NORTHERN CORRIDOR TRANSPORT OBSERVATORY

Facilitating Trade and transport for Sustainable Development

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TRANSPORT OBSERVATORY
RELIABLE NORTHERN CORRIDOR PERFORMANCE DATA

NORTHERN CORRIDOR TRANSIT & TRANSPORT COORDINATION AUTHORITY

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NORTHERN CORRIDOR TRANSIT AND TRANSPORT COORDINATION AUTHORITY

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Foreword:

The Transport Observatory which is robust performance monitoring tool was developed to monitor the performance of the Northern Corridor. The Observatory also compliments the activities of the Mombasa Port Charter where the Secretariat has committed to host the Northern Corridor Performance Dashboard, provide technical support for the Northern Corridor Performance Dashboard as part of the monitoring and evaluation framework for the Charter signatories as well as coordinating and ensuring that interventions along the Corridor by the charter members have linkages with relevant corridor projects in all member states. Transport Observatory helps in providing key and reliable information to policy makers and users to facilitate the formulation of policies and decisions respectively. The targets have been drawn from the Mombasa Port Community Charter, global best practice as well as service charters from various stakeholders.

NCTTCA supports various initiatives for effective and competitive port and logistics supply chain, geared towards driving the region towards becoming an attractive investment destination. There is a need for fast-tracking of programmes and project implementation in the port and Inland Container Depots (ICDs), improving inter-modal linkages between the port, cargo terminals, rail, road and pipeline to enhance intermodal transport.

This 12th report, therefore, assesses the key 35 indicators along the Northern Corridor with the ultimate goal of ensuring that it can identify the challenges that may be hampering transportation along the Corridor. Apart from just collecting data on the Corridor and from the Member States, it also makes recommendations as to the way each member countries can contribute to efficient transport along the Corridor.

As such I wish to thank the various stakeholders from the host country as well as from the member countries who support the survey by availing the results from data that was used in the analysis of this report. Just as each stakeholder contributed to the production of this report so should they also focus on implementing the main recommendations from this report so that the region can continue experiencing smooth transportation that facilitates sustainable development.

Fred Tumwebaze
Ag Executive Secretary

Acknowledgement

The Northern Corridor Transit and Transport Coordination Authority conveys its appreciation to the Northern Corridor Member States for their support in ensuring continuation and improvement of the Transport Observatory Portal.

We gratefully appreciate the support from Trademark East Africa which has enabled sustained continuous development and improvement of the Observatory through financial and technical support.

In a special way, we thank all the stakeholders who provided data for the report. Without the data, this would not have been possible!

The Northern Corridor Secretariat wishes to acknowledge those who have provided reviews for the reports and stakeholders who participated in the validation and adoption of this report. We believe your steadfast commitment towards monitoring the performance of the Corridor will enable us to achieve our objective for a competitive and seamless Corridor.

Finally, we thank those who in one way or another are supporting the Northern Corridor infrastructure and trade in the region. With this common goal, the support will go a long way in propelling the region to greater heights.

NCTTCA Secretariat

Executive summary

The transport observatory report has continued its quest of ensuring the provision of evidence-based information to support the development of Northern Corridor transport infrastructure. Proper policies supported by evidence will support the region and contribute to the much-anticipated economic growth and sustained development. The 12th issue of the transport Observatory report examines the 35 performance indicators along the corridor with a special focus on projects and policy recommendation that can help reduce the cost of transportation and even speed up the clearing of goods at the port of Mombasa and remove the cross-border hurdles.

The region continues to post a rapid increase in population growth and it's expected to hit approximately 244 million people in 2022 up from 212 million in 2018. This fast growth indicates that the demand for goods in the region may grow at the same pace. Unfortunately, the population increase does not match the economic growth implying that countries served by Northern Corridor have to find a way of opening up their regions to international markets as well as investors

The data collected revealed that the targeted timelines such as the ship turnaround times and port clearance can be improved if the expansion of port is fully sustained and efficiency measures and Service Level Agreements adhered to. More customers are encouraged to use complementary transport facilities such as the SGR and the capacity of the pipeline that has been increased to decongest the highways. The first quarter of 2018 continues to show tremendous changes such as the customers shift to the SGR as well as the possible increase in the volume of petroleum transported by the Pipeline. For instance, the first four months of 2018 saw a total 33,046 TEUs transported by the SGR of which 25,392 TEUs were for imports and 7654 TEUS for exports and return of empty containers.

