

VALIDATED 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

Figure 1 Diagram showing how the SCT works
Figure 2 Boats on Lake Victoria
Figure 3 the oil pipeline from Mombasa to Nairobi: - Source Kenya Pipeline
Figure 4 the new SGR railway in Kenya: Source KRC1
Figure 5 A cargo ship at the port of Mombasa berth number 141
Figure 6 Scheme describing the possible container flows at a container port/terminal1
Figure 7 the New Mombasa Container Terminal1
Figure 8 JKIA cargo terminal: Source Air Freight International Magazine
Figure 9 Artists Impression of Embakasi ICD. The facility is being expanded to create extra capacity
Figure 10 Average Weighbridge Crossing Time in Minutes: Source Northern Corridor Transport Observatory Survey 201
Figure 11 Juba International Airport (JIA)2
Figure 12 Dar es Salaam Port3
Figure 13 An aerial view of an oil exploration site in Bulisa district, approximately 244 km (152 miles) northwest o Kampala in this undated handout photo from Tullow Oil Uganda, received by Reuters July 4, 2012
Figure 14 LAPSSET Corridor: Source LAPSSET Corridor Development Authority
Figure 15 Artists impression of Lamu Port3
Figure 2 Mombasa Nairobi cost of Road Freight 2011-2016: Source SCEA LPS 2016 and Northern Corridor Transpo Observatory
Figure 3 Mombasa Kampala cost of Road Freight 2011-2016: Source SCEA LPS 2016 and Northern Corridor Transpo Observatory
Figure 4 Mombasa Kigali cost of Road Freight 2011-2016: Source SCEA LPS 2016 and Northern Corridor Transpo Observatory
Figure 5 Mombasa Bujumbura cost of Road Freight 2011-2016: Source SCEA LPS 2016 and Northern Corridor Transpo ObservatoryError! Bookmark not defined
Figure 6 Mombasa Juba cost of Road Freight 40 ft. container: Source SCEA LPS 2016 and Northern Corridor Transpo Observatory
Figure 7 Road Freight charges from Dar es Salaam to Kampala (40-foot container): Source SCEA LPS 2016 and Centr Corridor Transport Observatory
Figure 8 Road Freight charges from Dar es Salaam to Kigali (40-foot container): Source SCEA LPS 2016 and Centr Corridor Transport Observatory
Figure 9 Figure 22 Road Freight charges from Dar es Salaam to Bujumbura (40-foot container): Source SCEA LPS 201 and Central Corridor Transport Observatory

Figure 10 Average cost per kilometer 2016 on select routes: Source SCEA LPS 2016, Central Corridor Transport Observatory and the Northern Corridor Transport Observatory
Figure 11 Mean sea freight export charges to principle export markets (\$/ container): Source SCEA LPS 2016 Error! Bookmark not defined.
Figure 12 Mean sea freight import charges from the regions principle import sources (in \$/ container). Source LPS 2016 Error! Bookmark not defined.
Figure 13 Mean airfreight export charges to key export destinations (\$/50 kg pallet): Source LPS 2016Error! Bookmark not defined.
Figure 14 Airfreight import costs 2016: Source LPS 2016
Figure 15 The average rail freight cost in 2016 for light 20-foot and 40-foot containers: Source Kenya Railways Error! Bookmark not defined.
Figure 16 Trends in turnaround times (2014-2016) from Mombasa to various destinations: Source SCEA LPS and Northern Corridor Transport Observatory
Figure 17 Trends in turnaround times (2014-2016) from Dar es Salaam to various destinations: SCEA LPS 2016 and Central Corridor Transport Observatory
Figure 18 vessel waiting time: Source Northern Corridor Transport Observatory and Mombasa Port Charter Error! Bookmark not defined.
Figure 19 Mombasa port container dwell time: Source Mombasa Port CharterError! Bookmark not defined.
Figure 20 Mombasa Port Vessel Turn-Around Time: Mombasa Port Charter and Northern Corridor Transport Observatory
Figure 21 Mombasa Port Time to Complete Customs Processes: Mombasa Port Charter and Northern Corridor Transport Observatory
Figure 22 Average Sea Export time in days to Key export destinations: SCEA LPS 2016Error! Bookmark not defined.
Figure 23 Sea imports time to import from principle overseas import markets: SCEA LPS 2016Error! Bookmark not defined.
Figure 24 Sea imports time to import from principle overseas import markets: Source SCEA LPS 2016Error! Bookmark not defined.
Figure 25 Stakeholders perspectives on the quality of infrastructure on a scale OF 1-5: Source LPS 2016 Error! Bookmark not defined.
Figure 26 Efficiency of key processes: Source SCEA LPS 2016
Figure 27 Number of Documents to Transact Across Ports and Borders: Source SCEA LPS 2016Error! Bookmark not defined.

LIST OF TABLES

Table 1: Sampling Plan
Table 2 Table 2: Port Community Performance Data 2016- Source Northern Corridor

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.

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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
- Gender Policy Position
- Policy Position on environment

- 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
- Policy Position on Inland waterways
- Policy Position on Rail Freight
- Policy position on Road freight safety issues

TABLE OF CONTENT

ACKNO	DWLEDGMENTS	
LIST OF	F ABBREVIATIONS	
LIST OF	F FIGURES	III
	F TABLES	
EXECU [°]	ITIVE SUMMARY	V !
FIND	DINGSVI	
	OMMENDATIONS:	Ιλ
TABLE	OF CONTENT	X
1 IN	NTRODUCTION	1
1.1	BACKGROUND	1
1.2	OBJECTIVES OF THE SURVEY	
1.3	RATIONAL FOR FREIGHT LOGISTICS PERFORMANCE SURVEY	
1.4	THE ROLE OF SHIPPERS' COUNCIL OF EAST AFRICA	3
1.5	Methodology	3
2 S	ITUATIONAL ANALYSIS	6
2.1	REGIONAL SITUATIONAL ANALYSIS INCLUDING REGIONAL PROGRAMS	6
2.2	THE STATE OF BURUNDI'S FREIGHT LOGISTICS SECTOR	12
2.3	THE STATE OF KENYA'S FREIGHT LOGISTICS SECTOR	13
2.4	The State of Rwanda's Freight Logistics Sector	22
2.5	THE STATE OF SOUTH SUDAN FREIGHT LOGISTICS SECTOR	26
2.6	THE STATE OF TANZANIA'S FREIGHT LOGISTICS SECTOR	
2.7	The State of Uganda's Freight Logistics Sector	
2.8	New Corridor Development (Lamu Port, South Sudan, Ethiopia Transport Corridor)	34
3 T	HE LOGISTICS PERFORMANCE SURVEY FINDINGS	36
3.1	ROAD FREIGHT COST INDICATORS	36
3.2	TIME INDICATORS	43
3.3	COMPLEXITY INDICATORS	49
4 R	RECOMMENDATIONS	52
4.1	RECOMMENDATIONS REGARDING PREVIOUS POLICY ADVOCACY RECOMMENDATIONS	52
4.2	RECOMMENDATIONS ON INSTITUTIONAL ARRANGEMENTS AND MECHANISMS	
4.3	RECOMMENDATIONS ON POLICY GAPS	52
4.4	VALIDATION WORKSHOP RECOMMENDATIONS	55
5 R	REFERENCES	57
APPEN	IDICES	59
•	Trade Statistics	59
•	Survey Questionnaires'	
•	LIST SURVEYS TARGETED PARTICIPANTS	
•	SLIRVEY DATA TARIES	50

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 conditions¹

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.

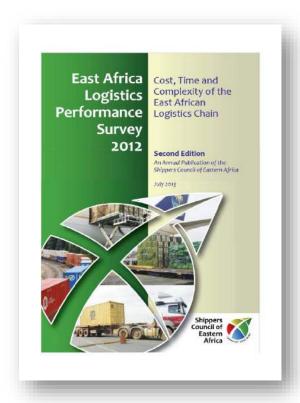
¹ The geography of transport systems: by Dr. Jean-Paul Rodrigue, Dept. of Global Studies & Geography, and Hofstra University, New York, USA, 1998-2017.

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 frame³ 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

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

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

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

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.

Table 1: 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		7	0	0	4	4	0	15		
5 Regulatory Authorities'		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		

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.

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

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

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 SITUATIONAL ANALYSIS

2.1 Regional Situational Analysis Including Regional Programs



The East African partner states have recently implemented a series of deep reforms that have stated to bear the desired fruits and have shown significant improvement in its relative freight logistics performance. All the EAC countries improved there ranking on the 2016 World bank LPI with Tanzania climbing 77 places registering the biggest leap in ranking among EAC countries. Out of 160 countries in the world Kenya is ranked 42 which is second in Africa after South Africa. Uganda is ranked 58, Tanzania 61, Rwanda 62 and is the only country to be ranked in double digits at 107 globally. The following are the key ongoing initiative aimed at improving East Africa's Logistics Performance:

2.1.1 Northern Corridor Transport Observatory

Northern Corridor Transport Observatory is a monitoring tool that measures 30 indicators on the performance along the corridor. The observatory trucks the indicators using raw data collected from the stakeholders in all the member states. Information provides clear picture on various indicators, enabling to identify the bottlenecks that needs to be resolved to improve on the efficiency and sequentially improving in the trade and operations along the corridor.

2.1.2 Single Customs Territory (SCT)

The East African Community (EAC) Committee on customs is working on deepening of implementation of Single Customs Territory system (SCT) to enable faster clearance of goods and reduce the cost of doing business in the region. The Single Customs Territory is being implemented by the Northern Corridor Integration Projects Initiative (NCIP) which began a rollout at the end of 2013, since then goods have been gradually being added into a single clearing system under a duty paid and warehousing regime. This Initiative is in due course going to reduce the internal border controls, restrictive regulations among member countries and will eventually lead to free circulation of goods that will ensure the realization of a full Customs Union.

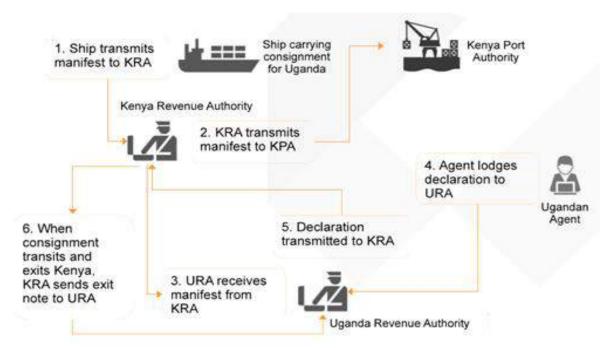


Figure 1 Diagram showing how the SCT works

The Single Customs Territory reduces the cost of doing business by eliminating the duplication of processes, it also reduces administrative costs, regulatory requirements by different member states and the risks and fines associated with non-compliance of goods in transit.

2.1.3 Inland Waterways

Lakes Victoria, Albert and Edward are used for transportation of goods inside and outside NC-member states. A new project under the NEPAD PICI has undertaken pre-feasibility study for developing a navigational link from Lake Victoria to Mediterranean Sea via Kagera River, Lakes George, Edward and Albert in Uganda, on to Albert River Nile to Nimule, Juba and Khartoum into Egypt. Inland ports of Kisumu and Kampala on Lake Victoria are under redevelopment.

