



Northern Corridor  
Transit and Transport  
Coordination Authority



CENTRAL CORRIDOR  
TRANSIT TRANSPORT FACILITATION AGENCY

# JOINT NORTHERN AND CENTRAL CORRIDORS PERFORMANCE REPORT



2016-2019

October 2020





**TRANSPORT  
OBSERVATORY**

---

**Partner**

---



---

**Development Partners**

---



## Table of Contents

List of Tables . . . . .	III
List of Figures. . . . .	IV
Abbreviations. . . . .	V
Joint Foreword . . . . .	VI
Acknowledgement . . . . .	VII
Executive Summary . . . . .	VIII
<b>Chapter One: Introduction . . . . .</b>	<b>2</b>
1.1 . Introduction . . . . .	3
1.2 . Background . . . . .	3
1.3 . Key macroeconomic indicators . . . . .	10
1.3.1 Population and Gross Domestic Product. . . . .	10
1.3.2 Ease of doing business. . . . .	10
<b>Chapter Two: Volume and Capacity . . . . .</b>	<b>14</b>
2.1 . Introduction . . . . .	15
2.2 . Cargo Throughput . . . . .	15
2.2.1 Combined total port throughput . . . . .	15
2.2.2 Throughput per respective port in EAC. . . . .	16
2.2.3 Imports . . . . .	17
2.2.4 Exports . . . . .	17
2.3 . Transit Volumes per Destination Country . . . . .	18
<b>Chapter Three: Efficiency and Productivity . . . . .</b>	<b>22</b>
3.1 . Introduction . . . . .	23
3.2 . Ship turnaround time . . . . .	23
3.3 . Vessel waiting time . . . . .	24
3.4 . Ship turnaround time . . . . .	25
3.4.1 Import Containerized Cargo Dwell Time at the port of Mombasa. . . . .	25
3.4.2 Containerized Cargo Dwell Time at Dar es Salaam port . . . . .	26
3.5 . Time for customs clearance at the Document Processing Centre (DPC) at the port of . . . Mombasa . . . . .	27
3.6 . Customs Release Time/ Document Processing Time (DPC) Time at Dar . . . . .	28

<b>Chapter Four: Transit Time . . . . .</b>	<b>30</b>
4.1 . Introduction . . . . .	31
4.2 . Transit time in Kenya . . . . .	31
4.2.1 Transit time up to Kenya Exit Borders – Malaba and Busia . . . . .	31
4.2.2 Average Transit time from origin to destination . . . . .	32
4.3 . Transit time in Dar es Salaam . . . . .	33
4.3.1 Transit time up to Tanzania Exit Borders. . . . .	33
4.3.2 Average Transit Time to Tanzania exit Borders . . . . .	34
4.3.3 Transit time from Dar es Salaam port to various destinations. . . . .	35
<b>Chapter Five: Transport Rates and Costs . . . . .</b>	<b>38</b>
5.1 . Introduction . . . . .	39
5.2 . Transport Rates Comparisons: Dar es Salaam vs Mombasa to various destinations. . . . .	39
5.3 . Road Freight charges in Kenya . . . . .	40
5.4 . Road Freight charges in Tanzania. . . . .	41
5.5 . Rail Transport Rates and Charges in Central Corridor . . . . .	42
5.6 . Standard tariff rates for containers by SGR . . . . .	43
<b>Chapter Six: East Africa Community Vehicle Load Limits Compliance. . . . .</b>	<b>46</b>
6.1 . Introduction on EAC vehicle load limits. . . . .	47
6.2 . Weighbridge Traffic along the Northern Corridor . . . . .	47
6.3 . Weighbridge Compliance along the Northern Corridor . . . . .	48
6.4 . Weighbridge Traffic along the Central Corridor . . . . .	49
6.5 . Weighbridge Compliance along the Central Corridor. . . . .	50
<b>Chapter Seven: Summary Conclusion and Recommendations . . . . .</b>	<b>52</b>
7.1 . Summary. . . . .	53
7.2 . Recommendations . . . . .	53

## List of Tables

<b>Table 1:</b> Population and GDP in 2018 . . . . .	10
<b>Table 2:</b> Ease of doing business global ranking out of 190 countries. . . . .	11
<b>Table 3:</b> Total Cargo throughput at the port of Mombasa in MT '000' . . . . .	16
<b>Table 4:</b> Annual Total Cargo Throughput at the port of Dar es Salaam in MT '000' . . . . .	16
<b>Table 5:</b> Total Traffic in ('000) MT through the port of Mombasa per destination . . . . .	19
<b>Table 6:</b> Total Traffic cargo in ('000) MT through Dar es Salaam Port. . . . .	20
<b>Table 7:</b> Vessel Waiting and berthing time in Hours at the port of Dar es Salaam . . . . .	25
<b>Table 8:</b> Tanzania Customs Release Time (Hours) . . . . .	28
<b>Table 9:</b> Transit time to Rusumo Border (hours) . . . . .	33
<b>Table 10:</b> Transit time to Kabanga border (hours) . . . . .	33
<b>Table 11:</b> Transit Time to Mutukula Border (hours). . . . .	34
<b>Table 12:</b> Summary - Total Route Costs by rail for imports (DSM to Kampala) -USD . . . . .	42
<b>Table 13:</b> Summary - Total route costs by rail for exports (DSM to Kampala) -USD . . . . .	43
<b>Table 14:</b> SGR standard tariff rates . . . . .	43
<b>Table 15:</b> Average daily weighed traffic at Weighbridges in Kenya in 2018 and 2019. . . . .	47
<b>Table 16:</b> Traffic of all vehicles weighed at the Static bridges per Quarters in Tanzania . . . . .	49

## List of Figures

<b>Figure 1:</b> Map of Northern Corridor . . . . .	5
<b>Figure 2:</b> Map showing the Central Corridor Road Network. . . . .	7
<b>Figure 3:</b> Total cargo throughput (000) Metric Tonnes. . . . .	15
<b>Figure 4:</b> Combined total imports in metric tonnes. . . . .	17
<b>Figure 5:</b> Combined total exports in metric tonnes. . . . .	18
<b>Figure 6:</b> Comparing transit volume between the port of Mombasa Port and Dar es Salaam in MT . . .	19
<b>Figure 7:</b> Ship turnaround time 2016-2019 in days. . . . .	23
<b>Figure 8:</b> Vessel Waiting Time before Berth at the port of Mombasa in Median Hours . . . . .	24
<b>Figure 9:</b> Containerized cargo dwell time in days . . . . .	26
<b>Figure 10:</b> Average Containerized Cargo Dwell Time . . . . .	27
<b>Figure 11:</b> Time Taken at the Document Processing Centre (DPC) . . . . .	27
<b>Figure 12:</b> Customs release time (hours). . . . .	28
<b>Figure 13:</b> Transit time from Mombasa port to Malaba and Busia borders in Hours. . . . .	32
<b>Figure 14:</b> Average transit time from Mombasa Port to various destinations . . . . .	32
<b>Figure 15:</b> Average Transit Time to Tanzania exit Borders (hours) . . . . .	34
<b>Figure 16:</b> Comparison: average transit time to destinations (hours) 2014 – 2019 . . . . .	35
<b>Figure 17:</b> Transport Rates Comparison Dar es Salaam vs Mombasa routes in 2019 . . . . .	39
<b>Figure 18:</b> Average Transport Rates (USD) to various destinations from Mombasa Port (imports) by . Kenyan transporters. . . . .	40
<b>Figure 19:</b> Road Transport rates in USD to various destinations from Dar Port in USD per Km. . . . .	41
<b>Figure 20:</b> Weighbridge compliance along Northern Corridor . . . . .	48
<b>Figure 21:</b> Weighbridge compliance in Tanzania . . . . .	50

## Abbreviations and Acronyms

<b>AVG</b>	Average
<b>CC</b>	Central Corridor
<b>CCTO</b>	Central Corridor Transport Observatory
<b>CCTTFA</b>	Central Corridor Transit Transport Facilitation Agency
<b>CFS's</b>	Container Freight Stations
<b>DPC</b>	Document Processing Centre
<b>DRC</b>	Democratic Republic of Congo
<b>Dwt</b>	Dead weight Tons
<b>EAC</b>	The East African Community
<b>ECTS</b>	Electronic Cargo Tracking System
<b>GDP</b>	Gross Domestic Product
<b>GPS</b>	Geographic Positioning System
<b>HSWIM</b>	High Speed Weigh-in-Motion
<b>KPA</b>	Kenya Ports Authority
<b>KRA</b>	Kenya Revenue Authority
<b>MT</b>	Metric Tons
<b>NC</b>	Northern Corridor
<b>NCTO</b>	Northern Corridor Transport Observatory
<b>NCTTA</b>	Northern Corridor Transit and Transport Agreement
<b>NCTTCA</b>	Northern Corridor Transit and Transport Coordination Authority
<b>OSBP</b>	One Stop Border Post
<b>SCT</b>	Single Custom Territory
<b>TANROADS</b>	Tanzania National Roads Agency
<b>TEU's</b>	Twenty Equivalent Units
<b>TICTS</b>	Tanzania International Container Services
<b>TMEA</b>	TradeMark East Africa
<b>TO</b>	Transport Observatory
<b>TPA</b>	Tanzania Port Authority
<b>TRA</b>	Tanzania Revenue Authority

## Joint Foreword

Northern Corridor Transit and Transport Coordination Authority and the Central Corridor Transit Transport Facilitation Agency have the pleasure of to present the First Edition of the Northern and Central Corridors Joint Performance Annual Report 2016-2019. The aim of the report is to compare the performance of the ports of Mombasa and Dar es Salaam on specific performance indicators for transit cargo. The Member Countries covered in this report are Burundi, Democratic Republic of Congo, Kenya, Rwanda, South Sudan, Tanzania and Uganda. The report was prepared by the Transport Observatory Project team from both corridors and was generated through a comprehensive data collection and analysis.

The Transport Observatory is a monitoring tool developed to monitor the performance of the ports of Mombasa and Dar es Salaam as well as the performance of the Northern and Central Corridors through the financial and technical assistance from TradeMark East Africa.

Various initiatives have been undertaken by all member countries that have resulted in considerable improvement in trade facilitation in the region. Notable achievements include; enhanced efficiency at both ports of Mombasa and Dar es Salaam with the expansion of container terminals that have led to increased cargo throughput as well as improvement of infrastructure and reduction of barriers to transport and trade.

The data presented in the report was provided and validated by key regional stakeholders from all member countries in charge of transport and trade facilitation and it is hoped will assist our governments in coming up with appropriate policies to improve logistical infrastructure and increase inter-regional trade.

We wish to reiterate the commitment of our Secretariat's to coordinate and support our stakeholders from all member countries towards an enabling environment for continued smooth transport and trade facilitation contributing to sustainable development in the region.

**Mr. Omae Nyarandi**



**Executive Secretary  
NCTTCA**

**Capt. Dieudonné Dukundane**



**Executive Secretary  
CCTFA**

## **Acknowledgement**

The Secretariats of Northern Corridor Transit and Transport Coordination Authority and the Central Corridor Transit Transport Facilitation Agency are deeply indebted to the Council of Ministers of both Corridor's Member States together with the Executive Board of Directors, specialized Technical Committees and Stakeholders Forums for their continued support to the Transport Observatory Project.

The Secretariats also wish to extend their deepest appreciation to all their stakeholders who provided information and important data that contributed to the making of the first Joint Northern and Central Corridor Joint Performance Report (2016 – 2019). They also acknowledge the transport observatory team of experts who participated in the drafting of the report and appreciate the valuable contributions, insights and comments made by the stakeholders who participated in the validation and adoption of this report.

We are grateful to TradeMark East Africa (TMEA) for their continued financial and technical support in the development and improvement of the Transport Observatory Project on both the Northern and Central Corridors.

## Executive Summary

This report was conceived from the East Africa Community (EAC) and Corridors Joint Economic forum held in 2018 in Dar es Salaam. The forum ratified the harmonization of transport corridor performance and monitoring framework. In regard to this, a total of ten indicators covering maritime, inland and corridor were identified for harmonization and joint reporting. These are: Port Throughput; Transit traffic; Ship turnaround time; Ship waiting time; Cargo dwell time; Transit Time; Rates and cost; Axle load proxied by Weighbridge traffic and Weighbridge compliance. It was agreed that the Corridor Authorities would adopt them as common performance indicators.

### The Northern and Central Corridor Agreements

The Central Corridor Transit Transport Facilitation Agency Agreement (CCTTFA) was concluded in Dar es Salaam, Tanzania, on September 2, 2006, by the five Governments of the Republic of Burundi, the Democratic Republic of the Congo (DRC), the Republic of Rwanda, the United Republic of Tanzania and the Republic of Uganda. The purpose of the Agreement is to provide the most efficient effective route for the transportation of goods by surface and lake transport between the Contracting States and the sea and to promote its use. The CCTTFA was formed in recognition of the right of landlocked countries to transit trade as declared under specific United Nations General Assembly Resolution 56/180 on particular needs of Landlocked Developing Countries from which other declarations and action programs evolved.

The Northern Corridor Transit and Transport Agreement (NCTTA) is a multilateral treaty established in 1985 and revised in 2007 to facilitate transit cargo between the Kenyan Port of Mombasa and the hinterland of Member States namely Burundi, Democratic Republic of Congo, Rwanda, Uganda, and South Sudan. The NCTTA provides a mechanism for facilitating transit trade to the landlocked countries through the port of Mombasa. Prior to the treaty, transit trade operated on the basis of bilateral agreements, which did not offer a coherent framework for standardized services and transit trade procedures across the different Member State territories. NCTTCA Secretariat is charged with coordinating the implementation of the provisions of the Agreement and its 12 protocols

### Corridor Network for the Northern and Central Corridors

The Transport Corridor network consists of surface modes of transport in the Northern and Central transport corridors. The entire NC road network covers approximately 12,707 Km in length distributed as follows; 1,323.6 Km in Kenya, 2,072 km in Uganda, 1,039.4 km in Rwanda, 567 km in Burundi, 4,162 km in DRC and 3,543 km in South Sudan. The main arterial cargo highway runs from the port city of Mombasa through Nairobi and Kampala to Kisangani in eastern DRC. Tributaries branch off to Mwanza, Juba, Bujumbura, and Kigali. The current installed pipeline system consists of 1,342 kilometers of pipeline with the capacity to handle about 6.9 billion liters of petroleum products annually with 8 depots on the network.

The Central Corridor by road stretches from the port of Dar es Salaam through the United Republic of Tanzania, where it splits to enter Burundi at Kobero/Kabanga border posts, Rwanda at Rusumo/Rusumo border posts and Uganda at Mutukula/Mutukula border posts. The Corridor continues to Goma and Bukavu through Rwanda. The Central Corridor by central railway line links Uganda through the inland port of Mwanza on Lake Victoria and also links Burundi and Eastern DRC through the inland

port of Kigoma on Lake Tanganyika. The Central and Northern Corridors are linked through various road arteries that run through member Countries. Kenya links to Tanzania through the Namanga border via the Namanga-Athi- River route, Taveta/Holili border via the Voi- Taveta Route, Isebania/Sirari border via the Isebania- Ahero route and Lunga Lunga/ Horohoro border via the Likoni – Lunga Lunga route.

### **Macro-economic, Demographic and Trade indicators**

Northern and Central Corridors Member States average population in 2019 was approximately 277 million (Burundi – 11.5 million, DRC – 86.8 million, Kenya – 52.5 million, Rwanda – 12.6 million, South Sudan – 11.1 million, Tanzania 58 million and Uganda – 44.3 million) with an annual increase of 3 percent when compared to 2018. This large population presents a huge market for trade and is projected to expand in the future. In addition, the region surface area of 4.78 million Km<sup>2</sup> calls for complex trade and logistic interventions to facilitate smooth trade.

According to the World Economic Outlook Report (2019), the combined average real Gross Domestic Product (GDP) for 2018 was 4.7 percent and is projected to increase to 5.3 percent in 2019. The Northern and Central Corridor Member States' economies are agriculture dominated and dependent on manufactured goods which are currently being met through imports from the rest of the world are net importers due to reliance on high value manufactured imports. The trade indicators demonstrate that the majority of the Member States largely import from China, India, United Arab Emirates and Saudi Arabia; whereas the United States of America and Pakistan provides market for their exports.

### **Volume and Capacity- Cargo Throughput**

Cargo throughput refers to 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. Data shows that the total cargo throughput at both the Mombasa and Dar es Salaam ports increased steadily from 41 million metric tons in 2016 to 46 Million metric tons in 2018 and further to 50 million metric tonnes in 2019. The year 2017 to 2018 recorded an increase of 2.2 million metric tons which is equivalent to a 5% annual increase. Similarly the year 2018 and 2019 witnessed a significant increase by 3.8 million metric tons translating to an annual growth of 8 percent. The growth in throughput indicates growing trade in the region which is in tandem with the steady economic growth that has been recorded in member countries in recent years and is projected to grow.

Total cargo throughput at the port of Mombasa has been increasing from 27 million metric tons in 2016 to 34 million metric tons in 2019 while Dar es Salaam port throughput also increased marginally from about 14 million metric tons to 16 million metric tons over the same period. The performance was mainly attributed to port improvements in terms of handling capacity & operational management as well as easy facilitation of doing business in the region. The port of Mombasa has a capacity of 2.65 million TEUs<sup>1</sup> equipped with two container terminals 1 and 2. Terminal 1 has three berths (No. 16,17 and 18) whereas, Terminal 2 has two berths (No. 20 and 21). Dar es Salaam Port is a multi-purpose Port with 11 deep water berths and a rated capacity of 4.1 million (dwt) dry cargo and 6.0 million (dwt) bulk liquid cargo. The Port has a total quay length of about 2,600 meters.

### **Imports and Exports**

Combined imports through the ports of Mombasa and Dar es Salaam stood at 40.5 million metric tonnes in 2019 having grown by 18% from 34 million metric tonnes in 2016. Imports accounted for 86% of total trade. Total exports stood at 6.7 million metric tonnes in 2019 representing 14% of the total trade volume through the ports. Evidently, the region has a huge trade deficit with imports far surpassing exports in all the countries. This has implications on the efficiency of the transport corridors because most return containers are usually empty.

<sup>1</sup> KPA Strategic Plan 2018-2022

In ('000) thousand USD	Imports	Exports	Total Trade
Mombasa	27,558	4,277	31,835
Dar es Salaam	12,988	2,373	15,361
<b>Total</b>	<b>40,546</b>	<b>6,650</b>	<b>47,196</b>
<b>Share of Total</b>	<b>86%</b>	<b>14%</b>	<b>100%</b>

Source: KPA and TPA 2019

## Efficiency and Productivity

### Ship turnaround time

The average ship turnaround time for the port of Dar Es Salaam ranged between 2 to 3.6 days over the period under review. On the other side, the ship turnaround time at the port of Mombasa also varied between 3 to 3.9 days during the same period under review. This performance shows that there is a marginal difference in ship turnaround time with the port of Dar Es Salaam having a slight edge. The port of Mombasa handles higher volume of cargo due to the larger handling capacity and the many vessels that call on the port compared to the port of Dar es Salaam. Furthermore, the port of Mombasa receives large container vessels that take longer time to offload. Generally, there has been increased efficiency in the ports driven by expansion in cargo handling capacity, automation of procedures and documentation, investment in modern and faster gantry cranes and other equipment.

### Vessel Waiting Time

Vessel waiting time is an important determinant of competitiveness of ports. In the period under review, the Port of Mombasa recorded improved performance which is attributed to an increase in the number of container handling terminals at the port of Mombasa and the implementation of fixed Berthing Window to allow shipping lines plan their time. In addition, there has been increased investment in both shore and offshore equipment's which includes the acquisition of modern tugboats and pilot boats that have boosted berthing operations among others. Reduction in Vessel waiting time enhances the attractiveness of the port.

At the same time and the period under review, the port of Dar es Salaam, recorded a tremendous improvement in vessel waiting time. The average waiting time registered was negligible thus attracting more shippers to use the port of Dar es Salaam. This is reflected through recorded cargo increase.

### Dwell Time

The report also notes steady performance for containerized import cargo dwell time during the years under review. With the high increase in cargo throughput and a steady dwell time is an indication of enhanced efficiency. The sustained performance could be attributed to the expansion and construction of additional terminals, acquisition of modern equipment, improvements in documentation and clearance processes and automation of container handling processes. Other factors that have played a role in sustaining favourable cargo dwell time at the port of Mombasa are the haulage of cargo by the standard gauge railway to the inland container depot in Nairobi and the uptake of local cargo by Container Freight Stations (CFS). The reduction of the demurrage charges grace period from 15 to 9 days has also been a key incentive for quicker evacuation of containers

The average transit container dwell time at the Dar-es-Salaam port increased marginally from 9 days in 2016 to 11 days in 2019. This resulted to the implementation of SCT with different systems (TANCIS) in Tanzania and ASYCUDA WORLD in the other countries. The regular exchange of information and training between the respective Revenue Authorities has contributed to solve the issue of system compatibility and Data from TICTS shows that average Transit Container dwell time has been decreasing marginally for over the past years. It is expected that the ongoing various improvements at the port by Tanzania Port Authority will improve this indicator.

