Shippers Council of Eastern Africa

LOADS OFF YOUR MIND

VALIDATED ABRIDGED FINAL REPORT

LOGISTICS PERFORMANCE SURVEY, 2016

CONTRACT Nº: SCEA/KM/CLU/001
DATE SUBMITTED: Friday, 05 May 2017
Revised on: Thursday, 11 May 2017

ACKNOWLEDGMENTS

AESDC would like to register our appreciation to the Shippers Council OF East Africa and in particular Mr. Gilbert Langat the CEO of the Shippers council for providing robust support and oversight all that made it possible to successfully undertake this assignment.

We also would like to appreciate the various contributors to this report who include: Airlines, 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) and may others who provided valuable data that informed the writing of this report.

Our assignment would not have been possible without our teams of Research Assistants, Data Entry Clerks and their Supervisors who through their fortitude and commitment were able to complete the field work in a very limited span of time.

LIST OF ABBREVIATIONS

AEO	Authorized Economic Operator
ASYCUDA	Automated System for Customs Data
CCTTFA	Central Corridor Transit Transport Facilitation Agency Agreement
CCTV	Closed Circuit Television
CFS	Container Freight Stations
COMESA	Common Market for Eastern and Southern Africa
DRC	Democratic Republic of Congo
EAC	East African Community
ECTS	Electronic Cargo Tracking System
FEU	Forty Foot Container Equivalent Unit
FT	Foot
GDP	Gross Domestic Product
HS-WIM	High Speed Weigh-in-Motion
ICD	Internal Container Depot
ICMS	Integrated Customs Management System
ICT	Information and Communications Technology
IDB	International Development Bank
JKIA	Jomo Kenyatta International Airport
KNESWS	Kenya National Electronic Single Window System
KPA	Kenya Ports Authority
KPH	Kilometers per hour
KRA	Kenya Revenue Authority
KRC	Kenya Railways Corporation
LPI	Logistics Performance Index
LPS	Logistics Performance Survey
MGR	Meter Gauge Railway
NCTTA	Northern Corridor Transit Transportation Coordination Authority
NEPAD	New Partnership for Africa's Development
NTB	Non-Tariff Barriers
OECD	Organization for Economic Co-operation and Development
OSBP	One Stop Border Post
PICI	Presidential Infrastructure Champion Initiative
PPP	Public Private Partnership
RADDEX	Revenue Authority Digital Data Exchange (RADDEX)
RECTS	Regional Electronic Cargo Tracking System
RMLF	Road Maintenance Levy Fund
RVR	Rift Valley Railways
SCEA	Shippers Council of East Africa
SCT	Single Customs Territory
SGR	Standard Gauge Railways
SME	Small and Medium – sized Enterprises
TAZARA	Tanzania Zambia Railways Authority
TEU	Twenty Foot Equivalent Container Unit
TMEA	Trademark East Africa
TPA	Tanzanian Ports Authority
TRC	Tanzania Railways Corporation
USAID	United States Agency for International Development
USD	United States Dollar
VAT	Value Added Tax

LIST OF FIGURES

LIST OF TABLES

EXECUTIVE SUMMARY

With the right policy choices, the rise in intra-regional trade, and a capacitated Private sector EAC could leverage its geographical location to serve as the Eastern gateway to the African continent.

Since the SCEA Logistics Performance Survey was first published, the East African region has initiated several reforms to improve its freight logistics and SCEA has used the LPS as its main point of reference for the development of policy advocacy positions. The Logistics Performance Survey reports also in themselves provided suggestions for improvement of freight logistics with some of the recommendation at various stages and levels of adoption or implementation by policy makers.

This report presents the findings of the logistics performance survey 2016 and draws on a set of data collected from freight logistics service providers in East Africa. The survey involved the collection of both quantitative indicators of freight logistics performance in terms of cost, time and complexity of executing trade transactions.

The methodology section of this report describes measures taken to ensure that data is comparable and standardizes the cargo size, cargo weight, and nature of cargo, nature of the handling, cargos origin and destination. For the first-time the LPS features issues on Gender, Road Safety and Environment. This year's report includes a situational analysis and a policy research component. It also for the first time includes EAC newest member South Sudan.

Findings

Cost Indicators

a) Road Freight

The cost from Mombasa to Nairobi has been declining from US$ 1,300 in the year 2011 to an average of US$ 879 for the year 2016. The cost from Mombasa to Kampala also has a decreasing trend from US$ 3,400 in year 2011 to US$ 2,237 in 2016. It also declined from US$ 8,000 to US$ 4,993 from Mombasa to Bujumbura and US$ 9,800 to US$ 5,877. The unit cost for trucks vary greatly for different sections of both the Northern corridor and the Central corridor. Average cost per kilometer was lowest between Mombasa and Nairobi where it costs an average of US$ 1.83 and US$ 2.8 per kilometer for the 20 ft. and 40 ft. equivalent standard container while the section between Kigali and Bujumbura is the costliest charging an average of $8.36 and $12.7 per kilometer for 20 ft. and 40 ft. standard containers respectively.

The costs of road freight have declined due to continued improvements in road infrastructure, reductions in the number of police checks and enhancement of weighbridge efficiencies through automation. Furthermore the region has relied less of mobile weighbridges which were prone to corruption. There is need to focus on dealing with drivers personal behaver especially with regards to the length and frequency of drivers rest stops, Furthermore there is need to enhance security and safety of the road so that trucks can run 24/7 without an increase in road accidents or security risks to drivers. A majority of transport firms have banned night driving as a means of enhancing road safety and ensuring safety of driver, cargo and truck. Avoiding night driving will limit the effective utilization of the road freight infrastructure, equipment and personnel and therefor limit optimization of road freight.

b) Sea Freight

In 2016 it costed an average of $1,810 for the 20 ft. container and 2,710 for the 40 ft. container from the UK to Mombasa by sea. On the other hand, it cost $2,070 and $3,090 for the 20 ft. and 40 ft. containers respectively from the UK to Dar es salaam. This higher costs for Dar es salaam is reflected in all the other ports of origin covered by the survey and Mombasa is cheaper from all the principle import sources as compared to the port of Dar es salaam.

Sea Freight export charges remain higher than import charges because of the high trade imbalance in East African ports where a high rate of empty containers being shipped out.

c) Air Freight

Nairobi's Jomo Kenyatta International airport continues to maintain the lowest cost of importing as airfreight from India, China and United Kingdom at US$ 710, US$ 639 and US$ 584 respectively. Tanzania's Dar es salaam airport had the second lowest charges for airfreight after Nairobi followed by Uganda's Entebbe, Rwanda's Kigali and then Burundi's Bujumbura in that order.

The region continues to have high airfreight charges because East Africa's Air Space is closed to competition as the partners states continue protecting national airlines that are struggling to remain airborne. Protectionism, which has been sustaining local carriers, has impeded the growth of the aviation industry and has been blamed for the current exorbitant air freight rates. The regional governments need to make the hard decision of opening the skies or maintaining the status quo. But the refusal by the EAC bloc to liberalize regional skies is impacting not only the growth of the sector but also trade, investment, productivity, employment and economic growth.

d) Rail Freight

Rail freight charges on the Mombasa to Kampala line have over the last three years steadily declined from a high of $2,400 in 2014 to $700 in 2016 as a result of steep competition for freight with roads. However, challenges with capacity and inefficacy of the current railway means the railway will continue to struggle to compete road freight. The old railway challenges will be further compounded once the SGR is fully operational.

Time Indicators

a) Road Freight

Road Freight turnaround times between Mombasa and Nairobi in 2016 was 26.4 hours. Mombasa to Kampala was 10.7 days, and Mombasa to Kigali was 12.5 days. The trend shows that there has been a 40% decrease in truck turnaround time between 2014 and 2016.

Truck turnaround times for Dar es Salaam to the key corridor destinations i.e. Kigali, Bujumbura, Kampala have remained steady with a marginal decrease of 1.8% on the Dar es salaam Kampala route. The trends for all the three routes are very similar because a bulk of the transport journey is in Tanzania with very short sections of the route in the neighboring country.

Optimization of journey times have been hampered by Insecurity, road safety concerns, and negative driving patterns such as extended driver rest stops have limited the regions ability to maximize benefits that could be accrued from improvements in road infrastructure, reductions in police can customs checks, and modernization and reduction in weighbridges.

b) Port Dwell times

The time it takes from the time a vessel arrives at the port area to the time it first berths improved from about 68 hours in January 2015 to about 8 hours in December of 2016 for the port of Mombasa. This is can be attributed to the introduction of fixed berthing by Kenya Ports Authority and the expansion of the port which increased the ports capacity and also the acquiring of more and better equipment by the port authorities between 2015 and 2016. This trend is very positive and has even bettered the set target of 14 hours. Port dwell times have continued to fall in 2016. Mombasa continues to outperformed her sister port Dar salaam where it takes an average of 88.8 hours (3.7 days) as compared to 144.0 Hours (6 days) for Dar es Salaam.

c) Sea Freight transaction times

It takes an average of 33 days to move freight by sea from port of Mombasa and 35 days from Dar es Salaam port to Felixstowe in the United Kingdom but less time from Dar es Salaam to Genoa in Italy as compared to Mombasa. The mean time it takes to move freight from Mombasa to Mumbai in India is 20 days while it takes about 28 days from Dar es Salaam to Mumbai. On average it takes 31 days from Mombasa to Rotterdam and 33 days from Dar es Salaam to Rotterdam.

However both ports still perform poorly when ranked against the Durban(55.9) , Chinese Ports average (43.4 hours), Average Indian Ports (54.7 hours) and the Netherlands (26.2 Hours) and the global average of 83.0 hours.

d) Customs Processes at the DPC Mombasa

The time to complete customer processes has continued to fall between 2015 and 2016. There has been a general decrease of over 10 hours in the time it takes to pass through customs at the port of Mombasa from January 2015 to December 2016. The average time it takes to go through customs at the port of Mombasa has been on a downward trend and has moved from an average of 55 hours in January 2015 to an average of 43 hours in December 2016.

e) Airport Dwell Times

Nairobi has the shortest airport dwell in the region at an average of 28 hours for exports and 33 hours for imports while the airport in Bujumbura has the longest dwell time at an average of about 65 hours for exports and 67 hours for imports. The second most efficient time after Nairobi is Kigali at 44 hours for export and 47 hours for imports, Entebbe at 49 and 51 hours and Dar es Salaam at 50 hours and 50 hours for export and imports respectively. Third is Entebbe in Uganda and Dar es salaam which are almost the same Entebbe has airport dwell time of 49 for exports and 51 for imports while Dar es salaam has 50 hours dwell time for export and 50 hours for imports.

Complexity of Logistics Processes

The respondents in the survey rated Kenyan airports infrastructure much higher than all other airports in the region scoring 4.2 out of 5 whereas Burundi and Uganda airport infrastructure scored the least at 2.7 out of 5. Tanzania and Rwanda scored 2.8 and 2.9 respectively out of a possible perfect score of 5.0.

With regards to the efficiency of key logistics processes Rwanda scored the highest with a score of 3.9 out of 5 according to the respondents' perception. Kenya came in second with a score of 2.7, Uganda scored 2.6 while Burundi and Tanzania scored 2.4 out of 5.

Uganda has the highest number of documents to be transacted both in exports and imports where one needs to transact an average of 12 and 13 documents respectively. Rwanda has only 8 while Burundi has the least number of export documents to be transacted before clearance with only 7. Kenya an average performance of has 8 documents for exports and 9 for imports.

Recommendations:

Recommendations regarding previous policy advocacy recommendations

Over 33 policy recommendations have been made since the SCEA was launched. Given the high number of previous policy recommendations prioritization and consolidation exercise was carried out to determine policy recommendations that are of highest priority. Without prioritization, the SCEA may be bogged down chasing low priority higher effort and low reward initiatives. As a result, of this consolidation and prioritization exercise previous recommendations were consolidated into 8 priority policy advocacy areas namely:

- Education and Sensitization of shippers on existing Regulations to enhance compliance
- Optimization of 24/7 operations at ports, borders and weighbridges
- Implementation of National and Regional Single Windows
- Establishment and implementation of Comprehensive Risk management
- Enhance Coordination amongst Border Agencies
- Implementation of electronic cargo tracking Systems
- Increased investment in Port Infrastructure
- Fast track upgrading of railway infrastructure

Recommendations on institutional arrangements and mechanisms

To ensure better policy and consistent reforms in the logistics sector needs to ensure that it implements a stakeholder engagement mechanisms that promotes dialogue amongst the multitude of players involved in the regions freight logistics. The sector would therefore require a common Stakeholder engagement mechanism that facilitates structured, robust and interactive multi sector public and private dialogue on policy issues concerning freight logistics is conducted. A good example of such an arrangement is the Mombasa Port Charter.

Recommendations on Policy Advocacy Gaps

The report finally identifies gaps in SCEA policy advocacy agenda and recommends the establishment of positions in the following areas:

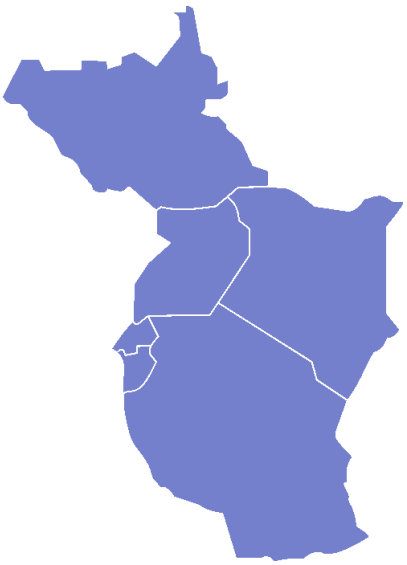
- Air Freight Policy Position
- Policy on Last Mile Road freight logistics Connectivity
- Policy position on increasing emphasis maintenance of existing road networks
- Policy Position on Ports and Shipping Lines Performance
- Policy Position on Regulation of the Boda-Boda sector
- Gender Policy Position
- Policy Position on environment
- Policy Position on Inland waterways
- Policy Position on Rail Freight
- Policy position on Road freight safety issues

TABLE OF CONTENT

1 INTRODUCTION

1.1 Background

Numerous studies undertaken by leading institutions including the world bank show that a country's logistics performance is closely associated with its levels of economic development and it can be argued that freight logistics is an effective measure of the development potential and competitiveness of a country because it is reflective of concrete transport and commercial conditions[1]



The Shippers Council of Eastern Africa (SCEA) is a business membership organization that advocates for the interests of cargo owners (importers and exporters) in Eastern Africa. SCEA's key mandate is to advocate for appropriate freight transport legislation and policies that will spur an efficient and cost-effective freight logistics system. This is done through evidence-based advocacy and representation primarily informed by the East Africa Logistics Performance Survey, an annual publication of the Council that examines the costs, times and complexity aspects of the East African freight logistics chain. This year's survey marks the fifth edition.

Improving freight logistics performance is at the core of the economic growth and competitiveness agenda.[2] Policymakers globally recognize the freight logistics sector as one of their key pillars for development. Trade powerhouses across the globe have developed and exploited seamless and sustainable freight logistics chains as engines of growth and of integration with global value chains.

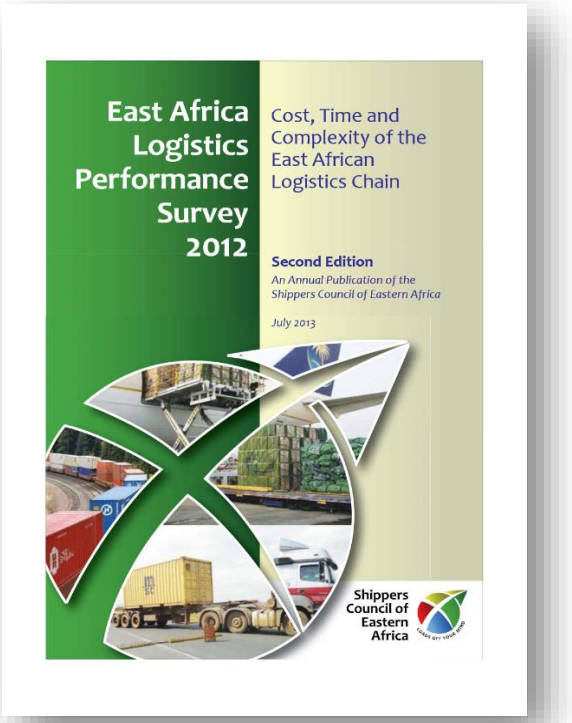
Despite the East Africa regions efforts to improve logistics, there is a lack in consistency and alignment of actions with the actual situation on the ground. Therefore, the need for informed actions and polices breeds the need for information of the state and performance of the freight logistics sector. With the right policy choices, the rise in intra-regional trade in the EAC and a capacitated Private sector EAC could leverage its geographical location to serve as the Eastern gateway to the African continent.