Road accidents continue to be a major challenge especially along some sections of the Corridor in Kenya and Uganda. Rwanda has managed to tame the number of accidents through strict laws governing road transportation.

It is important to note that the Member Countries including the host country to the Northern Corridor Secretariat, Kenya, have made good progress in some of the sectors that were surveyed for this 12th issue. Kenya and Uganda had already complied with enforcement of the vehicles load limits geared towards protecting the road pavement from premature damage. Kenya is also using High Speed Weigh in Motion weighbridges at either side of the busy sections of the road to reduce the number and duration of stops along the Corridor.

Road conditions have continued to show mixed results with none of the member countries recording over 80% of its road network in good condition except Rwanda. As such it is the recommendation of this report that the NC member countries enhance their subsidiary routes so that they can decongest the main highways for easier and faster transportation of goods.

Besides concentrating on the expansion of routes it is also important to consider mitigating the CO2 emissions along the Corridor. The transport sector accounts for a big percentage of CO2 emissions. The recent Mombasa Port baseline study conducted by NCTTCA in collaboration with KPA and KMA indicated that 94% of the emissions at the port are as a result of anchoring of ships, heavy machinery accounted for 2.2% of the emissions and 1% by trucks and other vehicles at the port area alone which is about 1 million Kg of CO2 emitted by vehicles at the port per year. The Northern Corridor Secretariat is therefore keen on ensuring that these emissions are reduced throughout the entire Northern Corridor transport network as provided by the Northern Corridor green freight program and international standards.

ABBREVIATIONS AND ACRONYMS

ACPLRWA	Rwanda Long Distance Truck Drivers Association
ASYCUDA	Automated System for Customs Data
BI	Burundi
CCTTFA	Central Corridor Transit Transport Facilitation Agency
CFSs	Container Freight Stations
CO2	Carbon Dioxide
DGDA	Direction Générale Des Douanes Et Accises
DRC	Democratic Republic of Congo
DWT	Dead Weight Ton
ECTS	Electronic Cargo Tracking System
FEC	Fédération des Enterprise's du Congo
GDP	Gross Domestic Product
GPS	Global Positioning System
HSWIM	High Speed Weigh-in-Motion
IABT	International Association of Burundi Transporters
ICBT	Informal Cross Border Trade
ICD	Inland Container Deport
ICT	Information Communication Technology
IRI	International Roughness Index
KE	Kenya
KeNHA	Kenya National Highways Authority
KPA	Kenya Ports Authority
KPC	Kenya Pipeline Authority
KRA	Kenya Revenue Authority
KTA	Kenya Transporters Association
LPI	Logistics Performance Index
KWATOS	Kilindini Waterfront Automated Terminal Operations System
MAGERWA	Magasins Généraux du Rwanda
NEPAD	New Partnership for Africa's Development
NC	Northern Corridor
NCTTA	Northern Corridor Transit and Transport Agreement
NCTTCA	Northern Corridor Transit and Transport Coordination Authority
NO	Nitrogen Monoxide
NOX	Oxides of Nitrogen
OBR	Office Burundais des Recettes
OCC	Office Congolais de Contrôle
ODR	Office Des Routes
OGEFREM	Office de Gestion Du Fret Multimodal
OSBP	One Stop Border Post
RECTS	Regional Electronic Cargo Tracking System
RRA	Rwanda Revenue Authority
RTDA	Rwanda Transport Development Agency
RVR	Rift Valley Railways
RW	Rwanda
SPSS	Statistical Package for Social Science
SGR	Standard Gauge Railway
SCT	Single Custom Territory
SSFEBA	South Sudan Federation of Employers and Business Association
TBL	Through Bill of Lading
TEUs	Twenty Feet Container Equivalent Units
TMEA	Trade Mark East Africa
TO	Transport Observatory
TOP	Transport Observatory Portal
UFFA	Uganda Freight Forwarders Association
UG	Uganda
UNRA	Uganda National Roads Authority
URA	Uganda Revenue Authority
URC	Uganda Railways Corporation
VOCs	Volatile Organic Compounds
WEO	World Economic Outlook

1 INTRODUCTION

The Northern Corridor is a multimodal trade route that link several landlocked countries around the lake region to the port of Mombasa. Its presence has enhanced trade among the landlocked countries and the outside world. As a result, The Northern Corridor Transport Observatory report seeks to evaluate the periodical performance as far as trade and transportation is concerned. The report mainly focuses on transport infrastructure, volume of trade, transit time, transport cost, transport safety, contribution to the development of the region and protection of the environment.