The China Roads and Bridges Company (CRBC) the Chinese engineering and construction conglomerate that is currently building Kenya's SGR has been contracted to build a modern \$150 million port in Kisumu. The port will be built under a government-to-government arrangement and as part of phase two of the standard gauge railway (SGR) which will link Nairobi to Malaba on the border with Uganda. Kisumu is deemed a critical hub for trade with neighboring countries such as Tanzania and Uganda and by extension Rwanda and Burundi as well as those in the Great Lakes region.

Mahathir Infra Services of India has entered into an agreement with the Government of Uganda for the supply of oil hopes to cut cost by reducing the number of trucks on the road coming from Uganda to collect fuel in Kenya. The use of water vessels to transport the consignment, gives room for evacuation of huge volumes of fuel at ago and helps to create space for storage of more oil given that Kenya has constraints in oil storage capacity.

Lake Victoria's economic activity has however been eroded by a number of factors, including a derelict railway infrastructure and impenetrable and stubborn water hyacinth as well as boundary disputes that have turned the fresh water lake into a liability. The plans to construct a new sea port and extend a branch of the SGR line being built from Mombasa is expected to boost economic activities in Kisumu and other satellite towns.



Figure 2 Boats on Lake Victoria

2.1.4 Single Security Bond

While there has been an agreement on the introduction of a single Customs bond for transit ⁵KRA reports that less than half of the transit consignees are currently using such a bond, since the use of the single bond based on the COMESA standard is not obligatory. In some instances, a bond appearing to match the pro forma has been issued in Kenya, but there have been difficulties with collection because the bond is not in fact 100% compliant with the agreed regional format.

2.1.5 Customs Management Systems Connectivity

The East African Partner states have abandoned the USAID funded Revenue Authority Digital Data Exchange (RADDEX) system that failed to meet the regions expectations and provided little value for money. The corridor has therefore pursed more home-grown customs integration and interconnectivity solutions under the SCT which are in a short while yielding great results. There are however some lingering challenges as there are significant problems with the interface between the SIMBA and ASYCUDA world systems which have contributed to delay of cargo within Mombasa Port.

There is no link between Ugandan and South Sudanese customs management systems nor is there a link at the Rwanda/DRC border at Goma. South Sudan's Customs management system was commissioned in 2013. Freight forwarders and clearing agents in Juba estimated that it currently takes an average of 3-5 days to clear goods manually at Nimule.

2.1.6 Joint Verification and Joint Inspection of Cargo at the Ports and Borders

Joint verification now takes place at Mombasa and at the main Kenya/Uganda border post used by truckers, as well as at most Uganda/Rwanda and Rwanda/Burundi border posts. There is no provision for joint inspection at the Uganda/South Sudan border posts or at the main Rwanda/DRC truck crossing point. ⁶

⁵ For transit cargo moving under the warehousing regime, where duty is paid only upon removal from a bonded storage at destination

⁶ Experiential Survey on Non-Tariff Barriers Along the Northern Corridor (Kigali-Mombasa May 2013)

2.1.7 Police and Customs roadblocks

The proliferation of police checks within Kenya is still an issue that needs to be addressed. The issue has been raised more than once by Kenya Transporters Association (KTA) and others at Mombasa Port Committee meetings. It was anticipated that introduction of the electronic cargo tracking system (ECTS) by KRA within Kenya would improve cargo security, by being linked directly to Kenyan police. However, the rapid response teams that would be needed are reportedly not yet in place. With the advent of devolution in Kenya a number of county governments have proposed to charge transit fees on goods transiting their territory. This is an issue that would need to be tacked as it would lead to increased cost and delays.

2.1.8 Congestion at border posts

There are extended delays at the Kenya/Uganda border for both truck and rail traffic, despite the ongoing development of OSBPs' permitting joint (simultaneous) inspection by representatives of Kenya and Uganda. Some of these delays are because of the not-yet-complete 'one-stop' infrastructure at Malaba, being developed under an EAC initiative to develop up to 14 OSBPs in the region. Recent reports show that the following OSBPs are fairly ready for official opening and operational piloting is ongoing on some of them:⁷

- i. Busia (Uganda complete and handed over) /Busia (Kenya) (97%)
- ii. Horohoro (completed and handed over) / Lunga (completed)
- iii. Horohoro / Lunga Lunga;(100%) All Civil Works complete
- iv. Isebania (97%) / Sirari; (100% and handed over)
- v. Kabanga (Tanzania) is completed / Kobero (Burundi)
- vi. Kagitumba / Mirama Hills (100% complete);
- vii. Malaba (Uganda) is completed and handed over / Malaba (Kenya) is 85%
- viii. Mutukula completed and handed over
- ix. Namanga: 100% on the Tanzanian side and 88% on the Kenyan side External and Electrical works in Kenya are ongoing.

While One Stop Border Posts have allowed some initial improvements to be made to the time taken at the borders involved, however, they do not meet the requirement for declarations to be submitted only once electronically (all require paper copies as well) and for the importer/exporter to deal with one person. Delays are still being incurred at the borders as unnecessary time is taken in goods moving from one transit border post to another where under the auspices of the SCT effectively identical processes will take place. ⁸A simpler transfer between administrations would be possible where there is co-location of the two national border posts. In order for these One Stop Border Posts to be fully optimized a change in legislation will be required to allow for extra territorial administration of governments authority at the borders. There is also the need to provide for special express lane for goods in transit, thus allowing them to avoid the queues that form for goods that require fresh declaration and clearance at that border posts.

2.1.9 Transit Vehicles Convoy escorts

Except for traffic to South Sudan, escorts are no longer required for transit traffic, as a result of the implementation of the port to final destination in an inland country that imposed delay at each border.

 $^{^7}$ Report of the 13th meeting of the sectoral council on transport, communications and meteorology of the EAC - June 2016

⁸ Northern Corridor Transit Transport Coordinating Authority (NCTTCA), Northern Corridor Time Release Study 2016

2.1.10 24/7 Operations of border posts

Many border posts do not operate 24/7. Borders between Burundi and Rwanda and Tanzania are open 12-14 hours per day, while the Uganda/South Sudan border is open less than 12 hours per day and portions of the 200-km road between Nimule and Juba are closed between dusk and dawn because of security risks.

2.1.11 Regional Electronic Cargo Tracking System (RECTS)

Uganda, Kenya and Rwanda have commenced development and implementation of a joint electronic cargo tracking system. The system is expected to cost \$4.4 million and will enable the three countries to track movement of goods along the Northern Corridor from the port of Mombasa to Kampala and Kigali. The system is expected to reduce transit time, cargo theft and diversion of goods in transit, which will then reduce the cost of doing business along the corridor. The RECTs will also eliminate the need for physical escorts and monitoring of sensitive cargo, such as batteries, fuel and cigarettes. The system was officially launched by revenue authorities of Kenya, Uganda and Rwanda in Kampala and will be free as the tax bodies will meet all operational costs.

Uganda was the first country to launch the electronic cargo tracking system in 2014. It has since helped traders in the country reduce the time of transporting cargo from Mombasa from 6 days to a one- and-a-half days.

2.1.12 National and Regional single Windows to the Northern Corridor

The East African states of Kenya, Tanzania, Uganda and Rwanda a regional single window as one of the key trade facilitation instruments. An Electronic Single Window System will facilitate coordinated cargo clearance and tracking by allowing exchange of data among the East African Community (EAC) countries. It will be supported by the tracking system that monitors cargo from their check-off point to destination point, avoiding dumping and theft. Kenya, Uganda, Burundi, Rwanda South Sudan and Tanzania are all expected to adopt to the system that harmonizes border control. The EAC partner states are in the process of aligning their automated customs management systems to allow for seamless operations. The online trade details lodged into one electronic point shall help in fulfilling all import, export and transit-related regulatory requirements. Rwanda which was the first country to set up the Electronic Single Window System followed by Kenya.

2.1.13 Construction of Oil Pipelines

Currently, oil pipeline is limited to Kenya, with a pipe running from Mombasa to Nairobi, and extensions to Kisumu and Eldoret from where landlocked countries of Uganda, Rwanda, Burundi and East DRC access their fuel supplies. Oil pipelines are planned in Kenya and Uganda to ferry crude from fields to port and East African countries are in a race to start exploiting crude oil reserves estimated at 1.7 billion recoverable barrels in Uganda and 750 million barrels in Kenya.



Figure 3 the oil pipeline from Mombasa to Nairobi: - Source Kenya Pipeline

Both nations are planning to start construction on pipelines by 2018. Kenya plans to start building an 865-kilometer (538-mile) pipeline linking fields in its northern region to a port at Lamu on the Indian Ocean coast by 2018. Work on Uganda's pipeline, which will run from the western region of Hoima to the Tanzanian port of Tanga, is expected to begin in 2018. France's Total SA, China National Offshore Oil Corp. and London-based Tullow are developing oil fields in Uganda's Lake Albert basin.⁹

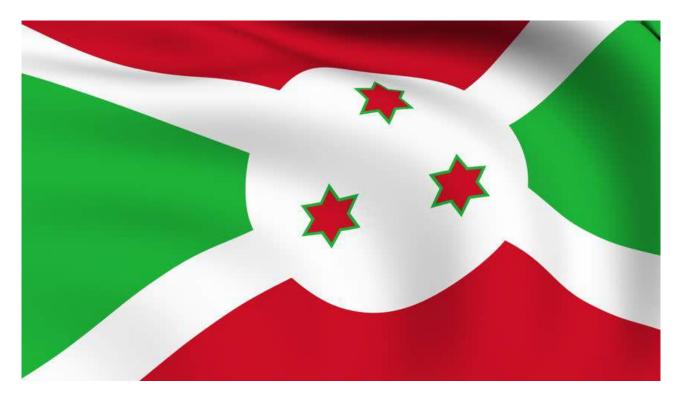
2.1.14 Gender and Freight Logistics

The freight logistics industry has traditionally been regarded as "no place for women." Poor working conditions have rendered the freight logistics industry especially unappealing to women, most notably in relation to working time, shift-working (24/7), and the location of employment (e.g. driving a truck long distances from home).

Women are underrepresented in the freight logistics industry with women's participation falling below 20%. The challenges that have led to this low level of participation are:

- Discrimination at the work place
- Unsupportive industry and work environment
- Sexual harassment
- Cultural and societal barriers
- Information and awareness

⁹ Africa regional report on improving transit cooperation, trade and trade facilitation for the benefit of the landlocked developing countries - status and policy implications by United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLLS)



2.2 The State of Burundi's Freight Logistics Sector

Burundi's freight logistics sector is nascent but in many ways stagnated due to challenges occasioned by the prevailing political upheavals.

2.2.1 Burundi's Road Freight

Burundi has a total of 12,322 kilometers of roads and only about 7 percent of them are paved. Road Freight logistics services in Burundi are extremely limited.