The SCEA Logistics Performance Survey can be used by academics, policy-makers, politicians, development experts, journalists and the business community to highlight red tape and promote reforms. It is a benchmark study of freight logistics efficiency centers on a simple freight logistics dimensions of cost, time and complexity that ensures comparability across economies and over time.

[1] The geography of transport systems: by Dr. Jean-Paul Rodrigues, Dept. of Global Studies & Geography, Hofstra University, New York, USA, 1998-2017.

[2] World bank, Connecting to Compete 2016: Trade Logistics in the Global Economy

Since the SCEA Logistics Performance Survey was first published, the East African region has initiated several reforms to improve their freight logistics and many of these reforms are a direct result of private sector advocacy's originating from proposals of previous reports. The Logistics Performance Survey reports also in themselves provide concrete suggestions for improvement of freight logistics with many of them being relatively easy to implement.



This report presents the findings of the logistics performance survey for East Africa. It focuses on freight logistics and draws on a set of data collected freight logistics service providers in East Africa.

The survey involved the collection of both quantitative indicators of freight logistics performance in terms of cost, time and complexity of executing trade transactions. The findings should spur public and private agencies that have influence and interest in freight logistics performance to focus attention on reducing challenges that hamper the region from effectively competing in today's global economy. Moreover, since the freight logistics performance indicators are directly related to operational performance, EAC countries can use these indicators to target actions to improve freight logistics and monitor their progress.

1.2 Objectives of the Survey

The overall objective of this survey is to determine freight logistics performance of the six East African Partner states in 2016. 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 traders in East Africa.

1.3 Rational for freight logistics performance survey

SCEA's key mandate is to advocate for appropriate freight transport legislation and policies that will spur an efficient, cost effective transport and freight logistics system. Since inception, the council has undertaken research based advocacy work informed by logistic performance survey (LPS).

The LPS is an annual publication of the council which examines the cost, time and complexity aspects of the East Africa Freight Logistics Chain. It provides the most comprehensive regional comparison tools to measure trade and transport facilitation friendliness of the EAC Countries. The survey is also designed to identify specific bottlenecks on the freight logistics chain such as policy and regulatory frameworks, infrastructure capacities, as well as operational challenges that impede the seamless flow of goods on the logistic chain.

Apart from informing the wider stakeholder on the sector performance, the recommendations of the survey inform the council's core advocacy agenda. Its first version was published in 2011, and it has since been updated 2012, 2014 and 2015. This report is therefore the fifth issue of the LPS.

1.4 The Role of Shippers' Council of East Africa

The Shippers' Council of East Africa (SCEA) serves as a representative body of cargo owners in East Africa. SCEA represents cargo owners in all matters that affect the competitiveness of East African supply chains regionally and globally. SCEA therefore works to understand the infrastructural, human resource, and other needs and requirements of its members to influence relevant stakeholders through coordinated collaborative efforts.

SCEA works closely with the relevant government departments in matters pertaining to the national and regional freight, transport and freight logistics legislation, policy and procedures for infrastructure as well as services that facilitate cost effective reliable and safe globally competitive supply chains. The mandate of the council is thus aimed at understanding the needs and requirements of its members to influence relevant stakeholders; working to be the preferred point of entry for cargo owners on collective issues; as well as being a source of supply chain knowledge with specific focus on transport and logistics. The council is therefore established as the voice of cargo owners in East Africa and already plays a regional role in EAC.

1.5 Methodology

The methodology applied in this survey involved a combination of data collection from existing information sources such as reports and the administration of a standard survey questionnaire targeting freight logistics service providers who included freight forwarders, Road Transporters, Shipping Lines and Shipping Agents, Airlines and Air Freight Agents, Shippers and development partners. The list of studies referred to is included in annex of this report. The questionnaires administered and list of stakeholders targeted is included in the references section of this report.

1.5.1 Questioner design

Six (6) Sector specific questionnaires using Cost, Time and Complexity (CTC) as a framework were prepared that will guided the framing of questions. The development of questionnaires to a great extent depended on the key and specific objectives of the assignment so as to ensure that eventual analysis and triangulation of the data collected is comprehensive enough to help meet the objectives of the assignment.

Since 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:

- **Cost Indicators** included: Airfreight export charges, Airfreight import charges, Sea freight export charges, Sea freight import charges, Road freight charges, Rail freight charges and Oil pipeline charges
- **Time Indicators:** Sea exports time to export to principle overseas export markets, Sea imports time to import from principle overseas import markets, principle sea ports dwell time, key airports dwell time and freight truck turnaround time
- **Complexity Indicators included:** Quality of freight logistics infrastructure, Efficiency of key processes, Average number of documents to transact across ports and borders

1.5.2 Sampling

The sample frame[3] was defined Freight Logistics Service Providers in the following industry clusters: Airfreight Carriers, Airport Authorities, CFS Operators, Clearing and Forwarding Agents, Rail Freight Operators, Road Freight Transporters, Shipping Line Agents, Shippers and Warehousing Operators.

3 In statistics, a sampling frame is the source material which a sample is drawn. It is a list of all those within a population who can be sampled, and may include individuals, households or institutions.

The population was of the service providers was estimated as being approximately 10,000 service providers in East Africa. This estimate was biased on information obtained from membership associations, revenue authorities and other government agencies in the six East African partner states. A sampling error of 8% was assumed.

The confidence level was set at 95% as higher confidence levels would have required a much larger sample and would significantly increase the cost of the survey. The level of skewing of responses was unknown and therefore a response distribution of 50% was set. The minimum sample size was therefore calculated to be 148 using the formula below:[4]

$$X = Z(^{c}/_{100})^{2} r(100-r)$$

$$N = {}^{N\,x}/_{((N-1)\,E^{2} + x)}$$

$$E = \mathrm{Sqrt}\ [{}^{(N\,-\,n)\,x}/_{n(N-1)}]$$

Where N is the population size, r is the fraction of responses that of interest in, Z(c/100) is the critical value for the confidence level c, n is the sample and is the E margin of error. This calculation assumes Normal distribution.

1.5.3 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. Trade volumes are based on the United Nations COMTRADE database on international trade. The sample was the further distributed based on the proportion of cargo handled by the "Freight logistics Service Providers/Freight logistics Operators." The table below is the resultant sampling plan.

SAMPLING PLAN	COUNTRY STRATIFICATION							
FREIGHT LOGISTICS SERVICE PROVISION CLUSTER STRATIFICATION ↓	RU	KE	RW	SS	TZ	UG	OTHER	TOTAL
1 Airlines and Airfreight Agents	0	6	1	0	1	1	0	9
2 Clearing and Forwarding Agents, CFS Operators and Warehouse Operators	8	53	11	0	32	19	0	123
3 Road Transporters	2	27	3	0	19	7	0	58
4 Shipping Lines/Ship Agents	0	7	0	0	4	4	0	15
5 Regulatory Authorities'	0	1	2	0	1	2	0	6
6 Shippers (Cargo owners, Importers and Exporters)	5	10	5	5	10	10	5	50
7 Others (Development Partners, Corridor Authorities', Regional Organizations	0	0	0	0	0	0	7	7
TOTAL	**10**	**94**	**17**	**0**	**57**	**33**	**7**	**268**

Table 1 Sampling Plan

The survey questionnaires were sent out to 2,250 respondents who included clearing agents, transporters, shipping lines and ship agents, and shippers. Of the respondents targeted 218 responded. This is a response rate of approximately 11 % of the targeted population. The minimum sample size required was 148 responses and therefore the responses met the study's sample size requirements specified in the sampling plan as described in the methodology.

[4] Basic Statistics: A Modern Approach Hardcover – January 1985 by Morris Hamburg

Kenya had the highest number of responses from the countries targeted by getting 97 responses. Tanzania had the second highest targeted respondents to the questionnaire and the survey team receives back 57 responses which was followed by Uganda with 34 responses, Rwanda with 17 responses and Burundi with 10 responses.

However, the survey team failed to get any responses from South Sudan despite sending the survey questionnaires to over 100 companies. Hence, some of the data herein on South Sudan is from direct phone calls to companies and from literature review.

1.5.4 Administration of the Survey

The survey was administered using a mix of methods namely face to face, telephone and internet surveys. The questionnaires were used to collect data and feedback from respondents recorded on time, cost and complexity associated with the logistical process of exporting and importing goods. Data on time, cost and complexity (excluding tariffs) associated with procedures for documentary compliance, border compliance and domestic transport within the overall process of exporting or importing a shipment of goods was collected.

Where it was deemed necessary and where responses were low or incomplete several rounds of follow-up communication with respondents was undertaken.

Other third-party data sources were reviewed and data validity confirmed. To ensure that data was comparable respondents were required to assume:

- That the traded product travels in dry-cargo, 20 ft. and 40 ft. full container load.
- It is not hazardous and does not require refrigeration.
- The product does not require any special phytosanitary or environmental safety standards other than accepted international shipping standards.
- That a shipment travels from a warehouse in the largest business city of the exporting partner state to a warehouse in the largest business city of the importing country.
- Each partner state imports a standardized shipment of 15 metric tons of containerized cargo from its natural import partner i.e. the country from which it imports the largest value of cargo.
- That each partner state exports the product of its comparative advantage (defined by the largest export value) to its natural export partner i.e. the country that is the largest purchaser of this product.
- Precious metal and gems, mineral fuels, oil products, live animals, residues and waste of foods and products as well as pharmaceuticals were excluded from the list of possible export products.
- Shippers hire and pays for a freight forwarder and pays for all costs related to international shipping, domestic transport, clearance and mandatory inspections by customs and other government agencies, port or border handling, documentary compliance fees and the like.
- All electronic submissions of information requested by any government agency about the shipment were considered to be documents obtained, prepared and submitted during the export or import process.
- A port or border was defined as a place (seaport or land border crossing) where merchandise can enter or leave a partner state.
- Government agencies considered relevant included agencies such as customs, port authorities, road police, border guards, standardization agencies, ministries or departments of agriculture or industry, national security agencies, central banks and any other government authorities.

2 THE LOGISTICS PERFORMANCE SURVEY FINDINGS

2.1 Road Freight Cost Indicators

Investments in road infrastructure have continued to pay dividends at the costs of road freight from Mombasa to all the major commercial centres in the Northern corridor have been declining since 2011. The cost from Mombasa to Nairobi has been declining from US$1,300 in the year 2011 to an average of US$879 for the year 2016. The cost from Mombasa to Kampala also has a decreasing trend from US$3,400 in year 2011 to US$2,237 in 2016. It also declined from US$ 8,000 to US$4,993 from Mombasa to Bujumbura and US$9,800 to US$ 5,877.

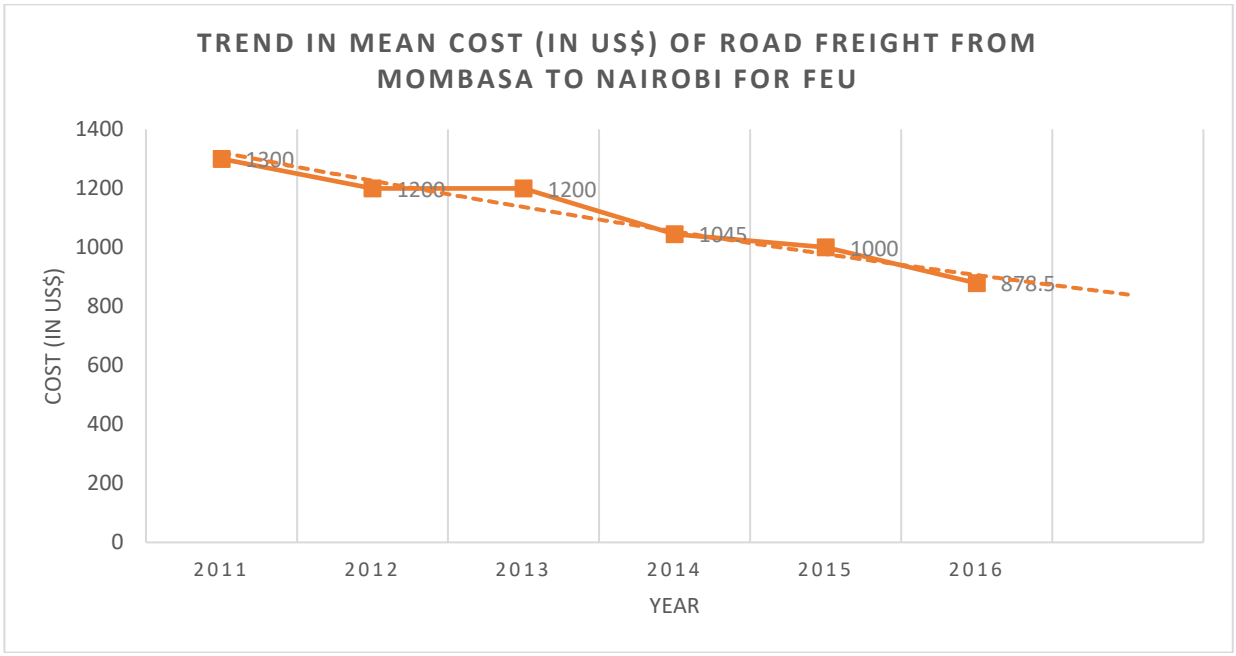


Figure 1 Mombasa Nairobi cost of Road Freight 2011-2016: Source SCEA LPS 2016 and Northern Corridor Transport Observatory

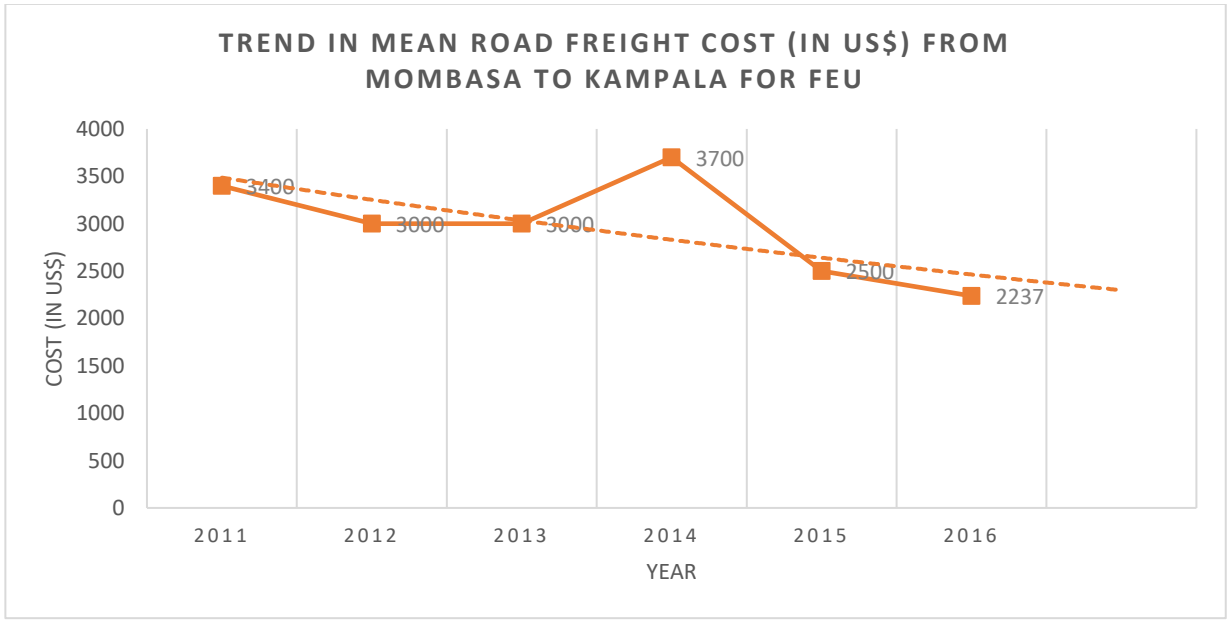


Figure 2 Mombasa Kampala cost of Road Freight 2011-2016: Source SCEA LPS 2016 and Northern Corridor Transport Observatory

