SCEA LOGISTICS PERFORMANCE SURVEY 2021

Self-Assessment Report on Logistics Performance Based on Survey Findings

Shippers Council of Eastern Africa

KEPSA

TRADESMART CONSULT LTD

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LIST OF ABBREVIATIONS

AEO	Africa Economic Outlook
CFS	Container Freight Station
EA	East Africa
EABC	Eat Africa Business Council
EAC	East African Community
ECOWAS	Economic Community of West Africa
COVID-19	Corona virus Disease 2019
COMESA	Common Market for Eastern and Southern Africa
DRC	Democratic Republic of Congo
GDP	Gross Domestic Product
ICD	Inland Container Depot
ICMS	Integrated Custom Management System
KeNHA	Kenya National Highways Authority
KEPSA	Kenya Private Sector Alliance
KNBS	Kenya National Bureau of Statistics
KPA	Kenya Ports Authority
LAPSSET	Lamu Port South Sudan Ethiopia Transport
LPI	Logistics Performance Index
LPS	Logistic Performance Survey
MTP	Medium Term Plan
NCTTA	Northern Corridor Transit and Transport Agreement
NISR	Network and Information Systems Regulation
PD	Project Director
RECDTS	Regional Cargo and Driver Tracking System
RECTS	Regional Electronic Cargo Tracking System
SADC	Southern Africa Development Community
SCEA	Shippers Council of East Africa
SCT	Single Customs Territory
SGR	Standard Gauge Railway
SPSS	Statistical Package for the Social Sciences
TEUs	Twenty Feet Container Equivalent Units
TMEA	Trade Mark East Africa
ToR	Terms of Reference
UBOS	Uganda Bureau of Statistics
WTO	World Trade Organization

The Study Was Carried Out
By

Diani CI Street
Ngong Road,Kenya

Tel: 254 724 418 153
Email: info@tradesmartconsult.co.ke

1 Introduction

1.1 Background

The efficiency and cost of freight transport services play a critical role in the competitiveness of international traders and by extension the economic performance of a country. Attempts to measure the efficiency of logistics services of a country have been done through the World Bank Logistics Performance Index (LPI), which attempts to rank the logistics performance of countries based on the following set of indicators namely;

- Customs
- Infrastructure
- International Shipment
- Logistics Competence
- Tracking and time lines.

Transport and logistic providers have been enlisted as essential service providers during the imposition of the COVID-19 containment measures. This underscores the importance of transport and logistics in the regional economy.

The Shippers Council of East Africa (SCEA) undertakes East Africa Logistic Survey annually, which examines the cost, time, and complexity aspects of the East Africa Logistics Chain. The LPS also provides the most comprehensive regional comparison tool to measure trade and transport facilitation friendliness of the EAC Countries.

The survey identifies specific bottlenecks on the logistics chain, including policy and regulatory frameworks, as well as operational challenges that impede the seamless flow of goods on the logistics chain. It also identifies the constraints and issues, which may negatively affect the successful implementation of the Mombasa Port Community Charter. Individual shippers use the findings of the survey to negotiate contract terms. The findings and recommendations therefore inform core advocacy agenda for the Council and the private sector to pursue.

One of the main agendas of economic growth and competitiveness is improving freight logistics performance. Globally, the freight logistics sector has been recognized as one of the core pillars for economic development. Improving trade logistics through enhancing trade facilitation measures has continued to be important to EACs regional integration agenda. The logistics performance in the region over time has improved as a result of a decline in tariffs and removal of trade barriers.

Attempts have been made through the World Bank Logistics Performance Index (LPI), which ranks the logistics, to measure logistics services efficiency of a country performance of countries based on a set of indicators. In the 2018 LPI report, Germany, Sweden, Belgium, Austria and Japan were ranked as countries with the best logistics performance at positions 1, 2, 3, 4 and 5 respectively. South Africa, Botswana and Egypt were the highest ranked African countries at positions 29, 58 and 60. Kenya was the highest ranked EAC country at position 63, while Rwanda, Tanzania, Uganda, and DRC Congo followed at positions 65, 67, 72, 133 and 1501. The emerging trends in logistics identified from the LPI of 2018 included: Labor-skills shortages; environmentally friendly logistics; and resilience to cyber threats.

Over the recent past, there has been increased investments in trade and transport infrastructure. These investments have been geared towards improving trade facilitation measures and increasing regional and/or economic integration. It is also important to note that improving the logistics sector tends to enhance efficiency in revenue collection for Governments and productivity.

This report presents the findings of the logistics performance survey for East Africa for the period 2020. It focuses on time, cost and complexity and focuses on data collected for a period of 3 month (August to October 2020) from private and government players in the transport logistics sector in East Africa.
The findings of this report will provide the much-needed impetus to private and public players in the transport and logistics industry to enhance efficiency in trade facilitation so as to improve the region's ability to compete with the global economy.

1.1.1 COVID-19 Pandemic

The beginning of the year 2020 witnessed an unprecedented global health crisis caused by the Corona-virus Disease 2019 (COVID-19). Outbreaks of the respiratory illness were first reported in Wuhan City, Hubei Province of China. The outbreaks would soon escalate into a health crisis never imagined; unprecedented in terms of contagiousness, fatalities, and global geographical spread affecting all countries leading into a global pandemic. This has resulted in the loss of lives and a multitude of socio-economic consequences with little or no signs of abating; what started as a health crisis in one country quickly degenerated into a disaster impacting social and economic aspects of nations.

In 2020, the World Bank noted operational constraints in both small and top players in the supply chain sector, leading to delivery delays, congestion, and higher freight

rates. Due to the insufficiency of a recovery plan, most small players in the transport and logistics sector have been severely hit, leading to the closure of operations. In contrast, top players resorted to invoking the 'Force Majeure' clause that allows contracts to be declared null and void due to acts of God or other unexpected circumstances—on all their contracts due to COVID-19 (IFC, 2020).

The financial implications of COVID-19 on trade and supply chains are significant. According to the Institute of Shipping Economics and Logistics (ISL), container throughput index, which measures the number of people and goods that pass-through shipping ports daily, declined from 113.3 in January 2020 to 107.7 in May 2020 –a decline of 9.5%. In addition, the International Air Travel Association (IATA) stated that Industry-wide air Cargo Tonne-Kilometres (CTKs) fell by 15.3% year-on-year in the three months to April 2020.

Explaining further, cargo volumes plunged but lack of capacity boosted loads and yields. This implied that sea and air cargo transport had been adversely affected by COVID-19. According to the World Bank (2020), due to COVID-19, in 2020 globally, there was an increasing decline in the number of port calls, particularly from container ships. The decline was as a result of by blank sailings, scheduled container services that either did not run at all or did not call at particular ports on a scheduled route, due to insufficient traffic.

Therefore, the timing for the 2020 LPS is appropriate given the numerous changes and challenges experienced since January 2020 amidst the COVID-19 pandemic that started late in 2019.

1.2 Why Logistic Performance Matters

An effective logistics sector is now recognized almost everywhere as one of the core enablers of development. Previous international publications on LPI have highlighted how implementing better policies leads to better logistics performance. Such policies cover, for example, regulating services; providing transportation infrastructure; implementing controls, especially for international goods; and raising the quality of Public–Private Partnerships (PPPs). Focus on policy has continued to evolve since the early 2000 where logistic policies tended to concentrate on facilitating trade and removing border bottlenecks. Today, international logistics has been intertwined with domestic logistics.

Private and Government players have to deal with a wide range of issues such as spatial planning; skills and resources for training; the environmental, social, and economic sustainability of the supply chain; and resilience of the supply chain to disruption or disaster (physical or digital).

1.3 Objective of Survey

The overall objective of this survey is to determine freight logistics performance of the five East African partner states in 2020. It is hoped that the findings of this survey will enable the Shippers Council of Eastern Africa (SCEA) and its members to effectively engage in evidence-based advocacy that will result in the development of policies to improve freight logistics efficiency, reduce the cost of freight transport services and enhance the competitiveness of international trade in East Africa.

1.4 Approach and Methodology

1.4.1 Approach

The study used a combination of qualitative and quantitative approaches to collect non- numeric and numeric data. This data was reviewed and analyzed when carrying out LPS to meet the requirements set out in the ToR.

Given that information and data related to the 2020 LPS cuts across various sectors, validation through triangulation was used in order to ensure credibility, reliability as well as authenticity of the information and data.

1.4.2 Questionnaire Design

The study team designed six (6) sector specific questionnaires that were used to collect information on Cost, Time and Complexity (CTC). The questionnaires were designed in line with the specific objectives and scope of the study as detailed in the ToR.
Both qualitative and quantitative data was collected using the designed questionnaires to maximize on the advantages of each modality. The following indicators were included in the survey:

i. Cost Indicators Included: Maritime transport costs, Port and terminal related costs, clearing agency costs, Surface transport (road and rail), CFS costs, and Airfreight cost.

ii. Time indicators included: Port dwell time, ship waiting time, CFS transfer time, time for customs procedure, port exit procedures, duration of quayside operations, time taken in inland transportation by road and rail, truck stops, weighbridges, police-checks, terrestrial border crossing times and cargo dwell times at major East African airports,

iii. Complexity Indictors Included: Number of documents required, number of signatures/ stamps, number of agencies intervening, percentage of sea-freight containers physically inspected, number of inspections

1.4.3 Sampling Design

The study was confined to Logistic Service Providers in East Africa. The sample group was aligned to the main players in the logistic services such as Airfreight Carriers, Clearing and Forwarding Agents, Rail Freight Operators, Road Freight Transporters, Shipping Lines/Ship Agents, Cargo Owners and Warehousing Operators. Based on the stakeholder population, sample determination of respondents in each stakeholder category known as a sub population or strata was through simple random sampling.

Key informant engagement was used where the target strata of a stakeholder group was not large such as government entities and monopolistic business[2], independently in each country where the sampling was applicable. The best way to ensure absence of bias in the sample was through random selection of units in the population. The overriding principle for selection of a simple random sample was that every unit would have approximately the same chance of being selected given multiple stakeholder groups.

The study team ensured that each sample group was proportional and statistically informed the population parameters. In this case, a multiple stratified random sampling method was used which considered the following:

- The level of precision to be 5% to estimate the population parameters
- The risk level in form of confidence interval of drawing samples is 95% for every group.
- The degree of variability in the firms under survey due to business dynamics is low hence, businesses are close to being homogenous.

The derived Cochran Formula which was used in the study was as follows:

$$n = \frac{Z^2 p(1-p)}{d^2}$$

Where n = sample size, Z = statistic for a level of confidence, P = expected prevalence or proportion (in proportion of one; and d = precision (in proportion of one; if 5%, d = 0.05). Z statistic (Z): for the level of confidence of 95%, which is conventional, Z value is 1.96.

This formula was used to determine the population size used in the 2020 LPS study.

1.4.4 Sample Stratification

The sample population was stratified into homogeneous subgroups by country and by service provider sector. Sample distribution by country was done according to trade volumes which were derived from the UN COMTRADE Database of 2019 on international trade. The table below is the resultant sampling plan

Table 1-1: Sampling Plan of Transport Logistic Service Providers

LOGISTICS SERVICE PROVIDERS CLUS-TERSTRATIFICATION	KENYA	RWANDA	TANZANIA	UGANDA	TOTAL
Airfreight Carriers	**8**	**1**	**3**	**2**	**14**
Clearing and Forwarding Agents	**20**	**5**	**13**	**13**	**51**

[2] If the stakeholder population in any category is very large, probabilistic sampling methods was used through the use of Cochran Sampling Framework.

Road Freight Transporters/ Fuel Companies	**9**	**3**	**14**	**11**	**37**
Shipping Line /Ship Agents	**5**	**2**	**5**	**4**	**16**
Cargo Owners/Warehousing operators	**2**		**2**		**4**
TOTAL	**44**	**11**	**37**	**30**	**122**

Source: Consultant 2021

Table 1-2: Sampling Plan of Key Informants

Organition	KENYA	RWANDA	TANZANIA	UGANDA	TOTAL
Transport Ministries	2	2	1	1	6
Port Authorities			1		1
Airport Authorities	2		1	1	4
Highway Authorities (Weighbridges)			1	1	2
Rail Companies	1		1	1	3
Pipeline Companies	1				1
Shippers Council of EAC				1	1
Inter-Governmental Standing Committee on Shipping	1				1
Maritime Authority					0
Corridor Transit Transport Coordination Authority			1		1
National Chambers for Commerce and Industry			1		1
Revenue Authorities			1	1	2
National Transport Safety Agencies					0
TOTAL	**7**	**2**	**8**	**6**	**23**

Source: Consultant 2021

The online survey questionnaire was sent out to 1,420 respondents who included clearing agents, transporters, shipping lines & ship agents, shippers and government agencies. Of the respondents targeted 145 responded indicating a response rate of 10.2% of the target population. The minimum sample size required was 100 responses and therefore the responses met the study's sample size requirements specified in the sampling plan as described in the methodology.

Kenya had the highest number of responses from the countries targeted given by achieving 51 responses. Tanzania had the second highest targeted respondents by achieving 45 responses, which was followed by Uganda with 36 responses and Rwanda 13 responses.

The study team failed to get any responses from Burundi and South Sudan despite sending the online forms to more than 60 companies. It is important to note that the data collected in Kenya and Uganda contains data for South Sudan and data collected in Tanzania contains information for Burundi. Therefore, these countries have been covered.

1.4.5 Data Collection Method

Blended data collection tools were used to collect variables of interest in line with project deliverables, through surveys, key informant interviews, case studies and observations. The questionnaires were developed in form of online questionnaire using Google forms, administered individually by the subjects or interviewees through the online platform. This was the best data collection strategy in the wake of the COVID 19 pandemic limiting face- to-face interviews and discussions. The consultant recognized the weight of the activity as the determinant of successful implementation of the exercise. The diversity in the stakeholders required development of different data tools in form of personal interviews and key informant interviews for groups. The Study Team developed separate tools for each sample category of stakeholders under same thematic area.

The tools covered specific areas such as Cost, Time and Complexity (CTC), which guided the framing of questions to meet the study objectives.

Prior to data collection, the respondents were appraised through the exercise on the modalities of filling the online forms and a follow up was made to ensure comprehensive data is achieved.

The questionnaires were piloted within the Study Team on different run trials to determine the flow of question, clarity on responses and subjectivity of the study.

1.4.6 Data Analysis

Once the survey was complete, data wrangling and analysis commenced using STATA, R and Excel where applicable. Exploratory and inferential statistics was carried out in line with the study objectives.

1.5 Study Limitation

It is important to note that the study achieved a response rate of 10%. The reason for the low response rate was attributed to several factors such as lack of perceived benefits after participation in the survey. This contributed to non-responses in most cases. The level of coordination through associations in South Sudan and Burundi was low. This affected the dissemination of the survey tools for data collection and thus no responses were recorded.

The lack of participation by Burundi and South Sudan did not in any way threaten the regional coverage and perspective of the study as most of the transport, clearing and forwarding services, air fright operators, Shipping Lines among others are provided by players in Kenya, Tanzania and Uganda who were sufficiently covered in the study. Therefore, the study response rate was considered to be representative given that it covered the Northern and Central Corridors. it is important to note that COVID19 also affected the study results particularly in Burundi and South Sudan as the consultant was not able to mobilize to site.

2 Literature Review

2.1 Analysis of World Bank Logistics Performance Index

The World Bank Logistics Performance Index (LPI) is a unique benchmarking tool, which provides the same measure of six components for more than 160 countries. The six components of the LPI include Customs, Infrastructure, and Ease of arranging shipments, Quality of logistics services, Timeliness, and Tracking & Tracing. The table below provides a comparison of LPI for the top ten Countries in the World, Top Ten African Countries and EAC Counties as per the World Bank 2018 LPI Report.

Table 2-1: Summary of LPI Rankings

Top Ten Countries in the World			Top Ten African Countries			Top EAC Countries		
Economy	LPI Rank	LPI Score	Economy	LPI Rank	LPI Score	Econo-my	LPI Rank	LPI Score
Germany	1	4.20	South Africa	33	3.38	Rwanda	57	2.97
Sweden	2	4.05	Coted'Ivoire	50	3.08	Kenya	68	2.81
Belgium	3	4.04	Rwanda	57	2.97	Uganda	102	2.58
Austria	4	4.03	Egypt	67	2.82	DRC Con-go	120	2.43
Japan	5	4.03	Kenya	68	2.81	Burundi	158	2.06
Netherlands	6	4.02	São Tomé andPrincipe	89	2.65			
Singapore	7	4.00	Djibouti	90	2.63			
Denmark	8	3.99	Burkina Faso	91	2.62			
United King-dom	9	3.99	Cameroon	95	2.6			
Finland	10	3.97	Mali	96	2.59			

Source: World Bank 2018 LPI

2.1.1 Comparison of Country's Logistic Environment

In 2018, low-income countries experienced a drop in the LPI scores for quality of infrastructure, customs performance and quality of logistics services. The scores for the three LPI components improved for low- middle income countries. Contrary to past reports, respondents reported improved scores for the bottom two quintiles in ICT infrastructure and in private logistics services—possibly due to ICT infrastructure improvements in the past decade. For low-income countries, streamlining border clearance procedures and ensuring access to physical trade and transport infrastructure continued to be a priority. The table below shows the performance of Logistics Environment since 2015.

Table 2-2: Logistics Environment since 2015 by LPI Quintile

Component	Bottom quintile	Fourth quintile	Third quintile	Second quintile	Top quin-tile
Customs	61	63	44	68	62
Other border procedures	69	43	36	60	49
Trade and transport infra-structure	65	40	45	66	53
ICT Infrastructure	54	69	62	69	67
Logistic regulation	57	39	36	53	31
Incidence of corruption	39	34	45	56	35

Source: Logistics Performance Index 2018

2.1.2 Best Practices in Top Ten Countries

As shown in Table 2-1 above, Germany, Sweden, Belgium, Austria and Japan performed well in the 2018 LPI. These Counties according to the 2018 LPI performed well on how they efficiently manage the movement of goods within and across borders. Among the lower middle-income group of countries, large economies such as India and Indonesia and emerging economies such as Vietnam and Ivory Coast stood out as best performers. It was identified that the top performing countries in the 2018 LPI scored highly in customs, infrastructure, international shipment, logistics quality and competence, tracking and tracing and timelines.

2.1.3 Actions to improve Regional Logistics Performance Index

The global logistics landscape displays positive trends, even though disparities remain between the top performers and many developing countries. In developing countries, the logistics agenda appears even more prominent today than it was in 2007, as interventions expand with changes in demand, changes in industry, and the increasingly central role of sustainability-related concerns. The 2018 LPI identified the following actions, which ought to be taken into consideration to improve Regional Logistics Performance.

- Development of skills for logistics
- Strengthening supply chain resilience
- Digital transformation of supply chains
- Development of E-Commerce
- Developing logistic property and infrastructure
- Development of environmental sustainability of logistics
- Advocating for green logistics
- Reducing the logistics footprint

2.2 EAC Transport Corridor Analysis

2.2.1 Port of Mombasa

The Port of Mombasa is the key entry and exit point for cargo belonging to a vast hinterland that includes Burundi, DR Congo, Kenya, Rwanda, South Sudan and Uganda. The Port of Mombasa also serves Tanzania, Somalia and Ethiopia. The Port of Mombasa comprises Kilindini Harbour, Port Reitz, the Old Port, Port Tudor, and the tidal waters encircling Mombasa Island. The port has a capacity of 2.65 million TEUs. Kilindini Harbour is a large, natural deep-water inlet with a depth of 45 – 55 Meters at its deepest center (continental draught); although the defining depth is the entrance channel into the port and the depth at the berths, with have a dredged depth of -15 Meters.

2.2.2 Port of Dar es Salaam

The Port of Dar es Salaam is Tanzania's principal port with 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 with eleven (11) deep-water berths. Dar es Salaam Port handles about 95% of the Tanzania international trade. The port serves the landlocked countries of Burundi, Democratic Republic of Congo, Malawi, Rwanda, Uganda and Zambia. The port is strategically placed to serve as a convenient freight linkage not only to and from East and Central Africa countries but also to Middle and Far East, Europe, Australia and America.

2.2.3 Northern & Central Corridor Transport Networks

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 Kilometres of pipeline with the capacity to handle about 6.9 billion liters of petroleum products annually with eight (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 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 route.

2.2.4 Mombasa & Dar es Salaam Port Performance

The COVID-19 global pandemic affected various key performance indicators at the port of Mombasa and the Port of Dar es Salaam in 2020. The table below shows the summary of the performance indicators between 2019 and 2020 for the two ports.

Table 2-3: Summary of the Performance Indicators between 2019 and 2020 for Port of Mombasa and Port of Dar es Salaam.

Item	Unit of Mea - surement	Port of Mombasa			Port of Dar es Salaam		
		2019	2020	Annual % Change (2019-2020)	2019	2020	Annual % Change (2019-2020)
Total Cargo throughput	Metric Tons	34,440,000.00	34,130,000.00	-0.90%	16,022,952.00	15,857,870	-1.03%
Total Transship-ment Cargo	Metric Tons	2,495,000.00	2,031,000.00	-18.60%	86,388.00	19,837.00	-77.04%
Total Imports	Metric Tons	27,558,000.00	27,803,000.00	0.89%	12,988,253.00	12,847,602.00	-1.08%
Total Exports	Metric Tons	4,277,000.00	4,187,000.00	-2.10%	2,372,984.00	2,483,392.00	4.65%
Ship turnaround time (Days)	Days	3.92	3.92	0.00%	3.6	5.8	61.11%
Dwell time	Days	3.67	4.42	20.44%	11.41	10.2	-10.60%
Truck turnaround time	Hours	5	5.5	10.00%	2.1	1.84	-12.38%
Transit Time to Destinations	Unit of Mea - surement	2019	2020	Annual % Change (2019-2020)	2019	2020	Annual % Change (2019-2020)
Kampala	Days	5.75	6.42	11.65%			
Elegu	Days	4.13	6.29	52.30%			
Mpondwe	Days	5.96	8.33	39.77%			
Kigali	Days	7.67	9.75	27.12%			
Cyanika	Days	7.92	8.38	5.81%			
Kigali		4.19			3.75	8.71	132.27%
Bujumbura		6.93					
Kampala				65.39%			
Bukavu		4.33					
Goma		7.5					
				73.21%			
		4.81					
		11.35					
				135.97%			
		4.65					
		10.87					
				133.76%			

Source: CCTO & NCTO 2021

2.2.4.1 Port of Mombasa

2.2.4.1.1 Cargo Throughput

A total of 34.13 million tons of cargo were handled in 2020, which is 1.8 million tons shy of the target of 35.90 million tons. It is worth noting that the pandemic and containment measures stifled domestic activity and disrupted global trade. Compared to 2019, the Port of Mombasa recorded a marginal decline of 0.9% in total cargo throughput in 2020. The decrease was mainly attributed to disruptions to the supply chain because of global lockdowns imposed due to the raging COVID-19 pandemic.

2.2.4.1.2 Ship Turnaround Time

Ship turnaround time in terms of days remained constant at 3.92 days (94 hours) between 2019 and 2020. The average turnaround time performance falls short of the 81 hours' target. This could be partly attributed to delays encountered by transporters to meet the COVID-19 health protocols.

2.2.4.1.3 Dwell Time

In the Port of Mombasa, the average dwell time improved significantly from 100 hours in 2018 to 88 hours in 2019. This time worsened to 106 hours in 2020, which could be linked to the longer ship turnaround time in the same year. Performance of this indicator was short of the Charter set a target of 78 hours. The poor performance could be attributable to the longer time to complete cargo clearance formalities and temporary storage time.

2.2.4.1.4 Transit Time

The data presented in The table above showed that in 2020 Mombasa-Kigali route was the slowest averaging 9.75 days followed Mombasa- Cyanika (8.38 days), Mombasa-Mpondwe (8.33 days). This suggested that there were factors constraining cargo movement on these routes. The Mombasa-Elegu (6.29) and Mombasa Kampala (6.42 days) routes were the fastest. The data indicated that there was an increase in average transit times between 2019 and 2020 which was mainly attributed to COVID-19 pandemic.

2.2.4.1.5 Transport Rates

The table below compares the charges in Kenya to different destinations along the Northern corridor in USD. Transport freight rates from Mombasa to the Member States increased in 2020 when compared to previous years. The increase in the average transport rates from Mombasa to these destinations was attributed to the novel Coronavirus (COVID-19) outbreak. The pandemic constrained logistics operations which led to delivery delays, congestion, and higher freight rates. Further analysis revealed that cross border logistics bottlenecks hurt the cost of cargo transportation to different destinations. Other factors that led to cost escalations include costs related to driver testing for the COVID-19, including quarantine, multiple border charges and road condition.

Table 2-4: Average Transport Rates (USD) to various destinations from Mombasa Port

From	To	Distance (Km)	Tariff Per Container/Km inUSD			Number of Trips	
			2016	2018	2020	2019	2020
Mombasa	Nairobi	481	1.78	1.62	1.77	8	6
Mombasa	Kampala	1,169	1.86	1.79	1.88	4	2
Mombasa	Kigali	1,682	2.16	2.23	2.08	2	2
Mombasa	Bujumbura	1,957	2.55	3.07	3.07	1	1
Mombasa	Goma	1,840	3.33	3.13	1	1	1
Mombasa	Juba	1,662	2.86	3.01	2.29	2	2

Source: KTA Data: 2016-2020

2.2.4.2 Port of Dar es Salaam

2.2.4.2.1 Total Cargo Throughput

The data in Table 2-3 shows that, the total cargo throughput at the Port of Dar es Salaam slightly decreased by 1.03% from 16,022,952 Mt in 2019 to 15,857,870 Mt in 2020 as a result of COVID-19 global pandemic. The volume of Transshipment Cargo also decreased by 77.04% during the same period from 86,388.00 Mt in 2019 to 19,837.00 Mt in 2020.

2.2.4.2.2 Ship Turnaround Time

The data in Table 2-3 shows that, Ship turnaround time in terms of days increased by 61.11% from 3.6 days in 2019 to 5.8 days in 2020. This increase was mainly attributed to the ship waiting time at Outer Anchorage (OA) and Berth time which affected the overall ship turnaround time.

2.2.4.2.3 Truck Turnaround Time

The data in Table 2-3 shows that Truck turnaround time for the calendar year 2019 at TICTS was on average of 2.14 hours whereas in 2020 it averages of 1.84 hours. This showed that TICTS system was operating efficiently to make sure Truck turnaround time is effectively reduced.

2.2.4.2.4 Dwell Time

The data in Table 2-3 shows that Ship Dwell time decreased by 10.6% from 11.41 days in 2019 to 10.2 days in 2020. This decrease was mainly attributed to ongoing improvements at the port and joint efforts from stakeholders to make the port efficient and productive.

2.2.4.2.5 Transit Time

The data in Table 2-3 showed that there was an increase of 132%, 65.4%, 73.2%, 136% and 134% in transit times to Kigali, Bujumbura, Kampala, Bukavu and Goma respectively from the Port of Dar es Salaam from 2019 to 2020. This tremendous increase of transit time was mainly attributed to the COVID- 19 global pandemic that had forced Central Corridor governments to respond with travel restrictions and bans to minimize the spread of the disease within the local community and from Country to Country.

2.2.4.2.6 Road Transport Rates

Table below indicates the road transport rates (Imports) to various destinations per container during the period 2019 to 2020. As shown below, container transport rates (USD/TEU & FEU) to Kigali and Bujumbura decreased by 3.4% and 3.2% during the period 2019 to 2020. Container transport rates (USD/TEU &FEU) to Kampala increased by 1.5% during the same period. On the other hand, the container transport rates in terms of Cost (USD/Km) for Kigali (3.6%) and Bujumbura (3.2%) decreased whereas that to Kampala increased by 1.1%. the main reason for the decrease in transport rates from 2019 to 2020 was attributed to the decrease in volume to transporters in Tanzania as a result of transporters in other countries purchasing trucks.

Table 2-5: Road Transport Rates Imports Per Container

Destintion	Transport Rates (USD/TEU & FEU) 2019	Transport Rates (USD/TEU & FEU) 2020	Annual Change (2019-2020)	
Kigali	2,900	2,800	-3.4%	
Bujumbura	3,100	3,000	-3.2%	
Kampala	3,250	3,300	1.5%	
Bukavu	4,900	4,900	0.0%	
Goma	4,200			
Destintion	**Distance (Km)**	**Cost (USD/Km) 2019**	**Cost (USD/Km) 2020**	**Annual Change (2019-2020)**
Kigali	1,495	1.94	1.87	-3.6%
Bujumbura	1,640	1.89	1.83	-3.2%
Kampala	1,780	1.83	1.85	1.1%
Bukavu	1,769	2.77	2.77	0.0%
Goma	1,635	2.57	2.63	2.3%

Source: CCTO 2021

2.2.5 Analysis of LAPPSET

The LAPSSET Corridor Program is Eastern Africa's largest and most ambitious infrastructure project bringing together Kenya, Ethiopia and South Sudan. The LAPSSET project not only connects Ethiopia and South Sudan to Kenya but is in the long run aimed at an equatorial land bridge of both road and rail across the African continent, connecting the Indian Ocean at Lamu Port, to the Atlantic Ocean.

2.2.5.1 LAPPSET Corridor Transport and Logistics

This mega project consists of seven key infrastructure projects, which include:

- A new 32 Berth port at Lamu (Kenya);
- Interregional Highways from Lamu to Isiolo, Isiolo to Juba (South Sudan), Isiolo to Addis Ababa (Ethiopia), and Lamu to Garsen (Kenya),
- Crude Oil Pipeline from Lamu to Isiolo, Isiolo to Juba;
- Product Oil Pipeline from Lamu to Isiolo, Isiolo to Addis Ababa;
- Interregional Standard Gauge Railway lines from Lamu to Isiolo, Isiolo to Juba, Isiolo to Addis Ababa, and Nairobi to Isiolo;
- 3 International Airports: one each at Lamu, Isiolo, and Lake Turkana;
- 3 Resort Cities: one each at Lamu, Isiolo and Lake Turkana; and

The figure below shows the key trade and transport routes for LAPPSET Corridor.

Table 2-4: Average Transport Rates (USD) to various destinations from Mombasa Port

Source: KeNHA 2020

The table below shows the summary status if the Highway Components.

Table 2-6: Summary Status of LASSPET Project Highway Components

Highway Component	Length (Km)	Status	Remarks
Lamu Port-Link Road	10	10-Kilometre Dual Carriageway Link Roadfrom the Lamu — Garsen road (A7) junction to the New Lamu Port.	Substantially completed
Lamu – Garissa	257	Works have just commenced	Completion period for the mainLamu-Garissa section is 12 months
Isiolo (Lerata) – Maralal – Baragoi -Lokichar	368	Final designs are ready	Funds are yet to be committedfor construction of this section.
Lokichar - Loichangamatak Road	40	Actual Progress: 9%	Completion Date: December 2022
Loichangamatak - Lodwar Road	50	Actual Progress: 95%	Completion Date: April, 2021
Lodwar – Lokitaung Junction Road	80	Actual Progress: 100%	Completion Date: January2021
Lokitaung Junction – Kalobeiyei RiverRoad	80	Actual Progress: 76%	Completion Date: October 2021
Kalobeiyei River – Nakodok Road	88	Actual Progress: 78%	Completion Date: September 2021
Kainuk Bridge	NA	Actual Progress: 100%	Completion Date: July 2020
Isiolo – Merille (A2)	136	Actual Progress: 100%	Construction completed in 2011
Merille – Marsabit (A2)	121	Actual Progress: 100%	Construction works are substantially complete.
Marsabit–Turbi (A2)	121.5	Actual Progress: 100%	Road is complete.
Turbi – Moyale (A2)	127	Actual Progress: 100%	Construction works are substantially complete

Source: KeNHA 2020

2.3 Ease of Doing Business Reforms

2.3.1 Introduction

The ease of doing business score measures an economy's performance with respect to a measure of regulatory best practice across the entire sample of 41 indicators for 10 Doing Business topics, which include:

- Starting a business
- Dealing with construction permits
- Getting electricity
- Registering property
- Getting credit
- Protecting minority investors
- Paying taxes
- Trading across borders
- Enforcing contracts
- Resolving insolvency

2.3.2 2020 Country Score and Ranking on Trading Across Borders

The Consultant reviewed the Ease of Doing Business score and ease of doing business ranking for the period ended 2020. The review results (summarized below) solely focused on the doing business topic touching on trading across borders which is a transport logistic indicator.

Canada, Poland and Spain have the shortest export time in terms of documentary compliance. In terms of border compliance, Austria, Belgium and Denmark have the shortest time to export.

Concerning cost to export, Hungary, Luxembourg and Norway have the least cost in terms of documentary compliance. France, Netherlands and Portugal have the least cost in terms of border compliance.

Concerning time to import, Republic of Korea, Latvia and New Zealand have the least time in terms of documentary compliance whereas as Estonia, France and Germany have the least time in hours on border compliance.

In terms of cost to import, Iceland, Latvia and United Kingdom have the least cost in terms of documentary compliance whereas Belgium, Denmark and Estonia had the least cost in terms of border compliance.

2.3.3 Doing Business Reforms Touching on Trade Facilitation

The table below details the summary of ease of doing business reforms3 included in the Doing Business Report of 2020. The table highlights reforms implemented by countries, which make it easier to do business.

Table 2-7: Ease of Doing Business Reforms Touching on Trade Facilitation

Country	Doing Business Topic	Description
Argentina	Trading Across Borders	Argentina reduced the time required for export and import documentary compliance by introducing electronic certificates of origin and improving its import licensing system.
Armenia	Paying Taxes	Armenia made paying taxes easier by extending value added tax cash refunds to cases of capital investment.
Armenia	Paying Taxes	Armenia made exporting faster by allowing the online submission of customs declarations.
The Bahamas	Trading Across	The Bahamas made paying taxes easier by enhancing the onlinevalue added tax reporting system and making it more accessible to taxpayers.
Bahrain	Borders	Bahrain made exporting faster by deploying new scanners.
Barbados	Paying Taxes	Barbados made trading across borders easier by streamlining inspections by port authorities and introducing an electronic system for documentary compliance. Barbados made trading across borders more expensive by increasing certificate of origin issuance fees.
Belgium	Paying Taxes	Belgium made paying taxes less costly by reducing the corporate income tax rate, increasing the notional interest deduction rate, and decreasing the rates for social security contributions paid by employers.
Belize	Trading Across Borders	Belize made trading across borders easier by enhancing its risk-based management system.
China	Paying Taxes	China made paying taxes easier by implementing a preferential corporate income tax rate for small enterprises, reducing the value added tax rate for certain industries, and enhancing the electronic filing and payment system. This reform applies to both Beijing and Shanghai.
China	Trading Across Borders	China made exporting and importing easier by implementing advance cargo declaration, upgrading port infrastructure, optimizing

3 Reform making it easier to do business

Source: Doing Business Report (2020)

3 LPS Survey Findings for 2020

3.1 Overview

This section will provide the survey findings of the 2020 Logistic Performance Survey. The findings will focus on Road Transport Operators, Maritime Transport Operators, Air Freight Transport Operators, Clearing and Forwarding Agents, Cargo Owners and Government Agencies.

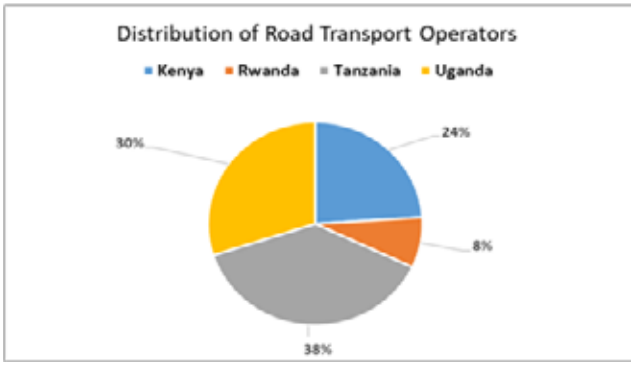
3.2 Road Transport Operators

3.2.1 Back Ground Information

3.2.1.1 Transport Operators Distribution by Country

The figure below shows the distribution of the transport operators by country. The LPS survey managed to survey 37 respondents out of which 38% were from Tanzania, 30% from Uganda, 24% from Kenya and 8% from Rwanda.

Figure 3-1: Distribution of Road Transport Operators by Country



Source: Consultant 2021

Data derived from the analysis showed that most of the companies interviewed transported containerized cargo (51%), loose cargo (46%) and medical/healthcare equipment's (3%). In terms of location of headquarters of the interviewed companies, most companies were located in Kampala (32%) followed by Dar es Salaam (30%), Nairobi (22%), Kigali (8%), Zanzibar (5%) and Arusha (3%).

3.2.1.2 Most Common Pick-Up and Drop Off Points

The table below shows the most common pick up and drop off points for the different transporters from each Country. The most common pick up and drop off points for each country were as follows:

- Kenya: Mombasa-Kampala
- Rwanda: Dar es Salaam-Kigali
- Tanzania: Kampala-Dar es Salaam
- Uganda: Mombasa-Kampala

Table 3-1: Most Common Loading and Off-Loading Matrix

Country	Most Common Pick Up Point	Most Common Drop Off Point									Grand Total	Percentage
		Bujumbura	Dar es Salaam	Dodoma	Eldoret	Entebbe	Jinja	Kampala	Kigali	Mombasa		
Kenya	Bujumbura		1								1	3%
	Mombasa					1	1	5			7	19%
	Nairobi				1						1	3%
Rwanda	Dar esSalaam								3		3	8%
Tanzania	Bujumbura		1								1	3%
	Dar esSalaam	1	1			1		1	1	1	6	17%
	Kampala		3								3	8%
	Kigali		1								1	3%
	Nairobi		1	1							2	6%
Uganda	Entebbe							1			1	3%
	Kampala		1							1	2	6%
	Mombasa							8			8	22%
Grand Total		**1**	**9**	**1**	**1**	**2**	**1**	**15**	**4**	**2**	**36**	**100%**
Percentage		**3%**	**25%**	**3%**	**3%**	**6%**	**3%**	**42%**	**11%**	**6%**	**100%**	

Source: Consultant 2021

3.2.2 Cost Indicators

The table below summarizes average transport cost in USD per metric ton, assuming a payload of 24 MT per 40-foot container. The most expensive route to transport cargo was Kampala-Mombasa (USD 2.5 per Ton) followed by Mombasa-Kampala (USD 2.17 per ton), Dar es Salaam-Kampala (USD 1.17 per ton) and Bujumbura-Dar es Salaam (USD 1.02 per ton).

The top three least expensive international routes were Dar es Salaam-Bujumbura (USD 0.02 per ton) followed by Dar es Salaam-Kigali (USD 0.17 per ton) and Nairobi-Dodoma (USD 0.1 per ton).

The main drivers of freight cost identified from the survey were Fuel prices, the number of NTBs along the routes, timeliness of clearance at the Port and turnaround time.

Table 3-2: Road Freight Transport costs within key/major towns of EAC charges

Average Cost USD/Ton										
Origin Location	Destination Towns									Average Cost
	Bujumbura	Dar es Salaam	Dodoma	Eldoret	Entebbe	Jinja	Kampala	Kigali	Mombasa	
Bujumbura	0.00	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.11**
Dar es Salaam	0.02	0.00	0.00	0.00	0.17	0.00	1.17	0.17	1.00	**0.28**
Entebbe	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	**0.00**
Kampala	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	2.50	**0.30**
Kigali	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.03**
Mombasa	0.00	0.00	0.00	0.00	1.70	1.70	2.17	0.00	0.00	**0.62**
Nairobi	0.00	0.15	0.10	0.10	0.00	0.00	0.00	0.00	0.00	**0.04**
Average Cost	**0.00**	**0.23**	**0.01**	**0.01**	**0.27**	**0.24**	**0.48**	**0.02**	**0.50**	**0.20**

Source: Consultant 2021

3.2.3 Time Indicators

3.2.3.1 Truck Dwell Time

The table below illustrates the Truck Dwell Time at the principle loading and off-loading points. Mombasa (14.5 hrs.), Dar es Salaam (13.9 hrs.) and Bujumbura (12.0 hrs.) had the highest loading point dwell time. Similarly, Kigali (18.5 hrs.), Kampala (16.2 hrs.) and Bujumbura had the highest dwell times at the principle off-loading points. The table below illustrates the dwell time in hours observed at the principle loading and off-loading points.

Table 3-3: Truck Dwell Time in Hours at Principal Loading and Off-Loading Points

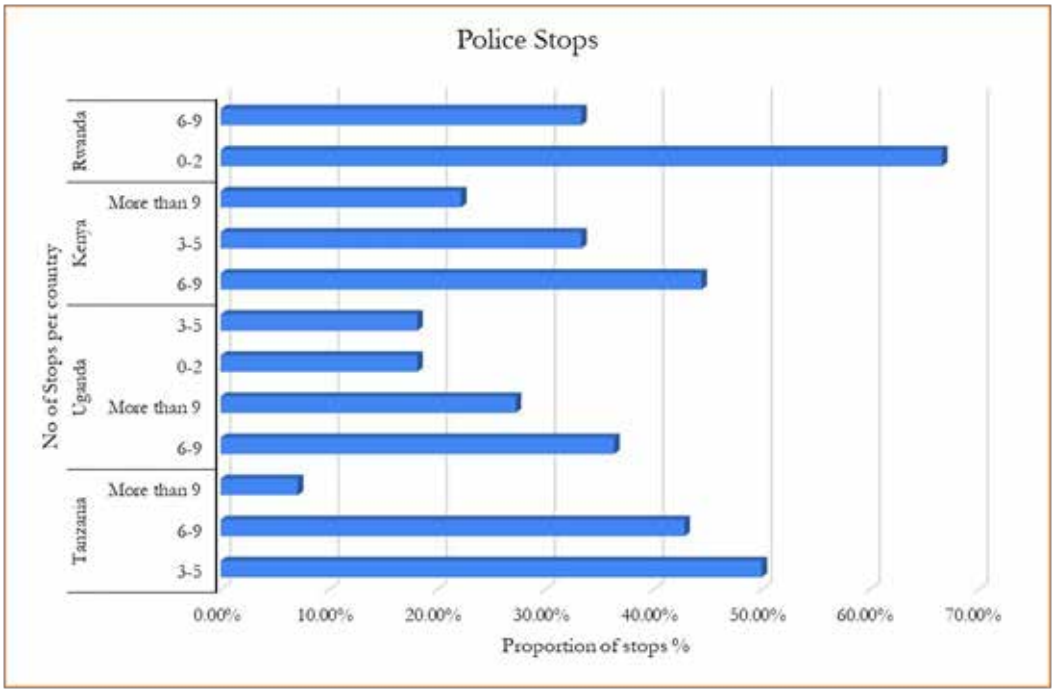
Location	Truck Dwell Time (Hrs.)	
	Loading Point	Off Loading Point
Bujumbura	12.0	12.0
Dar es Salaam	13.9	4.7
Entebbe	2.0	5.0
Kampala	4.8	16.2
Kigali	1.0	18.5
Mombasa	14.5	8.5
Nairobi	3.5	
Dodoma		10
Eldoret		20
Jinja		40

Source: Consultant 2021

3.2.3.2 Truck Stops

The figure below shows the number of police stops made by trucks per country. It was identified that most of the police stops in Uganda and Kenya ranged between 6-9. Most of the police stops in Tanzania ranged from 3-5. Rwanda had the least police stops ranging between 0-2.