2.2.2 Burundi's Rail Freight

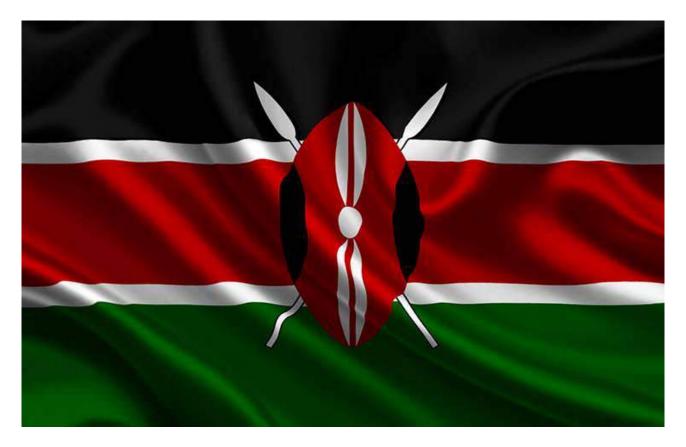
Burundi does not possess any railway infrastructure, although there are proposals to connect Burundi to its neighbors via railway connecting at Isaka with the existing Tanzanian railway network, and running via Kigali in Rwanda through to Burundi.

2.2.3 Burundi's Marine and Inland Water Transport

Lake Tanganyika is used for transport, with the major port on the lake being Bujumbura. Most freight is transported down waterways. Bujumbura port is located in the North of Tanganyika Lake. The port handles not only Burundi cargo but also transit cargo to Rwanda and DRC. Bujumbura port is a hub of 3 corridors: northern corridor (Mombasa), Central Corridor (Dar es Salaam) and Southern corridor (Mlungu-Zambia). The Government of Burundi has a project of rehabilitation of the port, including extension of berths and Fuel terminal.

2.2.4 Burundi's Air Freight

Bujumbura International Airport is the country's primary airport and is served by Brussels Airlines, Ethiopian Airlines, fly Dubai, Kenya Airways and Rwanda Air. The government's priority is to improve security and quality of services at Bujumbura International Airport. There is a plan to build an international airport near Gitega town as Gitega is planned to be the political and administrative capital of Burundi in near future.



2.3 The State of Kenya's Freight Logistics Sector

Kenya like the rest of the East African Partner states has for many years been plagued by a significant inadequacy of freight logistics infrastructure and freight logistics competence however in recent years the situation appears to be changing for the better.

The transport system infrastructure consists of a single commercial seaport; a single-track rail network consisting of a mainline and a few branch lines; an oil pipeline connecting the port through Nairobi to Western Kenya towns of Eldoret and Kisumu; and a classified road network of approximately 161,000 km. There are four international airports at Nairobi, Mombasa, Eldoret and Kisumu. The passenger terminals at airports in Nairobi and Kisumu have recently been expanded, though capacity constraints remain.

2.3.1 Kenya's Road Freight

In 2016 Road transport constituted about 80% of the total internal freight traffic in Kenya. Neighboring landlocked countries utilize Kenya's road network as it is the gateway through which goods are transported from the Mombasa port. Kenya's road network is about 160,886 km long, of which only 14,000 km is paved. The country's roads are severely overstretched and traffic jams are heavy especially in urban areas. The Kenyan government is working on improving and expanding its road infrastructure networks both domestically and across East Africa to improve trade flows in the region.

2.3.1.1 Road Maintenance

Recent studies show that there is a backlog of road maintenance which requires \$4 billion and that subsequent road maintenance requires \$500 million per year, compared with the annual Road Maintenance Levy Fund (RMLF) collections of about \$300 million.¹⁰

¹⁰ Source: Kenya Roads Board

These figures do not include required investments for the urgent need to expand the road network in Kenya. In order to close the financing gap, the Ministry is seeking increased investment from the Government and promoting the application of new financing mechanisms to finance, develop and manage the road infrastructure. These mechanisms include Public - Private Partnerships (PPPs) and the Annuity financing model under which 10,000 km of roads will be tarmacked in the next five years.

2.3.1.2 Planned Major roads

The Government also has plans to construct a second port at Lamu with new road links to Ethiopia (A1/14) and South Sudan (A10).

2.3.1.3 Devolution and its impact on the Roads sector

Despite the benefits of the devolution process, there are a number of issues yet to be resolved in terms of overlapping mandates and coordination that are undermining the effectiveness of the road sector. These include disputes over control of certain roads categories between national government and county governments, and poor demarcation of responsibilities between national roads agencies and country governments at the county level. This results in confusion, poor coordination and a lack of co-operation between different actors — undermining the efficiency of the sector. In order to align itself with the Constitution, the Ministry is currently undergoing reforms to facilitate the devolution of County Roads to County Governments. Towards this end, a Road Subsector Policy, 2014, and the Kenya Roads Bill, 2015, have been developed. The Bill is in Parliament awaiting enactment.

2.3.2 Kenya's Rail Freight

The East African partner States have committed themselves to development of the SGR with the same design standards from Mombasa to Nairobi, Kampala, Kigali and Juba. The Mombasa Nairobi SGR is the biggest infrastructure project in Kenya since independence. It will shorten the passenger travel time from Mombasa to Nairobi from more than ten hours to a little more than four hours. Freight trains will complete the journey in less than eight hours. Construction of the 609 km-long line began in October 2013 and is scheduled to be completed by June 2017.



Figure 4 the new SGR railway in Kenya: Source KRC

SGR Project, with a total length of 471.65 km, is designed as a single-track railway of diesel traction with maximum speed of 120 km/h for passenger service and 80 km/h for freight service. It is expected that 50% of cargo will be transported by rail and Carbon emission on road to be reduced to 40%. In addition, lower cost of business and less transit time. More container loading capacity i.e. 4,000 tones/train. The freight terminals will be located at the Mombasa port and the Inland Container Depots at Embakasi in Nairobi.

The railway line is designed to carry 22 million tons a year of cargo or a projected 40% of Mombasa Port throughput by 2035. As at December 2016; 99.4 percent of earthworks were complete, concrete works 100% complete, station building works 85.25% complete and track laying 90.49% complete. State-of-the-art passenger stations have been constructed at Mombasa and Nairobi as well as five other intermediate stations at Mariakani, Voi, Mtito-Andei, Sultan Hamud and Athi-River.

2.3.3 Kenya's Marine and Inland Water Transport

2.3.3.1 Eliminating Congestion at the Port

KPA estimates that average dwell time within the port is currently about 3-6 days. KPA also estimates that 55% of this time is accounted for by delays that are in the hands of consignees or their agents, including late lodging of the manifests (the manifest section of KRA has been relocated from Nairobi to Mombasa to facilitate timely processing) and last-minute changes by the consignee or his agent to delivery location or other details.

While consignees are represented at the weekly Port Committee meetings, it appears that not all fully appreciate the importance of all participants in the freight logistics chain taking all possible steps to reduce delays. ¹¹

2.3.3.2 Reduction in Time Taken at the Document Processing Centre Kenya Revenue Authority (DPC)

There has been A was a marginal decrease in DPC time from 3.4 hours in January 2016 to 3.0 hours in December 2016. This performance falls short of the 2.6 hours averaged in 2014 showing that the DPC has moved away from the performance target of 2.0 hours set three years ago.

Initiatives that have been taken to improve DPC time include on the spot approval of manifest, allowing partial manifest and simultaneous online submission of manifest. The implementation of

¹¹ Experiential Survey on Non-Tariff Barriers Along the Northern Corridor (Kigali-Mombasa May 2013)

this initiatives also calls for expansion of capacity to accommodate the growing volume of cargo that is handled at the DPCs.



Figure 5 A cargo ship at the port of Mombasa berth number 14

2.3.3.3 Mombasa Port Charter

The Mombasa Port Community Charter which was signed in June 2013 provides various commitments among them to:

- Achieve 70% pre-arrival clearance of cargo handled by the Mombasa Port.
- Paperless cargo clearance by integrating community systems into the KNESWS
- Increase liquid bulk holding capacity to 11,000,000 MT by December 2015.
- Achieve an average of 120,000 km per truck per annum by December 2016.
- Transform Mombasa Port into a high performing landlord port by 2016
- Grow cargo off take by rail to above 35% of throughput by December 2018.

Implementation of these targets will support the regions efforts in enhancing the northern corridors efficiency. Thus far waiting time before berth targets has been surpassed and a review is recommended. The table below summarizes performance of key monthly indicators as of December 2016.

CATEGORY	INDICATOR	TARGET	STATUS DECEMBER 2016			
Maritime Indicators	Vessel turnaround time	72	76.4			
	Ship waiting time before berth	24	21.5			
Port Indicators	Containerized Cargo Dwell time	72	104.3			
	One Stop Centre Time	24	57.79			
	After customs release	36	50.56			
	Document Processing Centre Time	2	2.35			
Corridor Indicators	Transit time Kenya in Hrs. (from Mombasa to Malaba)	72	105.6			
	Transit time Kenya in Hrs. (from Mombasa to Busia)	72	205.3	205.3		
	Weighbridge traffic (Average No of trucks weighed monthly)	All	Mariakani	4043		
			Athi River	9619		
			Gilgil	4641		
			Webuye	1671		
			Busia	446		
	Weight compliance at weighbridge	100				

Table 2 Table 2: Port Community Performance Data 2016- Source Northern Corridor

2.3.3.4 Transforming of Mombasa Port into a Transshipment Port

The Port of Mombasa plays a vital role in the transport network of East Africa as it serves a region of over 250 million people and handles traffic to Kenya, South Sudan, Uganda, Rwanda, Burundi, Democratic Republic of Congo (DRC) and Tanzania. It has experienced major traffic growth, averaging 10% annually over the past 10 years. The project consists of the comprehensive rehabilitation and upgrade of several existing quays, and a land reclamation component that aims to increase the port's storage capacity. After completion, the facilities will be used for both containers and general heavy cargo handling.

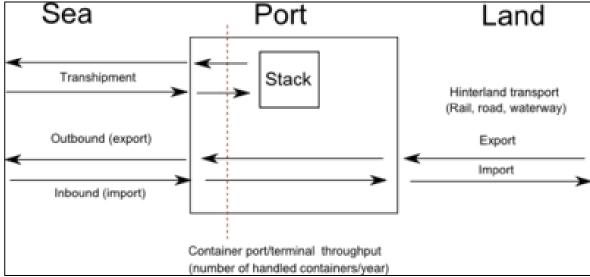


Figure 6 Scheme describing the possible container flows at a container port/terminal

The project also includes a capacity building and environmental management component targeted at the Kenya Ports Authority.

With the expensive dredging behind it and the era of fast train set to begin, Mombasa may as well begin to think of its future as one of Africa's transshipment hubs. As a transshipment port, Mombasa will receive large ships from industrialized nations which will create a micro economy as they offload their cargo onto smaller vessels which eventually complete the journey to other ports in the region.

