of the road section from Nesitu to the border with Kenya. This initiative aims to further improve road infrastructure and connectivity. As part of the development plan, the establishment of RoadSide Stations for truckers is also suggested, which would provide essential facilities and support services for vehicles passing through the area.

While specific information regarding the operational status of the Nadapal border station is not provided, it is clear that efforts are being made to enhance transportation infrastructure in the region, with a focus on facilitating trade and connectivity between Kenya and South Sudan.

1.3.1.13 Goli/Mahagi

The Goli/Mahagi border crossing, situated between Uganda and the Democratic Republic of Congo (DRC), plays a vital role as a bustling trade route connecting population centers such as Arua (UG) and Bunia (DRC). Moreover, it serves as a crucial link along the longer corridor connecting Mombasa Port to Kisangani.

The border post was upgraded to an OSBP. The OSBP construction works with financing through TradeMark Africa (TMA) formerly TradeMark East Africa (TMEA) were at 90% completion as of June 2023. The design entailed development of a juxtaposed One Stop Border Post facility comprising of roads, parking, warehouses on DRC side and the rehabilitation and modification of existing buildings, parking and small warehouse on the Uganda side.



1.3.1.14 *Nimule/Elegu*

In February 2020, the Nimule-Elegu border post, at the northern border of Uganda with South Sudan, officially started its operations as One Stop Border Post (OSBP). The facilities on the Ugandan side at Elegu were inaugurated in November 2018. Nimule-Elegu is the main border post between South Sudan and Uganda and the busiest land border in South Sudan, where 90% of goods imported from Uganda are processed, with an average of about 200 trucks crossing this border post daily. The OSBP has juxtaposed facilities. The bridge and road connecting Uganda and South Sudan is narrow and requires expansion to accommodate the truck traffic.

The border has a huge private truck parking yard run by the URA on the Uganda side. This facility acts as a holding centre and a rest station while awaiting clearance. However, the facility is not paved and is prone to flooding during the rainy season.

The road section on the Uganda side is paved and in good condition. On the South Sudan side, the roads are poor and often affected by weather conditions. Additionally, insecurity issues along Nimule to Juba road remain a big challenge.

1.3.1.15 *Ntoroko*

Ntoroko connects to the port of Kasenyi in DR Congo, a growing hub for exports to eastern DRC over Lake Albert. Ntoroko lake port works financed by TMA were completed and handed over to GoU in April 2022. The Ntoroko Lakeport is partially operational with the OSBP building and verification sheds being completed. All works were completed and handed over to GoU in April 2022. While the Reinforced Cement Concrete (RCC) jetty was completed, the dredging of silt had not been done at the time of the review impacting the use of the jetty for loading and offloading of cargo transported on smaller vessels. The business community is using an improvised locally-made jetty to access the lake and do the loading onto the boats. This temporary provision is unsafe and can only accommodate two boats at a time while the jetty was designed to accommodate 8 boats.

1.3.1.16 *Namanga*

The Namanga One Stop Border Post on the Kenya/Tanzania border was commissioned in 2018 by the Tanzania and Kenya Head of States. Many tourists pass through this border crossing to visit the nearby Amboseli National Park. In the past, access was difficult, but with the financial support from the African Development Bank, up to 242 km of roads around the border town have now been upgraded. The African Development Bank (AfDB) and the Government of Japan and the Japan International Cooperation Agency (JICA) funded the construction of the Arusha-Namanga-Athi River road.

1.3.1.17 *Lunga Lunga/Horohoro*

The Lunga-Lunga OSBP is a border station between Kenya and Tanzania, with KRA and Tanzania Revenue Authority (TRA) as lead agencies.

Its construction was supported by development partners Trade Mark East Africa (TMEA) and Japan International Cooperation Agency (JICA) in 2015. After the commencement of operation at the OSBP, the estimated average time for cargo clearance reduced from 48 hours to less than 8 hours, and revenue grew by 51% in the 2021/2022 financial year despite the challenges that came with the COVID-19 pandemic. However, the Lunga-Lunga OSBP has not been commissioned but plans are underway in close collaboration with the EAC secretariat.

Lunga Lunga OSBP just like all other OSBPs in the Northern Corridor, the entry and parking into the building is only done once. All processes concerned with documentation are processed in one public area for entering and exiting either adjacent country.

To reduce the time and cost of doing business, there is need to establish a common testing facility for PGAs with related mandates at the border post in order to avoid multiple sampling and testing of similar products.



1.3.1.18 Oraba

Oraba (Kaya) Border Control, between Uganda and South Sudan, is situated close to Oraba in Northwestern corner of Uganda.

Around the border, the Government of Uganda started the construction of Oraba Border Export Zone in 2020. The Border Market is one of the priority areas adopted by the National Development Plan II, National Trade Policy, and the NRM Manifesto that will enable Uganda promote regional trade. The project will help increase and fasten cross border flows of exports and services, promote value addition, improve capacity of cross border trade through increased compliance to standards, provision of employment, promote investments through Public Private Partnership.

1.3.1.19 Mpondwe/Kasindi

Under the World Bank (WB) fund to implement the Great Lakes Trade Facilitation Project (GTLF), the renovation of the entire Kasindi-Mpondwe border post was done in phases.

The works included rehabilitation of the parking area and installation of an unloading bay and customs storage areas; installation of two one-way and fenced-off pedestrian lanes, between the bridge and the border control facilities to prevent access to the inhabited area close to the border; replacing the narrow bridge between the two countries, on which two pedestrian lanes alongside the bridge were considered; new road design and construction to provide for one-way traffic flows; and new border infrastructure, facilities and systems at Mpondwe, the Uganda side of the border.

The construction of the support infrastructure of 125-kilometre Kasindi – Beni Butembo road began in March 2022.

Upgrades for One stop Border Post at Lamia, Bunagana and Kyanika are under design. Additionally, Masindi Port Bridge Karuma Bridge, Nebbi-Arua are also under design. In Rwanda, Rwempasha/Kizinga border post was inaugurated in July 2023.

Along the Northern Corridor route, between the Member State of DRC and the other Northern Corridor Member States, the OSBP concept has not been implemented in spite of the availability of requisite infrastructure. In addition, some border points have been experiencing spates of insecurity affecting cross-border movement of goods.

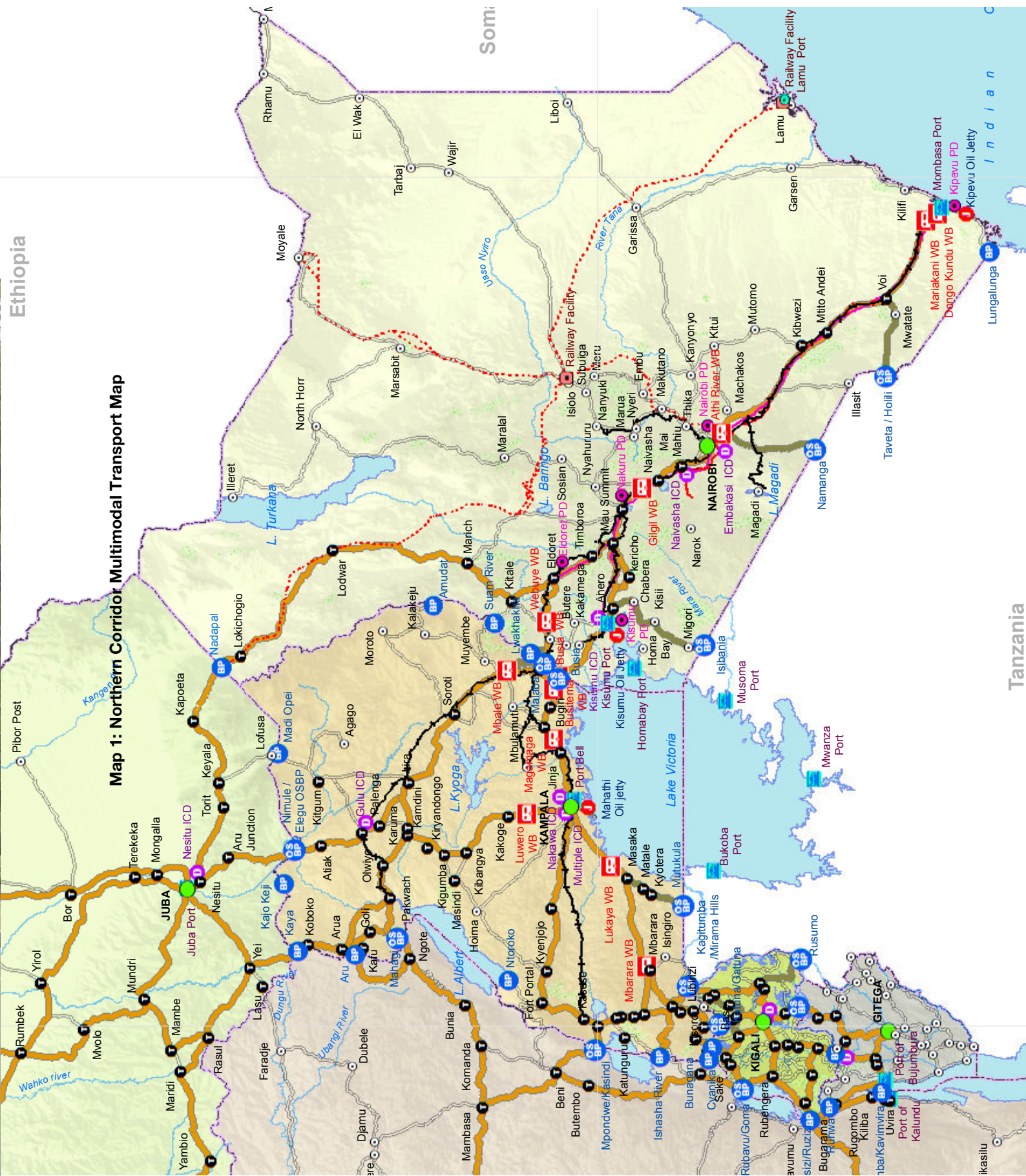


1.3.2 Road Network

From the 18th Edition of the Transport Observatory covering the period January to December 2022, 72.3% of the Northern corridor road sections in Burundi are in good condition, 23.5% are in fair condition, and only 4% in poor condition. In Kenya, 76% of the roads are in good condition, 19% in fair condition, and 5% in bad shape. Rwanda has 93.8% of Northern Corridor roads paved and in good condition. However, about 6.2% of the road network is in bad condition. In South Sudan, the road network is generally poor attributed to limited infrastructure development and maintenance resources. Of the 2,076 Km of the Northern Corridor network in Uganda, 49% of the roads are paved and are currently in good condition, 45% are in fair condition, and 6% are in poor condition. Many of the Northern Corridor roads in DRC are unpaved and generally in fair condition. Around the border crossing stations, most roads are paved and in good conditions.



Map 1: Northern Corridor Multimodal Transport Map



1.3.2.1 Burundi

the Republic of Burundi is actively engaged in the zero potholes campaign, aimed at reducing transit time and costs by rehabilitating and maintaining all national roads. This effort includes ongoing works on critical urban roads and sections of the Northern Corridor Road network such as Bujumbura-Bugarama and Bugarama-Gitega. Additionally, the rehabilitation and asphaltting of National Road No. 16 are in progress, funded by the Arab Bank for Economic Development in Africa (BADEA), OPEC Fund for International Development (OFID), and Financial Sector Deepening (FSD).

In terms of upcoming plans, there is a comprehensive focus on road upgrading and infrastructure development. The Cross Border Roads Upgrading Project, supported by the Africa Development Bank (AfDB), encompasses the construction of a One Stop Border Post (OSBP) at the Akanyaru Haut Border. This ambitious project, slated for completion in 2028, will occur in two phases. Phase 1 includes the upgrading of roads in Rwanda and Burundi, along with detailed engineering designs for the OSBP. Social infrastructure provision, institutional support, and capacity building are also part of this phase. Phase 2 will involve the construction of the OSBP, remaining road sections, and additional road projects, aligning with EAC standards under the National Development Plan. Furthermore, plans are in place to establish Roadside Stations (RSS) along Northern Corridor routes in Burundi, with a feasibility study for an RSS in Bugarama scheduled for FY 2023/2024, supported by the Northern Corridor Transit and Transport Coordination Authority (NCTTCA).

1.3.2.2 Democratic Republic of Congo

The government has invested in constructing and rehabilitating key roads, particularly those that connect major population centers and economic hubs. The World Bank and other international organizations have also provided funding for road infrastructure projects, such as the rehabilitation of the Goma-Bukavu road and the Beni-Butembo road. However, ongoing conflict and instability continue to pose challenges to road construction and maintenance efforts. At the same time, limited funding and resources have also hindered progress. Nonetheless, efforts to improve roads in Eastern DRC remain a critical priority for the region's economic and social development.