The 12th edition of the Transport Observatory report has been compiled from data collected and compiled by the Northern Corridor Transit and Transport Coordination Authority (NCTTCA) Secretariat for the period of October 2017 to April 2018. The Northern Corridor Transit and Transport Coordination Authority (NCTTCA) was established through the Northern Corridor Transit and Transport Agreement. The agreement comprises six nations namely; Burundi, Democratic Republic of Congo (DRC), Kenya, Rwanda, South Sudan and Uganda.

NCTTCA sole mandate is to oversee the implementation of the Northern Corridor Transit and Transport Agreement. The objective of the revised Northern Corridor Agreement (NCTTA-2007) is to transform the Northern Corridor into a development corridor. This transformation is highly dependent on efficient trade and transport system, which includes the regulatory agencies adopting measures for improved controls while at the same time smoothing trade and contributing to the reduction of the cost of doing business along the Northern Corridor.

The development and improvement of the Northern Corridor has been ongoing with an ultimate target of propelling the region's economic outlook while at the same time enhancing trade within the region. Additionally, the Corridor is and shall serve as a channel through which the region can provide safe, affordable, accessible and sustainable transport systems for all, improving road safety by 2030 with target to halve the number of deaths and injuries from road traffic accidents by 2020.
NCTTA has been collaborating with TradeMark East Africa (TMEA) and signed an agreement for the period of 2018 – 2021 with the aim of Strengthening and Enhancing the Northern Corridor Transport Observatory. These are some of the measures by the Northern Corridor Secretariat that seek to ensure that all the infrastructure linked to the Northern Corridor is reliable, sustainable and resilient.

As such the Northern Corridor Secretariat has focused on developing regional and trans-border infrastructure in addition to supporting economic development as well as the wellbeing of humanity within the East Africa region. Apart from just providing sustainable and steadfast transport infrastructure the Secretariat is also keen on reducing greenhouse gases emissions along the Corridor in an attempt to safeguard the environment.

Therefore, the report generally highlights key performance areas in relation to the Corridor as a whole based on the thirty-five key performance indicators and the Mombasa port Community Charter that obligates the private and public sectors to ensure efficiency at the port of Mombasa as well as along the Corridor. The information used in the preparation of the report can be retrieved from the Northern Corridor Transport Observatory website http://www.ttcanc.org or www.kandalakaskazini.or.ke.

1.1. Key Economic Indicators

While the Northern Corridor may just be seen as a route through which goods are transported from the port of Mombasa to the landlocked countries it has far reaching economic implications on the Host country (Kenya) and the other five-member states (Uganda, Rwanda, Burundi, DRC and South Sudan). As such the Northern Corridor Secretariat also examines the key economic indicators that arise from the development of the Northern Corridor among them being Gross Domestic Product (GDP), general infrastructure improvement, faster and efficient methods of clearance of the goods and the general wellbeing of the people in the aforementioned countries.

The Corridor will only be said to have brought positive economic impact if the countries have access to other international markets faster, goods are transported faster to and from the interiors parts of the countries using the Corridor while at the same time increasing the level of locals investing and promoting bilateral and multilateral trade within the region. The world bank's Logistics Performance Index for instance assess the performance of the economy by evaluating areas such as Customs, infrastructure, international shipment, logistics quality and competence, tracking& tracing and timeliness. As at the publication of this report the data available was up to 2016 and the six-member countries that rely on the Northern Corridor had the following scores performance indices. Kenya 3.33, Uganda 3.04, Rwanda 2.99, Burundi 2.51 and DRC recorded a performance index of 2.38. Logistics performance index: Overall (1=low to 5=high)

The Gross Domestic Product forecast and the population of the six members are provided in the table below. Table 1 shows that all the countries apart from South Sudan shall post a positive GDP growth rate. While a positive deviation in GDP is a function of many factors such as sound macroeconomic policies, improved trade is a major contributor towards this deviation among the countries. The Northern Corridor is and shall go a long way in facilitating movement of people and goods within the region hence influencing Gross Domestic Product.