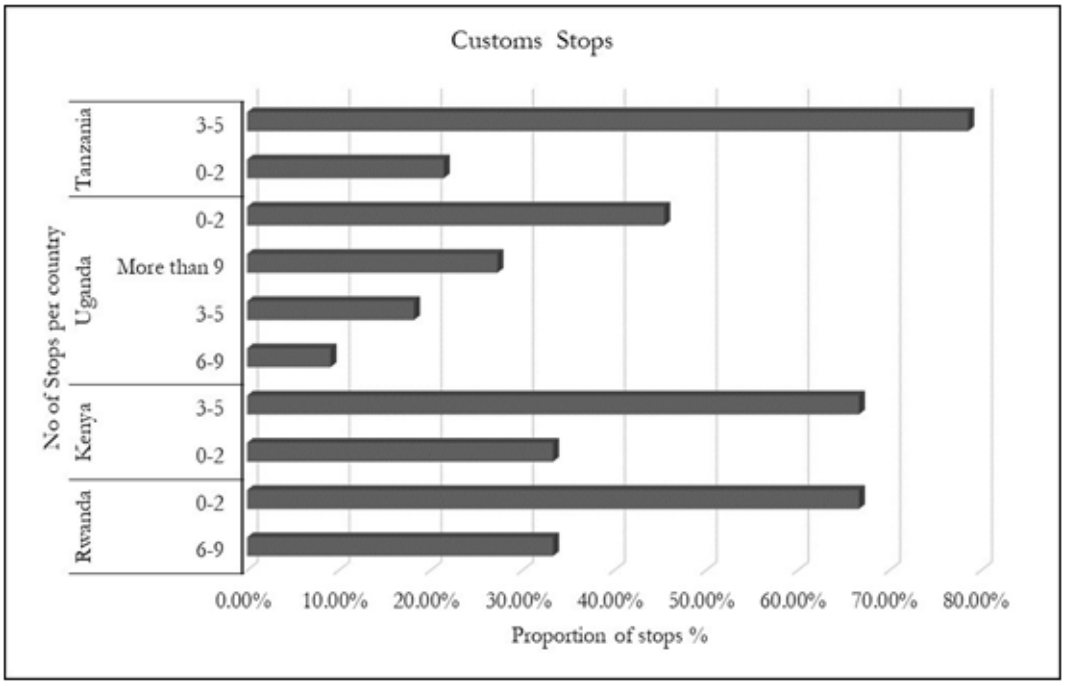
Figure 3-2: Number of Police stops



Source: Consultant 2021

It was identified that Customs stops in Tanzania and Kenya ranged between 3-5. Uganda and Rwanda had the least customs stops of 0-2 as identified from the survey results shown in the figure below. The reason for the low numbers of truck stops in Rwanda was because all transit trucks were being escorted from one border to another.

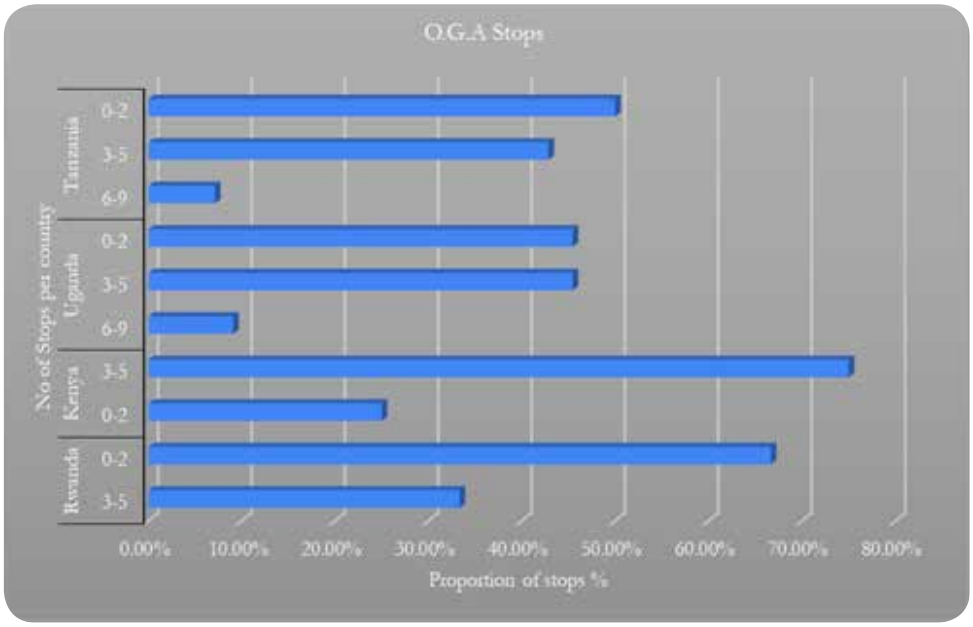
Figure 3-3: Number of Customs stops



Source: Consultant 2021

In terms of other government agencies stops, Kenya had most the 3-5 stops. The most stops for Uganda, Tanzania and Rwanda was 0-2 as identified from the survey results shown in the figure below.

Figure 3-4: Number of Other Government Agencies stops

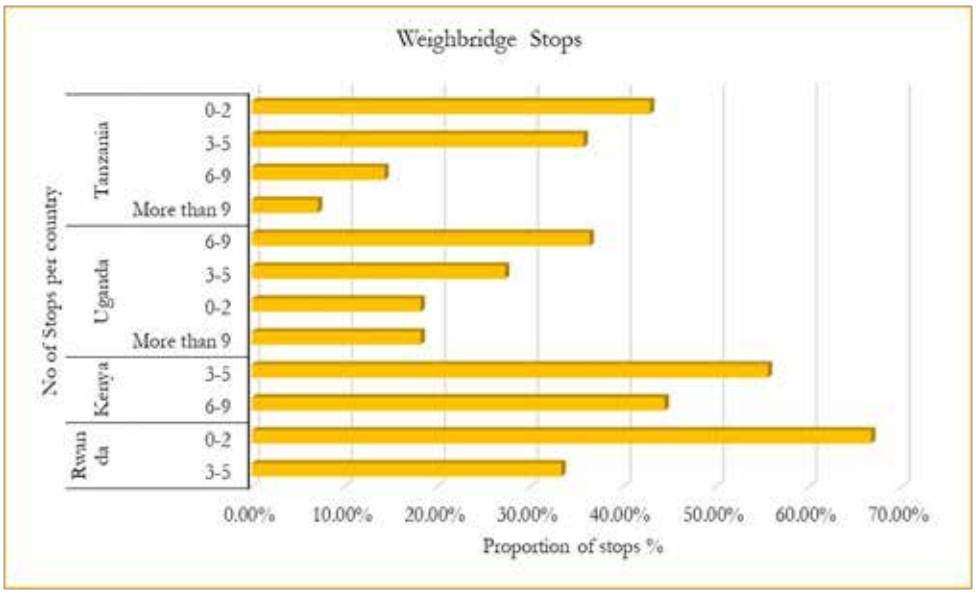


Source: Consultant 2021

Other Government Agencies include the Transport Safety Authority Stops, Health Stops, Local Authority/ Government Stops and Border Stops among others.

In terms of weighbridge stops, it was identified that most of the weighbridge stops in Uganda ranged from 6-9. The most weighbridge stop in Kenya ranged from 3-5. Rwanda and Tanzania had the least weighbridge stops ranging from 0-2 as identified survey results shown in the figure below.

Figure 3-5: Number of Weigh Bridge Stops



Source: Consultant 2021

The number of official weighbridges in Kenya and Uganda are approximately 5 and 4 respectively. The weighbridges in Kenya include Mariakani, Athi River, Gilgil, Webuye and Busia all located along the Northern Corridor. The Weighbridges in Uganda include Mbarara, Magamaga, Lukaya, and Mbale all located along the Northern Corridor. The central corridor and specifically in Tanzania has approximately 9 official weighbridges which include Vigwaza, Mikese, Kihonda/Dakawa, Nala, Njuki, Mwendakulima, Nyakahura, Kyamyorwa and Mutukula.

3.2.3.3 Truck Turn Around Time at Ports of Entry

The study sought to investigate the impact of the pandemic on truck turnaround time in EAC states. Considering all the countries, 59% of the respondents stated that there was an increase in truck turnaround time from 2019 to 2020 with Kenya and Tanzania reporting the highest increases. Most of the respondents from Rwanda reported that there was a decrease in truck turnaround time during the period under review.

Table 3-4: Change in Truck Turn Around Time (2019-2020)

Change Scenario	Country				
	Kenya	Rwanda	Tanzania	Uganda	Overall
Increased	78%	33%	71%	36%	59%
Decrease	11%	67%	7%	36%	22%
No change	11%	0%	21%	27%	19%

Source: Consultant 2021

The increase in truck turnaround time in the region was mainly attributed to the stringent containment measures such as curfew, COVID-19 tests and increase in queues at the border posts.

3.2.4 Logistic Complexity of Road Transport Operators

Table 3-5 below illustrates the road transport logistic complexity results from the 2020 LPS.

3.2.4.1 Kenya Road Transport Logistic Complexity

In order to export from Kenya, most of the respondents (56%) stated that one had to have a minimum of 5-6 documents, 5-6 signatures (50%), to interact with 2-4 intervening agencies (44%) and to undergo 5-6 inspections (44%). In order to import to Kenya, most of the respondents (78%) stated that one had to have a minimum of 5-6 documents, 7-10 signatures (50%), to interact with 2-4 intervening agencies (56%) and to undergo 7-10 inspections (44%) The study also established that when carrying out trade activities, 5-6 payment processes had to be made (33%), 2-4 licenses had to be renewed (56%) and 2 insurances had to be issued (56%).

3.2.4.2 Uganda Road Transport Logistic Complexity

Most of the respondents in Uganda stated that they have to prepare 5-6 documents (55%), source for 2-4 signatures (36%), interact with 2-4 intervening government agencies (36%) and have to undergo up to 2 inspections (45%) when exporting cargo.

Most of the respondents in Uganda stated that they have to prepare 5-6 documents (45%), source for 5-6 signatures (36%), interact with 2-4 intervening government agencies (71%) and have to undergo up to 2-4 inspections (50%) when importing cargo.

The study also established that when carrying out trade activities, most of the respondents stated that 0-2 payment processes have to be made (64%), 0-2 licenses have to be renewed (70%), 2 insurance certificates have to be issued (70%) and the COVID-19 test certificate has to be shown 2-4 times (36%).

3.2.4.3 Tanzania Road Transport Logistic Complexity

Most of the respondents in Tanzania stated that they have to prepare 5-6 documents (86%), source for 2-4 signatures (50%), interact with 2-4 intervening government agencies (36%) and have to undergo 2-4 inspections (43%) when exporting cargo.

When importing cargo, most of the respondents in Tanzania stated that they have to prepare 2-4 documents (57%), source for 7-10 signatures (29%), interact with 2-4 intervening government agencies (79%) and have to undergo up to 2-4 inspections (43%).

The study also established that when carrying out trade activities, most of the respondents stated that 0-2 payment processes have to be made (64%), 0-2 licenses have to be renewed (70%), 2 insurance certificates have to be issued (70%) and the COVID-19 test certificate has to be shown 2-4 times (36%).

The study also established that when carrying out trade activities, most of the respondents stated that 0-2 payment processes have to be made (50%), 7-10 licenses have to be renewed (43%), 2-4 insurance certificates have to be issued (43%) and the COVID-19 test certificate has to be shown 0-2 times (64%).

3.2.4.4 Rwanda Road Transport Logistics Complexity

Most of the respondents in Rwanda stated that they have to prepare 2-4 documents (100%), source for 2-4 signatures (67%), interact with 0-2 intervening government agencies (67%) and have to undergo 2-4 inspections (67%) when exporting cargo.

When importing cargo, most of the respondents in Rwanda stated that, they have to prepare 5-6 documents (67%), source for 5-6 signatures (67%), interact with 0-2 intervening government agencies (67%) and have to undergo up to 2-4 inspections (67%).

The study also established that when carrying out trade activities, most of the respondents stated that 0-2 payment processes have to be made (64%), 0-2 licenses have to be renewed (70%), 2 insurance certificates have to be issued (70%) and the COVID-19 test certificate has to be shown 2-4 times (36%).

The study also established that when carrying out trade activities, most of the respondents stated that 0-2 payment processes have to be made (67%), 0-2 licenses have to be renewed (67%), 0-2 insurance certificates have to be issued (67%) and the COVID-19 test certificate has to be shown 0-2 times (67%).

Table 3-5: Road Transport Logistic Complexity Results by Country

Description	Details	Kenya		Uganda		Tanzania		Rwanda	
		Ex-port	Im-port	Export	Im-port	Ex-port	Im-port	Ex-port	Im-port
Documents needed to Export/Im-port	0-2			18%	0%	0%	7%	0%	0%
	2-4	33%	11%	55%	45%	7%	57%	100%	33%
	5-6	56%	78%	18%	45%	86%	21%	0%	67%
	7-10	11%	11%	9%	9%	7%	14%	0%	0%
	Over 10			0%	0%	0%	0%	0%	0%
Number of Signatures needed	0-2			18%	18%	14%	21%	0%	0%
	2-4	13%	11%	36%	27%	50%	21%	67%	33%
	5-6	50%	22%	18%	36%	14%	29%	33%	67%
	7-10	38%	67%	27%	18%	14%	29%	0%	0%
	Over 10			0%	0%	7%	0%	0%	0%
Number of Agencies	0-2			0%	18%	7%	0%	67%	67%
	2-4	44%	56%	60%	45%	71%	79%	0%	0%
Intervening	5-6	33%	33%	40%	27%	14%	21%	33%	33%
	7-10	22%	11%	0%	9%	7%	0%	0%	0%
	Over 10			0%	0%	0%	0%	0%	0%
Number of Inspections Required	0-2	11%	11%	45%	40%	29%	14%	33%	33%
	2-4	11%	11%	18%	50%	43%	43%	67%	67%
	5-6	44%	33%	27%	10%	21%	36%	0%	0%
	7-10	33%	44%	9%	0%	7%	7%	0%	0%
	Over 10			0%	0%	0%	0%	0%	0%
Payment Pro-cess/Steps	0-2	22%		64%		50%		67%	
	2-4	22%		18%		43%		33%	
	5-6	33%		9%		7%		0%	
	7-10	22%		9%		0%		0%	
	Over 10			0%		0%		0%	
No of License Renewal	0-2	33%		70%		29%		67%	
	2-4	56%		20%		21%		33%	
	5-6	11%		10%		7%		0%	
	7-10			0%		43%		0%	
	Over 10			0%		0%		0%	
Issuance of Insurance	0-2	56%		70%		43%		67%	
	2-4	22%		20%		43%		33%	
	5-6	11%		10%		14%		0%	
	7-10	11%		0%		0%		0%	
	Over 10			0%		0%		0%	
COVID-19 CertificateRe-quest	0-2	33%		36%		64%		67%	
	2-4	56%		36%		21%		33%	
	5-6			9%		14%		0%	
	7-10	11%		18%		0%		0%	
	Over 10			0%		0%		0%	

Source: Consultant 2021

3.2.4.5 Comparative Analysis of 2019 to 2020 Road Transport Logistics Complexity for Exports and Imports

The study sought to investigate the impact of the pandemic on road transport logistic complexity from 2019 to 2020 in EAC member states. According to most of the respondents, in terms of exports, logistic complexity increased in Kenya (44%), decreased in Rwanda (100%), did not change in Tanzania (54%) and increased in Uganda (45%). In terms of imports, logistic complexity increased in Kenya (44%), decreased in Rwanda (100%), did not change in Tanzania (58%) and decreased in Uganda (45%). The table below shows the change in logistic complexity for road transporters during the period 2019 to 2020.

Table 3-6: Change in Logistic Complexity for Road Transporters during the period 2019 to2020

Country	Exports			Imports		
	Increased	Decreased	No change	Increased	Decreased	No change
Kenya	44%	22%	33%	44%	22%	33%
Rwanda	0%	100%	0%	0%	100%	0%
Tanzania	38%	8%	54%	33%	8%	58%
Uganda	45%	45%	9%	36%	45%	18%

Source: LPS 2021

3.2.5 Perception of Road Transport Logistics

3.2.5.1 Rating of Factors that influence the decision of Transporting Freight using Road Transport.

Logistic efficiency is key to any regional trade block. From the survey 77% of traders in the region use road transport for movement of goods and freight. Cross border trade has been a major driver of region's economic growth and receives increasing emphasis in regional and national development plans. Shippers demand high performing corridors that reduce cost and time spent on transport and logistics and increase the reliability and predictability of the corridors.

Hence trade facilitation is key to continued trade growth. However, recent studies conducted by World Bank indicates that 75% of the delays in the movements of goods are from trade facilitation and that 25% is attributed to infrastructure. In this regard intra-regional trade, is often hindered by long procedures involved in passing through two sets of identical controls on each side of the border. Lengthy transit times increase the cost of trade and make African businesses less competitive.

In the period of survey, traders from the region had different views on making decision to use road transport analyzed in detail by country. The results showed some key factors were considered as important determinants when choosing to transport freight using road transport. In terms of value of shipment, Uganda considered it to a very great extent, Kenya and Tanzania considered it to great extent and Rwanda was split between moderate and low extent.

In terms of time schedules, this was considered largely in Uganda, and Tanzania, to a moderate extent in Kenya with Rwanda split between moderate and low extent.

Freight cost was considered largely in Tanzania. In Kenya, Uganda and Rwanda, the transporters were split between great and moderate extent; very great and great extent; and moderate and low extent.
Reliability of the carrier was considered largely in Rwanda whereas in Kenya, Uganda and Tanzania, it was considered to a great extent.

Sensitivity of the freight was considered to a very great extent in Uganda and Tanzania whereas in Kenya it was considered to a great extent. In Rwanda, this was considered to a great extent and to a low extent as it was split in between the two.

Security and safety of the freight was considered to a great extent in Tanzania whereas in Kenya it was considered to a moderate extent. In Uganda and Rwanda, the decisions were split between to a very great and great extent and to great and low extent respectively.

Road condition was considered to a great extent in Uganda and Tanzania whereas in Kenya it was considered to a moderate extent. Rwanda's decision was split into half between to a moderate and to a low extent. The table below illustrates the rating of factors that influence the decision of transporting freight using Road Transport.

Table 3-7: Rating of Factors that influence the decision of Transporting Freight using Road Transport.

Details	Rating of Value of Shipment			
	Kenya	Uganda	Tanzania	Rwanda
Very Great Extent	0%	40%	15%	0%
Great Extent	56%	30%	77%	0%
Moderate Extent	33%	20%	8%	50%
Low Extent	11%	10%	0%	50%
Details	**Rating of Time Schedules**			
	Kenya	**Uganda**	**Tanzania**	**Rwanda**
Very Great Extent	0%	45%	23%	0%
Great Extent	22%	18%	54%	0%
Moderate Extent	67%	27%	23%	50%
Low Extent	11%	9%	0%	50%
Details	**Rating of Freight Cost**			
	Kenya	**Uganda**	**Tanzania**	**Rwanda**
Very Great Extent	11%	45%	38%	0%
Great Extent	44%	45%	62%	0%
Moderate Extent	44%	9%	0%	50%
Low Extent	0%	0%	0%	50%
Details	**Rating on Reliability of Carrier**			
	Kenya	**Uganda**	**Tanzania**	**Rwanda**
Very Great Extent	11%	36%	38%	100%
Great Extent	56%	36%	54%	0%
Moderate Extent	33%	18%	8%	0%
Low Extent	0%	9%	0%	0%
Details	**Rating on Sensitivity of the Cargo**			
	Kenya	**Uganda**	**Tanzania**	**Rwanda**
Very Great Extent	22%	45%	46%	0%
Great Extent	56%	27%	23%	50%
Moderate Extent	22%	18%	31%	0%
Details	**Rating of Value of Shipment**			
	Kenya	**Uganda**	**Tanzania**	**Rwanda**
Low Extent	0%	9%	0%	50%
Details	**Security and Safety**			
	Kenya	**Uganda**	**Tanzania**	**Rwanda**
Very Great Extent	0%	36%	23%	0%
Great Extent	33%	36%	77%	50%
Moderate Extent	67%	9%	0%	0%
Low Extent	0%	18%	0%	50%
Details	**Rating of Road Condition**			
	Kenya	**Uganda**	**Tanzania**	**Rwanda**
Very Great Extent	0%	20%	0%	0%
Great Extent	0%	40%	77%	0%
Moderate Extent	100%	20%	23%	50%
Low Extent	0%	20%	0%	50%

Source: LPS 2021

Perception on Government agencies performances in ease of doing business in East Africa across the traders reveal slight improvement in government commitments and plans to reduce the cost and time in cargo movement. The table below shows the respective government agencies percentage score in improving the logistic environment.

Table 3-8: Government Agency Percentage Score in Improving Logistic Environment

Country	Agency	Automation of Proce-dures	Reduced Clearing Time	Improve ment of bor-der facilities	Port/ Stati on Manage-ment	Infrastruc-ture Ex-pansion
Kenya	Airports/Civil Aviation	13%	3%	-	7%	9%
	Rail	7%	11%	-1%	10%	6%
	Road	15%	17%	45%	-	50%
	Transport Policy Holders(perception)	23%	20%	39%	33%	35%
Rwanda	Transport Policy Holders	2%	15%	7%	-	23%
Tanzania	Airports/Civil Aviation	23%	11%	9%	2%	3%
	Ports	19%	22%	-	14%	12%
	Rail	4%	2%	-	12%	9%
	Revenue Authority	45%	23%	31%	-	17%
	Road	12%	-	1%	-	14%
	Transport Policy Holders	8%	7%	4%	2%	17%
Uganda	Airports/Civil Aviation	11%	6%	17%	7%	5%
	Rail	1%	3%	2%	3%	3%
	Revenue Authority	4%	7%	1%	3%	3%
	Road	11%	2%	23%	-	22%
	Transport Policy Holders	9%	3%	3%	7%	13%

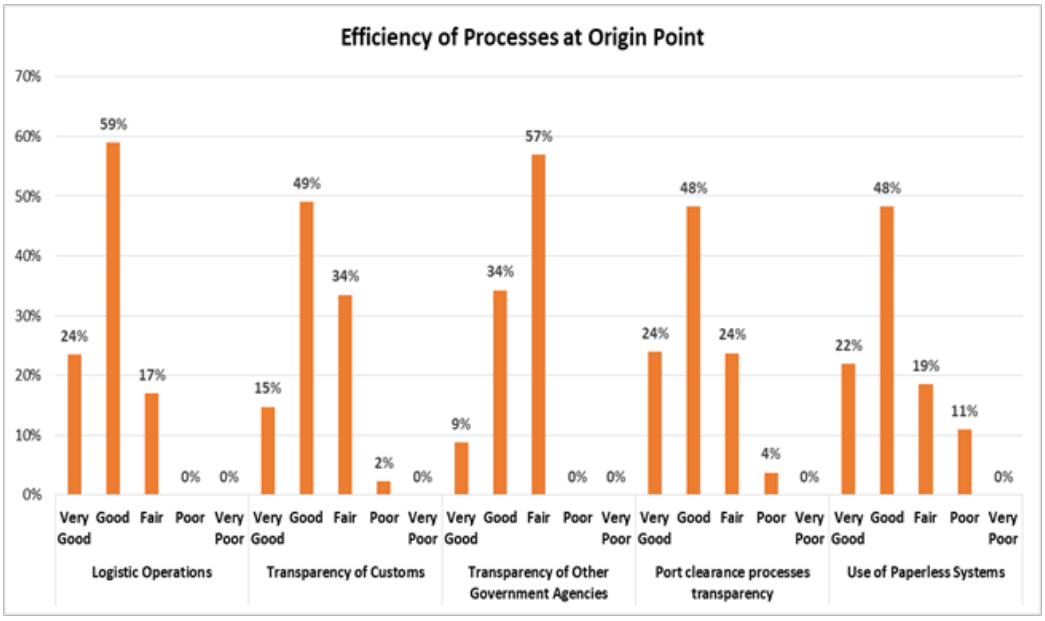
Source: LPS 2021

All the agencies under the listed service sectors improved in their service delivery and logistic services environment. Infrastructure expansion recorded positive growth as well as the automation of services.

3.2.5.2 Efficiency processes at Truck Origin and Destination Ports

The study established that a number of factors play a critical role in the efficiency process of road transport logistic services at origin and destination points. Some of the factors investigated included the logistic operations, transparency of customs, transparency of other government agencies, port clearance processes transparency and use of paperless systems. The figure below illustrates the survey results obtained for the efficiency of processes at the freight origin port and freight destination ports.

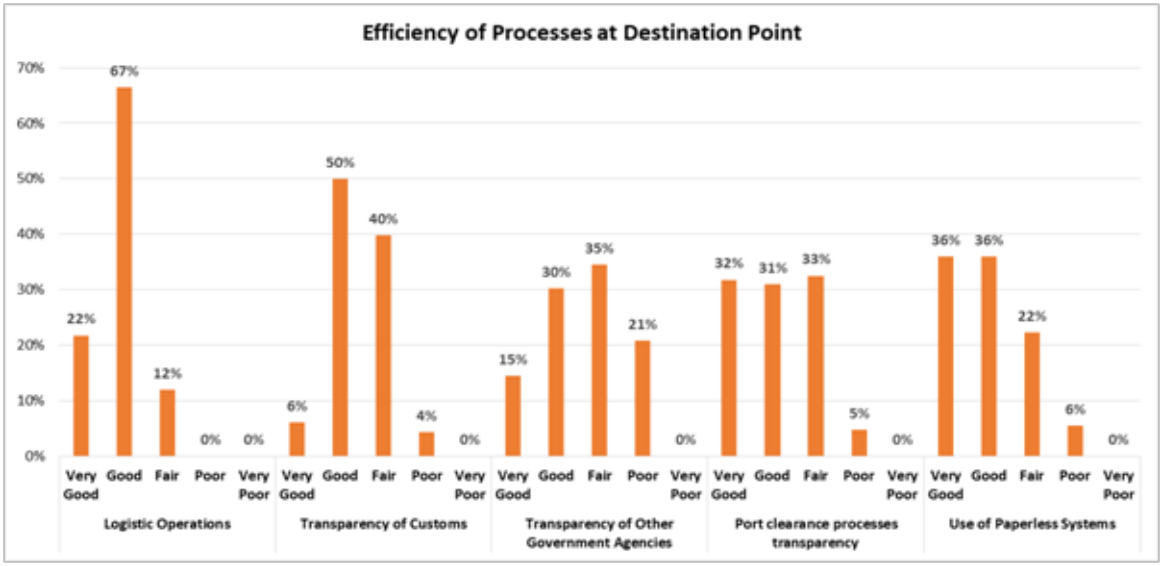
Figure 3-6: Efficiency of Processes at Origin Point



Source: LPS 2021

As shown in the figure above, logistic operations, transparency of customs, port Clearance processes transparency and use of paperless systems at origin points was ranked as good, which were above average. Transparency of other government agencies was ranked as fair, which was average.

Figure 3-7: Efficiency of Processes at Destination Point



Source: LPS 2021

As shown in the figure above, logistic operations and transparency of customs was ranked as good. Transparency of other government agencies and port clearance transparency were ranked as fair at the destination points. Use of paperless system was ranked as very good at the destination points, which showed that most of the countries had moved online systems.

3.2.6 Impact of COVID-19 on Road Transport Operators

3.2.6.1 Impact of COVID-19 on Road Transport and Logistic Businesses in East Africa

The study established that the COVID-19 Pandemic significantly affected approximately 95% of the transport and logistics businesses in East Africa. Only a paltry 5% indicated that they were not affected by the pandemic since onset in March 2020. Most countries reported that they were affected 100% by the pandemic save for Kenya where the impact was 78%. The table below shows the Impact of COVID-19 Pandemic on road transport and logistics businesses in East Africa.

Table 3-9: Impact of COVID-19 Pandemic on Road Transport and Logistics Businesses inEast Africa.

Country	Impact of COVID-19	
	No	Yes
Kenya	22%	78%
Rwanda	0%	100%
Tanzania	0%	100%
Uganda	0%	100%
Overall	**5%**	**95%**

Source: LPS 2021

3.2.6.2 Changes Made by Business to Mitigate the Impact of COVID-19 Pandemic

Most of the companies (97%) indicated that they had made changes to businesses so as to mitigate the effects of COVID-19 pandemic as shown in the table below.

Table 3-10: Changes made to Road Transport Businesses to Mitigate Impact of COVID-19 Pandemic

Country	Changes to Business due to Impact of COVID-19	
	No	Yes
Kenya	11%	89%
Rwanda	0%	100%
Tanzania	0%	100%
Uganda	0%	100%
Overall	**3%**	**97%**

Source: LPS 2021

Some of the changes, which were made by businesses to mitigate the pandemic included: downscaling operations, investment in ICT/Automation, hiring more laborers, working from home, reducing employees and working in shifts among others.

3.2.6.3 Operational Challenges faced by Road Transport Operators in East Africa due to COVID-19 Pandemic

In terms of challenges as a result of COVID-19 pandemic, several operational challenges were identified in the different EAC member states as shown in the figure below. These challenges were mainly experienced at Ports and Border Points.

- In Uganda, 45% of the respondents identified delays leading to increased turnaround time at the port followed by an increase in new clearance procedures (18%), increase in quarantine costs (18%), emergence of new technology requirements (9%) and an increase in COVID-19 tests (9%).
- In Tanzania, 50% of the respondents identified delays leading to increased turnaround time at the port followed by an increase in new clearance procedures (7%) and an increase in transshipments costs & demurrage both at 7%.
- In Rwanda, the respondents identified an increase in transshipment costs, an increase in quarantine costs and demurrages, which all tied at 33% each.
- In Kenya, 63% of the respondents identified delays leading to increased turnaround time followed by an increase in new clearance procedures, increase in COVID-19 tests and demurrages all ranking at 13%.

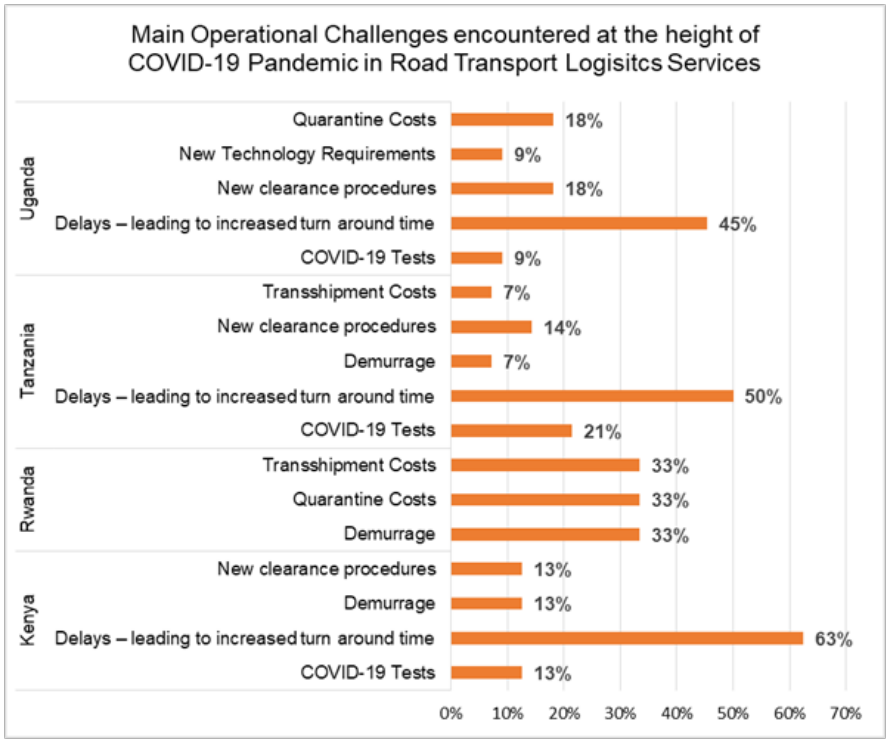


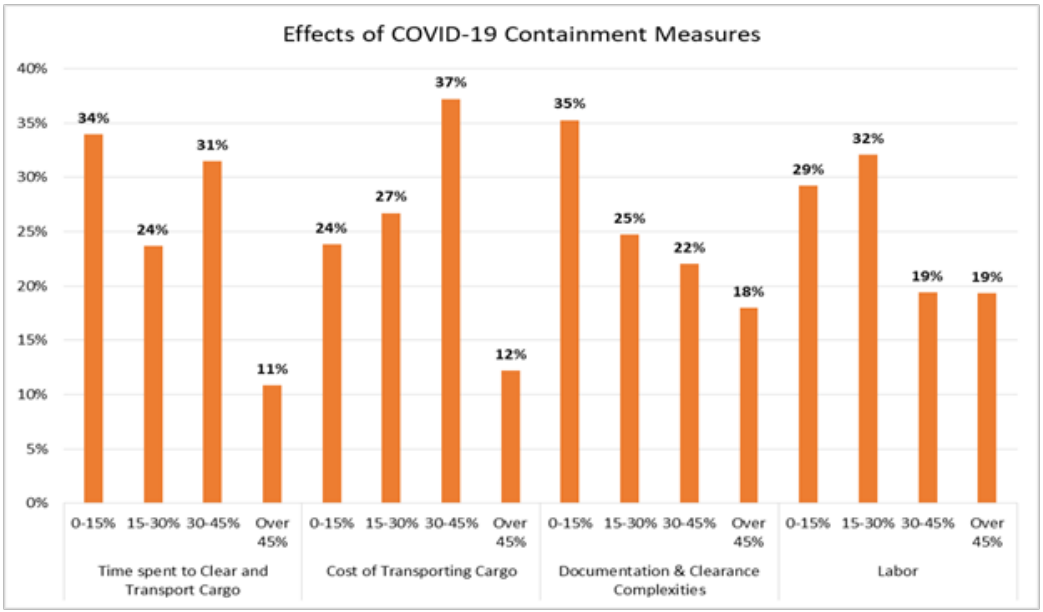
Figure 3-5: Main Operational Challenges encountered at the height of COVID-19 Pandemic while undertaking Road Transport Services

Source: LPS 2021

3.2.6.4 Effects of COVID-19 Containment Measures on Road Transport Operators

COVID-19 containment measures had effects on Time spent to Clear and Transport Cargo, Cost of Transporting Cargo, Documentation & Clearance Complexities and Labor. On average, 34% of the road transport operators in East Africa stated that time spent to clear and transport cargo had increased by 15%. About 37% of the respondents estimated that transport costs had increased significantly by 30%-45%. Approximately 35% of the respondents estimated that documentation and clearance complexities had increased marginally by 15%. About 32% of the respondents estimated that labour had increased marginally by 15%-30%. The figure below gives the details of the study findings on effects of COVID-19 containment measures on road transport logistic operators.

Figure 3-8: Effects of COVID-19 Containment Measures on Rod Transport Operators in EAC



Source: LPS 2021

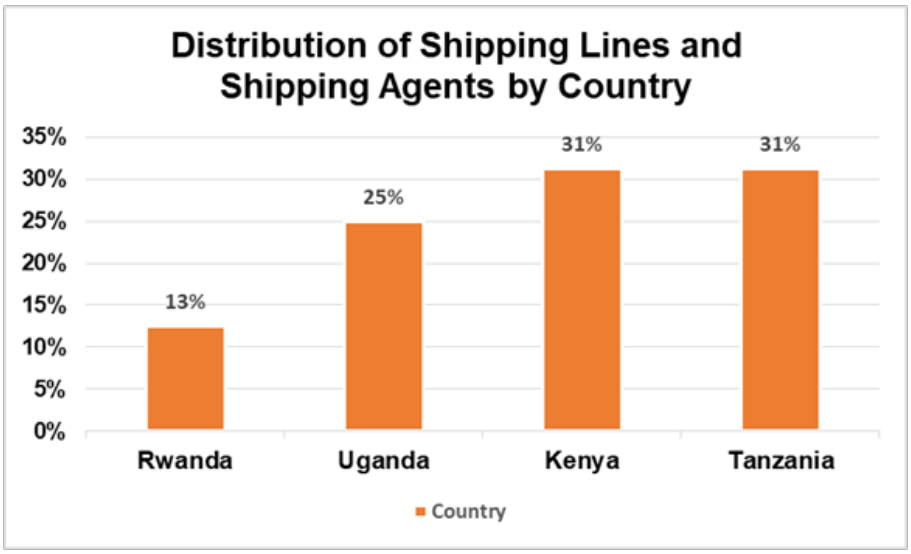
3.3 Maritime Transport

3.3.1 Background Information

3.3.1.1 Shipping Lines and Shipping Agents Distribution by Country

The figure below shows the distribution of the shippers by country. The LPS survey managed to survey a total of 16 respondents out of which 13% (2) were from Rwanda, 25% (4) from Uganda and 31% (5) each from Kenya and Rwanda.

Figure 3-9: Distribution of Shippers and Shipping Agents by Country



Source: LPS 2021

Most of the companies interviewed stated that they offer the following services: international forwarding, ocean freight, lake freight, warehousing, depot and container terminal, customs clearance, distribution, packing and removals, project logistics, Special Operations, warehousing and goods sourcing.

3.3.1.2 Principal Location of Cargo Loading and Off-Loading Points

The table below shows the principal loading and destination ports for the shipping lines by country. China emerged as the principal loading port for Kenya, Rwanda and Tanzania. Uganda's principal lading ports were equally distributed between China, UAE and Oman. Mombasa was the main destination port for Kenya and Uganda. Dar es Salaam port was the main destination port for Rwanda and Tanzania. A paltry 20% of the shippers in Kenya stated Lamu as their destination port.

Table 3-11: Principal Loading and Destination Ports

Country	Principal Loading Point (Country)	Principal Destination Port				Total	Percentage
		Dar esSalaam	Lamu	Mombasa	SalalaOrman		
Kenya	USA			1		1	20%
	China		1	3		4	80%
	Percentage	**0%**	**20%**	**80%**	**0%**		
Rwanda	China	2				2	100%
	Percentage	**100%**					
Tanzania	China	2				2	50%
	Tanzania				1	1	25%
	Far East & MiddleEast	1				1	25%
	Percentage	**75%**	**0%**	**0%**	**25%**		
Uganda	China			1		1	25%
	UAE			1		1	25%
	Oman			1		1	25%
	Percentage			**100%**			

Source: LPS 2021

The respondents provided various reasons for using the above stated routes, which included but were not limited to the following: availability of cargo volumes, ease of connectivity, and availability of cargo handling services at the ports among others.

3.3.2 Cost Indicators

3.3.2.1 Standard Importation Cost to East Africa

The discussions with the shipping line agents enabled the study team compute the typical average cost (freight charges) for importing a standard 20-foot container from the key loading ports in the world to East Africa through Mombasa Port and Dar es Salaam Port. The results are presented in the figure below.

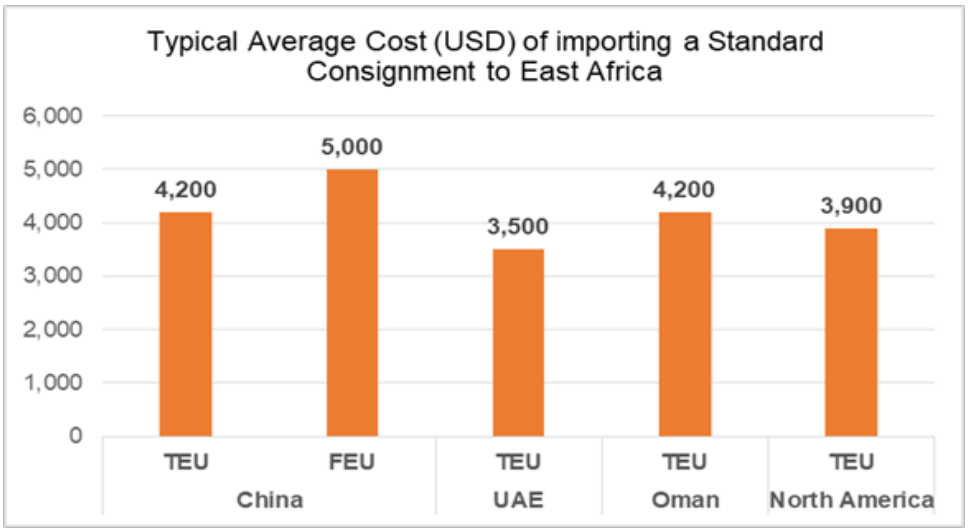


Figure 3-10: Typical Average Cost of importing a Standard Consignment from East Africa.

Source: LPS 2021

Maritime freight rates for imports to East Africa averaged USD 4,200 from China, USD 3,500 from UAE, and USD 4,200 from Oman and USD 3,900 from North America for a standard TEU. For FEU, the maritime freight rates from China to East Africa averaged USD 5,000. The main factors that were identified to determine freight rates included position within shipping networks, operating costs and market rates.

3.3.2.2 Comparative Analysis of 2019 to 2020

Maritime Freight Rates for Outbound and Inbound Cargo

The study team collected information on the impact of COVID-19 pandemic on maritime freight rates in EAC states as shown in the table below. Taking all countries into account, 63% reported that maritime freight rates increased by 20%-30% during the period 2019 to 219 for outbound cargo. During the same period, 31% of the respondents reported that maritime freight rates for inbound cargo increased by 30%-40%.

Table 3-12: Change in Maritime Freight Rates during the period 2019-2020

Flow Direction	Country	Percentage change in the Shipping Freight Rates in 2019 and 2020				
		1 =10% - 20%	2 = 20% - 30%	3 =30 % - 40%	5 = No change	
Outbound Cargo	Kenya	0%	100%	0%	0%	
	Rwanda	50%	0%	50%	0%	
	Tanzania	0%	80%	0%	20%	
	Uganda	25%	25%	50%	0%	
	Overall	**13%**	**63%**	**19%**	**6%**	
Flow Direction	**Country**	**Percentage change in the Shipping Freight Rates in 2019 and 2020**				
		10% - 20%	**20% - 30%**	**30 % - 40%**	**Over 40%**	**No Change**
Inbound Cargo	Kenya	0%	20%	40%	40%	0%
	Rwanda	50%	50%	0%	0%	0%
	Tanzania	20%	20%	20%	0%	40%
	Uganda	0%	0%	50%	50%	0%
	Overall	**13%**	**19%**	**31%**	**25%**	**13%**

Source: LPS 2020

The study team collected information on the impact of COVID-19 pandemic on maritime freight rates in EAC states as shown in the table below. Taking all countries into account, 63% reported that maritime freight rates increased by 20%-30% during the period 2019 to 219 for outbound cargo. During the same period, 31% of the respondents reported that maritime freight rates for inbound cargo increased by 30%-40%.

The respondents recommended a list of changes that would help bring down the maritime freight rates. The changes picked out from the survey included: Reducing port charges and ancillary costs and Legislation at EAC level to review tax structure in respect to the General Agreement on Tariffs and Trade valuation.

3.3.3 Time Indicators

3.3.3.1 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. The ship turn- around time is an accumulation of the two critical times; ship service time at berth and waiting time. The table below shows the ship turnaround time for Mombasa and Dar es Salaam Port during the period 2019 and 2020.

Table 3-13: Mombasa Port and Dar es Salaam Port Ship Turnaround Time

Ship Turnaround Time		
Port	**Year**	
	2019	**2020**
Mombasa	3.9	3.9
Dar es Salaam	3.6	5.8

Source: NCTTCA, 2021 & CCTTFA 2020

As shown in The table above, the containerized vessel turnaround time on average remained the same for Mombasa port at 3.9 days. The turnaround time in Dar es Salaam port increased to 5.8 days in 2020 from 3.6 days in 2019. This showed a tremendous increase in ship turnaround time of about 2.2 days equivalent to 61% increase.

3.3.3.2 Container Dwell Time

Dwell time is the measure of the time elapsed from the time the cargo arrives in the port to the time the goods leave the port premises after all permits and clearances have been obtained. The table below shows the container dwell time at Mombasa Port and Dar es Salaam Port.

Table 3-14: Mombasa Port and Dar es Salaam Port Container Dwell Time

Container Dwell Time at the Port			
Port	**Year**		
	2018	**2019**	**2020**
Mombasa	4.2	3.7	4.4
Dar es Salaam	12.4	10.8	10.4

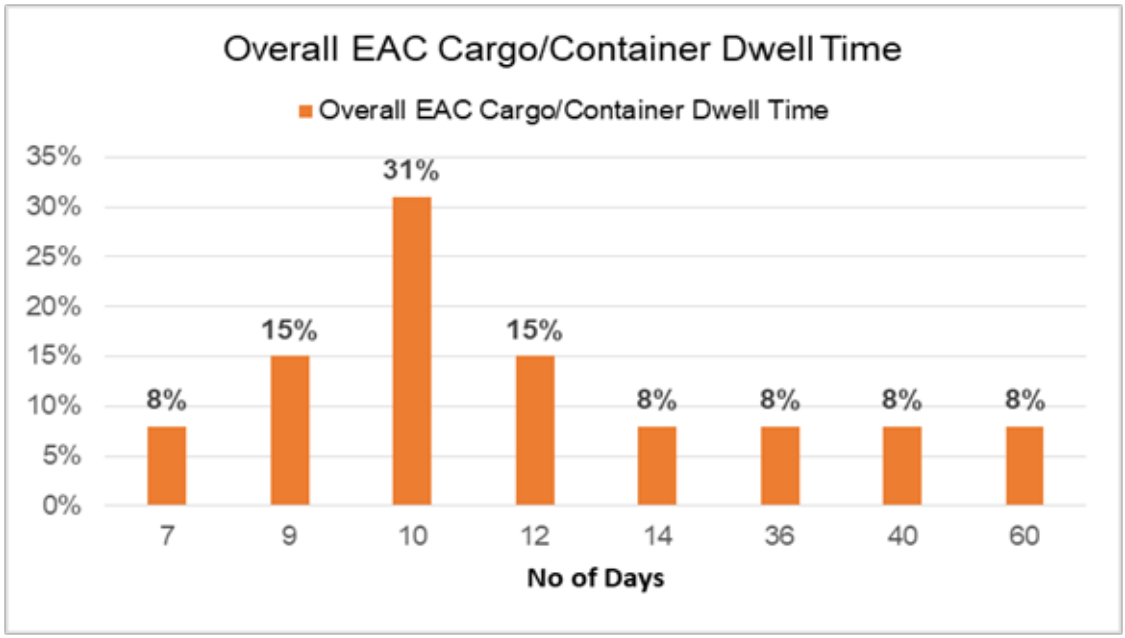
Source: NCTTCA, 2021 & CCTTFA 2020

As depicted in The table above, container dwell time at Mombasa port decreased in 2019 to 3.7 days from 4.2 days in 2018. This time worsened to 4.4 days in 2020, which could be linked to the longer ship turnaround time in the same year. Performance of this indicator was short of the Charter set a target of 3.3 days.