1.3.2.3 Kenya

In addition to various improvement projects along various road sections by the Government of Kenya, EU, AfDB and GIZ are financing the expansion of the Mombasa – Mariakani road section to decongest the corridor

1.3.2.4 Rwanda

Rwanda is currently improving its road network through various ongoing civil projects and maintenance initiatives happening nationwide. Notable maintenance activities involve a three-year periodic upkeep plan for crucial road segments like Rusizi-Buhinga-Tyazo, Crete Congo Nil-Buhinga, Tyazo-Karongi-Rubengera, and Rusizi-Bugarama-Ruhwa. Furthermore, several paved roads such as Kigali-Musanze, Kigali-Gatuna, Nyakinama-Musanze-Cyanika, and Musanze-Rubavu-Gisiza are also receiving continuous maintenance attention. The country is additionally focusing on projects like rehabilitating and expanding the Rambura-Nyange road and upgrading the Nyagatare-Rukomo, Huye-Kibeho-Ngoma, and Base-Butaro-Kidaho roads. The ultimate goal of these endeavors is to improve transportation and overall connectivity across the nation.

As for upcoming rehabilitation and upgrade plans, significant progress has been made in various road sections. Notably, the rehabilitation of the Kagitumba-Kigali section from Kagitumba to Kayonza was finished in 2022, and preparations for the Kayonza-Kigali stretch are in progress. In the same vein, funding has been secured for the restoration of the Kigali-Muhanga Road section, set to commence in 2024. Additionally, designs for the Muhanga-Huye route were completed in 2016, with ongoing efforts to gather the necessary funds for the project. Another significant part of this expansion includes the Huye-Akanyaru Haut section, which has completed designs from 2016 and is now undergoing fund mobilization. Moreover, the successful completion of rehabilitation works for sections like Huye-Rusizi and Gatuna-Kigali, Kigali-Musanze, and Musanze-Rubavu demonstrates the continued dedication to enhancing Rwanda's transportation infrastructure. Lastly, studies have been conducted for the

rehabilitation of Rusizi-Bugarama and Cyanika-Musanze routes in 2016 and 2017 respectively, with ongoing funding mobilization efforts for their realization.

1.3.2.5 South Sudan

Currently, two out of the three paved road sections, specifically Juba-Terekeka and Juba-Bor, have been successfully transformed into asphalt-paved roads. These projects were realized through the Government's Oil-for-Infrastructure Programme, and these newly completed roads exhibit a satisfactory level of the International Roughness Index (IRI). However, the Juba-Nimule Road, which was upgraded to an asphalt-paved standard in 2012, has deteriorated significantly due to a lack of maintenance since 2014, rendering its condition poor.

Several road segments, including Nadapal-Kapoeta-Torit-Juba Road, Juba-Lainya-Yei-Kaya Road, Terekeka-Yirol-Rumbek Road, and the Juba-Mundri-Maridi-Yambio road, are currently undergoing maintenance to achieve a gravel-surfaced standard under the Government of South Sudan's Oil-for-Roads program. While there is a priority to upgrade all these road sections to asphalt-paved standards, the progress has been hindered by a shortage of funding. Despite these challenges, recent efforts have been observed to enhance road infrastructure, particularly in major urban areas, offering potential relief from some of these road-related issues.

Moreover, the NCTTCA, in collaboration with the South Sudan Ministry of Transport, has conducted a thorough assessment of transport sector requirements in the Republic of South Sudan. This comprehensive study has identified various gaps encompassing policy, legal frameworks, institutions, financing mechanisms, capacity, interconnectivity, and stakeholder engagement. The study has also proposed intervention strategies to enhance trade and transportation along the Northern Corridor routes within South Sudan. NCTTCA's objective includes harmonizing and standardizing the implementation of trade and transport facilitation measures among the Northern Corridor Member States. In this pursuit, NCTTCA is leading the mobilization of funds for the effective execution of the recommendations derived from the study.

1.3.2.6 Uganda

Uganda is actively engaged in the rehabilitation and enhancement of its road network across different sections to ensure smooth and secure transportation. The process of rehabilitating the Malaba (Uganda/Kenya border) - Bugiri section is ongoing, and plans are in place for periodic maintenance of the Bugiri - Jinja segment to commence in 2025. Concurrently, efforts are underway to maintain and improve the Kampala - Jinja Expressway, while the Kibuye - Busega - Mpigi Expressway is progressing with advanced procurement stages, backed by funding from the African Development Bank (AfDB). Construction for the Busega-Mpigi expressway stretch commenced in 2019, and AfDB is poised to support the refurbishment of lake ports and vessels in Lake Victoria, as well as the rehabilitation of Kampala - Malaba MGR, aimed at promoting multimodal transportation.

Notably, significant strides have been made in various routes: the Mbarara - Katuna route and Mbarara bypass have been successfully rehabilitated, and the ongoing upgrading of the Mityana - Kitenga route to bituminous standards is projected to conclude in 2024. The Kyenjojo- Katunguru section's upgrade was finalized in 2021, and designs for the Kitenga - Kyenjojo sections and Kikorongo - Mpondwe are in progress. The upcoming paving of the Katunguru - Ishasha route is also in the works. Furthermore, rehabilitation initiatives are active for routes such as Kamdini - Pakwach- Nebbi and Nebbi - Arua Manibe. Anticipated for completion in 2024, the Busia - Tororo upgrade is set to enhance the entire road network's efficiency and safety.

In line with these developments, the Uganda Gulu Logistics Hub (GLH) project is a pivotal government endeavor in the trade and transport sector, crucial for boosting growth in Northern Uganda. Strategically positioned and linked to major international, regional, and municipal roads, the GLH project's first phase is already completed at 100%, with additional works and access road construction successfully accomplished.



1.3.3 Railway Network

The Northern Corridor route presently consists of both the Standard Gauge Railway (SGR) and the Metre Gauge Railway (MGR). The Mombasa-Nairobi SGR, spanning 485 kilometers, has been fully operational since 2018, along with the extension of the SGR line from Nairobi to Naivasha. The trunk line of the corridor is formed by the MGR line connecting Mombasa Port to Malaba Border to Kampala and the SGR line connecting Mombasa Port to Nairobi ICD to Naivasha ICD and to the Malaba line through MGR. Administrative control of the domestic lines lies with Kenya Railways Corporation (KRC) in Kenya and Uganda Railways Corporation (URC) in Uganda. Efforts have been undertaken to establish seamless rail services between MGR and SGR, including the operationalization of the MGR-SGR link and the enhancement of rail services through various initiatives like new locomotives, loading equipment, and rehabilitation projects. Uganda has also rehabilitated and expanded its railway lines, with upcoming rehabilitation plans aiming to improve the operational capacity of key MGR sections.

Furthermore, collaborative endeavours between Kenya and Uganda are notable. The two countries have entered into an agreement to jointly extend the SGR from Naivasha to Malaba in Kenya and from Malaba to Kampala, Kasese, and Mpondwe in Uganda. This extension is set to include a branch line connecting Bihanga to Mirama Hills near Rwanda. These ongoing and planned initiatives in both countries reflect their commitment to enhancing rail services and connectivity along the Northern Corridor route.

In Uganda, significant strides have been made in rail infrastructure rehabilitation. The Tororo-Namanve railway line, including the Jinja Pier line, has been rehabilitated, and preparations for the Imathia Concrete sleepers manufacturing Factory at Kawolo railway station have been completed. The production of over 4,500 concrete sleepers and the assembly of 200 panels have also been achieved. Further efforts are underway to rehabilitate the Tororo-Gulu line, a two-year project aimed at enhancing Uganda's regional competitiveness. Looking ahead, Uganda has plans to rehabilitate various operational MGR sections, including Malaba-Kampala, Jinja-Jinja Pier, Kampala-Port Bell, and Kampala-Nalukolongo, along with the Tororo-Gulu and Gulu-Pakwach sections that are currently not operational.

1.3.4 Pipeline Network

The Kenya Pipeline Company (KPC) plays a crucial role in the transportation, storage, and management of petroleum products within Kenya. The extensive pipeline network spans 1,797 kilometres and includes 14 pumping stations and seven loading depots, allowing for the transportation of approximately 6.9 billion litres of petroleum products annually. Key areas where petroleum loading depots are situated include Mombasa, Konza, Nairobi's Industrial Area, Embakasi (Aviation depot), Nakuru, Eldoret, and Kisumu. The pipeline runs from Mombasa's oil refinery, connecting Nairobi, Eldoret, and Kisumu, and further extends its reach to neighboring countries such as Uganda, Rwanda, Burundi, and the Eastern Democratic Republic of the Congo. This cross-border operation involves tanker transshipment on the Northern Corridor highways and oil jetties at Lake Victoria in Kisumu, with the Kisumu Oil Jetty (KOJ) serving as a link to Uganda's East Africa Logistics Limited Depot via Lake Victoria.

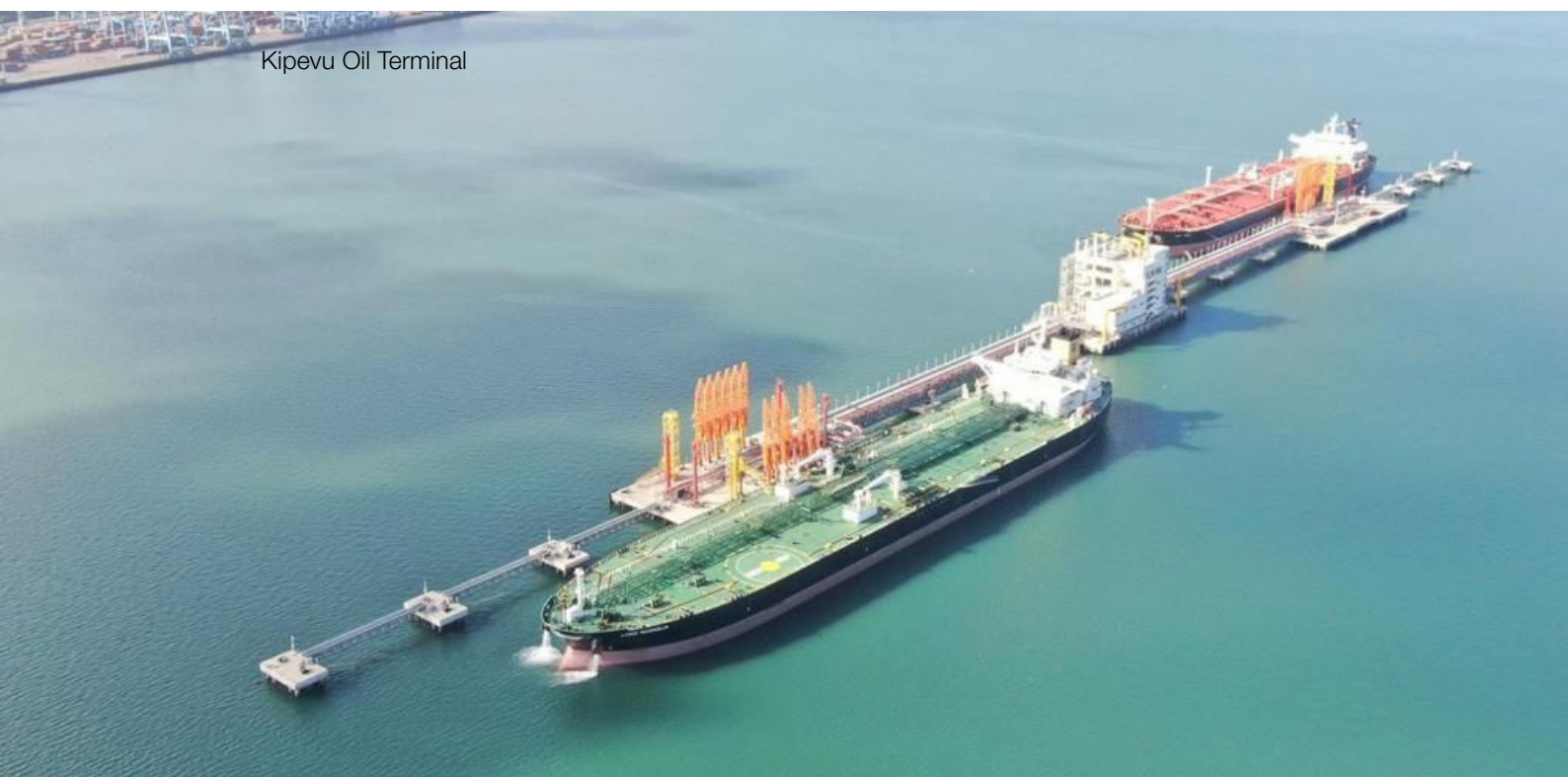
One notable accomplishment is the successful completion and operation of the Kisumu Oil Jetty (KOJ), a private supplementary facility that extends its connections to Uganda's Bukiri-Bukasa Entebbe through Lake Victoria. This facility, consisting of a jetty and depot, allows for efficient and strategic petroleum product transportation, further enhancing the regional petroleum supply chain and supporting trade and logistics in the area.