On the other hand, the average local containerized import cargo dwell time at the port of Dar es Salaam has seen an annual decrease from 5.09 days in 2016 to 4.2 days in 2019. From the analysis, this recorded decrease was mainly attributed by various improvements at the port of Dar es Salaam including the ongoing mega initiative of Dar es Salaam Maritime Gateway Project (DMGP) that has increased effectiveness and operational efficiency within the port.

### **Transit time**

Generally, there has been an improvement in transit time on both the Northern and Central Corridors. All the destinations from Mombasa have seen an improvement in average transit times since the implementation of Regional Electronic Cargo Tracking System (RECTs). Transit time is affected by the condition of the roads on the trade routes and other factors that slow the movement of cargo. These include weighbridge checks, police checks, border crossing procedures, accidents, poor weather conditions and traffic bottlenecks, especially in urban areas. Transit time in the region has improved over time though is still below the set targets for most of the routes. The average time taken from Malaba to Elegu improved significantly in 2019 when compared to the previous years.

The average transit time from Dar es Salaam port to Tanzania exit borders, has not been steady and is still slightly higher than the government's set target of 60 hours from Dar es Salaam Port to Tanzania exit borders. For instance, average transit time from Dar es Salaam port to Rusumo border for the calendar year 2017 is 86.16 hours while for the 2018 same period, the average recorded was 81.84 hours which shows that transit time is slightly going down to reach the set target of 60 hours.

### **One stop Border Posts**

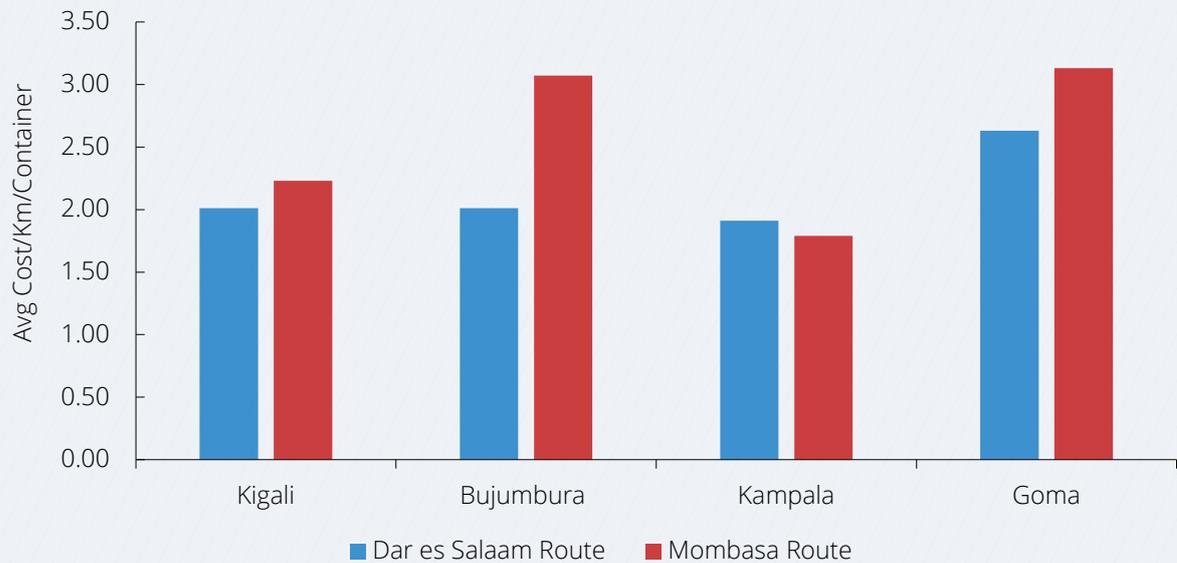
One Stop Border Posts aims at reducing transit costs and time incurred in cross border movement in harmonizing the activities of both country's border agencies. The East African Community Countries through the support of TradeMark East Africa fully operationalized and trained personnel at 14 OSBPs with the aim of facilitating trade and free movement of goods in the region. The OSBPs are therefore becoming more popular at the regional level and they are seen as a modern approach towards facilitating secure movement of goods, persons and services across national borders. In addition, OSBPs ensure enhanced revenue collection and promotion of legitimate trade, especially for informal trades. Their operationalization and training of personnel has significantly reduced the time taken by travelers and trucks at the borders from days to about 1.5 minutes to 30 minutes on average respectively. The operationalization of OSBPs on both corridors is not without challenges. Some of the challenges related to inadequate infrastructure at many of these border posts including housing for staff, amenities such as schools and hospitals, holding grounds for quarantined animals, insufficient water resources and in some cases unreliable power supply and not the least human capacity and skills shortfalls in a number of critical areas.

### **Transport costs and rates**

Analysis of the trends transport rates reveals that cost of freight has slightly gone down for the mentioned period. However, they are still a concern for transporters in the region. It is notable that the cost for long distances remains high. Some of factors that have been identified to cause cost escalations include road tolls, multiple border charges, and road conditions.

As depicted in the table above, it is slightly cheaper to import through Dar es Salaam port for the Central Corridor Member Countries except Uganda as Transport Rates from Dar es Salaam to various destinations is considerably lower compared to Mombasa to various destinations. This is attributed to the shorter distance for Rwanda, DRC and Burundi to access the Dar es Salaam port; higher turnaround time in Central Corridor and road users' charges are minimal in Central Corridor because of fewer border points. This implies that elimination of Non-Tariff Barriers has had a positive impact in reducing the cost of transport in the region.

Road Transport Rates Comparisons: Dar es Salaam Vs. Mombasa route to various destinations



### Development of the Standard Gauge Railway

The development of the standard gauge railway in Kenya and Tanzania heralds a new era for inland freight logistics in the region. SGR comes with potential to haul large volumes of cargo in more cheaply and faster way compared to road transport. The 485 km-long Standard Gauge line from the port of Mombasa to Nairobi Inland Container Depot (ICD) is complete and in full use. Work on the extension of the SGR line to Naivasha from Nairobi has just been finalized and the passenger train is in use. Commercial operations of the Standard Gauge Railway (SGR) freight train service began cargo operations in January 2018 and has witnessed a tremendous increase registering 20 percent share of the total throughput since the launch of SGR freight services. Work is ongoing on the Tanzania standard gauge railway where the main objective is to construct a Standard Gauge railway network from DSM to Mwanza (1219kms). The project will involve the use of highly advanced technology with a capacity of 35 tons per axle; will be electrified with a maximum speed of 160 kph for passenger trains and 120 kph for freight trains. The construction status by December 2019 for Lot 1, Dar es Salaam – Morogoro (300 km-long) is at 70% and the work is expected to be completed in April 2020 while Lot 2, Morogoro – Makutupora (422 km-long) is at 19% and construction work is expected to be completed in February 2021. Other, remaining lots including Makutupora –Tabora (249 km-long); Tabora – Isaka (133 km-long) and Isaka –Mwanza (249 km-long).





# Chapter One

## **Introduction**

## 1.1 Introduction

The annual joint report provides an analysis of performance for indicators that are tracked by the Northern and Central Corridor Transport Observatories. Where applicable a comparison is made with previous years to gauge trends in performance and efficiency. This report was conceived from the East Africa Community (EAC) and Corridors Joint Economic forum held in 2018 in Dar es Salaam. The forum ratified the harmonization of corridor performance and monitoring. A total of ten indicators covering maritime and inland were identified and harmonized. It was agreed that the Corridor authorities adopt them as common performance indicators.

In this regard, the scope of the report covers the ten indicators specified in the Joint corridor session and is part of the performance indicators being measured by the Transport Observatories. The indicators tracked provide a set of tools for the diagnosis of problems affecting the Northern and Central Corridors; thus, plays a key role in informing policy and decision makers on areas of concern along the logistical chain; whether it relates to time, delays, costs, volumes or efficiency to improve the competitiveness of the Corridors. Both qualitative and quantitative data are processed and an in-depth analysis conducted into selected aspects of corridors performance, using various diagnosis tools to investigate in detail specific challenges and proposed intervention measures to be implemented along the transport corridors.

## 1.2 Background

The Northern and Central Corridors comprise of multi-modal transport networks consisting of road, rail, pipeline and inland waterways transport connecting the landlocked countries to the seaports of Mombasa and Dar es Salaam respectively. Both ports serve the great lakes countries of east and central Africa region. The Northern Corridor Transit and Transport Coordination Authority was established through the Northern Corridor Transit and Transport Agreement (NCTTA) that was first signed in 1985 and revised in 2007 with a view of facilitating interstate and transit trade among member states. Member States of the Northern Corridor include; Burundi, Democratic Republic of Congo (DRC), Kenya, Rwanda, South Sudan, and Uganda. The Agreement is anchored on economic, social and environmental pillars of sustainable transport coupled with 12 protocols for regional cooperation. NCTTA is currently under review to incorporate the new policy developments in the region such as the implementation of vehicle

load control limit, development of standard gauge railway, to unify cross border transport regulations, customs provisions and trade standards across the Member States in support of regional integration and implementation of the Africa Continental Free Trade Area among others.

The Central Corridor Transit Transport Facilitation Agency (CCTTFA) is a multilateral Agency that was established on 2nd September 2006 through an Agreement by 5 Governments of Burundi, Democratic Republic of Congo (DRC), Rwanda, Tanzania, and Uganda. The Central Corridor Secretariat officially started work in 2010 and the Agreement was renewed for another 10 years in 2018. The Central Corridor Transit Transport Facilitation Agency (CCTTFA) is charged with the promotion of transport utilization of the Central Corridor, encouraging the maintenance, upgrading, improvement and development of infrastructure and supporting service facilities at port, rail, lake, road border posts and along the route to meet user requirements, ensure open competition and reduce the costs of transit transport for land-linked Member States. The Central Corridor Transit Transport Facilitation Agency Agreement provided for enactment of Protocols for the enablement of effective implementation of the goals of the Agency. Like the Northern Corridor agreement, the Central Corridor agreement has 11 protocols as follows: Protocol No.1: Maritime Port Facilities, Protocol No.2: Routes and Facilities, Protocol No.3: Customs Controls



SGR and road transport in Kenya along the Northern Corridor  
PHOTO: NCTTCA

and Operations, Protocol No.4: Documentation and Procedures Protocol No.5: Transport of Goods by Rail Protocol No.6: Transport of Goods by Road Protocol No.7: Inland Waterways Transport of Goods Protocol No.8: Transport by Pipeline, Protocol No.9: Multimodal Transport of Goods, Protocol No.10: Handling of Dangerous Goods, Protocol No.11: Measures of Facilitation for Transit Agencies, Traders and Employees.

These two Corridors facilitate trade for the Eastern and Central regions hence improving their performance is a necessary ingredient for growth and integration into the regional economy. However, measuring corridor performance requires a good understanding of the obstacles to trade in order to determine the causes of the poor performance and proposing recommendations to address the gaps. The Secretariats for both the Northern and Central Corridors monitor performance through transport observatory portals. A Transport Observatory (TO) is an analytical performance monitoring tool that analyzes corridor performance in its multiple dimensions. TO is anchored to Corridor Management Institutions through both public and private stakeholders involved in the logistics chain framework. The Northern Corridor Transport Observatory (NCTO) and Central Corridor Transport Observatory (CCTO) were established in 2012 to address the need for an organized performance measurement tool with an online portal that generates evidence-based information for policy interventions.

Currently, the Northern Corridor Transport Observatory tracks over 40 performance indicators grouped in 7 categories as follows: Volume and capacity, Tariff and Rates, Transit Time and Delays, Efficiency and Productivity, Intra-regional trade, Road Safety, and Green Freight. The Central Corridor Transport Observatory, on the other hand, the Central Corridor Transport Observatory tracks over 33 performance indicators grouped into 4 categories: Volume and Capacity, Transport Rates and Costs, Transit Times and Delays and Efficiency and Productivity.

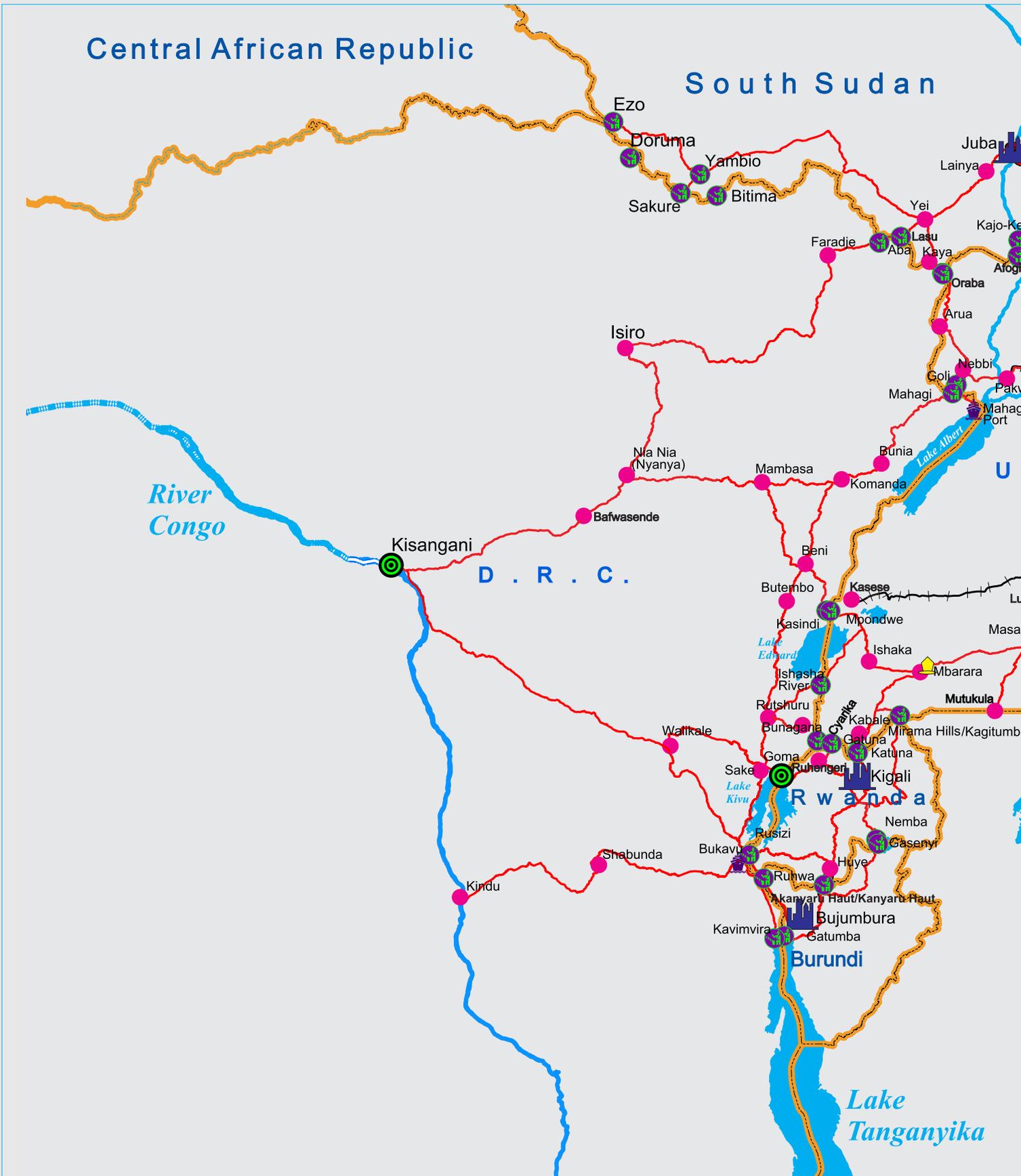
A well-developed inter-modal transport network ensured a seamless, faster and more reliable movement of cargo. The port of Mombasa is the main entry point to the Northern Corridor, as well as serving regions of neighboring countries that have their own sea port (Somalia, Tanzania). The Government of Kenya through Kenya Ports Authority (KPA) is also developing a second commercial port in Lamu to tap into South Sudan and Ethiopian Markets under the Lamu Port South Sudan Ethiopia Transport (LAPSSET) initiative. Lamu port shall consist of a total of 32 Berths when fully completed. To start with, KPA is currently developing three multipurpose berths. The port will also be linked to its hinterland of South Sudan, Ethiopia by oil pipelines, super highways, and standard gauge rail. This is a new transport corridor known as the LAPSSET corridor.

The entire NC road network covers approximately 12,707 Km in length distributed as follows; 1,323.6 Km in Kenya, 2,072 km in Uganda, 1,039.4 km in Rwanda, 567 km in Burundi, 4,162 km in DRC and 3,543 km in South Sudan. The main arterial cargo highway runs from the port city of Mombasa through Nairobi and Kampala to Kisangani in eastern DRC. Tributaries branch off to Mwanza, Juba, Bujumbura, and Kigali. The current installed pipeline system consists of 1,342 kilometers of pipeline with capacity to handle about 6.9 billion liters of petroleum products annually with 8 depots on the network. In addition, Kenya Ports Authority (KPA) has constructed inland container depots at Nairobi, Kisumu, and Eldoret. These depots are linked to the Mombasa Port container terminal by a rail-trainer service. Imports are delivered directly from Mombasa to the depots on a Through Bill of Lading, while exports can also be consolidated at the ICDs and railed to the Port for shipping.

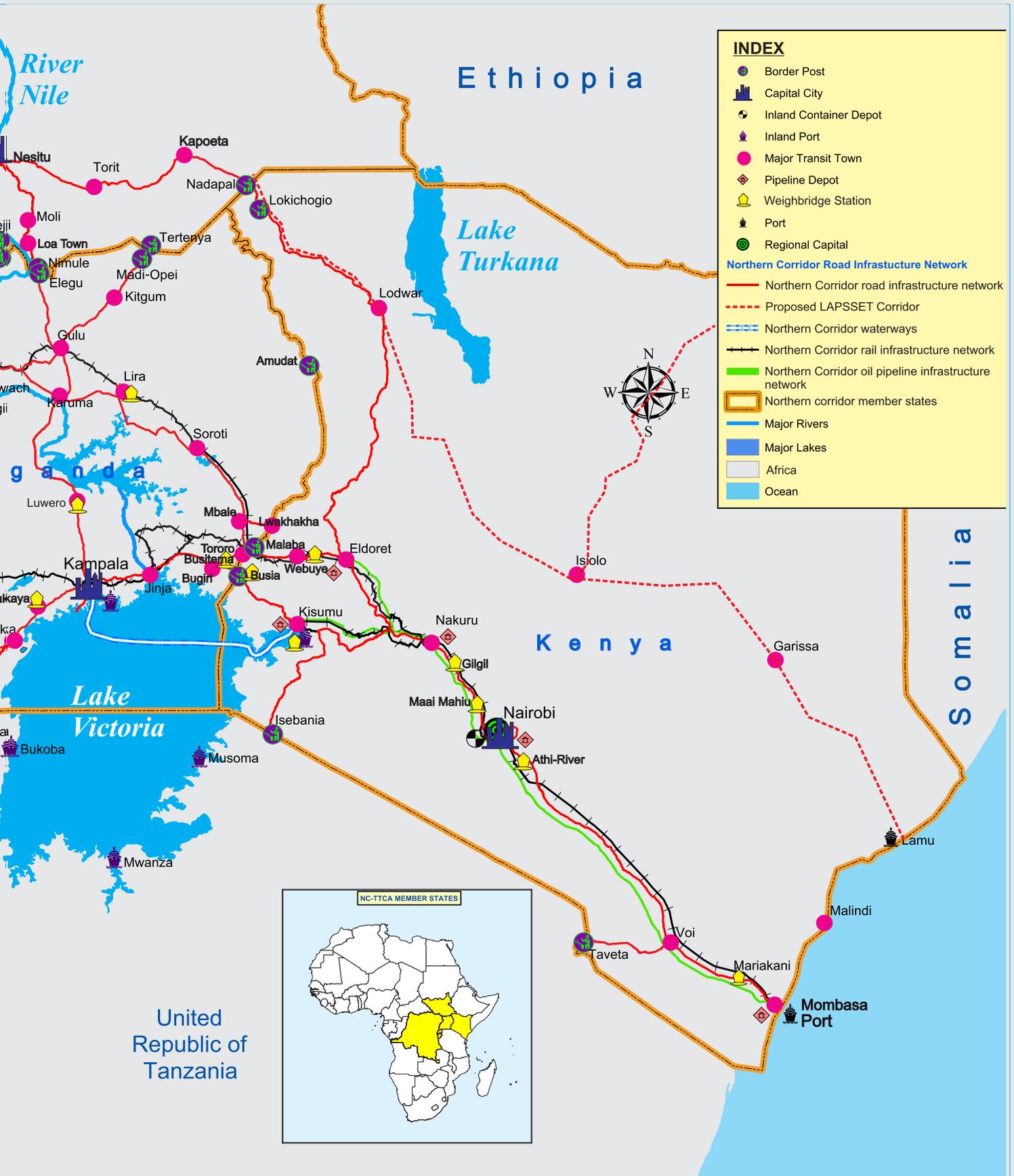
Below is a map on the Northern Corridor multi-modal transport and the member states.