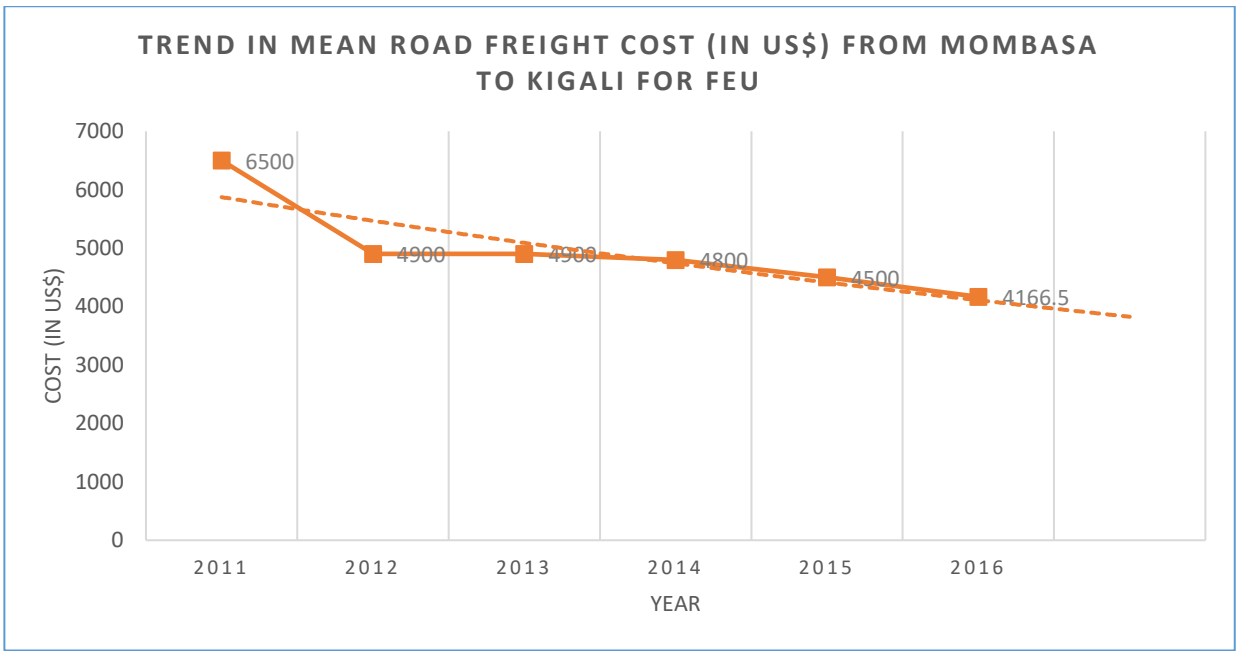


Figure 3 Mombasa Kigali cost of Road Freight 2011-2016: Source SCEA LPS 2016 and Northern Corridor Transport Observatory

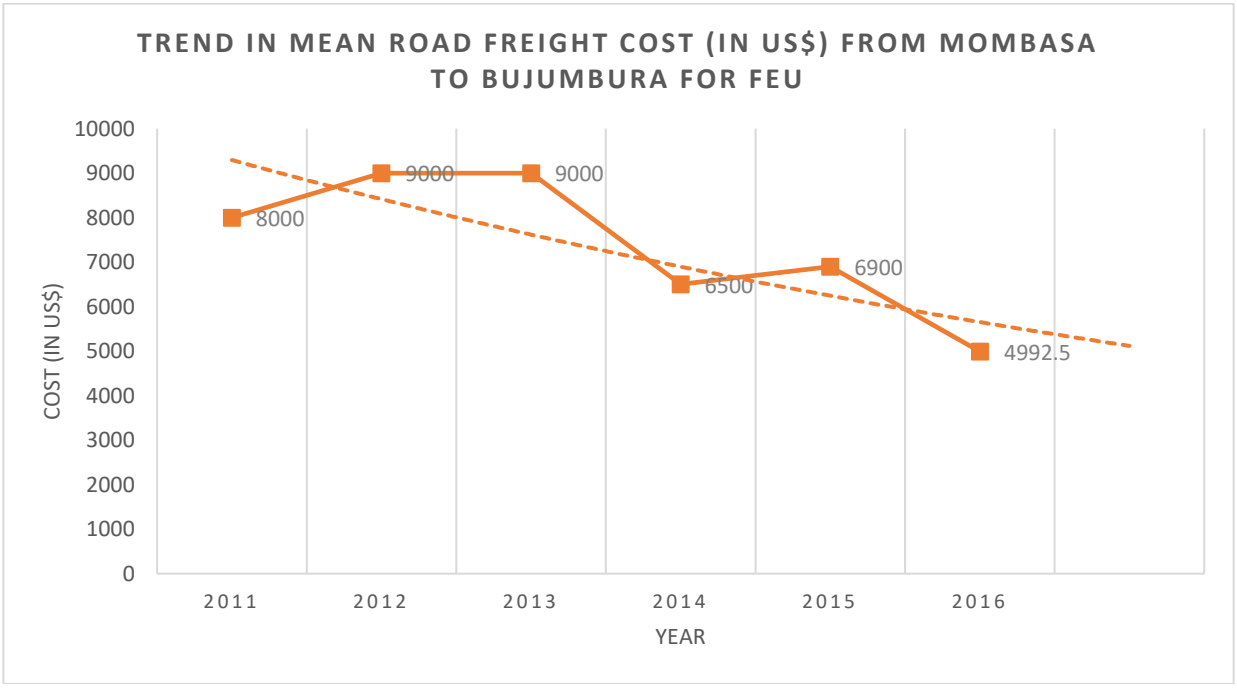


Figure 4 Mombasa Bujumbura cost of Road Freight 2011-2016: Source SCEA LPS 2016 and Northern Corridor Transport Observatory

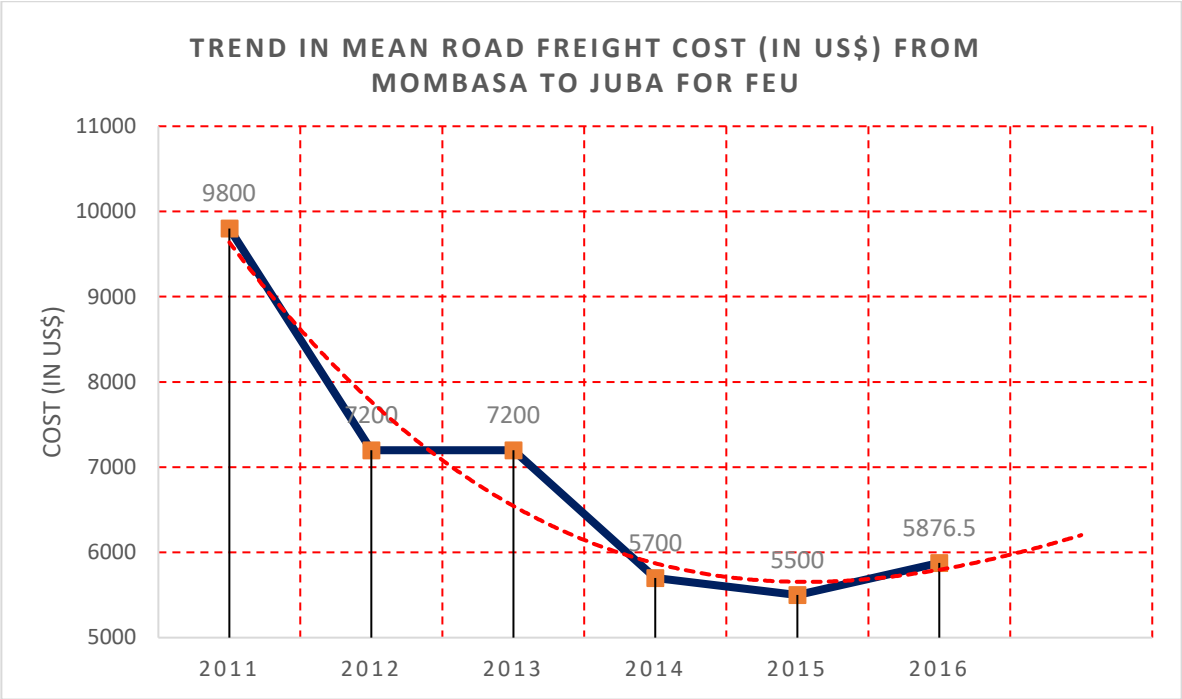


Figure 5 Mombasa Juba cost of Road Freight 40 ft. container: Source SCEA LPS 2016 and Northern Corridor Transport Observatory

Unlike the Northern Corridor road freight costs on the central corridor have increase for all the 3 key destinations between 2011 and 2012 then more or less levelled off at around $ 4,500 for Kampala and Bujumbura until the year 2015. The exception is the road freight costs to Kigali that have remained unchanged at around $ 4,250 for the four years from 2012 to 2015.

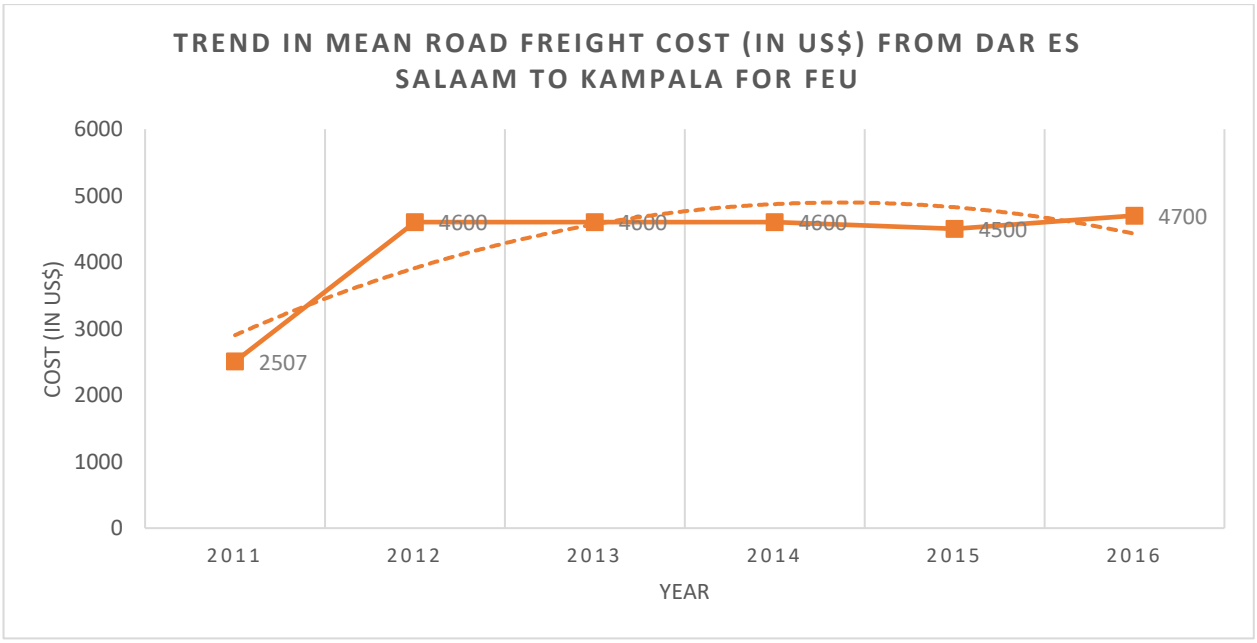


Figure 6 Road Freight charges from Dar es Salaam to Kampala (40-foot container): Source SCEA LPS 2016 and Central Corridor Transport Observatory

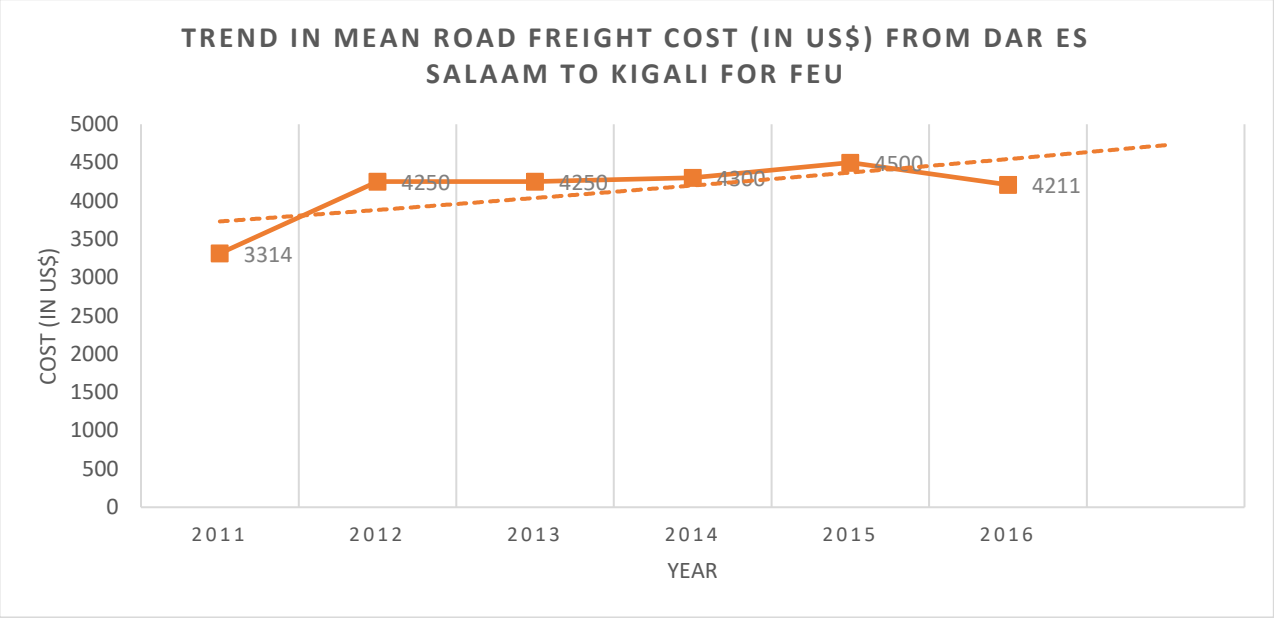


Figure 7 Road Freight charges from Dar es Salaam to Kigali (40-foot container): Source SCEA LPS 2016 and Central Corridor Transport Observatory

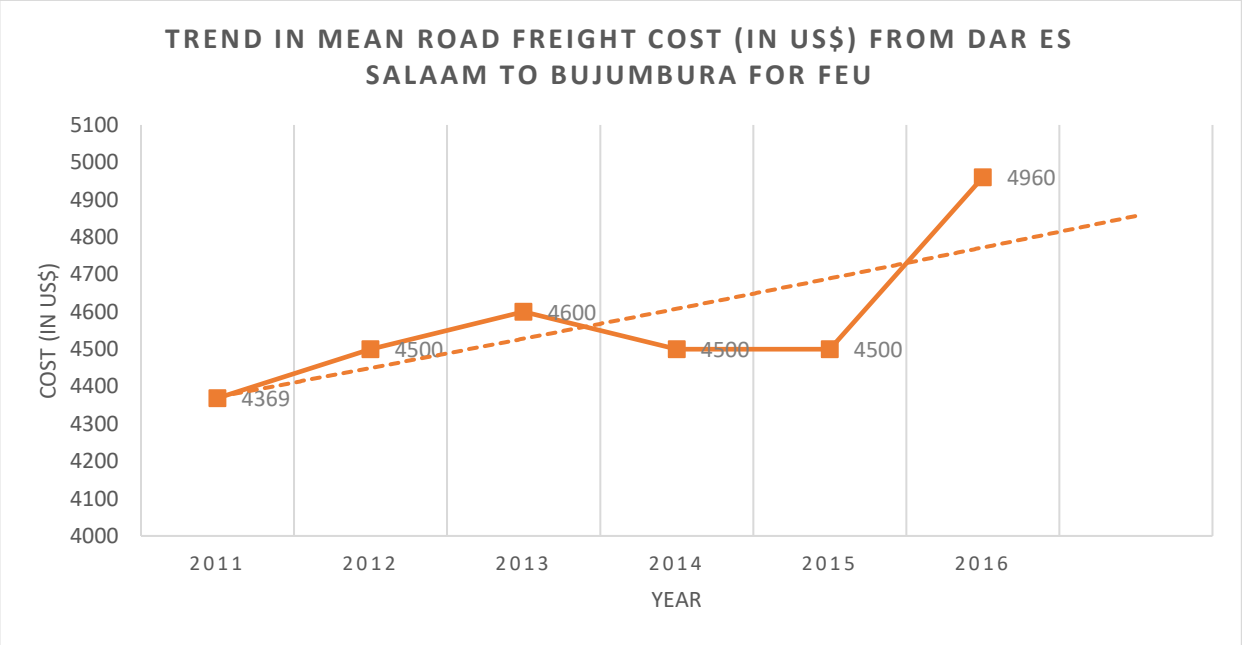


Figure 8 Figure 22 Road Freight charges from Dar es Salaam to Bujumbura (40-foot container): Source SCEA LPS 2016 and Central Corridor Transport Observatory

Average cost per kilometer was lowest between Mombasa and Nairobi with costs of US$1.8 and US$2.8 per kilometer for 20 ft. and 40 ft. containers respectively while the sections between Kigali and Bujumbura are the costliest charging an average of $7.2 and $10.8 per kilometer for 20 ft. and 40 ft. containers respectively. The possible reasons for relatively higher kilometer charges for Kigali - Bujumbura are due to a closed transport market with limited competition as compared to Nairobi – Mombasa section and Dar es salaam Kigali section.