The Kenya Pipeline Company (KPC) is actively working on several initiatives to enhance its capacity for handling, transporting, storing, and transferring petroleum products to meet market demands. One major plan involves the installation of additional pump stations and the construction of a new 20-inch pipeline between Mombasa and Nairobi. This upgrade is aimed at significantly increasing the pipeline's capacity, allowing for a higher flow rate of 1.9 million litres per hour, thus improving the efficiency of petroleum transportation along this crucial route.

Furthermore, KPC has embarked on various projects to enhance its capabilities:

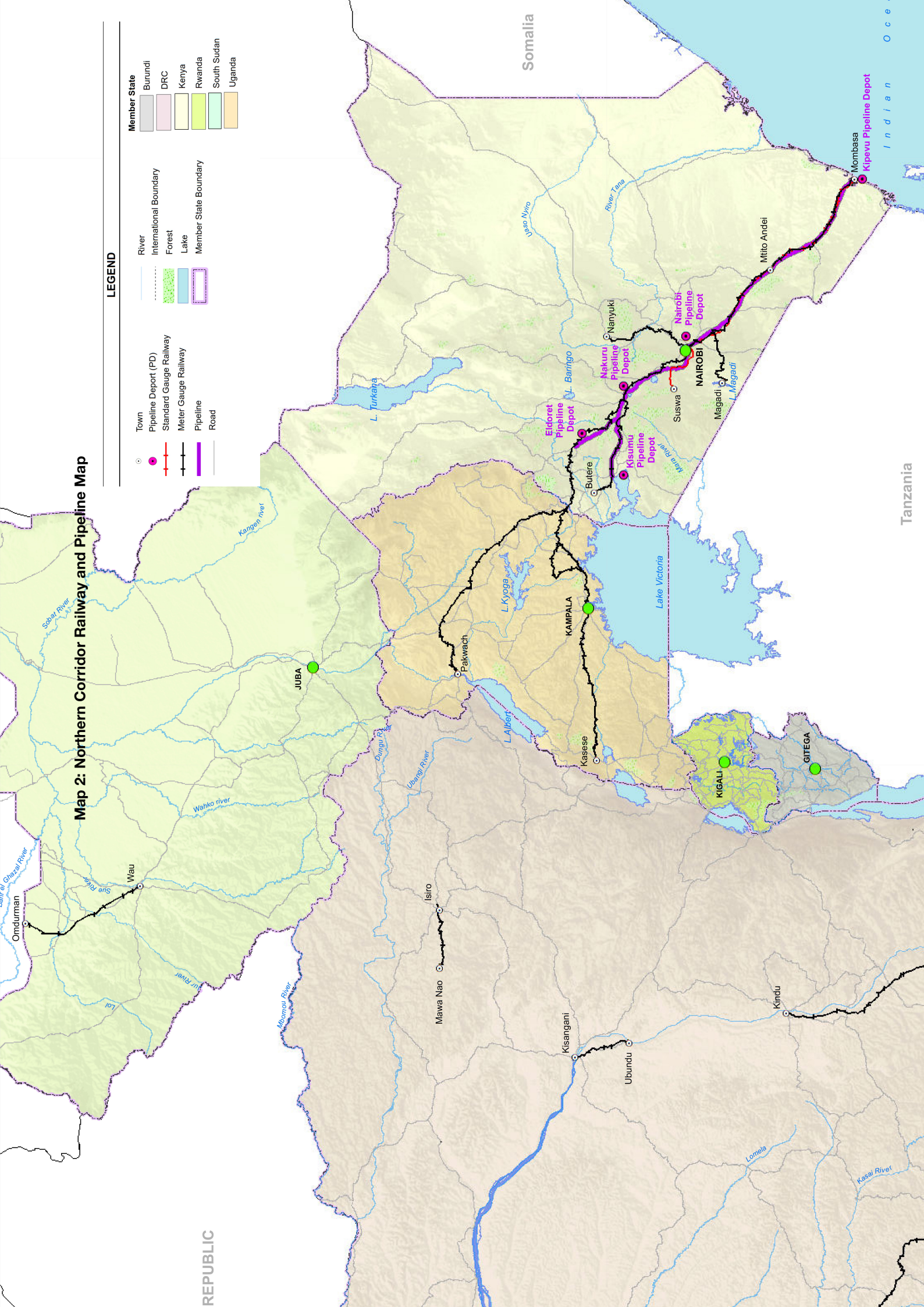
a) The Nairobi-Eldoret pipeline (Line 4) is being upgraded to boost its flow rate from 330m³ to 500m³ per hour. Additionally, the enhancement of the Nairobi Terminal (PS 10) is underway, focusing on the development of bottom-loading facilities to offer 'common user' loading options in Nairobi.

b) In addressing the need for LPG (liquefied petroleum gas) transportation, KPC is planning the establishment of an LPG Truck loading Facility at KPRL (PS 15). While KPC currently holds a storage capacity of 1200 MT at KPRL, the company is planning to develop a larger 25,000 MT LPG bulk storage and handling facility in Mombasa. This facility will be connected to Kipevu Oil Terminal (KOT) II and will serve as phase I of an extensive LPG infrastructure development program. This program aims to include the development of Bulk LPG storage and handling facilities in key locations like Nairobi, Eldoret, Nakuru, Kisumu, and Sagana, further improving the distribution and availability of LPG across various regions.



Kipevu Oil Terminal

Map 2: Northern Corridor Railway and Pipeline Map



1.3.5 Inland Waterways Transport Network

Kenya and Uganda possess Inland Waterways that hold substantial potential for water transport, acting as vital links to the Northern Corridor's rail, pipeline, and road networks. Despite various navigable lakes and rivers in both countries, Lake Victoria remains the primary waterbody in active use, connecting Kenya, Uganda, and Tanzania. Lakes like Naivasha, Nakuru, Baringo, Turkana, and others are mainly used for fishing and tourism due to limited navigability, while Uganda's underutilized waterways include the River Nile, Lakes Kyoga, Albert, and Edward. The region's numerous Inland Water Transport (IWT) routes connect countries such as Uganda, South Sudan, DRC, Rwanda, Kenya, Burundi, and Tanzania, but these water bodies are generally underdeveloped.

Recognizing the potential benefits of IWT, including enhanced cargo movement, cost efficiency, reduced emissions, and improved safety, Regional Economic Blocks such as COMESA and EAC, alongside Northern Corridor Member States, are focusing on IWT development projects. Current projects target Lakes Victoria, Kivu, Tanganyika, and Rivers Nile and Congo to boost transboundary freight. With Lake Victoria's connection to the Congo River Basin and the increasing significance of the Trans African Highway section, the potential for further development is amplified, especially with the adoption of the Africa Continental Free Trade Area (AfCFTA). The inclusion of the Democratic Republic of Congo (DRC) in the East African Community (EAC) necessitates harmonized IWT objectives, policies, and regulations for both the EAC and CEMAC regions. Member States are encouraged to invest more in IWT infrastructure to foster integration with other transport modes, bridging trade gaps.

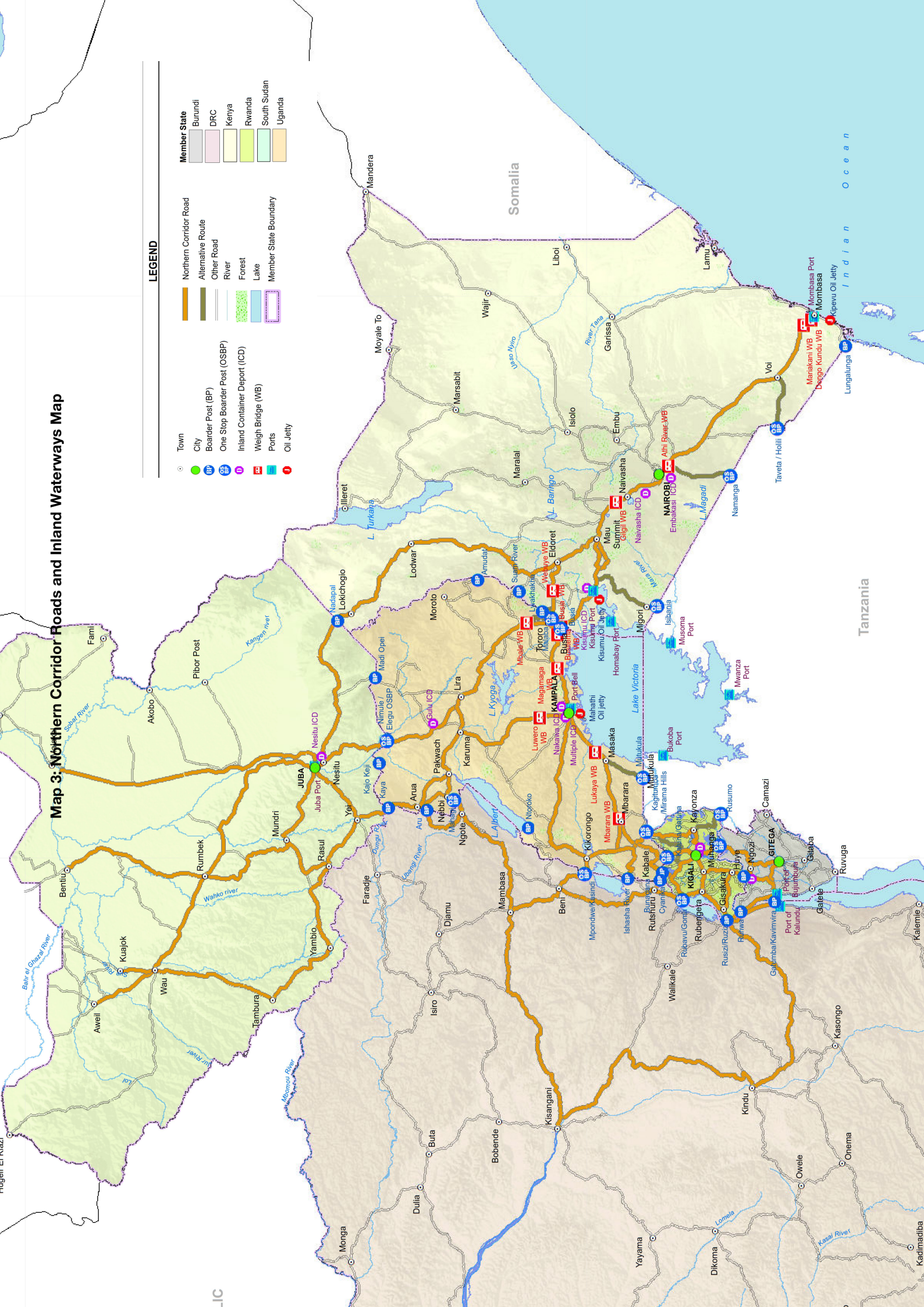
Initiatives are underway to modernize and develop infrastructure at Inland Ports in Kenya and Uganda, primarily focusing on Lake Victoria's revitalization. Notable developments include projects at Kisumu Port in Kenya and ports in Uganda, driven by public and private collaboration. Various private sector ventures, like passenger ferries and cargo vessels, are also contributing to IWT development. Additionally, the Standard Gauge Railway's expansion and refurbishment of Meter Gauge railways in both Kenya and Uganda are bolstering connections to the Northern Corridor backbone, enhancing the appeal of IWT as a preferred mode of transport.

Several ongoing initiatives in other countries are aimed at upgrading ports, enhancing navigation routes, and improving port facilities. Projects in Burundi, the Democratic Republic of Congo, Rwanda, and South Sudan involve developments such as port facility rehabilitation, shipyard construction, and the procurement of vessels. These initiatives, combined with the integration of navigation aids and improvements to existing ports, showcase a concerted effort to bolster IWT infrastructure and efficiency in the Northern Corridor region.

Kisumu Oil Jetty on Lake Victoria



Map 3: Northern Corridor Roads and Inland Waterways Map



1.4 Conclusion

The cross-border transport infrastructure along the Northern Corridor is a testament to the potential of regional collaboration in fostering economic growth and integration. As efforts to enhance connectivity persist, and the implementation of the Africa Continental Free Trade Area (AfCFTA), the Northern Corridor stands as a symbol of how effective infrastructure can reshape trade dynamics, facilitate people-to-people interactions, and pave the way for a more prosperous future in East Africa and beyond.

1.5 Recommendations

Infrastructure Maintenance: Ensuring the longevity of transport infrastructure requires consistent maintenance. Some roads between partner States are in deplorable condition. Notably, roads in DRC and South Sudan are poor. Other roads, for instance between Mutukula and Masaka should be fast-tracked for rehabilitation. Collaborative efforts between countries and private stakeholders are essential to keep roads, railways, and ports in optimal condition.

Non-Tariff Barriers: Delays at border crossings due to non-tariff barriers remain a challenge. Weighbridges, as much as they help protect the transport infrastructure, have been cited as causes of delays. Transit cargo to be exempted from all the weighing, except at the points of entry and exit. There should be continued negotiations and agreements among participating countries aimed at reducing these barriers and promoting smoother cross-border trade. Additionally, there is need to put in place mechanisms for transporters to allow report and monitoring of NTBs faced along the Northern Corridor. Harmonization of the road user charges across EAC is pertinent to promote cross-border transportation.