Figure 1: Map of Northern Corridor



Source: Northern Corridor Transport Observatory



The Government of Tanzania through Tanzania Port Authority is managing three main ports namely; Dar es Salaam port, Mtwara port, and Tanga port. The Dar es Salaam port is the principal port of Tanzania and handles approximately 90% of the country's cargo traffic. The port of Tanga, on the other hand, has an annual capacity of 500,000 tonnes and the Country has major plans to upgrade the port to increase capacity and provide an alternative route for cargo flowing into the Country.

Roads in Tanzania are classified either as "trunk" roads that connect corridor routes (there are 42 trunk roads), regional roads, district roads, and urban roads. The Corridor road network stretches from the port of Dar es Salaam inland through Tanzania, where it splits to enter Burundi at Kobero/Kabanga; Rwanda at Rusumo and Uganda at Mutukula borders. The Corridor extends to DRC as well through Rusumo or Kabanga/Kobero borders. Central Corridor Member States boast extensive road networks and the distances between Member States major towns from the port of Dar es Salaam are as follows: Dar-Kigali is 1,495 Km, Dar-Kampala is 1,780 Km, Dar-Bujumbura is 1,630 Km, Dar-Bukavu is 1,704 Km and Dar-Goma

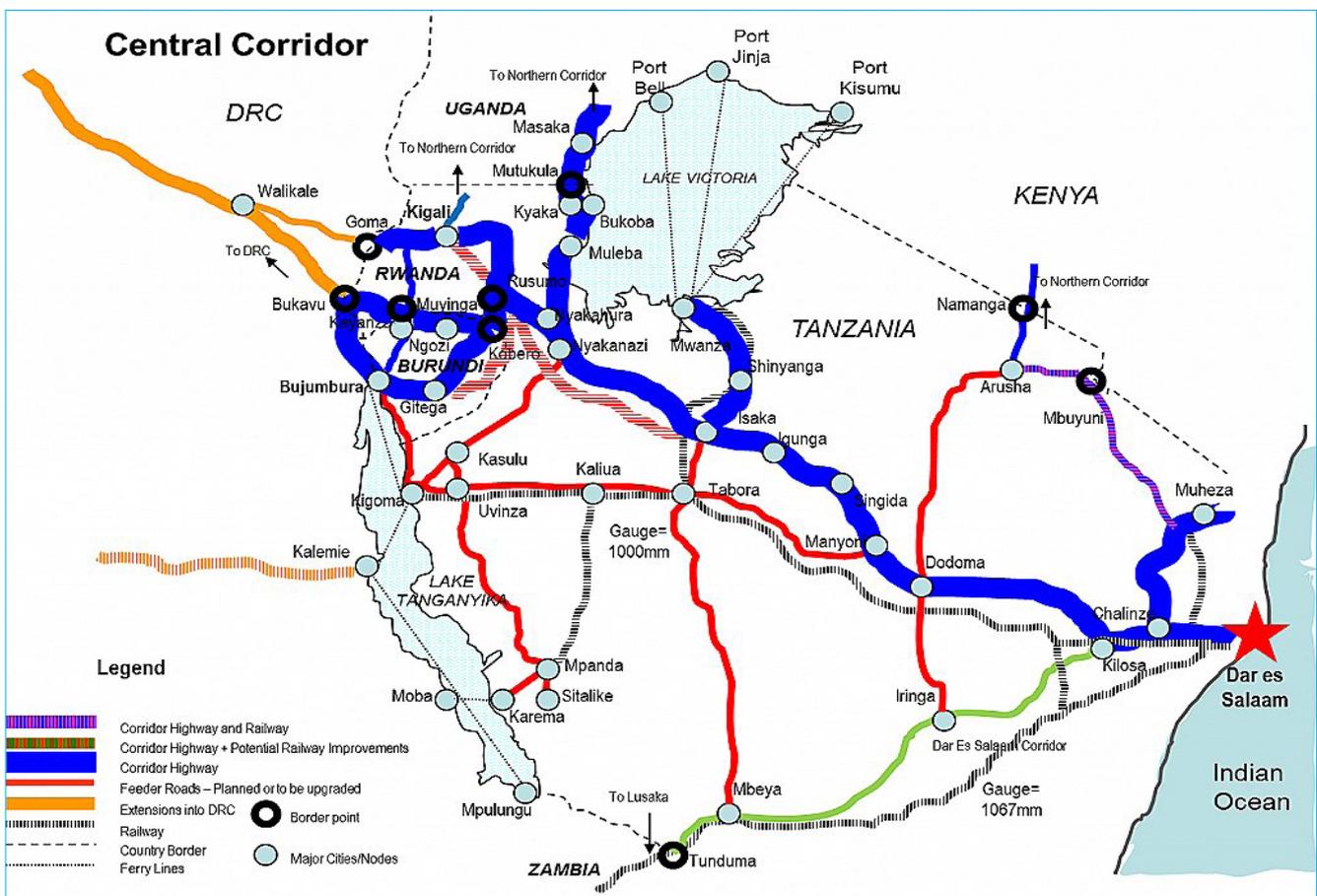
is 1,635 Km. Generally, most of the Central Corridor roads are paved except for some sections such as the route from Nyakanazi to Kabanga/Kobero.

The Central and Northern Corridors are linked through various road arteries that run through member Countries. Kenya links to Tanzania through the Namanga border via the Namanga- Athi- River route, Taveta/Holili border via the Voi- Taveta Route, Isebania/ Sirari border via the Isebania- Ahero route and Lunga Lunga/ Horohoro border via the Likoni – Lunga Lunga route. These borders facilitate trade between the two countries. Taveta/ Holili and Namanga/ Namanga one stop border posts are fully functioning and the status of road condition is also very good.

Kenya is linked to Uganda to the west through the main highway from Mombasa-Nairobi-Malaba route through Malaba/Malaba border and via the Nairobi-Kisumu- Busia route through Busia/Busia border. On the other hand, Uganda borders Tanzania to the south via the Mutukula/Mutukula borders. The borders are one stop border posts to simplify and expedite border controls and trade facilitation.

**Figure 2: Map showing the Central Corridor Road Network**

Source: CCTFA Official Map





Road transport in Tanzania along the Central Corridor

PHOTO: CCTFA

The Northern Corridor road network in Uganda is approximately 2,072 km long, out of which, about 79% of total NC road network are paved and in good condition 13% in fair condition. Uganda plays a central role in linking the Member States.

It is bordered to the north by South Sudan via Elegu/Nimule border; Oraba/Kaya border; Madi Opei/Tatenya border and Afoji/Kajojeji borders. To the west, Uganda links to the Democratic Republic of Congo via Vurra/Aru border; Goli/Mahaki border; Mpondwe/Kasindi border; Ishasha/Ishasha border; Bunagana/Bunagana border; Ntoroko/Ntoroko border and Lia/Lia border. To the south-west Uganda links to Rwanda via Katuna/Gatuna border; Mirama Hills/Kagitumba border; and Cyanika/Cyanika border. The southern part of the country includes a substantial portion of Lake Victoria, shared with Kenya and Tanzania.

Rwanda is bordered by Uganda, Tanzania, Burundi, and the DRC. Rwanda borders DRC through various borders among them is Rubavu/Goma and Rusizi/Bukavu. The two countries share Lake Kivu. Rwanda

links to Burundi through Akanyaru Haut/Kanyaru Haut; Ruhwa/Ruhwa; and Nemba/Gasenya borders. On the other hand, Rwanda is linked to Tanzania through the Rusumo/Rusumo border.

Burundi is also linked by road with Tanzania, via Mugina/Manyovu border and Kobero/Kabanga border which the majority of the country's imports and exports are made.

DRC has the majority of navigable waterways, and traditionally water transport has been the dominant means of moving around approximately two-thirds of the Country. Lake Tanganyika is shared between four countries namely DRC, Tanzania, Burundi and Zambia with Tanzania and DRC possessing the majority (86%) of the lake. The Lake is the key link between Tanzania and DRC.

The Mombasa Port & Northern Corridor Community Charter lays out a number of target activities that are aimed at improving port efficiency

### **Box 1 - 1: Port Charters for Northern Corridor**

#### **The Mombasa Port & Northern Corridor Community Charter 2018 – 2024**

*The importance of accomplishing a seamless flow of cargo was recognized heavily, when His Excellency, the President Uhuru Kenyatta, launched the initial Mombasa Port Community Charter in 2014. The aim of the Charter was to establish a permanent framework of collaboration, binding port community stakeholders to specific actions, collective obligations, service delivery targets and timelines. Through its implementation, in the last four years, tremendous improvements have been witnessed in areas such as port and corridor infrastructure, transport connectivity and automation, reduced cargo clearance times, ship turnaround times, transit time along the Northern Corridor and the overall logistics cost.*

*However, with time, Authorities noted that while some targets were achieved, others appeared to have been overtaken by changes in infrastructure, systems, processes and policies that impacted on operations and cargo clearance processes. It was also noted that the Charter had omitted key stakeholders who needed to be part of the process. In response to these developments, Mombasa Port and Northern Corridor Community Charter 2018-2024 was developed and proclaims the desire of the Mombasa Port and Northern Corridor community to realize the full trade facilitation.*

*The Charter is a culmination of extensive consultations with private and public sector stakeholders, including government agencies, the business community, civil society organizations and special interest groups, on the upgrading and improvement of logistics services. The reviewed Charter has also generated smarter goals, better performance indicators and inclusion of performance indicators for a wider range of service providers. The review has strengthened the Charter organs to enable greater involvement of top government offices and other stakeholders and improved coordination of the monitoring and evaluation process. Therefore, successful implementation of the Charter will go a long way towards making Mombasa the region's port of choice and the Northern Corridor a globally competitive route. There are weekly meeting on every Friday to deliberate on the performance status of the Charter and provide policy advice on addressing challenges identified. The meeting draws representation from public and private sectors involved in logistics chain who are signatories to the Charter.*

### **Box 1 - 2: The Dar es Salaam Port Improvement Committee (PIC)**

*The Port of Dar es Salaam Port Improvement Committee (PIC) was formed in 2007 after a presidential directive of the then President Jakaya Kikwete to the ministry in charge of transport to reduce congestion at the port and improve efficiency. The PIC is headed by the Dar Port Director and is made up of key stakeholders, both public and private, in the maritime sector in Tanzania.*

*One of the major recommendations the PIC came up with as quick wins to reduce congestion at the port was the introduction of Inland Container Depots (ICD's) and Container Freight Stations that are operational to date and keep being improved upon. Once the Committee had submitted its initial report, the Permanent Secretary directed the PIC to become a permanent entity and to continue to hold its meetings regularly to advise TPA and the government on improving port operations and efficiency at the Port of Dar es Salaam. The meetings are held monthly at TPA offices in Dar es Salaam.*

*Currently the PIC is engaged in the Dar es Salaam Maritime Gateway Project (DMGP) that involves the modernization of the Dar es Salaam Port, including upgrade of berths 1 to 7, deepening of the harbour, improving cargo handling and port layout. The objective of the project is to increase the capacity of the Port of Dar es Salaam through increased port efficiency. The first component of the project comprises the essential civil works in the port, and the key access infrastructure: a) Deepening and strengthening of existing Berths 1 to 7 to 14.5 m below Chart Datum (CD), and constructing a new multipurpose berth at Gerezani Creek; b) Deepening and widening the entrance channel and turning basin in the port to the end of Berth 11 to 15.5 m below CD; c) Improving the rail linkages and platform in the port; and d) Deepening and strengthening of existing Berths 8-11, to 14.5m below CD.*

*The second component comprises the Institutional Strengthening of TPA through technical assistance to support the restructuring of TPA to reflect the twin objectives of corporatisation of functional business units under TPA for those berths where TPA will remain the operator, whilst enhancing TPA's capacity to act as a landlord, manager and developer of the ports in Tanzania. On its completion, the DMGP will greatly improve the effectiveness and efficiency of the Dar es Salaam port, enabling it to handle more cargo and as a result open up the Central Corridor to more business and opportunities.*

### 1.3 Key macroeconomic indicators

This section provides quantitative information in relation to economic and trade policy issues.

#### 1.3.1 Population and Gross Domestic Product

Northern and Central Corridors Member States average population has been increasing annually with the year 2019 having a combined total population of approximately 277 million<sup>1</sup>; this is an increase by 3% population growth rate when compared to the year 2018. This large population presents a huge market for trade and is projected to expand in the future. In addition, the region surface area of 4.78 million Km<sup>2</sup> calls for complex trade and logistic interventions to facilitate smooth trade.

The combined average real Gross Domestic Product (GDP) of 4.7% was registered in the year 2018. According to the 2020 world economic outlook world economic growth is projected to rise to 3.3% in 2020 from an estimated 2.9% in 2019 and further to 3.4% in 2021. The countries with the highest economic growth are Rwanda, Kenya, Uganda, and Tanzania as shown in table 1 below.

In both countries the GDP growth has been driven by the agriculture sector, followed by industry and service sectors. In countries with low growth, such as South Sudan (-1.1%), Burundi (0.6%), the main factor is lack of peace and stability, which has disrupted economic activity.

In South Sudan, internal conflict disrupted oil production, and agricultural production declined because of poor weather conditions and violent conflict in many areas. In Burundi, political instability disrupted economic activity.



**Table 1: Population and GDP in 2018**

Source: World Economic Outlook Report October 2019; UNCTAD statistics 2017/18/19

ECONOMY	Real GDP Growth (%)	Population in Thousands	Surface Area in KM <sup>2</sup>
	2018	2019	2019
Burundi	0.1	11,531	27,830
DRC	5.8	86,791	2,344,860
Kenya	6.3	52,574	580,370
Rwanda	8.6	12,627	26,340
South Sudan	(1.1)	11,062	619,745
Uganda	6.1	44,270	241,550
Tanzania	7.0	58,005	947,300
<b>Average/ Total</b>	<b>(Average) 4.7</b>	<b>276,860</b>	<b>4,787,995</b>

#### 1.3.2 Ease of doing business

The ease of doing business index is meant to measure regulations directly affecting businesses. Doing business gathers detailed and objective data on 11 areas/parameters of business regulation, helping governments diagnose issues in administrative procedures and correct them. Table 2 shows the performance of the East Africa Member States and DRC on ease of doing business score and trading across borders score. The scores range from 0 (worst) to 100 (best) and help us to analyze economic outcomes and identify what reforms of business regulation have worked, where and why. Rwanda and Kenya economies witnessed the most notable improvement in ease of doing business performance score which was attributable to implementing business regulatory reforms across some of the parameters. Uganda and Tanzania were ranked at positions 116 and 141 respectively. Tanzania made starting a business easier by launching online company registrations. DRC, South Sudan and Burundi should enhance their regulatory reforms to improve on their scores.

<sup>2</sup> UNCTAD statistics on population

On the other hand, trading across borders which is a critical parameter to multilateral trade logistics, records the time and cost associated with the logistical process of exporting and importing goods. Uganda reduced the time needed to export and import by further implementing the Single Customs Territory, as well as by developing the Uganda Electronic Single Window and the Centralized Document Processing Centre.

Kenya simplified the process of providing value added tax information by enhancing its existing online system, iTax.

Rwanda streamlined the process of starting a business by replacing its electronic billing machine system with new software that allows taxpayers to issue value added tax invoices.

Rwanda was ranked position 88 out of 190 on this parameter, while Kenya was ranked position 117. DRC, Tanzania and South Sudan needs to implement measures that will facilitate efficient trade across borders.

**Table 2: Ease of doing business global ranking out of 190 countries**

Source: World Bank, 2019/ 2020

<b>Economy</b>	<b>Rank as of doing business out of 190</b>	<b>Overall ease of doing business score (0-100)</b>	<b>Trading across borders score</b>	<b>Ease of Trading RANK</b>
Rwanda	38	76.5	75.0	88
Kenya	56	73.2	67.4	117
Uganda	116	60.0	66.7	121
Tanzania	141	54.5	20.2	182
Burundi	166	46.8	47.3	169
DRC	183	36.2	3.5	187
South Sudan	185	34.6	26.2	180



PHOTO: KPA



PHOTO:CCTTFA



## Chapter Two

# **Volume and Capacity**

## 2.1 Introduction

The chapter presents the annual performance of the Dar es Salaam and Mombasa Ports in terms of cargo flow both for imports and exports for the years 2016 to 2019. It also looks at transit traffic by country destination. An analysis comparing the performance of the two corridors is also highlighted.

## 2.2 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.*

Mombasa seaport is the gateway and artery to an extensive economic hinterland stretching across Burundi, eastern Democratic Republic of Congo (DRC), Rwanda, Somalia, South Sudan, and Uganda. It also serves northern Tanzania and southern Ethiopia. The port of Mombasa has a capacity of 2.65 million TEUs<sup>1</sup>. The port is equipped with two container terminals 1 and 2. Terminal 1 has three berths (No. 16,17 and 18) whereas, Terminal 2 has two berths (No. 20 and 21).

The 2nd container terminal is 15 meters deep with berth 20 having a width of 210 meters; berth 21 having a width of 300 meters wide for berth 21. On the other hand, berths 16-19 are about 840 meters each. Other facilities and equipment include; 2 bulk oil jetties, 2 bulk cement berths with 3 silos and 10 Conventional Cargo berth. Considering the port's potential capacity relative to global performance benchmarks, the port of Mombasa has room for more cargo throughput.

The Dar es Salaam Port is a multi-purpose Port with 11 berths and a number of Jetties. It is Tanzania's principal Port that handles over 90% of the country's imports and exports volume and is the gateway to the Central and Northern parts of Tanzania and to the countries of Malawi, Zambia, D.R Congo, Rwanda, Burundi, and Uganda. The Dar es Salaam Port is still under modernization project to improve the effectiveness and efficiency of the Dar es Salaam Port and support the economic development of Tanzania and the countries of the East Africa region. This project is expected to increase the capacity of the Port to 28 million metric tons by 2025.

### 2.2.1 Combined total port throughput

Figure 3 below presents the trends in cargo throughput from the year 2016 to 2019 in both corridors under preview. The combined total cargo throughput for both ports increased from 41,150 thousand metric tonnes in 2016 to 46,617 thousand tonnes in 2018 and further to 50,463 thousand metric tonnes in 2019. Out

of which, the port of Mombasa handles approximately 66% of the total combined throughput while Dar es Salaam port handles the remaining 34%. However, the report also notes from the foregoing that the size capacity of the two ports is different with the port of Mombasa having a higher handling capacity when compared to Dar es Salaam port.

**Figure 3: Total cargo throughput (000) Metric Tonnes**

Source: KPA and TPA 2016/2017/2018 and 2019



<sup>3</sup> KPA Strategic Plan 2018-2022

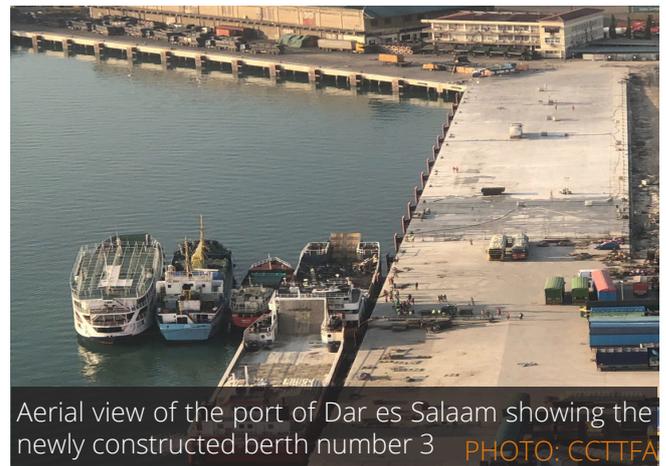
### 2.2.2 Throughput per respective port in EAC

Table 3 describes the volume of cargo in metric tons through the port of Mombasa. Total cargo throughput at the port of Mombasa has been increasing steadily over the years from approximately 27 million metric tons in 2016 to 34 million metric tons in 2019. The year 2019 witnessed an annual increase of 11.4%, significantly picking up compared to the 2% annual growth in 2018. The growth is attributable to an increase in imports, transshipment, and exports. Furthermore, imports comprise over 80% of the total port throughput indicating trade deficits that have also been rising. This trend implies that the countries using the Port of Mombasa are net importers.

**Table 3: Total Cargo throughput at the port of Mombasa in MT '000'**

Source: Kenya Ports Authority (KPA), 2016/2017/2018 and 2019

Type of Cargo	2016	2017	2018	2019
Imports	23,116	25,604	25,475	27,558
Exports	3,659	3,794	4,125	4,277
Transshipment	589	874	1,247	2,495
Restows	-	73	76	110
<b>Throughput '000' MT</b>	<b>27,364</b>	<b>30,345</b>	<b>30,923</b>	<b>34,440</b>
<b>Annual % change</b>	<b>2.4</b>	<b>10.9</b>	<b>1.9</b>	<b>11.4</b>



Transshipment cargo at the port of Mombasa contributed greatly to the growth in port throughput and has been increasing steadily over the years from an annual increase of 2% in 2016 to annual growth of 4% of the total port throughput in 2018. The year 2019 recorded approximately 2.5 million metric tonnes in transshipment volume doubling from 1.3 million metric tonnes in 2018. The main destination for transshipment cargo was: Dar-es-salaam, Pemba, Mogadishu, and Mauritius.