The poor performance could be attributable to the longer time to complete cargo clearance formalities and temporary storage time. Other factors, which affected the fluidity of cargo getting out of the port, included challenges of clearing the cargo because of the pandemic. Equipment's lacked operators at times, leading to container transfer delays leading to higher Dwell time within the Port of Mombasa. The average transit container dwell time slightly decreased from12.4 days in 2018 to 10.8 days in 2019. In 2020, the transit container dwell time decease from 10.4 days which was equivalent to a decrease of 3.7% attributed by improvements on operational efficiency on handling of transit cargo at Dar es Salaam Port.

From the 2020 LPS survey, the study established that 31% of the respondents stated that the overall EAC cargo/container dwell time was 10 days in 2021 as shown in the figure below.

Figure 3-11: Overall EAC Cargo/Container Dwell Time (Days)



Source: NCTTCA, 2021 & CCTTFA 2020

As shown in The table above, the containerized vessel turnaround time on average remained the same for Mombasa port at 3.9 days. The turnaround time in Dar es Salaam port increased to 5.8 days in 2020 from 3.6 days in 2019. This showed a tremendous increase in ship turnaround time of about 2.2 days equivalent to 61% increase.

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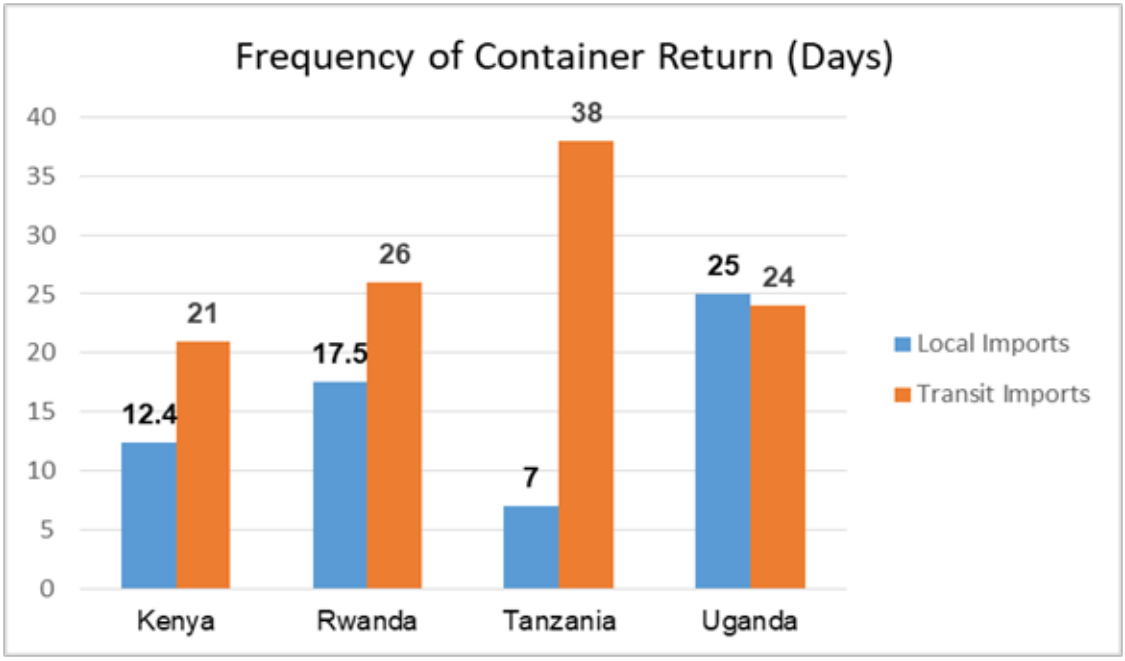


Source: LPS 2021

Among the many challenges stated by the respondents included but were not limited to the following:

- Failure by clients to clear freight charges on time;
- Inconsistencies by customs and other authorized agents involved in Clearance process at destination;
- Delays in customs clearance, port congestion,
- Damaged container being rejected by the shipping lines,
- Lengthy shipping line bureaucracies and Procedural guidelines laid by the governing authorities.

3.3.4 Logistics Complexity of Shipping Line and Shipping Agents

In order to export and import from Kenya, most respondents (53%) stated that one had to have a minimum of 5-6 documents, 5-6 signatures (100%), to interact with over 10 (48%) intervening Government Agencies, to undergo 7-10 inspections (66%), undergo 5-6 payment processes (53%), have 5-6 license renewals (86%) and be issued with 5-6 insurances documents (86%). The table below contains information from the other EAC member states.

Table 3-15: Complexity of Shipping Lines and Agents when undertaking Trade

Description	Details	Complexity in Exports and Imports			
		Kenya	Rwanda	Tanzania	Uganda
Documents needed to Export/Import	0-2		25%		
	2-4			12%	29%
	5-6	53%	75%	50%	71%
	7-10	47%			
	Over 10			75%	
Number of Signatures Needed	0-2		25%		10%
	2-4			20%	20%
	5-6	100%	75%	29%	42%
	7-10			25%	38%
	Over 10			53%	
Number of Agencies Intervening	0-2		18%	20%	
	2-4			26%	36%
	5-6	14%		17%	35%
	7-10	38%	80%	42%	47%
	Over 10	48%	83%	28%	
Number of Inspections Required	0-2		17%		10%
	2-4			10%	
	5-6	34%		17%	55%
	7-10	66%		32%	80%
	Over 10		83%	50%	
Payment Process/ Steps	0-2		33%	43%	
	2-4		67%	57%	17%
	5-6	53%			50%
	7-10	47%			33%
	Over 10				
No of LicenseRenewal	0-2		20%		25%
	2-4	14%		13%	
	5-6	86%		38%	75%
	7-10		80%	50%	
	Over 10				
Issuance ofInsurance	0-2		17%		
	2-4	14%		14%	29%
	5-6	86%		86%	29%
	7-10				43%
	Over 10		83%		

Source: LPS 2021

3.3.4.1 Comparative Analysis of 2019 to 2020 Shipping Lines and Agents Logistics Complexity for Exports and Imports

The study sought to determine the impact of the pandemic on Shipping Line and Agents on the logistics complexity. Overall, majority of respondents stated that there was change in logistic complexity during the period 2019-202. The table below shows the Change in Logistic Complexity for Shipping Lines and Agents during the period 2019 to 2020

3.3.5 Perception

3.3.5.1 Factors Influencing Decision to Transport Freight using Marine Transport

The factors that influence the decision to transport freight using marine transport was analyzed in detail by country.

As shown in the table below, in terms of marine route, majority of the respondents from Kenya and Tanzania rated it to a very great extent whereas respondents from Rwanda and Uganda rated it to a great extent.

In terms of freight cost, majority of respondents from Tanzania rated it to a very great extent whereas Kenya and Uganda rated it to a great extent and Uganda to a moderate extent.

In terms of time taken to transport cargo, majority of respondents from Kenya and Uganda rated it a great extent whereas respondents from Tanzania rated it to a moderate extent and those from Rwanda were split between great extent and low extent.

In terms of Port connectivity, majority of respondents from Kenya and Rwanda rated it to very great extent whereas respondents from Tanzania and Uganda rated it to a moderate extent.

In terms of security and safety, majority of respondents from Kenya and Tanzania rated it to very great extent whereas respondents from Rwanda rated it to a moderate extent and those from Uganda were split between very great extent and great extent. The table below illustrates the rating of factors that influence the decision of transporting freight using marine transport.

Table 3-16: Change in Logistic Complexity for Shipping Lines and Agents during the period 2019 to 2020

Country	Change in Logistic Complexity for Shipping Lines and Agents during the period 2019 to 2020		
	Increased	Decrease	No change
Kenya	20%		80%
Rwanda		50%	50%
Tanzania	50%		50%
Uganda	75%		25%
Overall	40%	7%	53%

Source: LPS 2021

Table 3-17: Rating of Factors that influence the decision of Transporting Freight using Marine Transport.

Factors Influ-encingMarine Cargo Transport	Scale	Kenya	Rwanda	Tanzania	Uganda
Marine Route	Very Great Extent	100%		80%	25%
	Great Extent		100%	20%	75%
	Moderate Extent				
	Low Extent				
	No Extent				
Freight Cost	Very Great Extent	40%		60%	25%
	Great Extent	60%		20%	75%
	Moderate Extent		100%	20%	
	Low Extent				
	No Extent				
Time Taken	Very Great Extent	40%			25%
	Great Extent	60%	50%		75%
	Moderate Extent			100%	
	Low Extent		50%		
	No Extent				
Port Connectivity	Very Great Extent	100%	50%	20%	25%
	Great Extent			20%	25%
	Moderate Extent			60%	50%
	Low Extent				
	No Extent		50%		
Security and Safety	Very Great Extent	100%		80%	50%
	Great Extent				50%
	Moderate Extent		100%	20%	
	Low Extent				
	No Extent				

Source: LPS 2021

3.3.5.2 Efficiency processes at Destination Port

As shown in the figure below, majority of the respondents (63%) rated vessel documentation as fair and above implying it is one of the major concerns of logistic performance. The remaining (38%) respondents rated it very low to low.

In terms of water disposal, majority of the respondents (63%) rated it as fair and above implying it is one of the major concerns of logistic performance. The remaining (38%) respondents rated it very low to low.

In terms of empty container handling, majority of the respondents (94%) rated it as fair and above implying it is a major concern of logistic performance. The remaining (6%) respondents rated it very low to low.

In terms of gang shifts, majority of the respondents (73%) rated it as fair and above implying it is a major concern of logistic performance. The remaining (27%) respondents rated it very low to low.

In terms of tag master turnaround, majority of the respondents (88%) rated it as fair and above implying it is a major concern of logistic performance. The remaining (12%) respondents rated it very low to low.

In terms of shore handling, majority of the respondents (75%) rated it as fair and above implying it is a major concern of logistic performance. The remaining (25%) respondents rated it very low to low.

In terms of health inspection process, majority of the respondents (94%) rated it as fair and above implying it is a major concern of logistic performance given the current COVID- 19 pandemic. The remaining (6%) respondents rated it very low to low.

In terms of stevedoring, majority of the respondents (81%) rated it as fair and above implying it is a major concern of logistic performance. The remaining (19%) respondents rated it very low to low.

In terms of pilotage, majority of the respondents (94%) rated it as fair and above implying it is a major concern of logistic performance. The remaining (6%) respondents rated it very low to low.

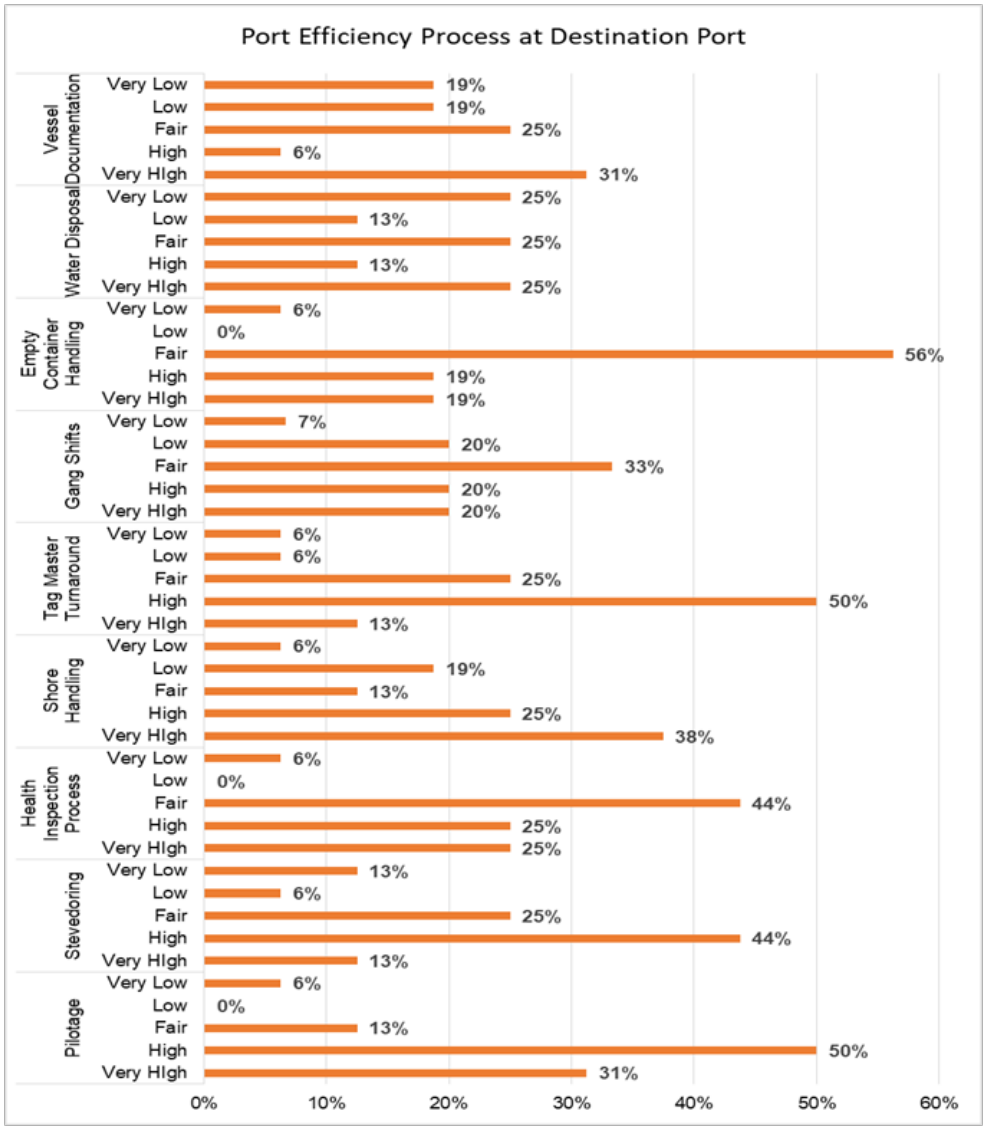


Figure 3-13: Efficiency of Processes at Destination Port

Source: LPS 2021

3.3.6 Impact of COVID-19 on Maritime Transport Operators

3.3.6.1 Impact of COVID-19 on Maritime Transport and Logistic Businesses in East Africa

The study established that approximately 88% of the respondents in marine transport and logistics businesses in East Africa were significantly affected by the COVID-19 Pandemic. Only a paltry 13% indicated that they were not affected by the pandemic. Most countries reported that they were affected 100% by the pandemic save for Tanzania where the impact was 60%. The table below shows the Impact of COVID-19 Pandemic on marine transport and logistics businesses in East Africa.

Table 3-18: Impact of COVID-19 Pandemic on Marine Transport and Logistics Businesses in East Africa.

Country	Impact of COVID-19 on Maritime Transport andLogistics Businesses	
	No	Yes
Kenya		100%
Rwanda		100%
Tanzania	40%	60%
Uganda		100%
Overall	**13%**	**88%**

Source: LPS 2021

3.3.6.2 Changes Made by Maritime Business to Mitigate the Impact of COVID-19 Pandemic

Most of the companies (88%) indicated that they had made changes to businesses so as to mitigate the effects of COVID-19 pandemic as shown in the table below.

Table 3-19: Changes made to Maritime Transport Businesses to Mitigate Impact of COVID-19 Pandemic

Country	No	Yes
Kenya		100%
Rwanda		100%
Tanzania	40%	60%
Uganda		100%
Overall	**13%**	**88%**

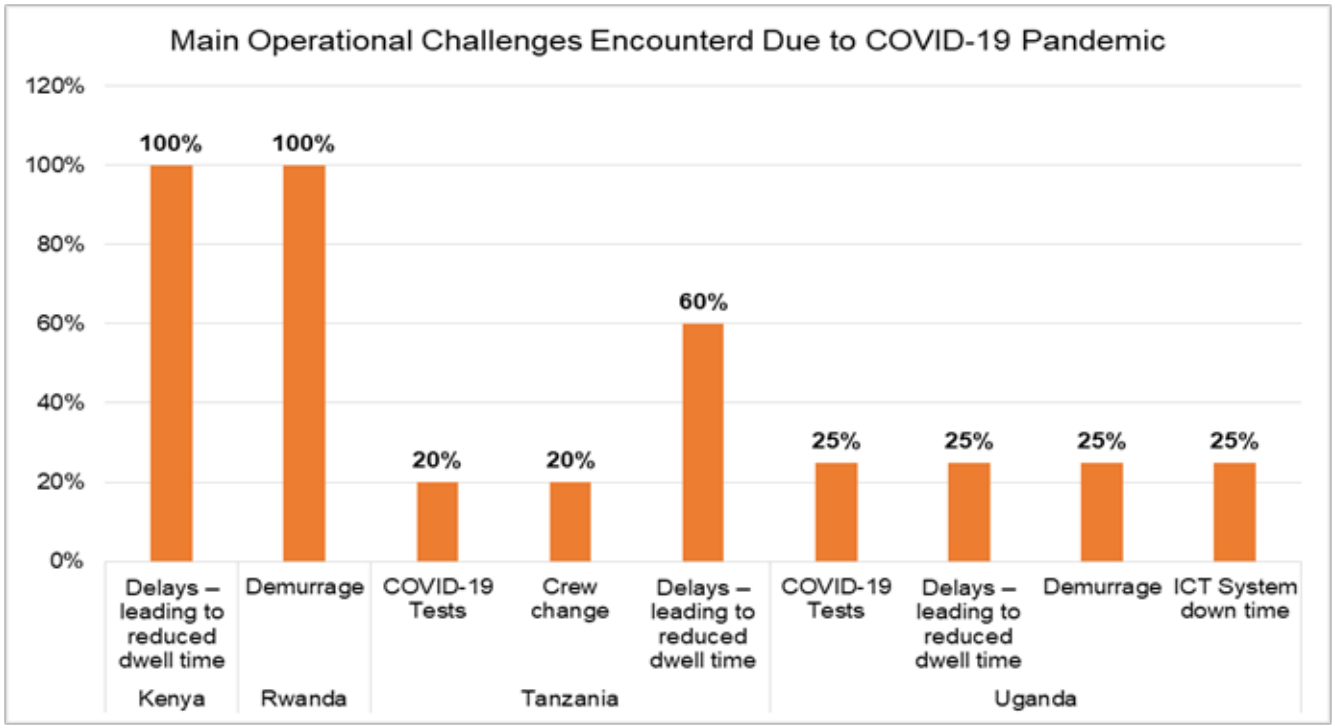
Source: LPS 2021

Some of the changes, which were made by maritime businesses to mitigate the pandemic included: downscaling operations, investment in ICT/Automation and hiring more laborers.

3.3.6.3 Operational Challenges faced by Maritime Transport Operators in East Africa due to COVID-19 Pandemic In terms of challenges as a result of COVID-19 pandemic, several operational challenges were identified in the different EAC member states as shown in the figure below.

- In Kenya, all the respondents identified delays leading to increased dwell time as a major operational challenge due to COVID-19.
- In Rwanda, 100% of the respondents identified demurrage as a major operational challenge encountered due to COVID-19.
- In Tanzania, 60% of the respondents identified delays leading to increased dwell time followed by COVID-19 tests (20%) and crew change (20%).
- In Uganda, the main operational challenges encountered as a result of COVID-19 pandemic included COVID-19 tests (25%), delays leading to increased dwell time (25%), demurrage (25%) and ICT systems down time (25%).

Figure 3-14: Main Operational Challenges encountered at the height of COVID-19 Pandemic while undertaking Maritime Transport Services

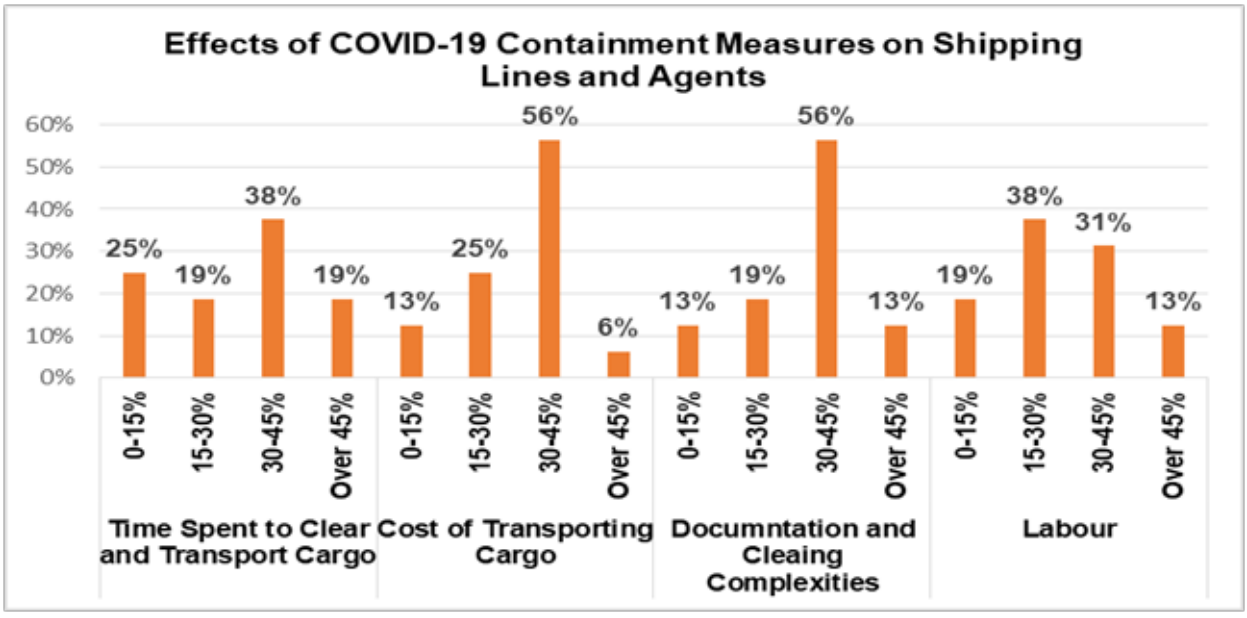


Source: LPS 2021

3.3.6.4 Effects of COVID-19 Containment Measures on Maritime Transport Operators

On average, 38% of the maritime transport operators in East Africa stated that time spent to clear and transport cargo had increased by 30%-45%. In terms of cost of transporting Cargo, 56% of the respondents stated that it had increased by 30%-45%. Most of the respondents (56%) stated that documentation and clearing complexities had increased by 30%-45%. About 38% of the respondents estimated that labour had increased marginally by 15%-30%. The figure below gives the details of the study findings on effects of COVID-19 containment measures on maritime transport logistic operators.

Figure 3-15: Effects of COVID-19 Containment Measures on Maritime Transport Operators in EAC



Source: LPS 2021

3.3.7 Gender Participation in Maritime Transport

3.3.7.1 Industry Promotion of Gender Balance and Protection

The study team identified how the different countries have promoted gender balance and protection within the maritime transport and logistic sector. In Kenya, the study established that the maritime transport companies had balanced both the male and female employees and embraced the 2/3 gender rule. In Tanzania, the maritime transport companies reported that they had employed more women to motivate them, promoted equality among employees, adopted the 30/70 gender rule and ensured there was fair treatment of male and female at work places. In Uganda most maritime transport companies reported that they protect women at work places, ensure equal inclusion for both genders and adopted policies which ensured women are given a first chance.

3.3.7.2 Gender Distribution on Technical Roles in Maritime Transport Companies

The study team established that the overall gender distribution in the maritime transport companies in East Africa was 66% male and 34% female. This showed that women participation in the maritime transport sector in East Africa was above 30% that indicated a marked improvement. In terms of by country results, women participation in Uganda was low as compared to Kenya, Rwanda and Tanzania. The table below shows the results of Gender Distribution in the Maritime Transport Companies.

Table 3-20: Gender Distribution on Technical Roles in Maritime Transport Companies

Country	Number		Percentage	
	Male	Female	Male	Female
Kenya	109	82	57%	43%
Rwanda	76	61	55%	45%
Tanzania	131	83	61%	39%
Uganda	168	23	88%	12%
Overall	**484**	**249**	**66%**	**34%**

Source: LPS 2021

Despite the overall balance of gender participation being 66% male and 34% female, the study team established that there were challenges in addressing gender parity. Some of these challenges included:

- Most people still believe that a woman cannot do some of tasks
- Nature of work sometimes is a challenge to women especially at night
- Stereotypes and traditions on role of women in the maritime transport logistics sector.

3.4 Air Freight Transport Operators

3.4.1 Background Information

3.4.1.1 Air Freight Carriers Distribution by Country

The figure above shows the distribution of the Air Freight Operators by country. The LPS survey managed to survey a total of 14 respondents out of which 57% were from Kenya, 22% from Tanzania, 14% from Uganda and 7% from Rwanda.

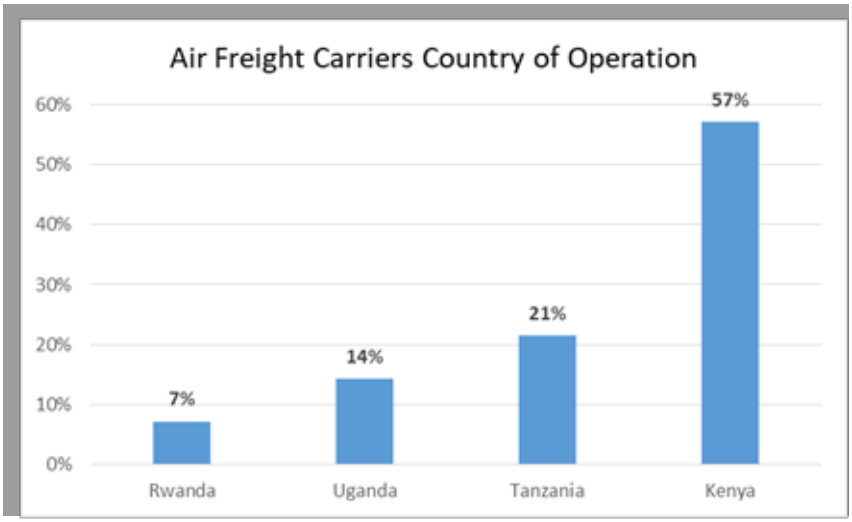


Figure 3-16: Air Freight Carriers Distribution by Country of Operation

Source: LPS 2021

Most of the companies identified Electronics 50% as the main type of import cargo followed by merchandise 15% and Parcels and documents 14% cargo. Vegetables were the main type of export cargo representing 50% followed by Flowers 22% and the third type of export cargo was parcels/documents 14%.

The location of headquarters of most of the companies was Nairobi 57%, Dar es Salaam 22%, Kampala, 14% and Kigali 7%.

Most companies identified Jomo Kenyatta International Airport 56% as the local airport of use, followed by Entebbe International Airport 15% and Dar es salaam Airport 14%.

Most companies identified Amsterdam Airport as the destination airport, followed by Chizhou Jiuhuashan Airport in China and Shanghai Pudong in China were identified as the airports they receive most of their imports from.

3.4.2 Cost Indicators

The table below summarizes average airfreight rate in USD per metric ton for imports and exports per facility of use.

Table 3-21: Average Freight Rate in USD per Tonne

Country	Facility				Average cost	
	Box		Pallets			
	Imports	Exports	Imports	Exports	Imports	Exports
Kenya	8,571	5,786	4,500	6,000	8,063	5,813
Rwanda			2,200	4,000	2,200	4,000
Tanzania	13,333	9,333			13,333	9,333
Uganda	0	6,000	1,500	1,300	750	3,650
Average cost	**9,091**	**6,773**	**2,733**	**3,767**	**7,729**	**6,129**

Source: LPS 2021

Tanzania had the highest cost (13,333 USD per Ton) for imports and (9,333 USD per Ton) for exports, followed by Kenya (8,063 USD per Ton) for imports and (5,813 USD per Ton) for exports. The main drivers of freight cost identified from the survey were: Airline rates, Nature of goods/cargo, Weight and volume of goods, Location, flight frequency connections, rates and space, competition and fuel costs

3.4.3 Time Indicators

The table below illustrates the Air Freight Dwell Time at the principle loading and off- loading points. Dar es Salaam (96 hrs) and Kampala (20 hrs) had the highest loading point dwell time. Similarly, Kigali (72 hrs), Dar es Salaam (48 hrs) and Kampala (20 hrs) and had the highest dwell times at the principle off-loading points.

Table 3-22: Average Freight Dwell Time

Country	Air Freight Dwell Time (Hrs)	
	Loading point	Offloading point
Dar es Salaam	96	48
Kampala	20	20
Kigali	5	72
Nairobi	5.25	15.75

Source: LPS 2021

The main drivers of freight time at the loading and offloading airports identified from the survey were: long clearing logistics processes or regulatory procedures and weather.

3.4.4 Logistic Complexity of Air Freight Operators

3.4.4.1 Air Freight Logistics Complexity

The table below illustrates the Air transport logistic complexity results from the 2020 LPS.

Table 3-23: Air Freight Logistic Complexity Results

Country	Number of Documents/Signatures Required toundertake Logistic Services through the Airport
Kenya	**57.14%**
(2-4)	75.00%
(7-10)	12.50%
(Over 10)	12.50%
Rwanda	**7.14%**
(Over 10)	100.00%
Tanzania	**21.43%**
(2-4)	100.00%
Uganda	**14.29%**
(2-4)	50.00%
(5-6)	50.00%

Source: LPS 2021

Rwanda had the most documentation required at (100%) Over 10 documents, followed by Uganda, with half of them needed to prepare (5-6) documents and 50%, (2-4) documents. Kenya and Tanzania had the least documentation required at (75%) needed to prepare (2-4) documents, and Tanzania, 100% needed to prepare (2-4) documents.

3.4.4.2 Comparative Analysis of 2019 to 2020 Air Freight Logistics Complexity for Exports and Imports
The study sought to investigate the impact of the pandemic on Air Freight logistic complexity from 2019 to 2020 in EAC member states. For both exports and imports, most

Kenyan respondents (75%) stated that there was no change, Rwandese and Ugandan respondents all stated that there had been an increase in complexity, whereas Tanzania, had (67%) stating that there was an increase while 34% indicated that there was no change.
The table below shows the change in logistic complexity for road transporters during the period 2019 to 2020.

Table 3-24: Change in Logistic Complexity for Air Freight Operators during the period 2019to 2020

Countries	Exports			Imports		
	Increased	Decreased	No change	Increased	Decreased	No change
Kenya	25%		75%	25%		75%
Rwanda	100%			100%		
Tanzania	66.67%		33.33%	66.67%		33.33%
Uganda		100%			100%	

Source: LPS 2021

3.4.5 Perception of Air Freight Logistics

3.4.5.1 Factors Influencing Decision to Transport Freight through Air

The factors that influence the decision to transport freight using Air transport was analyzed in detail by country.

Kenya considered the factors below as the major influencers of the transport mode decision:

- Time Schedules -100% (Great Extent)
- Value of shipment -75% (Great Extent)
- Freight cost-50% (Great Extent)
- Reliability of Carrier -75% (Great Extent)
- Sensitivity of Cargo-50% (Great Extent)
- Security and Safety-62.5% (Great Extent)
- Cargo Size-62.5% (Great Extent)

Rwanda considered the factors below as the major influencers of the transport mode decision:

- Value of shipment -100% (Very Great Extent)
- Freight cost-100% (Very Great Extent)
- Reliability of Carrier -100% (Very Great Extent)
- Cargo Size- 100% (Very Great Extent)

Tanzania considered the factors below as the major influencers of the transport mode decision:

- Time Schedules -67% (Great Extent)
- Value of shipment -67% (Very Great Extent)
- Reliability of Carrier -67% (Very Great Extent)
- Sensitivity of Cargo-67% (Very Great Extent)
- Security and Safety-100% (Great Extent)

Uganda considered the factors below as the major influencers of the transport mode decision:

- Time Schedules -50% (Very Great Extent)
- Value of shipment -100% (Very Great Extent)
- Freight cost-100% (Great Extent)
- Reliability of Carrier -50% (Great Extent)
- Sensitivity of Cargo-50% (Very Great Extent)
- Security and Safety- 100% (Great Extent)
- Cargo Size-50% (Very Great Extent)

Table 3-25: Rating of Factors that influence the decision of Transporting Freight through Air

Details	Value of Shipment			
	Kenya	Rwanda	Tanzania	Uganda
Very Great Extent	25%	100%	67%	100%
Great Extent	75%	0%	33%	0%
Details	**Time Schedule**			
	Kenya	**Rwanda**	**Tanzania**	**Uganda**
Very Great Extent	0%		33%	50%
Great Extent	100%		67%	50%
Details	**Freight Cost**			
	Kenya	**Rwanda**	**Tanzania**	**Uganda**
Very Great Extent	13%	100%	33%	0%
Great Extent	50%	0%	33%	100%
Moderate Extent	38%	0%	33%	0%
Details	**Reliability of Carrier**			
	Kenya	**Rwanda**	**Tanzania**	**Uganda**
Very Great Extent	25%	100%	67%	0%
Great Extent	75%	0%	33%	50%
Low Extent	0%	0%	0%	50%
Details	**Sensitivity of Cargo**			
	Kenya	**Rwanda**	**Tanzania**	**Uganda**
Very Great Extent	38%		67%	50%
Great Extent	50%		33%	50%
Moderate Extent	13%		0%	0%
Details	**Security and Safety**			
	Kenya	**Rwanda**	**Tanzania**	**Uganda**
Very Great Extent	38%		0%	0%
Great Extent	63%		100%	100%
Details	**Cargo Size**			
	Kenya	**Rwanda**	**Tanzania**	**Uganda**
Very Great Extent	38%	100%	33%	50%
Great Extent	63%	0%	33%	50%
Moderate Extent	0%	0%	33%	0%

Source: LPS 2021

3.4.5.2 Efficiency of processes at Airport Origin and Destination

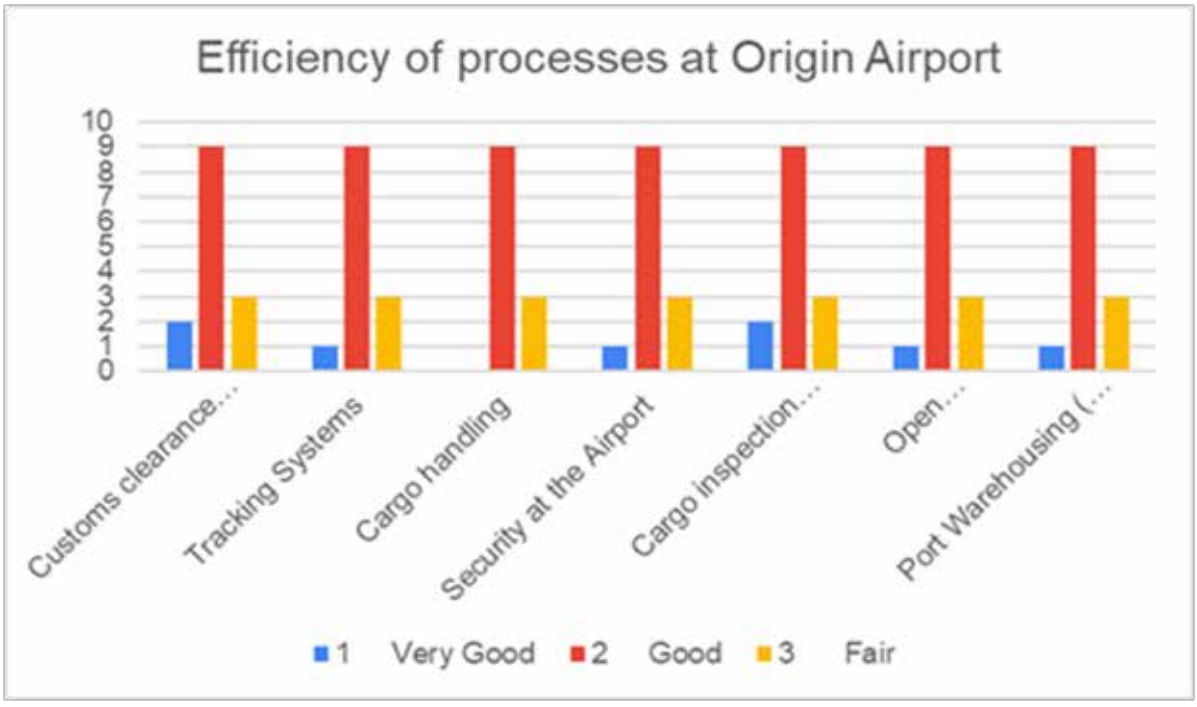
The study established that a number of factors play a critical role in the efficiency process of Air transport logistic services at origin and destination points. Some of the factors investigated included: Customs clearance procedures, Cargo handling, Port warehousing (layout of storage facilities), Cargo inspection procedures, Security at the Airport, Open Competitiveness from other Players and Tracking Systems. The figure below illustrates the survey results obtained for the efficiency of processes at the freight origin and destination points.

Figure 3-17: Efficiency of Processes at Destination Airport

Source: LPS 2021

As shown in the figure above, Majority of the respondents ranked the efficiency of processes at the destination airport as fair.

Figure 3-18: Efficiency of Processes at Origin Airport



Source: LPS 2021

As shown in the figure above, the efficiency of processes at the Origin Airport are ranked by the majority as good.

3.4.6 Impact of COVID-19 on Air Freight Transport Operators

3.4.6.1 Impact of COVID-19 on Air Freight Transport Operators in East Africa

The study established that at 93% of respondents were affected by the COVID-19 Pandemic. With countries like Kenya, Rwanda and Tanzania recording 100% of all respondents.

Table 3-26: Impact of COVID-19 Pandemic on Air Transport Operators in East Africa

Countries	Impact of COVID-19 Pandemic on Air Transport Operators in East Africa	
	No	Yes
Kenya	0%	100%
Rwanda	0%	100%
Tanzania	0%	100%
Uganda	50%	50%
Overall	**7%**	**93%**

Source: LPS 2021

Most of the companies (93%) indicated that they had made changes to businesses so as to mitigate the effects of COVID-19 pandemic.

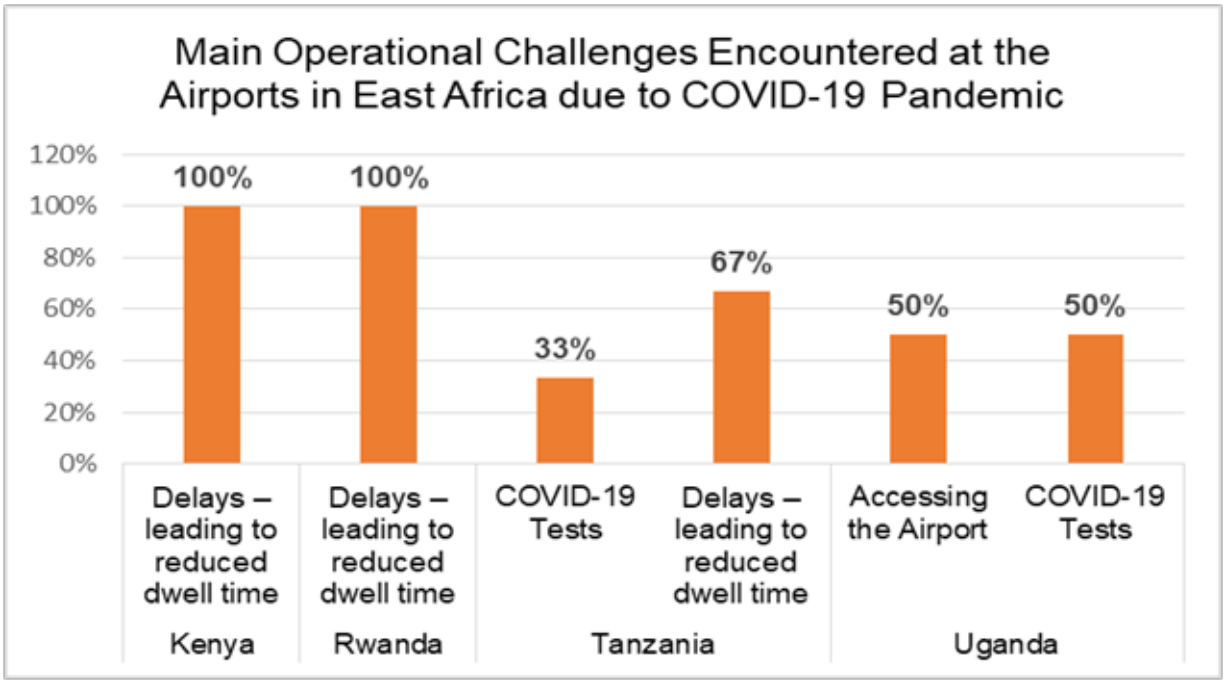
3.4.6.2 Main Operational Challenges Encountered at the Airports in East Africa due to COVID-19 Pandemic

In Uganda, 50% of the respondents indicated COVID-19 Tests and the other 50% mentioned Accessing the Airport as a major challenge.

In Tanzania, the majority of respondents 67% mentioned Delays – Leading to reduced dwell time as a major challenge.

In Kenya and Rwanda, all respondents mentioned Delays –Leading to reduced dwell time as a major challenge.

Figure 3-19: Main Operational Challenges Encountered at the Airports in East Africa due to COVID-19 Pandemic



Source: LPS 2021

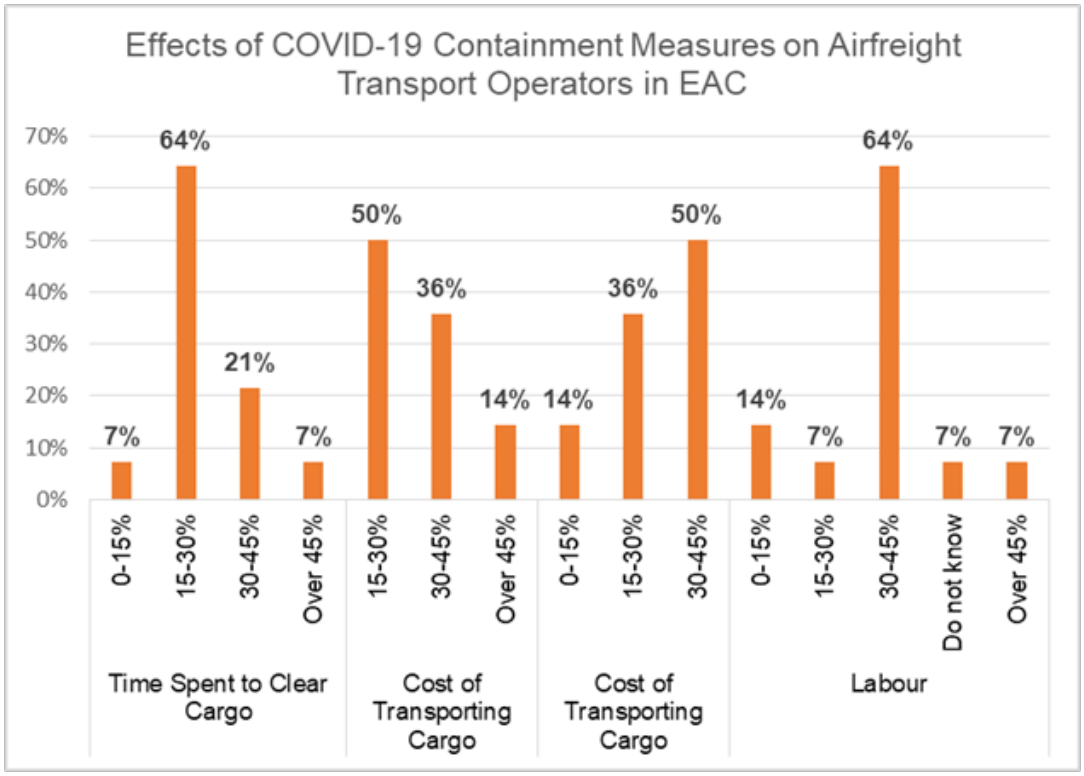
3.4.6.3 Effects of COVID-19 Containment Measures on Air Transport Operators

COVID-19 containment measures had marginal effects on Time spent to Clear and Transport Cargo, Cost of Transporting Cargo, Documentation & Clearance Complexities and Labor. On average, 64% of Air Freight operators stated that time spent to clear and transport cargo had increased by 15-30%. 64% of the respondents estimated that transport costs had increased by 15%-30%. Approximately 65% of the respondents estimated that documentation and clearance complexities had increased marginally by 15%. About 64% of the respondents estimated that labour had increased marginally by 15%-30%. The figure below gives the details of the study findings on effects of COVID-19 containment measures on Air Freight operators.