Even though the Mombasa-Nairobi route may be the cheapest in the region at US$1.8 per kilometer, it is still very high compared to other regions of the world. In the United States, it costs only US$0.3 per kilometer while in the EU it cost an average of US$0.7 per kilometer according to the World Bank. This is despite the costs of labor in these countries being much higher as compared to EAC region labor costs.

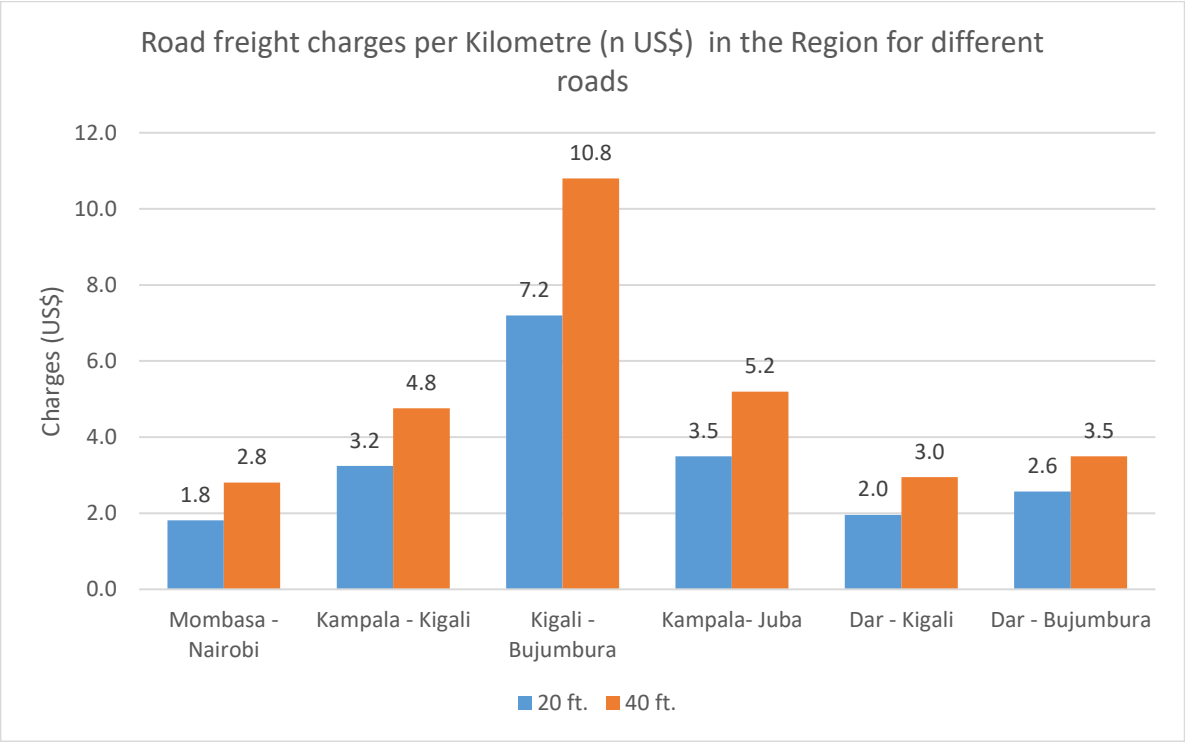
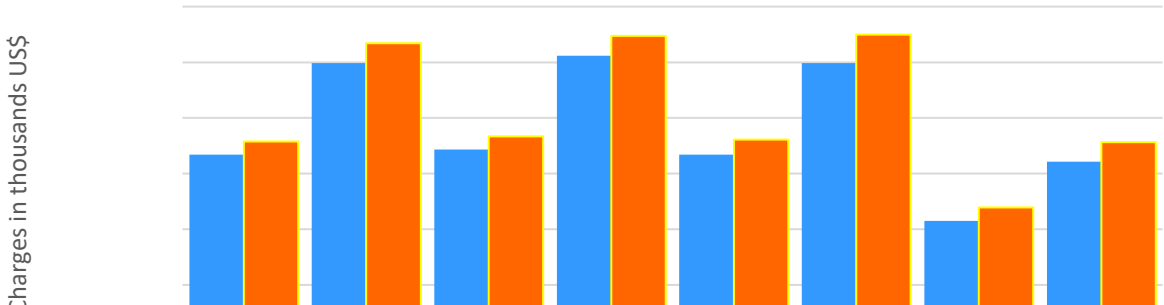


Figure 9 Average cost per kilometer 2016 on select routes: Source SCEA LPS 2016, Central Corridor Transport Observatory and the Northern Corridor Transport Observatory

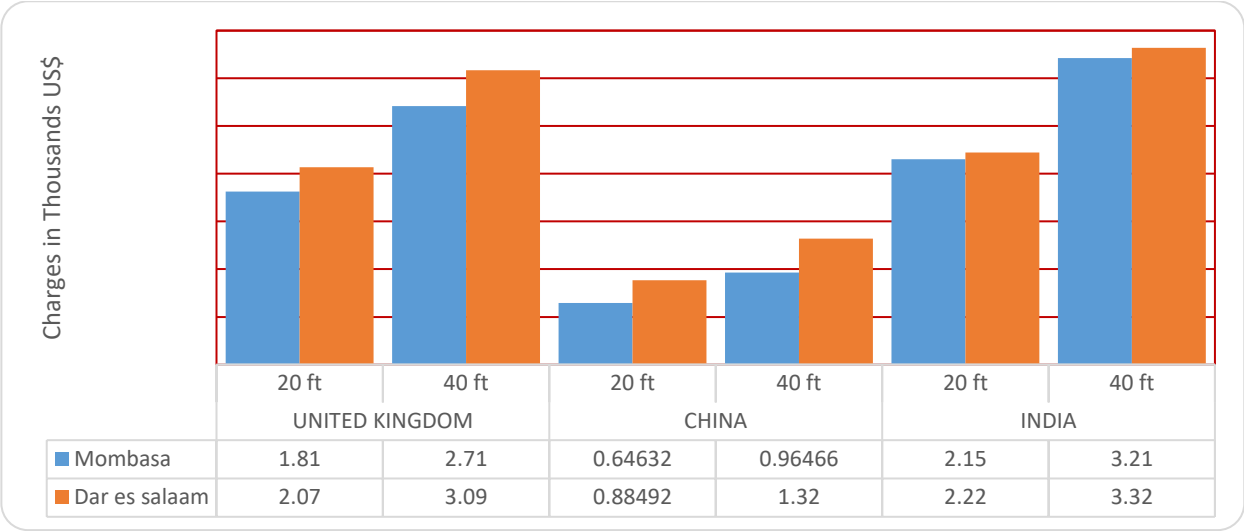
2.1.1 Sea Freight cost indicators

The freight charges cost for imports are significantly cheaper as compared to export charges between the same ports. It is also evident that importing into the region through the port of Mombasa is cheaper from all the principle import sources as compared to Dar es salaam. The graph further illustrates that importing cargo is significantly cheaper from China through sea freight as compared to India and the United Kingdom despite the latter being nearer to the East African ports.



	UNITED KINGDOM		ITALY		HOLLAND		INDIA	
	20 ft	40 ft	20 ft	40 ft	20 ft	40 ft	20 ft	40 ft
Mombasa	3.34	4.99	3.43	5.12068	3.34	4.98681	2.15	3.21
Dar es salaam	3.58	5.34	3.66828	5.47504	3.61	5.50	2.39	3.57

Figure 10 Mean sea freight export charges to principle export markets ($/ container): Source SCEA LPS 2016.

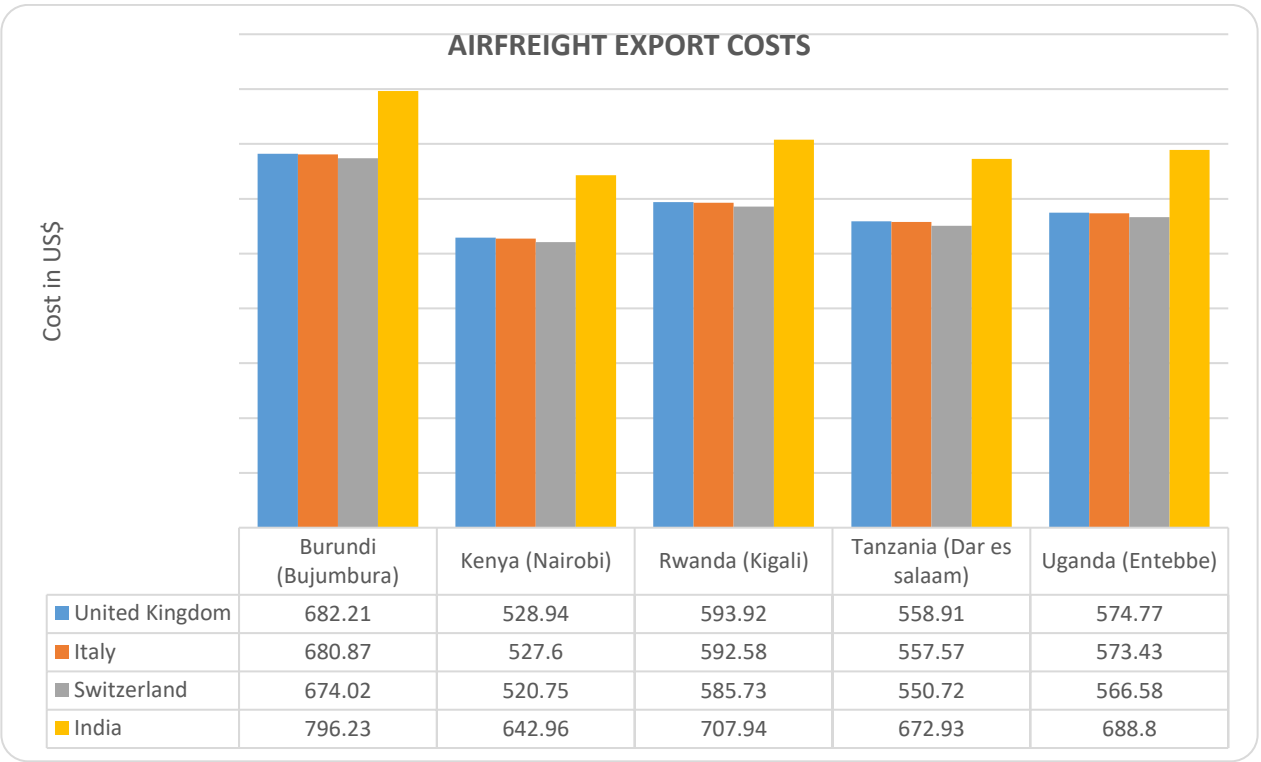


	UNITED KINGDOM		CHINA		INDIA	
	20 ft	40 ft	20 ft	40 ft	20 ft	40 ft
Mombasa	1.81	2.71	0.64632	0.96466	2.15	3.21
Dar es salaam	2.07	3.09	0.88492	1.32	2.22	3.32

Figure 11 Mean sea freight import charges from the regions principle import sources (in $/ container). Source LPS 2016

2.1.2 Air Freight cost indicators

The average cost of exporting a 50-kg pallet measuring 1 cubic metre from Nairobi's Jomo Kenyatta International airport to key export destinations of UK, Italy, Switzerland and India are US$528, US$527, US$520 and US$643 respectively. These costs are cheaper than when exporting from all other airports in the region. Second cheapest is Dar es salaam airport, Entebbe, Kigali then Bujumbura.

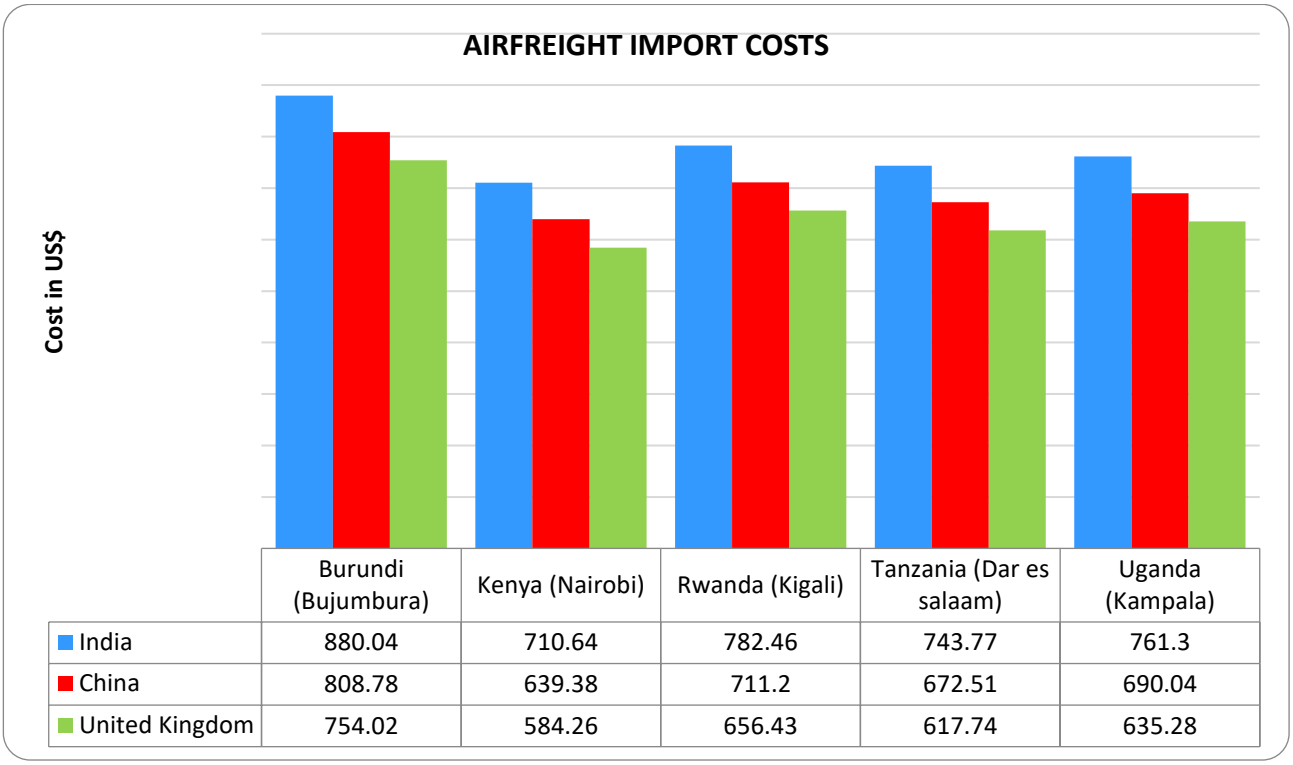


	Burundi (Bujumbura)	Kenya (Nairobi)	Rwanda (Kigali)	Tanzania (Dar es salaam)	Uganda (Entebbe)
United Kingdom	682.21	528.94	593.92	558.91	574.77
Italy	680.87	527.6	592.58	557.57	573.43
Switzerland	674.02	520.75	585.73	550.72	566.58
India	796.23	642.96	707.94	672.93	688.8

Figure 12 Mean airfreight export charges to key export destinations ($/50 kg pallet): Source LPS 2016

The average cost of importing a 50-kg pallet measuring 1 cubic meter as airfreight from India, China and United Kingdom into Nairobi is $710, $639 and $584 respectively. This cost is much cheaper than all other airfreight destinations in the region where Bujumbura has the highest airfreight rates of $880, $809 and $754 respectively. Airfreight from India is more expensive than China and the UK which are the other key import sources for the region.