Equally, table 4 shows the total cargo throughput at Dar es Salaam port for the four-year period ending 2019. From the analysis, port throughput increased steadily from about 14 million metric tons in 2016 to approximately 16 million metric tons in 2019. The year 2017 to 2018 recorded an increase of 1,649,757 metric tons which is equivalent to 12% annual increase. Also referring the year 2018 to 2019, recorded a slight increase of 329,159 metric tons which is equivalent 2.1%. The performance was mainly attributed to port improvements in terms of effectiveness and efficiency on handling & operational management as well as easy facilitation of doing business in Tanzania.

**Table 4: Annual Total Cargo Throughput at the port of Dar es Salaam in MT '000'**

Source: TPA 2016/2017/2018 and 2019

Type of Cargo	2016	2017	2018	2019
Imports	11,261	11,461	12,683	12,988
Exports	2,039	2,045	2,452	2,373
Transshipment	289	256	267	87
Total Traffic	13,589	13,762	15,401	15,448
Total Coastal Traffic	197	282	293	575
<b>Total Cargo Throughput</b>	<b>13,786</b>	<b>14,044</b>	<b>15,694</b>	<b>16,023</b>
<b>Annual % change</b>		<b>1.9</b>	<b>11.7</b>	<b>2.1</b>



### 2.2.3 Imports

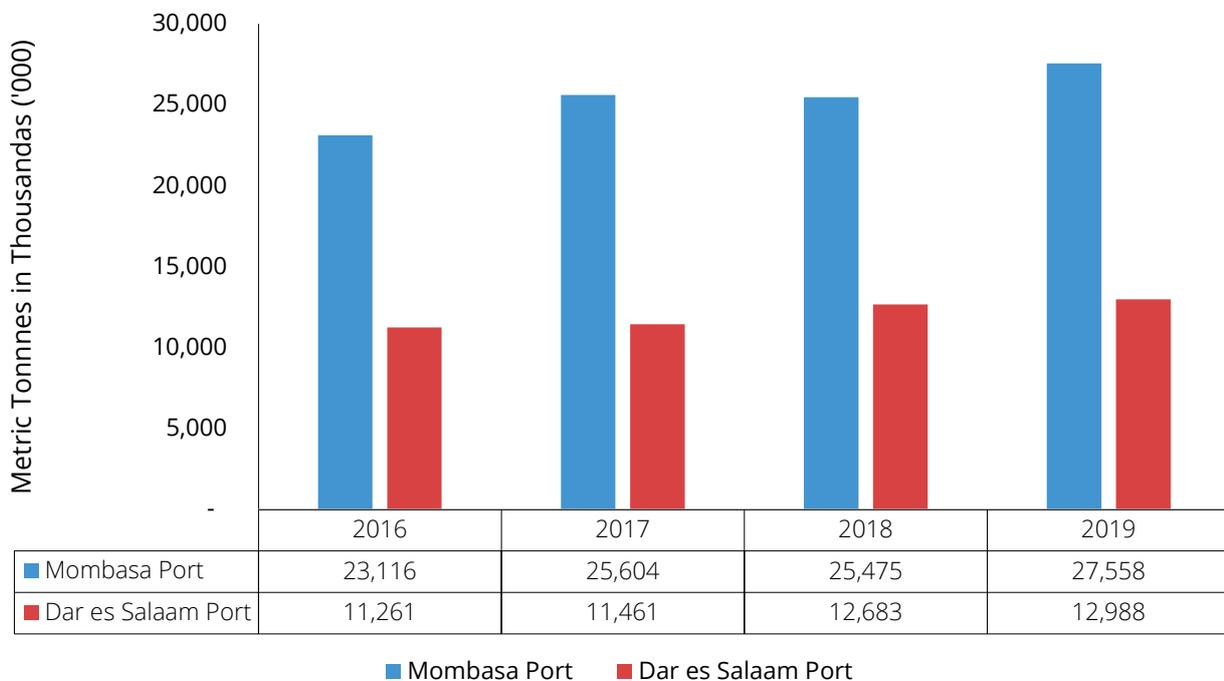
Figure 4 shows combined imports through the ports of Mombasa and Dar es Salaam. Total imports combined stood at 40.5 million metric tonnes in 2019 having grown by 18% from 34 million metric tonnes in 2016. Imports through the port of Mombasa are two-fold when compared to Dar es Salaam port. It is evident that the region continues to import substantially more goods than it exports signifying unfavorable trade balance. Both ports registered the highest import cargo serving similar countries. The growth is driven by the corresponding growth of economies in the region. The top import commodities through the port of Mombasa include petroleum oil & lubricants, clinker,

wheat, iron & steel, palm/vegetable oil, fertilizers, coal, rice, plastic and sugar. Major import partners include Asia and the European Union.

Kenya and Tanzania accounted for the majority of imports slightly over 60% of total imports discharged through the port of Mombasa and Dar Es Salaam respectively. Whereas the proportion of transit imports accounted for 30%. Total imports at the port of Mombasa has been growing steadily over the years except in 2018 which saw an annual decrease of 0.5% which was attributable to a decrease in imports for Kenya (this is a positive performance since countries should export more and import less).

**Figure 4: Combined total imports in metric tonnes**

Source: KPA and TPA 2016/2017/2018/2019



### 2.2.4 Exports

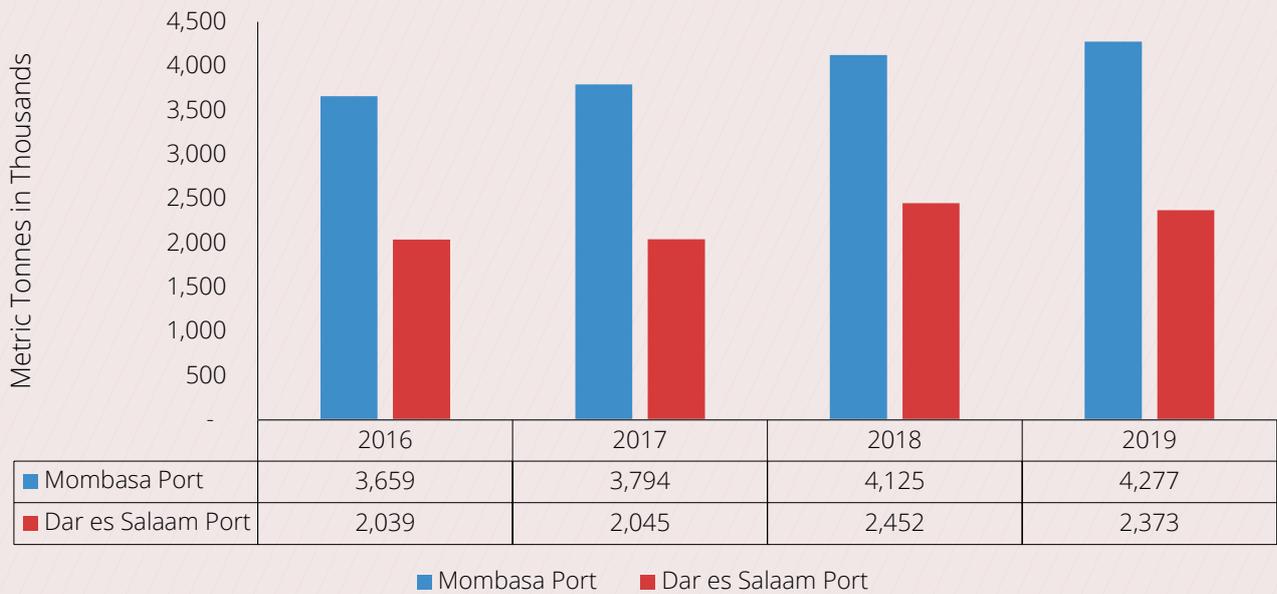
Figure 5 below shows a comparison of overall export through the Mombasa and Dar es Salaam ports from 2016 to 2019. The port of Mombasa witnessed an increasing trend from 3.7 million MT in 2016 to 4.1 million MT in 2018 and further to 4.3 million MT in 2019. The port of Dar es Salaam registered an increasing trend from 2.0 million MT in 2016 to 2.5 million MT in 2018 and a decreasing trend to 2.4 million MT in 2019.

Total exports through the port of Mombasa are almost two-fold when compared to exports through Dar es

Salaam port. DRC uses Tanzania port for most of her exports whereas Uganda uses Mombasa port for most of her exports. This could be attributed to the distance to the nearest port. However, the report recommends boosting investments in local manufacturing and value addition for exports through provision of a supportive regulatory framework that will spur production of competitive goods for exports in the region. The top export commodities through the port of Mombasa include titanium, tea, coffee, tinned fruit, vegetables & juices, soda ash, oil seeds, clothes, bulk oils, fish & crustacean, tobacco and cigarettes.

**Figure 5: Combined total exports in metric tonnes**

Source: KPA and TPA statistics 2016/2017/2018 and 2019



### 2.3 Transit Volumes per Destination Country

Transit volume is the quantity of cargo that is discharged or loaded at the port and destined to countries outside the port of loading or discharge. This indicator is obtained by the summation of all cargo’s weight handled at the Port (Dar Es Salaam or Mombasa) per Country of destination.

Kenya and Tanzania are serving some similar landlocked countries through their ports. The main destinations of cargo coming through Dar Es Salaam port are Burundi, DRC, Rwanda, Uganda, Zambia, and Malawi. The main destinations of cargo coming through Mombasa port are Burundi, DRC, Rwanda, South Sudan, Uganda, Somalia, Tanzania and others. Dar es Salaam is the preferred port in the transit traffic for Burundi, Rwanda, and DRC because Tanzania has absolute advantage on distance from the coast to these countries compared to Mombasa port. This translates to cost advantage as well as time utility.

Statistics in figure 6 below show that transit cargo for Burundi through Dar es Salaam port accounts for over 90%, DRC accounts for 70% and Rwanda accounts for over 80% of her total traffic volume through the port of Dar es Salaam. On the other hand, Uganda remains the top destination of all transit traffic through the Port of Mombasa accounting for over 90%.

Generally, some of the key issues that affect transit volumes include; inefficiencies at the port, delays of cargo to and from the port as well as political instability in some countries.

**Figure 6: Comparing transit volumes between the port of Mombasa Port and Dar es Salaam in MT**

Source: KPA and TPA 2016/2017/2018 and 2019

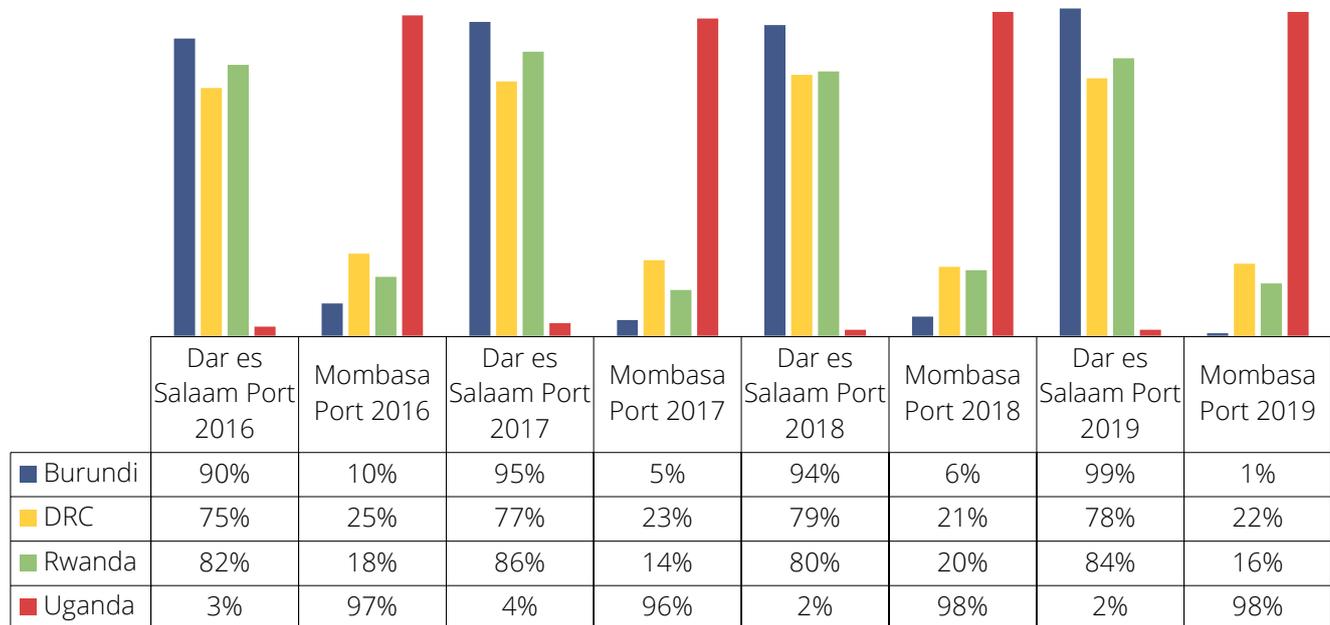


Table 5 gives the total amount of cargo that is handled at the port of Mombasa for the period 2016 to 2019. Total traffic shows an increasing trend in cargo volume over the years from approximately 27 million tonnes in 2016 to about 32 million tonnes in 2019. Analysis indicate that Local traffic accounted for 70% of total traffic during the period under review. The data shows that transit cargo has grown significantly from 7.7 million tons in 2016 to around 9.9 million tons in 2019 signifying the expansion of trade in transit countries.

Uganda commands more than 80% of the total transit traffic through the Port of Mombasa followed by South Sudan cargo that has been steady at 8% during the review period. DRC cargo accounted for 6% while Rwanda and Burundi volume has not been steady accounting for 2.3 and 0.02% respectively in 2019 of the total transit volume.

**Table 5: Total Traffic in ('000) MT through the port of Mombasa per destination**

Source: Kenya Ports Authority (KPA), 2016- 2019

ECONOMY	2016	2017	2018	2019
Kenya	19,027	20,761	19,996	21,888
Uganda	6,347	7,113	7,889	8,133
South Sudan	598	674	734	770
D. R. Congo	377	360	471	547
Tanzania	183	272	2485	255
Rwanda	194	180	231	231
Burundi	36	22	22	2
Somalia	4	4	2	0.4
Others	11	13	7	9
<b>TOTAL Traffic</b>	<b>26,776</b>	<b>29,398</b>	<b>29,601</b>	<b>31,836</b>
Transit In-Imports	7,217	7,903	8,873	9,244
Local In- Imports -Kenya	15,899	17,701	16,602	18,314
Transit Out- Exports	531	734	731	703
Local Out- Exports - Kenya	3,128	3,060	3,394	3,574
<b>Total Transit Traffic</b>	<b>7,748</b>	<b>8,637</b>	<b>9,604</b>	<b>9,947</b>
<b>Total Local Traffic</b>	<b>19,027</b>	<b>20,761</b>	<b>19,996</b>	<b>21,888</b>

It is interesting to note that some of Tanzania bound cargo transit through the port of Mombasa, for instance, Tanzania bound cargo accounted for 254,961 metric tonnes in 2019 an equivalent of 2.6% of the total transit volume. This is arguably bound to continue on a higher trend following the completion of the road from Voi to Taveta. It is argued that this development has seen increased number of shippers in northern Tanzania prefer routing their consignments through the Northern Corridor. Further analysis show that transit exports took the least share of the throughput less than 10%, while transit in imports accounted for the vast majority of transit throughput slightly above 90% during the same period. The region economies are agriculture dominated and dependent on manufactured goods which are currently being met through imports from the rest of the world. The imports are driven by manufactured imports, machinery and oil imports.

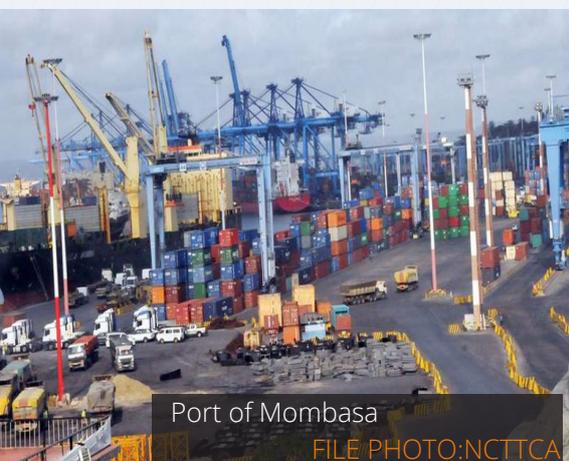
Whereas table 6 below indicates the total traffic through Dar es Salaam port in terms of total cargo discharged and loaded from 2016 to 2019 in metric tons. The trends show that total transit cargo increased from approximately 4.5 million metric tons to 5.9 million metric tons in 2019. It is observed that in 2019, combined DRC and Rwanda accounted for over half (about 55%) of the total transit traffic through the port of Dar es Salaam while 36% was for others including Malawi, Mozambique, Zimbabwe, Angola, and Zambia. Imports took the largest part of the traffic volume at over 80%.

Further analysis shows that the trends in imports are increasing from the year 2016 to 2019. In comparing 2018 and 2019 it is depicted that there is an increase of 428,711 metric tons which is equivalent to 3.4% increase. Similarly, the total exports at Dar es Salaam port in metric tons are increasing from past years to the current year 2019. As depicted on the graph, the trends show an increase of 307,472 metric tons which is equivalent to 15% increase from 2018 to 2019.

**Table 6: Total Traffic cargo in ('000) MT through Dar es Salaam Port**

Source: TPA 2016 to 2019

<b>ECONOMY</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
Tanzania	8,461	7,807	9,452	9,489
D.R.Congo	1,153	1,177	1,780	1,914
Rwanda	863	1,061	912	1,239
Burundi	320	416	380	453
Uganda	166	272	189	141
Other	1,963	2,382	1,914	2,125
<b>Total Traffic</b>	<b>12,926</b>	<b>13,116</b>	<b>14,625</b>	<b>15,361</b>
<i>Transit in-Imports</i>	3,903	4,654	4,252	4,841
<b>Local In- Imports -Tanzania</b>	7,190	6,704	8,307	8,147
<i>Transit out-Exports</i>	562	654	921	1,031
<b>Local Out- Exports - Tanzania</b>	1,271	1,103	1,144	1,342
<b>Total Transit Traffic</b>	<b>4,465</b>	<b>5,308</b>	<b>5,173</b>	<b>5,872</b>
<b>Total Local Traffic</b>	<b>8,461</b>	<b>7,807</b>	<b>9,452</b>	<b>9,489</b>



Port of Mombasa

FILE PHOTO: NCTTCA



MSC DON GIOVANNI



## Chapter Three

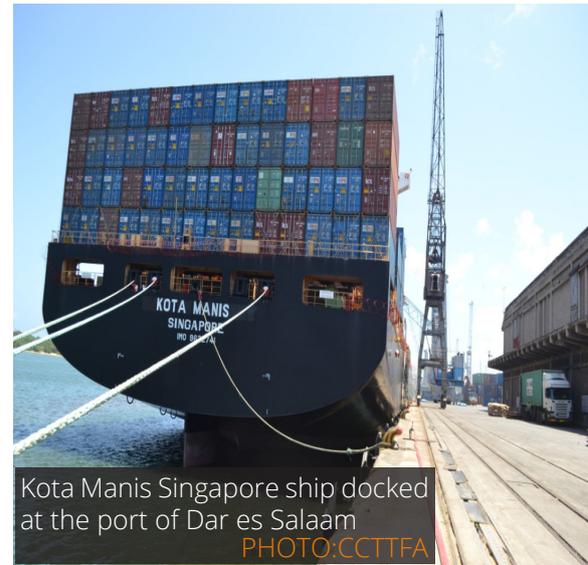
# **Efficiency and Productivity**

### 3.1 Introduction

The analysis of efficiency and productivity indicators give a basis on how well the corridors operate optimally. The objective of productivity measurement is to give the current performance in the transport logistics chain against desirable productivity measures as provided by the best practice, also ensuring that its outcomes live up to the expected values. In addition, the efficiency and productivity indicators help the corridors to gauge the performance of the ports and corridor at large.

This section highlights the performance of key efficiency and productivity indicators to enable pinpoint out inefficiencies and also to provide insights into policy approaches that could trigger enhanced performance going forward.

Key indicators include vessel waiting times at outer anchorage, ship turnaround time and cargo dwell time. These targets are also compared against industry standards or benchmarks based on the United Nations Conference on Trade and Development (UNCTAD) developed indicators for assessing port performance.



### 3.2 Ship turnaround time

*This indicator is measured from the time the vessel arrives at the Port area (Fairway Buoy) to the time it leaves the port area demarcated by the fairway buoy*

Components of ship turnaround time include the following aspects: Ship waiting time, Berthing/unberthing time, Berth time (Service time).

The waiting time is normally a small proportion of turnaround time. The key drivers of turnaround time are the effective scheduling and allocation of key resources like yard cranes, quay cranes berths, and trucks. This indicator is very key in terms of port productivity and efficiency.