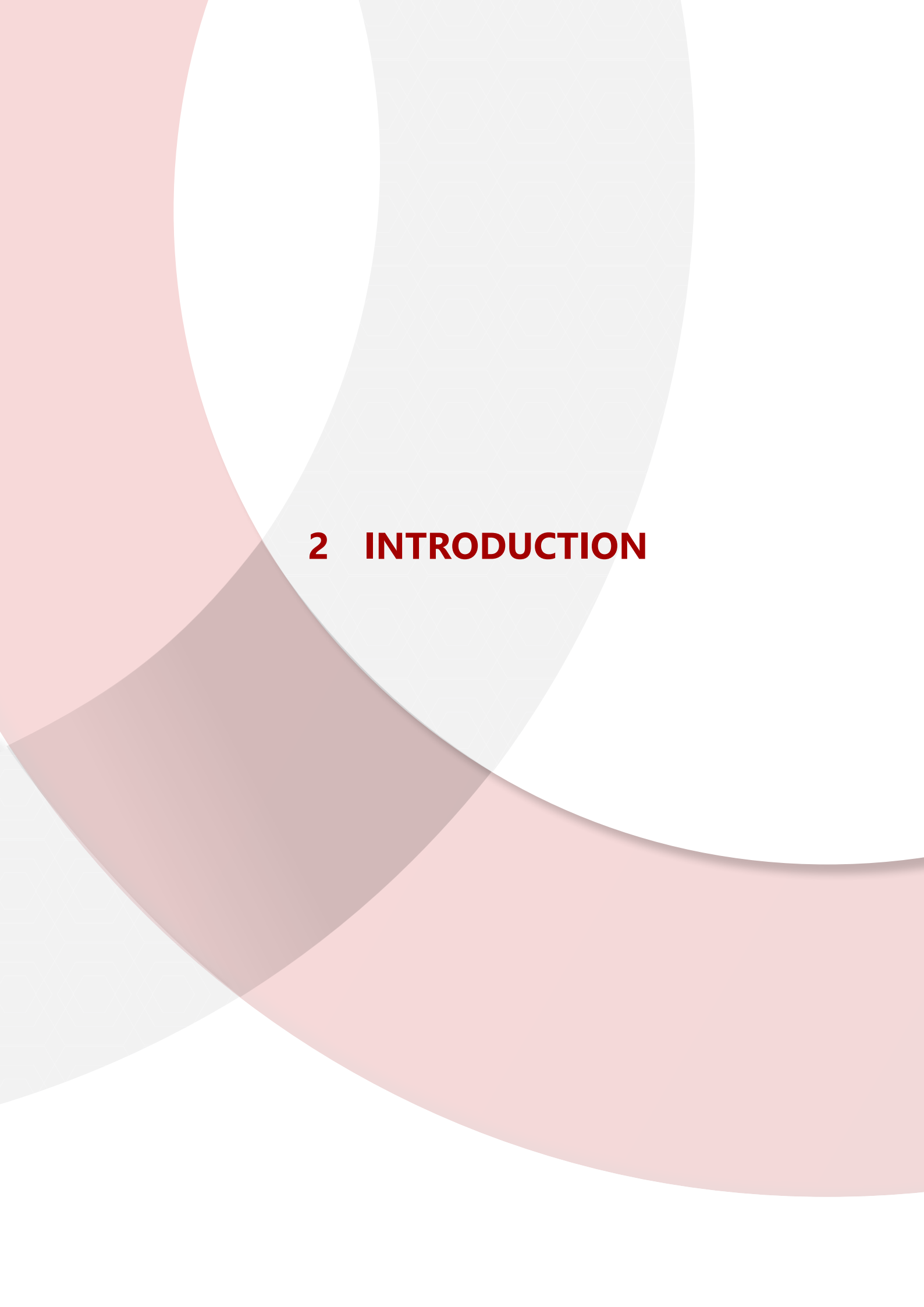
Partner States Cooperation, Investment and Financing: Countries along the Northern Corridor continue to collaborate on infrastructure projects, aiming to expand and improve connectivity. The route through Taveta-Holili to Burundi, Rwanda and DRC, the route through Lwakhakha, the route through Nadapal, and the route through Nakiloro/Lokirama are prime examples, creating additional routes to boost regional trade. Public and private investments play a pivotal role in infrastructure development. International financial institutions, governments, and private entities should continue investing in projects to modernize and expand the corridor's transport networks.

Modal Shift: To promote the cross-border movement of goods and people there is a need to do a modal shift from road to rail and utilize the inland waterways, especially in Uganda.

Sustainability Considerations: As the region grows, sustainability is gaining importance. Initiatives like adopting cleaner technologies and incorporating eco-friendly practices in infrastructure construction are being explored.

1.6 Thematic Coverage of Previous Special Features

- a) African Continental Free Trade Area and Trade Enhancement in Northern Corridor Member States
- b) Assessing Vulnerability and Developing Resilience of the Northern Corridor
- c) The Linkage Between Transport Infrastructure and Technology
- d) The Northern Corridor Trade and Transport Logistics in the Wake of Covid-19
- e) Impact of Covid-19 on Trade Facilitation on the Northern Transport Corridor: The Case of Drivers
- f) Gender Perspectives in Informal Cross-Border Trade in Rwanda
- g) Naivasha Inland Container Depot
- h) Inland Container Depots along the Northern Transport Corridor
- i) Railway Transport along the Northern Transport Corridor
- j) Road Safety in Uganda
- k) Green Freight Program for the Northern Corridor



2 INTRODUCTION

2.1 Introduction

The Northern Corridor Transit and Transport Coordination Authority (NCTTCA) ensures the smooth flow of trade along the Northern Corridor by removing obstacles, allowing efficient and cost-effective cargo transit. This corridor connects landlocked countries like Burundi, Rwanda, DRC, South Sudan, and Uganda to the Kenyan port of Mombasa. The competitiveness of this route relies on identifying and eliminating trade and transport barriers to reduce costs and transit time.

The bustling Mombasa port is a major gateway to East and Central Africa, serving a vast population of around 237 million people¹. Efficient port operation is crucial for effective goods movement. Reducing congestion, time, and costs enhances port efficiency, boosting trade volumes significantly.

The Transport Observatory tracks these indicators across seven categories: Volume and capacity, Tariff and Rates, Time and Delays, Efficiency and Productivity, Intraregional trade, Road Safety, and Green Freight.

2.2 Demographic and Macroeconomic Indicators for Northern Corridor Member States

Trade is a critical factor in a country's economic growth, national development and economic diplomacy. Economic indicators allow analysis of economic performance and predictions of future performance. In terms of growth and development, it is through trade that a country can create gainful employment, increase national income and promote technological innovation that will enhance efficiency in the production of goods and services. Therefore, promoting exports in the region and beyond, expanding access to markets, increasing capital flow into the country, strengthening regional economic communities, and promoting fair trade and equitable bilateral, regional and multilateral trade agreements will enhance the country's trade interests.

The table below presents key economic indicators and projections for the Northern Corridor Member States. The analysis of these indicators such as population, gross Domestic Product (GDP), ease of doing business and volume of imports and exports of goods and services, frames regional trends on economy and progress toward improving lives and achieving sustainable development.

According to AfDB data, in 2022, the Northern Corridor Member States had a combined population of 237 million, as shown in table 2. Their economy displayed strength with a robust average real GDP growth of 6.5%, surpassing the 6.45% in 2021, although a slight dip is expected in 2023. This growth outpaced East Africa's average of 4.4% in 2022.

Certain member states experienced growth slowdown due to global factors like slow economic growth, rising consumer prices, adverse weather, and mounting public debt. Notably, the Democratic Republic of Congo, Kenya, Rwanda, and Uganda saw the highest growth rates, while Burundi's growth was lower, and South Sudan remained in recession.

The driving force behind the Northern Corridor Member States' real GDP was primarily the services sector, contributing almost half of the economic expansion in 2022. This sector also contributed 2.0 percentage points to East Africa's GDP growth. Agriculture ranked second, with industry as the third contributor to real GDP. Key service sectors included accommodation, food, entertainment, transportation, communication, retail, banking, insurance, and healthcare. The services sector holds greater potential for growth and innovation compared to the traditional income sources of agriculture and mining in East Africa.

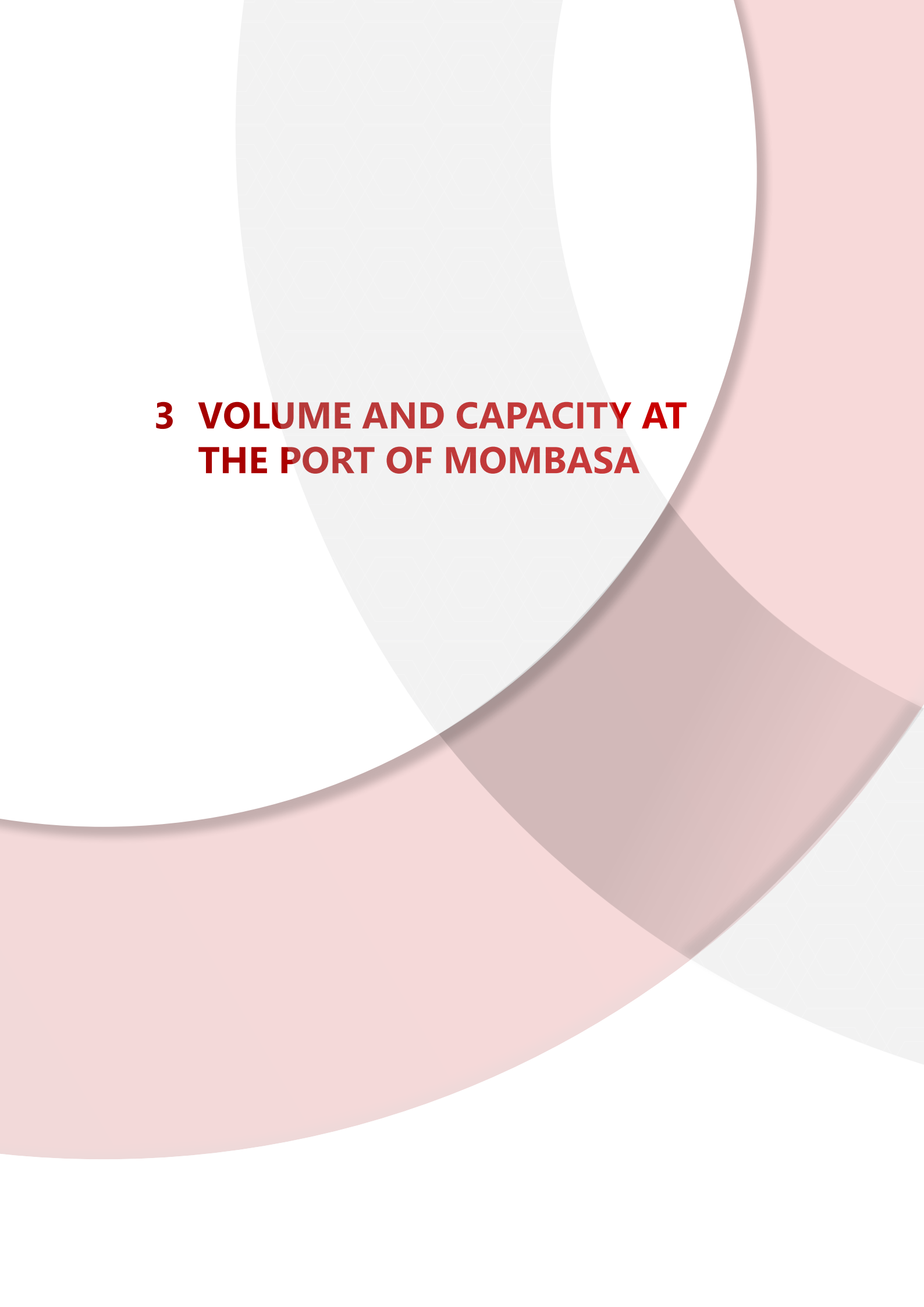
In the medium term, East Africa's economic growth is projected to surpass that of the entire African continent and other regions. Economic growth within the Northern Corridor region is expected to remain strong, reaching 6.44% in 2023 and 5.98% in 2024. This growth will be primarily driven by the Democratic Republic of Congo, Uganda, and Kenya. However, ongoing conflicts pose a threat to regional stability and could potentially lower these projected growth rates.