Transshipment cargo volumes have already increased by 87 per cent over last year's levels to hit 19,225 twenty-foot equivalent unit (TEUs). Dar es Salaam, Pemba, Mogadishu and Mauritius have so far proved as early beneficiaries of Mombasa port's improving status. Last year, KPA commissioned phase one of the second container terminal, built with a billion US dollar loan from the Japanese government through the Japan International Cooperation Agency (JICA). It has a capacity to handle 550,000 containers annually. Support from AfIF will complement EIB and AFD loans providing crucial funding that will strengthen the governance and financial capacities of the Kenya Ports Authority, ensuring the long-term sustainability of the project.12



Figure 7 the New Mombasa Container Terminal

2.3.4 Kenya's Air Freight

2.3.4.1 Jomo Kenyatta International Airport Expansion

Kenya's air transport services have outstripped those in Uganda, Tanzania and, in relative terms, Ethiopia. Nairobi remains the major hub for East Africa and with KQ rivalling the services provided by Ethiopian Airlines at Addis Ababa. Air-freight is not a constraint to the export of fresh produce found in neighboring countries. However, Ethiopian Airlines makes direct flights to the United States (US) as Bole Airport has FAA Category 1 security clearance and the Ethiopian Civil Aviation Authority is categorized as satisfactory.

Jomo Kenyatta International Airport (JKIA) is one of the busiest in Africa serving as a major hub in East Africa for cargo and tourist passengers. A number of upgrades at Kenya's airports should help improve passenger capacity and airline access, increasing the country's ability to handle more traffic every year.

¹² Business daily Tuesday, May 16, 2017 19:40



Figure 8 JKIA cargo terminal: Source Air Freight International Magazine

Nairobi's Jomo Kenyatta International Airport (JKIA) Terminal 1A was opened after an August 2013 fire destroyed the former international arrivals terminal, which is currently being demolished. The new terminal will be used exclusively by Kenya Airways and its Sky team partners for all of their domestic and international flights.

A long-awaited new, second runway is also planned and will cost \$141.5 million. The changes form part of a broader program of modernization and rehabilitation of the aviation infrastructure across Kenya. With improved airport infrastructure and connectivity, a crucial part of the government's Vision 2030 plan, airports in Mombasa, Kisumu, Malindi and Lamu will also see sizable investments, as will smaller airstrips in rural areas. Total investments of about \$150 million have been made in improvements over the past few years

A final piece of the puzzle will be implemented when Kenya can reinstate flights to the US. The airport is currently overhauling its security arrangements for both passenger and freight traffic, as it continues to make its case for direct flights to the US after it cancelled the planned start of direct flights nearly six years ago.

2.3.5 Other Cross Cutting Logistics Issues in Kenya

2.3.5.1 Revive the operation of Dry Ports

Inland Container Depots within the Northern Corridor enhance the Port of Mombasa throughput capacity, the clearance of cargo and container handling. In Kenya, the ICDs are managed by the Kenya Ports Authority (KPA) and linked with the Port of Mombasa by regular container rail services. The depots are located at Nairobi, Kisumu and Eldoret, and have transit sheds and stacking grounds equipped with various types of cargo handling equipment. The ICDs were established to realize maximum benefits of containerization of cargo. There is need to revamp and restore these facilities to extend the benefits of containerization further inland.



Figure 9 Artists Impression of Embakasi ICD. The facility is being expanded to create extra capacity

The upgrading of the Internal Container Depot (ICD) in Nairobi near Embakasi is expected to be completed by the end of May 2017 when the first phase of the Standard Gauge Railway (SGR) line is planned to deliver its first consignment. The facility is being upgraded to create an extra capacity to handle the increased volumes of the cargo that is expected to be delivered on rail. The existing ICD has the capacity to handle only 180,000 Twenty Foot Equivalent Units (TEUS) per annum that is currently being delivered by the existing Meter Gauge Railway (MGR).

Both the SGR and MGR will exist side by side at the ICD with the SGR expected to handle at least 405,000 TEUs per annum. Cargo evacuated from the port of Mombasa through the SGR will be cleared at the ICD. The ICD clearing procedures will be similar to those at the Port of Mombasa or the Container Freight Stations (CFSs).

Private sector players have already begun to invest in warehousing and these warehousing capacities may be used for the setting up of CFS facilities. ICD will be supported by extra containers handling capacity at the proposed Nairobi South Hub currently under construction. While the ICD-Nairobi will handle containers for customs clearance in Nairobi, the Nairobi South Hub will handle containers already cleared in Mombasa.

A 5.1 kilometers of SGR track in the ICD for reception and dispatch of container trains are being constructed and as part of the SGR project, new equipment's will be acquired that include rail mounted container cranes, front loaders and tractor operated transfer trucks.

The combined transport capacity of the SGR and the existing line will account for approximately 45% of total freight. Currently, the volumes of the cargo being evacuated from the port of Mombasa through the existing line has remained at less than 10%, with the bulk of the cargo being hauled on trucks through Kenyan roads.

2.3.5.2 Reduction and Automation of Weighbridges

Truckers operating within Kenya and in the inland countries continue to report that there remain multiple weighbridges and multiple checks of weight documents on the roads linking Mombasa to the Ugandan border. In fact, the NC-TTCA Dashboard continues to report on number of vehicles weighed and average delay not only at Mariakani, but also at Athi River, Gilgil, Busia and Webuye.

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The EAC established an Axle Load Control law in 2013. The Kenya Transporters Association, Kenya Long Distance Truck Drivers Union, a range of Government agencies including KRA and Kenya National Police Service and the NCTTCA put in place a Self-Regulatory Charter on Vehicle Load Control however its success has been limited. The use of High Speed Weigh in Motion (HS-WIM) technology should eventually result in a reduction of delays at the weigh bridges in addition to minimizing delays this technology would minimize opportunity for corruption at the weigh bridges. Weighbridges remain a necessary control at the moment, as the compliance rate of the trucks is still at an unacceptable rate. This should improve naturally, but only if management ensures that the controls are applied and that the penalties are sufficiently deterrent.

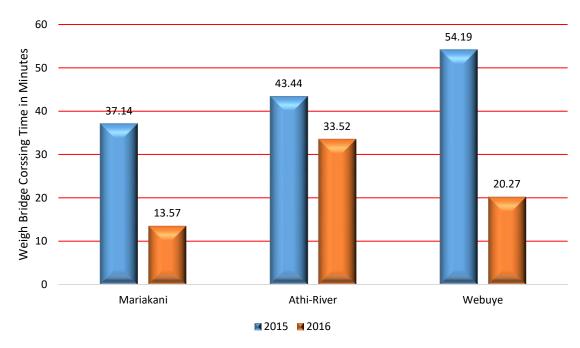


Figure 10 Average Weighbridge Crossing Time in Minutes: Source Northern Corridor Transport Observatory Survey 2016

2.3.5.3 Kenya National Single Window System

On May 2, 2014, a year after the KNESWS went live, President Uhuru Kenyatta of Kenya, together with his regional counterparts, President of Rwanda and President of Uganda, officially launched the KNESWS. The process of implementing the KNESWS involved the implementation of 20 modules, streamlining and automation of approximately 42 processes, and establishing connectivity with 29 government agencies—with and without ICT systems. Implementation was phased and the two final modules were implemented in 2016.

According to the International Finance Cooperation Implementation of the KNESWS has resulted in streamlined import and export processes and procedures and effective information sharing, and it has facilitated genuine collaboration among stakeholders involved in international trade. The initiative enables importers and exporters to conveniently submit documents from the comfort of their offices or homes. The IFC reports that implementation of KNESWS has resulted in:

a. Improved connectivity, processes and procedures, and governance: Connectivity to the single window has been established with 22 government agencies that issue various permits and 32 procedures that are fully automated. Twelve government agencies boast 100 percent use of the KNESWS for receipt and issuance of permits. An e-payment system is now operational and has streamlined payment arrangements for permits. The system also has improved governance, as demonstrated by comments from the public and private sectors.

¹³ Northern Corridor Time Release Study 2016 By NCTTCA

- **b.** Time reduction for processing pre-import documents: The KNESWS has contributed to marked improvements in time taken to obtain pre-import/export permits. The time for processing permits has been reduced in some cases by as much as 200 ¹⁴percent.
- c. Reduction in clearance time: In the past, physical hard-copy permits had to be scanned and then submitted at the time of clearing goods. Today, soft copies of permits are available for seamless use by customs through the KNESWS. This has eliminated the need to submit hardcopy permits at the time of clearance of cargo. This initiative, coupled with others, has contributed to reduction of clearance time by 53 percent and cargo dwell time by 39 percent
- **d. Cost and complexity reduction:** The automation of processes and procedures has resulted in convenience and substantial savings as traders' costs associated with transportation, time, and telecommunication have been reduced or eliminated. For instance, the number of trips between agencies and the banks has been significantly reduced.



2.4 The State of Rwanda's Freight Logistics Sector

Rwanda has made significant achievements in developing transport infrastructure in recent years. Road transport is the dominant mode of travel in Rwanda catering for the bulk of domestic passenger travel and freight traffic demands. The main freight on Rwandan roads consists of agricultural products, construction materials, household goods, foodstuffs and minerals.

2.4.1.1 Rwanda's Road Freight

All activities within the road transport sector are managed by the Rwanda Transport Development Agency (RTDA) which operates under the Ministry of Infrastructure (MINIFRA). Within the legal and institutional framework stated in the National Transport Policy, MINIFRA is responsible for the sector's policies and strategies. Rwanda is dependent on its road transport system for the economic development of the country. All the major towns are connected by the road network. Rwanda is also well connected by the road transport system with the neighboring countries of Uganda, Kenya, Tanzania, Burundi and the Democratic Republic of Congo.

¹⁴ International Finance Corporation, Opening opportunities: Kenya's Electronic Single Window February 2017

The road system plays a very important role in the import and export business of the country. The Rwanda road network has improved through rehabilitation and upgrading during the past years. The total road network covers 2,662 km of paved roads and 11,346 km unpaved roads, making a total of 14,008 km. Roads are classified into national (2,860 km), District (1,835 km) and gravel roads (3,563 km). (15

Primary roads, which are suitable for heavy long-haul trucks, connect the capital Kigali with the provinces and international border crossings. The paved primary roads link Kigali with the major locations of Ngoma, Kirehe, Huye, Gicumbi, Nyagatare, Rusizi, Musanze and Rubavu. Many of these roads are steep, especially in the Northern and Southern provinces, and therefore travel speeds along these roads should be quite slow. Secondary roads are generally acceptable for small trucks (15 MT max) but require 4WD during rainy seasons especially on roads in mountainous areas. These roads are narrow, steep and difficult to pass during the 6 – 7 month long rainy season. The condition of the district roads in rural areas will only allow small trucks of a 10 MT capacity during the dry season and only about 5 MT during the rainy season.

Rwanda is a small country and the distances from Kigali to the provincial towns are not very far in relative terms. However, due to road conditions and the terrain, the average travelling time for a heavy loaded vehicle, it takes from Kigali as follows: Huye, 3 hours; Cyangugu, 5 hours; Gisenyi, 2 hours, Ngoma, 3 hours; and Karongi, 4 hours. All secondary roads are unpaved and become very difficult to travel across during the wet season. Truck movements during the rainy season become very difficult due to floods and mudslides, especially with the mountainous terrain of the country,

2.4.2 Rwanda's Rail Freight

Rwanda does not have a railway and it will take some time for Rwanda to develop railway infrastructure as Rwanda must wait for her neighbor Uganda to complete building its route connecting Kampala-Kasese-Mpondwe-Mirama hill which will connect with Kagitumba border in the eastern part of Rwanda. However, Uganda has not yet started building this route because it also has to wait for Kenya to complete building the Naivasha-Malaba route by 2020 to connect with Uganda on the Malaba border. Rwanda ability to tap onto the regional network will depend on progress of implementation of railway projects under the northern corridor initiative in Tanzania and Uganda. These routes are Dar-es-salaam-Isaka-Kigali route which will connect Rwanda on the south-eastern part, but this route is still at study-level and basic design was only approved in August 2016. Compared to Kenya, Tanzania and Uganda routes, Rwanda has short routes and it can complete them in a very short time. It is justifiable that it cannot start constructing a railway unless bordering routes are complete. Rwanda is therefore focusing on other major infrastructures like airports and roads.