Figure 7 below compares ship turnaround time between the two ports for the northern and Central Corridors.

It is noted that vessel turnaround time for the Central Corridor ranged between 2 to 3.6 days over the period under review. On the other the ship turnaround time for Northern Corridor also varied between 3 to 3.9 days during the same period under review. The performance for 2019 on both two corridors increased marginally and is still yet to achieve the global target of one day. Further, this performance shows that there is a marginal difference in ship turnaround time with the port of Dar Es Salaam having a slight edge. However, it is critical to note that the port of Mombasa handles larger of volume of cargo due to the larger handling capacity and the many vessels that call on the port compared to the port of Dar es Salaam. Furthermore, the port of Mombasa receives larger container vessels that take a longer time to offload. Generally, there has been increased effectiveness and overall efficiency in both the port of Mombasa and Dar es Salaam driven by expansion in cargo handling capacity, automation of procedures and documentation, investment in modern and faster gantry cranes and other equipment.

**Figure 7: Ship turnaround time 2016-2019 in days**

Source: KPA and TPA 2016, 2017, 2018 and 2019



**Box 3-1: Global Hub Port: Singapore**

Ship turnaround time is a critical indicator of port efficiency as an increase in ship turnaround time indicates inefficiencies on the part of multiple stakeholders involved in servicing the vessels and clearing the cargo from the port. Globally, the ultimate goal is to attain the 24 hours (1 day) ship turnaround global benchmark time.

Singapore is a premier global hub port, connected to 600 ports in over 120 countries, giving users reliable, value-added and cost-efficient marine services and facilities. It is the busiest port in the world in terms of shipping tonnage, with more than 130,000 vessel calls annually.

The Port of Singapore maintained a stable performance in 2018. Container throughput grew by 8.7 per cent to 36.6 million twenty-foot equivalent units (TEUs), and total cargo throughput remained stable at 630 million tonnes. Singapore also retained its position as the world's leading bunkering port. At any one time, there are about 1,000 vessels in the Singapore port. Every 2-3 minutes, a ship arrives or leaves Singapore.

**3.3 Vessel waiting time**

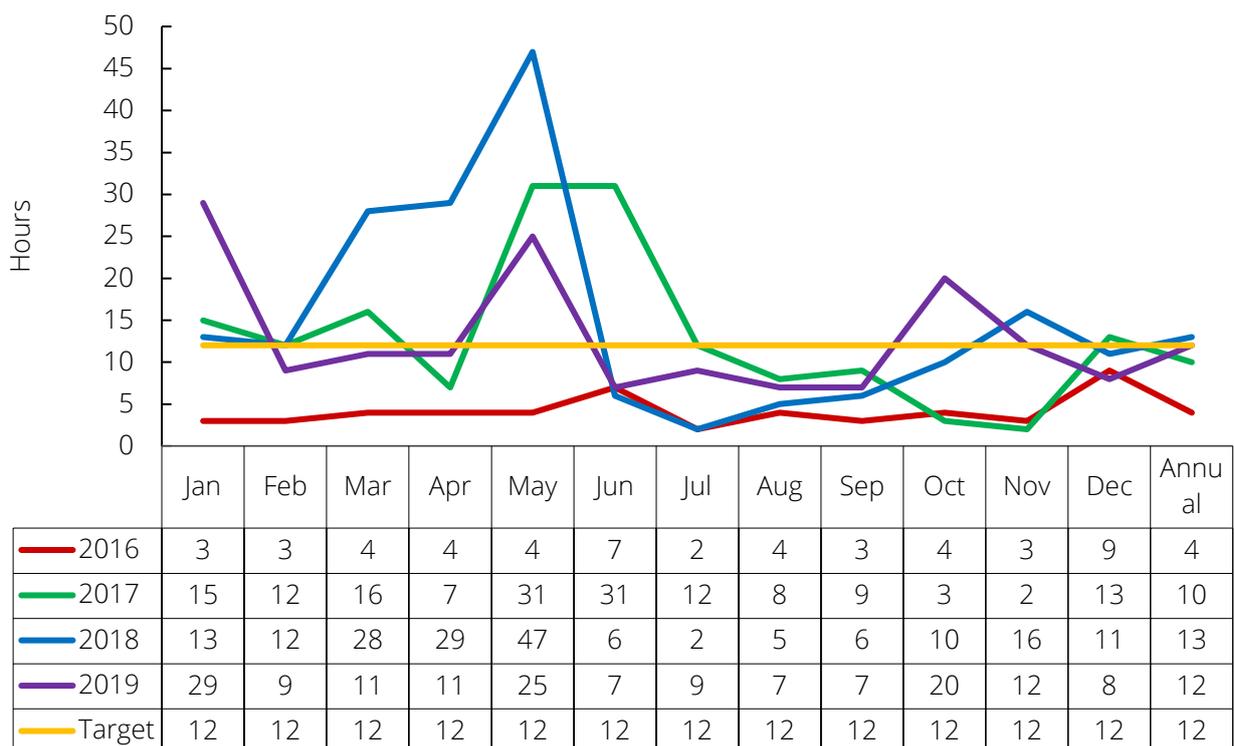
This time is measured from the time the vessel arrives at the port area, demarcated by the fairway buoy to the time of its first berth.

Vessel waiting time is a subset of the vessel turnaround time and a key determinant of competitiveness of port terminals. From figure 8 below, the performance of vessel waiting time at the port of Mombasa has been within the confines of the set target of 24 hours since June 2015 suggesting enhanced efficiency. The year 2016 posed a great performance of 4 median hours as the vessel waiting time before berth.

However, the statistics also show high performance for the months of March, April and May 2018 and October 2019 which can be attributed to the rainy season. The report notes improved performance in 2019 when compared to 2018 occasioned by the increase in the number of container handling terminals at the port of Mombasa and the implementation of fixed Berthing Window to allow shipping lines to plan their time. In addition, there has been increased investment in both shore and offshore equipment's which includes acquisition of modern tugboats and pilot boats that have boosted berthing operations among others.

**Figure 8: Vessel Waiting Time before Berth at the port of Mombasa in Median Hours**

Source: KPA 2016, 2017, 2018 and 2019



On the other hand, the waiting time for the Dar es Salaam port is presented below for the year 2019. From the analysis, the average waiting time for 2019 was about 11 hours. The performance is approximately negligible as most of the ships are waiting at their own convenience to complete their own processes as observed from recorded data in the table below. Further analysis, shows a sharp increase in 2019 for the month of September which affected the overall average and it was mainly attributed by limited

berthing facility and shifting of the berthing operations at the port which affected the port operations and resulted into huge delays of the ships for berthing. The issue is now resolved and from October 2019 the port operations resumed into normalcy. Central Corridor stakeholders should be aware of the mega project that is ongoing at the port of Dar es Salaam which improves efficiency and overall port handling operations and correspondingly reducing the ship turnaround time at a high percentage.

**Table 7: Vessel Waiting and berthing time in Hours at the port of Dar es Salaam**

Source: TPA 2019

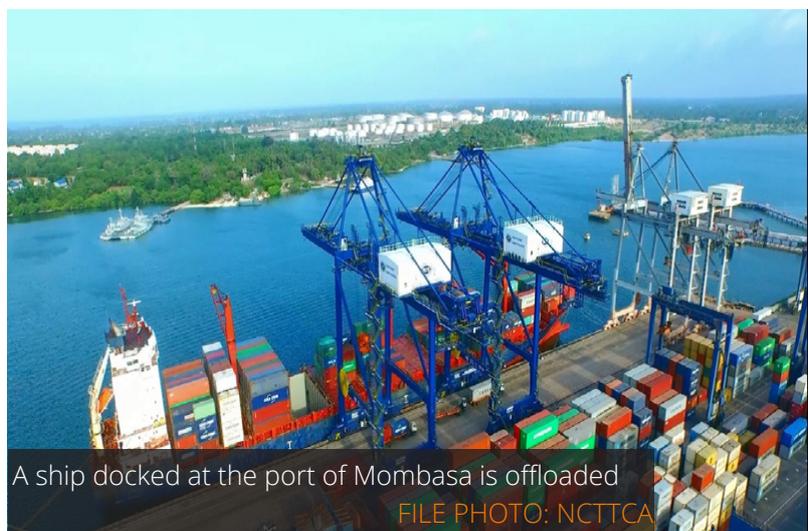
	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Average
Waiting time	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	127.2	4.8	0.0	0.0	11.0
Berthing time	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	7.2	2.4	2.4	2.8
Berth time	67.2	64.8	69.6	69.6	76.8	69.6	62.4	74.4	76.8	69.6	76.8	84.0	71.8
<b>Turnaround time</b>	<b>69.6</b>	<b>67.2</b>	<b>72.0</b>	<b>72.0</b>	<b>79.2</b>	<b>72.0</b>	<b>64.8</b>	<b>76.8</b>	<b>206.4</b>	<b>81.6</b>	<b>79.2</b>	<b>86.4</b>	<b>85.6</b>

### 3.4 Ship turnaround time

Dwell time refers to the total time spent by cargo at the port from when the cargo was discharged from the vessel until port exit after all permits and clearances have been obtained (average number of days the container stays in a yard). The shorter the dwell time, the more efficient the port is.

Data is obtained from KPA and TPA respectively. The methodology applied for the case of Mombasa Port is as follows:

The Dwell time discussed is for import containers. The methodology applied in the containerized cargo dwell time analysis, considers only cargo that arrives and exits the Port during a calendar month (i.e. based on entry inward date). For the purpose of the analysis, outlier cases of consignments held from clearance for more than 21 days due to non-compliance issues, court matters among others are excluded. The report uses the 'out date' to group the data on a monthly basis with the last day of the month being the cut-off day (at midnight); 21 days' grace period be applied to filter out outliers. A similar methodology is applied for Central Corridor that a three week interval (21 days) is applied to filter out outliers. However, for Central Corridor on determining dwell time for import containers at the port of Dar es Salaam, the procedure is different from Northern corridor and there is a clear separation between transit and local containerized dwell time and both are monitored differently.



A ship docked at the port of Mombasa is offloaded

FILE PHOTO: NCTCA

#### 3.4.1 Import Containerized Cargo Dwell Time at the port of Mombasa

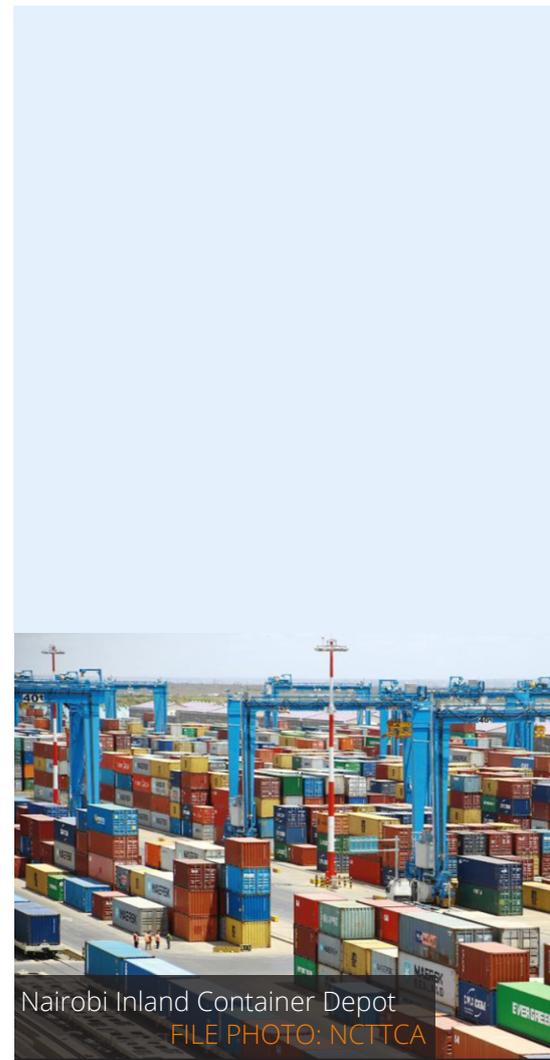
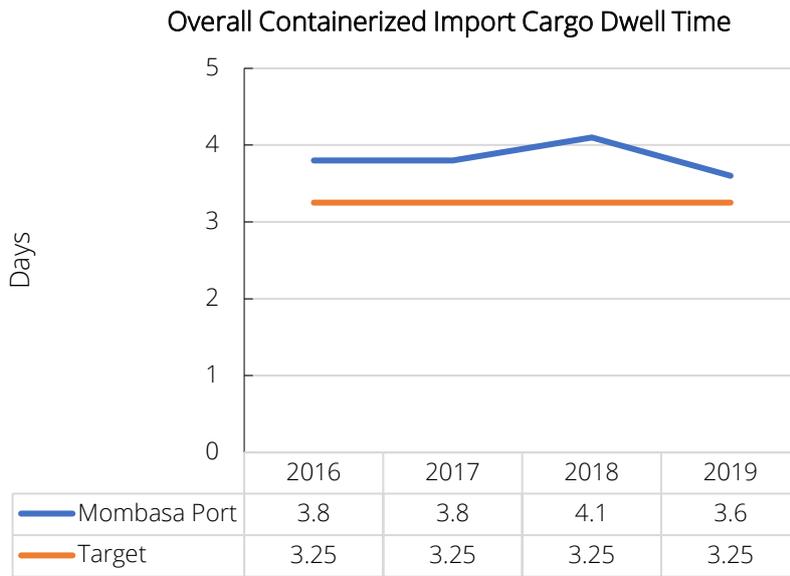
Figure 9 shows average import cargo dwell time at the port of Mombasa.

From the analysis, performance in containerized cargo dwell time for Mombasa port has been steady over the five year period since 2016 averaging 4 days. The sustained performance could be attributed to the expansion and construction of additional terminals, acquisition of modern equipment, improvements in documentation and clearance processes and

automation of container handling processes. Other factors that have played a role in sustaining favourable cargo dwell time at the port of Mombasa are the haulage of cargo by the standard gauge railway to the inland container depot in Nairobi and the uptake of local cargo by Container Freight Stations (CFS). The reduction of grace period from 15 to 9 days has also been a key incentive for quicker evacuation of containers.

**Figure 9: Containerized cargo dwell time in days**

Source: KPA 2016, 2017, 2018 and 2019



### 3.4.2 Containerized Cargo Dwell Time at Dar es Salaam port

The average transit container dwell time at the Dar-es-Salaam port increased marginally from 9 days in 2016 to 11 days in 2019. This resulted to the implementation of SCT with different systems (TANCIS) in Tanzania and ASYCUDA WORLD in the other countries. The regular exchange of information and training between the respective Revenue Authorities has contributed to solve the issue of system compatibility and Data from TICTS shows that average Transit Container dwell time has been decreasing marginally for over the past years. Comparing 2018 and 2019 it has been observed a decrease of approximately 19.3%. The Central Corridor stakeholders are keen to see a reduction of dwell time in the coming years especially 2020 due to ongoing various improvements at the port by TPA.

Further more, local containerized cargo dwell time at the port of Dar es Salaam has seen an annual decrease from 5.09 days in 2016 to 4.2 days in 2019. From the analysis, the recorded decrease was mainly attributed by various improvements at the port of Dar es Salaam including the ongoing mega initiative of Dar es Salaam Maritime Gateway Project (DMGP) that has positively

increased effectiveness and operational efficiency within the port.

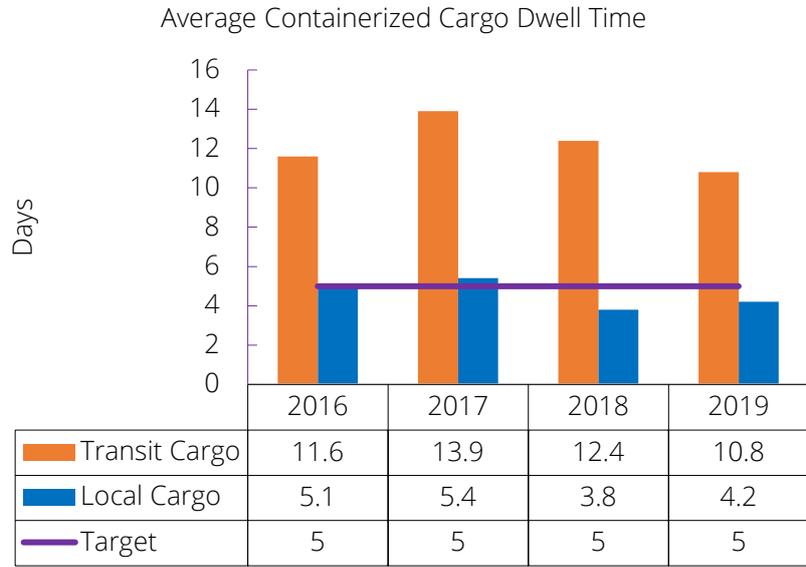
As depicted in figure 10 below, the average TICTS Transit Container dwell time is slightly decreasing from past years as observed on the data table. In comparing the year 2018 and 2019, the trends show a decrease on an average transit dwell time from 12.4 days in 2018 to 10.8 days in 2019 which is equivalent to a decrease of 12.9% attributed by improvements on effectiveness and efficiency on cargo handling and overall port operational management.

Similarly, the average local container dwell time for TICTS has been decreasing over the period under review, the analysis shows that the dwell time attained the set target of 5 days since 2018 to the current year of 2019. Referring the year 2018 and 2019, deep analysis recorded an average of 3.8 days and 4.2 days respectively which surpassed the set target of 5 days. In comparison of the year 2018 and 2019, observed an increase of dwell time of about 11%.

The containerized cargo dwell time depends also on the efficiency of clearance time, for example the transit cargo clearance depends on multiple interventions from the country of destination under Single Customs Territory (SCT) which might also attribute some of the delays on clearance time as justified under Fig. 12 below.

**Figure 10: Average Containerized Cargo Dwell Time**

Source: KPA 2016, 2017, 2018 and 2019



### 3.5 Time for customs clearance at the Document Processing Centre (DPC) at the port of Mombasa

This refers to the time taken by Customs to pass an entry lodged by a clearing agent. This time bears a proportion to the total port dwell time.

From figure 11, data shows that annual average time taken at DPC was steady at 2 hours from 2017 to 2019.

The performance in DPC time is still an hour shy away from the set target. Initiatives to improve DPC time include on the spot approval of manifest, allow partial manifest and simultaneous online submission of manifest. However, delays in the time taken for customs clearance at DPC was partly to the SIMBA system instability; document volumes awaiting processing in between the shifts; the quality of declaration by the relevant agents and other stakeholders' systems. Addressing these challenges will go a long way in improving DPC time.

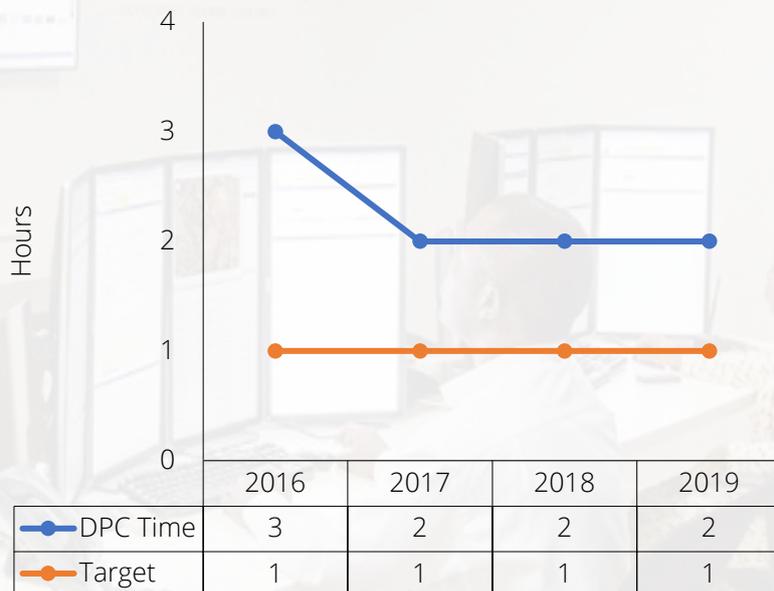
KRA has committed to automate the DPC process under Integrated Customs Management System (iCMS) and strengthen ICT

infrastructure to minimize KRA customs' systems downtime and disruption. Furthermore, the iCMS will replace the SIMBA System to enhance efficient clearance.

It will also have an automated risk module that will reduce clearance time by pre-arrival clearance of cargo within a span of 48 hours before docking of vessels.

**Figure 11: Time Taken at the Document Processing Centre (DPC)**

Source: KRA 2016/2017/2018/2019



### 3.6 Customs Release Time/ Document Processing Time (DPC) Time at Dar

It provides the average time taken in hours that elapse from when a declaration is made by Clearing & Forwarding Agent till when the Release order is issued by the Customs for Transit Cargo declarations.

It has been calculated from the average time difference between Release time and Declaration time, measured in Hours from Tanzania Revenue Authority.

As depicted on the table 8 above, it shows that the average time in hours for the 2018 is 83.13 hours compared to 64.07 hours in 2019. This shows that the release time is decreasing from 2018 to 2019 by approximately 23% which is mainly attributed by operational improvements at Document Processing Centre (DPC). But Transporters are still concerned with high DPC time and have been emphasizing on timely release of cargo.