1 AfDB 2023

Table 2: Key Macroeconomic Indicators

	Population (thousands)	Land area (km2 thousands)	Population density (people per km2)	Gross domestic product a (\$ millions)	Gross domestic product per capita a (\$)	annual real GDP growth %)			
						2021	2022 estimated	2023 projected	2024 projected
Burundi	12,890	26	502	10,782	8.36	3.1	4	4.5	4.6
Democratic Republic of Congo	99,010	2,267	44	133,485	1,348	6.2	8.5	8	7.2
Kenya	54,027	569	95	312,884	5,791	7.5	5.5	5.6	6
Rwanda	13,777	25	558	37,993	2,758	10.9	8.2	7.6	8
South Sudan	10,913	632	17	7,061	0.647	-4.9	-2.9	-0.4	4.6
Uganda	47,250	201	236	132,362	2,801	5.6	6.3	6.5	6.7
Total	237,867	Total 3720	Total 1452	Total 634,567	Average 3,6175	Average 6.45	Average 6.5	Average 6.44	Average 5.98

Source: Compiled from AfDB, African Economic Outlook 2023



3 VOLUME AND CAPACITY AT THE PORT OF MOMBASA

Mombasa Port, located in Mombasa, Kenya, is the largest and busiest seaport in East Africa. It serves as a crucial gateway for trade, facilitating the import and export of goods not only for Kenya but also for the landlocked countries in the region, including Uganda, Rwanda, Burundi, the Democratic Republic of Congo and South Sudan.

Over the years, Mombasa Port has undergone significant expansion and modernization efforts to keep up with the growing demands of regional and international trade. Currently, the Port of Mombasa has the capacity to handle 2.1 million twenty-foot equivalent units (TEUs) annually. However, the port handles approximately 1.5 million TEUs annually. Completion of the second phase of the Second Container Terminal in June 2022 increased the capacity of the Port of Mombasa by an additional 450,000 TEUs.

Additionally, feasibility studies are ongoing on the decommissioning of the old Kipevu Oil Terminal (KOT) to construct a new berth projected to increase port capacity by 300,000 TEUs.

This section presents an analysis of the volume and capacity of cargo handled at the port of Mombasa, as well as along the Northern Corridor, for the period January to June 2023. The analysis encompasses cargo throughput through the Mombasa port and volume per country destination indicators. A comparison to a corresponding period in the previous years has also been made.

3.1 Cargo Throughput

Cargo throughput measures the total volume of cargo discharged and loaded at the port. It includes break-bulk, liquid bulk, dry bulk, containerized cargo, transit cargo, and transshipment.

The total Mombasa port throughput recorded a 3.4% increase moving 18,063,051 tons for the period January to June 2023 compared to 17,474,311 tons over the corresponding period in 2022. Analysis reveals that Northern Corridor Member States are net importers, with imports accounting for 80% of the total throughput. Exports accounted for 14% of the total throughput, transshipment 5.9% and restows 0.3%. Further, during the reporting period, imports posted a 5.1% growth, exports grew by 5.3%, and restows by 13.9%, while transshipments decreased by 18%, compared to the first six months of 2022.

Port of Mombasa

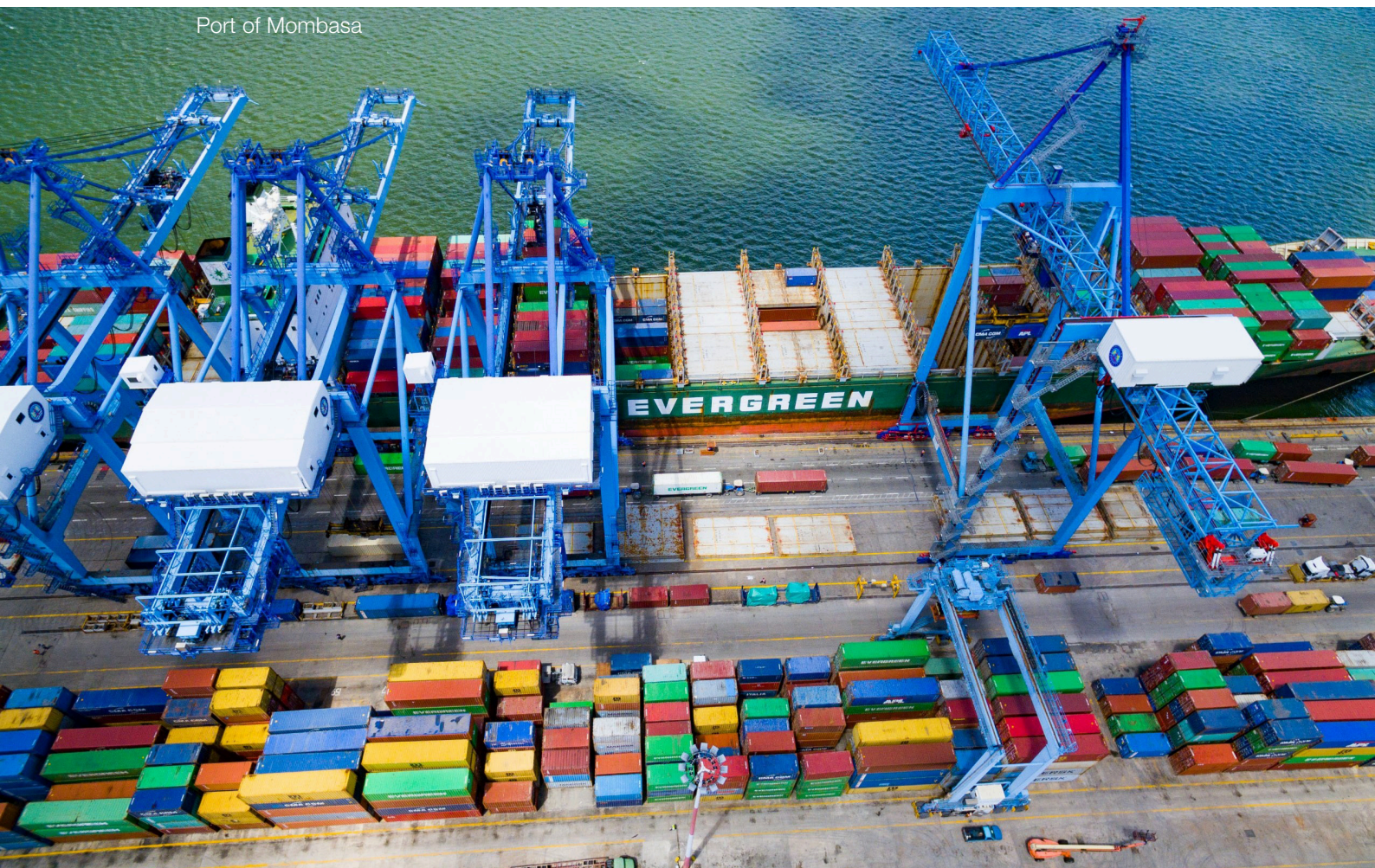


Table 3: Mombasa port volume performance for January to June various years

Type of Cargo	2022	2023	Volume Change	Growth %	% Share of Total Throughput 2022	% Share of Total Throughput 2023
Containerized	6,563,652	8,303,043	1,739,391	26.5%	38%	46%
Dry Bulk	3,980,995	3,418,481	-562,514	-14.1%	23%	19%
Conventional	1,155,278	1,113,702	-41,576	-3.6%	7%	6%
Liquid Bulk	4,412,875	4,705,221	292,346	6.6%	25%	26%
Transshipment ¹	1,312,598	1,073,467	-239,131	-18.2%	7.5%	5.9%
Restows	48,914	55,722	6,808	13.9%	0.3%	0.3%
Throughput Total	17,474,311	18,063,051	588,740	3.4%	100%	100%
All Imports	13,708,329	14,402,298	693,969	5.1%	78%	80%
All Exports	2,404,470	2,531,563	127,093	5.3%	14%	14%

Source: KPA data, 2022 and 2023

3.2 Volume per Country Destination through the Port of Mombasa

Cargo in transit is the movement of cargo discharged at a gateway seaport or cargo originating from a country within a union across international borders to another country where the final destination is mainly a landlocked country.

The transit market for the port of Mombasa comprises Tanzania, Somalia, Ethiopia and the Northern Corridor Member States, with the exception of Kenya.

Transit volumes recorded 5,412,121 tons, a 4% increase in the half-year period ending June 2023, compared to 5,195,115 tons in the half-year period ending June 2022. The main transit markets for the port of Mombasa are Uganda (61%), South Sudan (17%), the Democratic Republic of Congo (DRC) (14%) and Rwanda (4%). Of the total transit volume, 89% were imports and 11% were exports.

From Table 2, Burundi cargo through the port of Mombasa more than doubled in the first six months of 2023 compared to a similar period in 2022. Along the Northern Corridor, DRC, Rwanda and South Sudan also recorded cargo growth in the reporting period, growing by 90%, 39% and 72%, respectively. However, Uganda cargo decreased by 17% compared to 2022. In addition, cargo to the transit destinations of Tanzania, Ethiopia and Somalia grew by 38%, 77% and 118%, respectively.

Table 4: Throughput as a share of market per destination various years

TRANSIT (TONS)	2021	2022	2023	Volume Change	% Change	% Share	% of Imports 2023	% of Exports 2023
BURUNDI	335	3,103	7,068	3,965	128%	0.1%	81%	19%
D.R.C.	378,854	410,133	778,238	368,105	90%	14%	93%	7%
RWANDA	88,843	171,840	239,714	67,874	39%	4%	97%	3%

¹ Transshipment is the off-loading a container from one ship and loading it onto another ship to be further carried to the final destination.

SOUTH SUDAN	522,309	544,830	939,378	394,548	72%	17%	88%	12%
UGANDA	3,615,847	3,948,290	3,284,810	-663,480	-17%	61%	87%	13%
TANZANIA	124,280	111,273	153,967	42,694	38%	2.8%	81%	19%
ETHIOPIA	215	4,679	8,302	3,623	77%	0.2%	100%	0%
SOMALIA	69	77	168	91	118%	0.0%	100%	0%
OTHERS	83	890	477	-413	-46%	0.0%	93%	7%
	4,730,835	5,195,115	5,412,121	217,006	4%	0.1%	89%	11%

Source: KPA data, 2021, 2022 and 2023

4 MARITIME INDICATORS



The efficiency of the transportation sector is a key driver of the competitiveness and growth of an economy. An efficient port plays an important role in trade and transport facilitation since it enhances competitiveness, allowing countries to trade goods and services on time and with lower transaction costs. Ports act as gateways for road, rail and inland waterway networks.

At the Mombasa seaport, daily activities revolve around meticulously planning secure ship schedules for the seamless transit of vessels. The port's landscape encompasses two container terminals, each housing multiple berth segments. This section of the report assesses the performance of container vessel movements at the Port of Mombasa in the half year ending June 2023. Specifically, the evaluation zeroes in on pivotal indicators such as ship turnaround time and the duration vessels spend awaiting berthing. These assessments are contextualized through comparative analysis with corresponding period of previous years, providing valuable insights into the port's evolving operational dynamics.

By June 2023, the Kenya Ports Authority (KPA) had acquired five new Harbour Mobile Cranes to improve operational efficiency at the port. Three of these cranes are in use at the Port of Lamu, and the other two at the port of Mombasa. In addition, KPA has also purchased four Ship to Shore Gantry cranes expected for delivery by July 2023 to replace the current outdated ones. Additionally, KPA plans to acquire three ship to shore gantry cranes for operations at Lamu port by mid-2024 as well as additional ones for berth 16 at the Port of Mombasa.

The port's efficiency is anticipated to increase significantly with the arrival of the four new Ship to Shore Gantry Cranes in July since they will provide more dependable equipment for ship operations, thereby cutting down on ship turnaround time. Additionally, KPA purchased 12 reach stackers and nine empty container handlers in December 2022, which were commissioned for operations in January 2023.

Moreover, the recent expansion through completion of the Second Container Terminal allows for improved ship and yard planning, creating opportunities for enhanced efficiency in cargo handling operations.