Figure 3-17: Efficiency of Processes at Destination Airport

Source: LPS 2021

Figure 3-20: Effects of COVID-19 Containment Measures on Airfreight Transport Operators in EAC



Source: LPS 2021

3.4.7 Gender Participation in Airfreight Transport

3.4.7.1 Industry Promotion of Gender Balance and Protection

The study team identified how the different countries have promoted gender balance and protection within the air transport and logistic sector. In Kenya, the study established that the airfreight transport companies had balanced the employment of both genders and ensured there is equal distribution of tasks and positions. In Rwanda, the respondents stated that gender promotion is still not balanced. In Tanzania, respondents reported giving more power to women to empower them on leadership aspect. In Uganda, respondents reported that they balanced employment between genders.

3.4.7.2 Gender Distribution on Technical Roles in Airfreight Transport Companies

The study team established that the overall gender distribution in the Airfreight transport companies in East Africa was 64% male and 36% female. This showed that women participation in the airfreight transport sector in East Africa was above 30% that indicated a marked improvement. In terms of by country results, women participation in Rwanda was low compared to Kenya, Uganda and Tanzania. The table below shows the results of Gender Distribution in the Airfreight Transport Companies.

Table 3-27: Gender Distribution on Technical Roles in Airfreight Transport Companies

Country	Number		Ratio	
	Male	Female	Male	Female
Kenya	170	100	63%	37%
Rwanda	20	7	74%	26%
Tanzania	21	12	64%	36%
Uganda	6	4	60%	40%
Total	**217**	**123**	**64%**	**36%**

Source: LPS 2021

Despite the overall balance of gender participation being 64% male and 36% male, the study team established that there were challenges in addressing gender parity. Some of these challenges included:

- Women being selective on the type of tasks they would allocate to them
- women not managing time efficiently in the logistic industry

3.5 Clearing and Forwarding Agents

3.5.1 Background Information

3.5.1.1 Distribution of Clearing and Forwarding Agents by Country

The figure below shows the distribution of the clearing and forwarding agents by country. The LPS survey managed to survey a total 51 respondents out of which 39% were from Kenya, 25% from Uganda, 25% from Tanzania and 10% from Rwanda.

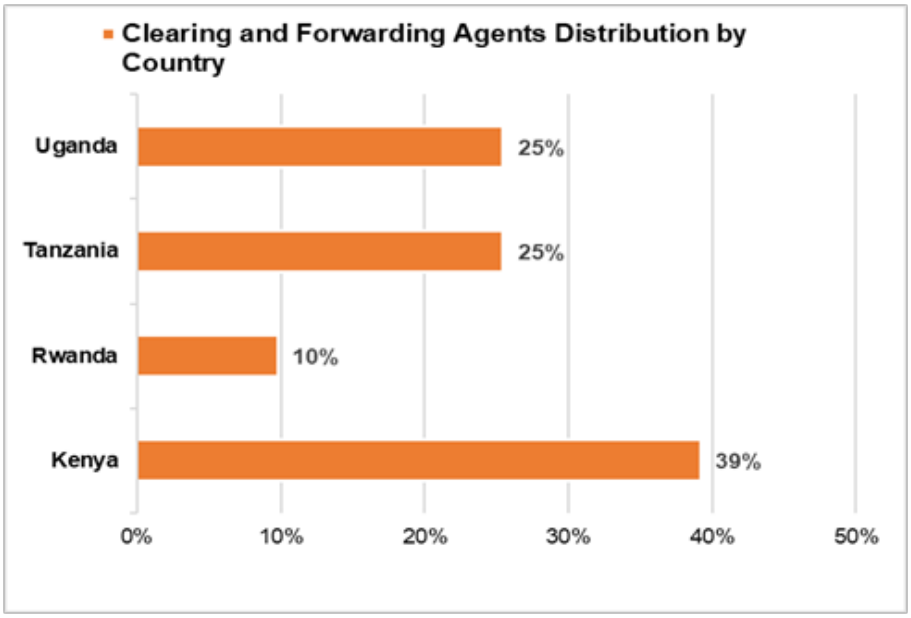


Figure 3-21: Distribution of Clearing and Forwarding Agent by Country

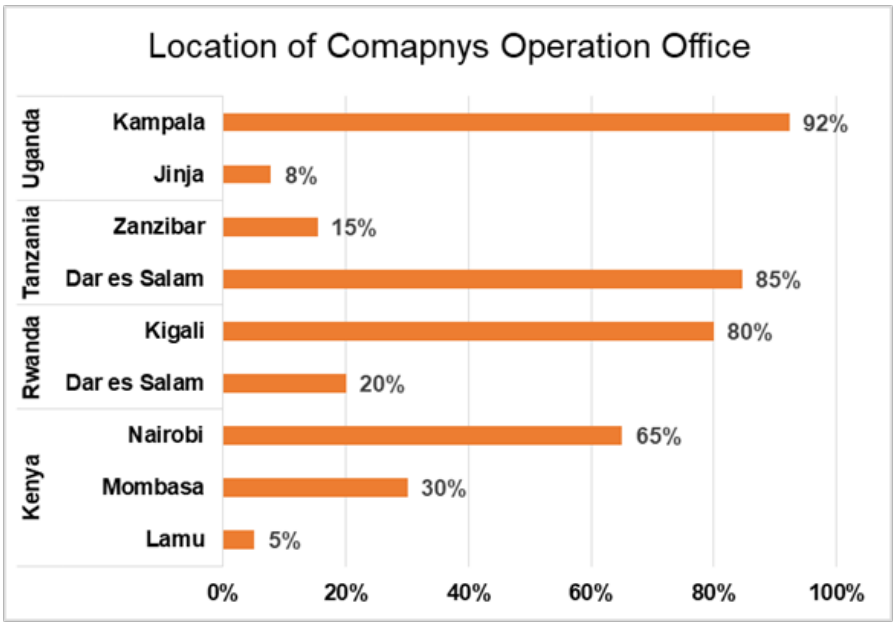
Source: LPS 2021

Most of the companies interviewed reported that they undertake various services such as customs clearance, airfreight, cargo transportation, storage and warehousing and international forwarding among others.

3.5.1.2 Location of Company's Operating Office

The figure below shows the distribution of the clearing and forwarding agents by town of operation. In Kenya, the companies were well spread in Nairobi (65%), Mombasa (30%) and Lamu (5%). In Uganda, most of the companies were located in Kampala (92%) and a paltry were located in Jinja (8%). In Tanzania most of the companies were located in Dar es Salaam (85%) and Zanzibar (15%). The results from Rwanda showed that most of the companies were located in Kigali (80%) and some were located in Dar es Salaam (20%).

Figure 3-22: Distribution of Clearing and Forwarding Agent by Town of Operation

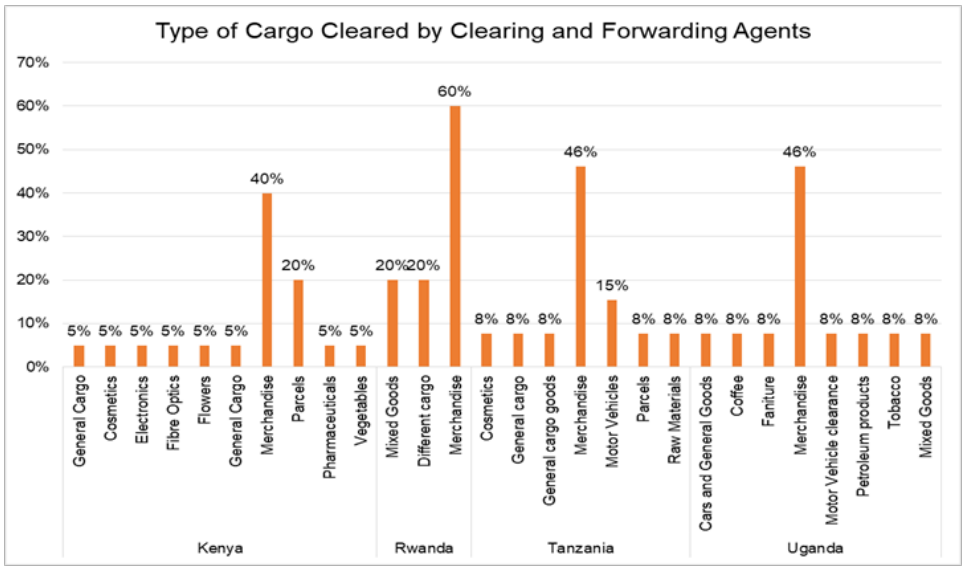


Source: LPS 2021

3.5.1.3 Cargo Type Cleared

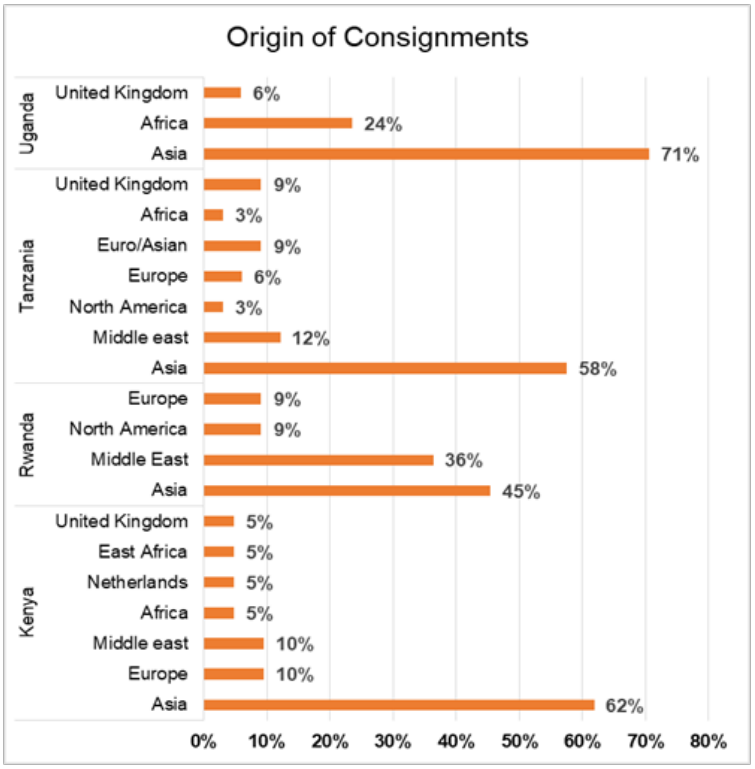
In surveying the good type transported along the road the study established the different type of cargo handled by the clearing and forwarding companies in East Africa. As depicted below, most of the clearing and forwarding agents cleared merchandise with Kenya recording 40%, Rwanda (60%), Tanzania (46%) and Uganda (46%). The other major products cleared included parcels, mixed goods and motor vehicles among others.

Figure 3 23: Type of Cargo Cleared by Clearing and Forwarding Agents



Source: LPS 2021

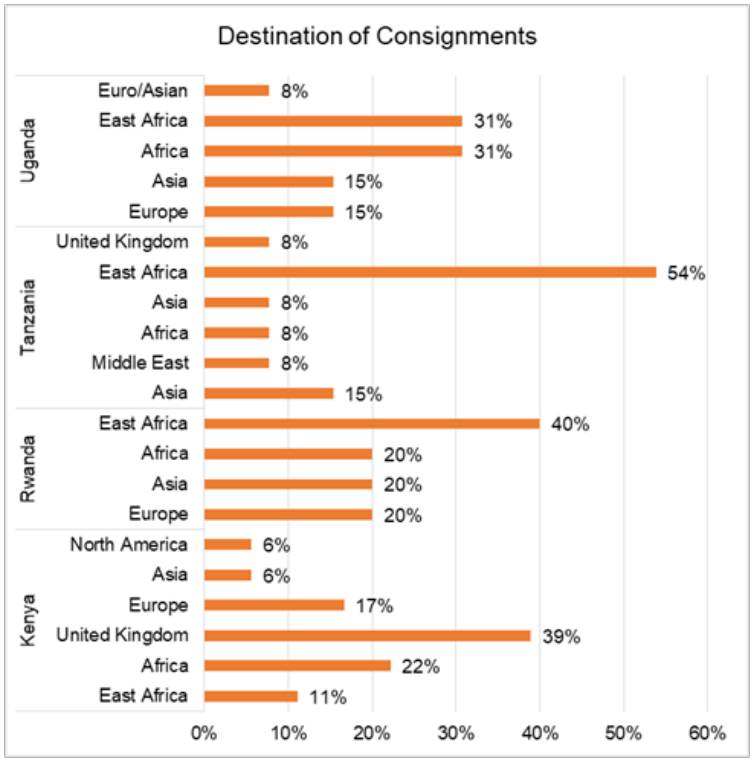
Figure 3-23: Origin of Consignments



Source: LPS 2021

In terms of destination as shown in the figure below, the study identified that for Uganda, East Africa (31%) and Africa (31%) were the main destination points followed by Asia (15%), Europe (15%) and Euro/Asia (8%). For Tanzania, East Africa (54%) was the main destination point followed by Asia, United Kingdom, Africa and Middle East each at 8%. For Rwanda, the main destination point was East Africa (40%) followed by Africa, Asia and Europe each standing at 20%. For Kenya, United Kingdom (39%) was the main destination point followed by Africa (22%), Europe (17%), East Africa (11%), Asia and North America each having 8%.

Figure 3-24: Destination of Consignments



Source: LPS 2021

3.5.2 Cost Indicators

The discussions with the Clearing and Forwarding Agencies enabled the study team compute the typical average cost for imports and exports across East Africa. As shown in the table below, the average fright importation cost for Kenya was highest for consolidation followed by container, Box and pallets. For Tanzania, the average freight importation cost was highest for containers at USD 1,757 and low for pallets at USD 250. For Uganda, the average freight importation cost was highest for tanker at USD 4,000 followed by container at USD1, 508 and Box at USD 100. For Rwanda, the average freight importation cost was USD 5,872

Table 3-28: Average Freight Importation Cost (USD)

Country	Facility Type	Average Freight Importation Cost (USD)
Kenya	Box	1,355
	Consolidation	8,000
	Container	4,669
	Pallets	1,014
Rwanda	Container	5,872
Tanzania	Boxes and pallets	250
	Container	1,757
Uganda	Box	100
	Container	1,508
	Tanker	4,000

Source: LPS 2021

The table below depict the average freight exportation cost across East African Countries. The results showed that for Kenya, freight exportation cost was highest for containers (USD 2,516) followed by Box (USD 1,260) and Pallets (US 668). For Tanzania, the average freight exportation cost was highest for containers (USD 1,682) followed by boxes and pallets (USD 250). For Uganda, the average freight exportation cost was highest for container (USD 6,913) followed by tanker (USD 1,200) and Box (USD 1,000).

Table 3-29: Average Freight Exportation Cost (USD)

Country	Facility Type	Average Freight Exportation Cost (USD)
Kenya	Box	1,260
	Container	2,516
	Pallets	668
Rwanda	Container	4,502
Tanzania	Boxes and pallets	250
	Container	1,682
Uganda	Box	1,000
	Container	6,913
	Tanker	1,200

Source: LPS 2021

Comparative Analysis of 2019 to 2020 Clearing and Forwarding Freight Rates for Imports and Exports

The study sought to investigate the impact of the pandemic on average freight costs for imports and exports in EAC Countries by CFA. Majority of respondents reported that the change in freight rates between 2019-2020 for imports and exports increased significantly by over 60%.

Figure 3-25: Change in Freight Rates for Exports and Imports experienced by CFA: 2019-2020

Source: LPS 2021

The CFA respondents provided various suggestions, which could help, improve logistic business in East Africa. Some of the changes proposed included but were not limited to the following: Reducing import and export restrictions; Mitigating COVID-19 pandemic; Government easing the ease of doing business and Improved System automation including stakeholders I.e., standards & permit issuing Organizations I.e., UNBS, MAAIF; WCO - AEO program initiative among others.

3.5.3 Time Indicators

3.5.3.1 Average Freight Time

The table below details the average freight time for imports reported by CFA respondents during the LPS survey. The average fright time in terms of days was highest in Rwanda followed by Kenya, Tanzania and Uganda.

Table 3-30: Average Freight Time for Import (in days)

Operation Area	Average Freight Time for Import (in days)
Kenya	
Jomo Kenyatta International Airport	18.8
Moi International Airport	16.7
Rwanda	
Kigali International Airport	31
Tanzania	
Jomo Kenyatta International Airport	20
Julius Nyerere International Airport	18.4
Uganda	
Entebbe International Airport	11.8

Source: LPS 2021

3.5.3.2 Freight Dwell Time

The study analyzed freight dwell time per mode of logistics. The main countries studied were Kenya and Rwanda. The results showed that the average freight dwell time was highest for maritime exports (35 days) followed by Import under rail transport (4.5 days) and exports under rail transport (4.5 days). The table below shows the average freight dwell time results in terms of days obtained from the study.

Table 3-31: Average Freight Dwell Time (Days)

Transport Mode	Country		Average
	Kenya	Rwanda	
Import under Road transport	5.0	3.0	4.0
Exports under any other transport	7.0	3.0	5.0
Exports under Air transport	3.0	1.0	2.0
Import under Rail transport	7.0	2.0	4.5
Import under Air transport	2.0	1.0	1.5
Import under any other transport	5.0	3.0	4.0
Exports under Rail transport	7.0	2.0	4.5
Exports under Water (ship) transport	40.0	30.0	35.0
Exports under Road transport	5.0	3.0	4.0

Source: LPS 2021

3.5.4 Complexity for Clearing and Forwarding Agents

The table below shows the rating of the different items in trying to establish the complexity of logistics. Under documents needed to import/export in your country, majority of respondents in Kenya stated that 5-6 (32%) documents are required; Rwanda 2-4 documents (60%), Tanzania 5-6 documents (42%) and Uganda 5-6 documents (38%).

Under number of signatures needed, majority of respondents stated as follows: Kenya (5- 6 signatures): 30%, Rwanda (2-4 signatures): 70%, Tanzania (5-6 signatures): 46% and Uganda (2-4 signatures): 52%.

Under number of agencies intervening, majority of respondents stated as follows: Kenya (2-4 agencies): 37%, Rwanda (2-4 agencies): 70%, Tanzania (5-6 agencies): 57% and Uganda (2-4 agencies): 40%.

Under number of inspections required, majority of respondents stated as follows: Kenya (2-4 inspections): 40%, Rwanda (2-4 inspections): 60%, Tanzania (2-4 inspections): 46% and Uganda (0-2 inspections): 50%.

Under payment processes required, majority of respondents stated as follows: Kenya (5-6 payments): 37%, Rwanda (0-2 payments): 60%, Tanzania (2-4 payments): 50% and Uganda (0-2 payments): 58%.

Under number of license renewals required, majority of respondents stated as follows: Kenya (2-4 licenses): 47%, Rwanda (0-2 licenses): 60%, Tanzania (2-4 licenses): 33% and Uganda (0-2 licenses): 67%.

Under number of insurances which require to be issued, majority of respondents stated as follows: Kenya (2-4 insurance): 47%, Rwanda (0-2 insurance): 60%, Tanzania (2-4 insurance): 58% and Uganda (0-2 insurance): 75%.

Table 3-32: Clearing and Forwarding Agents Logistics Complexity

Complexity Description	Scale	Kenya	Rwanda	Tanzania	Uganda
Document needed to import/export inyour country	(0-2)	5%	20%	25%	15%
	(2-4)	26%	60%	8%	15%
	(5-6)	32%	20%	42%	38%
	(7-10)	16%	0%	17%	15%
	(Over 10)	21%	0%	8%	15%
Number of Signatures needed	(0-2)	6%	30%	0%	26%
	(2-4)	22%	70%	42%	52%
	(5-6)	33%	0%	46%	18%
	(7-10)	27%	0%	9%	0%
	(Over 10)	14%	0%	4%	4%
Number of Agencies Intervening	(0-2)	0%	30%	0%	12%
	(2-4)	37%	70%	35%	40%
	(5-6)	29%	0%	57%	29%
	(7-10)	29%	0%	9%	20%
	(Over 10)	5%	0%	0%	0%
Number of Inspections Required	(0-2)	5%	40%	21%	50%
	(2-4)	40%	60%	46%	34%
	(5-6)	24%	0%	33%	8%
	(7-10)	26%	0%	0%	8%
	(Over 10)	5%	0%	0%	0%
Payment Process/Steps	(0-2)	21%	60%	25%	58%
	(2-4)	32%	40%	50%	33%
	(5-6)	37%	0%	25%	0%
	(7-10)	11%	0%	0%	8%
No of License Renewal	(0-2)	26%	60%	17%	67%
	(2-4)	47%	20%	33%	25%
Complexity Description	**Scale**	**Kenya**	**Rwanda**	**Tanzania**	**Uganda**
	(5-6)	5%	0%	25%	0%
	(7-10)	16%	0%	25%	0%
	(Over 10)	5%	20%	0%	8%
Issuance of Insurance	(0-2)	37%	60%	58%	75%
	(2-4)	47%	20%	33%	17%
	(5-6)	5%	20%	8%	8%
	(7-10)	5%	0%	0%	0%
	(Over 10)	5%	0%	0%	0%

Source: LPS 2021

3.5.5 Perception of Clearing and Forwarding Agents in Logistics

3.5.5.1 Factors Influencing Decision of CFA to use certain mode of Cargo Transport

The factors that influence the decision of CFA to use certain mode of cargo transport was analyzed in detail by country.

Kenya CFA considered the factors below as the major influencers of the transport mode decision: Time Schedules - 47% (Great Extent); Freight Cost - 42% (Great Extent); Reliability of Carrier -58% (Very Great Extent); Sensitivity of Cargo - 63% (Very Great Extent); Security and Safety - 58% (Very Great Extent) and Vessel Size - 58% (Great Extent).

Rwanda CFA considered the factors below as the major influencers of the transport mode decision: Time Schedules - 60% (Moderate Extent); Freight Cost – 20% (No Extent); Reliability of Carrier - 40% (No Extent); Sensitivity of Cargo - 40% (Very Great Extent); Security and Safety - 40% (Great Extent) and Vessel Size - 40% (No Extent).

Tanzania CFA considered the factors below as the major influencers of the transport mode decision: Time Schedules - 38% (Very Great Extent); Freight Cost – 46% (Very Great Extent); Reliability of Carrier - 46% (Very Great Extent); Sensitivity of Cargo - 54% (Very Great Extent); Security and Safety - 54% (Very Great Extent) and Vessel Size - 31% (Very Great Extent).

Uganda CFA considered the factors below as the major influencers of the transport mode decision: Time Schedules - 46% (Very Great Extent); Freight Cost – 54% (Very Great Extent); Reliability of Carrier - 46% (Very Great Extent); Sensitivity of Cargo - 46% (Very Great Extent); Security and Safety - 46% (Moderate Extent) and Vessel Size - 31% (Moderate Extent).

Table 3-33: Rating of Factors that influence the decision of CFA to use certain Mode of Transport

Rank	Kenya	Rwanda	Tanzania	Uganda
	Time Schedule			
Very Great Extent	37%	20%	38%	46%
Great Extent	47%	0%	31%	15%
Moderate Extent	11%	60%	15%	31%
Low Extent	5%	0%	0%	8%
No Extent	0%	20%	15%	0%
Rank	**Freight Cost**			
Very Great Extent	37%	20%	46%	54%
Great Extent	42%	20%	46%	23%
Moderate Extent	21%	20%	8%	23%
Low Extent	0%	20%	0%	0%
No Extent	0%	20%	0%	0%
Rank	**Reliability of Carrier**			
Very Great Extent	58%	20%	46%	46%
Great Extent	32%	20%	46%	15%
Moderate Extent	11%	20%	8%	38%
Low Extent	0%	20%	0%	0%
No Extent	0%	20%	0%	0%
Rank	**Sensitivity of the Cargo**			
Very Great Extent	63%	40%	54%	46%
Great Extent	37%	20%	31%	15%
Moderate Extent	0%	40%	15%	23%
Low Extent	0%	0%	0%	15%
Rank	**Security and Safety**			
Very Great Extent	58%	20%	54%	38%
Great Extent	42%	40%	38%	8%
Moderate Extent	0%	20%	8%	46%
No Extent	0%	20%	0%	8%
Rank	**Vessel Size**			
Very Great Extent	26%	20%	31%	23%
Great Extent	58%	20%	31%	23%
Moderate Extent	11%	20%	15%	31%
Low Extent	0%	0%	23%	0%
No Extent	5%	40%	0%	23%

Source: LPS 2021

3.5.5.2 Rating of Efficiency of processes at Freight Origin and Destination Points

As shown in the table below, majority of the CFA respondents from Kenya rated transparency of customs as above average (80%) and a paltry rated it as below average (21%). in terms of transparency of other Government Agencies, this was rated above average (84%) and a paltry 16% rated it below average. In terms of clearance processes and transparency, this was rated above average by 79% of the respondents. The respondents rated use of paperless systems at above average by 68%.

Majority of the CFA respondents from Rwanda rated transparency of customs at 100% above average. In terms of transparency of other Government Agencies, this was rated above average by 100% of the respondents. In terms of clearance processes and transparency, this was rated above average by 100% of the respondents. The respondents rated use of paperless systems at above average by 60%.

Majority of the CFA respondents from Tanzania rated transparency of customs at 99% above average. In terms of transparency of other Government Agencies, this was rated above average by 99% of the respondents. In terms of clearance processes and transparency, this was rated above average by 92% of the respondents. The respondents rated use of paperless systems at above average by 84%.

Majority of the CFA respondents from Uganda rated transparency of customs at 100% above average. In terms of transparency of other Government Agencies, this was rated above average by 85% of the respondents. In terms of clearance processes and transparency, this was rated above average by 100% of the respondents. The respondents rated use of paperless systems at above average by 100%.

Table 3-34: Rating of Efficiency Processes at Freight Origin and Destination Port

Transparency of Customs				
Rank	**Kenya**	**Rwanda**	**Tanzania**	**Uganda**
Very Good	16%	20%	15%	23%
Good	32%	60%	38%	31%
Fair	32%	20%	46%	46%
Poor	16%	0%	0%	0%
Very Poor	5%	0%	0%	0%
Transparency of Other Government Agencies				
Rank	**Kenya**	**Rwanda**	**Tanzania**	**Uganda**
Very Good	21%	40%	15%	15%
Good	21%	20%	46%	8%
Fair	42%	40%	38%	62%
Poor	11%	0%	0%	15%
Very Poor	5%	0%	0%	0%
Port Clearance Processes Transparency				
Rank	**Kenya**	**Rwanda**	**Tanzania**	**Uganda**
Very Good	16%	20%	31%	31%
Good	37%	40%	38%	38%
Fair	26%	40%	23%	31%
Poor	16%	0%	8%	0%
Very Poor	5%	0%	0%	0%
Use of Paperless Systems				
Transparency of Customs				
Rank	**Kenya**	**Rwanda**	**Tanzania**	**Uganda**
Rank	**Kenya**	**Rwanda**	**Tanzania**	**Uganda**
Very Good	21%	0%	15%	31%
Good	26%	40%	31%	54%
Fair	21%	20%	38%	15%
Poor	16%	20%	15%	0%
Very Poor	16%	20%	0%	0%

Source: LPS 2021

3.5.6 Impact of COVID -19 on Clearing and Forwarding Agents in Transport Logistics

3.5.6.1 Impact of COVID-19 on CFA in East Africa

The study established that at 96% of CFA respondents from East Africa were affected by the COVID-19 Pandemic.

Table 3-35: Impact of COVID-19 Pandemic on CFA in East Africa

Country	Impact of COVID-19 Pandemic	
	No	Yes
Kenya	0%	100%
Rwanda	0%	100%
Tanzania	0%	100%
Uganda	15%	85%
Overall	**4%**	**96%**

Source: LPS 2021

Most of the companies (96%) indicated that they had made changes to businesses so as to mitigate the effects of COVID-19 pandemic.

3.5.6.2 Rating of the Impact of COVID-19 on CFA Business

The study rated the impact of COVID-19 on CFA businesses in East Africa against a number of factors. The summary below indicate the overall impact of COVID-19 on CFA businesses across east Africa.

- On Managing shipments, the overall impact was low
- On freight rates, the overall impact was in between low and severe
- On securing flights, the overall impact was uniform across all rating categories
- On delayed Documentation at Source Market, the overall impact was low
- On securing transport services, the overall impact was moderate
- On complying with Government Agencies, the overall impact was low
- On Clearing from the Airport/Port, the overall impact was low

Table 3-36: Rating of the Impact of COVID-19 on CFA Business

Description	Rating	Kenya	Rwanda	Tanzania	Uganda	Overall
Managing Shipments	Low Impact	35%	40%	62%	38%	43%
	Moderate Impact	35%	40%	31%	38%	35%
	Severe Impact	30%	20%	8%	23%	22%
Description	**Rating**	**Kenya**	**Rwanda**	**Tanzania**	**Uganda**	**Overall**
Freight Rates	Low Impact	30%	20%	54%	31%	35%
	Moderate Impact	30%	60%	23%	23%	29%
	Severe Impact	40%	20%	23%	46%	35%
Description	**Rating**	**Kenya**	**Rwanda**	**Tanzania**	**Uganda**	**Overall**
Securing Flights	Low Impact	25%	40%	46%	31%	33%
	Moderate Impact	30%	20%	38%	38%	33%
	Severe Impact	45%	40%	15%	31%	33%
Description	**Rating**	**Kenya**	**Rwanda**	**Tanzania**	**Uganda**	**Overall**
Delayed Doc-umentationat Source Market	Low Impact	30%	40%	46%	38%	37%
	Moderate Impact	25%	40%	31%	38%	31%
	Severe Impact	45%	20%	23%	23%	31%
Description	**Rating**	**Kenya**	**Rwanda**	**Tanzania**	**Uganda**	**Overall**
Securing Transport Ser-vices	Low Impact	30%	20%	46%	31%	33%
	Moderate Impact	35%	40%	38%	31%	35%
	Severe Impact	35%	40%	15%	38%	31%
Description	**Rating**	**Kenya**	**Rwanda**	**Tanzania**	**Uganda**	**Overall**
Complying with Government Agencies	Low Impact	35%	40%	54%	38%	41%
	Moderate Impact	30%	40%	38%	31%	33%
	Severe Impact	35%	20%	8%	31%	25%
Description	**Rating**	**Kenya**	**Rwanda**	**Tanzania**	**Uganda**	**Overall**
Clearing from the Airport/Port	Low Impact	40%	60%	31%	31%	37%
	Moderate Impact	20%	40%	46%	23%	29%
	Severe Impact	40%	0%	23%	46%	33%

Source: LPS 2021

3.5.6.3 Effects of COVID-19 Containment Measures on CFA

COVID-19 containment measures had significant effects on cost of transporting cargo as most respondents (33%) reported that costs have increased by 30%-45%. On labor, the containment measures led to a marginal increase on laborers by 15-30% as reported by 39% of the respondents. Documentation and clearance complexities increases by a slim margin of 15%-30% as reported by most respondents (31%). The time spent to clear and transport cargo increased by 30%-45% as reported by most respondents (33%). The figure below gives the details of the study findings on effects of COVID-19 containment measures on clearing and forwarding agents in East Africa.

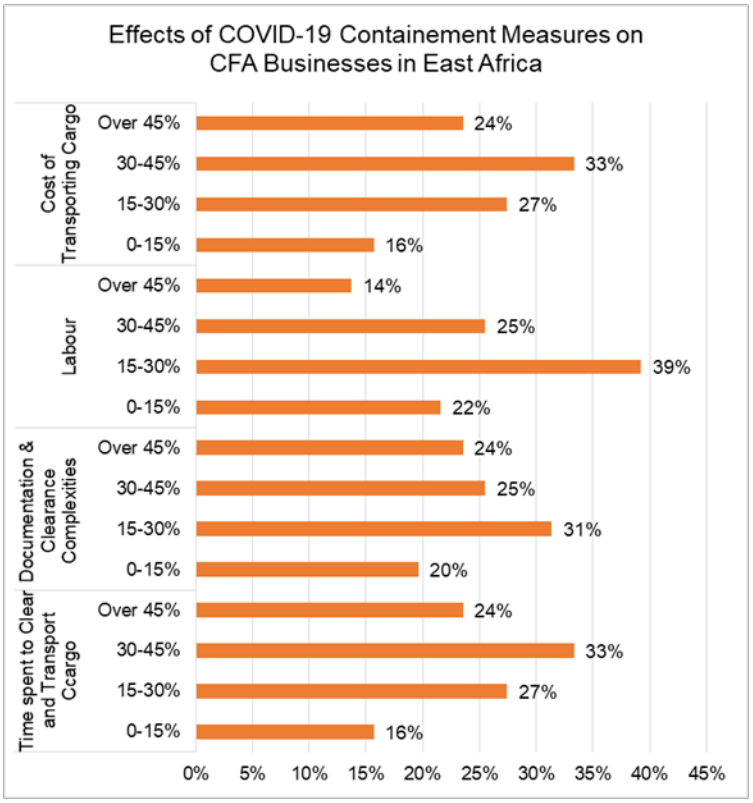


Figure 3-27: Effect of COVID-19 Containment Measures on CFA Businesses in East Africa.

Source: LPS 2021

3.6 Cargo Owners

3.6.1 Background Information

3.6.1.1 Distribution of Cargo Owners by Country

The figure below shows the distribution of cargo owners by country. The LPS survey managed to survey a total of 4 respondents out of which 50% were from Tanzania and 50% from Kenya. Most of the companies interviewed stated that they do both imports and exports. Most of the companies identified that they mainly import containerized cargo. The location of headquarters of the companies were Dar es Salaam and Nairobi.

3.6.1.2 Mode of Transport

The mode of transport chosen by cargo owners in the logistics decision is key for goods movement in the logistics chain. The figure below gives the share of modes used by cargo owners to import goods into East Africa market.

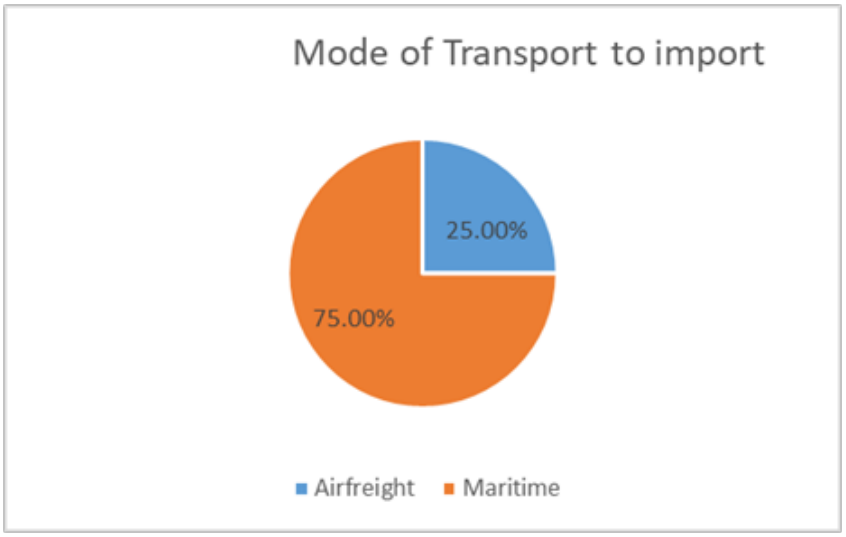


Figure 3-28: Cargo Owners Mode of Transport used to Import

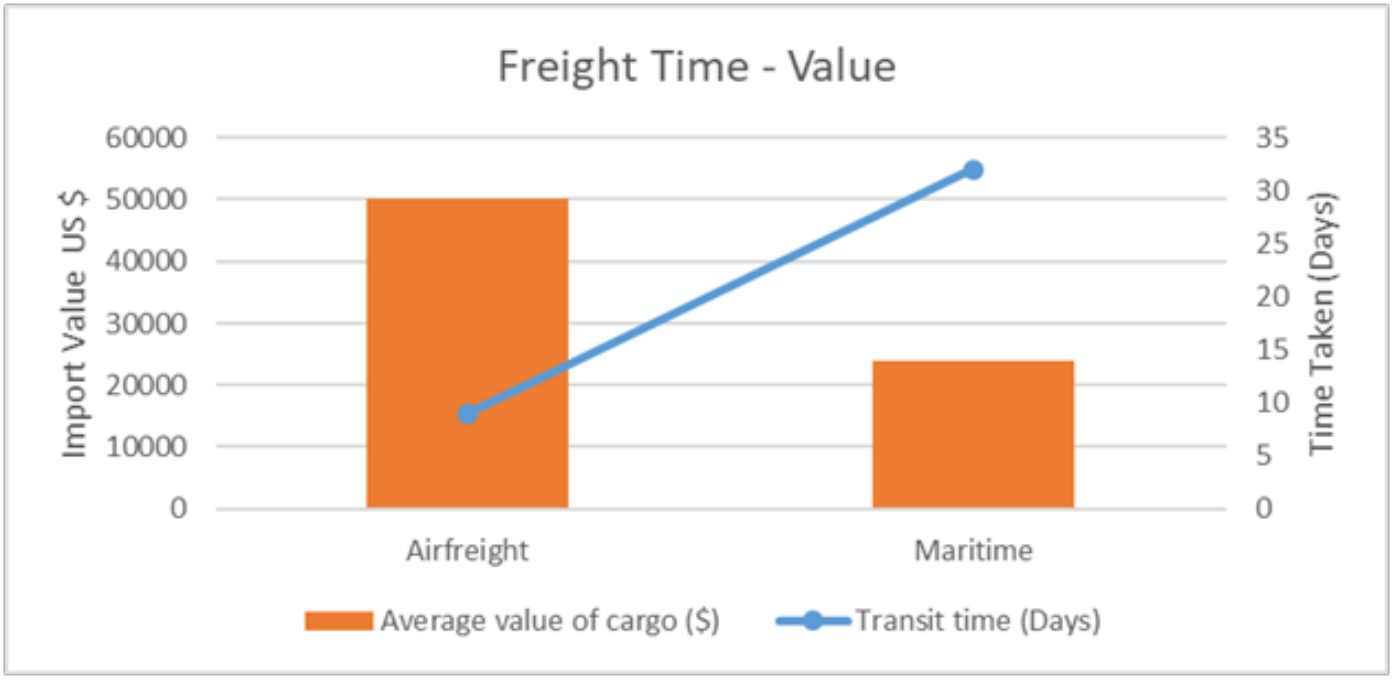
Source: LPS 2021

From the chart above, maritime (water transport) through shipping at 75% was the main mode of transport used to import goods. The remaining balance of 25% used air transport.

3.6.2 Time Indicator

The cargo owners are to minimize on the logistic time taken given the value of the cargo. In the survey, the cargo owners gave the average time taken and the approximated value of their imports in the 2020. The result is presented in the figure below.

Figure 3-29: Freight Time



Source: LPS 2021

The figure above, this showed that air transport takes on average 9 days whereas maritime transport takes approximately 30 days. This however is dependent on the type of cargo being imported.

In accessing the logistic time change, 69% of the respondents observed an average 30%- 40% increase in the cargo import time with a maximum taking 91 days after logistic clearance for import. In the response, 21% showed a change above 40% in the freight time for the imports.

3.6.3 Cost Indicator

The input factor in the logistic services for traders is a consideration given on the mode of transport cost to import the goods irrespective the route. The cost incurred in the 2020 logistic review period is given in the table below.

Table 3-37: Average Cost for Imports and Exports in USD/Tonne

Modes/Unit	Average of Cost ofImport (USD/Ton).	Average of Cost ofExport (USD/Ton).
Airfreight	3,000	2,730
Maritime	1,400	2,100

Source: LPS 2021

The unit ton charge of importing cargo was high in air transport at USD 3,000 compared to Maritime at USD 1,400. Exporting through maritime transport was high compared to import cost. The driver of this cost was the economy of scale where exporting the cargo owner makes the exporting schedule whereas at import the decision of import time depend on the airline or ship agencies hence cost is shared among importers.

3.6.4 Complexity in Logistic Services by Cargo Owners

Each player in the sector experiences the dynamics in the logistic industry, cargo owners are at the center of any events happening with respect to factor affecting cargo movements, during the survey respondent gave their insight on the complexity scope under the survey period.

3.6.4.1 Clearing Agents

The dilemma of the clearing agents were not major issues during the review period since they had to choose the clearing agents for exports except for imports which the importing agents do. The time efficiency of the clearing agents is given in the table below.

Table 3-38: Time Efficiency for Clearing Agents

Mode of Transport	Average Time taken to Clear Cargo atthe Port/Airport/ICD (in Hours)
Freight & Logistics	48
Customs Clearance/Brokerage	72

Source: LPS 2021

As shown above, the average time for freight and logistics takes 48 hours whereas the time for customs and clearance takes on average 72 hours.

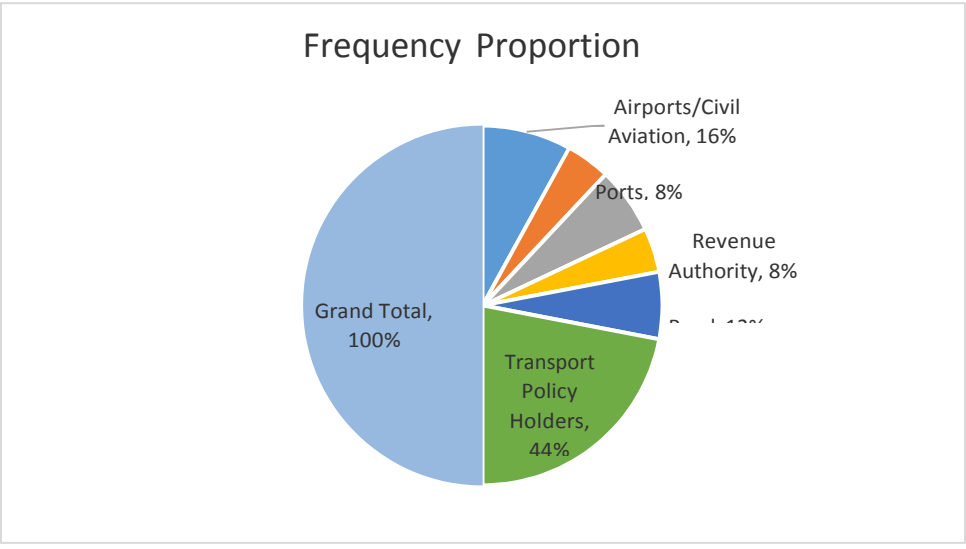
3.7 Government Agencies Key Informant Interviews

3.7.1 Background Information

3.7.1.1 Distribution of Government Agencies by Logistic Sector

The figure below shows the distribution of the government agencies providing logistic services in the region based on the sector. The LPS survey managed to interview a total 25 public entities subjects distributed as shown in the chart below;

Figure 3-30:Frequency of Government Agencies by operation sector



Source: LPS 2021

3.7.1.2 List of Government Agencies by Country

The figure below shows the list of key Informant by the country of operation;

Table 3-37: Average Cost for Imports and Exports in USD/Tonne

Government Agencies	Country of Operation
Kenya	8
Airports/Civil Aviation	2
Rail	1
Road	1
Transport Policy Holders	4
Rwanda	2
Transport Policy Holders	2
Tanzania	8
Airports/Civil Aviation	1
Ports	1
Rail	1
Revenue Authority	1
Road	1
Transport Policy Holders	3
Uganda	6
Airports/Civil Aviation	1
Rail	1
Revenue Authority	1
Road	1
Transport Policy Holders	2

Source: LPS 2021

3.7.2 Roads Sector Performance

The period under review road agencies within the region developed and maintained their corridors to continuously sustain the road logistic services, the output performance for 2019 and 2020 is presented in the table below;

Table 3-39: EAC Road Output Performance

Corridor	Country	Road Length Constructed		Road Length Maintained	
		2019	2020	2029	2020
Northern Corridor	Kenya	17	13	731	772
Central Corridor	Tanzania	20	10	65	76

Source: LPS 2021

The table above shows the output per country's corridor, In Kenya under KeNHA mandated to develop the northern corridor totaling to 813 Km developed 17 km in 2019 and 13 Km in 2020 as new pavement along the corridor to ease traffic congestion in Mombasa Port Area.