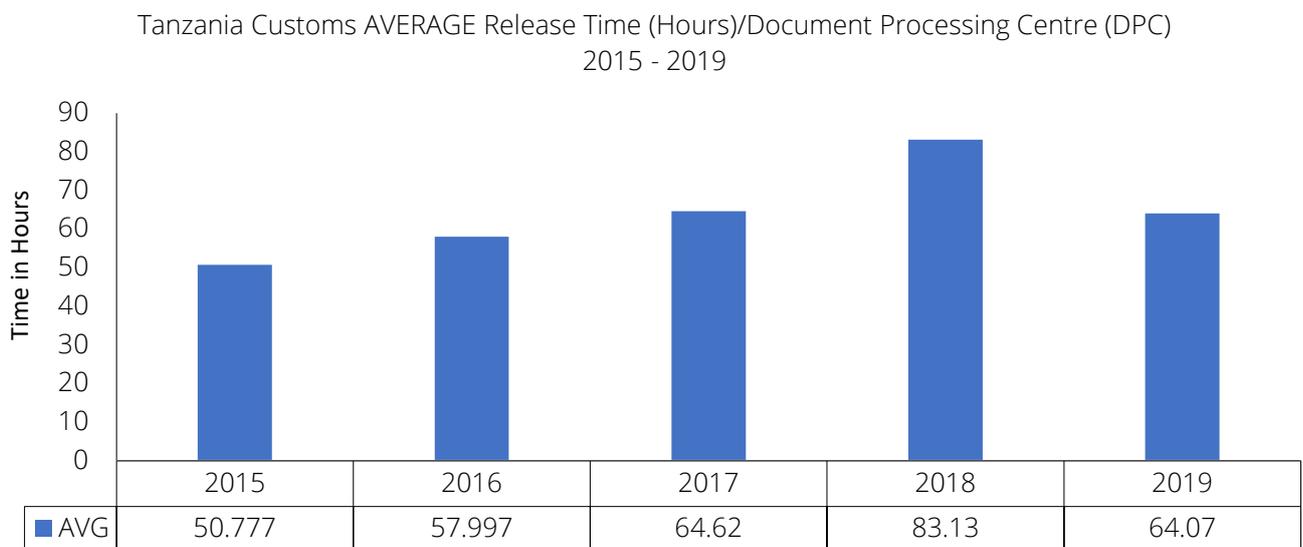
**Table 8: Tanzania Customs Release Time (Hours)**

Source: TRA, Jan – Dec 2016-2019

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
<b>2015</b>	51.2	52.9	50.5	50.2	51.6	51.2	51.1	50.8	50.3	50.1	49.7	49.6	<b>50.8</b>
<b>2016</b>	55.1	52.4	48.5	51.0	53.5	55.9	57.6	59.6	62.5	65.3	66.7	67.9	<b>56.0</b>
<b>2017</b>	65.6	67.2	68.8	64.9	65.1	64.0	63.3	62.6	62.6	63.7	63.3	64.4	<b>64.6</b>
<b>2018</b>	87.0	86.7	84.3	83.1	81.0	81.9	81.4	82.7	83.2	82.0	81.3	80.1	<b>83.1</b>
<b>2019</b>	64.7	64.8	63.0	62.3	62.8	63.3	63.4	63.9	64.7	65.2	65.3	65.5	<b>64.1</b>

**Figure 12: Customs release time (hours)**

Source: TRA 2015-2019







## Chapter Four

# **Transit Time**



A road section at Molo Kenya along the Northern Corridor route

FILE PHOTO:NCTTCA

## 4.1 Introduction

Transit time is measured by the average time for transit trucks take to move from departure to destination.

## 4.2 Transit time in Kenya

In Kenya, the transit time is measured from the time cargo is released by Customs in Mombasa to the time it arrives at the various borders along the Northern Corridor. This transit time includes delays after customs release and stoppages along the Corridor. The data used in the analysis of this indicator is from the Regional Electronic Cargo Tracking System (RECTS) and the road transport survey results.

Regional Electronic Cargo Tracking System (RECTS), connecting Kenya, Rwanda, and Uganda was implemented in 2018 with the objective of reducing the cost of cargo transportation along the Northern Corridor. RECTS allows revenue authorities in Rwanda, Uganda and Kenya to jointly and electronically track and monitor goods (whose taxes have not been paid) along the Northern Corridor from Loading (Departure) to destination within Kenya, Rwanda, and Uganda. RECTS replaces the existing Electronic Cargo Tracking System (ECTS) where monitoring is done independently through stand-alone platforms. DRC and South Sudan have not yet rolled out the R-ECTS.

Currently, KRA has about 3,000 R-ECTS gadgets and targets to have 17,000. RECTs cover; about 15% of the transit cargo only. It is also noted that the number of RECTS seals on some transit routes were quite few

with some having very minimal records. Therefore, some of the routes have not been analyzed since the sample population may not be adequate for conclusive analysis.

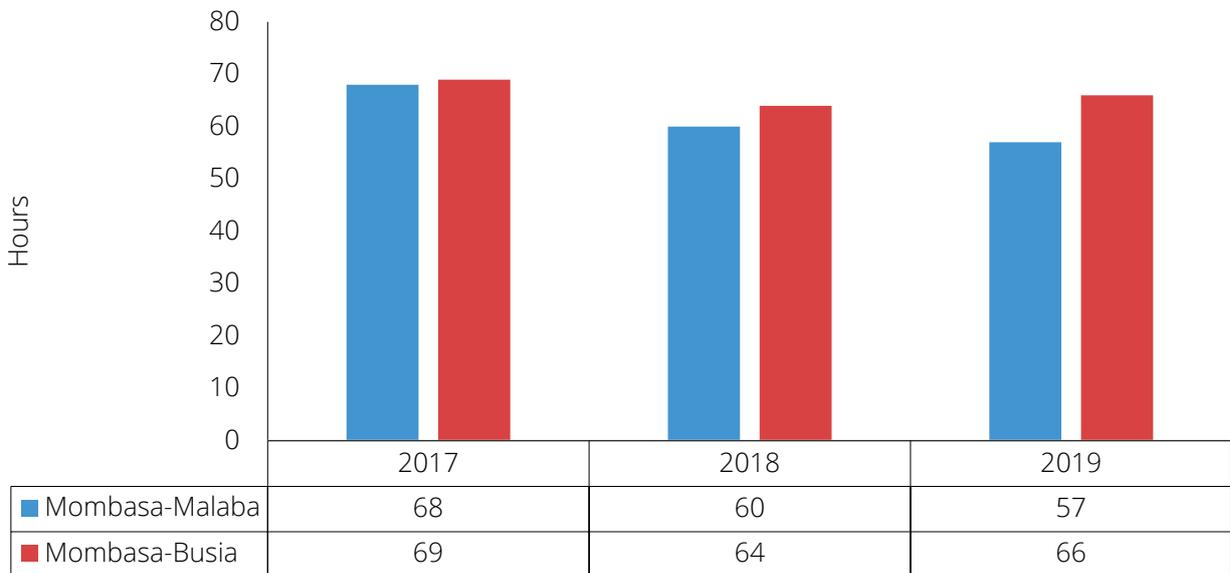
### 4.2.1 Transit time up to Kenya Exit Borders - Malaba and Busia

Busia and Malaba are 947 Km and 933 Km from Mombasa respectively. Both borders are the first exit points from Kenya to Uganda. The target transit time for cargo from Mombasa to Malaba and Busia border point is 72 hours.

As seen in figure 13 below, the performance on both the Mombasa – Malaba, and Mombasa – Busia route indicates that the transit time target of 3 days has been achieved which suggests an enhanced efficiency along the route over time. This tremendous performance is attributable to the improvement of the road infrastructure along the route. These include construction of Port Reitz- Moi International airport access road (18km), Miritini –Mwache Kipevu links road (39.2 Km), construction of 3 interchanges at Nakuru and dualling of Mombasa- Mariakani road (30 Km), the interchanges at Nakuru, Njoro and Mau Summit have been completed and are in use among others. Work is still ongoing on the Interchanges at Kaburengu and Webuye. There interchanges are expected to minimize traffic disruptions. In addition, the completion of the Dongo Kundu, Nairobi southern by-pass, eastern by-pass, and Kisumu by-pass have succeeded in diverting traffic from congestion in the major urban areas along the corridor.

**Figure 13: Transit time from Mombasa port to Malaba and Busia borders in Hours**

Source: KRA, customs RECTS data 2017/2018 and 2019



**4.2.2 Average Transit time from origin to destination**

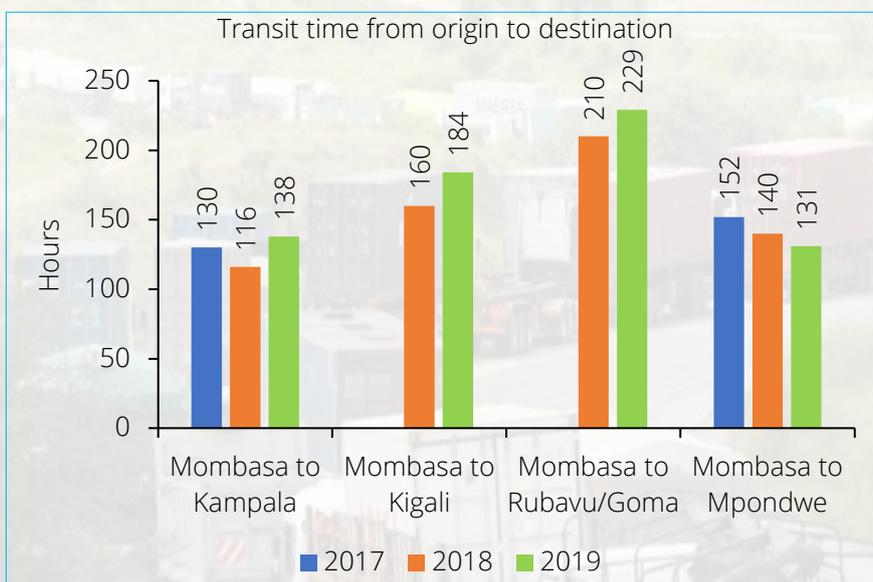
Average time taken to move cargo from the port of Mombasa and to the various destinations is as shown in figure 14 below. The transit time varied on different routes depending on a number of factors such as distance, status of the road, non-tariff barriers among others. The route from the port of Mombasa to Kampala covers a distance of 1,169 Km, to Kigali

1,682 Km and to Mpondwe 1,611 Km. Statistics show that transit time has been improving over the years on some routes. However, factors constraining cargo movement on some routes were still prevalent for instance occasioned by congestion due to weather conditions, high number of black spots and longer time to clear and disarm the ECTS for trucks which may contribute to an increase in transit time. Destinations from Mombasa have seen an improvement in average transit times since the implementation of RECTs. There have been immense investment along the corridor to ensure reduction of transit time. The initiatives include:

improvement/expansion of road infrastructure, implementation of the SCT framework for clearance of goods, one-stop border points among others clearly an indication to enhanced efficiency.

**Figure 14: Average transit time from Mombasa Port to various destinations**

Source: RECTS data 2017/2018/2019



### 4.3 Transit time in Dar es Salaam

Indicators of Transit time and delays within the Central Corridor are obtained from Electronic Cargo Tracking System (ECTS) from TRA and the GPS road survey results. Corridor monitoring starts from when goods/ cargo leave Dar es Salaam port till when they reach their final destinations. This time has been broken down to form different indicators depending on different activities and sections along the Corridor.



#### 4.3.1 Transit time up to Tanzania Exit Borders

Transit time to Tanzania exit borders refers to the time taken by the transit truck from the Port of Dar es Salaam to the respective borders between Central Corridor Member States and Tanzania. These are measured from the time difference in days between Stop date at the border and Start date from Dar es Salaam Port.

The borders are Rusumo for Tanzania – Rwanda, Kabanga/Kobero for Tanzania– Burundi and Mutukula for Tanzania – Uganda. Trucks heading to D.R Congo through Central Corridor normally passes through Rusumo or Kabanga/Kobero borders.

As depicted on the table 9 below, the average transit time from Dar es Salaam port to Rusumo border for the calendar year 2018 is 81.84 hours while for 2019 same period the average recorded was 83.6 hours which shows that transit time is slightly going up compared to the set target of 60 hours from Dar es Salaam port to Tanzania exit borders. An increase is equivalent to 2%.

**Table 9: Transit time to Rusumo Border (hours)**

Source: ECTS 2015-2019

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
<b>2016</b>	80.88	82.32	82.32	82.32	82.8	82.8	83.28	83.28	83.04	82.8	83.28	83.28	<b>82.8</b>
<b>2017</b>	85.92	85.2	85.2	84.96	85.44	85.2	85.44	85.44	84.96	88.32	88.8	89.04	<b>86.16</b>
<b>2018</b>	86.88	83.28	83.76	79.92	83.52	78.72	89.28	82.56	76.56	83.28	77.28	81.84	<b>81.84</b>
<b>2019</b>	84.56	83.60	83.76	82.40	83.92	82.24	86.00	83.76	81.52	84.80	83.12	84.72	<b>83.60</b>

It can be observed from table 10 below that the average transit time from Dar es Salaam port to Kabanga border for the period January – December 2018 is 86.16 hours. It has been observed that the transit time is higher compared to the set target of 60 hours, when comparing 2018 and 2019 the trend shows that is slightly going up which is equivalent to 5.6% increase in Transit time from the port of Dar es Salaam to exit border of Kabanga.

**Table 10: Transit time to Kabanga border (hours)**

Source: ECTS 2016-2019

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
<b>2016</b>	102.24	98.88	97.68	97.44	96.48	96.48	96	95.28	94.56	94.08	93.36	93.12	<b>96.24</b>
<b>2017</b>	88.32	90	90.72	90.96	91.44	90.96	90.48	88.32	88.8	92.4	92.88	92.88	<b>90.72</b>
<b>2018</b>	78.96	83.28	93.36	88.08	86.64	85.92	82.56	81.36	92.16	83.76	89.52	87.36	<b>86.16</b>
<b>2019</b>	89.84	90.72	93.92	92.16	91.52	91.12	89.68	88.32	91.84	90.08	91.92	91.12	<b>91.04</b>

From table 11 below, average transit time from Dar es Salaam port to Mutukula border for the calendar year 2018 is 98.88 hours while same period 2019 is 96.32 hours which shows a decrease of 2.56 hours equivalent to 3% decrease. It seems transit time to Mutukula border is still high compared to the set target of 60 hours but plans are in place to reduce the overall transit time including removal of unnecessary delays and encourage drivers to reduce personal stoppages.

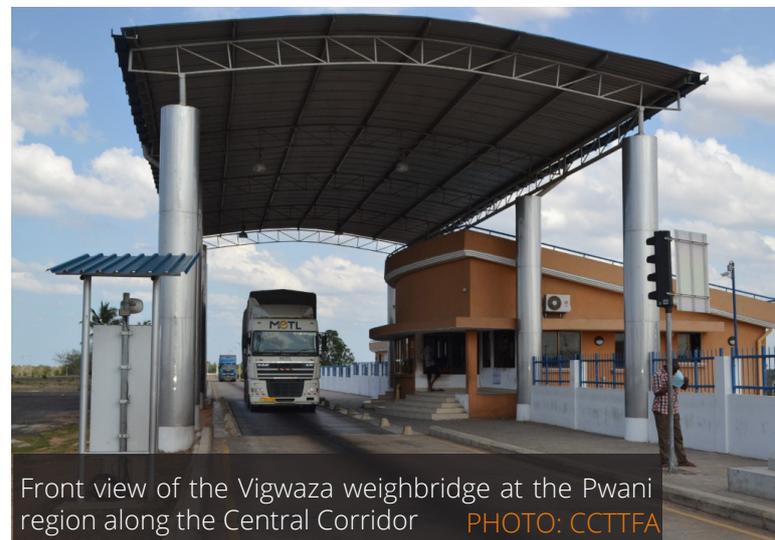
**Table 11: Transit Time to Mutukula Border (hours)**

Source: ECTS 2016-2019

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG
<b>2016</b>	88.8	88.08	89.04	88.08	87.6	88.32	88.32	88.08	88.32	88.8	88.8	88.8	<b>88.32</b>
<b>2017</b>	99.6	100.32	101.28	102.96	103.2	102.96	101.76	99.6	100.8	102.96	102.96	102.96	<b>101.76</b>
<b>2018</b>	103.2	97.44	96.96	103.92	102.96	98.88	95.52	92.64	96.24	101.76	95.28	102.72	<b>98.88</b>
<b>2019</b>	97.20	95.28	95.76	98.32	97.92	96.72	95.20	93.44	95.12	97.84	95.68	98.16	<b>96.32</b>

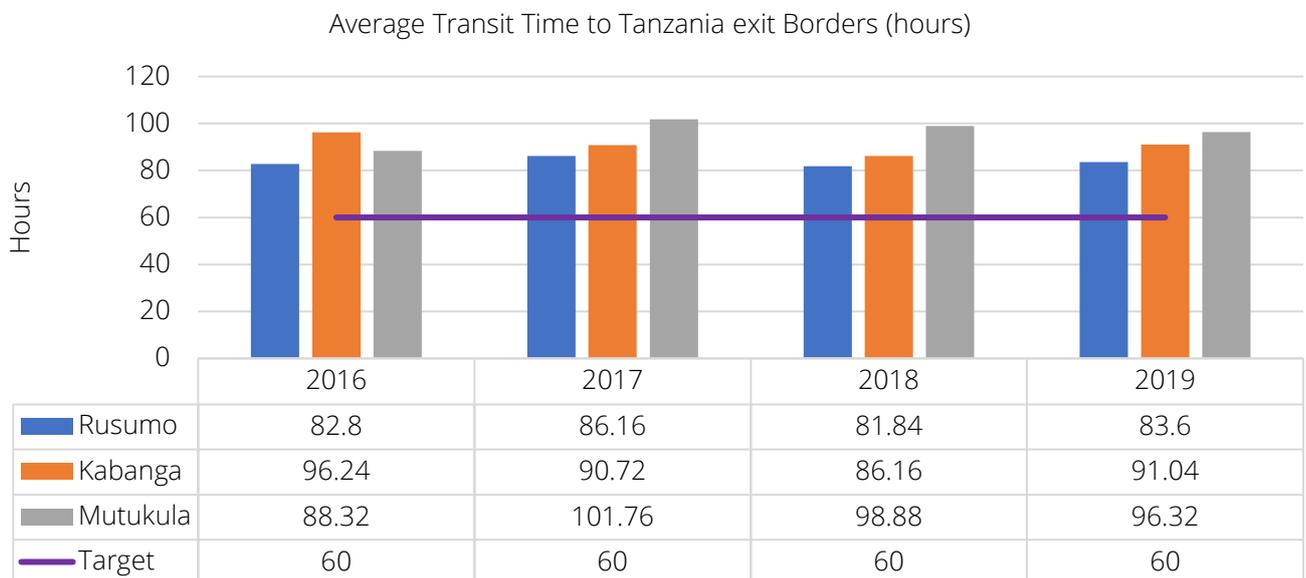
**4.3.2 Average Transit Time to Tanzania exit Borders**

Figure 15 below presents transit time from Tanzania exit borders during the review period. From all Transit times up to Tanzania exit borders, it has been observed that the average transit time keeps fluctuating and is still slightly higher than the government’s set targets of 60 hours from the port of Dar es Salaam to Tanzania exit borders. It has been mainly attributed by long and regular personal stoppages by drivers along the route. Effective plans underway from driver’s association and transporters associations to make sure they reduce unnecessary stoppages by drivers along the route.



**Figure 15: Average Transit Time to Tanzania exit Borders (hours)**

Source: TRA 2016-2019



### 4.3.3 Transit time from Dar es Salaam port to various destinations

The section highlights the transit time it takes for cargo to move from the port of Dar es salaam to various destinations in the Central Corridor Member States. This transit time is greatly affected by stoppages along the Corridor. Some of the main stoppage reasons include; drivers’ personal reasons, police checks, weighbridges, company check-points, road conditions, custom checks among other reasons.

Some of the measures that have been put in place to minimize stoppages and improve transit time include the implementation of the High-Speed Weigh in Motion (HSWIM) weighbridges in Tanzania, implementation of one-stop border posts (OSBPs) almost at all border points in the Central Corridor member countries, construction of One Stop Inspection stations (OSIS) in Tanzania which is being piloted by allowing trucks to stop and being inspected at only three weighbridges and lastly, the implementation of the Single Customs Territory (SCT) which is another measure that enhanced clearance of the goods across borders.

Figure 16 below provides highlights on the Transit time for imports i.e. from Dar es Salaam port to various destinations in the Central Corridor member states.