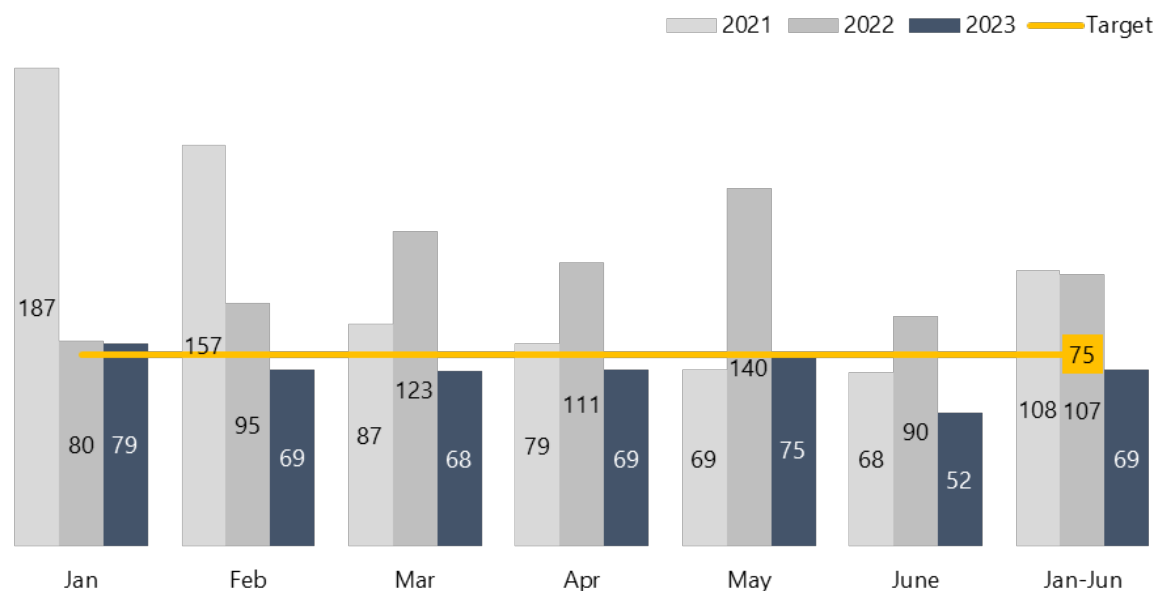
4.1 Ship turnaround time

The Ship Turnaround Time is calculated from the time the vessel enters the port area (delineated by the fairway buoy) until the time it departs the port area.

The Mombasa Port and Northern Corridor Community Charter aims to achieve a target ship turnaround time of 75 hours by December 2023 and 67 hours by December 2024. The global benchmark for this indicator is 24 hours.

From the Figure below, ship turnaround time at the port of Mombasa has been improving over the years, recording an average turnaround time of 69 hours in the half-year ending June 2023, down from 107 hours and 108 hours in a comparative period in 2022 and 2021 respectively.

Figure 1: Ship turnaround Time at the port of Mombasa in hours



Source: KPA data, January to June 2021, 2022 and 2023

4.2 Vessel waiting time before berth at the port of Mombasa

This time is measured from the time the vessel arrives at the fairway buoy to the time at its first berth, including waiting at their own convenience.

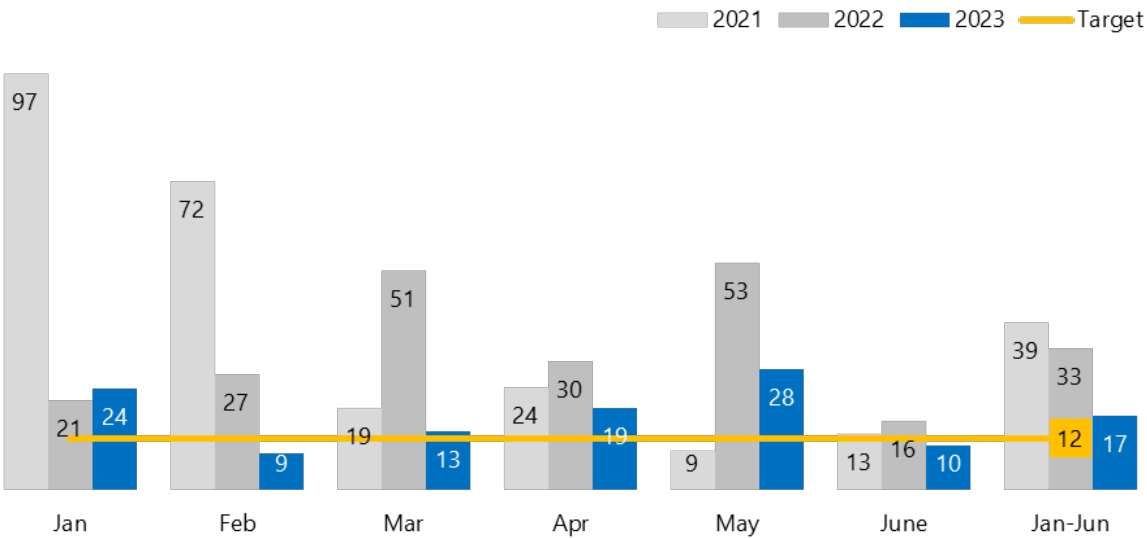
Ship waiting time is influenced by various factors, including port congestion, availability of berths, scheduling conflicts, adverse weather conditions, and operational inefficiencies. Prolonged waiting times can have significant economic implications, as they lead to increased operational costs for shipping companies, reduced supply chain predictability, and potential disruptions in trade flows. Moreover, excessive waiting times can strain the infrastructure and resources of ports, affecting their overall efficiency and capacity to handle incoming vessels.



Efforts to minimize vessel waiting time often involve advanced planning, efficient scheduling, and improved communication between port authorities, shipping companies, and other stakeholders. Modern technologies, such as predictive analytics and real-time data sharing, play a crucial role in optimizing vessel movements and reducing unnecessary delays. Ports with well-designed infrastructure, adequate berth capacity, and streamlined cargo handling processes are better equipped to manage vessel waiting times effectively. As global trade continues to grow, addressing the challenges associated with vessel waiting time becomes increasingly vital to ensure the smooth functioning of supply chains and enhance the overall competitiveness of maritime trade networks.

Ship waiting time indicator at the port of Mombasa posted a record performance in the period January to June 2023 reducing by about 50% to attain an average of 17 hours compared to an average of 33 hours and 39 hours in 2022 and 2021, respectively. The set target for this indicator is 12 hours as per the Mombasa Port and Northern Corridor Community Charter. The efforts by KPA to modernize and acquire new equipment, in addition to construction of new berths will go a long way in improving this indicator.

Figure 2: Average Vessel Waiting Time before Berth in hours at the port of Mombasa



Source: KPA data, January to June 2021, 2022 and 2023



5 PORT INDICATORS

Port performance indicators are essential metrics used to assess the efficiency, effectiveness, and overall operational success of a port facility. These indicators provide valuable insights into various aspects of port operations, helping stakeholders, including port authorities, shipping companies, investors, and policymakers, make informed decisions and identify areas for improvement.

This section focuses on the port's time and delay performance, specifically container import dwell time, clearance time under the Integrated Customs Management Systems (iCMS), and Delays after customs release at the port of Mombasa from January to June 2023. Where possible, a comparison with the corresponding period from previous years is made.

The Port of Mombasa has two container terminals 1 and 2. Terminal 1 has three berths (No. 16, No. 17, and No. 18), whereas Terminal 2 has two berths (No. 20 and No. 21). Among other facilities and equipment, there are 10 conventional cargo berths, 2 bulk cement berths with 3 silos, and 2 bulk oil jetties.



5.1 Containerized Cargo Dwell Time at the Port of Mombasa

The Containerized Cargo Dwell Time is the measure of time that elapses from the time a container is offloaded at the port to the time it leaves the port premises.

Delays in clearing containers result in increased costs for shippers and consignees and congestion at the port. This sub-section focuses on the time cargo spends at the port for import containers. The method used in analyzing this time is to consider the cargo that arrives in a particular month (based on the entry date). Cases, where consignments are held for more than 21 days due to issues like non-compliance or legal matters, are not included in the analysis. The report organizes the data monthly using the "out" date, with the last day of the month as the cut-off day (at midnight). A grace period of 21 days is used to remove outliers.

As stipulated in the Mombasa Port and Northern Corridor Community Charter, the set target for cargo dwell time for import containers at the port of Mombasa is set at 60 hours by December 2023 and 48 hours by December 2024, in line with the international benchmark standards.

During the six months period, it took an average of 86 hours to evacuate cargo at the port of Mombasa, which exceeds the set target of 60 hours. This is attributed to the longer time to complete cargo clearance formalities and a temporary increase in storage time.

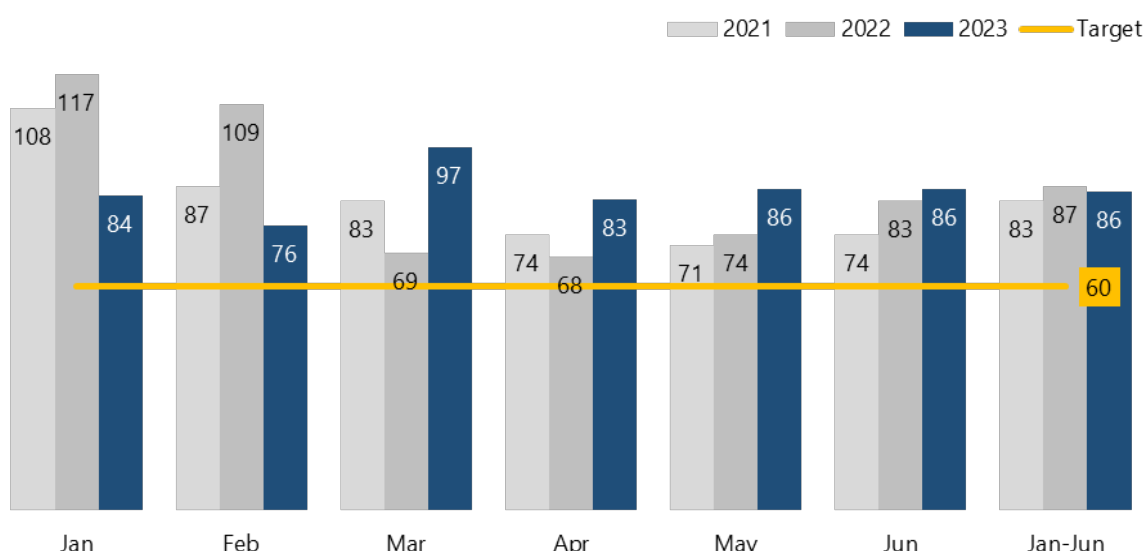
Effective 1st May 2023, KPA revised its storage free period for cargo handled at the port of Mombasa and ICDs to a 15-day free period from nine days, while importers choosing to use Naivasha ICD were granted 30 days free storage from nine days. After the free period expiry, containers that overstay

for between 16 and 21 days are charged \$30 per day for 20 feet containers and \$60 for 40 feet containers. KPA charges \$45 for cargo that stays for more than 21 days for 20 feet containers and \$90 for 40 feet containers.

Equipment breakdowns at the yard, late submission of documentation by clearing and forwarding agents, and delay in cargo pickup after release by shippers, among others, contributed to delays. However, the Port of Mombasa has been working to improve the efficiency of cargo handling processes, including streamlining customs procedures, increasing storage capacity, acquiring new equipment, and improving technology to track and monitor cargo movements.

With the extended grace period, importers should be encouraged to evacuate their cargo faster for the target to be achieved. Additionally, dwell time at the port may be reduced by having adequate truck holding yards and an efficient truck appointment system to reduce congestion and delays in accessing the port to pick up cargo.

Figure 3: Average containerized import dwell time in hours



Source: KPA data, January to June 2021, 2022 and 2023

5.2 Time for clearance under the Integrated Customs Management Systems (iCMS)

The iCMS system aligns with the World Trade Organization's (WTO) requirement to simplify global trade procedures. It aims to further streamline Customs processes by creating a new system that integrates various subsystems around the main clearance system, incorporating new functionalities. The Kenya Revenue Authority (KRA) also commits to automating the DPC process under iCMS to be instantaneous, improving ICT infrastructure to minimize customs system downtime, and ultimately reducing clearance times for imports and exports by at least 60%.

The Mombasa Port and Northern Corridor Community Charter established a baseline clearance time of 2.3 hours in December 2018, measuring the duration between duty payment and customs entry approval under iCMS. Since iCMS implementation, this process has significantly improved to real-time responses. Unlike the previous Simba 2005/2014 system, which required multiple authentication points and depended on ship arrival, iCMS allows KRA to receive goods declarations before ships dock, leading to quicker verification and reduced clearance times.

Table 5: Clearance time under iCMS

Performance Indicator	Unit of Measure	Baseline 2018	Jan-Jun 2023
Average time to submit manifests (under iCMS)	Minutes	60	Instant
Average time elapsed from the time duties are paid by freight forwarders until the entry is passed or rejected by customs (under iCMS)	Hours	2.3	Instant
Automation of DPC process (Under iCMS)	Instant	Instant	Instant

Source: KRA data (iCMS)

5.3 Rwanda Revenue Authority (RRA) Customs Time and Delays

The Rwanda Revenue Authority commits to facilitate the fast-processing release of transit cargo and reduce clearance times for transit cargo under the Mombasa Port and Northern Corridor Community Charter. This subsection analyses the ASYCUDA system's after-release time, delay processing time, and customs release time.

Over the six months review period, the average time taken to evacuate the cargo from the port after it is officially released by Customs decreased from 25 hours in 2022 to 24 hours in 2023. Similarly, the time between customs entry registration and issuing a customs release order improved from 30 hours in 2022 to 26 hours in 2023. Delay processing time also improved, reducing to 33 hours in 2023 from 41 hours in 2022.