Tanzania under TANROADs developed 20 Km and 10 Km respectively in 2019 and 2020 to improve poor road sections along the corridor. The road agencies continue to maintain its highways to improve the logistic services; the output from the central corridor maintenance is low compared to the Northern Corridor.

3.7.2.1 Axle Load Compliance

Road trafficking comes with responsibility from road users mainly goods vehicles to protect the road pavement from the any load related deterioration. The survey measured the compliance rate from different countries in axle load control at the weighbridges and the traffic volume of cargo vehicles passing through the facilities.

The table below gives the compliance rate and the goods vehicle traffic volume along the corridors;

Table 3-40: Axle Load Compliance

Country	Average daily goods vehicle volumepassing along the corridor weighbridges	Compliance rate of axle loadlimit along the corridor
Kenya	11,611	86
Tanzania	5,916	80
Uganda	3,223	96
Average	**6,842**	**87.3**

Source: LPS 2021

The compliance rate in Uganda is almost perfect this due to law enforcement and other regulatory measure, to note Kenya and Tanzania traffic volumes are high hence low compliance rate compared to Uganda.

3.7.2.2 Measures to enhance Road Transport

Protecting and improving the existing infrastructure is key in ensuring sustainability of road transport in the region, The table below gives the intervention measures the road agencies are undertaking to improve efficiency in the region logistic industry.

Table 3-41: Measures to enhance road Transport

Use of Technology in Axle Control				
Country	**Kenya**	**Tanzania**	**Uganda**	**Grand Total**
Highly Improved	100.00%	100.00%	0.00%	66.67%
Improved	0.00%	0.00%	100.00%	33.33%
Traffic Management in Weighbridges				
Improved	100%	100%	100%	100%
Developing alternative routes to ease traffic on the corridor				
Improved	0.00%	100.00%	100.00%	66.67%
Planning	100.00%	0.00%	0.00%	33.33%
Installing Standardized Bumps along the corridor				
Improved	100.00%	100.00%	0.00%	66.67%
No Change	0.00%	0.00%	100.00%	33.33%

Source: LPS 2021

Table 3-42: Railway Sector Performance (Metric Tons)

Country	Average volume of transit cargo in standard container size transported in the railway? (Per week)
Kenya	766
Tanzania	10
Uganda	750

Source: LPS Survey2021

From The table above, Kenya and Uganda are the most user of railway services in the logistic industry in the region having traffic volume of 766 Mt and 750 Mt respectively with Tanzania recording low volume of 10 per week.

3.7.3.1 Railway Freight Cost

The absolute cost per 40ft container is high in Uganda at 1,850 USD compared to Kenya and Tanzania who charge the least in the region at 70 USD, the variation may be the factor of distance and railway network coverage in the respective countries.

Table 3-43: Railway Freight Cost

Government Agencies	Average unit cost of 40ft container along your railway line (USD)
Kenya	700
Tanzania	70
Uganda	1,850

Source: LPS Survey 2021

3.7.3.2 Railway Freight Time

The average freight time in hours for clearing cargo at loading area (ICD/Port) is high in Uganda at 20hours and least in Tanzania at 6 hours. The attributes of the efficiency are the procedural requirements by the government agencies contributing to 60.2% of the time taken, lack of documentation by cargo owners at 15.7% and break down of equipment 10% while the rest are mishandling of the cargo at loading areas.

Table 3-44: Railway Freight Time in Hours

Country	Average clearing time for Cargo at point of loading to offloading point (Hrs)
Kenya	10
Tanzania	6
Uganda	20

Source: LPS Survey 2021

In overcoming, the complexities in the rail sector the government agencies of respective countries are committed to;

Kenya
- Reduction of documentation and harmonize freight charges with neighbouring countries

Tanzania
- Optimize servicing of Rolling stock, usage of warehouses, employ technology etc.

Uganda
- Increasing the number of Logistic Hubs in the country by developing logistics hubs in each region, currently there is Mukonono Logistics hub, and Gulu Logistics hub is about to be completed as many others are under way

3.7.4 Complexity in Government Agency Services

The respondents ranked the complexity or difficulties experienced while trade is being undertaken. The table below provides the rating of the service delivery provided by the institutions interviewed.

Table 3-45: Government Agencies Complexity Rating of Services

Logistics-Friendly Laws and Regulations					
Country	**Kenya**	**Rwanda**	**Tanzania**	**Uganda**	**Grand Total**
Fair	0%	0%	0%	50%	9%
High	75%	100%	100%	50%	82%
Very High	25%	0%	0%	0%	9%
Good customer care					
Fair	0%	0%	33%	100%	27%
High	75%	50%	0%	0%	36%
Very High	25%	50%	67%	0%	36%
Regional Insurance Policies					
Don't Know	0%	50%	33%	0%	18%
Fair	25%	0%	0%	50%	18%
High	25%	50%	67%	0%	36%
Low	0%	0%	0%	50%	9%
Very High	50%	0%	0%	0%	18%
Harmonized Fines and Penalties Structure					
Fair	25%	50%	67%	0%	36%
High	50%	50%	0%	0%	27%
Low	0%	0%	33%	100%	27%
Very High	25%	0%	0%	0%	9%

Source: LPS 2021

On the logistic friendly laws and regulation, government agencies give high services with 100% in Tanzania and Rwanda with Kenya at 75% while in Uganda it was 50% fair.

Good customer care factor is still an issue in the region with all countries giving an insignificant rating in the service delivery, more customer care services is required to the logistic service providers being facilitated by the government agencies.

On regional insurance policy, the service offer varies from country to country, with 18.18% "don't know" how this works while 36.36% offer high service on this area with Kenya and Rwanda offering fair and high service at 50%. Uganda still offers low service in this sector at 64%.

Harmonization of fines and penalties is another concern of the service providers with only Kenya and Rwanda offering 75% and 50% respectively high service with Uganda offering low service while Tanzania is in fair state.

Harmonization of fines and penalties needs to synchronize for uniformity across the region to improve on service delivery.

3.7.5 Government Mechanisms to Support Logistic Services in the Region

The section below presents the Government mechanism to support logistic services in the Region.

Table 3-46: Government Mechanism to Support Logistic Service in the Region

Mechanisms per Country
Kenya
• Enhancements of online systems and introduction of paperless transactions
• Having the appropriate legislation to support and facilitate the players in the industry.
• Implementation of modern technological facilities in majority of the areas
• Put in place working sectoral groups and task forces such as Dar PIC and NorthernCorridor & Mombasa Port Community Charter.
Rwanda
• The government of Rwanda, through Rwanda Transport Development Agency (RTDA),conducts survey to identify black spots along the road network and takes required measures. The exercise is sometimes conducted with the assistance of DevelopmentPartners such World Bank.
Tanzania
• Construction of Ring Roads/Diversions
• They have employed technological systems in most areas operations
Uganda
• Cargo tracking
• Participation in dialogue of the association of traffic Bosses across the region • Development of new ports; e.g., Bukasa • Launching of new transport vessels • Improved management of Uganda Railways cargo services for the EA railway gauge
• Upgrade of URA Custom's systems has been ongoing with assistance from TrademarkEast Africa for several years as part of East African wide regional technical assistance programs. This includes Uganda Electronic Single Window, Electronic Cargo Tracking, Uganda Trade Portal etc.

Uganda Trade Portal etc.

4 Transport Cost Analysis for the various Transport Modes

4.1 Introduction

The Study Team critically reviewed and analyzed the current cost trend cutting across the maritime, rail, road and airfreight amid the COVID-19 Pandemic for exports and imports along the Northern and Central Corridors in EAC. The analysis provided details of trends in Cost between EAC and COMESA, EU, ASIA and USA.

The costs were obtained through interviews, focus group discussions and questionnaires with the key sector players who include Airlines and Airfreight Agents, Clearing and Forwarding Agents, CFS Operators and Warehouse Operators, Road Transporters, Shipping Lines/Ship Agents, Regulatory Authorities, Shippers (Cargo owners, Importers and Exporters), Others (Development Partners, Corridor Authorities', Regional Organizations) in the EAC region. The costs were also obtained through review of key documents such as the Transport Observatory Reports for Northern and Central Corridors, among others.

4.2 Sea Freight Cost

Sea freight rates to and from the East African ports, like any other African region, differ. Import rates are normally higher than exports rates. However, rates to and from both ports are the same. There is no major difference in the import and export rates to Mombasa and Dar es Salaam. This is mainly due to the fact that the ports are served by the same feeder vessels on a routine trip, Considering the volume of cargo into and out of the region, liners prefer to use a single vessel to call both ports.

Secondly the similarity in origin, destination, type of cargo and port structures and operations makes it unattainable to offer differing rates. Seaborne trade accounted for 80% of the total volume and 70% of the value of global trade in 2019 with the total volume carried reaching 12.3 billion tons. However, African countries accounted for just 7% and 5% of both magnitudes. (UNCTAD 2020).

Table 4-1: Maersk announcement for FAK rates (Freight All Kind) from India to EA ports

Origin	Destination	Commodity	20DC	40DC	40High
India ports (IN)	Djibouti (DJ)	FAK	525 USD	1490 USD	1490 USD
India ports (IN)	Dar es Salaam (TZ)	FAK	780 USD	1350 USD	1350 USD
India ports (IN)	Mogadishu (SO)	FAK	625 USD	1250 USD	1250 USD
India ports (IN)	Zanzibar (TZ)	FAK	1725 USD	3050 USD	3050 USD
India ports (IN)	Mombasa (KE)	FAK	780 USD	1350 USD	1350 USD
India ports (IN)	Tanga (TZ)	FAK	1925 USD	3450 USD	3450 USD
India ports (IN)	Berbera (SO)	FAK	1185 USD	2370 USD	2370 USD

Source: Maersk 20204

Table 4-2: Average container rates from Asia to East Africa

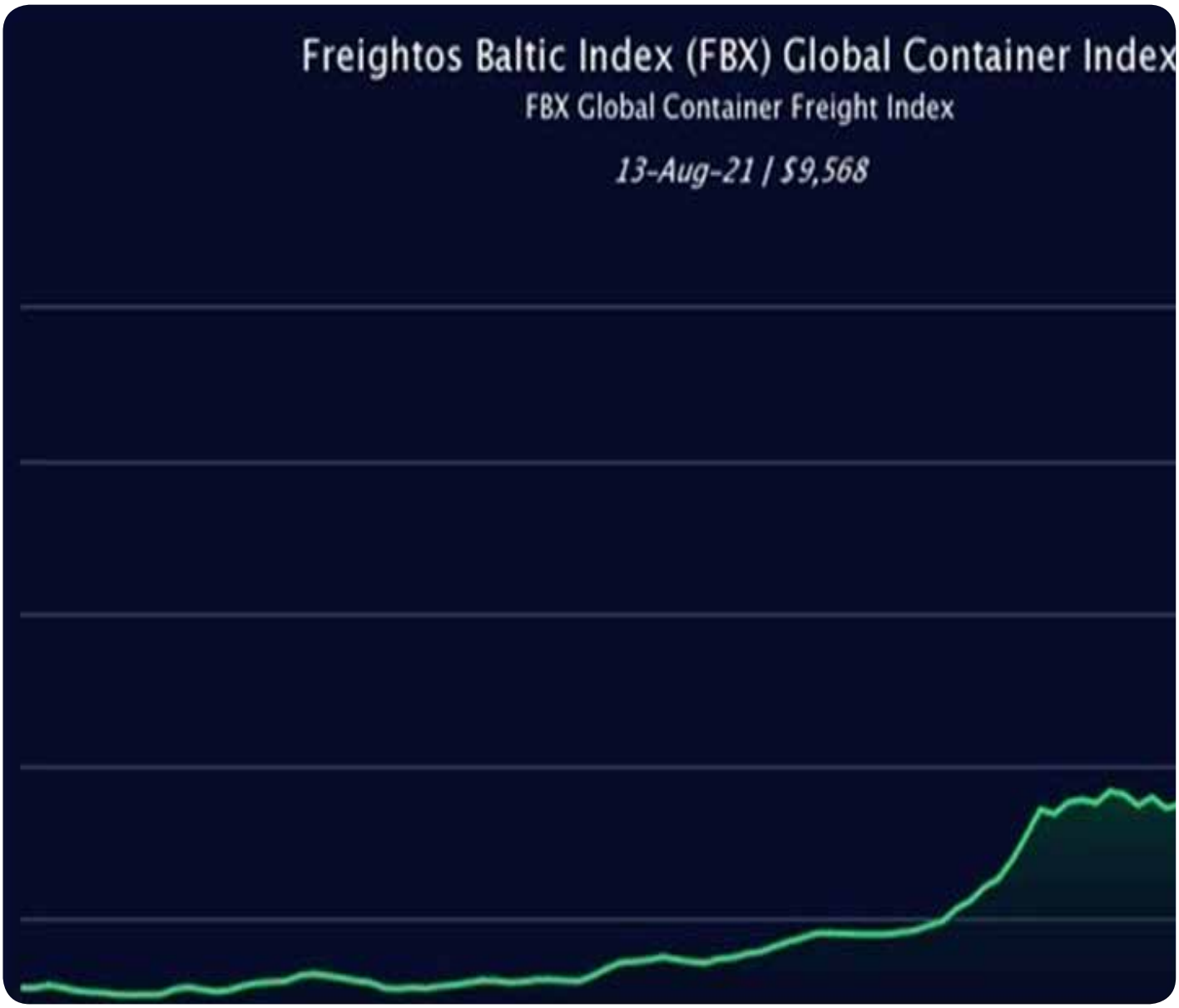
Origin	Destination	Commodity	20DC	40DC	40High
Qingdao	Mombasa	FAK	1200 USD	2150 USD	2150 USD
Ningbo	Mombasa	FAK	1450 USD	2700 USD	2700 USD
Nansha	Mombasa	FAK	1275 USD	2250 USD	2250 USD
Qingdao	Dar es Salaam	FAK	1200 USD	2150 USD	2150 USD
Ningbo	Dar es Salaam	FAK	1450 USD	2700 USD	2700 USD
Nansha	Dar es Salaam	FAK	1275 USD	2250 USD	2250 USD
Jakarta	Mombasa	FAK	850 USD	1550 USD	1550 USD
Tanjung Pelepas	Mombasa	FAK	850 USD	1650 USD	1650 USD
Ho Chi Minh	Mombasa	FAK	1000 USD	1850 USD	1850 USD
Laem Chabang	Mombasa	FAK	850 USD	1600 USD	1600 USD
Jakarta	Dar es Salaam	FAK	850 USD	1550 USD	1550 USD
Tanjung Pelepas	Dar es Salaam	FAK	950 USD	1850 USD	1850 USD
Ho Chi Minh	Dar es Salaam	FAK	1000 USD	1850 USD	1850 USD
Laem Chabang	Dar es Salaam	FAK	950 USD	1800 USD	1800 USD

Source: Shippingwatch, 2020.

Above tables displays a case of freight rates to Mombasa and Dar being the same.

4 https://www.maersk.com/news/articles/2019/11/20/ra-india-east-africa

Figure 4-1: Rate change for a 40' from Shanghai to Los Angeles between Sep2019 to Aug 2021



Source: Freightos, 2021[5]

The only marked difference is in import and export rates. International trade costs for the region are increased by the relatively small shipment sizes and asymmetric flows, leading to high costs per unit of shipment. Unit costs are also elevated by the imbalance between the types of cargo imported and exported (containerized versus mostly bulk). Moving a unit (such as container) of cargo is 1.5–3.5 times more expensive into Africa than in comparable high-volume trade routes over a similar distance (UNCTAD 2020).

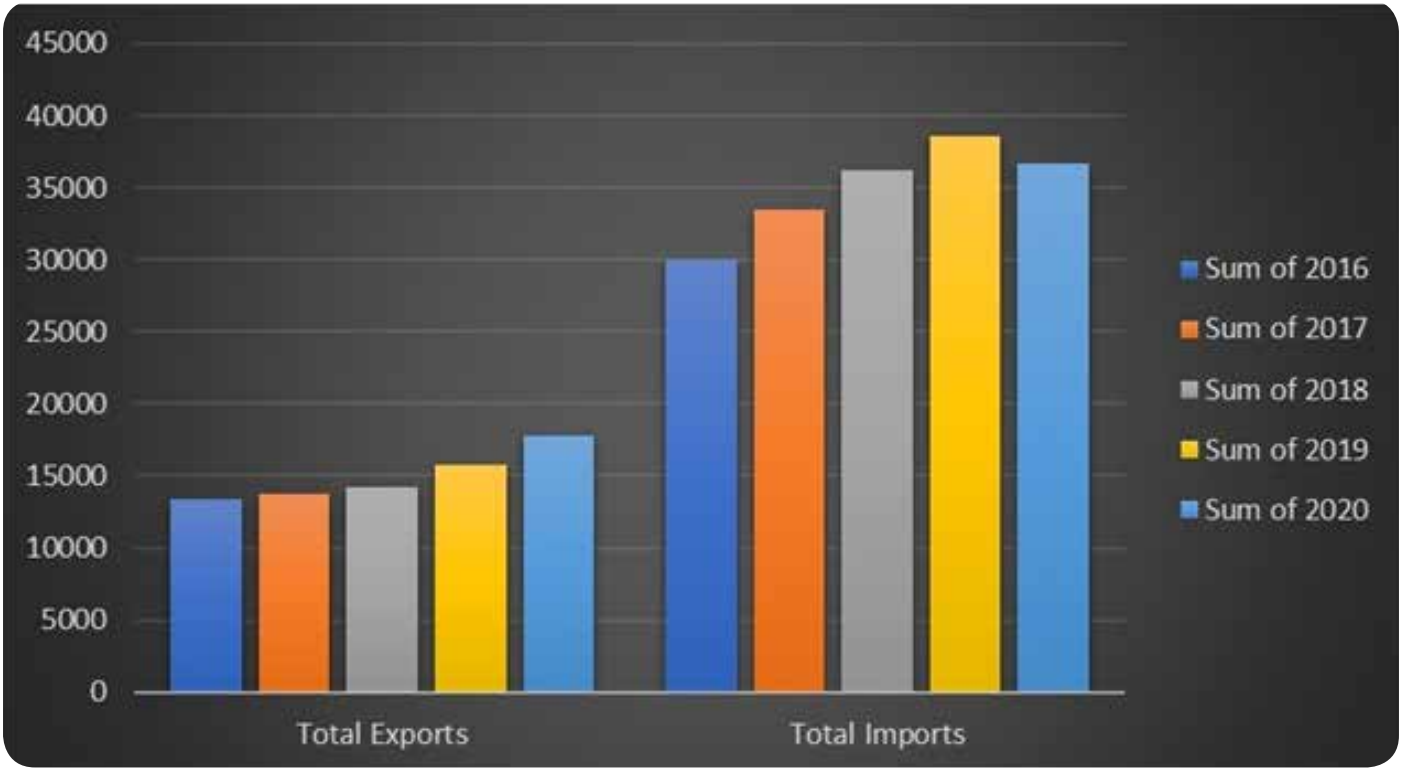
The East African region main exports out of the ports are raw material, raw agricultural produce and mineral products yet the regions import almost all consumable finished products, donated food aid for the ever-growing immigration population in the region, raw materials for the few factories, fertilizers, fuel and building and construction materials for the roads and construction industry. The quest for scale economies is also vital for maritime costs, large trade flows like exports from China and high-volume imports into Europe are conducive to scale economies in shipping, which in turn lower shipping costs and thereby increase trade. The lack of scale economies, because of the low volumes expected to be shipped from East African ports, has forced the shipping lines to set higher tariffs to call in these ports meanwhile.

[5] https://fbx.freightos.com/

The main effect on the region is that the high imports costs for consumer goods and raw materials get reflected on the end price. Meanwhile the low costs on export have no major value to the region since the commodities are exported in raw form at a low value. This imbalance in trade has a negative effect on development of poor countries like the region of study.

The figure below shows the sum of Total Exports and Imports of EAC Region.

Figure 4-1: Rate change for a 40' from Shanghai to Los Angeles between Sep2019 to Aug 2021



Source: EAC Data.2021

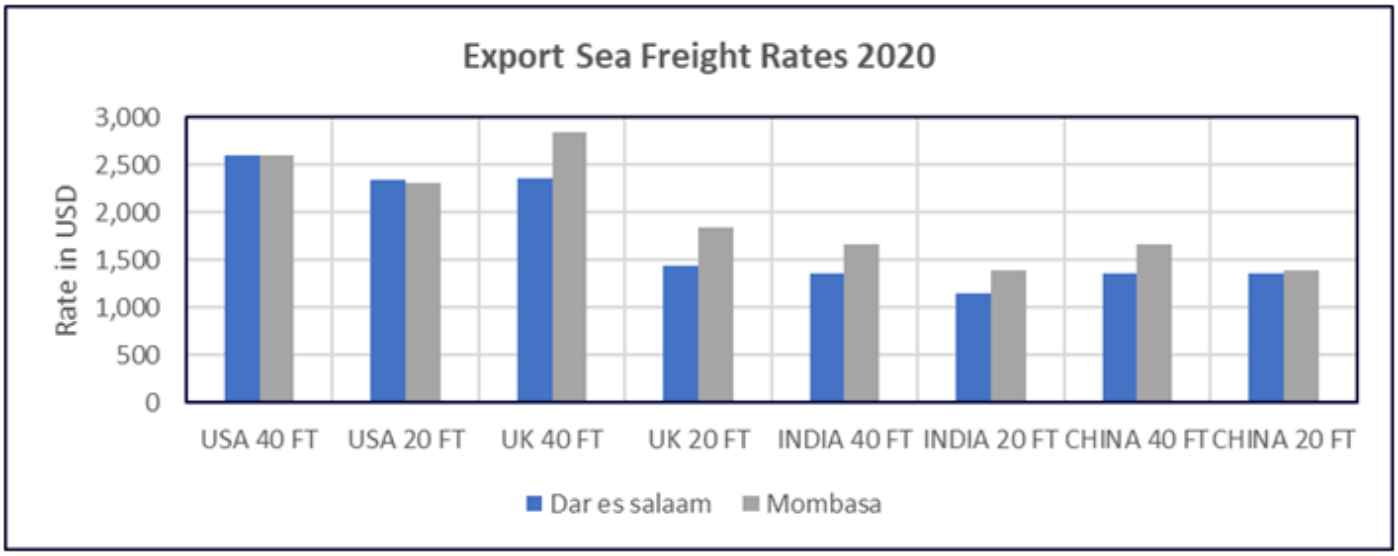
As per UNCTAD general data and in reference to table 1.3 above. The volume of imports into developing regions like East Africa has always been higher that the volume of export out of the region. This to the shipping industry means that the bigger portion of the vessel space when departing the port is filled by returning empty containers.

The impact of no return cargo on vessels means higher costs of management of relocation of empty containers to the regions requiring more containers. This extra cost is in effect reflected on import containers meaning that container costs to the region will be higher than the other regions that have return cargo on the vessel. To mitigate this, the shipping lines offer low rates for exports going to the regions that have a container deficit and limit the costs of shipping the containers to the areas.

As shown in the figure below, the freight cost/ rates to Asia and pacific region are extremely low compared to the rates to continental Europe and Americas despite the export commodity being similar but the distances being different.

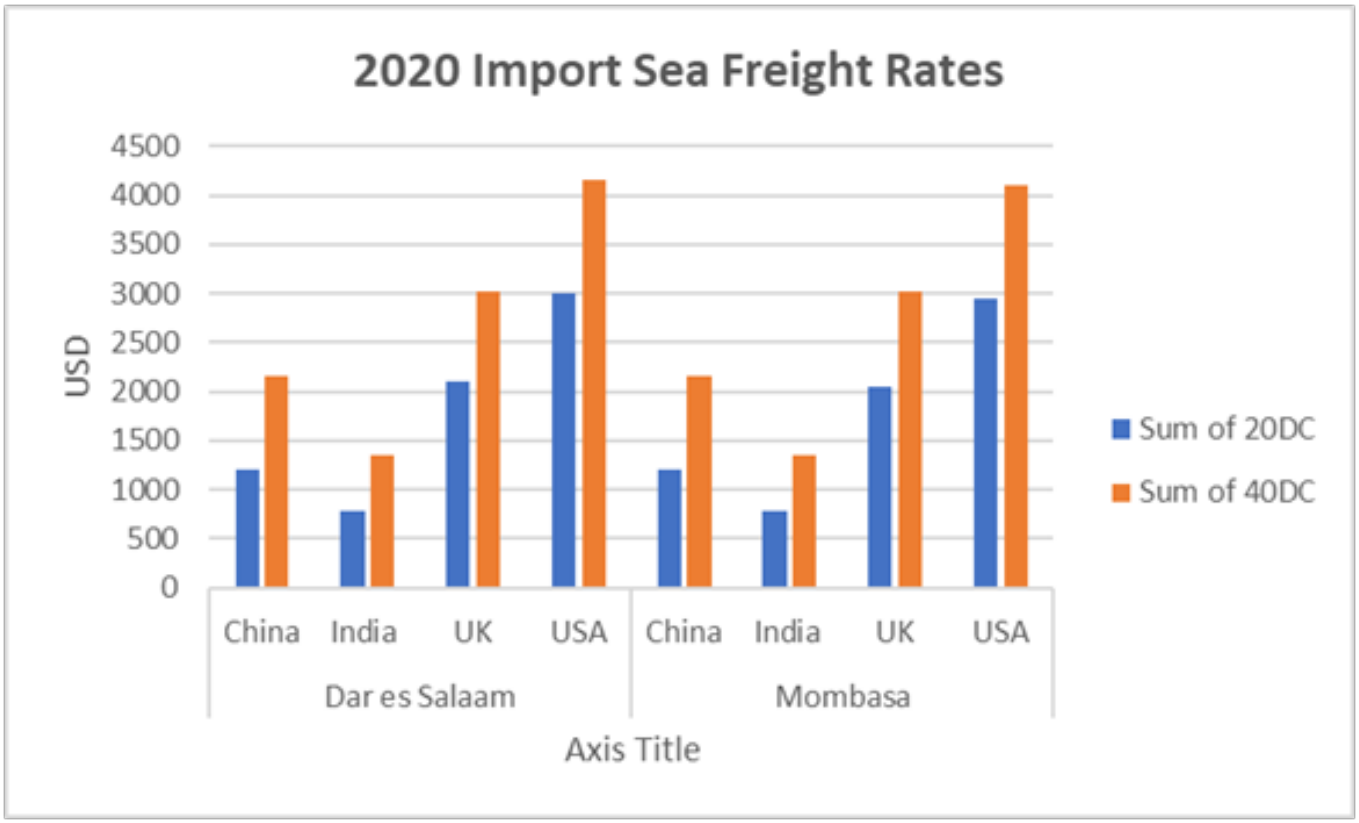
Therefore, in generally, export freight shipping rates out of both ports are lower than Import freight rates partly because of a fierce competition for return cargo to container deficit areas. Secondly because the highly imbalanced trading atmosphere where empty containers take up to two-thirds of a ship's slots for vessel departing the ports compared to inward vessel coming into the ports.

Figure 4-3: 2020 Export Sea Freight Rates for Dar es Salaam and Mombasa Ports. TradeSmart data 2021



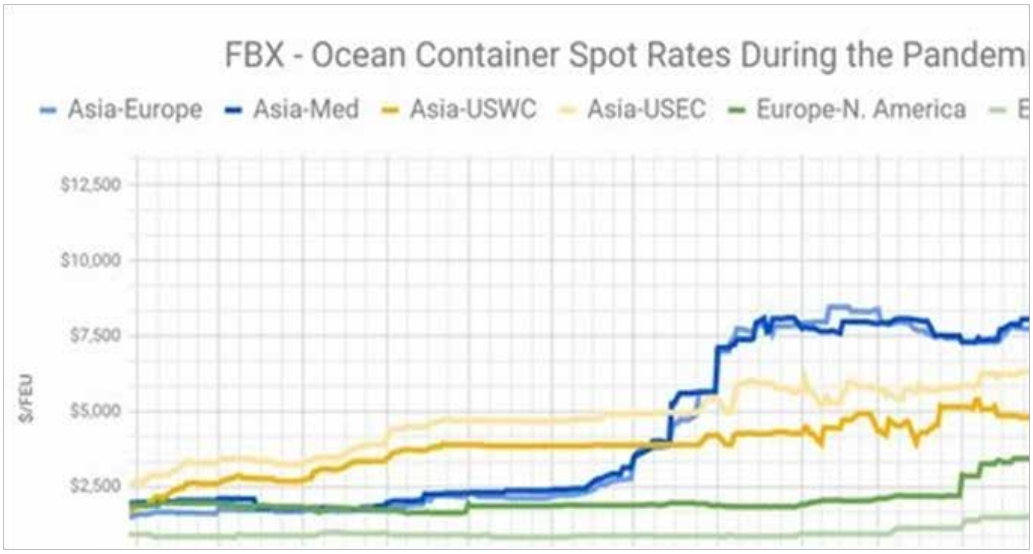
Source: TradeSmart data 2021

Figure 4-4: 2020 Import Sea Freight Rates for Dar es Salaam and Mombasa Ports.



Source: Shanghai Global index 2021

Figure 4-5: Ocean Freight Rate: June 2020 to July 2021.



Source.
Shanghai Global index 2021

Table 4-3: Global Freight changes for Sep 2021.

Trade Route	Origin	Destination	Rate	% increase
PACIFIC				
	China/East Asia	North America West Coast	USD19,040	3%
	North America West Coast	China/East Asia	USD919	1%
	China/East Asia	North America East Coast	USD20,615	3%
	North America East Coast	China/East Asia	USD1,025	10%
SUEZ				
	China/East Asia	North Europe	USD13,869	0.10%
	North Europe	China/East Asia	USD1,562	0.50%
	China/East Asia	Mediterranean	USD13,013	1%
	Mediterranean	China/East Asia	USD1,521	0.40%
ATLANTIC				
	North America East Coast	North Europe	USD363	18%
	North Europe	North America East Coast	USD5,994	1%
	Europe	South America East Coast	USD3,688	4%
	Europe	South America West Coast	USD5,249	1%

Source: Shanghai Global Index 2021

As explained above, there was no effect on rates from Africa. COVID had less impact on the export rates.

Table 4-4: China Containerized Freight Index

China Containerized Freight Index			
Description	**Previous Index**	**Current Index**	**Weekly Growth**
	27/08/2021	03/09/2021	(%)
COMPOSITE INDEX	3079.04	3097.58	0.60%
JAPAN	928.92	934.02	0.50%
EUROPE	5356.26	5305.97	-0.90%
W/C AMERICA	2099.31	2319.37	10.50%
E/C AMERICA	2433.97	2289.71	-5.90%
KOREA	921.04	937.42	1.80%
SOUTHEAST	1365.65	1324.3	-3%
MEDITERRANEAN	5838.46	5706.33	-2.30%
AUSTRALIA/NEW ZEALAND	2312.16	2377.27	2.80%
SOUTH AFRICA	2959.05	2990.97	1.10%
SOUTH AMERICA	2467.04	2491.9	1%
WEST EAST AFRICA	2170.8	2081.38	-4.10%
PERSIAN GULF/RED SEA	3666.26	3762.09	2.60%

Source: Shanghai Global Index 2021

4.3 Port Costs

4.3.1 Port Charges and Cost in Kenya and Tanzania.

In order to have control of the ports in East Africa, the respective government by acts of parliament respectively set up the port authorities to manage the ports mainly for strategic and economic reasons. In comparison, most ports in the developed world are owned or run privately. Most ports in Continental Europe, Greater Asia, China and USA are privately operated. The ports in East Africa and run by the authorities. They both have tariffs to guide in the collection of revenue. The tariff guides on all different aspects of the port operations and cost implications related to all vessel operations within the port. The table below illustrates the terminologies for port charges for Mombasa and Dar es Salaam.

Table 4-5: Terminologies for port charges for Mombasa and Dar es Salaam

Port Charges	
• Pilotage	• Licences & Fees
• Port Dues	• Hire Of Rowboats, Motorboat Portages
• Navigational Dues	• Baggage Attendants' Charges
• Dockage & Buoyage	• Passenger And Luggage Services
• Tug Services	• Slipping & Unslipping Of Vessels Hire Of Slipways
• Wayleave Dues	• Private Mooring Buoys
• Hire Of Lighters & Pontoons	• Ships Stores
• Mooring & Unmooring Services	• Military Cargo
• Supply Of Freshwater To Vessels	• Charts
• Garbage Disposal	• Stevedoring – Conventional Cargo Charges
• Hire Of Telephone	• Stevedoring Containerized Cargo Charges
• Hire Of Staff & Labor	• Storage Charges
• Hire Or Equipment	• wharfage charges
• Port Labor Kept Waiting Or Remaining Idle	• Shore Handling Charges

Source: Extracts from the KPA and TPA Tariff Books 2020

The study will only examine costs related to port end users who import or export cargo. The main focus will be on the following:

- Wharfage,
- Shore handling
- Delay charges that port users incur

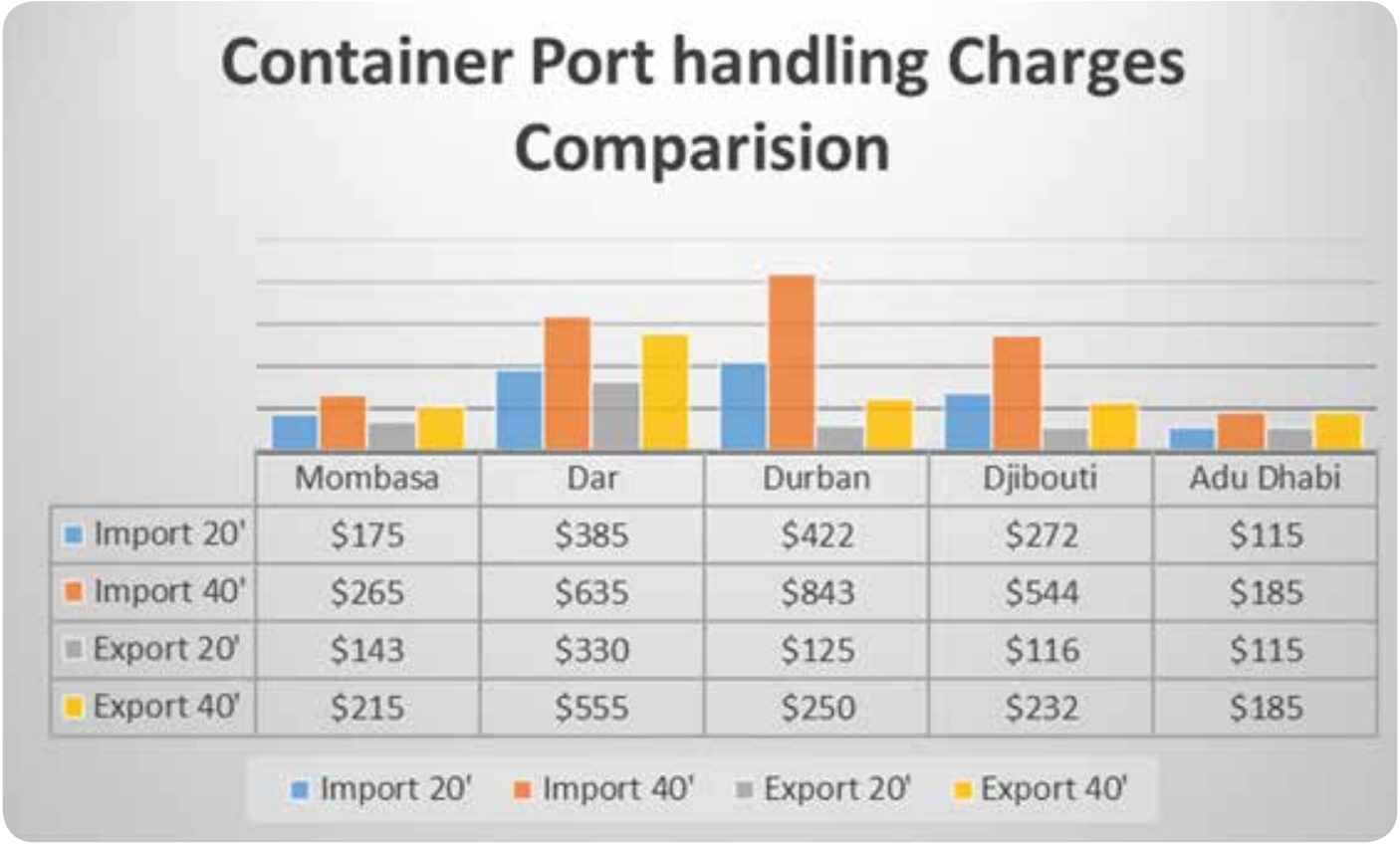
The table below details the charges for Mombasa and Dar es Salaam Port.

Table 4-6: Port Charges in Mombasa and Dar es Salaam

Port Charges						
Wharfage						
				unit	Momba-sa	Dar
	Domestic	Convention-al cargo	Import	per ton	USD8	1.6% of val-ue
		Convention-al cargo	Export	per ton	USD7	1% of value
		Container	Import	20’	USD70	USD250
		Container	Import	40’	USD105	USD500
		Container	Export	20’	USD90	USD240
		Container	Export	40’	USD135	USD420
	Transit	Convention-al cargo	Import	per ton	USD7	USD0
		Convention-al cargo	Export	per ton	USD5	USD0
		Container	Import	20’	USD80	USD240
		Container	Import	40’	USD120	USD420
		Container	Export	20’		USD160
		Container	Export	40’		USD280
Shore handling						
	Domestic	Convention-al cargo	Import	per ton	USD8	USD7
		Convention-al cargo	Export	per ton	USD7	USD4
		Container	Import	20’	USD105	USD90
		Container	Import	40’	USD160	USD135
		Container	Export	20’	USD53	USD90

Source: Extracts from the KPA and TPA tariff books 2021

Table 4-4: China Containerized Freight Index



	Mombasa	Dar	Durban	Djibouti	Adu Dhabi
Import 20'	$175	$385	$422	$272	$115
Import 40'	$265	$635	$843	$544	$185
Export 20'	$143	$330	$125	$116	$115
Export 40'	$215	$555	$250	$232	$185

Source: Transnet ZA, Kalifa Terminal and Djibouti Port Authority web sites 2021

4.3.2 Wharfage Charges

Wharfage is charged by the port authorities on any cargo that goes through the port's quay side. This is a standard charge globally that any port user will pay.

In comparison to Kenya Ports Authority, Tanzania Port Authority do also charge wharfage but calculated in a different format. Worldwide including Kenya, the wharfage charges by the port are calculated based on the weight, volume of cargo or container unit size. However, the Tanzania Ports Authority bases its calculation on the value of cargo which is contrary to the best practices in the world.

4.3.2.1 Dar es Salaam wharfage Charges

Dar es salaam Port Authority wharfage charges are comparatively high compared to what other ports in the region. High wharfage fees have a direct impact on the cost of production and trading to those who use the port as compared to users who ship through the other ports like Mombasa.

As indicated in The table above, Wharfage is based on the value of goods while Kenya ports charge based on weight, measure or containers size. This in effect means that raw material importers using the port of Dar will pay more costs that the importer using Mombasa port. This effect on costs on raw material imports has adversely affected local manufactures/industrial owners and agriculture farm inputs like fertilizers. The same also The share ranges between 3.4% and 12.8% of production cost for large and new industries respectively. The charges take a share of 23.1% to 40% of freight charges for the captioned industries.

4.3.2.1.1 Compression Between Mombasa and Dar Port cost.

• Dwell time in the port of Dar due to cumbersome port operations, cargo clearance by outdated procedures and administrative inefficiencies related to, among others, physical verifications, proof of payments, system failures attributed to network failure and power interruptions. In addition, exchange rate depreciation of Tanzania Shilling led to additional increase in port charges including wharfage fees.

• Port clearing and handling charges: The basic port clearing charges in Dar es salaam port are approximately 28% higher than Mombasa Port. Wharfage charges contribute by 35 – 60% to the overall port call dues while shore handling accounts to 18%-29% only at Dar es salaam Port. Mombasa terminal handling fees count to 30%-40% followed by wharfage fees at around 31% of all charges.

• Economics of Scale: Ports with high throughput like. Mombasa port handles more cargo and has a higher cargo turnover than Dar port. Because of the high throughput, Mombasa can afford to charge lower wharfage and handling fees than Dar.

• Financing of the Port infrastructure: The Government of Kenya under takes all infrastructure developments in the ports in Kenya since the port authority is considered a statutory organization (parastatal). Meanwhile in Tanzania the government expects the Ports Authority to generate its own income and finance its development plans. Reason Dar justifies the present wharfage fees charging procedures by being obliged to maximizing its revenue and cover its cost for operation, port infrastructure, and equipment and other investments. The involvement of Government enables development of better improved infrastructure compared to Dar that has to generate own funds.

• Wharfage fee tariff system: Commonly at most ports in the world wharfage fee is charged as per gross weight, Gross registered Tonnage (GRT), Long ton (LOT) or size of cargo. Dar es salaam port applies mainly ad valorem system, based on CIF value as base for calculation. Other ports indeed faced the same challenges in the past and have reformed the tariff already to weight, size, or volume system after substantial port user complaints.

• Competitiveness of products from Tanzania: Due to revenue maximization by Dar, high port cost like Wharfage charges burdens port users especially importers of raw materials and other conventional cargo importers and exporters. The high port costs affect particularly new firms, small and medium industries at most, resulting in increased production cost and transport/ freight charges and thus hampered competitiveness as compared to port users in Kenya

The recent involvement of SUMTRA in handling complaints from the Dar port users has seen an improvement in the efficiency of port activities. According to Central Corridor Transport Observatory, increased efficiency at the Dar port has seen Burundi imports through Kenya sharply drop to 1,200 tons in 2020 compared with a total 21,000 tons in 2019.

4.4 Road Freight Cost

The East African region, our area of study, has two major international corridors—the Northern Corridor and the Central Corridor that traverse the region with a large cross boarder transport infrastructure network, each linking seaports with landlocked countries. The northern corridor links the East African hinterland to the port of Mombasa while the central corridor links to the port of Dar. The region has more corridors that link more regions other than the major two mentioned.

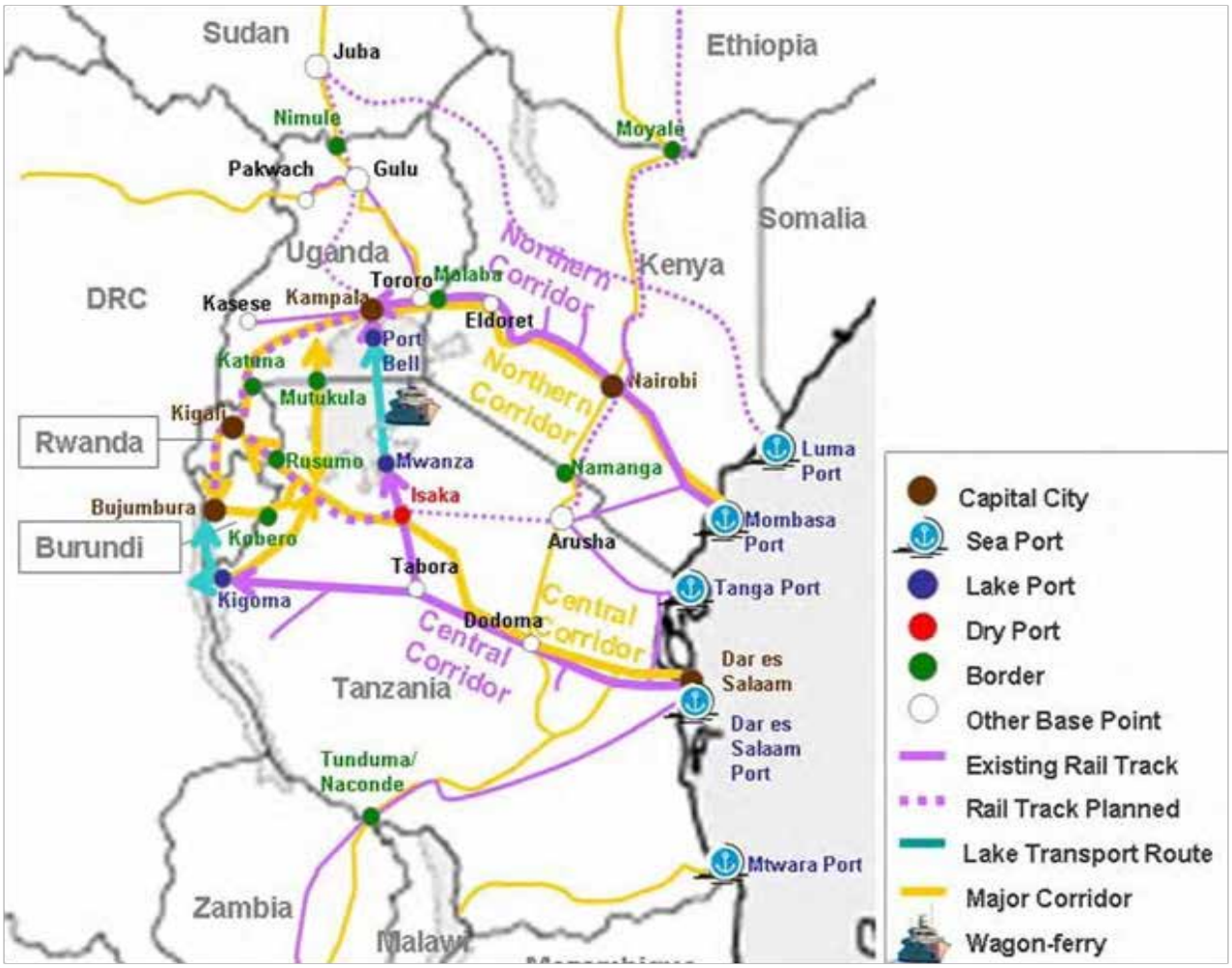
The Dar-es-Salaam corridor links the port of Dar to the countries to the south of Tanzania and parts of Congo and the LAPSSET corridor, a new project that links the new port of Lamu to the northern region of Kenya, Ethiopia and South Sudan

Each of the international corridors consists of two modes of transport, the road and railway lines. Of the two transport modes, the condition of the roads in the corridor is mostly good or fair except for several sections, which are either under development or under rehabilitation, while the railway corridor suffers from reduced capacity attributable to a lack of investment and maintenance in track and rolling stock on the old meter gauge lines (MGR). The coming in of the SGR link from Mombasa to Suswa near Naivasha has seen a great improvement in the movement of cargo to and from the port of Mombasa. This effect is only felt in Kenya since the line has not reached its intended destinations of Uganda, Rwanda, South Sudan and part of Kenya like Kisumu

The East African Community through the East African Customs Management Act encouraged the introduction of the Single Customs Document Clearing process with the aim of reducing transit delays. Under the regime one single document is used to move the cargo across borders. Further, with assistance from donor funds, a couple of One Stop Border Stations were built to limit of time of processing documents.