Tanzania's Dar es salaam airport has the second lowest import charges for airfreight after Nairobi followed by Uganda's Entebbe, Rwanda's Kigali and then Burundi's Bujumbura in that order. One of the main reasons it is cheaper to export and import air freight from Nairobi compared to the other airports is the long-standing position of Nairobi as a hub and gateway to the region even though Tanzania's Dar es salaam is rapidly closing the gap and could in future challenge Nairobi.



	Burundi (Bujumbura)	Kenya (Nairobi)	Rwanda (Kigali)	Tanzania (Dar es salaam)	Uganda (Kampala)
India	880.04	710.64	782.46	743.77	761.3
China	808.78	639.38	711.2	672.51	690.04
United Kingdom	754.02	584.26	656.43	617.74	635.28

Figure 13 Airfreight import costs 2016: Source LPS 2016

2.1.3 Rail Freight cost indicators

Rail freight charges on the Mombasa to Kampala line have over the last three years declined steadily as a result of steep competition for freight with road freight. However, challenges with capacity and inefficacy of the current railway means the railway is struggling to compete road freight. These challenges faced by the RVR are expected to be compounded by the arrival of the new standard gauge railway under construction. Hence the future of the RVR railway lines remains uncertain.

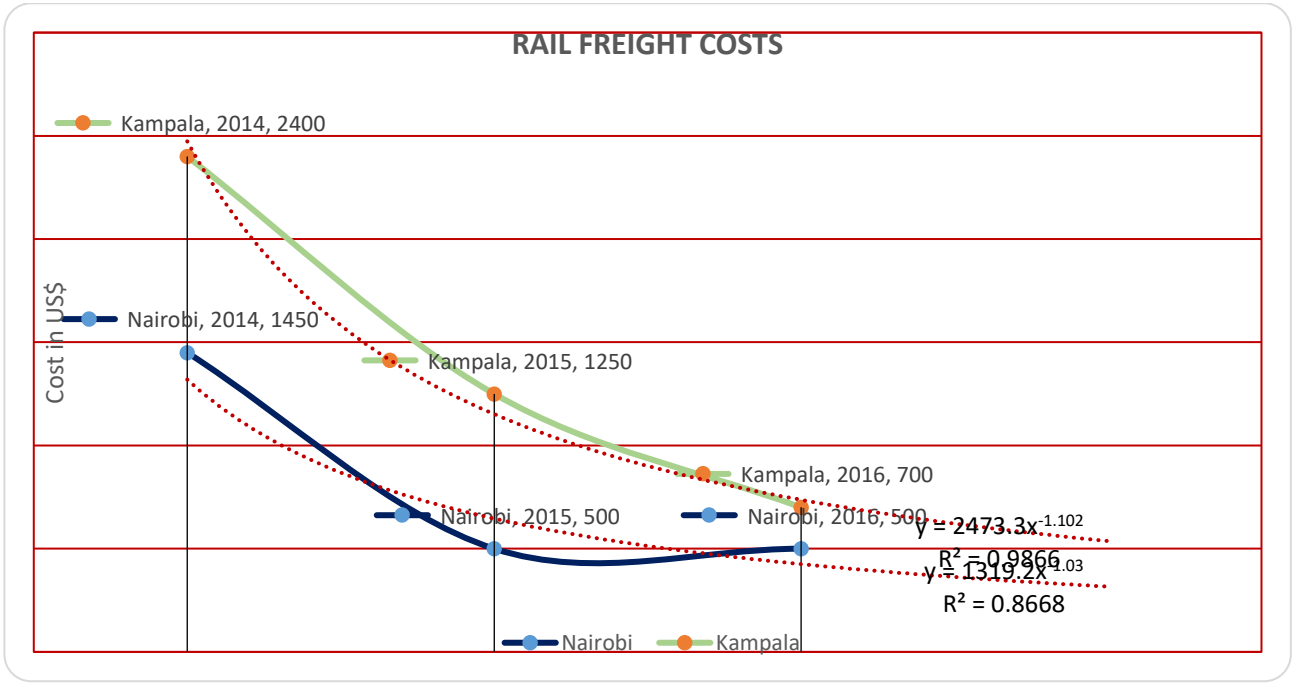


Figure 14 The average rail freight cost in 2016 for light 20-foot and 40-foot containers: Source Kenya Railways.

2.2 Time Indicators

2.2.1 Road Freight time indicators

The chart indicates that the turnaround times between Mombasa and Nairobi has remained significantly shorter compared to the times from Mombasa and the other major centres in the Northern corridor. The average time in 2014 was just over 33 hours decreased to 30 hours in 2015 and then even lower to 26.4 hours in 2016. The times from Mombasa to Kampala reduced from 96.7 hours in 2014 to 76.5 in 2016 and to Kigali reduced from 131.9 hours in 2014 to 92.4 hours in 2016.

The turnaround time for Mombasa – Bujumbura and Mombasa – Juba increased from 1511 hours in 2014 to 169 in 2016 and 170 hours in 2014 to 189 hrs in 2016 respectively. The turnaround time for these 2 destinations may have been affected by the political instability in these 2 countries since 2014.

These turn-around have not shown significant decreases despite all the efforts that have been put in to reduce them. This means there are still many obstacles on the route including police road blocks, weigh bridges and border posts delays.

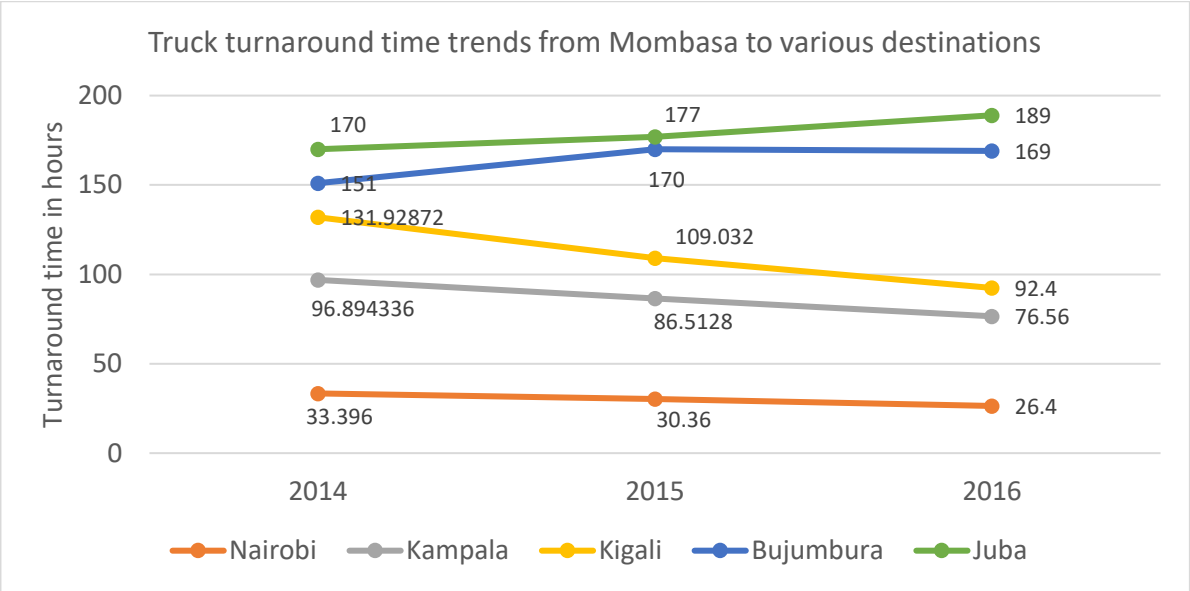


Figure 15 Trends in turnaround times (2014-2016) from Mombasa to various destinations: Source SCEA LPS and Northern Corridor Transport Observatory

On the Central corridor, the truck turnaround times from Dar es salaam to Kampala and to Kigali have decreased from 275 hours to 261 hours and 280 hours to 275 hours respectively between 2014 and 2016. On the other hand, the turnaround time to Bujumbura slightly increased from 295 hours to 300 hours between 2014 and 2016. This slight increase in the average turnaround time to Bujumbura could be attributed in the political instability in the country since 2014.

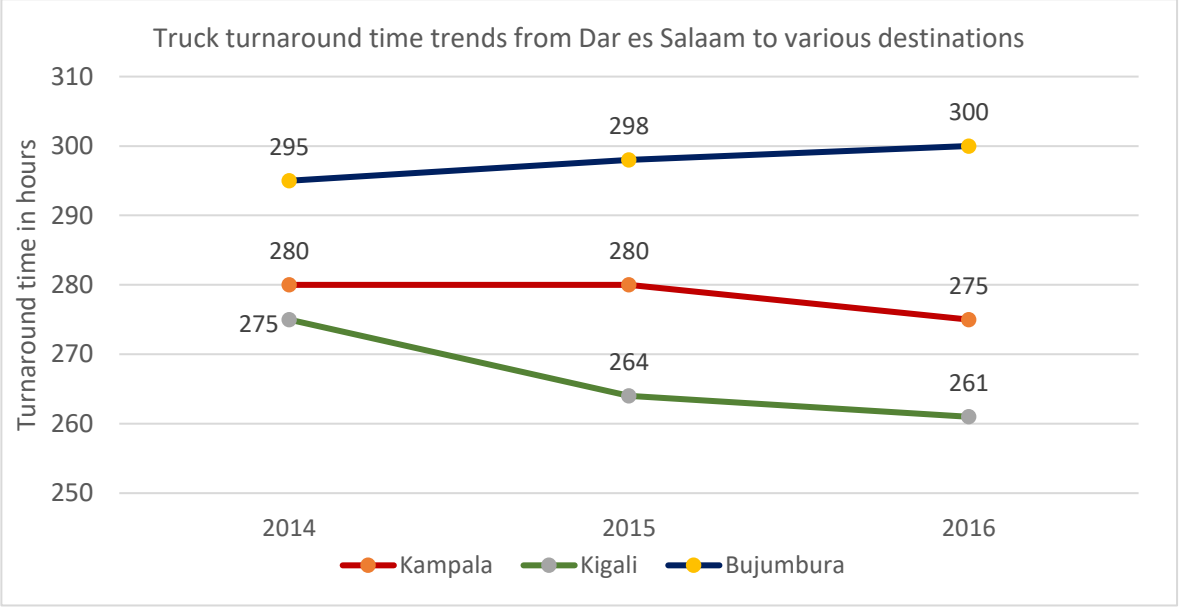


Figure 16 Trends in turnaround times (2014-2016) from Dar es Salaam to various destinations: SCEA LPS 2016 and Central Corridor Transport Observatory

2.2.2 Sea Freight time indicators

The time it takes from the time a vessel arrives at the port area to the time it first berths improved from about 68 hours in January 2015 to about 8 hours in December of 2016 for the port of Mombasa.

This is could be attributed to the expansion of the port which increased the ports capacity and the introduction of fixed berthing at the port in 2016.

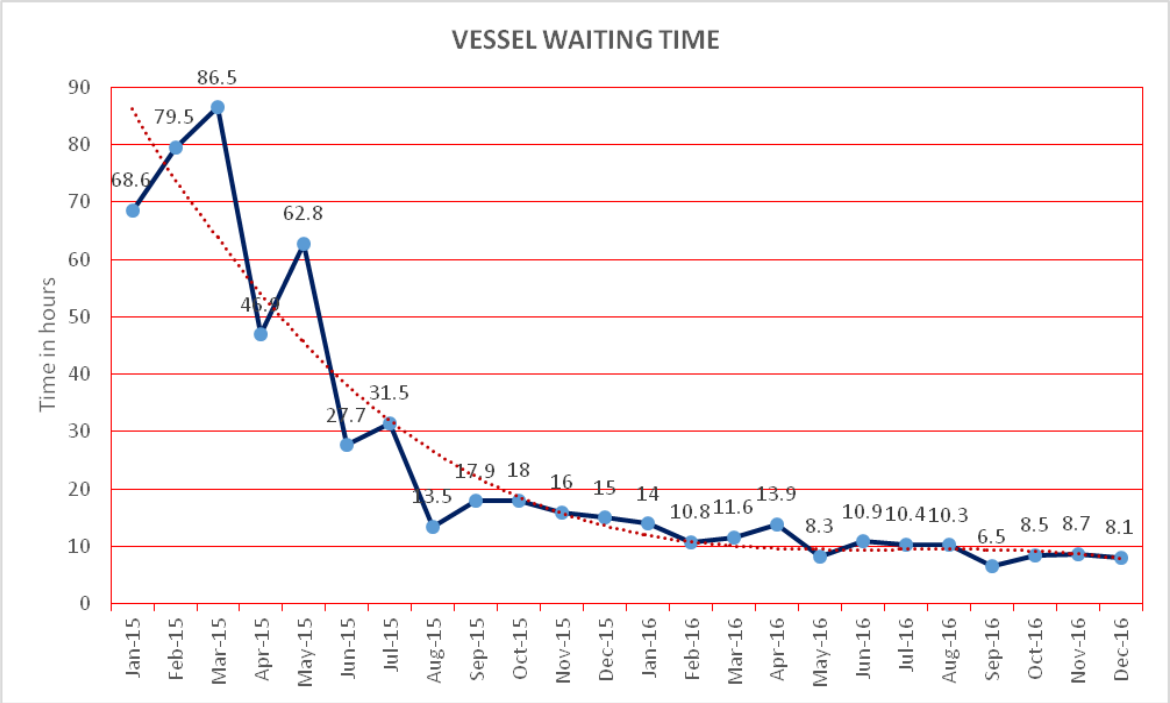


Figure 17 Vessel waiting time: Source Northern Corridor Transport Observatory and Mombasa Port Charter

Sea dwell time is the time it takes between the time a ship arrives at the sea port and is off loaded processed and released from the port to the cargo owner. It takes a significantly shorter time to offload and clear cargo from the port of Mombasa where it takes an average of about 3.7 days as compared to 6 days for Dar es Salaam. The figure below shows the trend for the mean port dwell time for Mombasa and Dar es salaam for 2015 – 2016. It shows that the mean port dwell time for Mombasa has been on a downward trend since 1st quarter of 2015 to end of 2016. It moved from an average of 110 hours to 83 hours at the end of 2016. On the other hand the dwell time for Dar es Salaam has been erratic but overall has an increasing dwell time from 158 hours to 224 hours.