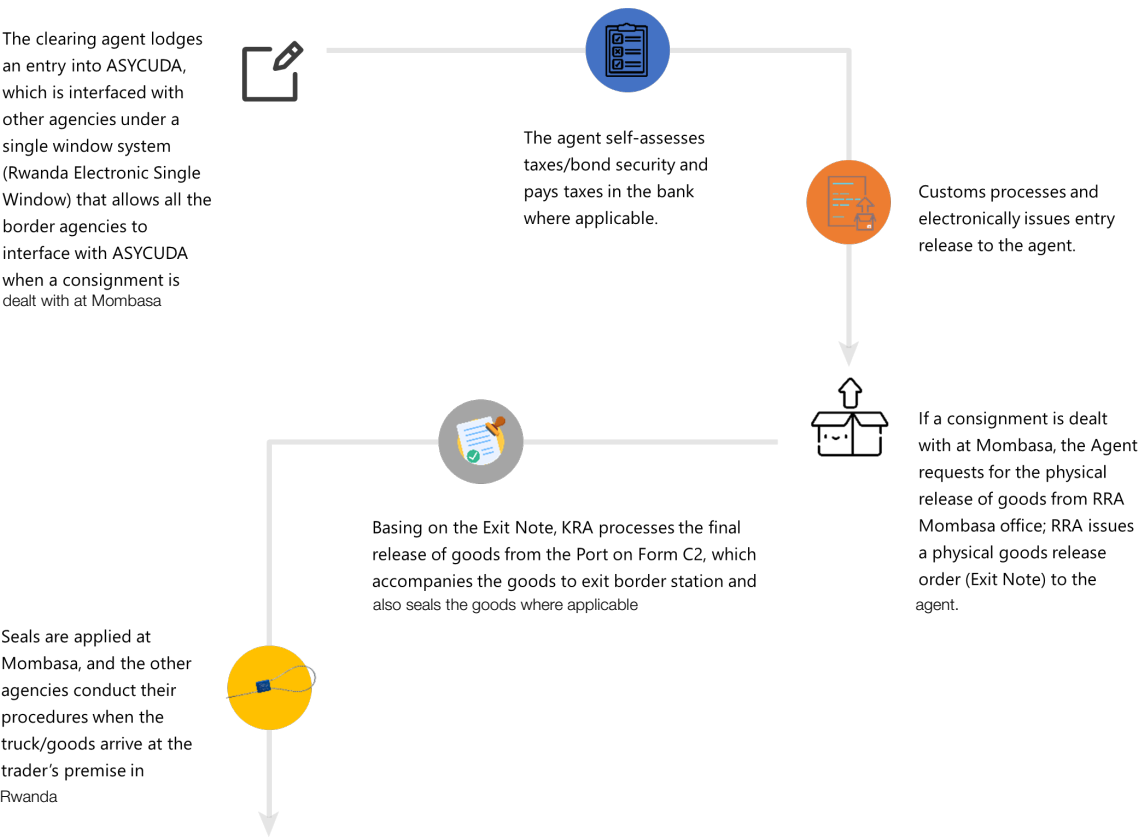
Commendable progress notwithstanding, there's still a challenge in automatic data exchange among the Member States involved in the SCT framework for clearing goods.

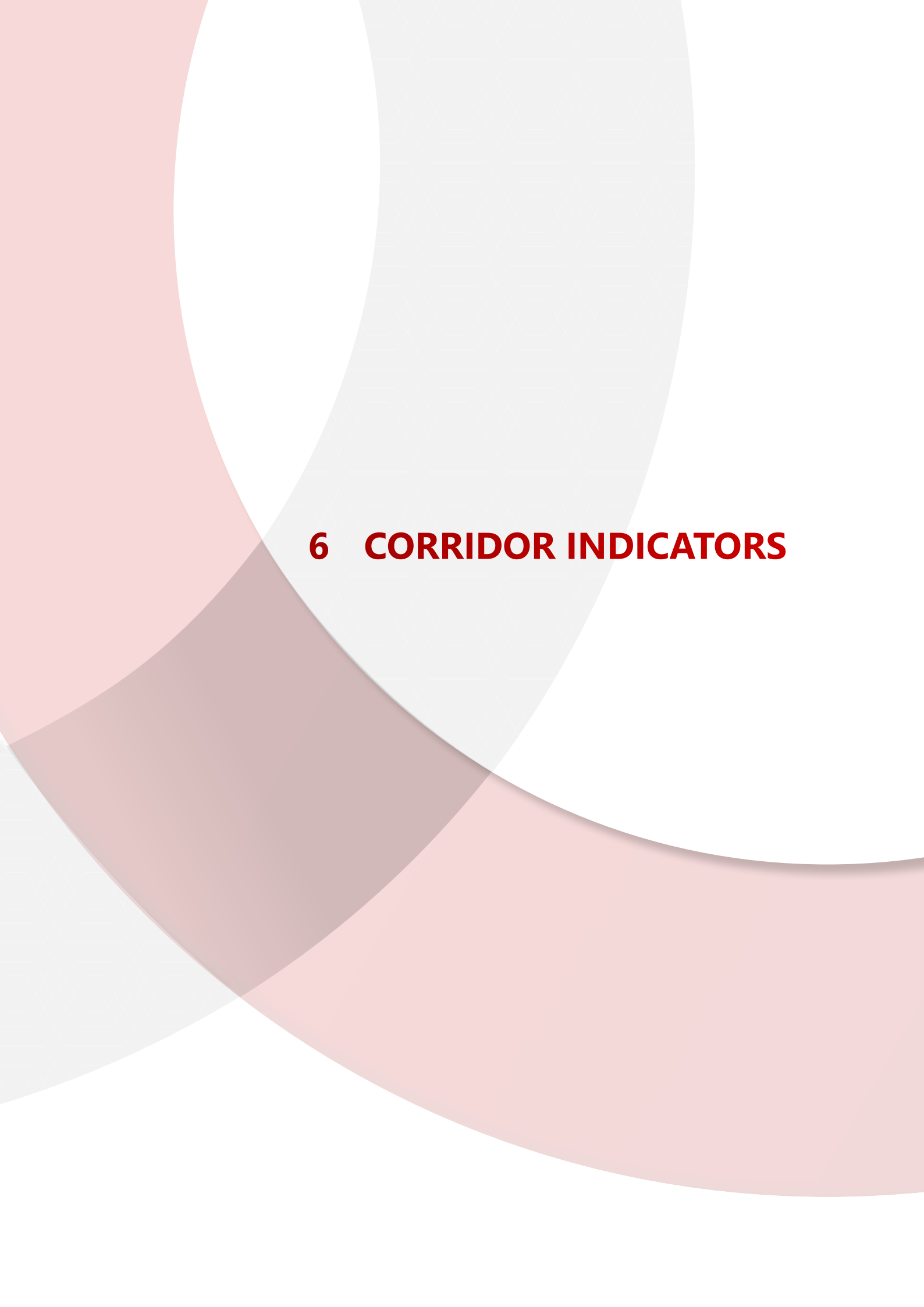
Table 6: RRA SCT Customs Time and Delays at the Port of Mombasa (Hours)

Month	After release time		Customs release time		Delay processing time	
	2022	2023	2022	2023	2022	2023
Jan	15	38	28	32	46	33
Feb	22	20	26	36	47	42
Mar	24	15	32	24	38	30
Apr	49	26	33	21	37	35
May	24	30	30	18	46	27
Jun	16	15	30	23	35	30
Average	25	24	30	26	41	33

Source: RRA data, January to June 2022 and 2023

Figure 4: Process of cargo clearance under SCT





6 CORRIDOR INDICATORS

Corridor indicators are essential measures used to assess the performance and efficiency of transportation corridors. These indicators help us understand how well a specific route or pathway is functioning for the movement of goods and services. They provide insights into various aspects of transportation, such as transit times, border crossing procedures, infrastructure quality, and logistics processes. By monitoring corridor indicators, it allows for identification of bottlenecks, addressing inefficiencies, and informing operational and policy decisions to improve the overall flow of trade and transportation. These indicators play a crucial role in enhancing the competitiveness and effectiveness of transportation networks, ultimately benefiting both businesses and consumers.

In this section, the report discusses transit times in the Northern Corridor's Member States, weighbridges traffic and compliance, identifies where stops occur, pinpoint reasons and quantify delays at key corridor points. The data is gathered from road surveys conducted with the ArcGIS Mobile app, as well as electronic systems like the Regional Electronic Cargo Tracking System (RECTS), ASYCUDA, and Single Custom Territory (SCT) used by Revenue Authorities.

6.1 Weighbridge performance in terms of Traffic along the Northern Corridor

The indicator measures the average number of trucks weighed per day at the various weighbridges in respective countries of the Northern Corridor.

Weighbridges play a pivotal role in ensuring that vehicles carrying goods comply with weight regulations, thereby contributing to road safety and infrastructure preservation. By monitoring weighbridge performance, authorities can gauge the flow of vehicles through these checkpoints and identify any congestion or bottlenecks. This information allows for timely interventions to optimize traffic movement, prevent excessive wear and tear on roads, and enhance overall logistical efficiency within transportation corridors.

The average daily traffic at five weighbridges for both inbound and outbound trucks as presented in Table 5 below. Athi River weighbridge records the highest truck traffic originating from/to the port of Mombasa both local and transit cargo and traffic originating from/to Namanga Border Point. Traffic is distributed to Nairobi and its environs reducing the truck traffic at Gilgil and subsequent weighbridges.



Truck weighing at Mariakani Weighbridge

Table 7: Average daily traffic through Kenyan weighbridges

	Mariakani			Athi River			Gilgil			Webuye			Busia		
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Jan	6,747	4,290	4,901	7,173	6,937	7,831	3,715	2,931	4,403	2,931	2,984	3,093	696	876	729
Feb	6,452	5,442	5,587	8,276	7,861	8,031	3,921	3,042	4,173	2,271	2,594	3,102	704	923	691
Mar	6,641	6,811	5,707	8,139	6,932	7,964	3,400	4,046	3,994	2,223	3,018	2,802	788	782	812
Apr	7,107	7,403	7,107	6,733	6,043	6,733		5,044	4,298	3,402	3,592	3,402	673	542	673
May	5,110	7,372	5,110	9,162	8,553	9,162	3,841	4,803	3,841	2,964	3,103	2,964	782	792	782
Jun	4,920	5,802	4,920	8,502	8,801	8,502	3,793	4,733	3,793	3,075	2,635	3,075	712	801	712
Total	36,977	37,121	33,332	47,985	45,128	48,224	18,670	24,599	24,501	16,866	17,926	18,438	4,355	4,718	4,399

Source: KeNHA data, January to June 2021, 2022 and 2023

6.2 Weighbridge performance in terms of compliance along the Northern Corridor

The indicator measures the Percentage of trucks that comply with the gross vehicle weight and the vehicle axle load limits before and after redistribution of cargo as stipulated in the East Africa Community Vehicle Load Control Act of 2016.

Weighbridges play a crucial role in verifying that vehicles carrying goods do not exceed prescribed weight limits, which helps prevent damage to infrastructure and enhance road safety. Monitoring weighbridge compliance performance allows authorities to assess whether vehicles are meeting these regulations. This information is vital for identifying instances of non-compliance, taking corrective actions, and promoting responsible and lawful transportation practices throughout the corridor.

The EAC Vehicle Load Control Act 2016, sets weight restrictions and strict penalties for rule violations. Trucks weighing 3.5 tonnes or more must stop at weighbridges. Those avoiding the weighing stations can be legally prosecuted. The law has also lowered super single tire axle weight to 8.5 tonnes from 10 tonnes and capped maximum axle load at 56 tonnes.

The analysis indicates that Kenyan weighbridges have maintained consistent compliance levels, with performance surpassing 94% from January to June 2023, except for Busia weighbridge, which averages 82% compliance. Busia's lower compliance is due to its role in weighing predominantly Kenyan-origin exports, being the first point for loaded trucks to be weighed. Moreover, Busia Weighbridge handles less traffic and lacks High-Speed Weigh-In-Motion (HSWIM) technology, affecting its effectiveness.

In spite of the importance of weighbridges in safeguarding the deterioration of transport infrastructure, multiple weighing of cargo at weighbridges has been flagged as cause for delays along the corridor. To address this, it's vital to create strategies enabling truckers to verify loads during loading and to reduce weighing frequency to twice – at the entry and exit points – for transit cargo originating from the port of Mombasa.