Despite all the changes in Inland facilities and systems for transit cargo crossing border point, we still see excessive transit time due to insufficiency in hard infrastructure, poor soft infrastructure, underdeveloped statutory institutions with stringent regulations. All such delays end up manifested into higher freight costs which in turn poses bottlenecks to trade and economic activities.

Figure 4-7: Map of East Africa showing current and planned rail network (EAC Files)



Source: EAC Files, 2021

4.4.1 Trucking Rates.

4.4.1.1 Mombasa to the Main inland locations

The table below shows the average Inland haulage rates from Mombasa.

Table 4-7: Average-Trucking Rates to Various Destinations from Mombasa Port

Average trucking Rates (USD) to various destinations from Mombasa Port								
Excluding handling and port fees								
From	To	Distance	Trip rates				Number of Trips	
			2016	2018	2020	2021	2019	2020
Mombasa	Nairobi	481	1000	850	900	850	8	6
Mombasa	Kampala	1169	2300	2100	2250	2300	4	2
Mombasa	Kigali	1682	4000	3750	3900	4000	2	1
Mombasa	Bujumbura	1957	5750	6000	6000	6300	1	0.5
Mombasa	Goma	1840	6150	5750	6500	6800	1	0.5
Mombasa	Juba	1662	5250	5000	5300	5500	1	0.5

Source: TradeSmart Data 2021

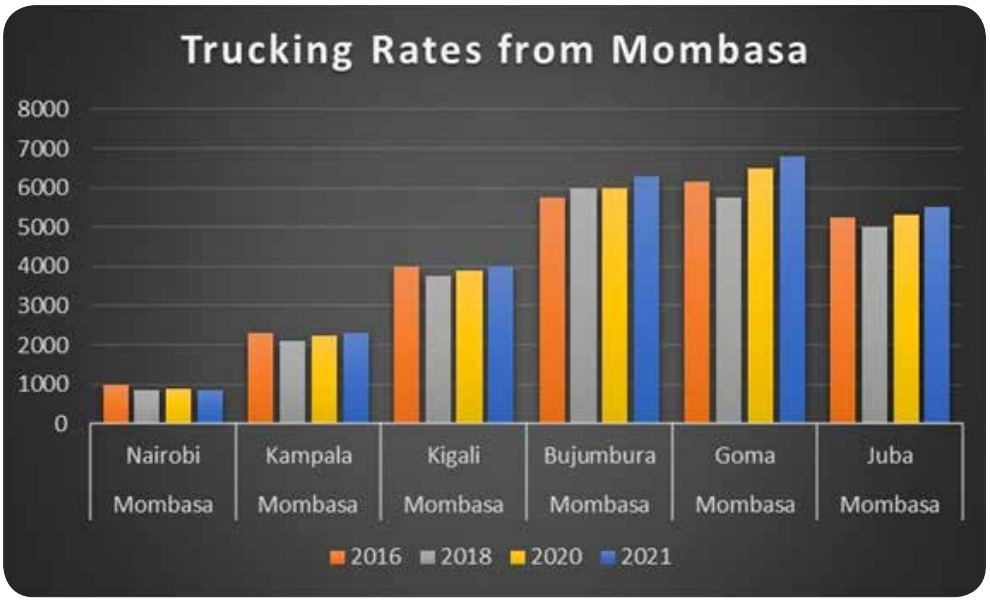


Figure 4-8: Average Inland haulage rate from Mombasa between 2016 and 2021

Source: TradeSmart Data 2021

Transport freight rates from Mombasa to the Member States increased in 2020 when compared to previous years. The increase in the average transport rates from Mombasa to these destinations was attributed to the COVID-19 outbreak. The pandemic constrained logistics operations which led to delivery delays, congestion, and higher freight rates. Further analysis revealed that cross border logistics bottlenecks hurt the cost of cargo transportation to different destinations. Other factors that led to cost escalations include cost related to driver testing for the COVID-19, including quarantine, multiple border charges and road condition. Despite the sever delays faced in transit movement of trucks and cargo, transport rates did not change much as anticipated. Any new price changes did not exceed usd150 per truck load and this, as agreed by truck owners was to cater for driver delay and testing at the borders.

It's been noted that trucking prices correlated strongly with changes in input costs. Between 2016 and 2020, input cost of a truck fell by 27.7%, driven by a large reduction in fuel prices. This coincided with a very similar decline in the price charged for transporting one metric ton from Mombasa to Kampala, which fell by 25.4%. This decline in prices also coincided with a 11.2% reduction in the value of goods imported by Kenya, Rwanda and Uganda which could have led to a lower demand for transport services. The region witnessed an increase in infrastructural projects like road construction, oil and gas drilling and bulk imports of raw wheat and sugar. This was a big diversion from the normal import of finished products for consumption. The project demanded low trucking rates

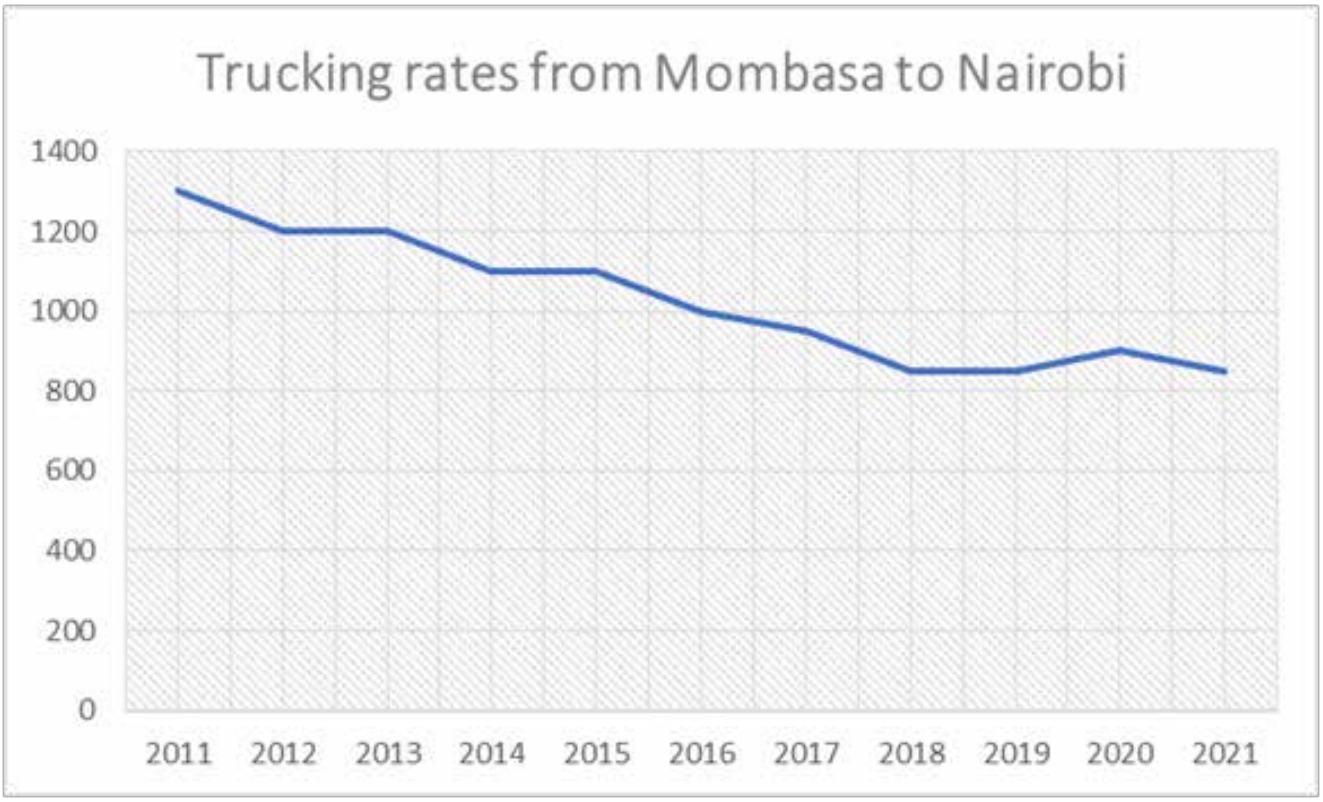
The confluence of both lower imports and lower input costs complicates our ability to infer the degree of competition in the trucking market. In the presence of market power, theory would predict prices to respond to changes in demand but not to respond so much to changes in input costs. Meanwhile, a competitive environment would imply prices to respond to both changes in input costs and demand. Hence, if the decline in prices were to be merely reflecting demand side factors, we would not be able to conclude whether the trucking industry operates in a competitive climate or not. Yet, given the much larger relative reduction in prices than in imports, transport prices do indeed appear to be influenced by input costs. This interpretation is line with several interview respondents, who attributed the decline in transport prices to the fall in fuel prices observed in recent years.

4.4.1.2 Mombasa to Nairobi

The figure below highlights the average road freight costs over the period between 2011 and 2021. Several factors explain the fall in trucking rates over time

- The fall in fuel prices.
- The increase in low value imports.
- Improved efficiency in port operations especially the coming of ICDs to ease the port congestion and reduce on truck dwell time in port.
- Improvement in the processing of document and tax payment process meant a decrease in Dwell time for port stay.
- Introduction of cheaper truck models from China like FAW with less fuel consumption and maintenance costs.
- The Cheaper trucks and easy access to Bank loans brought in increased completion with new players coming in.
- The introduction of weighbridges to limit truck load limits meant an increase in cargo availability and demand for low rates from cargo owners.
- Improved road infrastructure meant quick turnaround time for trucks
- The introduction of the Standard Gauge Railway (SGR) and policy of KPA transferring Kenya bound cargo to Nairobi ICDs. This introduced cut throat completion.

Figure 4-9: Mombasa Road Freight Cost 2011-2021



Source: TradeSmart Data 2021

4.4.1.3 Transit Cargo Rates

Transit cargo refers to cargo destined to the others countries outside Kenya. The trade routes had continued to see a steady fall in trucking rates until the breakout of the COVID-19 epidemic. This fall in trucking rates to was a result of partly the several factors mentioned above and partly due:

- The influence by the EAC on the introduction of the single customs documentation process that eliminated the old documentation of individual states. This helped ease the process of cross border transfer and truck dwell time hence the reduction in transit cost than enabled truckers cut on the costs

- The East African "Coalition Of The Willing" protocol that sought to give cargo and truckers in Kenya, Rwanda and Uganda preferential treatment by reducing bottleneck in the movement of cargo and people. This arrangement meant less delays or increased turnaround time for cargo and truck respectively and in-turn encourages reduction in rates.

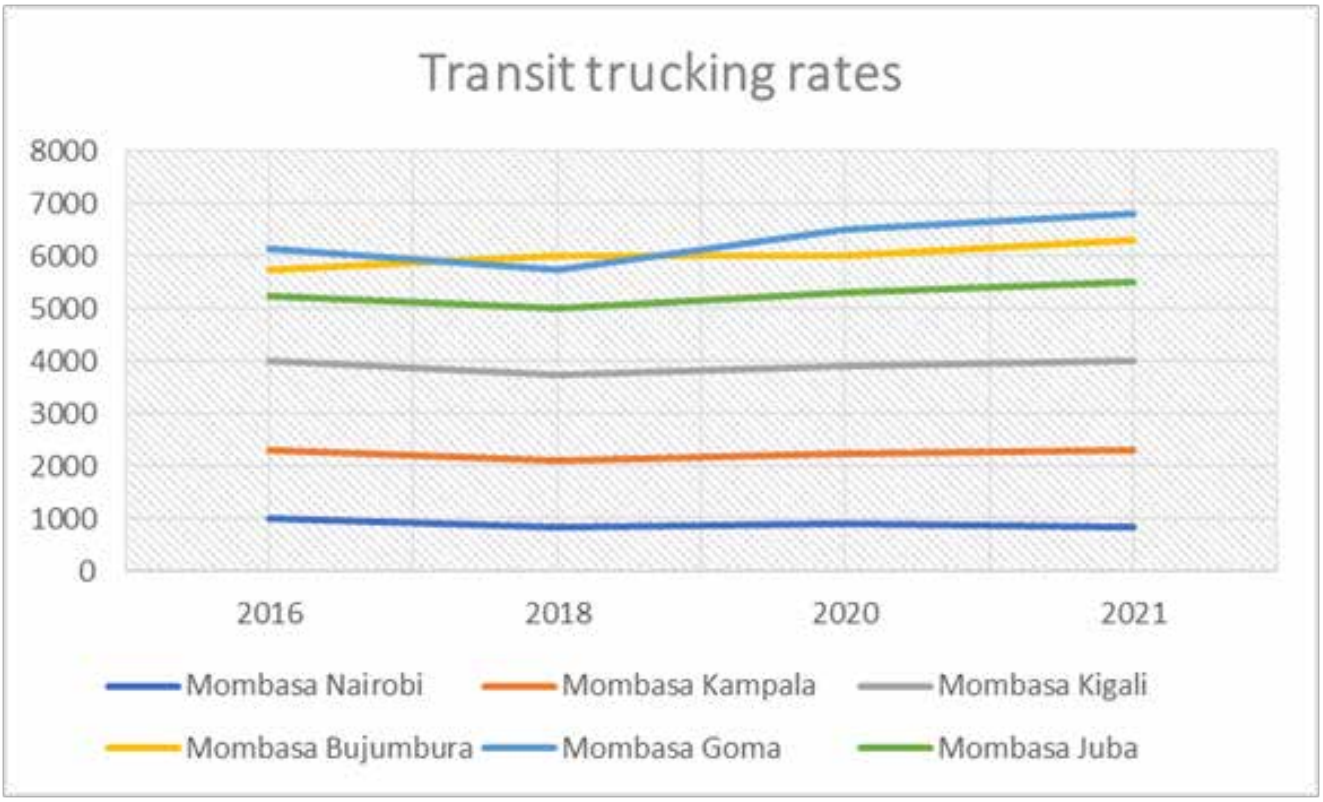
- RVR poor performance in moving the rail bound cargo encouraged trucker to go for the rail cargo offering rates closer to what the rail was offering. This was more on bulk cargo that was commonly a preserve for rail. Truckers reduced per ton rate from USD115 to USD 90 per ton from Mombasa to Kampala for wheat, paper reels, iron and steel material and iron coils

- Increase in export cargo meant provided return cargo for trucker and this meant that truckers were not incurring the cost of returning empty to Mombasa. Truck rates always factor in the cost of empty return.

- Mombasa Transit trucking rates, unlike for local Kenya rates, went up across the region from 2020 due to the onset of the COVID-19 epidemic. Most countries in the region closed their borders only allowing cargo trucks whose drivers were subjected to stringent control measure and continues COVID-19 tests. This created heavy traffic congestions at the borders. The delays meant les trips for the trucks and the measures meant extra costs on the drivers, especially the many tests the driver would undertake at every crossing point. Drivers would be tested from the exiting country and again in the entry country and same would be repeated at the next point.

But because the volume of cargo had gone down due to the global effect of COVID-19 on production of cargo, the truckers were forced to carry the increased cost and only charge a small percentage on cargo. This explains the marginal increase of between USD 100 to USD 200 from 2020 and 2021.

Figure 4-10: Transit Trucking Rates



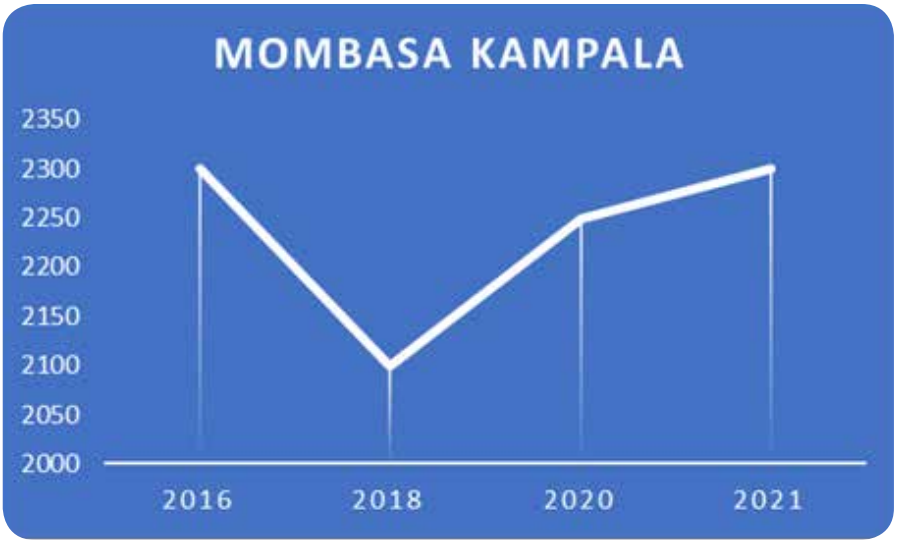
Source: TradeSmart Data 2021

4.4.1.3.1 Mombasa to Kampala

Apart from general reason given above to explain the reduction in trucking rates in the region, rates to Uganda have also been influenced by the many infrastructural project that were under taken within the period. Project like the construction of power dams Isimba, Narubale and Karuma dams. Oil and gas drilling projects and road construction. These were considered low value high volume bulk cargo and attracted low rates. Truckers had to offer low rates in order to be competitive. The offers eventually were extended to other importers of general cargo

Secondly Uganda saw an increase in export of cash crops like coffee and tea. The export volumes offered relief to truckers who initially did not have return cargo. On a single trip that would attract USD2500 would now be a round trip collecting USD 2300 for import and USD 900 for export totaling to USD 3,200 or more.

Figure 4-11: Mombasa to Kampala inland haulage rates between 2016 and 2021



Source: TradeSmart Data 2021

4.4.1.4 Mombasa Kigali

In addition to earlier general explanations to the changes in rates in the region, Inland haulage rates to Kigali were on the downward trend before 2019 until the closer of the main customs border post of Katuna for refurbishments. All cargo trucks were diverted to Mirama Hill and Cyanika border posts. Before the diversion, Katuna was considered closer to Kigali in both the distance, convenience and infrastructural development, like the tarmacked road from Malaba through Kampala to Kigali through Katuna. The diversion meant trucks had to go through rough road and terrain and delayed processing of documents Further the regulation stopping Rwanda citizens from crossing into also affected trucks owned and driven by Rwandese. This reduced the number of trucks on the route and helped the few trucks left in the trade to take advantage and raise the rates

Further increment came in with the COVID-19 epidemic outbreak when Rwanda authorities imposed heavy restrictions on transit trucks movement into the country. New restrictions required that all cargo be tax cleared at the border point and all trucks would thereafter be escorted by police to the delivery point. Unlike in the past where tax clearance could be done after delivery to the Inland ICD or Warehouse at the convenience of the importer, the new restrictions meant delays in cargo clearance and hence were reflected in the trucking rates charged by the transporters.

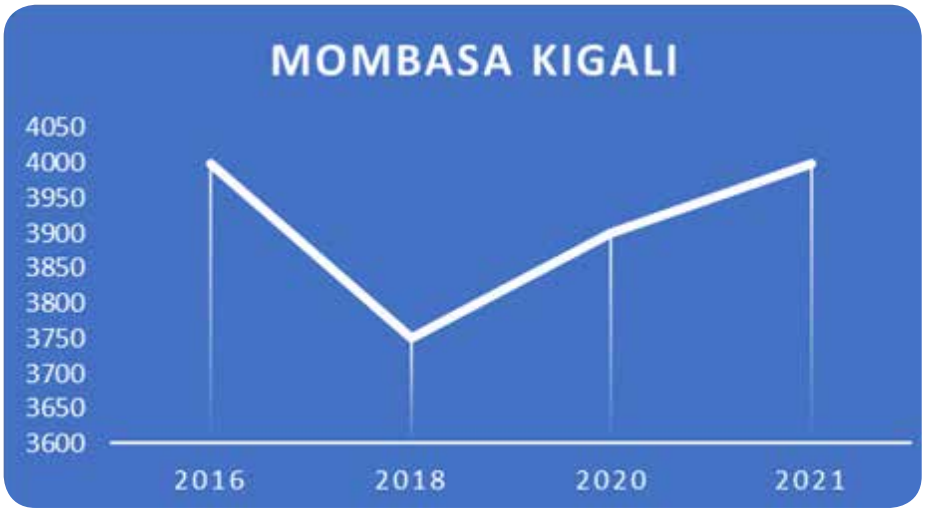


Figure 4-12: Inland Haulage rates from Mombasa to Kigali

Source: TradeSmart Data 2021

4.4.1.4.1 Mombasa – Bujumbura

Cargo trucks from Mombasa to Burundi traditionally always transit through Uganda and Rwanda. Due to political differences between Rwanda and Burundi that date back to 2014, transporters have opted to cross from Uganda to Burundi through Mutukula then via Tanzania, this new routing has occasioned the continues rise in rates. This coupled with the COVID-19 epidemic restrictions along the transit route has seen a further rise in rates.

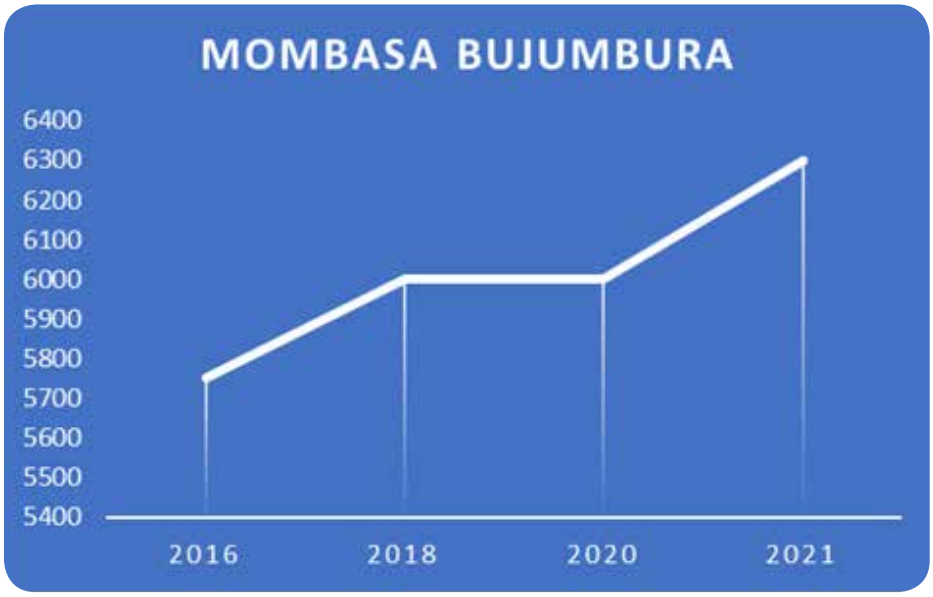


Figure 4-13:Inland haulage rates from Mombasa to Bujumbura

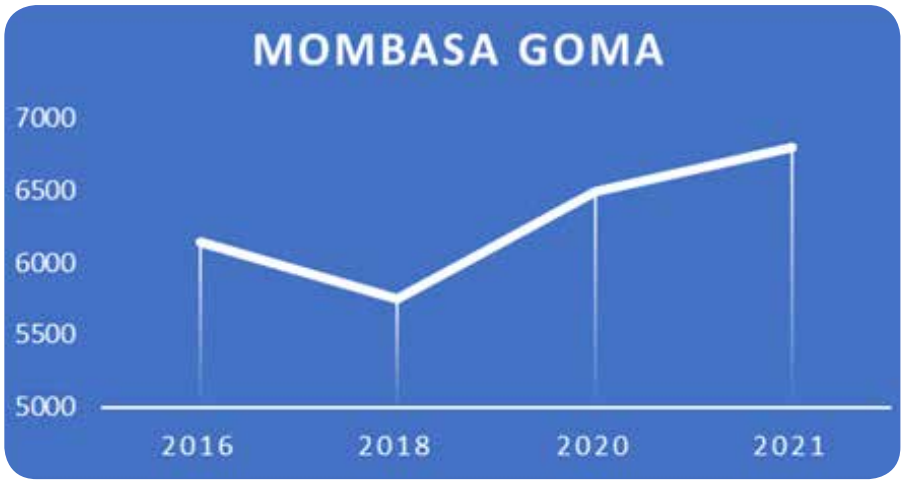


Figure 4-14: Inland haulage rates from Mombasa to Goma

Source: TradeSmart Data 2021

4.4.1.4.2 Mombasa to Juba

Since the creation of South Sudan as an independent state, there was a steady fall in tracking rates due to improved security, improvement on the poor narrow roads that caused longer travel times and increased cargo volumes. The increase in cargo volume was mainly a result of increased donor funded infrastructure development for the new state. This change in volume and security attracted many logistics players and brought down the rates. The rate fell from USD9500 in 2007 to USD5000 in 2018 almost a 50% fall.

Due to the deteriorating pollical situation and increased insecurity, the country got listed as insecure country leading to the reduction in donor support funding. The reduction in volumes and the increase in risks on the roads has seen an increase in tracking rates continuously. Few trucks are willing to risk at load the little that is going to the country.

There have recent incidents where truck drivers and owners of import loaded trucks went on strike and declined to move from Elegu border point between Uganda and South Sudan until they were guaranteed security while enroute to Juba.

This fragile situation is likely to see a further increment in trucking rates unless the state ensures adequate internal security that is required for sustained economic development and improved safety of logistics players and the residents too.

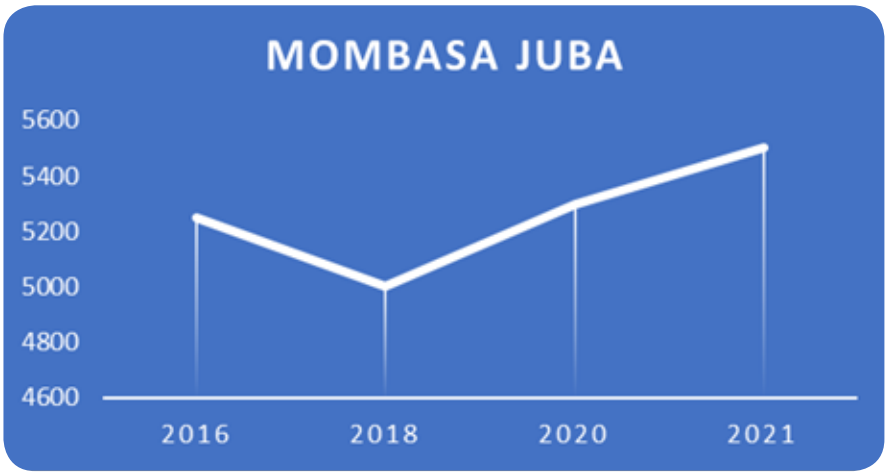


Figure 4-15: Inland haulage rates from Mombasa to Juba

Source: TradeSmart Data 2021

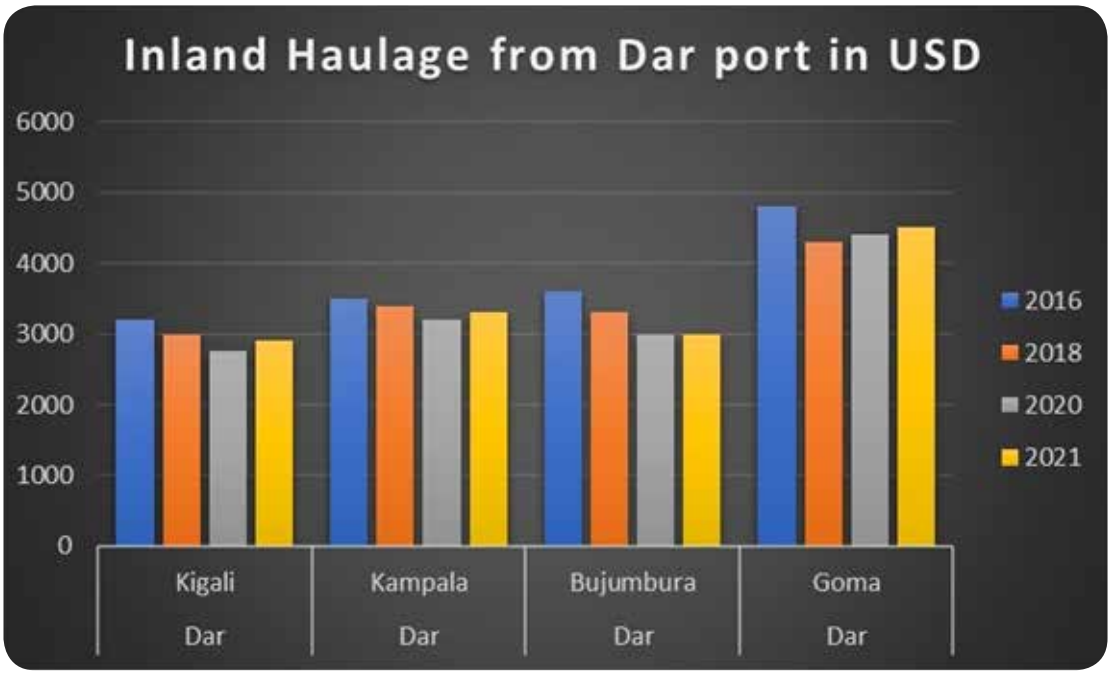
4.4.1.4.3 Dar es Salaam to Kampala.

Port of Dar is always considered the alternate route for Uganda because Mombasa is the proffered transit point. Traditionally the biggest percentage of Uganda bound has always gone through Mombasa port with some rail cargo moving via Lake Victoria to or from Mwanza for Dar Port. Factors that has always influenced this tradition are the:

- Complexity in processing transit cargo documents.
- The lower port and handling charges.
- The truck levies. Rwanda trucks pay USD150 while Uganda trucks pay USD500 in Tanzania. Still compared to Kenya where Uganda trucks pay USD50 only.
- The infrastructural developments in the transit route.
- The transit distance between Kampala and the port.
- The collapse of the rail system meaning that road becomes the preferred mode.

Over time there has been an effort by the Tanzania government to address the time and complexity issues to encourage rerouting of cargo and the active role of the Central Corridor Authority. Further there has also been an improvement in the road network which all have seen a change in use. These changes have attributed to the reduction in rates. Road rates dropped from USD 4500 in 2012 to USD 3400 by 2018, a 24% fall.

Figure 4-16: Central Corridor Trucking Rates



Source: TradeSmart Data 2021

4.4.1.4.4 Dar es Salaam to Kigali

80% of Rwanda's export and import cargo goes through Dar Port because of distance and logistics convenience, however over a long period some of Rwanda cargo goes through Mombasa via Uganda. Due to poor and under developed infrastructure between Dar and Rwanda, there has continues use of the northern corridor due to flexibility and convenience that the cargo movers enjoy when they use the Northern Corridor.

The other main challenges for Kigali cargo going through Dar has always been the higher port charges, complexity in the document processing and the many stringent regulations that manage trucks moving transit cargo like the road user fees and processes.
Due to the COVID-19 epidemic outbreak that saw introduction of preventive measure, Dar port relaxed approach to introducing strict restrictions endeared many cargo owners to switch from Mombasa to Dar
Political differences between Uganda and Rwanda saw limited movement of Rwanda citizens to or through Uganda and this too forced more cargo owners who owned their owns trucks to switch ports.

The combination of improved infrastructure between Dar and Kigali, relaxed port and transit regulations, political differences and the COVID-19 epidemic outbreak saw Dar continue be the preferred route, increased competition for the dwindling cargo which called for a reduction in inland haulage rates.

The road freight rate between Dar es Salaam and Kigali increased in 2011 from Usd3,314 to USD 4,250 in 2012. The rates remained the same in 2013 and only increased marginally in 2014 followed by a further increase of USD200 in 2015. The rate dropped by 31% from USD 4,500 in 2015 to USD 3,200 in 2016 followed by another drop USD 3,000 in 2018 and USD 2,750 by the beginning of 2020.

By the end of 2020 to current time, just like anywhere in the logistics world, the rates went up manly to cater for costs the COVID-19 epidemic restrictions introduced at border crossing points. In order to minimize contact between Rwanda local and foreign truck drivers, Kigali introduced the system of import tax clearance for all imports to be done at the border and only allow the truck be escorted to the discharge point by police. This created extra dwell time for trucks that forced the track owners to increase their rates to meet the delays costs.

4.4.1.4.5 Dar es Salaam to Bujumbura

On average, road freight costs from Dar es Salaam to Bujumbura have gradually reduced from a high of USD4,500 in 2014 and 2015 to as low as USD 3,400 in 2018. This seems to have been the effect of the

improvement in infrastructure, which helped minimize operation cost and the increase in internal competition, which has led to driving down the transport rates.

4.4.1.4.6 Road costs within EAC

The table below summarizes transport cost per Kilometre per metric ton, assuming a payload of 24 MT per 40-foot container. The most expensive routes are Mombasa- Bujumbura at USD0.13 per ton per Kilometre followed by Kampala- Kigali at USD0.12 per ton per Kilometre. At position three is Kisumu- Kampala at USD0.12 per ton per Kilometre. The top three least expensive routes are Mombasa- Nairobi at USD0.08 per ton per Kilometre while Dar es Salaam- Kigali and Dar Es Salaam- Kampala both tying at USD0.09 per ton per Kilometre.

Some of the reason as to why the Mombasa – Bujumbura route is expensive is because Burundi is a net importer and there is very little return cargo. At the same time, the cabotage rule that is in force in the transit countries prevents trucks returning from Burundi to pick any cargo enroute to Mombasa.

The Mombasa – Nairobi route is the lowest because there is a lot of competition between transporters and the trucks can also pick up some return cargo enroute to Mombasa.

Table 4-8: Rate per Kilometre ton within the region.

ORIGIN	DESTINATION	KILOMETRES	RATE	RATE/KM	RATE/KM/TON
Mombasa	Nairobi	481	900	1.87	0.08
Dar es Salaam	Kigali	1,430	3,000	2.1	0.09
Dar es salaam	Kampala	1,668	3,500	2.1	0.09
Mombasa	Kampala	1,169	2,500	2.14	0.09
Dar es Salaam	Bujumbura	1,480	3,200	2.16	0.09
Mombasa	Kisumu	830	1,800	2.17	0.09
Mombasa	Nakuru	650	1,500	2.31	0.10
Nairobi	Kigali	1,171	3,000	2.56	0.11
Nairobi	Kisumu	351	900	2.56	0.11
Mombasa	Kigali	1,682	4,500	2.68	0.11
Nairobi	Kampala	660	1,800	2.73	0.11
Kigali	Bujumbura	291	800	2.75	0.11
Mombasa	Juba	1,662	4,800	2.89	0.12
Kisumu	Kampala	310	900	2.9	0.12
Kampala	Kigali	516	1,500	2.91	0.12
Mombasa	Bujumbura	1,957	6,000	3.07	0.13

Source: Shippingwatch, 2020.

4.5 Rail Freight Costs

The East African ports are currently linked to the hinterland by three major rail lines

- The Kenya Railways Corporation (KRC) rail link connecting the Mombasa port to the rest of Kenya and Uganda through Kisumu pier and Malaba by meter gauge line that connect with Uganda Railways Corporation (URC) Meter Gauge line to Kampala and northern Uganda
- The Tanzania Railways Corporation (TRC) meter gauge line that link Dar port to Burundi at Kigoma, Rwanda at Isaka and Mwanza through Lake Victoria to Port Bell Uganda
- The Standard Gauge line from Mombasa to Suswa in central Kenya for Kenya bound cargo
- Two more lines are expected to join after completion. The Standard Gauge line in Tanzania and the Lamu port rail link to Ethiopia and South Sudan

The main physical transport constraint on the Central Corridor is the movement capacity of TRC. The Kigoma and Isaka routes are potentially the lowest cost transit alternatives for Burundi and Rwanda, and the Mwanza route offers Uganda its only feasible alternative to transit through Kenya. All the routes are, however, crucially dependent on an adequate level of rail service through Tanzania.

The table below shows the current meter gauge rail rates in the region. Following effort to revamp the poor infrastructure that the rail networks and improved service delivery by the respective rail lines, there has been an increase in rail rates. In 2018, the container rate for a light 20' container from was at USD 1,200 and now is at USD 1,400.

The biggest challenge the rail line face is increased competition from the road transporters who offer good transit time, safety of cargo, last mail delivery and free and fast return of empty containers to the shipping lines.

The other challenge for mainly KRC MGR has been the introduction of the SGR line that has been given priority to move all Kenya inland cargo. KRC is only left with Transit bound cargo.

Table 4-9: Current Rail Tariff for containers (URC and TRC Commercial Offices)

CONTAINER TRAFFIC- IMPORTS(USD USD)					
From	To	0 - 21.999 Mts	22-27.999 Mts	28 – 34 Mts	1*40FT(Any weight)
Mombasa	Kampala	USD1,400	USD1,850	USD2,350	USD1,850
Dar	Kampala	USD1,300	USD1,300	USD2,570	USD2,570
Dar	Isaka	USD600	USD900	USD1,150	USD1,150
Dar	Kigoma	USD1,100	USD1,500	USD2,165	USD2,165
Kampala	Mombasa	USD700	USD700	USD900	USD700
Kampala	Dar	USD486	USD486	USD486	USD912

Source: Uganda Railways Corporation Commercial Department 2021

4.5.1 Standard Gauge Rail – Kenya

The Kenya Railways Standard Gauge Railway program is one of the largest infrastructure projects under implementation in the EAC region. It covers Kenya, Uganda, South Sudan and Rwanda and aims to create seamless rail connectivity to the port of Mombasa.

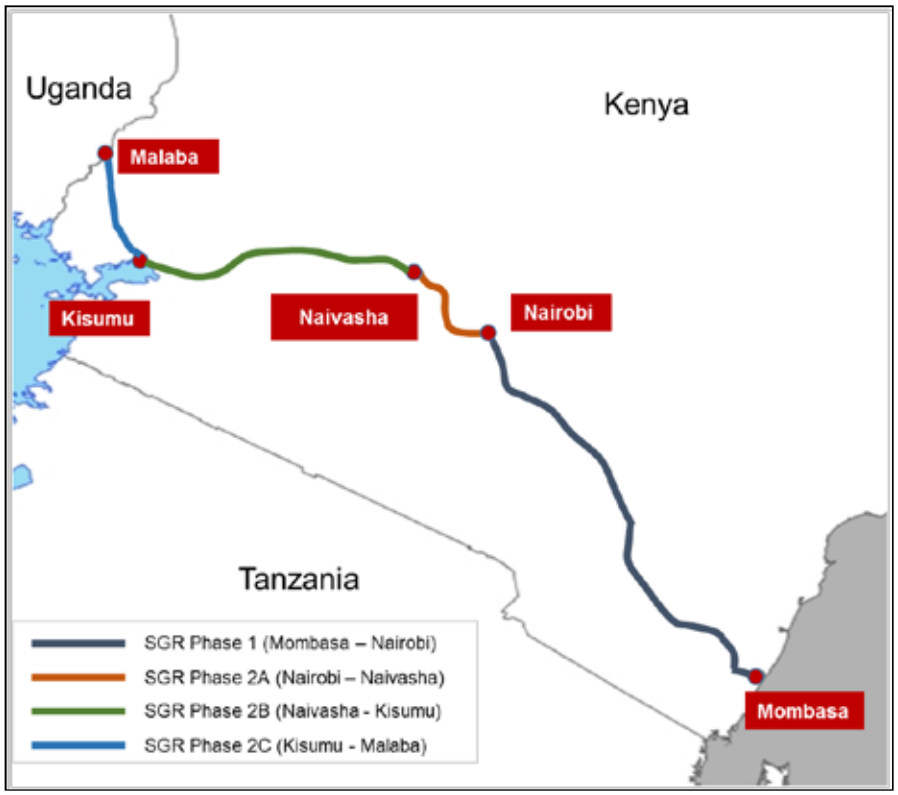
A tripartite agreement was signed between the republics of Kenya, Rwanda and Uganda in August 2013 for the development and operation of an SGR in the Mombasa-Kampala- Kigali route with branch lines to Kisumu (Kenya) and Pakwach /Gul-Nimule (Uganda). The Republic of South Sudan joined the agreement in May 2014 extending the proposed line to Juba. The phasing of the Kenyan SGR project is as below.

Table 4-10: Proposed Kenyan SGR Network:

Phase	From	To	Status
I	Mombasa	Nairobi	Operational
II a	Nairobi	Naivasha	Commissioned in October 2019
II b	Naivasha	Kisumu	Proposed
II c	Kisumu	Malaba	Proposed

Source: Kenya Railways Corporation 2021

Figure 4-17: Map of the SGR plan Source: Project for Master Plan on Logistics in Northern Economic Corridor



Source: Japan International Cooperation Agency 2019

Currently SGR Kenya handles almost all inland cargo container imports from Mombasa port to Nairobi and Suswa following the government directive to support the SGR project. Local non containerized imports and transit cargo is handled by MGR and trucks from Mombasa to destination.

On January 1, 2018, the Kenya Railways Corporation (KRC) commenced commercial operations of the freight service on the SGR network between the port city of Mombasa in Kenya and Nairobi. The phase-I involved transportation of containerized cargo from the port to the ICD in Nairobi (ICDN).

The SGR tariff at the launch of the cargo express train for import containers from Mombasa to Nairobi:

Table 4-11: Tariff Notice for SGR

■ Size	■ Weight range (tons)	■ Rate (USD) for loaded	■ Empty container return rate via SGR (USD)
■ 20 feet container	■ Full range	■ 500	■ 100
■ 400 feet container	■ Up to 20 tons	■ 700	■ 100
■	■ 21-30 tons	■ 750	■ 100

Source: Kenya Railways Corporation 2021

In 2020, the second phase of rail cargo movement to Suswa was commissioned giving lee way to KRC to move cargo to and from the ICD in Suswa giving the rates of USD 600 and USD 850 per 20' /40' respectively. Early 2021, KRC SGR reduced the container rates to Suswa Naivasha from by 15% USD 600 to USD 510 per 20' container and USD 850 to USD 725 per 40' Container. This was meant to encourage the use of Suswa ICD by importers in Central and Western Kenya and this reduction saw an over 40% raise in container volume handled by SGR to Suswa. The move was also intended to target transit cargo to Uganda, Rwanda, Eastern Congo and South Sudan who have been reluctant to embrace the mandatory use of SGR serves to Suswa.

4.5.1.1 Cost analysis of Transit containers moved by SGR.

Due to a missing connection between SGR station at Suswa and MGR station at Naivasha, transit cargo moving by SGR can only be transshipped at Nairobi ICD.