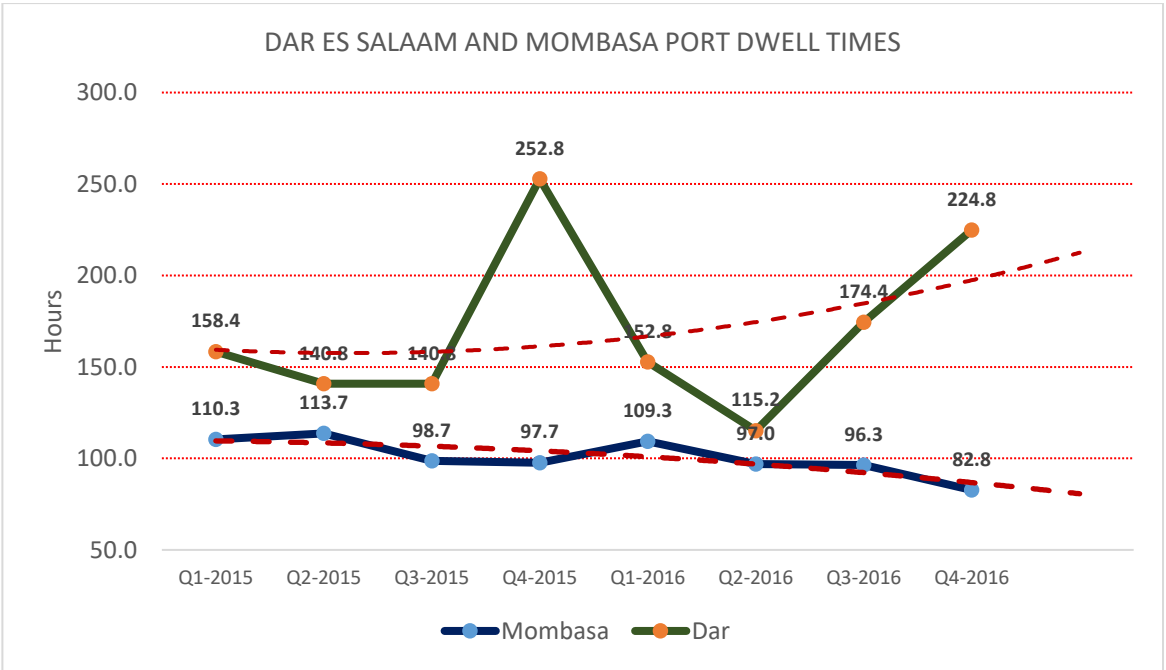


Figure 18: Dar es salaam and Mombasa Port Dwell times

Vessel turnaround time refers to the total time spent by a ship in the port. It is measured by the average of the time difference in hours from the time a ship enters the port area to time it exits the port area. Vessel turnaround times are consistently getting shorter for Mombasa. The port has plans to become a transshipment port which will have the effect of further lowering sea freight coats. Vessels in 2016 were taking on average about 75 hours which much shorter time than the 155 hours they were taking at the beginning of 2015.

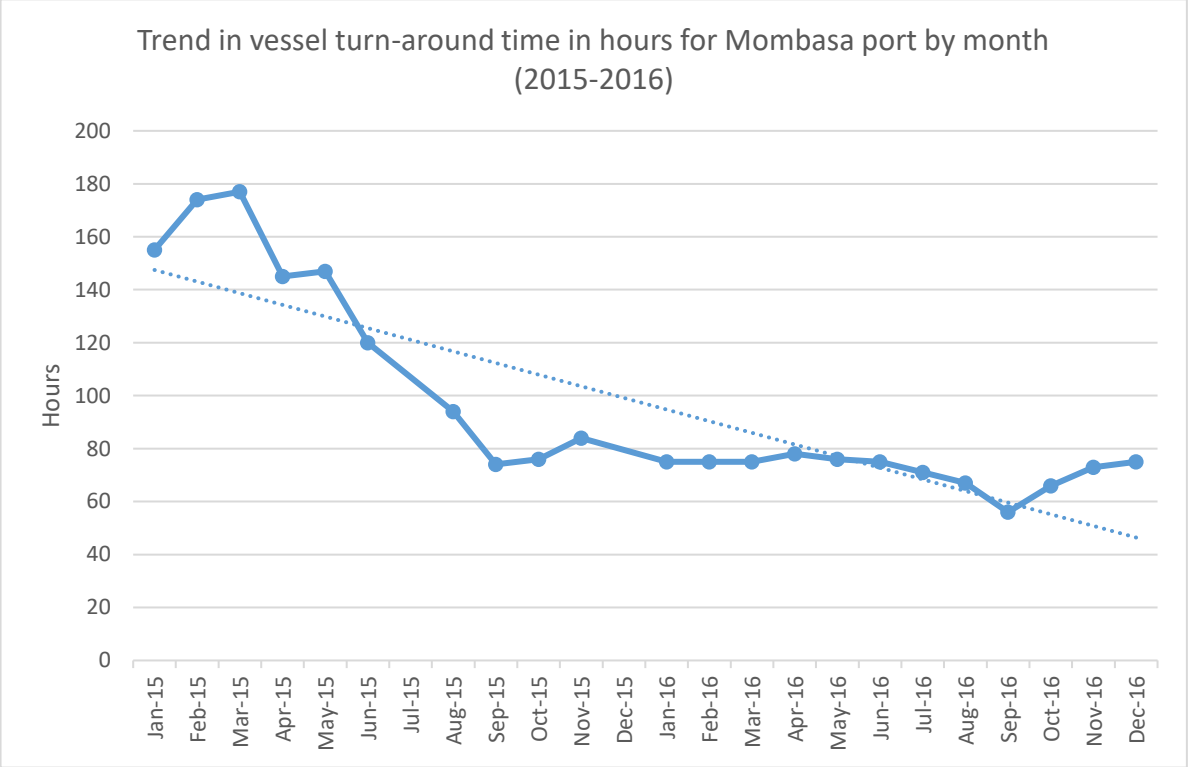


Figure 19 Mombasa Port Vessel Turn-Around Time: Mombasa Port Charter and Northern Corridor Transport Observatory

The time to complete customer processes has continued to fall between 2015 and 2016. There has been a general decrease of over 10 hours in the time it takes to pass through customs at the port of Mombasa from January 2015 to December 2016. The average time it takes to go through customs at the port of Mombasa has been on a downward trend and has moved from an average of 55 hours in January 2015 to an average of 43 hours in December 2016.

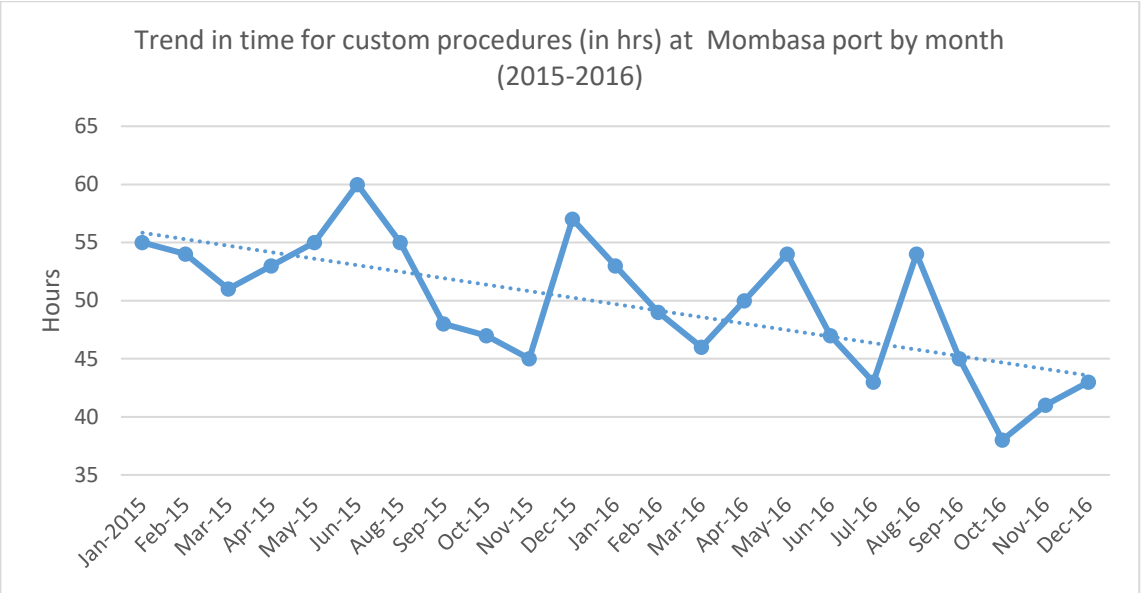


Figure 20 Mombasa Port Time to Complete Customs Processes: Mombasa Port Charter and Northern Corridor Transport Observatory

It takes an average of 33 days to move freight by sea from port of Mombasa and 35 days from Dar es Salaam port to Felixstowe in the United Kingdom but less time from Dar es Salaam to Genoa in Italy as compared to Mombasa. The mean time it takes to move freight from Mombasa to Mumbai in India is 20 days while it takes about 28 days from Dar es Salaam to Mumbai. On average it takes 31 days from Mombasa to Rotterdam and 33 days from Dar es Salaam to Rotterdam.

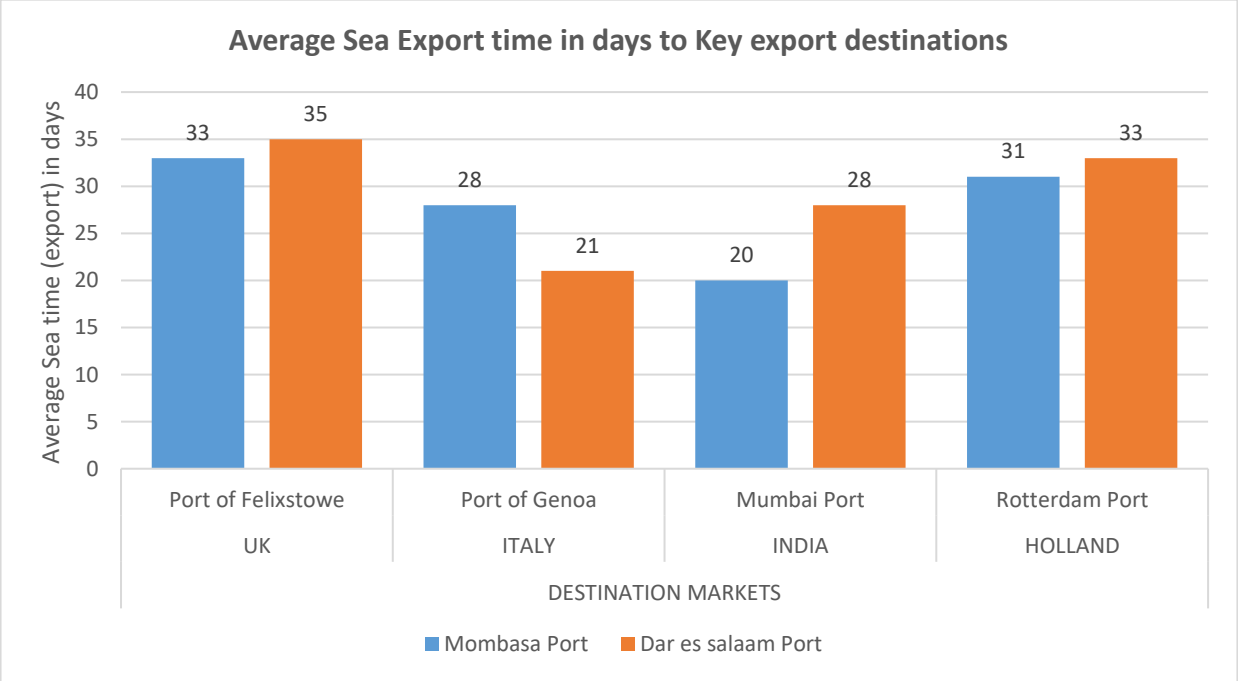


Figure 21 Average Sea Export time in days to Key export destinations: SCEA LPS 2016

The average time it takes to move sea freight from the key import countries of India (Mumbai), China (Shanghai) and the United Kingdom (Felixstowe) to Mombasa and Dar es Salaam are shown below. It takes on average of 15 days to import from Mumbai in India while it takes 20 days from Mumbai to Dar es Salaam. It also takes on average of 27 days from Shanghai to Mombasa and an average of 35 days to Dar es Salaam. Importing from Felixstowe in the United Kingdom to Mombasa takes on average 48 days and 55 days to Dar es Salaam.

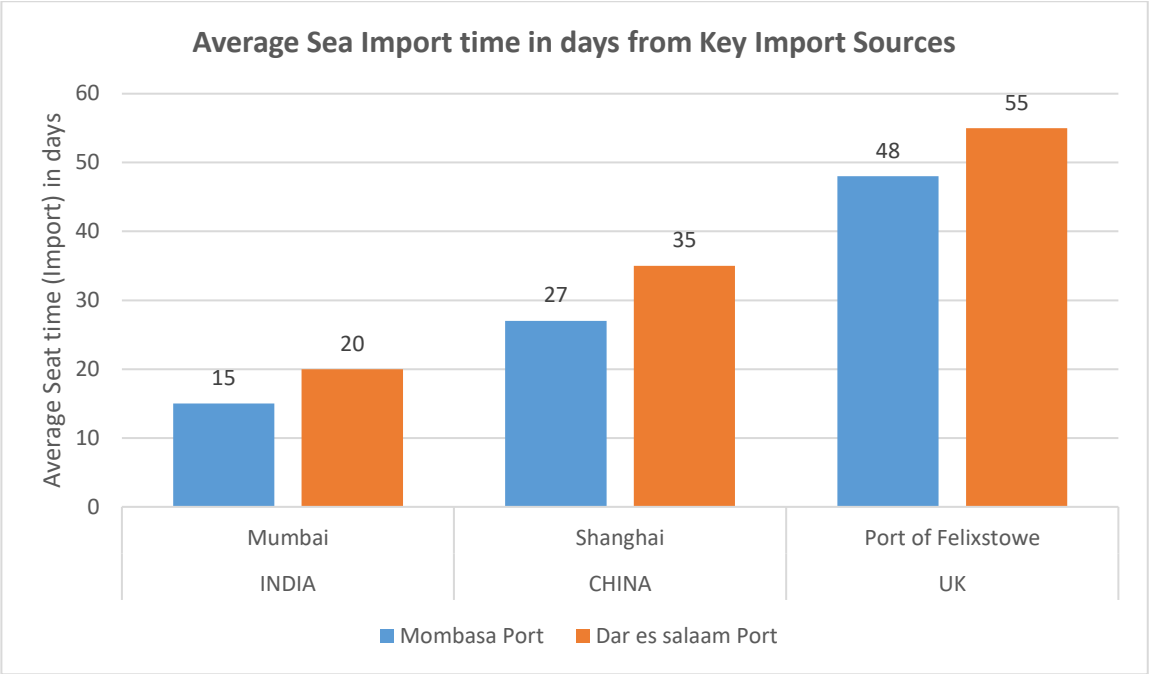


Figure 22 Sea imports time to import from principle overseas import markets: SCEA LPS 2016

2.2.3 Air Freight time indicators

Airport dwell time is the time it takes between the time airfreight arrives at an airport and the time it is cleared and is ready for collection in the case of imports while in the case of exports the time it arrives at the airport and processed and boarded into a plane ready for take-off. Dwell times include not just the time waiting for the aircraft, but also the time needed to clear through customs, and the time needed for security-related procedures. A common complaint from shippers is that customs and security procedures add too much time to deliveries and are choking the industry.