Table 8: Weight compliance at the Kenyan weighbridges

	Mariakani			Athi River			Gilgil			Webuye			Busia		
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
Jan	99.92	98.21	98.65	98.60	97.45	97.78	94.82	98.65	94.36	91.94	92.12	94.93	79.07	85.30	87.33
Feb	99.73	97.21	99.11	97.43	99.12	98.46	94.36	96.01	95.14	91.39	96.42	94.98	77.04	84.45	84.92
Mar	98.54	99.45	98.02	98.86	98.42	98.01	93.36	97.34	96.72	93.87	95.45	95.02	83.11	83.21	80.04
Apr	99.01	98.89	99.01	98.30	99.02	98.34		93.75	96.53	92.11	90.56	92.11	83.47	87.43	83.47
May	99.52	98.87	99.52	98.01	97.33	98.01	97.73	94.12	97.73	94.71	92.12	94.71	80.31	83.98	80.31
Jun	99.01	99.43	99.01	99.23	99.32	99.23	95.09	97.02	95.09	94.01	95.43	94.04	79.53	84.32	79.53
Average	99.29	98.68	98.89	98.41	98.44	98.31	95.07	96.15	95.93	93.01	93.68	94.30	80.42	84.78	82.60

Source: KeNHA data, January to June 2021, 2022 and 2023



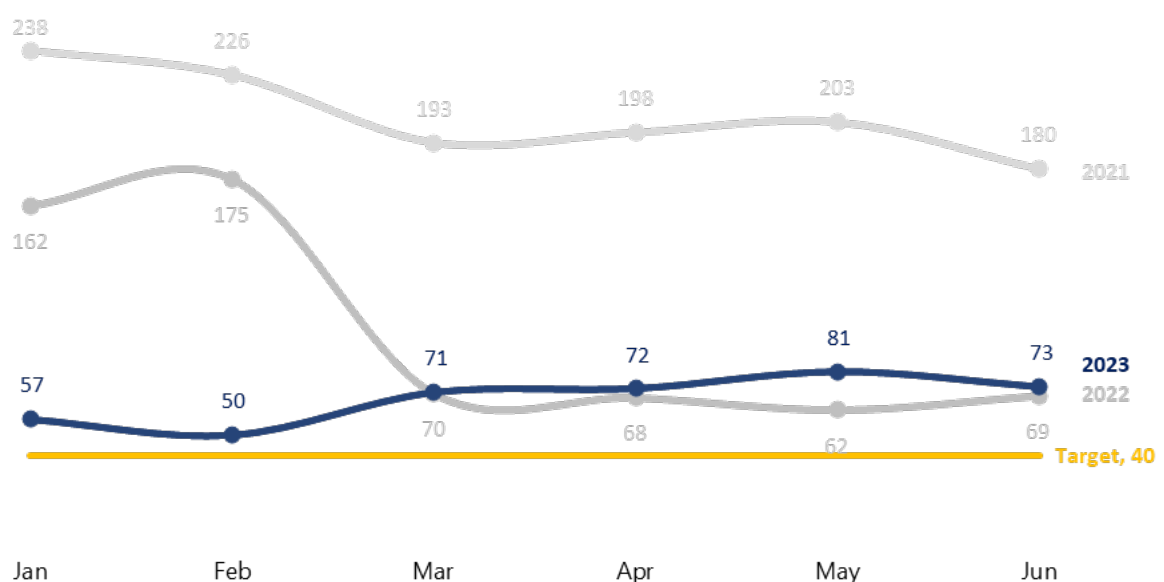
6.3 Transit time in Kenya from the port to the borders

This indicator is measured as the time out of the port gates to the time truck lodges customs clearance documents at the Malaba or Busia border post. Malaba and Busia borders are the main exit borders for Kenya using RECTS data.

This section on transit time focuses on road transport. The Northern Corridor is served by a combination of surface transport modes; road, railway, oil pipeline and inland waterways. Accessing the port accounts for a considerable share of corridors costs.

The Mombasa Port and Northern Corridor Community Charter sets transit time from Mombasa to Malaba as 40 hours and Mombasa to Busia as 45 hours. Although the performance for transit time from Mombasa to Malaba in January to June 2023 has been relatively low compared to a corresponding period in previous years, data shows the indicator is still high, almost double the set target.

Figure 5: Transit time from Mombasa to Malaba in hours

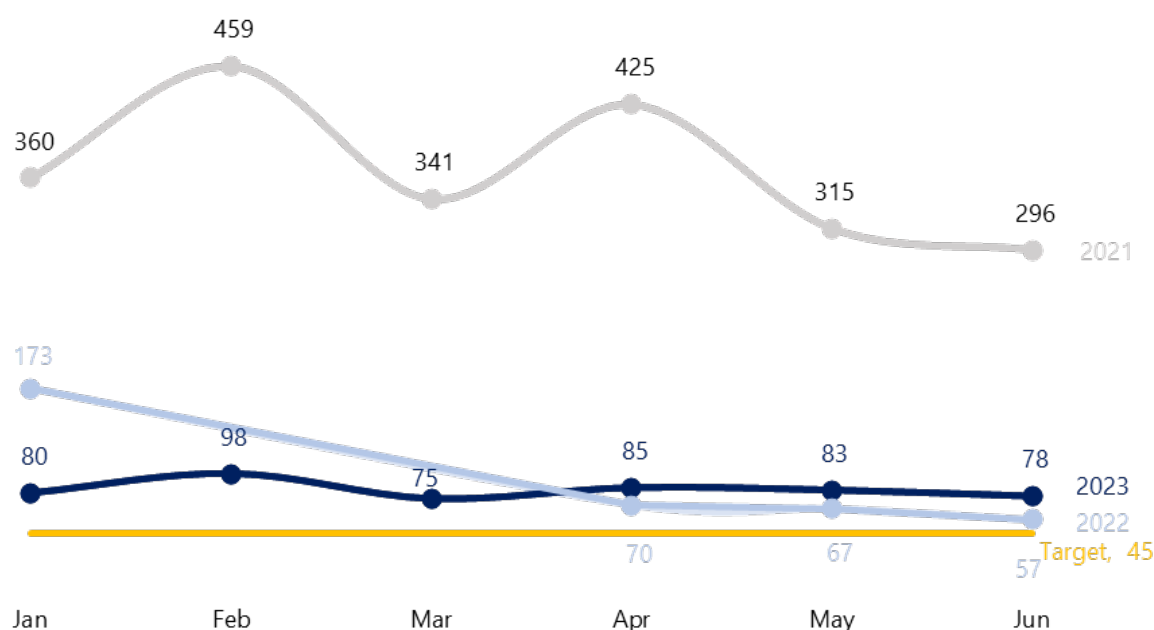


Source: URA- RECTS data 2021, 2022 and 2023

Similar to Mombasa - Malaba route, Mombasa - Busia route transit time was higher than the set target. Average transit time along the route was also higher than the corresponding period in 2022.



Figure 6: Transit time from Mombasa to Busia in hours



Source: URA- RECTS data 2021, 2022 and 2023

During the reporting period, delays along the routes were attributed to various factors, including road conditions, delays at weighbridges, police checks, company vehicle inspections, road accidents, and personal reasons of drivers. There is need to address these barriers to cargo movement to enhance efficiency along the corridor. Furthermore, ongoing infrastructure enhancements along different stretches of the routes are anticipated to decrease transit time.

6.3.1 Transit Time from Origin to various border points

RECTS data reveals Mombasa to Elegu and Mombasa to Gatuna as the fastest routes, each taking around 13 hours. Mombasa to Padea, Mombasa to Vurra, and Nairobi to Kampala were the slowest with trucks moving at an average below 8 kms in an hour. Delays are often due to border crossing processes and other stoppages along the routes. Border crossing procedures has been cited as one of the main causes of delays along the corridor. There has been a challenge in automated sharing of customs data among Member States participating in the SCT framework of clearing goods resulting in delays.

Table 9: Transit Time from Origin to various border points in Hours

Origin	Destination	Average Transit Time (Hrs)	Distance (Km)	Km/Hr
Mombasa	Cyanika	149	1,636	11.0
Mombasa	Elegu	107	1,430	13.3
Mombasa	Gatuna	122	1,601	13.1
Mombasa	Goli	184	1,476	8.0
Mombasa	Kampala	105	1,169	11.2
Mombasa	Mirama Hills	165	1,513	9.1
Mombasa	Mpondwe	150	1,611	10.8
Mombasa	Ntoroko	143	1,520	10.6
Mombasa	Padea	179	1,401	7.8

Origin	Destination	Average Transit Time (Hrs)	Distance (Km)	Km/Hr
Mombasa	Vurra	201	1,510	7.5
Nairobi	Kampala	87	688	7.9

Source: URA- RECTS data 2021, 2022 and 2023

6.4 Transit time in Rwanda

Transit time in Rwanda is the time duration from the time a truck is allowed (electronically in Rwanda Revenue Authority's system) to commence the transit journey to the time the bond is cancelled on the exit border.

Rwanda has three entry borders: Kagitumba/Mirama Hills, Gatuna/Katuna, and Cyanika/Cyanika. On the flip side, the exit borders from Rwanda include Rubavu/Goma, Akanyaru-Haut/Kanyaru Haut, Mururu/Rusizi, and Nemba/Gasenyei.

Within Rwanda, the quickest route is Kagitumba to Akanyaru-Haut, averaging 12 kilometers per hour. Despite shorter distances, Cyanika to Rubavu, Gatuna to Kigali, and Kagitumba to Kigali are the slowest routes, with trucks moving at an average of 2 kilometers per hour.

Table 10: Average Transit time in Rwanda

Origin	Destination	Average Transit Time (Hrs)	Distance (Km)	Km/Hr
Cyanika	Cyangugu / Rusizi	37	270	7.4
Cyanika	RUBAVU	37	80	2.2
Gatuna	Akanyaru-Haut	27	145	5.3
Gatuna	Bugarama	64	353	5.5
Gatuna	Cyangugu / Rusizi	43	277	6.4
Gatuna	Gisenyei / Rubavu OSBP	24	153	6.3
Gatuna	KIGALI	40	81	2.0
Kagitumba	Akanyaru-Haut	19	232	12.2
Kagitumba	Bugarama	64	444	6.9
Kagitumba	Cyangugu / Rusizi	57	389	6.9
Kagitumba	KIGALI	85	171	2.0
Kagitumba	RUBAVU	48	266	5.5
Mombasa	Cyangugu / Rusizi	163	1,855	11.4
Mombasa	KIGALI	164	1,682	10.2
Mombasa	RUBAVU	163	1,703	10.4

Source: RRA data January to June 2023



Fuel Tanker along Kamudini road in Uganda

6.5 Transit time in Uganda

Transit time in Uganda tracks the time taken to move cargo between Kampala and various borders between Uganda and Northern Corridor Member States.

Uganda's transport routes along the Northern Corridor extensively connect the Member States, making efficiency crucial for regional trade. Lowering transit time directly reduces transport costs.

Kampala – Oraba and Kampala – Elegu routes were the fastest during the reporting period, averaging 12 kilometers per hour. The slowest routes were Kampala to Malaba and Kampala to Padea. Factors leading to longer transit times include congestion due to weather, blackspots, and poor road conditions, among others.

Uganda is actively improving routes for smooth cargo movement. Rehabilitation is ongoing for the Malaba - Bugiri section, and planned maintenance for Bugiri - Jinja starts in 2025. Kampala - Jinja Expressway is under maintenance. Kibuye - Busega - Mpigi Expressway's capacity improvement is progressing with African Development Bank financing. Mbarara - Katuna and Mityana - Kitenga routes are upgraded. Other projects include Kyenjojo - Katunguru, Kitenga - Kyenjojo, and Kikorongo - Mpondwe sections. Katunguru - Ishasha route will be paved. Rehabilitation continues for Kamdini – Pakwach- Nebbi and Nebbi – Arua Manibe sections. Busia - Tororo upgrade aims for completion in 2024.

In addition to these improvements, a survey is needed to identify bottlenecks along the corridor, and subsequently propose evidence-based recommendations to enhance operational efficiency for transporters.

Table 11: Average transit Time from Kampala in hours

Origin	Destination	Average Transit Time (Hrs)	Distance (Km)	Km/Hr
Kampala	Bunagana	49	501	10.3
Kampala	Busia	26	198	7.6
Kampala	Cyanika	64	490	7.7
Kampala	Elegu	38	457	12.0
Kampala	Gatuna	44	432	9.8
Kampala	Goli	55	465	8.4
Kampala	Kigali	45	513	11.5



Origin	Destination	Average Transit Time (Hrs)	Distance (Km)	Km/Hr
Kampala	Malaba	45	236	5.2
Kampala	Mirama Hills	57	368	6.4
Kampala	Mpondwe	45	442	9.7
Kampala	Mutukula	35	223	6.4
Kampala	Ntoroko	47	374	7.9
Kampala	Oraba	48	581	12.0
Kampala	Padea	57	324	5.7
Kampala	Vurra	59	432	7.3

Source: URA- RECTS data, January to June 2023



7 REFERENCES

- Multinational (Rwanda / Burundi) - cross border roads upgrading project, phase I. (n.d.). <https://projectsportal.afdb.org/dataportal/VProject/show/P-Z1-DB0-254>
- Phase II OSBP development program - east african community. (n.d.). <http://repository.eac.int/bitstream/handle/11671/24353/OSBP%20-%20Phase%20%20Develeopment%20Program.pdf?sequence=1>
- Eac. (2016, April 15). *The East African Community one border posts act*, 2016. EACIR Home. <http://repository.eac.int/handle/11671/24096>