Table 1: Key Economic Indicators

COUNTRY	GROWTH IN GDP (%)		POPULATION (MILLION)	
	2017	2018	2017	2018
Burundi	0.00	0.15	9.88	10.12
Democratic Republic of the Congo	2.78	2.99	86.65	89.25
Kenya	5.02	5.48	46.73	48.03
Rwanda	6.16	6.82	11.83	12.13
South Sudan	-6.26	-3.41	13.14	13.81
Uganda	5.18	5.8	37.67	38.82

Source: International Monetary Fund, World Economic Outlook Database, 201

The Northern Corridor region population has been projected to hit the 212 million people in 2018 and 244 million people by the year 2022. This demographic change will fuel new demand for goods and services within the region implying that the region should put in place proper infrastructure that shall help sustain the expected growth in demand by this population. Stable political environment and improved cross-border movement of goods and service is important in supporting the regions development.

Table 2: Ease of doing Business

		DTF (distance to frontier) SCORE		
COUNTRY	RANK (2018)	(2017)	(2018)	DTF CHANGE
Burundi	164	46.86	46.92	+0.06
Democratic Republic of Congo	183	37.43	37.65	+0.22
Kenya	80	62.56	65.15	+2.59
Rwanda	41	70.19	73.40	+3.21
South Sudan	187	33.19	32.86	-0.33
Uganda	122	56.52	56.94	+0.42

Source: World Bank, 2018

Table 2 shows the ease of doing business on a score of 0 to 100. Low numeric score indicates that the country has less restrictions and strong protection of the property rights. The score by the World Bank is based on measures such as starting business, getting credit, protecting monetary investor, paying taxes among others. The Northern Corridor countries have continued to record a positive deviation as indicated in the Table 2 apart from South Sudan. Unfortunately, the index does not capture the cross-border tariffs especially for international trade. However, this report shall examine this part in addition to other factors that have affected trade across the border.

1.2. Northern Corridor Performance Monitoring

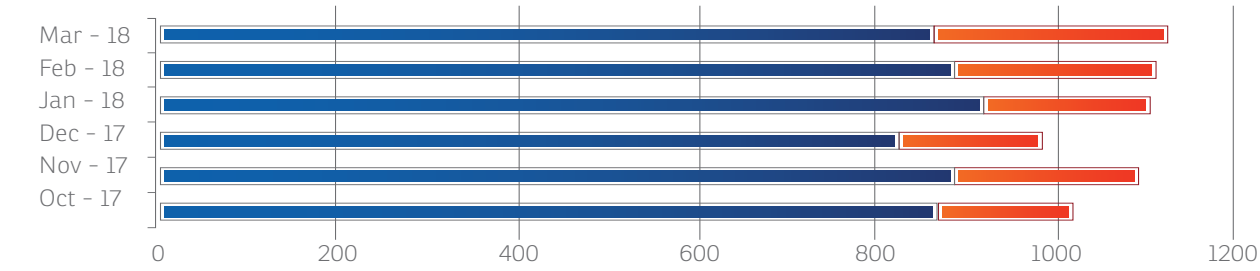
NCTTCA has the mandate to collect useful information along the Northern Corridor that can aid in improving its performance. As such, the Northern Corridor Transport Observatory is a monitoring tool that has an online portal to track the performance of the Corridor. The main components used by the Observatory include the GIS component, the dashboard and the main Observatory portal. Currently, the observatory tool observes 35 performance indicators on a regular basis while the dashboard monitors the implementation of the Port Community Charter on a weekly and a quarterly basis to increase efficiency at the Port of Mombasa. The GIS module maps the Corridor performance on the Northern Corridor digital map. Through these monitoring tools, the NCTTCA Secretariat is able to track the performance of the Corridor and provide evidence-based recommendations to the stakeholders and policymakers. The new agreement with TradeMark East Africa is expected to operationalize the Transport Observatory information platforms, data collection framework, dissemination of the Transport Observatory information and formulate and implement the Transport Observatory communication and advocacy strategy.

NCTTCA Secretariat is able to track the performance of the Corridor and provide evidence-based recommendations to the stakeholders and policymakers.