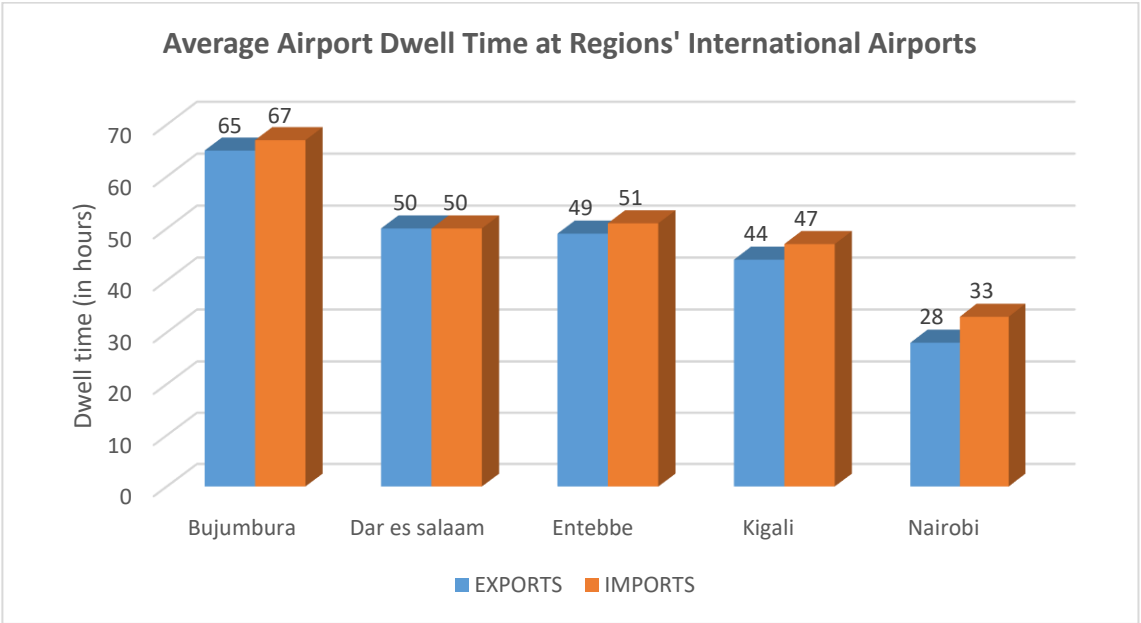


Figure 23 Sea imports time to import from principle overseas import markets: Source SCEA LPS 2016

Nairobi has the shortest airport dwell in the region at an average of 28 hours for exports and 33 hours for imports while the airport in Bujumbura has the longest dwell time at an average of about 65 hours for exports and 67 hours for imports. The second most efficient time after Nairobi is Kigali at 44 hours for export and 47 hours for imports, Entebbe at 49 and 51 hours and Dar es Salaam at 50 hours and 50 hours for export and imports respectively. Third is Entebbe in Uganda and Dar es salaam which are almost the same Entebbe has airport dwell time of 49 for exports and 51 for imports while Dar es salaam has 50 hours dwell time for export and 50 hours for imports.

2.3 Complexity Indicators

The complexity of freight logistics gives an attempt at measuring how different factors play into complicating freight logistics in the region. The study divided complexity into quality of infrastructure, and efficiency of some key processes necessary for the movement of the freight. The table below gives the distribution of responses and perceptions of the respondents on the quality of infrastructure in the countries they operate in terms of airports, roads, and rail system where available and warehouses. It also gives the average rating of the responses by country.

2.3.1 Quality of freight logistics infrastructure

The respondents in the survey rated Kenyan airports infrastructure much higher than all other airports in the region scoring 4.2 out of 5 whereas Burundi and Uganda airport infrastructure scored the least at 2.7 out of 5. Tanzania and Rwanda scored 2.8 and 2.9 respectively out of a possible perfect score of 5.0.

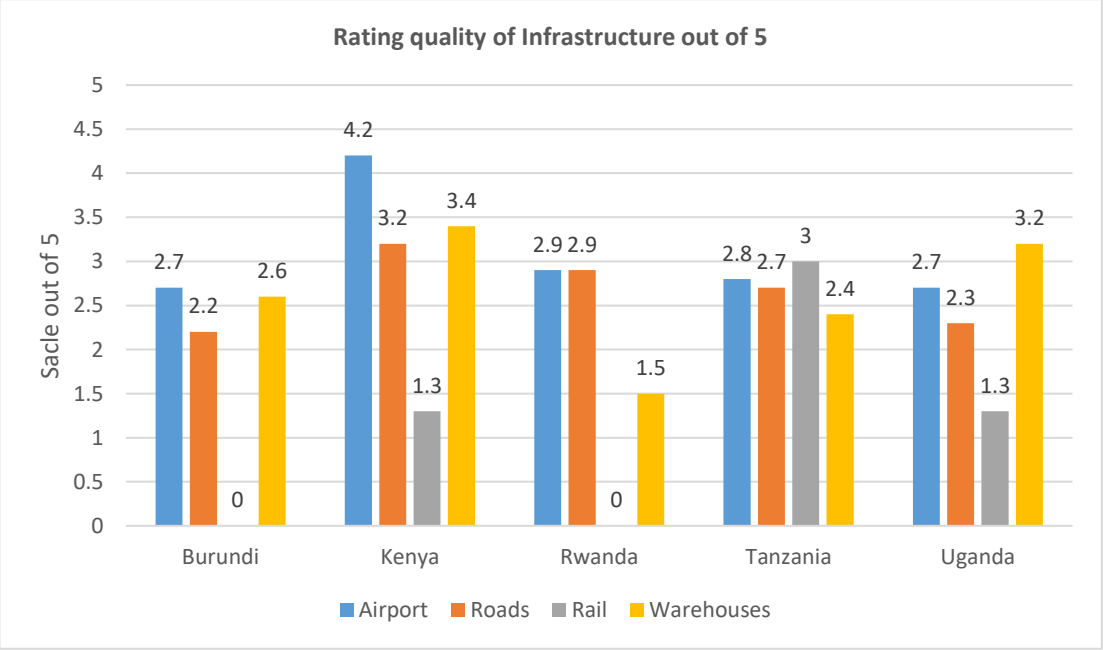


Figure 24 Stakeholders perspectives on the quality of infrastructure on a scale OF 1-5: Source LPS 2016

Kenya's road infrastructure was also rated higher than the rest in terms of roads infrastructure scoring 3.2 while Rwanda was rated second best scoring 2.9 out of 5. Burundi roads were rated the lowest at 2.2 out of 5 while Uganda scored 2.3 out of 5. Only Kenya Uganda and Tanzania were rated on the Railway system because Rwanda and Burundi do not have any. Tanzania Rail system scored the highest with a score of 3.0 while Kenya and Uganda scored only 1.3 each out of 5.0. Kenya's warehousing infrastructure was rated highest in the region ahead of the other countries in the region with a score of 3.4 while Uganda came in second with a score of 3.2 out of 5. Burundi scored 2.5 while Tanzania scored 2.4. Rwanda scored the least in warehousing infrastructure with a score of 1.5.

2.3.2 Efficiency of key processes

Efficiency of certain key processes were also assessed from the respondents. These included perceptions of efficiency in terms of clearance operations, trader level of competence, transparency of customs department and advancement in use of a paperless system. The figure gives the percentage distributions on how the respondents perceptions of the level of efficiencies for the different countries of the region. In terms of border clearance operations, Rwanda scored the highest with a score of 3.9 out of 5 according to the respondents' perception.

Kenya came in second with a score of 2.7, Uganda scored 2.6 while Burundi and Tanzania scored 2.4 out of 5. In rating the trader competence, again Rwanda scored the highest at 3.9 while Kenya scored the lowest at only 2.0 out of 5. Burundi score 2.6, Uganda 2.4 and Tanzania scored 2.3 out of 5. In rating the transparency of the of customs, Uganda scored the highest with a score of 3.3 out of 5 followed by Rwanda with 3.1 Burundi 2.7, Tanzania 2.4 and last was Kenya with a score of 2.1 out of a possible 5. In rating other government agencies, Rwanda scored the highest with a perception index of 3.8 followed by Uganda at 2.7 and Kenya at 2.4. Tanzania comes in last with a perception index score of 1.6 out of 5. In rating adopted use of a paperless system, Rwanda came on top with Perception index score of 3.5 followed by Kenya with a score of 3., Uganda with 2.7, Burundi 2.1 and Tanzania with a score 2.0 out of a possible.

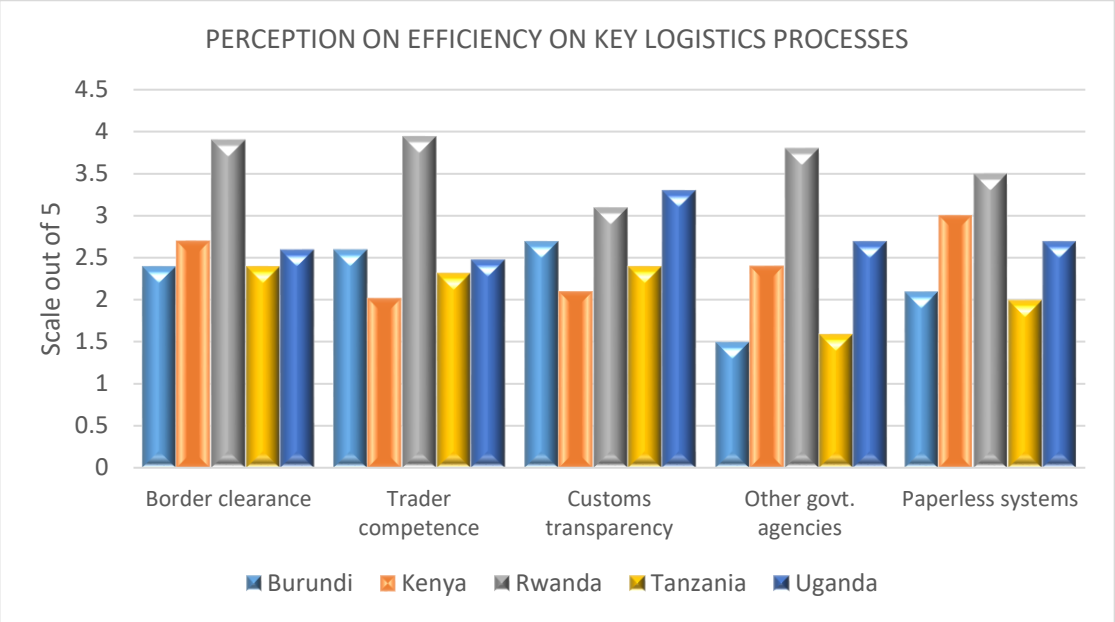


Figure 25 Efficiency of key processes: Source SCEA LPS 2016

One of the main factors determining the delivery time of import or export cargo to the desired destinations is the number of documents that must be transacted before cargo is cleared through border. Even though not all types of freight cargo have the same number of documents to be transacted before clearance, the respondents were asked based on their experiences, what the average number of documents needed to be transacted at the border in their respective countries and table 25 gives the average for each country.

It is evident that Uganda has the highest number of documents to be transacted before clearance at borders both in exports and imports where one needs to transact an average of 12 and 13 documents respectively before the cargo is cleared to move on. Rwanda has only 8 while Burundi has the least number of export documents to be transacted before clearance with only 7. In Kenya, one must process an average of 8 documents during export and 9 during import. In Tanzania, there is an average of 10 documents to be processed both during import and export.

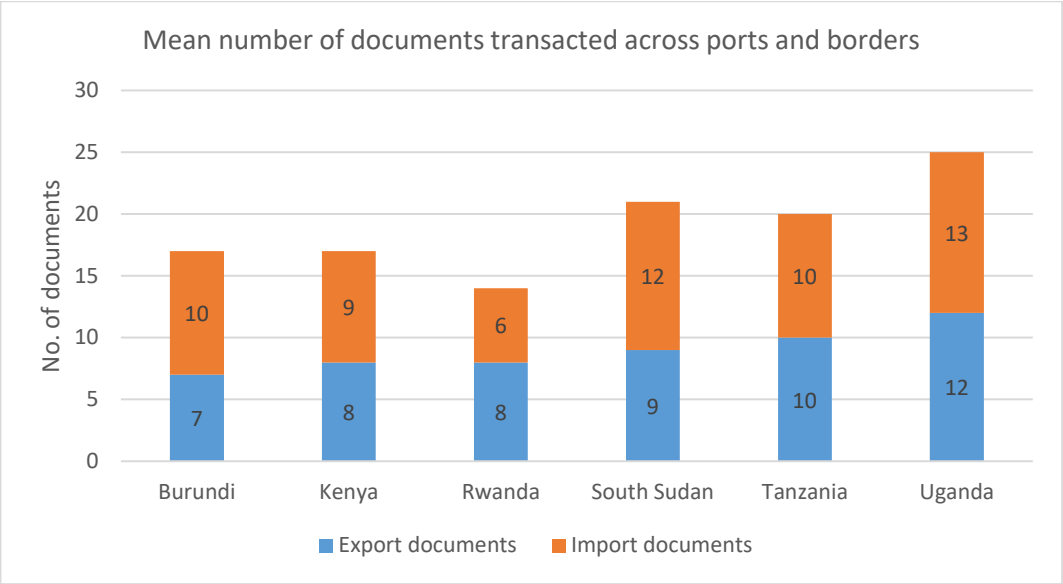


Figure 26 Number of Documents to Transact Across Ports and Borders: Source SCEA LPS 2016

The weigh bridge compliance in Kenyan road was found to be 92.4% in the year 2016. This is a decline from the previous 2 years of 2014 when it was 96% and 2015 when it was 93.8 as shown in the figure below.

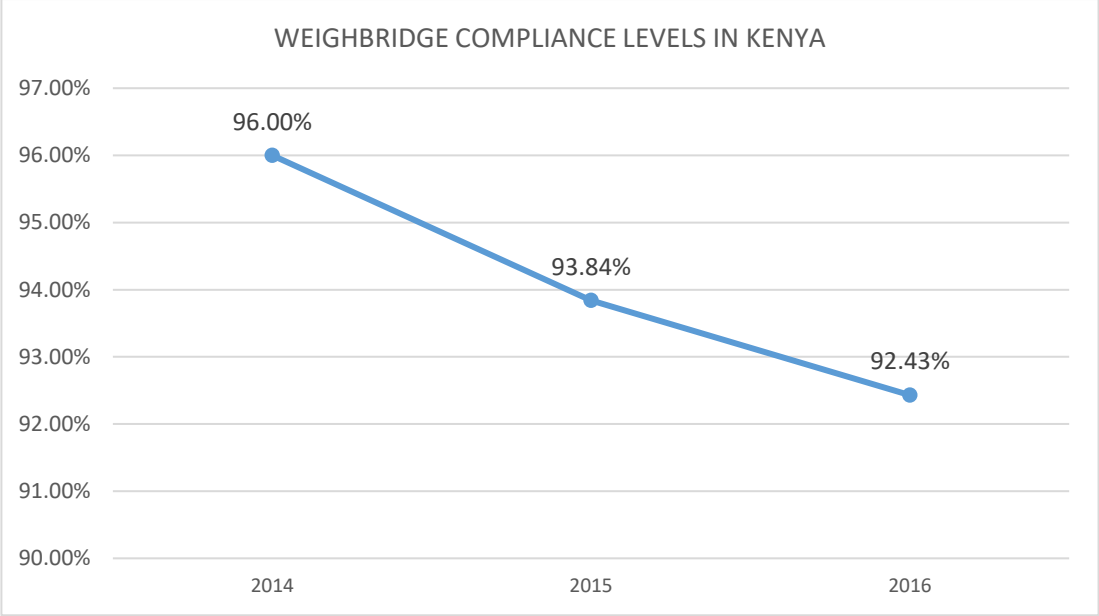


Figure 27: Trends in Weighbridge compliance in Kenya (2014-2016)

3 RECOMMENDATIONS

3.1 Recommendations regarding previous policy advocacy recommendations

Over 33 policy recommendations have been made since the SCEA was launched. Given the high number of previous policy recommendations prioritization and consolidation exercise was carried out to determine policy recommendations that are of highest priority. Without prioritization the SCEA may be bogged down chasing low priority higher effort and low reward initiatives. As a result of this consolidation and prioritization exercise previous recommendations were consolidated into 8 priority policy advocacy areas namely:

I. Education and Sensitization of shippers on existing Regulations to enhance compliance

II. Optimization of 24/7 operations at ports, borders and weighbridges

III. Implementation of National and Regional Single Windows

IV. Establishment and implementation of Comprehensive Risk management

V. Enhance Coordination amongst Border Agencies

VI. Implementation of electronic cargo tracking Systems

VII. Increased investment in Port Infrastructure

VIII. Fast track upgrading of railway infrastructure

3.2 Recommendations on institutional arrangements and mechanisms

To ensure better policy and consistent reforms in the logistics sector needs to ensure that it implements a Stakeholder engagement mechanisms that promotes dialogue amongst the multitude of players involved in the regions freight logistics. The sector would therefore require a common Stakeholder engagement mechanism that facilitates structured, robust and interactive multi sector public and private dialogue on policy issues concerning freight logistics is conducted. A good example of such an arrangement is the Mombasa Port Charter.