The Rwanda has implemented an Electronic Single Window (ReSW) which was launched in 2012 and has been a major force in its improved freight logistics performance. Clearance times have been reduced, and both direct and indirect costs connected with international trade have been reduced as processes were re-engineered and simplified. Both the regulators and the private sector stakeholders have expressed satisfaction with the operations of the ReSW.

2.4.3 Rwanda's Air Freight

Rwanda being a relatively small country in terms or area and with relatively good quality roads there is not much requirement for many regional airports. Additionally, being such a hilly country there is little flat land.

The aviation sector in Rwanda has seen massive growth over the recent years. The sector is regulated by the Rwanda Civil Aviation Authority (RCAA) which manages all aspects of civil aviation in the country. In the recent past, the institution has undergone legal reforms which have greatly impacted the execution of its operations in ensuring safety, security and infrastructural development.

Kigali International Airport (KIA), formerly known as Gregoire Kayibanda International Airport, is the primary airport serving Kigali, and the only international airport in the country. It is the main air gateway for all destinations in the country, and in addition serves as a transit airport for Goma and Bukavu in the eastern Democratic Republic of Congo. The airport is located in the suburb of Kanombe, at the eastern edge of Kigali, approximately 12 km from the city Centre.

There has been significant growth in air traffic with introduction of a number of international airlines to the country. KIA is undergoing expansion to meet the midterm additional capacity requirements. For the longer term, plans are underway to construct a world class international airport – New Bugesera International Airport (NBIA) - which will be located some 40 km from Kigali.

Domestic air transport is very limited. Regular flights are conducted to Kamembe Airport, while Gisenyi aerodrome is being upgraded.

Rwanda Air, the national carrier, has in the recent past acquired new aircraft and operates on many routes in Africa and United Arab Emirates. Other airlines operating flights to Kigali include Kenya Airways, Ethiopian Airlines, SN Brussels Airline, Qatar Airways, Turkish Airlines, and China Postal Airlines.

2.4.3.1 New Bugesera International Airport (NBIA)

Bugesera International Airport is being constructed to accommodate the growth of air traffic in Rwanda. The project will cost approximately US \$650 million and will be located 25 km southeast of Kigali. The airport will have capacity for three million passengers per year. The first phase of construction will include the runway of 4,200 m, a cargo terminal and a passenger terminal with capacity for 1.8 million passengers per year.

2.4.3.2 Upgrade of Airports

In order to respond to the air traffic growth in Rwanda, the government has decided to upgrade its 3 main airports of Kigali, Kamembe, and Gisenyi/Rubavu. It includes terminals and runways expansion, new security, navigation and meteorological system.

The domestic airports of Kamembe and Gisenyi/Rubavu, located in the South and Southwest of Rwanda, respectively, have been given priority for rehabilitation by the government of Rwanda. The airport terminal in Kamembe has been upgraded; both Kamembe and Gisenyi/Rubavu airports will be standardized to accommodate heavy aircraft.

2.4.4 Rwanda National Single Window System

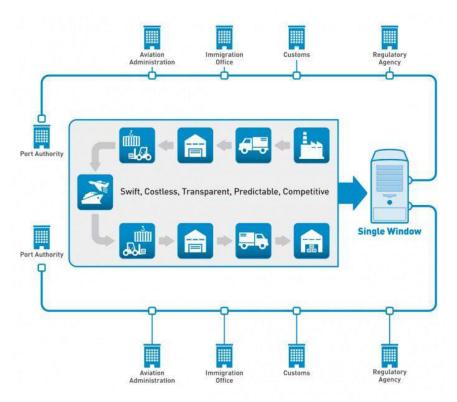
In early 2012 the pilot phase of Rwanda's National Single Window System began. In February 2013, the system was officially launched. These systems are now popularly known as the Single Window Information for Trade Systems (Swifts). The targeted agencies are: Rwanda Development Board; Rwanda Standards Board; Rwanda Agriculture and Livestock Inspection Services; National Agriculture Export Board; Rwanda Agriculture Board — Veterinary Services; and The Ministry of Health Pharmaceutical Unit. The aim was to enhance the efficiency of the Single Window by integrating these systems to enable direct information/data exchange so as to eliminate paper-based permits during clearance of goods. The development and integration of these systems began in 2014; to date four systems have been successfully integrated with the Single Window System.

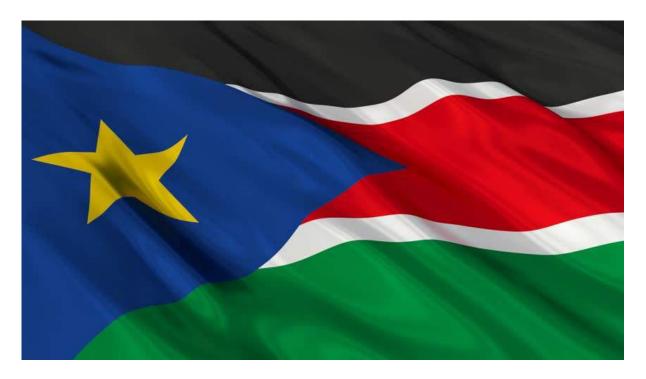
With the core work ongoing, TMEA was supporting the other government agencies involved in clearance of goods to automate their backend systems and procedures for licensing or issuance of permits as well as mandatory import or export inspections.

According to a report by the international Finance Cooperation published in February 2017 implementation of the ReSW has resulted in:

- a. A reduction in the average time to clear imported goods through customs from 264 hours (11 days) in 2012 to 34 hours (1.5 days) in 2014. Export clearance times dropped from 67 hours (about 3 days) to 34 hours (about 1.5 days). The elimination for importers of the \$50 fee associated with securing a tax exemption certificate and a combined savings to-date of as much as \$2.6M, based on the number of certificates issued between 2013 and 2014.
- b. An increase in the productivity of transporters and other logistics providers' assets as a result of shorter turnaround times for clearance of goods as well as savings associated with lower parking fees, demurrage costs, warehousing rent and storage penalties. The money value of higher productivity likely exceeds a combined \$6M a year.
- c. Increased cooperation among Rwandan agencies involved in customs and shipments. For instance, RRA and the Rwanda Standards Board (RSB) developed a shared risk profiling mechanism that facilitates a robust risk-based assessment of goods.

Improved efficiency in the form of expedited, more transparent transactions and communication between government and the private sector. Also, real time monitoring of the progress of goods through the system is now possible and there is reduced scope for corruption as a result of fewer face to face interaction between system actors.





2.5 The State of South Sudan Freight Logistics Sector

South Sudan has one of the world's most underdeveloped roads networks. The total estimated track length in South Sudan is approximately 90,200 km, which includes approximately 14,000 km of primary and secondary roads, and 6000 km of tertiary tracks.

The current interstate and international roads network consists of around 5,000 km of gravel roads with approximately 300 km of sealed roads. Currently only one international road, the 192 km stretch between Juba-Nimule on the Ugandan border is sealed. The majority of other sealed roads are urban roads within the capital city Juba. All other national, interstate and urban roads consist of badly or non-maintained dirt roads.

The rugged land terrain, insecurity in certain areas along transport routes, the vast distances to be covered, and the sheer size of capital investment required, are all limiting the expansion of the roads network and addressing the severe infrastructural backlog currently faced by the government. The general infrastructure and conditions of the roads makes them vulnerable to seasonal influxes, with many roads impassable during the rainy season for extended period of times and cutting off large areas of the country.

All these factors contribute to relatively high transportation costs and the Government has identified the poor condition of the road network and infrastructure as one of the major constraints to economic and social development. As such, the government through its long-term development initiatives have identified road construction and the upgrade and expansion of existing infrastructure as a key priority.

Since resumption of conflict in December 2013 road travel has become precarious. Road conditions, at best, remain assessed as very poor, markings and very limited maintenance increasing the security risk. Compounding this situation is the current absence of adequate policing of the nation's roads, resulting in dangerous standards of driving and even in major towns there is almost no enforcement of existing traffic regulations.

During the rainy season, many of South Sudan's roads become impassible and injury from motor vehicle accidents, and exposure to other risks such as illegal checkpoints to staff traveling by road increase. Road checkpoints are a common occurrence, especially in large towns and cities, and in areas that have recently experienced civil unrest.

Currently there are no weighbridges in the country and low capacity to enforce axle load limits. South Sudan is adjusting to the regional axle load limits set through the Common Market for Eastern and Southern Africa (COMESA) and East African Community (EAC) requirements, and which is currently set at a maximum of 56 tones with a 0% weighbridge allowance. These requirements permit some of the highest Gross Vehicle Mass limits in the world; however, countries in the region apply these load limits differently so vehicles travelling through the region to South Sudan will be subject to compliance with the lowest axle load limit. Note, Traffic from Ethiopia into Upper Nile State can move payloads of 45 MT per truck.

2.5.1 South Sudan's Air freight

Civil aviation falls under the authority of the Ministry of Transport and South Sudan which has been a member of the International Civil Aviation Organization (ICAO) since 10 November 2011. In 2013, the South Sudan Civil Aviation Authority was established and the aim of this statutory authority is to formally oversee and regulate the countries aviation industry, airline companies, and operations.

South Sudan's Juba International Airport (JIA) is currently the only airport receiving flights from international commercial airline carriers. The other major airports include Wau, Malakal and Rumbek.

The aviation industry in general is characterized by decades of underdevelopment, little investment in infrastructure, low capacity and a poor safety record and adherence to international standards. The country is however readily accessible by air as there are hundreds of fixed wing and helicopter landing sites spread out across the country, of which more than 50 airstrips are serviceable by fixed wing aircraft. The vast majority of these strips are gravel however and only accessible by light aircraft. Only Juba, Paloich, Malakal and Wau airports currently have asphalted runways capable of handling large aircraft.



Figure 11 Juba International Airport (JIA)

The availability of fuel, aircraft maintenance facilities and handling services remains an issue, especially in remote areas. A small number of private sector operators are able to supply fuel at the various major airports, however fuel is imported from neighboring countries increasing cost and risking fuel shortages, especially during the rainy season. Basic repairs and maintenance can be conducted in South Sudan; however, major repairs have to be conducted in neighboring countries or in some cases Europe.

More recently, a concerted effort by the government is being made to upgrade existing aviation infrastructure, expand the network, and manage its airspace. In recent times there have also been growths in commercial domestic carriers, air charter and airfreight companies providing reliable service.