Rail cost from Mombasa to Kampala via SGR

Table 4-12: Rail costs to Kampala on SGR

From	To	Mode	Cost (USD)
Mombasa	Nairobi	SGR	USD500
Nairobi	Kampala	MGR	USD1,590
Total			**USD2,090**
India ports (IN)	Mombasa (KE)	FAK	780 USD
India ports (IN)	Tanga (TZ)	FAK	1925 USD
India ports (IN)	Berbera (SO)	FAK	1185 USD

Source: Kenya Railways Corporation Commercial Department 2021

Based on the 2017 SGR tariff, the cost for transporting a 20 ft container from Mombasa to Kampala currently costs USD 2,090. Thus, transporting a 20 ft container via the three available modes shall entail the following costs

Table 4-13: Haulage cost analysis for transporting a 20 ft container from Mombasa to Kampala

• Mode	• Type of mode	• Cost (USD)
• Rail	• SGR + MGR	• 2,090
	• MGR	• 1,850
• Road	• Road + SGR	• 2,100

Source: TradeSmart Data 2021

4.5.2 Rail Freight - Tanzania

Tanzania Railway Corporation (TRC) operates on the meter gauge rail line and has four main railway corridors for transport of goods and people. One corridor is on the northern part and it starts from Tanga port and the second one is on the southern part starting from Mtwara port. The two other major corridors are the central and the Dar es Salaam corridors which extend from Dar es Salaam port to various parts of the countries and the central corridor links the Dar es Salaam port to Uganda, Burundi, Rwanda, and the Eastern Democratic Republic of Congo (DRC). Its railway operated by Tanzania Railways Corporation runs from Dar es Salaam to Kigoma and branches to Mwanza through Isaka. This railway is badly in need of maintenance and cannot effectively serve Tanzania's trades or neighbouring countries. Therefore, the transportation of goods in the Central Corridor primarily occurs on the road network.

TRC offers the best alternative to road for Burundi and Rwanda Cargo however with destination in Tanzania (Kigoma and Isaka respectively). This requires extra handling and last mile delivery on trucks to the final country of delivery. As for Isaka, there is a dry port facility where landlocked countries such as Uganda, Burundi, Rwanda and the Democratic Republic of Congo can pick their goods by road transport since this dry port is also connected with major roads that go to neighbouring countries.

The World Bank logistics study report on Tanzania rail network of 2019 shows that on average road transport in Tanzania costs13.5 USUSD per ton-km compare to rail transport which costs4.3 USUSD per ton-km. The study revealed that road transport cost is nearly 4 times higher than the railway transport cost. But due to the low reliability of rail transport in the country, many shippers seem not to be attracted to use the rail mode of transport.

The study stated that the Government spends approximately USD 310million on road development

and maintenance every year. There is a developed problem of many shippers to use roads as a preferable mode of transportation even though the railway is cheaper as a transportation mode than the road. The result is therefore an increase in

It was, therefore, important to look at the effects of the Tanzanian railway network in the performance of rail freight operation to find out the challenges which if addressed would lead to a substantial increase in rail freight modal share.

In order to address the challenges of the old meter-gauge line and its related poor performance the Tanzania government is constructing a new standard gauge line. The Tanzania Standard Gauge Railway (SGR) is a railway system, under construction, linking the country to the neighbouring countries of Rwanda and Uganda, and through these two, to Burundi and the Democratic Republic of the Congo. The new Tanzania SGR, is intended to replace the old, inefficient metre-gauge railway system and reduce road congestion. It is also expected to decrease freight costs by 40%. Each freight train is expected to transport up to 10,000 Tons, equivalent to 500 lorry-loads.

The project is being implemented in 5 phases: 202km Phase 1 (Dar es Salaam– Morogoro) Section, 348km Phase 2 (Morogoro–Makutopora) Section, 294km Phase 3 (Makutopora–Tabora) Section; 130km Phase 4 (Tabora-Isaka) Section, and 341km Phase 5 (Isaka–Mwanza) Section. The projected completion plan is end 2022.

The table below shows the current rail rates for containers on the Central corridor offered by TRC. Considering the export rate from Kampala, the central corridor would be the best option for Uganda export cargo in terms of cost, if the issue of time and poor rail operations was addressed.

Table 4-14 TRC traffic rates for containers. Source: TRC tariff guideline
Rail cost from Mombasa to Kampala via SGR

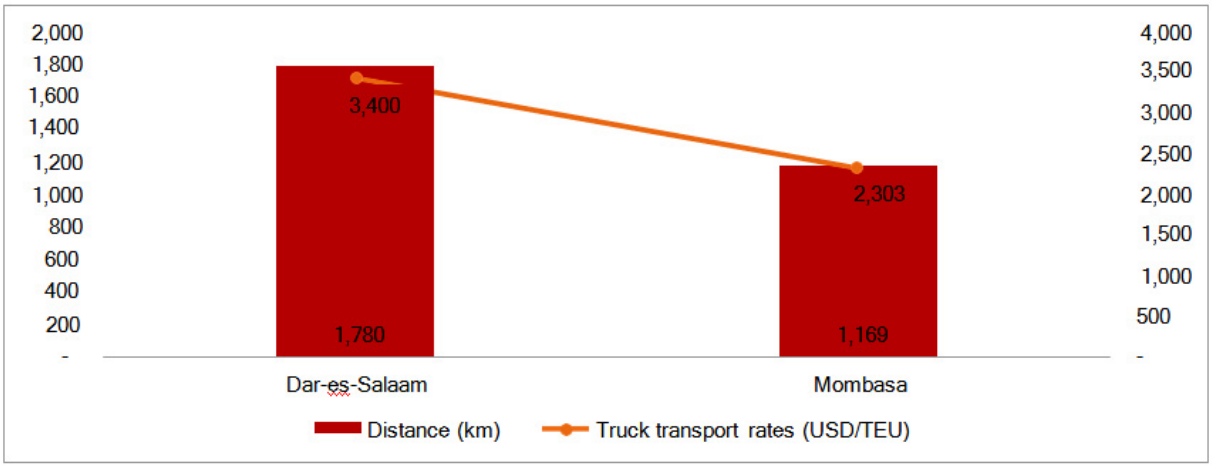
From	To	0 - 21.999 Mts	22-27.999 Mts	28 – 34 Mts	1*40FT(Any weight)
Dar	Kampala	USD1,300	USD1,300	USD2,570	USD2,570
Dar	Isaka	USD600	USD900	USD1,150	USD1,150
Dar	Kigoma	USD1,100	USD1,500	USD2,165	USD2,165
Kampala	Dar	USD486	USD486	USD486	USD912

Source: TRC Tariff Guideline 2020 Source: TRC Tariff Guideline 2020

4.6 Cost Comparison Between Corridors

Currently, roads are the major mode of transport used for transportation of cargo to and from the ports in the region. Notably, the cost of transportation by road on the Central Corridor is higher than the Northern Corridor, primarily because of greater distance. The road route distance from Dar es Salaam to Kampala is ~1,780 km vis-à-vis the road route distance of 1,169 km from Mombasa to Kampala via Busia. This scenario makes utilization of the Central Corridor Road route for export and imports from Uganda unviable.

Figure 4-18: Comparison of truck transportation rates from Dar es Salaam to Kampala and Mombasa to Kampala for 20ft import container

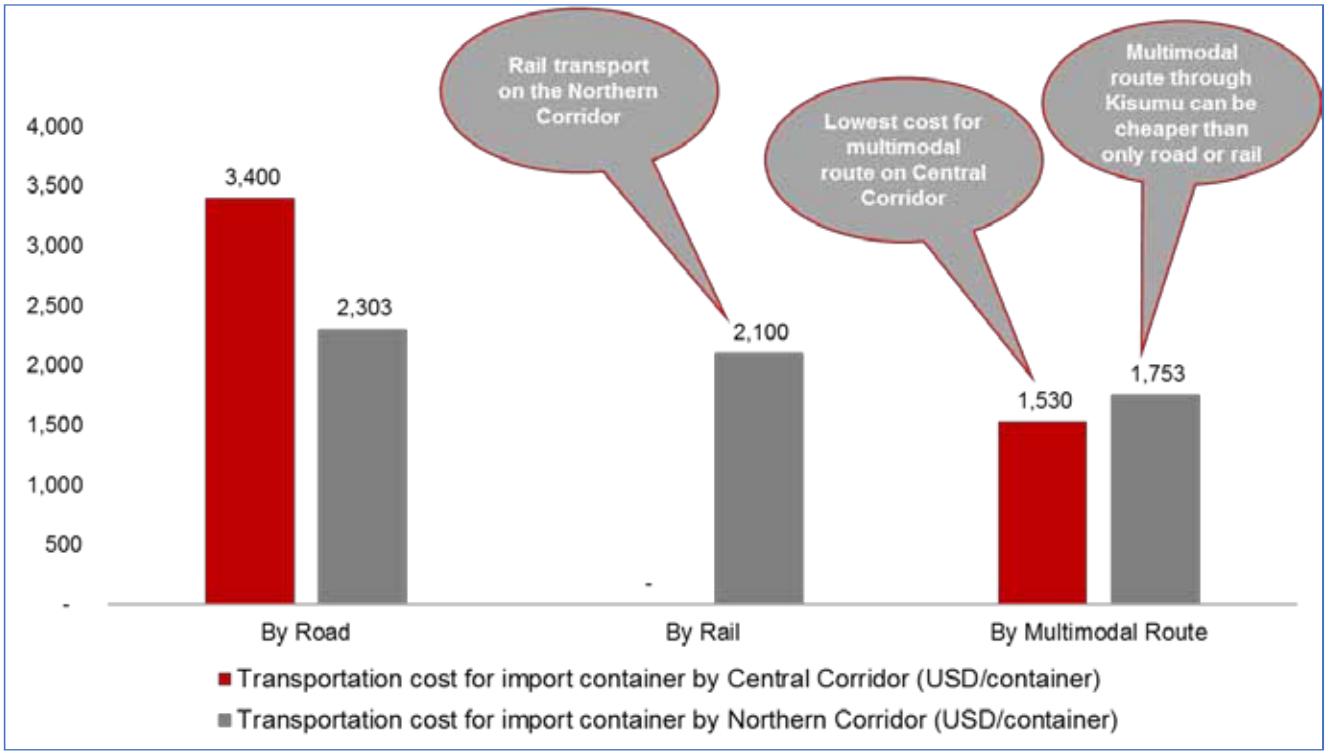


Source: Central Corridor Observatory Report 2021, Northern Corridor Observatory Report 2021

4.6.1 Inefficient rail and multi modal transport on Central Corridor via Lake Victoria

As discussed in the preceding section, the cost for transporting import containers by road on the Central Corridor is substantially higher than the Northern Corridor. In such a scenario, the only viable way to transport import containers on the Central Corridor is the multi modal route connecting Dar es Salaam to Kampala Goods Shed via Mwanza and Port Bell. Notably, the multi modal route is cost competitive vis-à-vis the Northern Corridor. An analysis of the road and rail costs based on observatory reports, stakeholder discussions and MGR rail tariff book of URC reveals the following route costs for various transport modes on the Central and Northern Corridors:

Figure 4-19: Comparison of route costs for import container (20ft) on Central and Northern Corridor utilizing different modes



Source: Central Corridor Observatory Reports, Northern Corridor Observatory Reports, Uganda Railways Corporation (2020)

It is evident that the multi modal route on the Central Corridor can enable transportation of import containers at a highly competitive rate. However, multiple issues pertaining to inefficient multi modal operations, railways infrastructure in Tanzania and handling infrastructure at Port Bell on the Ugandan side have led to underutilization of this route.

4.6.2 Unreliable railway operations between Dar es Salaam to Mwanza Port.

Transportation by rail along the Central Corridor is managed and operated by Tanzania Railways Ltd. The entire network length of Tanzanian Railways is of ~2,700 km of meter gauge line. The rail network is not directly connected to Uganda, it rather connects the Dar es Salaam Port to Mwanza Port from where the cargo can be carried over Lake Victoria by rail-wagon ferry. This railway network has historically been an important element of the Central Corridor's connectivity infrastructure. However, it is understood that lack of commensurate investments in network augmentation and maintenance has resulted in unreliable and inefficient rail services. Due to poor track condition, there are speed restrictions of 13-50 km/hr in place over many sections of the rail network. Because of the speed restrictions and inefficient operations, the train turnaround time from Dar es Salaam is around 18 days instead of the scheduled 10 days. This scenario results in an overall turnaround time of more than 20-25 days for importing a container from Port of Dar es Salaam compared to less than 20 days for Port of Mombasa (~5 days for roads and 10-20 days for rail). As per the discussions with various stakeholders, the unreliability of transit time is a major factor that contributes to the underutilization of Central Corridor.

Figure 4-20: Tanzanian railway network connecting Port of Mwanza to Port of Dar es Salaam

Source: Tanzania Invest (2020) TradeSmart Data File 2021

4.7 Air Freight Cost

Airfreight cargo costs normally depend on the demand for the service in a particular region more especially how sensitive the commodity is. Commodities shipped by air thus have high values per unit or are very time-sensitive, such as documents, pharmaceuticals, fashion garments, production samples, electronics consumer goods, and perishable agricultural and seafood products. They also include some inputs to meet just-in-time production and emergency shipments of spare parts.

Common shipments into the East African region are all the above with exception of perishable agriculture and fresh fish products. The main commodities airlifted out of all East African airports are fresh flowers, chilled fish and fresh fruits and vegetables. While on the contrary the inward airfreighted cargo is mainly medicine and high value consumer goods. The export of low value highly sensitive commodities and import of high value commodities tends to determine the airfreight rates.

The imbalance in value tends to discourage cargo airlines from flying to the region while the few that come will opt to load return cargo at a lower rate than return empty. With exception of Jomo Kenyatta and Kilimanjaro airport with high volumes of flower exports, the rest of the region airport receive fewer air cargo planes as most airlines airlift import shipment in passenger planes.

Even the regional airlines only operate passenger planes due to the imbalance in value of airfreight cargo. The COVID-19 epidemic and the resultant effect led to low demand for air cargo imports into the region partly due to disruptions in global supply chains yet there was sustained growth in the demand for fresh produce exports from the region. Because of global demand and supply disruptions, the cost of air freight, particularly in East Africa has escalated drastically, making the region's export produce uncompetitive. We now see airfreight charges to the Europe and other markets are currently in the range from USD3-7 per kg up from an average of between USD1.50 to 2.50 per kg.

Figure 4-21 Airfreight Global Cost Index April 2021

TAC Index Pricing				
Route	USD/KG	Change	Change %	M
China to Europe	3.29	0.02	0.61%	
China to USA	5.16	0.41	8.63%	
Shanghai to Europe	3.32	-0.08	-2.35%	
Shanghai to USA	4.97	0.38	8.28%	
Hong Kong to Europe	3.26	0.12	3.82%	
Hong Kong to USA	5.35	0.45	9.18%	
Chicago to Europe	1.69	0.07	4.32%	

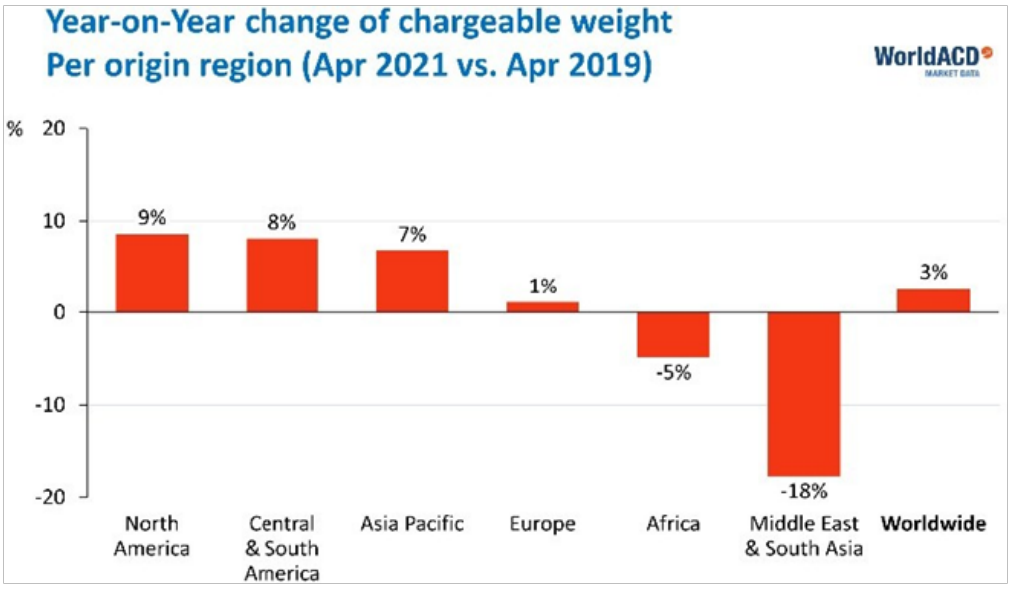
Source: Morethanshipping.com (2021)

It is evident that the multi modal route on the Central Corridor can enable transportation of import containers at a highly competitive rate. However, multiple issues pertaining to inefficient multi modal operations, railways infrastructure in Tanzania and handling infrastructure at Port Bell on the Ugandan side have led to underutilization of this route.

4.6.2 Unreliable railway operations between Dar es Salaam to Mwanza Port.

Transportation by rail along the Central Corridor is managed and operated by Tanzania Railways Ltd. The entire network length of Tanzanian Railways is of ~2,700 km of meter gauge line. The rail network is not directly connected to Uganda, it rather connects the Dar es Salaam Port to Mwanza Port from where the cargo can be carried over Lake Victoria by rail-wagon ferry. This railway network has historically been an important element of the Central Corridor's connectivity infrastructure. However, it is understood that lack of commensurate investments in network augmentation and maintenance has resulted in unreliable and inefficient rail services. Due to poor track condition, there are speed restrictions of 13-50 km/hr in place over many sections of the rail network. Because of the speed restrictions and inefficient operations, the train turnaround time from Dar es Salaam is around 18 days instead of the scheduled 10 days. This scenario results in an overall turnaround time of more than 20-25 days for importing a container from Port of Dar es Salaam compared to less than 20 days for Port of Mombasa (~5 days for roads and 10-20 days for rail). As per the discussions with various stakeholders, the unreliability of transit time is a major factor that contributes to the underutilization of Central Corridor.

Figure 4-22 Percentage changes in Airfreight Charges



Source: (WorldACD World Data) 2021 Report

4.7.1 Kenya Air Cargo

Jomo Kenyatta International Airport (JKAI) has the highest handling capacity of air cargo in the region. The airport has the capacity to handle the largest air cargo planes and has developed good infrastructure to handle both import and export cargo in terms of both dry warehouses and cold handing facilities.

The outbreak of the COVID-19 epidemic has had the same global effect on the cargo turnover at the airport like many other airports in the world. Due to disruption in commercial activity saw a low demand for imported finished goods while the demand for fresh agricultural commodities continued to go up forcing the normal export rates to go up due to few flights coming in. The prevailing high air freight charges are attributed to a combination of higher operating costs, fewer scheduled or chartered flights and an imbalance in supply and demand.

In Kenya, for example, the volume of fresh produce shipped through Jomo Kenyatta International Airport (JKIA) reduced from a weekly 5,000 tons to 1,300. This reflects a 75 per cent decline with similar trends reported across the region.

Costs, however, continue to ease with more scheduled capacity provided by KLM, Qatar and Ethiopian Airlines.

4.7.2 Rwanda Air Cargo

Kayibanda International Airport located in Kigali is the primary airport serving Rwanda. since 2018, a weekly direct cargo flight from Liege Belgium to load export out of the airport was introduced. The new aviation services were only meant to facilitate Rwanda's Agri-exports providing a direct route from Kigali to Liege Airport in Belgium.

Rwanda traditional export cargo is very low and is manly horticulture commodities like fresh fruits. There is no other daily scheduled cargo plane that flies into Rwanda as most import cargo is loaded on passenger planes. with the COVID-19 outbreak followed by global strict travel and lockdown measures, Rwanda saw a reduction in passenger planes and thus a reduction in air freight cargo. meanwhile the weekly cargo for export closed its operations.

This has forced Rwanda Air to dedicate its passenger planes to load some of the cargo to specific destinations in Europe, the consumer market for the goods. However, the airline can only carry a weekly belly cargo load of 32 tons out of the 110 tons weekly production that was being exported before covid outbreak.

Rwanda Air being a commercial passenger airline is not guaranteed of return cargo from the European destination and this has forced the airline to charge up to US 5.4 per Kilogram up from USD1.8 per Kilogram that was being charged when there were more flights into Rwanda.

4.7.3 Tanzania Air Cargo

Julius Nyerere International Airport is the international airport of Dar es Salaam, the largest city in Tanzania. It is located about 12 Kilometres southwest of the city centre. The airport has flights to destinations in Africa, Europe, and the Middle East. The Julius Nyerere International Airport offers the second most competitive airfreight rates, second to JKIA in Nairobi. Its newly developed state of the cargo-handling terminal will soon begin to bear fruits and one would expect that Dar es Salaam would begin to offer stiff competition to JKIA for floriculture and horticulture exports to Europe.

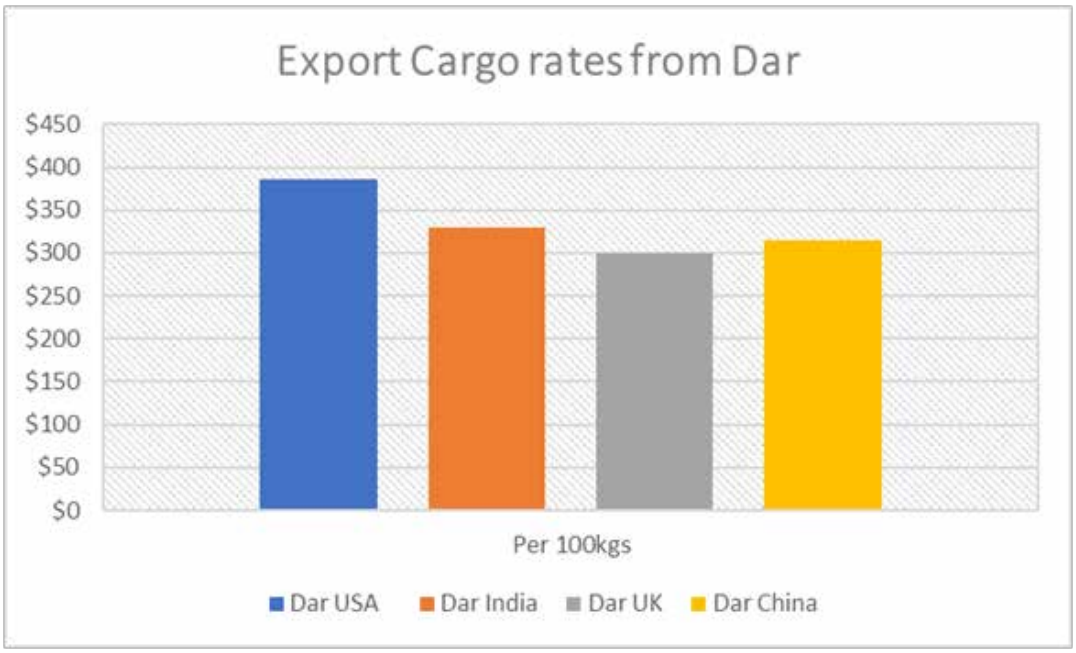
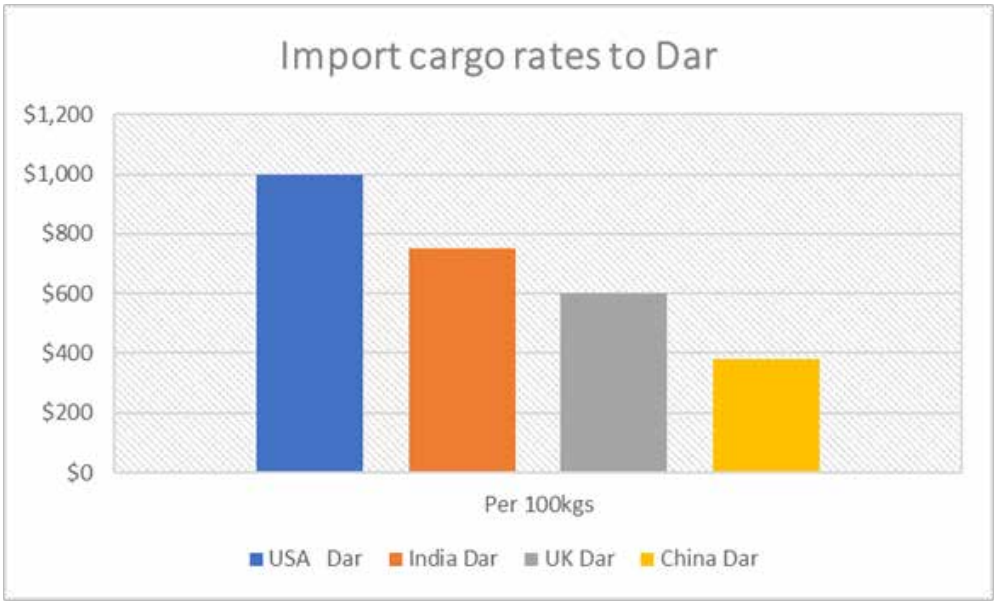


Figure 4-23 Tanzania airfreight rates for exports to select destination economies

Source:
IATA COVID-19 report 2021

Figure 4-24 Tanzania airfreight rates for imports from select economies



Source: IATA COVID-19 report 2021

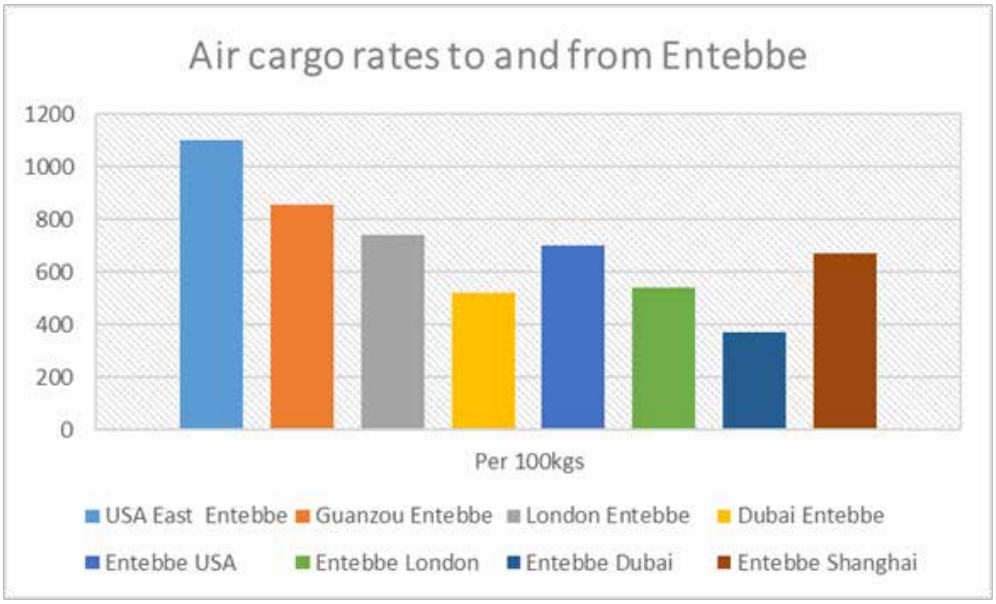
4.7.4 Uganda Air Cargo

The amount of cargo moving through Entebbe International Airport has increased by almost two times in the past one year, data from the Uganda Civil Aviation Authority. Entebbe Airport handled 5,329 metric tons of cargo in May 2021 compared to 3,992 Tons in May 2020. in April this year, 5,725 Tons were handled 5,977 tons in March, 4,766 Tons in February and 4,911 Tons in January 2021. With 42,000 tons handled in 2019 and 58000 tons in 2020, cargo traffic is increasing and expect to handle more than 62,000 tons by end 2021.

The biggest contributor to the Entebbe cargo volume is the United Nations Mission cargo based at the airport. The mission receives and handles import aid and mission cargo for the UN logistics support services in the region. The rest of the cargo is commercial cargo by small scale importers, diplomatic cargo and horticulture and fresh food exports.

The chart below is a breakdown of airfreight charges to select cargo destinations/origins around the world. The Entebbe International Airport offers the third most competitive airfreight rates, third to Julius Nyerere International Airport in Dar es Salaam. The recent launch of Uganda Airline passenger route to Dubai is now targeted to include belly cargo traffic. Uganda Airlines and Emirates Air have agreed to share the cargo traffic that is mainly composed of fresh horticulture exports to United Arab Emirates and Commercial cargo traffic from Dubai commonly imported by small scale traders that cannot afford full container loads by sea.

Figure 4-25: Air Cargo freight rates to and from Entebbe.

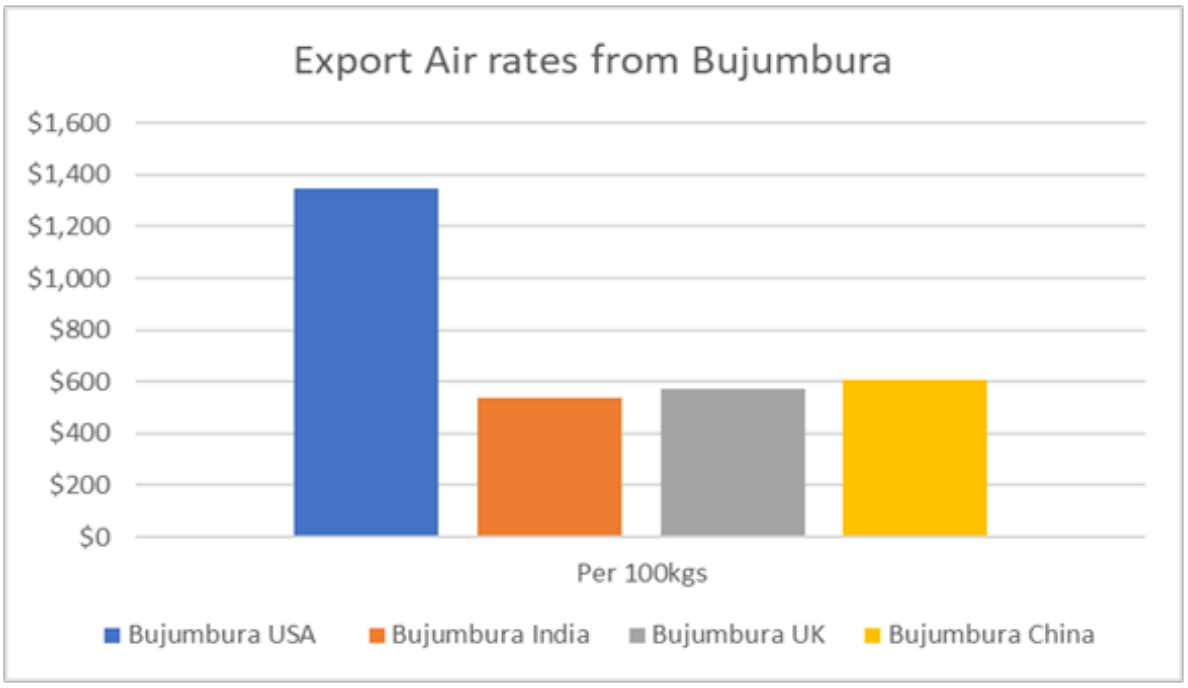


Source:
IATA COVID-19 report 2021

4.7.5 Burundi Air Cargo

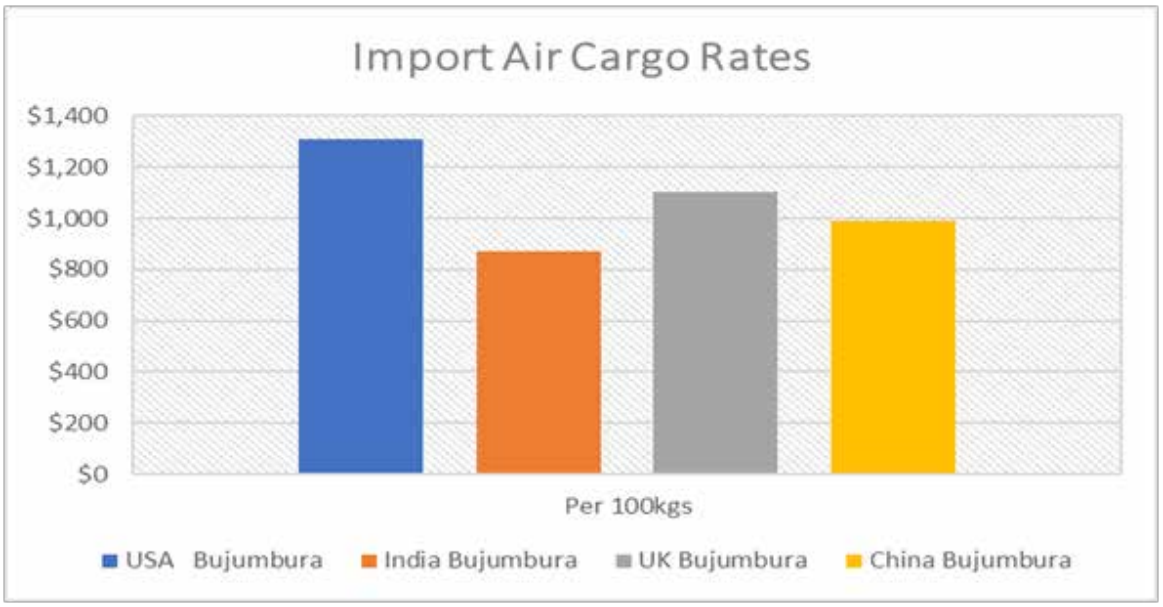
Bujumbura International Airport in Bujumbura, the capital of Burundi. It is Burundi's only international airport. As of January 2021, Brussels Airlines, Ethiopian Airlines, Kenya Airways and RwandAir maintain regular scheduled service to Bujumbura International Airport for both passenger and cargo. Burundi has the highest airfreight rates in the region as a result of relatively lower connectivity of the airport with only passenger airlines handling cargo and low volume cargo to and from the airport.

Figure 4-26: Burundi airfreight rates for exports to select destination economies



Source: ISTEEBU 2021

Figure 4-27: Burundi airfreight rates for imports from select origins



Source: ISTEEBU 2021

5 Inter modal Facilities

5.1 Impact of Inter modal

The need for the development of multi modal logistics hubs/parks/warehousing infrastructure like Container Freight Stations (CFS) and Inland Customs Depots (ICD) at key locations was realized at the time when there were heavy delays in cargo movement within the region. The main area of concern was the heavy costs resulting from these logistics failures that had a direct impact on costs of trade, production and export markets within East Africa.

- The major cause of failure was the collapse of the Rail network in the region that used to carry more than 70 percent of import and export cargo and the prevailing poor network of roads across the region that affected the movement of cargo trucks
- Delays in delivery of cargo culminated into cargo piling up at the ports leaving no space for new cargo discharged. The port delays due to port congestion and delays enabling last mile connectivity and cargo consolidation in the import destination and export origin lead to higher costs on cargo. The main costs were reflected in Vessel delay surcharges, port storage charges and container detention charges.
- The establishment of these CFSs and ICDs were to offer cargo handling facilities for ease of cargo clearance by the Customs authorities. Besides providing cargo- handling facilities, a common user CFS / ICD would also perform the function of an entry port for import and export cargo, like port facilities in coastal cities and the inland cities where the facilities would act as a centralized neutral cargo-handling base for import and export customs procedures.
- There are several other benefits of the multi modal logistics facilities.
- The establishment of CFSs in the port cities helped relieve the port authorities from shore handling of cargo and storage and were now able to concentrate on cargo management and vessel handling. Like any other ports in the world, cargo and containers only go through a port but not stored. CFSs would take direct delivery of cargo from the vessel to their facilities where the normal customs clearance procedures would take place.
- Improvement in turn-around time of trucks and containers. Faster turn-around time at the ICD were meant to reduce transit time between the origin and destination of cargo traffic. This in turn was expected to enhance the time reliability of transit.
- Cargo Consolidation. ICD become a focal storage point for both import and export cargo. This meant that stripped import containers would easily be utilized for already consolidated export cargo and readily available trucks.
- ICDs with a rail link and siding helped in the reduction of transport costs through modal shift. Usage of rail transport particularly for bulk traffic is much cheaper than road transport. The establishment of the ICD was expected to be beneficial for traders who might shift from road transport to rail transport to incur less transport cost for carriage of same tonnage. Then would use delivery trucks for last mail connectivity.
- Attraction of Industries. Establishment of the ICDs especially in the hinterland cities was expected to help reduce transportation cost for the raw materials and finished products. It was also expected to be a natural motivating factor for players to set up industries more so for players using bulk raw materials. The Nairobi Embakasi area, The Kampala Industrial and Business Park in Namanve and Kigoma town was expected to accommodate majority of such industries that benefit from the use of these facilities.
- Transit sheds for handling transit cargo helped in the ease of monitoring transit cargo by the respective revenue authorities. This helped in isolating transit cargo from local imports more specially to help prevent dumping of taxable cargo. Transit shed equally helped in consolidation of cargo for export or re-export. Isaka Goods shed, Mukono ICD, Kampala Multiple ICD, the New Gulu Logistics hub and Suswa Terminal are such cases of transit shed.

5.2 Changes in the effectiveness or requirement for the Multi modal facilities

The coming into effect of the single customs territory mechanism under the East African Customs Management Act has had an effect on the need for and operations of these facilities.

A single customs territory (SCT) is a stage in the full attainment of the EAC Customs Union Protocol, achievable through removal of trade restrictions, including minimization of internal border controls on goods moving between partner states. Its main objective is to achieve free circulation of goods in the customs territory in order to reduce the cost of doing business.

The main features of the SCT are:

- Goods are cleared at the first point of entry;
- Only one customs declaration is made at the destination country;
- Taxes are paid at the point of destination when goods are still at the first point of entry;
- Goods are moved under a single regional guarantee

bond from the port to destination; and

- Goods in transit/transfer are monitored by electronic cargo tracking system, interconnected customs systems, minimized internal controls.

The customs systems are web based and automated to enable accessibility and interaction from anywhere by clearing agents. Transit declaration under the SCT applies only to goods originating from and destined to countries outside the EAC region. All customs duties under the SCT are paid in the respective destination/ importing countries.

Under the SCT, there is no bond guarantee for goods for which taxes are paid at the destination. Bond guarantee applies on goods meant for warehousing, temporary importation, transit and on duty remission and exemption.

When considering selling goods within partner states of the SCT, the importer first seeks approval from the commissioners of the importing and destination countries, pay taxes in the consuming country and claim refund from the destination country where taxes were initially paid. Internal borders of importing partner states still handle cargo clearance. Goods originating from neighboring states and cleared at the first point of entry are reexamined at the internal border stations but controls are less. If a partner state imports goods produced in the region and meets the EAC rules of origin, import duty is not applicable. However, these goods are subject to domestic taxes which must be paid before the goods move from the country of origin to the destination.

The revenue authorities in the partner states work together to ensure that electronic cargo tracking is free and e-monitor goods in transit at no cost for the client. Under the SCT, the partner states have agreed to have cargo weighed once in the country of transit or destination in order to limit the time spent in transit on the numerous weigh bridges.

Government agencies involved in the clearing process under the partner states have been positioned at the various points of entry and have access to systems of other government agencies in a bid to foster integration within the other stakeholders.

The implementation of the SCT in the region has had a significant effect on the need to ICD. The change in market conditions and regulations meant the closer of ICDs in the rest of the region with exception of Kenya and Tanzania. since payment of import taxes is done at first entry point in the region meant that the relevance of the ICD was no more. Cargo is directly delivered for home consumption or the owners Customs warehouse Bond (for bonded cargo).

Further effect is that not all imports can be bonded but rather taxes are required to be paid at point of first landing in the region. Bonded warehousing is not allowed for items like sugar, milled and broken rice, wines and spirits, building materials, motor vehicle tyres and tubes, motor cycle tyres, used motor vehicles, garments, footwear etc.

The banned items form the bulk of cargo that was handled and stored in these ICD and commercial Bonded customs bonded warehouses. Similarly, the same effect on the Transit sheds business given that many of these products are transited in the region

5.2.1.1 Kenya SGR Factor

The commissioning of the SGR cargo train in Kenya came with instructions to have all inland bound Kenya import cargo be moved by SGR cargo train from the Mombasa port to selected ICDs in Nairobi and Suswa. All containerized cargo once discharged from the vessel is loaded and delivered to the ICD for customs processing before release. This effectively eliminated the Mombasa CFSs from handling any other cargo other than Mombasa bound import cargo. The ICDs in Nairobi, Suswa and Kisumu with MGR connection become the extension of Mombasa port.

5.2.2 Effect of One Stop Border Post (OSBP) on Inland facilities

In order to minimize delays in handing of transit cargo, the countries in the region embarked on the construction of OSBP. OSBPs enable more efficient movement of goods at land borders by streamlining necessary procedures by the two countries with one stop in a single facility instead of conducting the same procedures twice on both sides of the borders. This helps in the reduction in costs on transit cargo. In essence OSBP help in reducing time, complexity and costs of handling transit cargo because all statutory agencies involved in the control and management of cargo traffic are all based in one center.

The commissioning of these OSBPs along all most all border crossing point in the region meant less delays for trucks and encourage cargo owners to effectively have the entire customs clearance process done at the border and avoid further customs processes at the destination point. The main beneficiary of these arrangements are those with tax exempted cargo, zero rated shipments and cargo tagged for verification at destination like medicines, food and agriculture chemical inputs and fertilizers. Any such shipment that requires final clearance by the revenue authorities at the point of entry can now be cleared for home consumption at the border station.

6 Impact of COVID-19 on Transport and Logistics

6.1 Introduction

The outbreak of the COVID-19 pandemic presented EAC Partner States with monumental challenges that affected different sectors of their economy. As a response, the Partner States instituted measures to mitigate the spread of the virus while, at the same time, ensuring that such measures did not adversely affect the economic wellbeing of their citizens. Specific measures were instituted addressing the transport and logistics sector in the region. These measures, however, affected the operations of the sector. This section will present findings from the AERC working Paper on COVID-19 for September 2021. The working paper sought to investigate the impact of the COVID-19 on the transport and logistics sector in East Africa.

6.2 Impact of COVID-19 on Performance of Transport and Logistics

6.2.1 Cargo Throughput

In terms of cargo throughput, the study revealed that the Port of Mombasa, which serves the Northern Corridor, witnessed a major decrease in the total number of cargo handled at the port, from a projection of 35.9 million tons in total throughput and 1.49 million Twenty- foot Equivalent Unit (TEUs) in container traffic to 34 million tons total throughput and 1.358 million TEUs.

6.2.2 Transport Costs and Rates

The COVID-19 crisis disrupted transport and logistics operations, leading to higher operational costs, delays, and in some cases, cancellations of orders. For example, truck turnaround from Mombasa to Kampala reduced from four trips to two trips per month (SCEA, 2020) Transporters were forced to adjust rates upwards, at the same time, truck owners absorbed about 48% of costs, attributed to border crossing delays to service existing transport contracts. The cost of transport from Mombasa to Kampala increased from USD 2,100 to USD 2,500 during the 2nd and 3rd quarters of 2020.

The trend at the Port of Dar es Salaam was slightly different. The port throughput was 11,596,225 tons in 2020 for the period between January and September, higher by 4,939 tons margin compared to 2019 for the period under review. The trend remained similar for the cost of transport in the Central Corridor, which is served by the Port of Dar es Salaam. There was a slight reduction in rates—the average cost from Dar es Salaam Port to Kigali reduced to USD 2,800 in 2020 from USD 2,867 in 2019, Dar to Bujumbura reduced from USD 3,067 to USD 2,978, while the cost from Dar es Salaam to Bukavu went down from USD 4,900 to USD 4,856.

6.3 Key COVID-19 containment measures Instituted in the EAC

The following section highlights some of the key containment measures which were instituted in the EAC during the period under review.