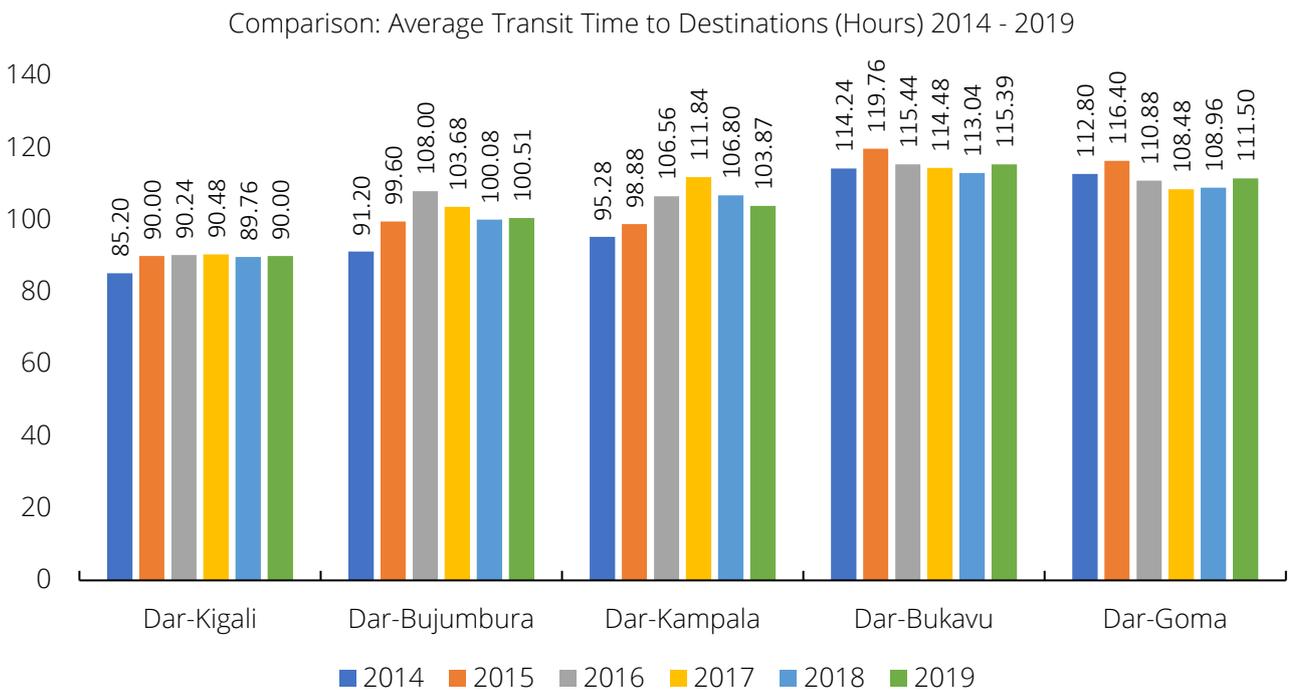
The Transit time to destination is measured from the time cargo starts its journey from the port of Dar es salaam to the time it arrives at various destinations in the Central Corridor member countries. The data used in the analysis of this indicator is from the Transporters tracking systems through Transporters Associations including Tanzania Truck Owners Association (TATO) and Transporters Association of Tanzania (TAT) and the GPS/road transport surveys results.

All the destinations from Dar es Salaam have observed a marginal increase in an average transit time to destinations in 2019 when compared to 2018 with exceptional of Dar – Kampala route. The marginal increase on the transit time to various destinations may have partly been contributed by poor road section between Lusahunga to Rusumo in Kagera region of which its rehabilitation is ongoing.



**Figure 16: Comparison: average transit time to destinations (hours) 2014 - 2019**

Source: GPS Road surveys data (2014-2017) & TATO/TAT data 2018-2019



#### **Box 4 - 1: One Stop Border Posts (OSBPs)**

*In order to realize the goal of African integration, there is a need to ensure smooth management of borders allowing swift and hassle-free movement of goods, persons, workers and services. The African Union, through its Border Program (African Union Border Program (AUBP)) encouraged and urged its member states to embrace a smoother management of border crossing points through installation and implementation of One Stop Border Posts (OSBPs). There are 77 borders in Africa that have been earmarked for OSBP construction with 15 of them being in the East Africa Community.*

*The East African Community 14 fully operationalized and trained personnel at 14 OSBPs with the aim of facilitating trade and free movement of goods in the region. The OSBPs are therefore becoming more popular at the regional level and they are seen as a modern approach towards facilitating movement of goods, persons and services across national borders. The OSBP concept promotes simplification of controls at borders through a one-time check at the border between the two countries. In practice, OSBP is achieved by placing the border officials of two adjoining countries at each other's adjoining border post so that border control checks will be jointly conducted by relevant officers from the two neighboring countries at once on the side of the entry country. Once such a check has taken place on one side of the border, no other check will follow. Operating OSBPs requires a tight coordinated cooperation between the agencies present at borders including immigration, police, customs, health etc.*

*The OSBP's on both the Northern and Central corridors have been constructed with the support from development partners such as TradeMark East Africa (TMEA) and their operationalization and training of personnel has significantly reduced the time taken by travelers and trucks at the borders from days to about 1.5 minutes to 30 minutes on average respectively.*

*The operationalization of OSBPs on both corridors is not without challenges. Some of the challenges relate to inadequate infrastructure at many of these border posts including housing for staff, amenities such as schools and hospitals, holding grounds for quarantined animals, insufficient water resources and in some cases unreliable power supply and not the least human capacity and skills shortfalls in a number of critical areas.*





## Chapter Five

# **Transport Rates and Costs**

## 5.1 Introduction

Transport costs are the expenses incurred in moving products or assets from one place to another paid by users. Such expenses comprise of fuel expenses, expenses related to non-tariff barriers, fixed costs such as road user charges for freight operators, expenses related to administrative costs among others. The cost could be determined by factors such as distance, location, infrastructure status and other indirect (hidden) costs among others. They may not necessarily express the real transport costs. As a result, there is a wide variation in transport costs across the Member States.

This section provides highlights of the rates and costs of transportation services paid by the cargo owners/ shippers to the transporter and other service providers within the logistic chain over the period 2016 to 2019. The scope is limited to transport rates and tariffs for the two modes of transport namely roads and railways within the Northern and Central Corridor member countries.

## 5.2 Transport Rates Comparisons: Dar es Salaam vs Mombasa to various destinations.

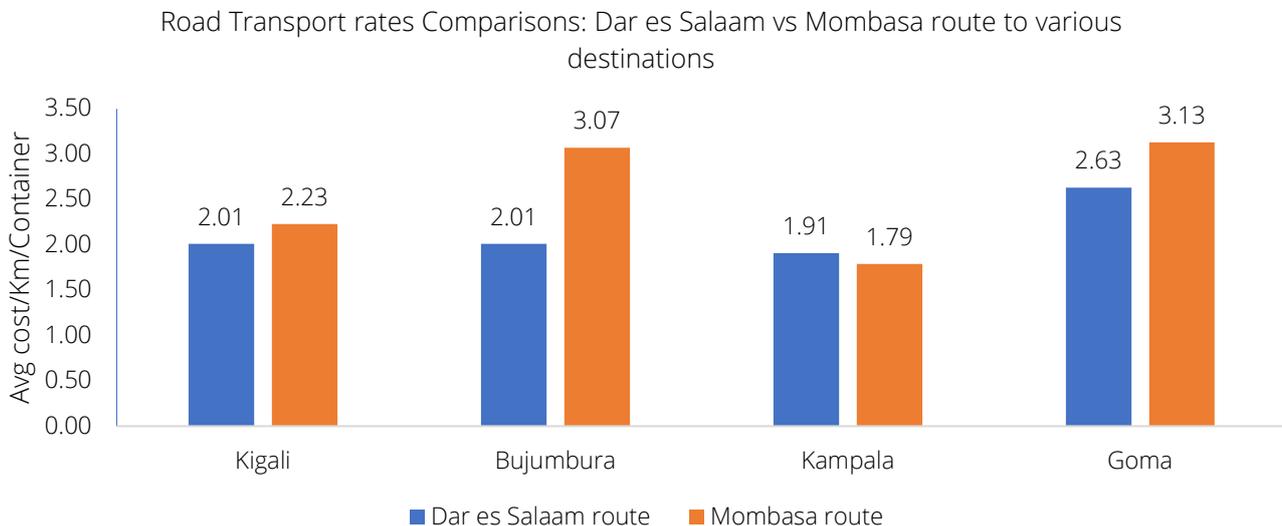
Figure 17 below provides a comparison based on the average transport rate cost per kilometer per container from both Dar es Salaam (Tanzania) and Mombasa (Kenya) ports to various destinations measured in USD.

The analysis shows that it is slightly cheaper to import through Dar es Salaam port for the Central Corridor Member countries except Uganda as Transport Rates from Dar es Salaam to various destinations compared to Mombasa to various destinations. This is attributed to the distance proximity that is it is shorter distance for Rwanda, DRC and Burundi to access the Dar es Salaam port; higher turnaround time in Central Corridor and road users' charges are minimal in Central Corridor because of less border's points.

It has been observed that it is also less expensive transporting cargo from Mombasa port to Kampala compared to Dar es Salaam port due to a shorter distance by road. There is also another alternative route to Burundi through Taveta/ Holili. Burundi transporters preferred Voi/Holili route due to shorter distance, low costs and fewer non-tariff barriers (i.e. one border) as opposed to the traditional corridor route which goes through Uganda and Rwanda. The transport rates from Nairobi and Mombasa to Bujumbura through Taveta/ Holili route are USD 2.6 per ton and USD 2.9 respectively.

**Figure 17: Transport Rates Comparison Dar es Salaam vs Mombasa routes in 2019**

Source: CCTO & NCTO 2019



### 5.3 Road Freight charges in Kenya

Figure 18 gives the average transport tariff per container per km for moving a container from Mombasa to main destinations along the Northern Corridor from 2015 to 2019. Transport freight rates from Mombasa to Nairobi and Kampala reduced significantly during the period under review mainly due to improvement in the business environment, reduced fuel costs and also improved road condition which has a positive bearing on costs. The costs of imports to Nairobi were cheaper possibly because most of the counterpart competition from SGR freight cargo.

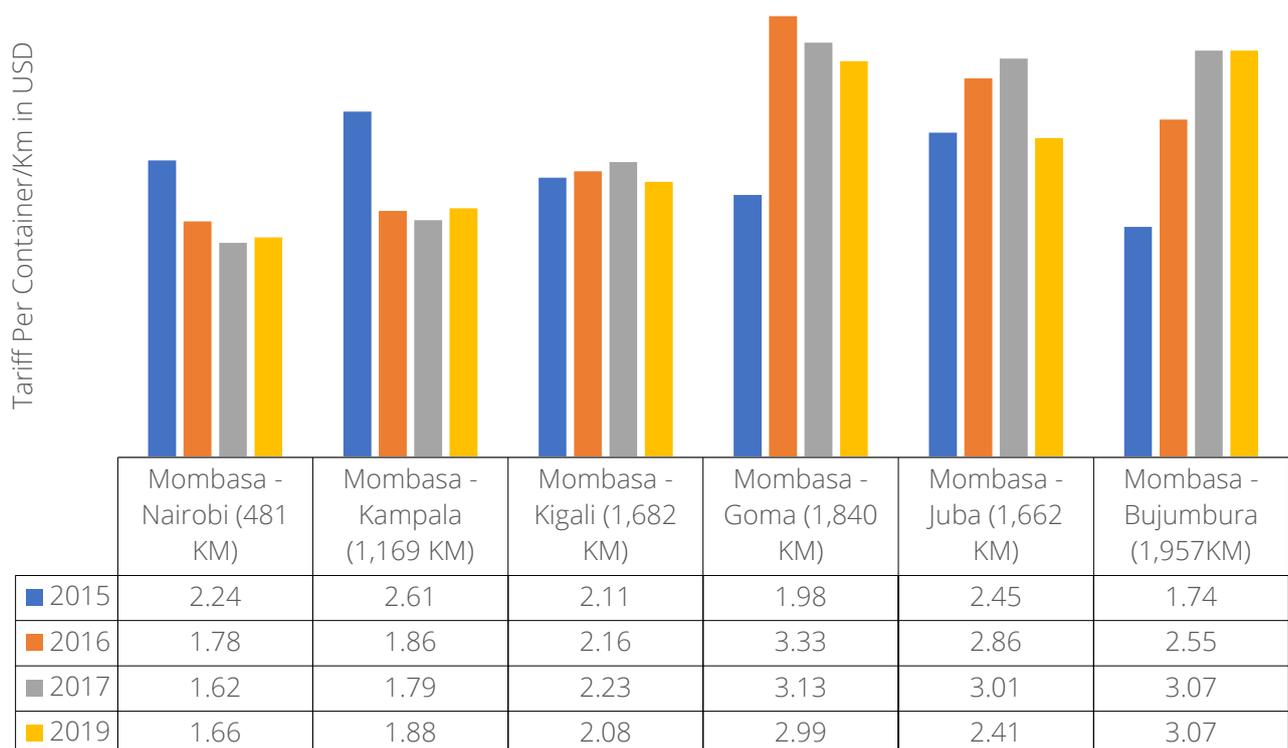
Analysis presented also show that it was expensive to transport cargo from Mombasa to Goma, Juba, and Bujumbura suggesting that cross border logistics bottlenecks have an impact on the cost of cargo transportation to different destination. The increase in the average transport rates from Mombasa to Bujumbura and Juba between 2015 and 2017 may also be attributed to political and security concerns. It is notable that the cost for long distances remains high. Some of factors that have been identified to cause cost escalations include road tolls, multiple border charges, and road condition.

There is another alternative route to Burundi through Taveta/ Holili. Burundi transporters preferred Voi/Holili route due to shorter distance, low costs and fewer non-tariff barriers (i.e. one border) as opposed to the traditional corridor route which goes through Uganda and Rwanda. The transport rates from Nairobi and Mombasa to Bujumbura through Taveta/ Holili route are USD 2.6 per ton and USD 2.9 respectively.



**Figure 18: Average Transport Rates (USD) to various destinations from Mombasa Port (imports) by Kenyan transporters**

Source: KTA, data 2015-2019



\*\*Note in 2018, data was not available from KTA,

### 5.4 Road Freight charges in Tanzania

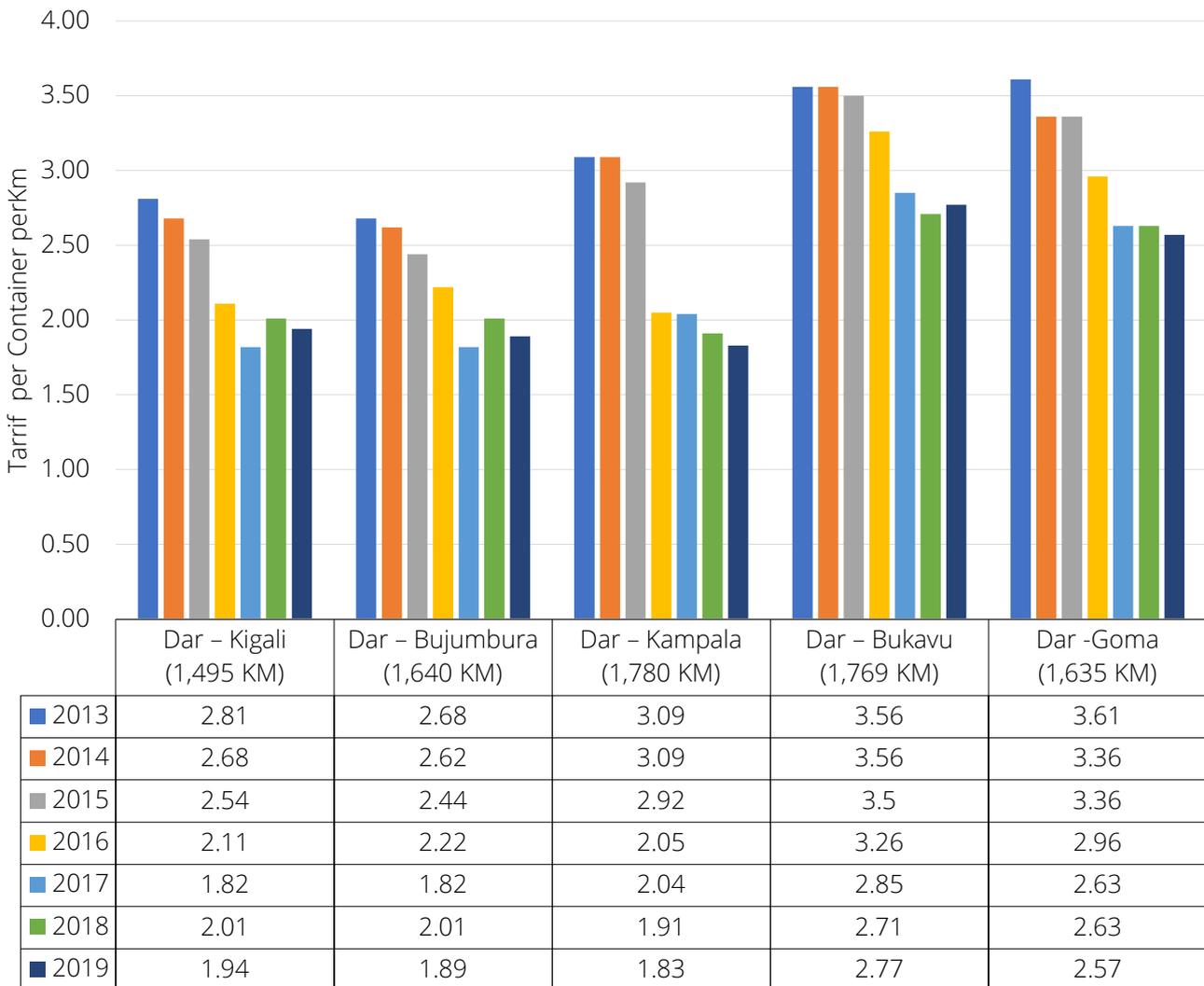
This section provides highlights of the rates of transportation services paid by the cargo owners/ shippers to the transporters. The rates are determined by various conditions related to location, infrastructure, administrative barriers, etc. These rates differ depending on whether the cargo is imports or exports.

The road Transport charges can be categorized into three main groups namely; the costs paid to the Transporter (Truckers) which are normally referred to as Transport rates, the costs paid to the Freight Forwarders and the Costs paid to the Customs Freight Agents (CFA) at the inland borders.

Figure 19 below indicates the road transport rates (Imports) to various destinations per container per kilometer in USD. As depicted on the graph the transport rate trend is slightly going down for the mentioned period (2013 – 2019). For 2019, the rates were lower for Dar es Salaam – Kigali route at an average of \$2900 per container while it was higher for Dar es Salaam – Bukavu route at an average of \$4,900 per container. Re-opening of the multimodal transport route of Dar es salaam – Mwanza – Port Bell – Kampala costing about \$2,730 total route cost per the 40ft container import, has resulted into reduction of the Road transport rates for the Dar es salaam – Kampala route, since most traders opt for this cheaper option which is the combination of railway-inland waterways modes of transport. Despite the decreasing trends of transport rates along the Central Corridor destinations, traders are still concerned of high transport costs within the region.

**Figure 19: Road Transport rates in USD to various destinations from Dar Port in USD per Km**

Source: C&F Agents/Transporters 2019





A banner of the SGR project during the official launch of the construction from Dar es Salaam to Morogoro

PHOTO:CCTFA

## 5.5 Rail Transport Rates and Charges in Central Corridor

Ahead of the construction of the Central Corridor Standard Gauge railway in Tanzania where the first lot section from Dar es salaam to Morogoro is at 60% of construction and the second Lot from Morogoro to Makutupora is at 16%, the Central line meter gauge is also operational and is being used to transport Cargo from Dar es salaam to various Central Corridor member countries of Uganda through Mwanza, Burundi and DRC through Kigoma port.

The Dar es Salaam – Mwanza – Port Bell – Kampala Goods shed route was re-opened in June 2018. The below Summarizes the applicable rail Tariffs on the re-opened Dar es salaam – Mwanza - Kampala route for the period 2018/2019

**Table 12: Summary - Total Route Costs by rail for imports (DSM to Kampala) -USD**

SERVICES RENDERED	20FT -USD	40FT-USD	RATE/TON-USD
PORT CHARGES-DAR PORT (TPA/TICTS)	180	270	9.50
CORRIDOR LEVY - DAR PORT (TPA/TICTS)	6	12	0.30
AGENCY FEES	150	200	5.00
RAILWAY CHARGES - TRC	680	1,360	34.00
RAILWAY CHARGES - URC	50	100	2.50
MARINE CHARGES- URC or MSCL	374	748	18.70
LINK SPAN CHARGES - TPA and URC	20	40	1.00
IMPORTS -TOTAL ROUTE COSTS - USD	1,460	2,730	71.00

**Table 13: Summary - Total route costs by rail for exports (DSM to Kampala) -USD**

SERVICES RENDERED	20FT -USD	40FT-USD	RATE/TON-USD
PORT CHARGES-DAR PORT (TPA/TICTS)	90	120	6.00
AGENCY FEES	100	150	3.75
RAILWAY CHARGES - TRC	160	320	8.00
RAILWAY CHARGES - URC	20	40	1.00
MARINE CHARGES- URC or MSCL	180	360	9.00
LINK SPAN CHARGES - TPA and URC	20	40	1.00
<b>EXPORTS -TOTAL ROUTE COSTS - USD</b>	<b>570</b>	<b>1030</b>	<b>28.75</b>

Note: Container free detention grace period is given at (thirty) 30 days.