2.6 The State of Tanzania's Freight Logistics Sector

The transport system in Tanzania consists of five modes: roads, rail, water, air and pipelines. A high proportion of the infrastructure was not modernized over time due to limited resources to invest and a large amount of infrastructure and equipment is now beyond its economic life.

2.6.1 Tanzania's Road Freight

The Tanzanian National Roads Agency (TANROADS) is the body mandated to manage Tanzania's trunk and regional road networks that total 12,786 kilometers of which 5130 kilometers is paved, the maintenance and development of the primary road network to support economic and social developments that will have an impact on humanitarian livelihood programmers.

The regulation of the road transport industry is the responsibility of the Surface and Marine Transport Regulatory Authority (SUMATRA). As part of the enforcement procedures, SUMATRA conducts roadside inspections to monitor compliance with licensing conditions. A large number of offenses suggest that there is widespread abuse of license conditions despite the imposition of fines. Overloading is common with about 25% of trucks exceeding axle load limits.

Roads in the regions of Arusha and Kilimanjaro are better off, some are connected to tarmac network and some are not. Roads in Manyara region are bad especially in Simanjiro and Kiteto districts. Destinations close to tarmac roads are easily accessible even with trucks of over 30 metric tons but those that are not close to tarmac roads, can't be accessed with trucks of over 15 metric tons. Trucks of 10 to 12 metric tons capacity mainly serve those destinations. Typical of those destinations are in Ngorongoro, Babati, Monduli, Simanjiro, and Karatu districts. During rainy seasons, roads deteriorate even more, makes transportation on 10-15 metric tons capacities even difficult. Tractors and fourwheel pick-ups are much preferred this time, which in turn adds to the cost of transport.

2.6.2 Tanzania's rail Freight

Tanzania has 2 railway systems of different gauges that were constructed at different times and for different purposes.

- a. The first and oldest line is one operated by the Reli Asset Holding Company which was constructed in colonial times and is meter gauge (1,000 mm) standard rail. The line comprises the central corridor between the port of Dar Es Salaam linking central and western areas of the country and terminating at Kigoma on Lake Tanganyika in the west. The line is operated under concession however, this concession is experiencing major difficulties and has not improve the services.
- b. Tanzania/Zambia Railway (TAZARA) is Tanzania's second railway and was built by China. It is a cape gauge standard rail (1,067 mm gauge) and links the port of Dar Es Salaam with Zambia. An interface has been constructed to link this line with the TRL line to facilitate freight traffic interchange between the two rail lines. TAZARA line has performed poorly for over 30 years due to undercapitalization.

The development of ports in Tanzania has a long history extending well over a century commencing with the initial coastal settlements in Dar es Salaam and Tanga to serve the lakeside communities and provide trading nodes to surrounding settlements.

2.6.3 Tanzania's Maritime Freight

The Tanzania Ports Authority (TPA) network of ports serve a large market which includes the whole of the country's hinterland and the neighboring landlocked countries of Burundi, Rwanda, DR Congo, Uganda, Zambia and Malawi. The main seaports, especially Dar es Salaam, provide vital access to world markets for this region. The ports on Lake Victoria, Tanganyika and Nyasa are also important for local and international trade although they now suffer from competition from road transport in many locations. The inefficiencies in port operations are a major cause of total delays to cargoes in the freight logistics chain. Ship turnaround time has improved significantly over the years due to the removal of the exclusivity clause in the TICTS concession as a larger number of berths are now available to handle the container trade.



Figure 12 Dar es Salaam Port

Major constraints affect international trade with the increasing congestion and capacity in Dar es Salaam port, the country's main port. The capacity of the port to handle additional container traffic is limited as facilities are already operating beyond the capacity design limits. Additional berths are required and the expansion plans are expected to be supported with assistance from China.

2.6.4 Tanzania Airfreight

Airports in Tanzania play an important part in the country's transport infrastructure. In addition to providing international gateways, airports have historically been used in domestic traffic and have been indispensable for pioneering development opportunities in remote rural areas.

Overall, the country has 368 airports with the Tanzania Airports Authority (TAA) responsible for 58 airports on the mainland. The majority of the airports are private airfields owned by mining companies and tour operators.

Despite the long history of air transport sector in the development of the country, operations of few international airlines and the national airline, Air Tanzania, do not play a dominating role in the development of the air transport industry. While many routes are long distance and require long trip times by road, the demand for air travel has remained relatively small and has not developed as fast as in many other countries. Low demand coupled with high operating costs and limited competition has resulted in high fare structures when compared to other parts of the world and this has also had an adverse impact on the growth of the industry.

The subsector is highly dependent upon capital investment from the government for undertaking airport improvements. Such contributions are not part of the balance sheet of TAA and the debt incurred for airport improvements is handled by the government.

2.6.5 Pipelines

Tanzania has three pipelines namely:

- a. The TAZAMA pipeline which transports crude oil from Dar es Salaam port to an oil refinery at Ndola in Zambia over 1,710 km
- b. The Songo-Songo pipeline which transfers natural gas from Songo-Songo island to Dar es Salaam over 232 km and
- c. The Mnazi Bay pipeline which transfers natural gas from the Mnazi gas field to a power plant in Mtwara over 28 km.

The oil and gas industry is currently expanding at a fast pace as new sources of supplies are being discovered. The development of additional pipelines is in the planning stage and further developments will also be undertaken in line with new oil and gas discoveries. These new investments in pipeline facilities will largely involve investment by the private sector and will be under the responsibility of the Ministry of Energy.



2.7 The State of Uganda's Freight Logistics Sector

2.7.1 Uganda's Road Freight

Uganda's road network is categorized into four classes namely national, district, urban and community access roads. The national roads network totals to 20,544 km comprising paved and unpaved roads. As of June 2016, the paved network was 4,157 kms (20 %) and the unpaved 16,388 km (80 %). National roads are managed by the Uganda National Roads Authority (UNRA).

Uganda's transport sector includes four transport modes namely roads, railway, water and air. Road transport is the predominant mode, accounting for over 90% of cargo freight moved. It upgraded 176 Kms of national roads in 2016 from gravel to tarmac.

2.7.2 Uganda's Rail Freight

Uganda also made some progress with regard to the construction of the Standard Gauge Railway (SGR). The Government signed a contract to develop the Eastern (Malaba-Tororo-Jinja-Kampala) and Northern (Tororo-Mbale-Soroti-Lira-Gulu-Nimule/Pakwach) Standard Gauge Railway lines. In addition, the SGR Protocol was signed to enable joint development and operation of a modern, fast, reliable, efficient and high capacity railway transport system. Land acquisition and compensation is in advanced stages on the Eastern route whereas Preliminary Engineering Designs, Environmental Impact Assessment and preparation of Bankable Feasibility Studies is on-going on the Northern, Western and Southern routes.

2.7.3 Uganda's Air Freight

The year 2016 also saw the upgrade and expansion of Entebbe International Airport with the objective of accommodating current and future air traffic. This project is implemented by the China Communications and Construction Company Ltd under design and build contract.

Air Transport is dominated by operations at Entebbe International Airport (EBB). Government has designated five other airports as potential entry/exit (international) airports, namely Arua, Gulu, Pakuba, Kidepo and Kasese. There are a further 8 airfields, namely: Soroti, Kisoro, Jinja, Lira, Tororo, Masindi, Mbarara and Moroto which can receive charter flights. The rest of the upcountry airports are either privately owned or managed by Local Authorities.

2.7.4 Uganda's Rail Freight

The railway network in Uganda extends for an estimated 1,260 kms. It comprises:

- The main line from Kampala to Tororo/Malaba, part of the Northern Corridor between Kampala and Mombasa (250 km),
- Spur lines to Jinja and Port Bell ferry terminals on Lake Victoria for routes to Kisumu (Kenya) and Mwanza (Tanzania) (21 km),
- The western line from Kampala to Kasese (333 km),
- The northern line from Tororo to Pakwach (641 km) and,
- The Busoga Loop line (15 km)

The railway transport system in Uganda also includes rail wagon ferry services on Lake Victoria connecting Port Bell and/or Jinja to rail networks in Tanzania at Mwanza and Kisumu in Kenya. The Uganda rail track is meter gauge. The Government is in the process of constructing a standard gauge railway between Torororo —Pakwach and Kampala- Tororo and Malaba -Kampala.

2.7.5 Uganda's Inland waterways

About 18% of Uganda's total surface area is covered by water. Most of the main water bodies are navigable and are used by motorized and non-motorized water vessels. In addition, rail wagon ferries at Jinja and Port Bell in Lake Victoria connect with rail networks in Mwanza (Tanzania) and Kisumu (Kenya). The MV Kaawa has been rehabilitated and was re-commissioned in August 2012. The vessel is currently operated by Rift Valley Railways as part of the concession agreement with Government.



Figure 13 An aerial view of an oil exploration site in Bulisa district, approximately 244 km (152 miles) northwest of Kampala in this undated handout photo from Tullow Oil Uganda, received by Reuters July 4, 2012.

Conventional water transport passenger services are provided on Lake Victoria by one Government owned vessel, MV Kalangala and four other passenger service vessels operated by the private sector namely: MV Pearl, KIS, MV Amani, MV Ssese and MV Amani. However, numerous small craft operating on inland waterways in Uganda whose safety standards continue to be a source of concern to both Government and the travelling public. The Ministry is in the process of developing standards for these vessels to ensure water transport safety.

To Juba © 2009 Ezilon.com All Right Reserved NAKODOT To Addis Ababa LOKICHOKIO MOYALE LODWAR Bule Held Lokichar UGANDA MARSABIT Laisamis SOMALIA Kitale Loruk Webuye Baringo ISIOLO Cisumu Nakuru **GARISSA** Kismo Kericho Embu Murang'a Tchika Bura MAIROBI Machakos ljara Mational Capital (2,205,000 tr 99) O over 500,000 O over 50,000 O over 25,000 a other main city - other city Mombasa LANZANIA

2.8 New corridor development (Lamu Port, South Sudan, Ethiopia Transport Corridor)

Figure 14 LAPSSET Corridor: Source LAPSSET Corridor Development Authority

Lamu Port, South Sudan, Ethiopia Transport Corridor (LAPSSET) is a regional transport infrastructure project that, when complete, will give the East Africa region a third transport and transit corridor. The project comprises of seven components namely:

- 32-berth deep sea port at Manda Bay, Lamu, Kenya
- Standard-gauge railway from Lamu to Juba via Isiolo with a branch from Isiolo to Addis Ababa via Moyale
- Two-lane motorway (Lamu–Isiolo–Juba; and Isiolo–Moyale–Addis Ababa)
- Oil pipelines (South Sudan–Lamu; and Ethiopia–Lamu)
- An oil refinery at Lamu
- Three airports (at Lamu, Isiolo, and Turkana)
- Three resort cities (Lamu, Isiolo, and Turkana)



Figure 15 Artists impression of Lamu Port

The Lamu Corridor, one of the largest infrastructure projects in Africa, is estimated to cost \$ 24.5 billion, and will be funded primarily by the governments of Kenya, South Sudan, and Ethiopia. Part of the financing is being sought through loans from international financial institutions such as the World Bank and African Development Bank. Work is already ongoing at different sites, such as Lamu Port and the roads network. The entire project is expected to be completed in 2018.