- Mandatory COVID-19 testing for cargo truck crew: To facilitate the movement of cargo by trucks, governments required all drivers to have valid COVID-19-free certificates. The test certificates were valid for 14 days. Testing facilities had to be set up such that drivers test at the points of loading and hold negative COVID-19 certificates as a prerequisite to enter another country.
- Restriction on the number of crew: To encourage social distancing among crew members, the number of crew per truck was restricted to not more than two (and in some countries three) including the driver.
- Enhanced online submission of cargo-related documents to government agencies: This was set up to minimize unnecessary human interaction. Most cargo clearance processes became automated, and communication channeled via emails.
- Use of Railway as an alternative to road: On the Northern Corridor, the use of railway up to Naivasha ICD in Kenya as an alternative to road transport for transit cargo destined to Uganda, Rwanda, South Sudan, and DRC was adopted. This reduced the distance within which truck drivers interacted with communities along the corridor.
- Increased non-intrusive verification of cargo by government agencies: At the ICD in Nairobi, the number of people involved in physical verification was reduced to two people for a 20ft container and three people for a 40 ft container. Private sector was also encouraged to do the same.
- Suspension of issuance of new port passes: This was implemented to limit the number of people accessing the port.
- Relay driving – switching drivers at borders: This was deployed at some borders such as Busia, Namanga, and Rusumo. It involved drivers exchanging trucks at the borders so that truck drivers who have not tested for COVID-19 do not cross into another country.
- Transhipment at borders: Involved trucks offloading cargo at a dry port established at the border to minimize crossing of borders by untested drivers from a Partner State. Cargo would be picked by local trucks to the destination.
- Escorting cargo in convoys: Deployed at Rusumo to ensure truck drivers do not deviate from the designated routes and, therefore, interact with communities along the corridors. These meant trucks were made to wait and build enough before

the convoy sets off. The trucks had designated areas for stopovers along the transit routes to avoid the crew mixing with the public.

- Checkpoints: Additional police check points to monitor adherence to the SOPs by truck drivers.
- Isolation of agents and customs officers from the community: This involved isolation of private and public sector officials at borders to minimize their interaction with people in their homes and the communities as they facilitate movement of cargo through borders.
- Quarantine and isolation: Authorities quarantined and isolated truck drivers who were contacts of positive cases. Quarantine and isolation were also deployed for all crew before the release of the COVID-19 test results and/or at borders where there were no arrangements for relay drivers or transshipment.
- Enhanced cleaning: Routine fumigation of the port area, truck cabins, and containers.
- Deployment of the Regional Electronic Cargo and Truck Driver Tracking System: To track driver and cargo movements.

The analysis also revealed the EAC countries had the same measures. Kenya, Uganda, and Rwanda had developed and implemented most of the identified containment measures and had aligned to the EAC Administrative Procedures on the easing of movement of goods and people in the region. On the other hand, Burundi, Tanzania, and South Sudan had instituted fewer measures compared to the other countries.

6.4 Key Study Findings

The section below will present key study findings from the AERC Working Paper of September 2021 on the impact of COVID-19 on transport and logistics In EAC Region.

6.4.1 COVID-19 Impact on Business in EAC Region

More than 75% of the transport and logistics businesses in East Africa were significantly affected by the pandemic, with 16% of the respondents reporting the impact to be devastating and 34% experiencing extremely severe impact.

6.4.2 Effectiveness of Regional COVID-19 Policies

The transport and logistics industry believed that the existing national and regional policies were not effective in addressing the pandemic. Respondents rated national government policies fair at 35% compared to regional policies at 38%.

6.4.3 Effects of COVID-19 Containment Measures

COVID-19 containment measures had increased the time, cost, documentation, and labour costs. About 62% of transport and logistics players estimated that clearance time had increased by more than 30%. More than 67% also estimated that the cost of transport had increased by more than 30%.

Majority of the players also indicated that there was marked increase in documentation and clearance complexities because of COVID-19. There was also some noted increase in labour costs as a result of the pandemic.

6.4.4 Operational Challenges faced due to COVID-19 Pandemic

In terms of challenges because of COVID-19 in the region, several operational challenges were identified. According to 90% of the players, the sector experienced delays leading to increasing turnaround time. About 70% of the respondents identified the second most operational challenge as the emergence of more and new clearance procedures. Systems failure issues were identified by about 60% of the respondents as contributing to the operational challenges. Similarly, another 60% identified COVID-19 test-related issues as a major contributor to the operational challenges.

7 LPS 2020 Key Policy Advocacy Issues and Recommendations

7.1 Introduction

The LPS report seeks to highlights the policy, regulatory gaps, and recommendation for East Africa and lays the foundation for the Shippers Council of East Africa's (SCEA) regional advocacy for much needed reforms for the entire region. This policy paper aims at providing guidance to the policy functions at the SCEA in framing its future advocacy agenda in a manner that promotes a harmonized, integrated, and sustainable freight logistics system.

Procedures, arrangements and issues for imports cargo movement from the time cargo lands at either the Port of Mombasa or Dar-es-Salaam until it reaches the consignee the final consumer or for exports out of the region, can be translated into costs. This represents a significant proportion of the overall cost structure. It has been observed that as procedures become easy to understand and use, related costs fall, and vice versa. Some of the procedures and arrangements are translated into direct or indirect costs of cargo movement.

It is therefore very imperative that regional statutory laws and regulations, customs documentation regulations and procedures and other interregional regulations are harmonized so as to promote trade by reducing trading costs.

7.2 Review of the Regional Transport and Trade Policy Environment

East Africa Community

The East African Community (EAC) is comprised of Burundi, Kenya, Rwanda, Tanzania, Uganda, and South Sudan. The objectives of the EAC are to develop policies and programs aimed at widening and deepening cooperation among the partner states in political, economic, social and cultural fields; research and technology; and defense, security, legal and judicial affairs for their mutual benefit.

The EAC aims at becoming "a prosperous, competitive, secure and politically united" region, through the successive establishment of a customs union, a common market, and a monetary union.

This vision is operationalized through five - year development strategies. The EAC is currently in its fourth Development Strategy focused on the consolidation of the customs union and the establishment of the common mark. Articles 90-95 of the treaty establishing the EAC make provisions for the development, maintenance, cooperation, and coordination of various modes of transport within the EAC.

After several years of steady increases in the first years of the launch of the customs union, intra-EAC trade in goods has stabilized at around 10% of the total merchandise trade of the Community over the review period. On average, EAC countries source 6% of their total imports from the region, and supply 20% of their total exports to the region. The major factors behind this low level of intra-EAC trade include informal (unrecorded) cross-border trade; and natural and non-tariff barriers to trade, mainly poor infrastructure, although this is being addressed by most countries; sanitary and phytosanitary measures; technical barriers to trade; similarities in the production of a limited number of identical manufactured goods (e.g. cement, petroleum, textiles, sugar, confectionery, beer, salt, fats and oils, iron and steel products, paper, plastics and pharmaceuticals) for which the production capacities have recently increased in most countries; and the use of different currencies.

The East African Customs Union

The Customs Union is the first Regional Integration milestone and critical foundation of the East African Community (EAC), which has been in force since 2005, as defined in Article 75 of the Treaty for the Establishment of the East African Community.

It means that the EAC Partner States agreed to establish free trade (or zero duty imposed) on goods and services amongst themselves and agreed on a common external tariff (CET), whereby imports from countries outside the EAC zone are subjected to the same tariff when sold to any EAC Partner State.

Enabling the EAC Partner States to enjoy economies of scale, with a view to supporting the process of economic development through the establishment of a Single Customs Territory. Goods moving freely within the EAC must comply with the EAC Rules of Origin and with certain provisions of the laid-out protocols.

The East African Court of Justice (EACJ)

This is the judicial arm of the Community. With its ten judges, it has jurisdiction over the interpretation and application of the EAC Treaty. Since its establishment in 2001, the Court has been operating on an ad hoc basis at its temporary headquarters in Arusha, and the judges convene only as needed. According to the EAC Secretariat, a final decision is to be made by the Council of Ministers for permanent services of the EACJ. As at

end-2017, about 175 cases were brought before the Court10. None of these cases was trade- related, as the Treaty has no direct trade-related provisions. A protocol on the extended jurisdiction of the Court has been signed by the Summit, to enable the Court to handle trade-related issues. However, it is still undergoing the ratification process.

The East African Legislative Assembly (EALA)

EALA with nine elected members per country is the legislative body of the Community. Its core mandate is to legislate on all matters relating to the operationalization of the Treaty. The legal framework of the EAC consists of the Treaty and its protocols, and several pieces of legislation. Bills can be introduced in the Assembly by a member of the EALA, an EALA committee, or the Council of Ministers. After a bill is passed into law by the EALA, it must be signed by EAC Heads of State before it is gazetted. If a Head of State refuses to sign, the bill shall be referred to the Assembly, with a request that the bill, or a particular provision thereof, be reconsidered. However, if a Head of State withholds signature to a re-submitted bill, the bill shall lapse.

The Northern and Central Transit corridor Authorities

The East African region has two major international corridors—the Northern Corridor and the Central Corridor that traverse the region with a large cross boarder transport infrastructure network, each linking seaports with landlocked countries. The northern corridor links the East African hinterland to the port of Mombasa while the central corridor links to the port of Dar es Salaam to the region too Northern and Central Corridor Transport Observatory is a monitoring tool that measures over 40 indicators on the performance along the corridor. The Observatory tracks these indicators using raw data collected from the stakeholders in all the member states. This information provides clear picture on various indicators, enabling to identify the bottlenecks that need to be resolved to improve on the efficiency and sequentially improving in the trade and operations along the corridor.

The East African Business Council (EABC)

Private sector interests and concerns are conveyed to the EAC's policymaking sphere mainly through the East African Business Council (EABC). Established in 1997, the EABC is composed of about 170 associations, government agencies, and corporations from the Community. It has observer status at the EAC, and can participate in activities and meetings at the EAC Secretariat.

7.3 Situations Analysis of Prevailing Policies

Authorized Economic Operator (AEO) Program

The EAC regional Authorized Economic Operator (AEO) program was conceived by the Commissioners of Customs of the East African (EAC) countries of Burundi, Kenya, Rwanda, Tanzania and Uganda in 2006 after the adoption of the World Customs Organization (WCO) SAFE Framework of Standards by the WCO Council in 2005.

In order to improve on the speedy clearance and release of import cargo, the Regional Customs Bodies introduced a special categorization of forwarders and importers. The regional AEO program was introduced in 2006. Under the program, any individual or business entity involved in international trade may benefit from faster customs clearance procedures, if recognized as a low-risk company by customs authorities. Customs declarations from traders and manufacturers with AEO status are given priority throughout the whole clearance process. AEO clearing and forwarding agents are supposed to be accorded priority treatment in the cargo clearance chain, and a waiver for the bond requirement. This greatly improve on timely delivery and reduced costs related to delayed customs procedures like cargo verification and scanning. It further allows cargo be taken to the owner's premises rather than the designated customs CFS or ICD.

The AEO program has not had a major impact mainly because the benefits are only enjoyed at country level. The program would have a real effect if extended to regional transporters and agents handling transit cargo

Customs Management Systems

Within the EAC, national customs use different computer systems. ASYCUDA World is in place in Rwanda, Uganda, and Burundi. In 2017, Kenya replaced its Simba system with the Integrated Customs Management System (iCMS). Tanzania also replaced ASYCUDA++ with the Tanzania Customs Integrated System (TANCIS). The use of these different systems is potentially a source of delays in cargo clearance, mainly for transit goods mainly because despite cargo arriving on the same shipping line cargo manifest, each customs authority only picks cargo items destined to the respective country. The systems are not interconnected to identify transit cargo movement. The Transiting country through which the cargo is transiting cannot electronically monitor the cargo. This leaves cargo move under physical monitoring by the transit country and relay on the receiving country to enforce delivery and tax collection

Customs Procedures and Documentation

The EAC members introduced EAC Customs Management Act, 2004 and the EAC Customs Management Regulations, 2010 for the sole purpose of harmonizing the customs tariffs in the region. The main purpose was to discourage cargo dumping in countries with lower import duty regimes. Unfortunately, the Customs procedures and documentations are not yet fully harmonized within the EAC as they are still being governed mainly by national legislations and special

tariff regimes instituted for economic benefits of the respective countries

Electronic Cargo Tracking
Up until 2018, EAC countries were using different cargo tracking systems, which resulted in cargos being traced only up to border points; delays at border points; increased costs for traders; and an increased risk of cargo theft or diversion of goods in transit. In 2017, Kenya, Uganda, and Rwanda jointly launched an electronic cargo tracking system along the northern corridor, Transit trucks and units on wheels are tagged or sealed with an electronic seal that in monitored from the control center points. Cargo is monitored from the port of Mombasa to Kampala and Kigali.

On 30th May 2020, All the EAC Partner States agreed to adopted the EAC Regional Electronic Cargo and Drivers Tracking System that will be hosted at the EAC Headquarters in Arusha, Tanzania. Tanzania one of the late entrants effectively commenced the system by early September.

Export Regime
The export regime, including procedures and documentation requirements, is not yet fully harmonized. All EAC countries apply export taxes on raw hides and skins. In addition, export duties and taxes are collected on specified items by:

- Uganda (raw tobacco, fish and fish products, and coffee);
- Tanzania (raw cashew nuts, wet blue leather, and fish and fish products);
- Kenya (wet blue leather, crust leather, and raw macadamia nuts);
- Burundi (minerals);

In general, these measures are meant to encourage domestic value addition. A number of export promotion instruments are harmonized within the EAC. These include manufacturing under bond, export processing zones, and duty remission schemes. Goods benefiting from any of these schemes are destined primarily for export, and manufacturers are required to sell at least 80% of their products outside the EAC.

Harmonization of Vehicle Axle Load Limits
The EAC countries have also taken steps to harmonize their vehicle load limits, through the adoption of the EAC Vehicle Load Control Act, 2013, which came into force in 2016. Under the Act, vehicles with a weight of 3.5 tons or more are to be weighed at every weighing station on the EAC road network and the 8 ton limit per axle for any truck load.

The main objective of the harmonization of the load limits was to preserve the road infrastructure that the respective countries have invested in heavily to enable ease of transport of cargo. Considering that each individual country has an obligation to build and maintain the transit routes along the corridors. It was therefore vital to agree on the load limits

The Mombasa Port Community Charter
The Mombasa Port and Northern Corridor Community Charter proclaims the desire of the Port and Northern Corridor community to realize the full trade facilitation potential of the Port and Northern Corridor. It is the 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.

Stakeholders are obliged to pursue and encourage realization of the Northern Corridor's full trade facilitation potential, as intended by the Charter. The public and private sectors' pursuit of Charter objectives has seen remarkable improvements in the quality of logistics services in Kenya.

The Mombasa Port and Northern Corridor community Charter MPCC is known only to stakeholders closely involved in the charter activities. Its presence is not known by the general public at large despite the fact that some of its programs of activities have been successful over the years. This position was noted during the last review of MPCC. The stakeholders noted that for the Charter to be successful, it needs to develop and implement a communications strategy to make stakeholders and the general public aware of the returns on the time and effort invested in the engagement. Without adequate information regarding the Charter's implementation and its attending benefits, the process risks disengagement and/or non-participation of key stakeholder groups and communities that ought to be involved in its implementation and who could very well contribute to its success.

One Stop Border Posts
In order to minimize delays in handing of transit cargo, the countries in the region embarked on the construction of OSBP. OSBPs enable more efficient movement of goods at land borders by streamlining necessary procedures by the two countries with one stop in a single facility instead of conducting the same procedures twice on both sides of the borders. This helps in the reduction in costs on transit cargo. In essence OSBP help in reducing time, complexity and costs of handling transit cargo because all statutory agencies involved in the control and management of cargo traffic are all based in one center.

The commissioning of these OSBPs along all most all border crossing point in the region meant less delays for trucks and encourage cargo owners to effectively have the entire customs clearance process done at the border and avoid further customs processes at

the destination point. The main beneficiary of these arrangements are those with tax exempted cargo, zero rated shipments and cargo tagged for verification at destination like medicines, food and agriculture chemical inputs and fertilizers. Any such shipment that requires final clearance by the revenue authorities at the point of entry can now be cleared for home consumption at the border station.

Regional Customs Transit Insurance Bond

Before the coming into effect of the EACMA, each territory customs authority required a specific customs bond to allow transit movement of cargo. That effectively meant that cargo in transit to third country in the same region required more than two customs insurance bonds to transit. EAC countries have improved the procedures for goods in transit, through the implementation of a single regional bond system. The main bond regionally accepted is the COMESA bond. The only challenge to this is its effectiveness once cargo is lost or damaged while in transit. The importer having paid the taxes at the first entry point will be required to pay taxes and fines to the country where the cargo never exited from. The transit bond, though meant to cover such incidents if not effectively implemented

The Single Customs Territory

The SCT was rolled out in July 2014. According to the authorities, all imports into the EAC and intra-EAC transfers of goods are cleared under the SCT, and its extension to the export regime is under consideration.13 The steps taken to operationalize the SCT have contributed to reducing delays in cargo clearance. For instance, on the Northern Corridor, the turnaround time of goods transiting from Mombasa to Kampala has been reduced from 18 days to 4, and goods from Mombasa to Kigali, from 21 days to 10 Similarly, on the Central Corridor, the turnaround time between the port of Dar es Salaam and Kigali (or Bujumbura) has been reduced from over 20 days to 6. The EAC's single customs territory (SCT) model relies on three pillars:

- Free movement of goods;
- A revenue management system; and
- An adequate legal and institutional framework;

Achievements in the implementation of Single Customs Territory include the reduction in time and cost of transporting goods to and from the respective ports of Dar es Salaam and Mombasa

The East Africa Customs and Freight Forwarding Practicing Certificate

The East Africa Customs and Freight Forwarding Practicing Certificate (EACFFPC) is a joint training program of the East Africa Revenue Authorities (EARAs) and the national freight forwarding associations affiliated to the Federation of East African Freight Forwarders Associations (FEAFFA).

The course is offered to individuals already practicing or intending to practice in the clearing and forwarding industry throughout the East African region The clearing and forwarding sector plays a critical role in facilitating international trade and logistics, and is therefore an agent of economic development. In the East Africa Region, the sector plays an even more strategic role in the regional integration processes by providing essential services such as Customs clearance, warehousing and transportation. The course is designed to equip learners with the necessary technical skills and professional ethics to responsibly discharge their duties and responsibilities as Freight Forwarding Practitioners. It is critical in ensuring students understand managing transportation documentation, compliance with customs processes and regulations.

This certificate is playing a crucial role of reducing the time taken to process customs documents that has a direct effect on costs.

7.4 Policy Recommendation

Sustainable transport

Although East Africa as a whole has a relatively lower carbon, global footprint the region should start to work towards global efforts to improve sustainable freight logistics. Failure to do so will risk the region being disadvantaged through market discrimination by consumers who would like to see the carbon footprint lowered. If the region's countries do not address this oil dependence expeditiously, people's ability to travel when oil products became scarce consequently, the overall economic security could be severely impacted with dire consequences on inflation, trade balance and the overall competitiveness of its economy.

One of the new challenges is how best to adapt to global climate change the regions black carbon footprint can be lowered by responding appropriately. Polices on reduction of the use of fossil fuel in freight logistics by:

I. Advocating for a shift of traffic to more sustainable freight transport systems and such as encouraging greater use of rail and inland water transport,
II. Raising awareness on pollutant impacts and mitigation strategies: improved quality of fuel, vehicles and infrastructure as well as promoting best practices and showcasing successful efforts,
III. Global efforts to achieve a reduction of 60% in Greenhouse Gases by 2050 in the transport sector should be supported in conformance with relevant SDG's. In this connection, the region should aim at a reduction in Particulate Matter (PM), black carbon emissions and Oxides of Nitrogen (NOX) grams per ton-km by at least 10% by 2021. Also, the region should consider supporting and considering the reduction of CO2 emission intensity grams per ton-km by 10% by 20121,
IV. Increasing the fuel efficiency of transport services

through electric railway systems, and fuel-efficient trucks, targeting improved fuel economy litres per ton- km for trucks by at least 5% by 2021,

V. Transport charges and taxes should be restructured so that each mode of transports pays the full costs of its impact on the environment.

Transport planning

The Northern Corridor, the Central Corridor, and the Dar es Salaam corridor need to harmonize freight logistics planning including the establishment of joint performance measuring and monitoring frameworks. The lack of harmonized variables for data collection and analysis hampers true comparisons between sectors and modes.

There is no coordinated planning between import and export cargo. As such trucking rates and costs are based on one way load trip rather than turn around trips. This is exemplified in the difference between import and export rates. A harmonized planning system would mean creation of cargo manifest, where cargo owners would update their planned loading to source for trucks at a reasonable rate.

With proper regulations and safety guarantees, this could see a reduction in transport costs

Transport management and operations

The East African Region should adopt sustainable freight logistics infrastructure maintenance program of existing freight logistics infrastructure and eliminate the need for infrastructure rehabilitation or reconstruction, as is the norm in the region. The contractors should be made to provide maintenance free period during which time they would be responsible for routine repairs and maintenance. Routine and periodic maintenance of freight logistics infrastructures should be financed by the infrastructure users. The region needs to develop measures aimed at harmonizing and improving the competence of freight logistics service providers. The ongoing East Africa Customs and Freight forwarding Practicing certificate needs to be expanded to encompass more than just customs clearance processes and should be expanded to cover road haulage terminal operations, and warehousing operations. The region should double up efforts to eliminate abnormal practices such as overloading, over speeding, operation of faulty or defective vehicles and corruption on the roads at the borders and in the ports.

Freight Logistics Performance Measurement;

The Northern Corridor, Central Corridor and the Dar es Salaam corridor secretariats should develop joint corridor performance monitoring and measuring frameworks. This will encourage a harmonized approach to monitor the efficiency of freight logistics systems. There is urgent need to develop baseline data and targets for key indicators. The region should build on the ongoing Mombasa Port Community Charter (MPCC) initiative that has so far developed a commendable results framework. The lack of harmonized variables for data collection and analysis hampers true comparisons between sectors and modes.

The following indicators may be considered for adoption across the two corridors:

- Port Connectivity: An indicator to measure the number of direct connections to hub ports can also be adopted as a new indicator in the region. In Eastern Africa, the most connected ports are Port Louis, Mauritius and Pointe de Galets, Reunion. Both ports provide trans-shipment services to other Eastern and Southern African ports. The liner shipping connectivity index of Mombasa, and Dar es Salaam, has been relatively stagnant. Both ports are important gateways to Eastern African countries' overseas trade, including the landlocked countries of Burundi, Rwanda, and Uganda, yet they are highly congested, limiting their potential for improved connectivity. Policy measures that could help improve port connectivity in Eastern Africa include expanding and further modernizing existing ports, investing in new ports, encouraging inter-port competition among neighboring countries, improving inter modal connections and trade, and facilitating transit.
- Rail Vs Road Traffic indicator: International best practice required that the region grow its rail volumes to at least 30% of the freight carried on rail. The region should encourage port to good shed evacuations while trucks do the last mile delivery. This would mean that the Rail port connection would be for evacuations of cargo only while customs processes and release would be handled at the respective rail goods sheds. This would cut on the port congestion and limit human interactions at the port. The rail road link would help reduce on time and cost of doing business
- Tracking and Tracing: This is one indicator that can build on the already developed electronic cargo-tracking infrastructure. There is need to develop the system to give shippers true real-time tracking and tracing capability and the system is only currently being used to control dumping of transit good.

Freight Logistics Infrastructure Financing

Member states should develop enabling legal and regulatory frameworks that support creation of PPPs for development, financing, management, and operation of major freight logistics infrastructure projects. For the road sector, the member states must ensure that financing of routine and periodic maintenance is covered by road user charges. Money collected should be channeled to road funds and used exclusively for road maintenance on performance basis and eliminate

the need for rehabilitation of the road network. For freight transport, user's charges should cover in full the cost of using the infrastructure, as well as the indirect costs, such as the impact on the environment. Member states should develop enabling legal, regulatory, and institutional frameworks for private sector involvement in development, financing, management, and operation of transport infrastructure projects.

Road infrastructure
EAC partner states should domesticate and deepen implementation of the East African Community Vehicle Load Control Act of 2016. All efforts should be made to ensure overloaded vehicles should disappear. Special consideration should be made for what to do to ensure compliance of vehicles from DRC, which is not a member of the EAC. The role of the private sector to maintain, up-grade and manage road infrastructure along the corridors with funding from tolling in order to generate revenue to be used specifically for road maintenance by the private sectors should be encouraged. Routine and periodic maintenance strategy should be modernized in order to better the regions roads and eliminate the requirement for rehabilitation.

Effective financing instruments need to be developed to finance road maintenance. A permanent working-out composed of all the stakeholders (administration, road agencies, companies, consultants; monitoring offices, and transport operators should be established in order to seek to prioritize road maintenance and to develop such regulations needed for the maintenance of various categories of roads.

The use of PPP for road construction and maintenance should be developed with road tolling as means of recovery of invested funds. The safety and protection for all road users should be secured through safer road infrastructure, through a combination of proper planning and safety assessment, design, building and maintenance of roads.

The Example of the planned new Kampala- Jinja Road under the PPP arrangement and the new Nairobi Express toll road under construction are such examples. This would mean that the current road user fees charged to transit trucks would now be channeled properly to the intended purpose of road maintenance. Road user's charges should be harmonized within the region and between the trading blocks.

Driver training and vehicle quality
There is need to strengthen regulations covering driver training and vehicle quality in order to increase efficiency, and improve safety. The driving regulations and standards of commercial vehicles should be harmonized and more rigorous professional testing and certification should be developed. Un-official roadblocks should disappear through a strict enforcement of existing regulations.

Expansion of port capacity
The regions port capacity should be expanded to meet the expected growth in freight logistics. Port planning in the national transport should be integrated with the overall transport planning system to ensure the establishment of an integrated transport system and that ports are well served with link roads and railways. The Regions hub ports that include Bagamoyo, Dar es Salaam, Mombasa, Mtwara, and Tanga need to be developed to offer adequate capacities at berths and channels to accommodate panamax and post-panamax vessels. At least two ports should be modernized and expanded to transform into true hub ports.

Inland waterways
Navigable inland waterways transport that has been neglected and has not been given due consideration thus has deteriorated over the years should be re activated and developed. The potential for inland water transport to contribute as a cheap and environmentally friendly/ sustainable (and multi-modal) mode of transport in East Africa's freight transport system taped. Government should be encouraged to develop plans to foster inland water transport through the provision of appropriate infrastructure, laws, and regulations to address common navigation issues and logistics to support efficient cross-border trade thereby promoting investment co- ordinated in terms of geographical needs, port locations, and modern integrated port and handling facilities.

Truck loading of petroleum products should be discouraged on the roads due to the high risks they expose to road users and the populations leaving along the transit routes. The regional governments should encourage the use of oil pipe lines from port to the oil jetties along the lakes sides. Then encourage private players to bring oil vessels to move the oil along the waterways. There are tremendous benefits to this apart from safety reasons, there will be reduction in road maintenance costs and transport costs resulting in a reduction in costs of doing business

Airfreight handling
There is need to continue with the ongoing modernization and developing of additional airport capacity based on market and financial viability and environmental sustainability. The region's major exports are fresh agricultural products and fish. With increased modernization of the airports and increased capacity to handle such fresh produce, there are high possibilities of cargo export growth with new commodities like animal products like meat and milk being airlifted out to the middle east regions. This would make the region compete with the current suppliers from South America, who are at a further distance than the East Africa region

Multi modal transport

Multi modal transport in the region is underdeveloped because of a general lack of awareness of the concept. This means that the region does not realize the full benefits of multi modal transport, implying that trade in the region is disadvantaged due to high transport costs. This is compounded by a general inadequacy of modern technologies, such as information technology systems, ICDs, and the capacity to institute the system. This has inhibited the region's capacity to effectively handle international freight, particularly under multi modal transport arrangements because this system requires quick documentation and fast cargo movement. The poor infrastructure, coupled with lengthy and cumbersome procedures, are the major constraints to the development of multi modal transport in the region and this should be addressed both by the governments and stakeholders with the assistance of regional organizations, namely EAC and COMESA. There is total lack of local involvement in this systems approach by local firms, and for it to take root, local investors should be encouraged to participate in the method.

Inland transport of containers offers the ideal conditions for a complementary relationship between road and rail or road and inland waterways transport respectively. With such a system, the trunk line movement of container would be left to the more cost-effective modes, i.e. rail, inland waterways while pick-up, and delivery services would be performed by road. Such a modal split in the carriage of containers can be in line with an optimum allocation of scarce resources for investment in infrastructure. Limited availability of resources necessitates a government policy to ensure optimum use of existing infrastructure and transport systems to the extent that railway lines or inland waterways can offer the required transport capacities.
There is need to develop legal frameworks conducive to multi modal transport operations. Infrastructure planning needs to be better addressed to allow for the physical conditions for multi modal transport. There is need to conduct feasibility studies to examine and promote multi modal transport and to identify transfer points, including inland container depots; and Policy, legal and regulatory developments must involve the private sector as key stakeholders.

There is need to develop regional legislation to regulate multi modal transport and to provide legal framework for the establishment and development of a private sector operators of multi modal transport. Conduct comparative analysis to investigate to which extent a transfer of cargoes towards rail, inland waterways, and short sea shipping could be beneficial for the environment Studies to define the most sustainable combination between ports, volumes of traffic and existing land transport network and the most promising ones in line with the countries' development plans should be undertaken.

7.5 Key Logistics Sector Advocacy Issues

This section provides a shopping list of the most important regional freight logistics advocacy issues and should lay the basis for advocacy for reforms of the sector for a period of time. The advocacy recommendations if given a further look, improved upon, approved and implemented should lead the region towards an efficient, integrated, sustainable, and harmonious logistics sector. The advocacy issues include:

Enhance Customs Efficiency and Reducing Logistics Complexity

I. Further review of clearance procedures with the aim of transporting the SCT into a true signal customs territory by promoting free movement of cargo through elimination of the regions internal borders.
II. Advocate for a change in the attitude of revenue authorities to trade facilitation;
III. Advocate for the enhancement of AEO benefits to make the program attractive to more players.
IV. Develop a small business AEO program to facilitate the participation of small shippers and freight forwarders. As it is today, the AEO is designed for the big players leveeing out a vast majority of the industry.
V. Expand the ECTS system into a fully-fledged cargo track and trace system where shippers have access to the system and can follow up there consignments directly.
VI. Promote Mandatory Logistics service provider certification,
VII. Promote the full implementation of a regional electronic Single window system that will improve customs compliance while reducing documentation effort for shippers and their agents.

Create Environment for Multi modal Operations

I. Conduct a comparative analysis to investigate to which extent a transfer of cargoes towards rail, inland waterways and short sea shipping could be beneficial for cost of transport and reducing the impact of logistics on the environment,
II. Advocate for transport infrastructure developments needed to create an appropriate environment for the development of multi modal transport,
III. Advocate for Institutional and legal framework to harmonize governmental regulations and commercial practices regarding the profession of "multi modal transport operator"
IV. Advocate for development of modalities of returning containers to owners and reducing or removal of charges such as container deposits,

Increase Port Efficiency

I. Lobby port authorities and government to develop a harmonized port performances monitoring framework to ease the monitoring and benchmarking of port performance in the region.

II. Lobby for Port Connectivity to become an indicator for measuring port performance for both Mombasa and Dar es Salaam. The same indicator should be adopted for the upcoming ports of Tanga, Lamu, Mtwara, and Bagamoyo.
III. Advocate for the establishment of Hub ports at Bagamoyo and encourage the completion of Lamu Port. East Africa does not have a transshipment port and as such the region does not attract sufficient transshipment traffic. Currently the entire cargo shipments for the Eastern and Southern parts of Africa are Transshipped from Salalah in Oman and delivered on feeder vessels The absence of ports in East Africa is one of the reasons for the high costs of maritime transport
IV. Advocate for accelerate expansion of port capacity to satisfy expected transport demand. Failure causes bunching of vessels due to merger facilities, which in turn brings about port congestion surcharges on cargo.

Increase Road Freight efficiency

I. Advocate for development of regional traffic rules that will harmonize driver competence and driver safety
II. Lobby truckers and government for the complete elimination of the culture of overloading vehicles. Which indirectly causes time losses,
III. The driving regulations and standards of commercial vehicles should be harmonized and more rigorous professional testing and certification should be defined and implemented across the region;
IV. Lobby for the complete removal of un-official roadblocks. These are particularly prevalent in Kenya, Tanzania, and Burundi.
V. Lobby for polices aimed at reduction of High truck and maintenance costs: Majority of the East African Transport Operators indicated that the cost of maintenance as being one of the larger costs of transport second to poor road condition. Polices should be aimed at ensuring the condition of the regions fleet is improved and even if the region shall continue to operate second hand vehicles that the age of commercial trucks be regulated. Policies should be developed to ease cost of purchasing new locally assembled/manufactured trucks.

Improve Railway Logistics

I. Develop indicator for ration of rail vs road and lobby government to move towards international best practice of at least 30% rail freight.
II. Advocate for improved value for money from the railway operators. This may include adopting tracking systems and directly contracting with road transport operators to provide a door-to-door service,
III. Lobby for the development of cross border railway operations through using best practices in term of movement of locomotives and wagons and in terms of custom clearance, Improve Freight Flow Balances Promote the development of polices needed to develop an electronic market for freight. One of the greatest causes high costs of transport is the mismatch of full freight truck moving in imports vs empty freight trucks returning to the region's ports. Development of electronic freight exchange system will go a long way in filling these trucks with regional traded commodities greatly increasing fleet utilization thereby greatly reducing the cost of transport.

7.6 Key Policy Gaps

East Africa's economic freight logistics and the infrastructure gap remains a key constraint to the regions competitiveness. The lack of efficient, reliable, and sustainable freight logistics links prevents the region from taking advantage of emerging regional and global cross border trade opportunities.

The consultant interviewed numerous freight logistics experts, policy makers, policy informers, and policy influences in arriving at the key freight logistics policy areas. In addition to this, the Consultant has conducted a deep and wide review of literature on freight logistics in East Africa, Africa and the rest of the world.

SCEA needs to take a regional approach to policy advocacy, change its Kenyan focus advocacy, and embrace a regional view of promoting efficient and effective freight logistics not only in Kenya but also across East Africa as a whole. The following cross cutting policy objectives gaps that have been identified:

I. Develop a policy on working relationship with the EABC so as to mainstream the SCEA LPS into the EACs policy considerations.
II. Improve the working relationship with the respective country Shipping councils. We noted a relax relationship between the two
III. Develop policy on promotion of new transport corridors,
IV. Develop policy positions on the strengthening of regional and continental freight logistics links,
V. Develop regional policy positions for efficient and effective road freight Infrastructure,
VI. Develop regional policy positions on effective and efficient rail freight,
VII. Develop regional policy positions on freight logistics infrastructure financing
VIII. Develop regional policy positions on freight logistics performance measurements
IX. Development of regional policy positions for the development and expansion of the capabilities of regions major ports to handle larger and modern marine vessels, and transform into real hub sea ports,
X. Development of regional policy positions on freight logistics Planning,
XI. Development of regional policy positions on multi modal freight transport,
XII. Development of regional policy positions on strengthening of airfreight,
XIII. Development of regional policy positions on sustainable freight logistics,

8 Current Initiatives to Improve Logistics Performance in East Africa

The global logistic service changes its operation in every moment with the drive to minimize logistic cost and time along the supply chain. East Africa business owners directly or indirectly are affected to these dynamics hence need to adapt or cope to remain a float is required, the continuity of these sector involves a multisector play to improve the logistic services.

As a result, logistics companies are stepping up with innovative strategies to respond to these rapidly shifting logistics trends in 2020 and beyond. From automated warehousing technology to last-mile delivery solutions and other as named below;

- E-commerce logistics are projected to be worth USUSD 524.1 billion by 2025 (Business Wire, 2019). According to recent polling conducted by Peerless Research Group (PGR), 10% of respondents saw their company's e-commerce channel grow by 60% or more since the pandemic began. Additionally, a combined 28% of respondents saw e-commerce growth of 40% or more in the same time period (Michel, 2020a)
- Reverse Logistics; Reverse logistics includes all the value-added services that companies provide after the point of sale. This includes post-sale services such as returns, refurbishment, repairs, reselling, and recycling services (Supply Chain Game Changer, (2021). The reverse logistics supply chain is expected to be worth USUSD 603.9 billion by 2025, with a CAGR of 4.6% between 2018 and 2025. In the growing Latin American market, the CAGR is projected to reach 17.9% by 2025 (Sawant & Sonpimple, 2019).
- Risk Management Framework through marine insurance. In 2019, the percentages were higher for logistics risk (69%) and supplier risks (62%). The same report found that "economic and financial volatility as a risk factor" declined from 34% in 2019 to 30% in 2020, equal to its 2018 level (Michel, 2020). However, the effects of the pandemic are still being evaluated. It is likely this number will increase for 2021, with many companies working to minimize economic risk factors sensitive to large-scale disruptions like COVID-19.
- Efficiency at the port of Mombasa and Dar Es Salaam by use of technology and manifests to clear cargo on time.
- Use of multi modal transport systems such as Standard Gauge Railways and Inland Ports.
- Specialized security personnel along the Northern and Central Corridor to escort valuable cargo.
- Automated weighbridges that use way on motion to minimize time wastage at static weighbridges.

9 Recommendations to Improve Logistics Efficiency

9.1 Market Regulation

i. The regulation of industry enabler's e.g. freight forwarders should be improved. The existing rules and regulations should be modified to address the bottlenecks experienced in the industry. The industry should also carry out change management engagements to ensure the industry players adhere to the modifications.

ii. The industry should introduce mechanisms which enhance honesty and trust by undertaking the following:

- Create a rewards and sanction system where honest players are rewarded and dishonest players are penalized
- Establish data sharing and information exchange mechanisms within the region
- Make available to the public information regarding the integrity and performance of drivers, freight forwarders and the players within the industry
- Create logistics and transport insurance regime and/ or further improve on it.

iii. The system of import/export control should be improved in the logistic industry. The industry should ensure establishment of convenient procedures for processing of import / export containers.

iv. The logistic industry should encourage the minimization of non-tariff barriers within the region.

v. To facilitate logistic services the custom regime needs to be uniform and mark EAC has a single entity in revenue clearance, the state approach is costly to service providers in terms of compliance and service charges.

9.2 Infrastructure

i. The industry should adopt relevant technology and robotic/automation. It should be noted that technology and automation can significantly increase the speed and efficiency of operations within the region. The existing technology should be synchronized and integrated with the new technology to enhance efficiency and ensure smooth flow of goods, activities and thoughts.

ii. The handling capacity at Mombasa, Lamu and Dar es Salam ports should be increased. The berths at the ports should be deepened to enable them handle large container ships. Similarly, installation of higher and stronger cranes at ports to actualize handling of goods at a shorter time should be enhanced.

iii. It is vital to optimize warehouse spaces and its operation to ensure increased and consistent productivity. Warehousing activities should react to the ever-changing environment. Importers should be encouraged to pick their shipments quickly to enhance efficient operations.

iv. Developing and Reviewing Standard Operating Procedures (SOP) can ensure the member countries are aligned with processes that are key to achieving a united goal. Procedures to be reviewed could include information and data sharing, realistic yet efficient timelines, reports on performance per country. Setting KPI's and regularly measuring them will monitor how well processes are performing and which areas require improvement.

v. The improvement of road infrastructure in order to double travel speeds and trip frequency is expected to have the largest effects in terms of cost reduction. However, it is very costly in short run. Other policies can be adopted with larger effects relative to the investment made. In this sense, it appears that reducing border delays and the number of weighbridges are more accessible and act as quick wins.

vi. Kenya and Tanzania should improve on the virtual weighbridges to minimize stops along the Northern and Central corridors respectively. Other member states ought to monitor and remove unnecessary security stops with clearance from the border. In addition the RECTs system needs to be strengthened to improve trust among member states in fighting smuggling of goods and tax evasion.

9.3 Effective Transport and Logistic Practices

i. EAC member states need to promote efficient multi modal transport development. This will lead to increased transport routes and channels hence leading to increased competition, improved service quality and introduction of innovative solutions and technology.

ii. EAC Member states need to form public private initiatives to bridge the gap in infrastructural needs and simultaneously reduce the bureaucratic processes in cargo handling and clearance at the port and border points.

9.4 Policy Framework

i. Improve the policy direction for logistics development. The Logistics industry can evaluate the revitalization plan (if necessary) and make proper adjustments based on actual results and include the changes in the policy.

ii. Improve the Regulatory Framework. The industry with the help of the respective governments needs to clarify regulatory functions and responsibilities within different agencies, streamline interactions and integrate processes for Logistics Efficiency to be realized.

9.5 COVID-19 Mitigation Plan

i. The role of technology and innovation should be embraced in the logistics sector. Companies need to look at how future technology can be leveraged to reduce physical movements. New technology such as the incubation of big data, IoT, and Omni channel solutions needs to be adopted in the industry.

ii. The truck drivers are key players in the industry hence health issues need a regional approach by incorporating road side health facilities on transport corridors. Their working welfare needs to be reviewed by providing health insurances given the risk of exposure to diseases.

iii. EAC member state governments need to provide financial assistance to transport and logistic companies. However, the conceptualization of any plan and innovation should be consensus based across the member states and the logistic service providers for smooth integration and implementation.

10 Annexes

No	Title of Survey Questionnaire	Survey Questionnaire Link
001	Government Agencies KII Tool	GOVERNMENT KI
002	Road Transport Operators Survey Tool	ROAD TRANSPORT OPERATORS SURVEY
003	Air Freight Logistics Survey Tool	AIR FREIGHT LOGISTICS SURVEY TOOL
004	Shipping Lines and Shipping Agents Tool	SHIPPING LINES AND SHIPS AGENTS SURVEY
005	Cargo Owners Survey tool	Cargo owners survey tool
006	Clearing and Forwarding Agents Tool	clearing and forwarding agents survey tool

10.2 Annex 2: Policy Research Paper

Policy Research Paper

STATE OF LOGISITICS IN EAST AFRICA 2020

A self-Assessment Report on Logistics Performance Based on Survey Findings

Introduction
The efficiency and cost of freight transport services plays a critical role in the competitiveness of international traders and by extension the economic performance of a country. Attempts to measure the efficiency of logistics services of a country have been done through the World Bank Logistics Performance Index (LPI), which attempts to rank the logistics performance of countries based on Customs, Infrastructure, International Shipment, Logistics Competence and Tracking and timelines.

Transport and logistic providers have been enlisted as essential service providers during the imposition of the COVID-19 containment measures. This underscores the importance of transport and logistics in the regional economy. In terms of challenges because of COVID-19 in the region, several operational challenges were identified.

The Logistic Performance Survey therefore provides the most comprehensive regional comparison tool to measure trade and transport facilitation friendliness of the EAC Countries.

The survey also identifies specific bottlenecks on the logistics chain, including policy and regulatory frameworks, as well as operational challenges that impede the seamless flow of goods on the logistics chain. Individual shippers also use the findings of the survey to negotiate contract terms. The findings and recommendations inform core advocacy agenda for the Council and the private sector to pursue. The survey also identifies the constraints and issues, which may negatively affect the successful implementation of the Mombasa Port Community Charter.

Key Policy Gaps
East Africa's economic freight logistics and the infrastructure gap remains a key constraint to the region's competitiveness. The lack of efficient, reliable, and sustainable freight logistics links prevents the region from taking advantage of emerging regional and global cross border trade opportunities. The individual operation of states within East Africa brings silo service delivery impeding the regional trading advantage. This in turn increase the complexity of logistic services and welfare of logistic providers.

Summary of findings.

Cost Indicators
Major trade routes still remain expensive compared to other logistic environment, the main drivers of freight cost identified from the survey were fuel prices, the number of NTBs along the routes, timeliness of clearance at the Port and border post.

Time Indicators
Logistics charges is highly correlated to time taken to deliver cargo to its owners, the time inefficiency is attributed to insufficient handling of cargo at the ports and warehouses, lack of alternative routes for emergencies, unreliable systems that is faced with system downtimes.

Complexity Indicators
This is major concern in the sector, it contributes to increase in both time and cost , hierarchy of compliance at the country of origin and destination is frequent delaying the cargo movement within the region.

Policy Recommendation
Although East Africa as a whole has recorded a significant improvement in cargo management and movement with expansions of infrastructure, EAC needs to integrate infrastructure development through embracing technology of robotic/automation to increase efficiency of the operations within the region and open more one stop order points to decongest the exiting points.

EAC needs to set Market Regulation Union within its secretariat to enhance logistic competition with foreign firms than individual countries licensing depending on the country's interest rather than the regions.

COVID-19 Mitigation Plan should be put in place by adopting the role technology and innovation should be embraced in the logistics sector. Companies need to look at how future technology can be leveraged to reduce physical movements. In addition adopt welfare support for logistic workers to caution any uncertainty in the sector.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SCEA LOGISTICS PERFORMANCE SURVEY 2021

Shippers Council of Eastern Africa
KPA Admin Block, 2nd Flr,ICDN,
off Mombasa Road

Tel:254708299175
Email: info@shipperscouncilea.org

Kenya Private Sector Alliance
5th Floor, Shelter Afrique Building,
Mamlaka Rd.

Tel:254b720 340949 / 0735 999979
Email: info@kespa.or.ke

Tradesmart Consult Limited
Diani CI Street
Ngong Road,Kenya

Tel: 254 724 418 153
Email: info@tradesmartconsult.co.ke