3.3 Recommendations on Policy Gaps

The consultant was commissioned to undertake a study to identify gaps in SCEA policy positions gaps and make recommendations for a more integrated and effective policy advocacy framework. These recommendations take cognizance of the fact that freight logistics issues and conditions present within each of the East African Community member states varies considerably and therefore in order to address the key issues in East Africa's freight logistics sector, the consultant has taken a broad view of the issues and the recommended policy position areas based on the broad view. The policy positions to be adopted may take various forms depending upon the nature of broad freight logistics issues, the sub-sector in question and the implementation constraints that are involved with the implementation of each policy position.

Shippers Council will be at liberty to select specific areas that could be framed into individual policy position papers or as part of a declaration of a SCEA strategy and policy, or declared within a formal institutional arrangement as may be put forward by a multi sector coordination mechanism for the freight logistics industry. Once a set or framework of consistent and practical policy positions have been adopted, the SCEA will have a basis from which it can engage other stakeholders within a broader concept for the development of the sector. This approach will enable SCEA play a more meaningful and active role promoting improvements in East Africa's freight logistics sector.

The freight logistics policy's position areas identified here will enable SCEA to focus its advocacy resources and activity toward resolving specific freight logistics issues. These policy position areas are presented for each sub-sector in the following paragraphs and represent only a few of the possible policy position actions available for consideration.

3.3.1 Policy position on increasing emphasis maintenance of existing road networks

East African Community Member states have largely focused their efforts on the construction of new road links and international road links. While it is true that some important road links and networks have not yet been built, most East African Countries now have good quality international trunk roads which provide access to major commercial centers, border posts and maritime ports. The present challenge is to sustain and improve this new resource of road networks, increase its quantity and enhance the quality of road freight services. Partner states will need to do more and invest in projects that maintain, strengthen and expand the existing road network, and which improve road freight services. There is need to develop clear polices on road maintenance, road rehabilitation and preservation of road infrastructures through greater enforcement of axle load limits.

3.3.2 Policy position on Road freight safety issues

East Africa is witnessing a road safety crisis. With some of the highest per capita rate of road fatalities in the world, road deaths on East African Roads are projected to more than double by 2030. This increase will see road fatalities overtake the number of malaria-related deaths in the region. In fact, while fatalities from both HIV/AIDS and malaria are projected to decline, road fatalities will continue to increase in a business-as-usual scenario. It is crucial to strengthen the effectiveness of road safety lead agencies across the region.

There is need to push for a series of key policy and investment decisions relating to the road network, driver and vehicle regulation, better data management systems and legislation addressing key risk factors. Polices on systematic mainstreaming of road safety in regional trade road corridors to minimize deadly crashes. These polices need to take into account polices on transportation of dangerous cargo on East African roads given that freight from the petroleum and other mining sectors is projected to grow thereby raising the risk profile of East African roads.

3.3.3 Policy Position on Regulation of the Boda-Boda sector

There is indeed to regulate the Boda-Boda sector in order to ensure that the sector does not continue to negatively contribute the poor safety on east African roads. Furthermore Boda-Boda riders are chocking some important transport nodes particularly loading and offloading point on commercial trading networks.

Most East African States have developed regulations to try to moderate the behavior of Boda-Boda operators with the exception of Rwanda most regulation is blatantly ignored by the operators. Boda-Boda which was introduced as a measure to deal with the problem of unemployment has now become a serious threat to safety and security while its intended purpose is largely incomprehensible. Yet, they are part of the increasing productivity in most parts of East Africa. Their agility to beat the mounting traffic jams in East Africa's conjected cities makes them indispensable. There is need to regulate the supply and use of motorcycles, emphasizing on road use training by a competent authority before they are allowed to carry any passengers. Their conditions must be constantly monitored by some agency and must carry liability insurance at all times.

3.3.4 Policy on Last Mile Road freight logistics Connectivity

The competitiveness of East Africa's Agriculture is impeded by a lack of road to rural agricultural areas for delivery of agricultural inputs such as seeds, fertilizers, pesticides, farm implements and equipment. Roads are also necessary for delivery of food such as maize major staple from the farmers to aggregation centers and millers. Roads are also required to deliver cash crops and horticultural produce to airports and ports.

SCEA should develop a policy position on last mile connectivity as this is a major issue for a majority of the population that is rural and are wholly dependent on roads to connect these populations' city markets and other commercial centers.

3.3.5 Policy Position on environment

SCEA need to define its policy position with regards to the environment and freight logistics. Policy makers in East Africa have not paid attention to the environmental impact of freight logistics infrastructure apart from limited concern as expressed in environmental impact assessments and there is a need to take a coordinated approaches to control of emissions amongst many other environmental issues.

The advocacy positions should be used to promote transport policies based on the principles of sustainable development. Transport policy should minimize harmful impacts on the environment and health, maximize efficiency of resources, including energy and land, and guarantee safety and sufficient access for all.

3.3.6 Policy Position on Rail Freight

The East African Community has begun to make very large investments in new rail infrastructure, rolling stock and facilities. Kenya is making good progress in rolling out new railway infrastructure with its standard gauge railway SGR which when completed will link the seaport of Mombasa with major commercial Centre on the northern corridor including Kampala, Kigali, Gulu and Juba. It is important that these new assets are deployed and managed in the most efficient and effective manner. Policy should clarify ownership and the involvement of the private sector in railway operations.

This policy position should respond to problems in institutional and regulatory frameworks, infrastructure, ownership, management, operations, skills, financing structures and methodologies for the rail freight system. This policy should require that the EAC governments take an interventionist approach to regulating the rail freight system, to ensure that individual costs of externalities and inefficiencies are not merely passed on to freight owners. The policy should ensure that rail freight rail serves as an appropriate mode and is enabled to perform the critical role that it should fulfil in the socio-economic development of the region.

3.3.7 Policy Position on Ports and Shipping Lines Performance

Kenya and Tanzania have made large investments in the upgrading of their port infrastructure. This includes the development of new ports in Lamu in Kenya, Bigamy, Tanga and Mtwara in Tanzania. With more infrastructure and equipment in place greater attention needs to be paid to improving the performance and productivity of Ports and Shipping companies.

The level of efficiency of port operations and the volume of traffic Mombasa and Dar es Salam are able to handle directly affect the performances of road, rail, and inland navigation systems along the Northern and Central corridors. For example, increases in the volume of containers handled by the two ports also increase the number of trucks and railcars that operate along the corridors.

In absence of adequate measures that increase the capacity of roads, railways, warehouses, dry ports, and Customs to handle the new traffic volumes, congestion and inefficiency follow as unintended effects of business success of the two ports. The policy should address the multi sectorial linkages such as working relation between the ports, Customs, Shipping lines/agencies, standards bureaus, police amongst the platitude of stakeholders contributing to poor performance in the port of the ports.

3.3.8 Policy Position on Inland waterways

Despite water transport being the cheapest means of transportation for bulk goods, and enables countries to reduce transport costs for bulk imports and exports. The complex network of connections between coastal ports, inland ports, and rail, air, and truck routes forms a foundation of material economic wealth worldwide. If properly developed, water transport could play a vital role in unlocking the economic potential, and increasing competitiveness and integration, of East Africa.

The land-locked economies of the East Africa's are hampered by expensive road transportation and freight logistics that have generally reduced their economic opportunities. The transport and trade links between South Sudan and the rest of East Africa remain weak. And the absence of a reliable and cost-effective north south transportation link has constrained trade.

A water transport link using Lake Victoria and the White Nile present great opportunity for regional integration. And economic development given prospective mineral resources, fossil fuels, and agricultural potential of the area connected by this waterway. Lake Tanganyika on the other had has the potential of connecting over 5 countries around the shores of Lake Tanganyika. This potential should in itself justify investment in bulk cargo transport infrastructure.

Lake Victoria could provide a critical link between the Northern Corridor (Kigali–Kampala–Mombasa) and the Central Corridor (Dar es Salaam–Tabora– Mwanza), and enlarge the economic impact zone of the respective corridors; improved Lake Victoria navigation would also strengthen inter-regional transport connections and economic integration. A policy position paper would seek to clarify government's plans for waterways and spell out the role of private sector in the development of the waterways.

3.3.9 Air Freight Policy Position

Reliable air freight services can play a role in economic development. Shippers in East Africa are demanding more and better air freight service reliability. Faced with the highly regulated operating environment and government involvement in air transport operations East African Airlines find it difficult to be responsive to user demands. Saving Kenya's National career Kenya Airways is the most urgent issue. A policy position of KQs ownership, operations and restructuring of its debt needs to be spelled out.

3.3.10 Gender Policy Position

SCEA needs to develop a policy position on gender concerns at the policy levels to increase the accessibility of women to all transport opportunities.

3.4 Validation Workshop Recommendations

The following recommendations were raised in the plenary and adopted as additional recommendations:

3.4.1 The region faces serious challenges in implementation SOLAS as its implementation is highly technical and requires many years of training and capacity building of personnel in order to understand and implement it. SCEA needs to engage the competent authorities including KMA and SUMATRA so as to develop action plans to speed up the regions compliance.

3.4.2 There is need to remove as much human interaction between public and the private sector in the logistics processes. Corruption thrives where the private sector is compelled to interact with public section. Processes concerning COC, CO, Valuation, Cargo Inspections and Port gate processes a fraught with corruption. There is need to deepen electronic processing and simplification of processes. Government agencies should be encouraged to document standard operating procedures to increase transparency of processes. SCEA should include the fight against corruption amongst its core policy advocacy areas.

3.4.3 The East African Partner states Revenue authorities need to diligently implement the WTO TFA requirements on Valuation. The SCEA needs to engage revenue authorities and other concern government agencies in ensuring that invoice value is compiled with according to WTO rules.

3.4.4 SCEA should work with FEAFFA and support the enactment of FEAFFA self-regulation bill.

3.4.5 SCEA should share information on challenges faced by women in logistics and use its collective power as the consumer of freight logistics to force reforms in the sector

4 REFERENCES

Arvis, J.-F.et al., (2012), Connecting to compete 2012: Trade logistics in the global economy: the logistics performance index and its indicators. The World Bank, 2012

Asian Development Bank Institute, Trade Logistics and Regional Integration in Latin America and the Caribbean. No. 200 of August 2010.

Business daily Tuesday, May 16, 2017 19:40

Demeter, K. (2013), Time-based competition: The aspect of partner proximity. Decision Support Systems Vol. 54, Iss. 4, (2013), Pages 1533–1540.

Droge, C., Jayaram, J., and Vickery, S.K. (2004), - The effects of internal versus external integration practices on time-based performance and overall firm performance. Journal of Operations Management, 22 (6) (2004), pp. 557–573

Ease of Doing Business (2015), World Bank

Experiential Survey on Non-Tariff Barriers along the Northern Corridor (Kigali-Mombasa May 2013)

FAA Commercial Aviation Forecast Conference, Washington.

Ferrantino, M., Geiger, T. & Tsigas, M., (2013), the Benefits of Trade Facilitation – A Modelling Exercise. Geneva, s.n

Gonzalez, J. A., Guasch,J.L., and Serebrisky, T. (2007), "Latin America: Addressing High Logistics Costs and Poor Infrastructure for Merchandise Transportation and Trade Facilitation", The World Bank

Hoang, T., 2002. Planning for the future in an uncertain environment. A Presentation at the 27th Annual

Hoyle, B.S. (1990), Port cities in context: The impact of waterfront regeneration. IBG-Transport Geography Study Group.

Hoyle, B.S. (1996), City ports, Coastal Zones and Regional Change: International Perspectives on Planning and Management. Wiley, Chichester (1996).

Hoyle, B.S., and Pinder, D.A. (1992), European Port Cities in Transition. Bellhaven Press, London, (1992).

Hum, S.-H., and Sim, H.-H. (1996), Time-based competition: literature review and implications for modelling. International Journal of Operations & Production Management, 16 (1) (1996), pp. 75–90.

Janelle, D. and Beuthe, M. (1997), Globalization and research issues in transportation. Journal of Transport Geography, 5 (1997), pp. 199–206.

Jean-Paul Rodrigue, The geography of transport systems: Dept. of Global Studies & Geography, Hofstra University, New York, USA, 1998-2017.

Kenya Ports Authority Tariff Book, 2016

McCray, J. (1998), North American Free Trade Agreement Truck Highway Corridors. US–Mexican Truck Rivers of Trade. Transportation Research Record, 1613 (1998), pp. 71–78

Morris Hamburg, Basic Statistics: A Modern Approach Hardcover – January 1985

Northern Corridor Transit Transport Coordinating Authority (NCTTCA), Northern Corridor Time Release Study 2016

Northern Corridor Transit Transport Coordinating Authority (NCTTCA), Analytical Comparative Transport Cost Study along the Northern Corridor Region.

Northern Corridor Transit Transport Coordinating Authority (NCTTCA), Transport Observatory Report. April 2014

Northern Corridor Transit Transport Coordinating Authority (NCTTCA), Monthly Port Community Charter Report For January-December 2016

Nuhn, H. (1999), Changes in the European Gateway System—the case of seaports. Beiträge zur Regionalen Geographie Europas, 47 (1999), pp. 88–102.

Observatory of Economic Complexity; OEC Profile of Exports, Imports and Trading Partners of Countries

Pedersen, P.O. (2000), Freight transport under globalisation and its impact on Africa. Journal of Transport Geography, 9 (2000), pp. 85–99

Report of the 13th meeting of the sectoral council on transport, communications and meteorology of the EAC - June 2016

Report on East African Community by Grail Research, a division of Integreon 2012

Rohr, S.S., and Correa, H.L. (1998), Time-based competitiveness in Brazil: whys and hows. International Journal of Operations & Production Management, 18 (3) (1998), pp. 233–245.

Second Medium-Term Plan, 2013 – 2017, Transforming Kenya: Pathway to devolution, socio-economic development, Equity and National Unity, 2010

Shippers Council of Eastern, Africa, East Africa Logistics Performance Survey, 2012

Shippers Council of Eastern, Africa, East Africa Logistics Performance Survey, 2013

Shippers Council of Eastern, Africa, East Africa Logistics Performance Survey, 2014

Shippers Council of Eastern, Africa, East Africa Logistics Performance Survey, 2015

Simeon Djankov, Caroline Freund and Cong S. Pham (2006). Trading on Time, Tanzania Ports Authority Tariff Book

Slack, B. (1998), Intermodal Transportation. B Hoyle, R Knowles (Eds.), Modern Transport Geography (second ed.), Wiley, London (1998), pp. 263–289.

Stalk, G. (1988), 'Time--The Next Source of Competitive Advantage', Harvard Business Review, July 1988, pp.41-52.

Stalk, G. and Hout, T.M. (1990a), Competing against Time. How Time-based Competition Is Reshaping Global Markets, Free Press, New York, NY, 1990, pp. 4-29

The Committee on Communication, Trade and Investment, Report of On-Spot Assessment on the EAC Single Customs Territory (EAC SCT) By s *28th September to 2nd October 2014*

The East African Community (EAC) Trade Helpdesk

The Observatory of Economic Complexity created by The MIT Media Lab Macro Connections group

The Role of Inland Water, Transport in Support of Further Regional Integration, 2015

UN-OHRLLS, Africa regional report on improving transit cooperation, trade and trade facilitation for the benefit of the landlocked developing countries - status and policy implications

World Bank Group (IFC), Doing Business 2014. Understanding Regulations for Small and Medium –

World Bank, Connecting to Compete 2014. Trade Logistics in the Global Economy. The Logistics Performance Index and its Indicators, 2014.

World Bank, Connecting to Compete 2016: Trade Logistics in the Global Economy

Woudsma, C. (1999), NAFTA and Canada–US cross-border freight transportation. Journal of Transport Geography, 7 (1999), pp. 105–119.

APPENDICES

Please refer to the appendices package supplied separately that contains the following:

- Trade Statistics
- Survey Questionnaires'
- List Surveys targeted participants
- Survey Data Tables