3 THE LOGISTICS PERFORMANCE SURVEY FINDINGS

3.1 Road Freight Cost Indicators

The costs of road freight from Mombasa to all the major commercial centres in the Northern corridor have been generally 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.

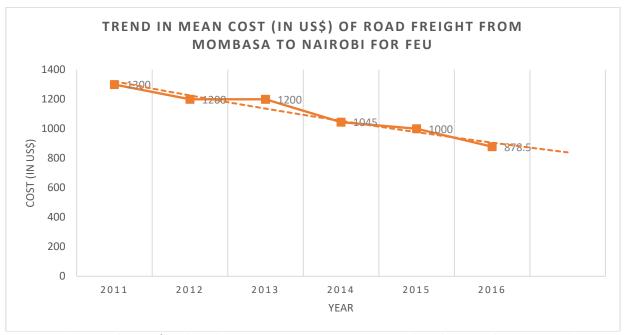


Figure 16 Mombasa Nairobi cost of Road Freight 2011-2016: Source SCEA LPS 2016 and Northern Corridor Transport Observatory

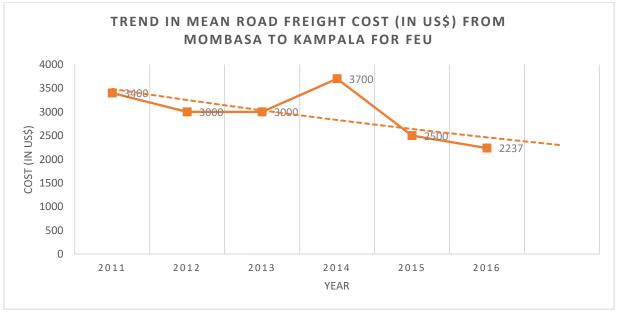


Figure 17 Mombasa Kampala cost of Road Freight 2011-2016: Source SCEA LPS 2016 and Northern Corridor Transport Observatory

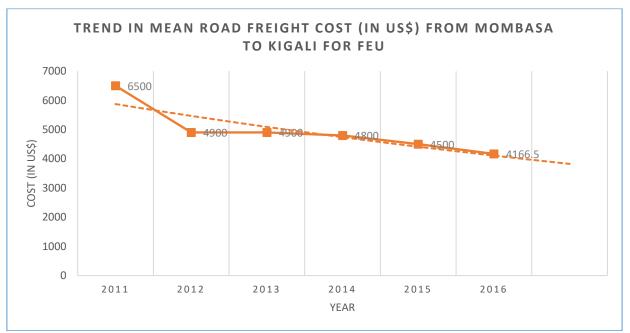


Figure 18 Mombasa Kigali cost of Road Freight 2011-2016: Source SCEA LPS 2016 and Northern Corridor Transport Observatory

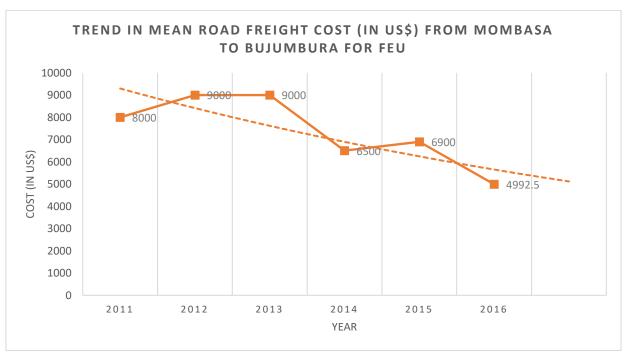


Figure 19 Mombasa Bujumbura cost of Road Freight 2011-2016: Source SCEA LPS 2016 and Northern Corridor Transport Observatory

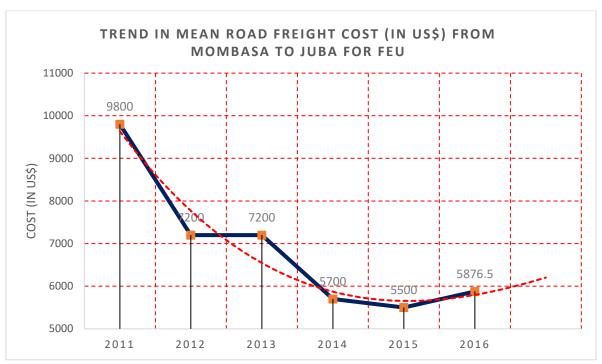


Figure 20 Mombasa Juba cost of Road Freight 40 ft. container: Source SCEA LPS 2016 and Northern Corridor Transport Observatory

Road freight from Dar es Salaam seem to 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. On the other hand, the road freight costs to Kigali levelled off at around \$ 4,250 for the four years from 2012 to 2015.

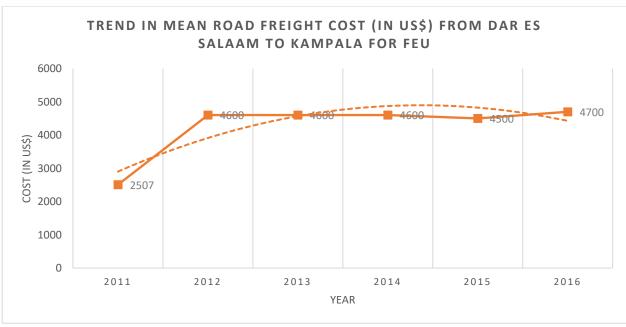


Figure 21 Road Freight charges from Dar es Salaam to Kampala (40-foot container): Source SCEA LPS 2016 and Central Corridor Transport Observatory

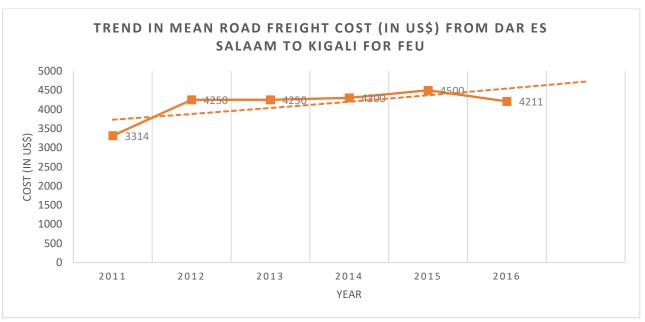


Figure 22 Road Freight charges from Dar es Salaam to Kigali (40-foot container): Source SCEA LPS 2016 and Central Corridor Transport Observatory

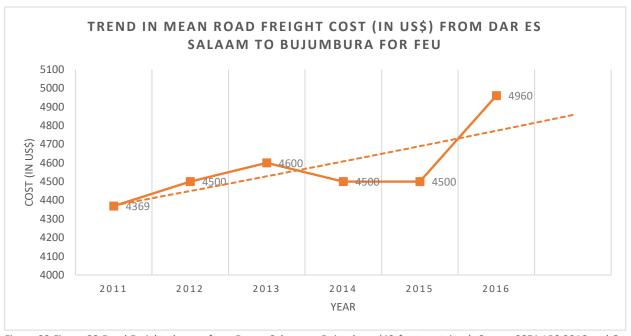


Figure 23 Figure 22 Road Freight charges from Dar es Salaam to Bujumbura (40-foot container): Source SCEA LPS 2016 and Central Corridor Transport Observatory

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.

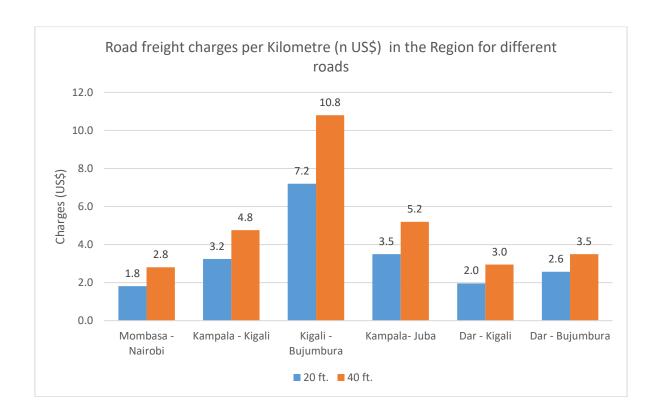


Figure 24 Average cost per kilometer 2016 on select routes: Source SCEA LPS 2016, Central Corridor Transport Observatory and the Northern Corridor Transport Observatory

3.1.1 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.

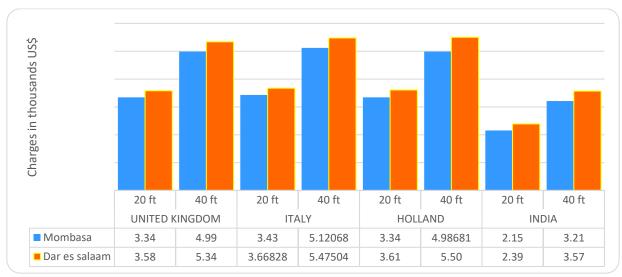


Figure 25 Mean sea freight export charges to principle export markets (\$/ container): Source SCEA LPS 2016.

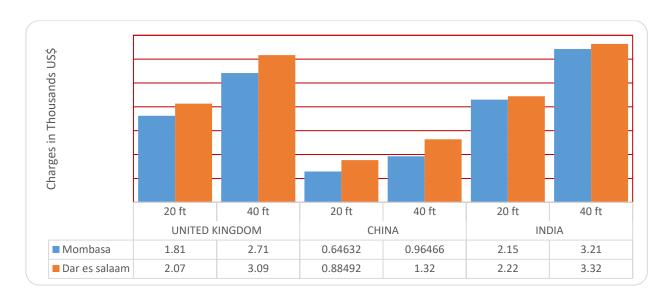


Figure 26 Mean sea freight import charges from the regions principle import sources (in \$/ container). Source LPS 2016

3.1.2 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.



Figure 27 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.

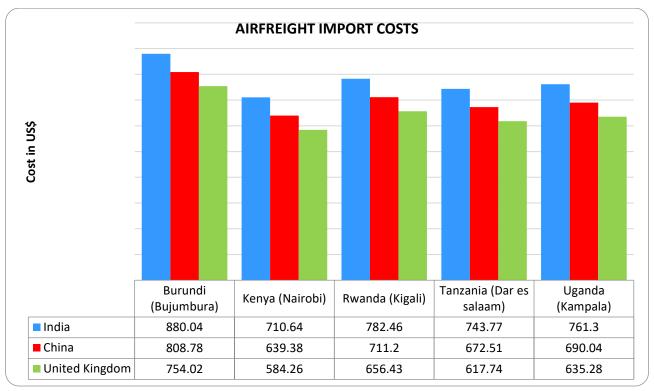


Figure 28 Airfreight import costs 2016: Source LPS 2016

3.1.3 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.