## 5.6 Standard tariff rates for containers by SGR

Table 14 refers to the standard charges for cargo haulage by SGR to and from Kilindini (Port Reitz) – ICD Nairobi/ Nairobi Freight Terminus. Rates are not inclusive of last mile cost. Statistics show that those transporting cargo from Nairobi to Mombasa will pay \$250 for a 20-foot container while a 40-foot container weighing up to 20 tonnes will cost \$350 and \$375 for those weighing to between 21-30 tonnes. Kenya Railways has been charging Sh30,000 to transport a 40-foot container from Nairobi to Mombasa irrespective of weight.

On the other hand, hauling the 20-foot container from Mombasa to Nairobi will cost US\$ 500 while a larger 40-foot container will cost up to US\$700 from the promotional cost of USD 400 reflecting a 79.9 per cent rise in a bid to raise more revenue to pay the Chinese operator. The promotional tariffs were introduced in January 2018, when cargo ferrying kicked off and was meant to end in April 2018 before being extended twice to June 2018 and December 2018. For volume discounts in the up direction, the maximum allowed is 20% of the cumulative payable based on the standard authorized tariff per unit and is only applicable for Kilindini as origin to ICD Nairobi/ Nairobi Freight Terminus as destination.

**Table 14: SGR standard tariff rates**

Source: Kenya Railways Corporation (KRC) 2017-2019

Size	Weight Range in Tons	Rate- Loaded Container (USD)		Rate – Empty Container (USD)	
		Up direction	Down Direction	Ex Movement by Rail	Ex Movement by Road
20 -foot container	Full range	500	250	100	150
40-foot container	Up to 20 Tonnes	700	350	100	150
	21- 30 Tonnes	750	375	100	150

### Box 5 - 1: Box of achievement on SGR in Kenya

Kenya, Uganda, Rwanda and South Sudan committed to the development of a new seamless railway transport system in order to reduce the cost of doing business, increase regional connectivity and enhance regional integration. The protocol between Member States agreed to development of the Single Gauge Rail (SGR) with the same design standards from Mombasa to Nairobi, Kampala, Kigali and Juba. Currently Kenya has just completed the SGR line from Mombasa to Nairobi. The Mombasa-Nairobi SGR is the first step in the grand plan to build an East Africa railway.

The 485 km-long Standard Gauge line from the port of Mombasa to Nairobi Inland Container Depot (ICD) is complete and in full use. Work on the extension of the SGR line to Naivasha from Nairobi is underway. Commercial operations of the Standard Gauge Railway (SGR) freight train service began cargo operations in January 2018 network that will eventually link Kenya with Uganda, Rwanda, Burundi and South Sudan.

Total haulage by rail has witnessed tremendous increase registering 20% share of the total throughput since the launch of SGR freight services in January 2018. In the year 2018, between Mombasa and Nairobi 2,524 SGR cargo trains carrying a total of 2.9 million metric tons of goods were run for both upstream and downstream operations. In regard to the SGR passenger train, a total of 2.4 million passengers travelled using the SGR train between Mombasa and Nairobi generating a revenue of USD 22 million for the year 2018 from the passenger service alone.



SGR in Kenya along the Northern Corridor: A cargo train hauls containers to ICD Nairobi

PHOTO:NCTTCA





## Chapter Six

# **East Africa Community Vehicle Load Limits Compliance**

## 6.1 Introduction on EAC vehicle load limits

The East Africa Community Vehicle Load Control Act, 2016, (EAC VLC Act 2016) is aimed to protect roads by curbing overloading. The law, which was gazetted in 2016, limits weights on the roads with tough penalties prescribed against those found guilty of contravening the laid down regulations. Vehicles with a gross weight of 3.5 tonnes (3,500 kg) and over have to be weighed at weighbridges they pass through and any transporter who bypasses, absconds or evades a weighing station is liable for prosecution. The weight in the axle of super single tyres has been lowered to 8.5 tonnes, from 10 tonnes. The law puts the maximum GVM load at 56 tonnes.

Those transporting unusual cargo are required to acquire a special license from respective national road authorities from the EAC countries after meeting set conditions. Burundi and South Sudan are now the only EAC countries that have yet to implement and enforce the law.

## 6.2 Weighbridge Traffic along the Northern Corridor

There are nine static weigh-bridges located at Athi-River, Mariakani, Webuye, Gilgil, Busia, Mtwapa, Rongo Isinya and Bondo; out of which the former five are along the Northern Corridor. To reduce congestion at the weighbridges, Kenya National Highway Authority (KeNHA) has installed High Speed Weigh in Motion (HSWIM) and multi deck scales at Mariakani; Athi River; Gilgil and Webuye which are fully automated.

Table 15 illustrates the average daily traffic at weighbridges for both inbound and outbound trucks. Athi-River weighbridge recorded the highest traffic that included traffic originating from the port of Mombasa both local and transit cargo and traffic originating from Namanga Border Point. This traffic reduced by around 50% at Gilgil weighbridge given that some of it was destined for Nairobi and its environs. Webuye and Busia Weighbridges recorded lower traffic which majorly comprises transit cargo heading to the border points of Malaba and Busia respectively.

**Table 15: Average daily weighed traffic at Weighbridges in Kenya in 2018 and 2019**

Source: KeNHA, Kenya 2018 and 2019

Weighbridge traffic	Mariakani		Athi River		Gilgil		Webuye		Busia	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
Jan	2,113	2,445	11,755	9,356	6,586	4,479	2,575	2,412	697	535
Feb	4,973	1,811	10,949	11,789	6,186	4,206	2,300	1,664	596	406
Mar	4,846	2,093	8,698	9,528	4,940		2,426	2,519	650	422
Apr	5,085	5,329	10,212	12,207	6,376	4,434	2,511	2,364	610	696
May	4,987	5,641	9,868	9,654	6,186	4,228	2,627	2,334	659	694
Jun	5,319	5,540	9,979	10,603	6,586	3,923	2,699	2,252	596	677
Jul	4,452	2,739	6,973	10,709	6,698	4,396	2,636	1,444	680	611
Aug	4,572	2,327	9,951	5,880	6,456	6,697	2,413	1,555	751	454
Sep	7,220	2,007	8,153	3,548	6,296	6,285	2,520	1,545	703	646
Oct	4,932	2,687	10,407	10,228		6,537	2,669	1,774	854	680
Nov	5,154	2,539	10,290	10,805		6,102	2,439	1,613	791	576
Dec	5,272	2,259	9,073	11,755		6,102	2,701	1,817	794	471

### 6.3 Weighbridge Compliance along the Northern Corridor

Weighbridge compliance is a key indicator for tracking corridor performance and is a measure of axle load compliance. Axle load limit compliance is important because non-compliance damages the roads and compromises vehicle safety. Weighbridges serve as check points that enhance compliance with the transport vehicle load limits.

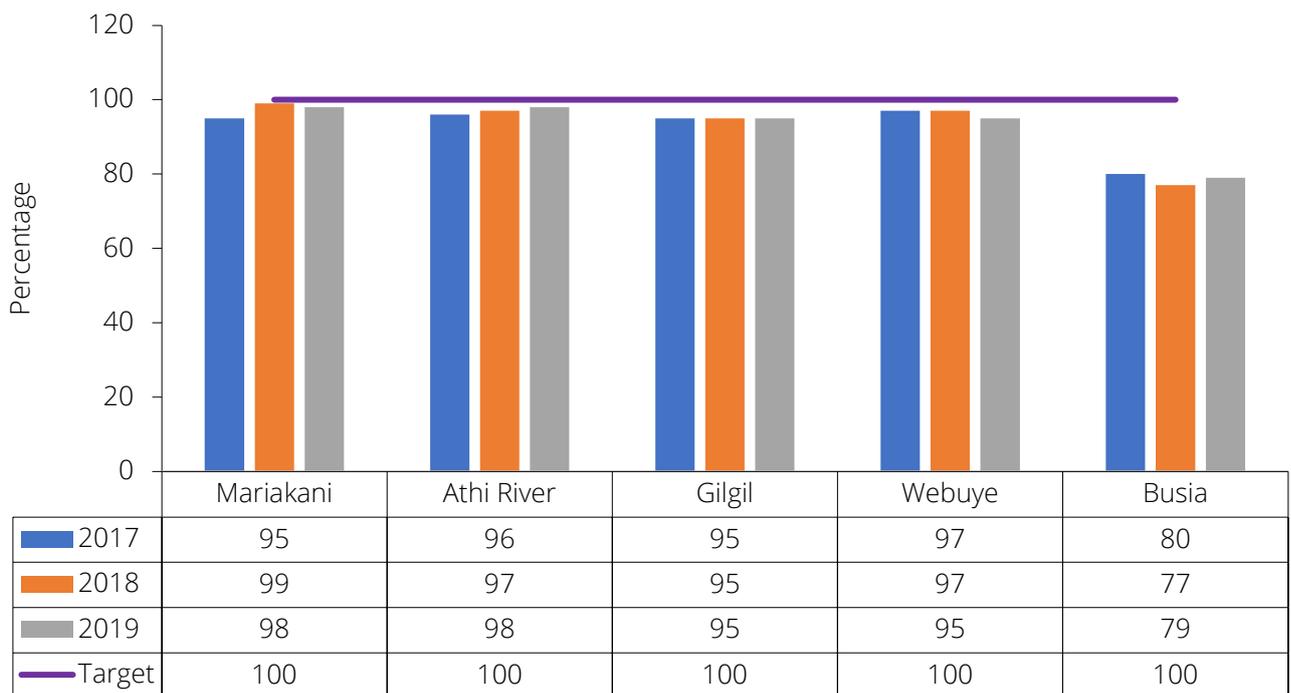
Figure 20 presents the level of compliance at Kenyan weighbridges along the Northern Corridor for both inbound and outbound trucks. Kenya National Highway Authority (KeNHA) has installed High Speed Weigh in Motion (HSWIM) and multi deck scales at: Mariakani; Athi River; Gilgil and Webuye which are fully automated.



A truck is weighed at a weighbridge along the Northern Corridor FILE PHOTO: NCTTCA

**Figure 20: Weighbridge compliance along Northern Corridor**

Source: KeNHA, data 2017 to 2019



In the analysis, weighbridges recorded a steady performance in terms of compliance levels of over 95% performance except for Busia weighbridge whose compliance level was steady at an average of 79% in 2019. Low compliance at Busia weighbridge could be attributed to the weighbridge basing its compliance on three parameters; Gross Vehicle Weight, Axle Vehicle

Weight and Axle Group Vehicle Weight. For the other weighbridges if an axle group is compliant the truck is allowed to proceed. In addition, there is a possibility that the Busia weighbridge handle cargo that originates from the region and has not been weighed elsewhere. The target of 100% compliance has not yet been attained.

## 6.4 Weighbridge Traffic along the Central Corridor

This indicator measures the average number of trucks weighed in a month at the various weighbridges in Tanzania along the Central Corridor.

Central Corridor Transit nodes in Tanzania have a total of 10 weighbridges, five of them Vigwaza, Mikese, Dakawa, Nala and Njuki are Weighing in Motion (WIM) for the purpose of reducing time spent during weighing process whereas Kurasini, Mwendakulima, Nyakahura, Kyamyora and Mutukula are static bridges.

Transit vehicles through the Central Corridor are weighed and being inspected at only three stops of Vigwaza, Njuki and Nyakahura.

The below statistics indicates traffic of all vehicles weighed at the Static bridges per Quarters in Tanzania.

The Vigwaza weighbridges recorded huge number of traffic as it's the first weighbridge for all vehicles from the Dar es Salaam port after Kurasini weighbridge which is stationed at the port of Dar es salaam. An average of 200,316 vehicles are weighed at the Static weighbridge at Vigwaza per quarter.

**Table 16: Traffic of all vehicles weighed at the Static bridges per Quarters in Tanzania**

Weighbridge Traffic		Jan - March	April - June	July - Sept	Oct - Dec
Vigwaza	2017	114,824	123,970	115,786	133,413
	2018	118,355	93,423	286,493	271,333
	2019	271,785	194,526	96,235	238,716
Mikese	2017	42,401	38,226	51,702	172,584
	2018	47,540	59,109	129,371	52,791
	2019	73,628	67,723	147,530	152,891
Kihonda/Dakawa	2017	21,518	17,910	19,140	25,905
	2018	15,754	29,053	38,513	32,777
	2019	33,897	37,262	92,058	109,518
Nala	2017	46,521	43,913	45,023	51,337
	2018	52,277	58,958	60,647	47,581
	2019	42,090	75,915	55,097	92,903
Njuki	2017	29,523	31,752	12,538	18,741
	2018	31,852	58,840	31,374	41,209
	2019	41,228	43,720	131,366	201,301
Mwendakulima	2017		27,654	30,743	28,473
	2018	32,153	30,563	34,098	32,291
	2019	29,194	26,086	9,142	25,967
Nyakahura	2017	20,276	1,239	24,299	2,4745
	2018	20,113	16,833	25,478	9,561
	2019	19,925	24,333	24,516	
Kyamyorwa	2017	10,006	7,715	11,078	10,415
	2018	9,879	8,925	9,044	10,657
	2019	14,568	17,531	18,315	16,502
Mutukula	2017	3,561	2,114	2,093	930
	2018	2,281	2,428	2,186	2,780
	2019	2,486	4,326	4,480	7,847

## 6.5 Weighbridge Compliance along the Central Corridor

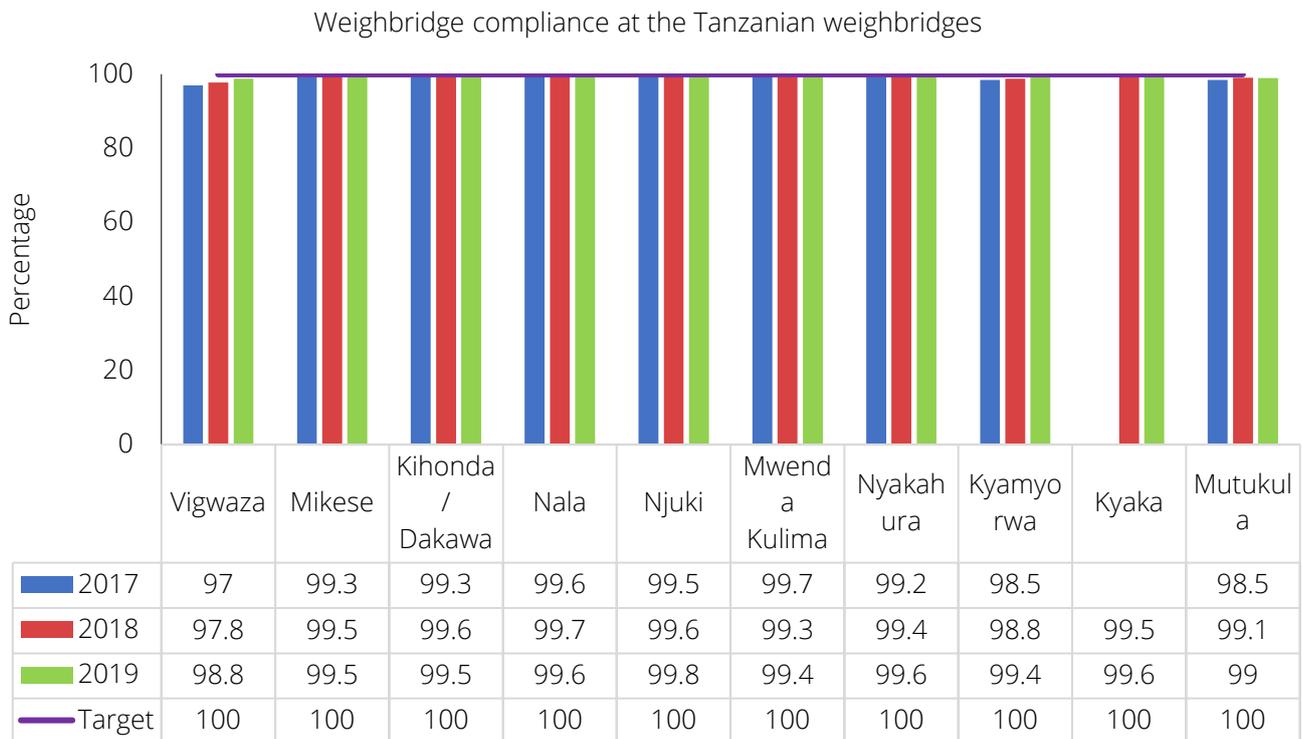
This measures the percentage of trucks that comply with the gross vehicle weight and the axle load limits before or after re-distribution of cargo.

The East African Community Vehicle Load Control Act 2016, is an Act of the Community to make provision for the control of vehicle loads, harmonized enforcement, institutional arrangements for the Regional Trunk Road Network within the Community and to provide for other related matters including management of the weighbridges. In Tanzania, weighbridges are managed by TANROADS.



**Figure 21: Weighbridge compliance in Tanzania**

Source: Tanroads, data 2017 to 2019



The figure above shows that there is high compliance level by trucks in all weighbridges along the Central Corridor in Tanzania. The compliance is consistent throughout the reporting period (2017- 2019). The average compliance is less at the first weighbridge of Vigwaza compared to all other weighbridges, however it has improved to 98.76% compliance for Jan – Dec 2019 from 97.2% for the same period 2018. This might

have largely attributed by the introduction of Kurasini weighbridge at the Port of Dar es salaam which has significantly reduced overload cases at Vigwaza weighbridge as it was purposely introduced to facilitate transporters and cargo owners to assess axle load compliance of their cargo before starting their trips. All other remained weighbridges record high compliance above 99.0%.





## Chapter Seven

# **Summary Conclusion and Recommendations**

## 7.1 Summary

There has been immense growth in trade volumes in both the Northern and Central Corridors in the review period riding on growing trade in the region. This has been bolstered by improved port efficiency at the Mombasa and Dar es Salaam ports that has triggered growth in cargo throughput to over 50 Million metric tonnes in 2019. Regional integration and harmonization of regulations that affect bilateral trade has, without doubt, enhanced efficiency of not only the transport corridors but also the Ports. Progressively, performance indicators show improvement in all areas with the reduction in time and costs of freight recorded over the review period albeit in a gradual manner.

The continued improvement of the Ports and ongoing works on the SGR is good news for the improvement and attractiveness of the region to trade. Some of the other notable improvements include, expansion of port terminals and berths at both the Mombasa and Dar Es Salaam port, road improvements including the opening of the Mombasa- Taveta Holili route, installation of high-speed weigh in motion (HSWIM) weighbridges, construction of one stop border points among others.

Harmonization of regulations in the EAC regions has laid the desired regulatory and policy environment that has greatly reduced hiccups that stifle cross border trade. Some of these include the harmonization of axle load requirements, implementation of Single Customs Territory, one stop border points, and development of common infrastructure including the proposed standard gauge railway just to mention but a few. Prioritization of investment in transport infrastructure by Governments cannot go unmentioned and has played a key role in mobilizing resources for the capital-intensive transport infrastructure.

Lastly, the collective efforts of all stakeholders in the transport and trade logistics sectors have played a critical role in enhancing the efficiency of the transport corridors. Key examples are the implementation of the Mombasa Port Community Charter and Dar es Salaam Port Improvement Committee that has mobilized stakeholders in enhancing efficiency by harnessing the efforts of all the stakeholders.

## 7.2 Recommendation

The following are recommended:

-  It is recommended that countries should opt on using alternative shorter routes to reduce cost and time taken.
-  The use of ECTS is still low therefore impacting on quality of data and information required on analyzing causes of stoppages and delays.
-  Member states to implement the policy on installation of High speed weigh in motion (HSWIM) weighbridges
-  Continual development of the Joint corridor reports to measure and compare performance on the two corridors, benchmarking with global standards.
-  A need for joint efforts between corridors' member countries to implement best initiatives with a purpose of improving efficiency of the corridor within the region
-  A need to expand the monitoring scope to include other mode of transport and looking for comparable indicators for joint reporting





NORTHERN CORRIDOR TRANSIT AND  
TRANSPORT COORDINATION AUTHORITY

HOUSE 1196 LINKS ROAD NYALI  
P.O BOX 34068-80118 MOMBASA, KENYA

+254 729 923574

+254 733 532485

[ttca@ttcanc.org](mailto:ttca@ttcanc.org)

[www.ttcanc.org](http://www.ttcanc.org)



CENTRAL CORRIDOR TRANSIT TRANSPORT  
FACILITATION AGENCY

POSTA HOUSE GHANA AVENUE

P.O. BOX 2372 DAR ES SALAAM, TANZANIA

PHONE: +255 22 2127 149

MOBILE: +255 687 440 941

[ttfa@centralcorridor-ttfa.org](mailto:ttfa@centralcorridor-ttfa.org)

[www.centralcorridor-ttfa.org](http://www.centralcorridor-ttfa.org)

@NorthernCorridor



@ccttfaorg

NorthernCorridor



ccttfa



# JOINT NORTRAL FOREMANCERE REPORT 2016-2019