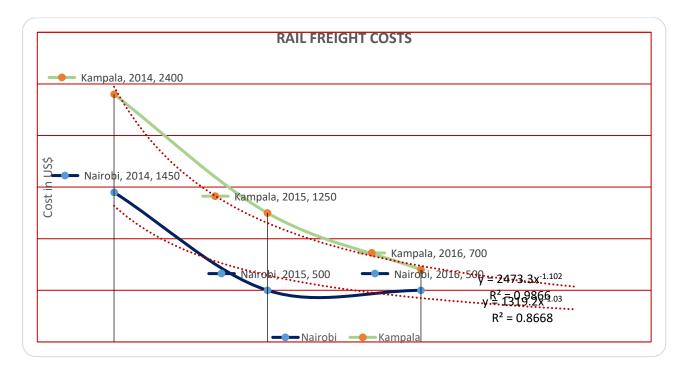


Figure 29 The average rail freight cost in 2016 for light 20-foot and 40-foot containers: Source Kenya Railways.

3.2 Time Indicators

3.2.1 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.

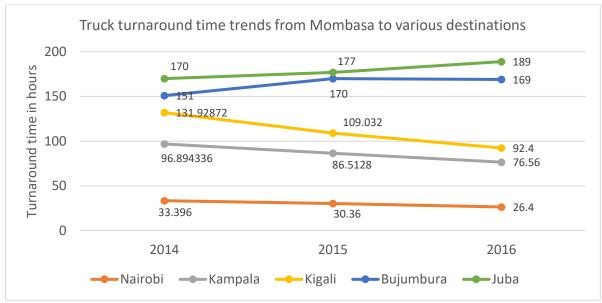


Figure 30 Trends in turnaround times (2014-2016) from Mombasa to various destinations: Source SCEA LPS and Northern Corridor Transport Observatory

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.

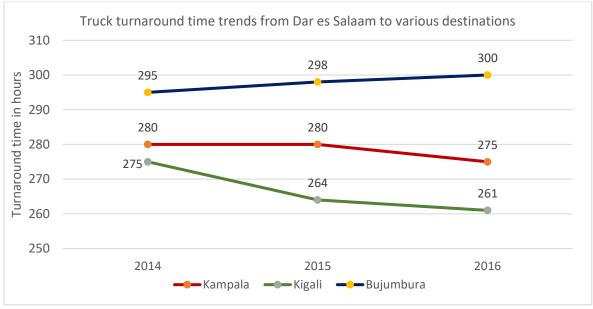


Figure 31 Trends in turnaround times (2014-2016) from Dar es Salaam to various destinations: SCEA LPS 2016 and Central Corridor Transport Observatory

3.2.2 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.

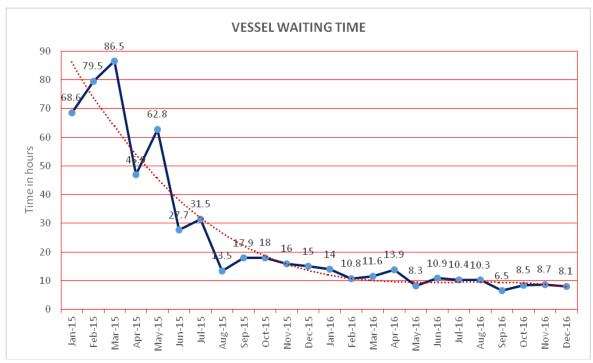
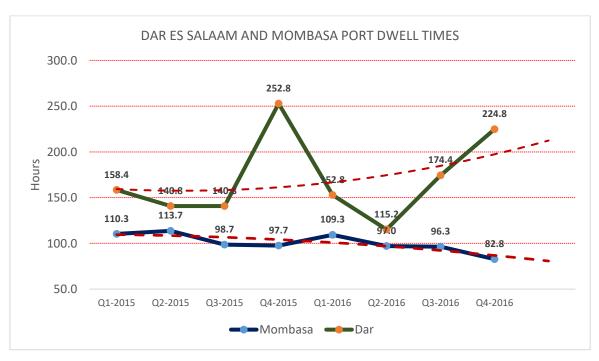


Figure 32 Vessel waiting time: Source Northern Corridor Transport Observatory and Mombasa Port Charter

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.



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.

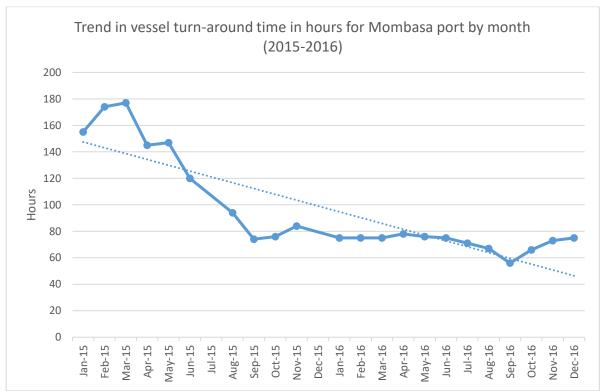


Figure 34 Mombasa Port Vessel Turn-Around Time: Mombasa Port Charter and Northern Corridor Transport Observatory

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.

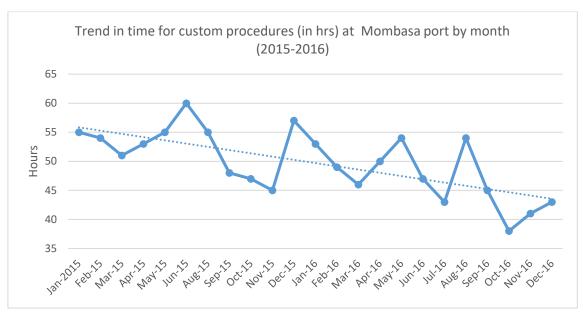


Figure 35 Mombasa Port Time to Complete Customs Processes: Mombasa Port Charter and Northern Corridor Transport Observatory

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.

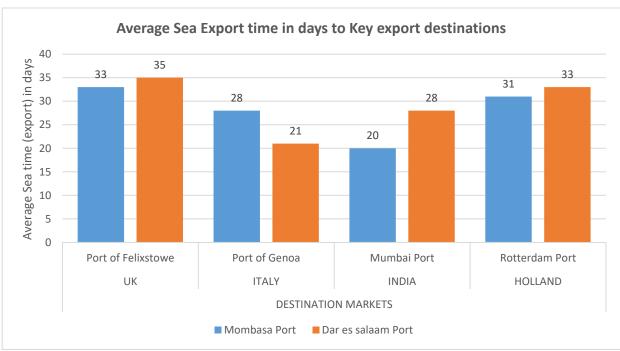


Figure 36 Average Sea Export time in days to Key export destinations: SCEA LPS 2016

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.

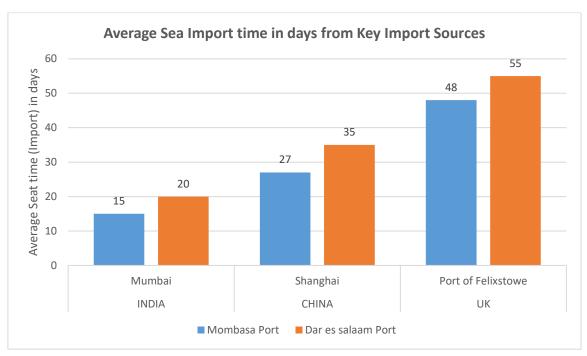


Figure 37 Sea imports time to import from principle overseas import markets: SCEA LPS 2016

3.2.3 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.

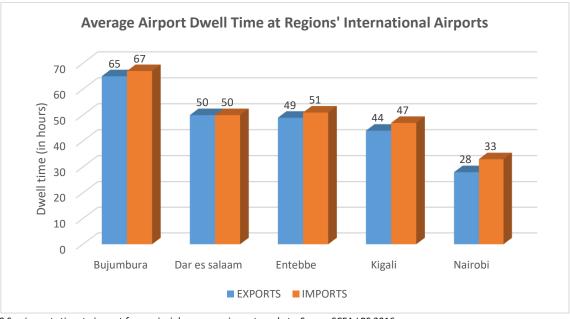


Figure 38 Sea imports time to import from principle overseas import markets: Source SCEA LPS 2016

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.

3.3 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.

3.3.1 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.

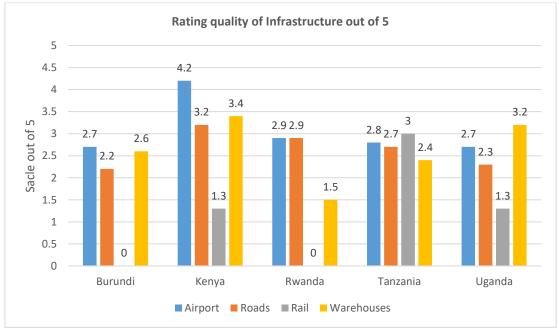


Figure 39 Stakeholders perspectives on the quality of infrastructure on a scale OF 1-5: Source LPS 2016

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.

3.3.2 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.

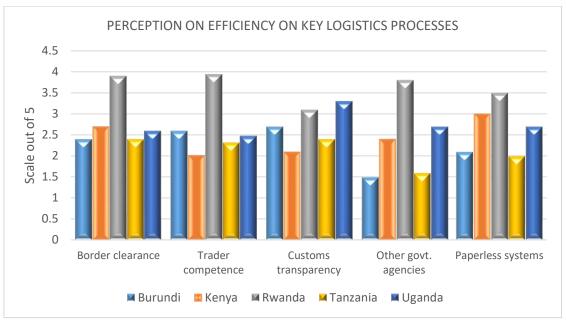


Figure 40 Efficiency of key processes: Source SCEA LPS 2016

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.

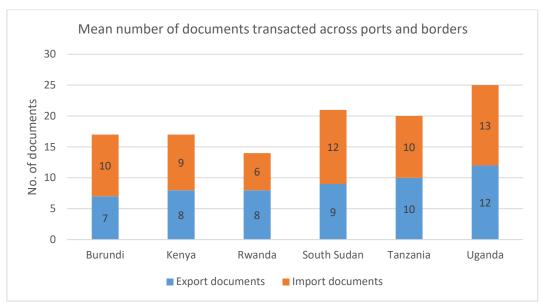


Figure 41 Number of Documents to Transact Across Ports and Borders: Source SCEA LPS 2016

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.

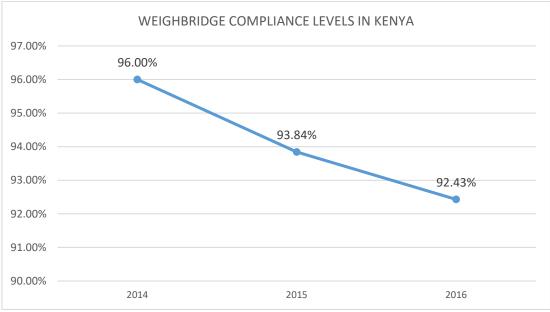


Figure 42: Trends in Weighbridge compliance in Kenya (2014-2016)

4 RECOMMENDATIONS

4.1 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

4.2 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.

4.3 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.

4.3.1 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.

4.3.2 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.

4.3.3 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.

4.3.4 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.

4.3.5 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.

4.3.6 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.

4.3.7 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.

4.3.8 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.

4.3.9 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.

4.3.10 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.

4.4 Validation Workshop Recommendations

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

- 4.4.1 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.
- 4.4.2 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.
- 4.4.3 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.
- 4.4.4 SCEA should work with FEAFFA and support the enactment of FEAFFA self-regulation bill.
- 4.4.5 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

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APPENDICES

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

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