Tracking the online usage of the Transport Observatory portal and accessing feedback has enabled the Secretariat to improve on monitoring the Corridor and advocating for its improvement through policy recommendations. Some of the recommendations that have been implemented from the data collected from the GIS include the Vehicle Load Control Charter and the improvement of the

strengthening of the Joint Border Committees with an aim of speeding up the clearance of the goods across the border. Various agencies have used the information for infrastructure development and setting up facilities. Since most of the reports are posted online the Observatory has been receiving approximately 875 new users every month from across the world.

Figure 1: Transport Observatory Online Portal users



	Oct - 17	Nov - 17	Dec - 17	Jan - 18	Feb - 18	Mar - 18
New Users	867	886	826	919	889	863
Returning Users	867	208	159	188	224	262

Source: Northern- Corridor Transport Observatory 2018

1.3. Methodology

The report has been compiled from a range of data that is collected from different tools of measurement along the Corridor. Performance on the Northern Corridor is measured through a range of indicators and data from stakeholder's electronic systems, road transport surveys, GPS surveys, phone surveys, secondary data from policy documents and reports.

1.4. Phone Survey

The report also uses phone surveys whereby questionnaires have been incorporated into the Android application using the 123 surveys from the google play store. As such the drivers can fill in the information from the time they start their journey, at any stop point and at the time they reach their destination. This data is received in real time and consolidated before being analyzed.

1.5. Analyzing and reporting

Once the data is collected from the different sources it is analyzed focusing on five categories that shall be presented in the subsequent chapters. The analysis is both quantitative and qualitative in nature and different statistical tools are used to generate tables and graphs. After validating the information, it is uploaded to the Northern Corridor online transport observatory portal and thereafter the findings and recommendations are passed on to the member countries for action.

The analysis is both quantitative and qualitative in nature and different statistical tools are used to generate tables and graphs.

2 VOLUME AND CAPACITY INDICATORS

2.1. Introduction

The Port of Mombasa serves as the gateway for the land linked countries within the East African region. It is the biggest terminal that feeds the Northern Corridor with the connections from rail and pipeline to support the Corridor. The past few years have seen an increase in the volume of goods going through the port. This high growth has put a strain on existing port infrastructure necessitating costly investments to improve operations and service delivery. Nonetheless, the Kenyan government has continued to expand the port its growth Strategy to keep enhancing efficiency and maintaining Capacity ahead of demand and also to replace the manual systems with digital systems to enhance clearance of goods.

This section gives the performance of the Mombasa Port in terms of volume related indicators from between 2016 and 2017. However, some data items shall cover up to 2018 depending on the availability of the information. The section shall also highlight pipeline transports as well as railway transport along the Northern Corridor.

2.2. Cargo Throughput at the port of Mombasa

The port of Mombasa handles more than 30 Million tones. The table 3 below shows figures for cargo throughput for the Port of Mombasa for the year 2016 and 2017.

Table 3: Cargo Throughput ('000')

TYPE OF CARGO	2016	2017	VOLUME CHANGE	GROWTH %	% SHARE OF TOTAL THROUGHPUT	
					2016	2017
NON – CONTAINER						
Dry Bulk	7,053	8,467	1,414	20%	26%	28%
Liquid Bulk	7,728	8,259	531	7%	28%	27%
Conventional	1,968	2,136	168	9%	7%	7%
Sub- Total	16,749	18,862	2,113	13%	61%	62%
CONTAINERIZED						
Sub-Total	10,026	10,536	510	5%	37%	35%
IMPORT/EXPORT						
Imports	23,116	25,604	2,488	11%	84%	84%
Exports	3,659	3,794	135	4%	13%	13%
Transshipment	589	874	285	48%	2%	3%
Restows	-	73				
TOTAL Throughput	27,364	30,345	2,981	11%	100%	100%

Source: KPA, April 2018

Table 3 represents the different types of cargo that the port of Mombasa handled in 2016 and 2017. The table shows that the port handled a total of 30,345,000 tons of cargo compared to 27,364,000 tons registered in 2016 an increase of 2,981,000 tons representing an 11 percent growth. Export traffic increased slightly by 135,000 tons which as equivalent to 4 percent to post 3,794, 000 tons in 2017. The marginal positive change was attributed to an increase in the volumes of the primary products such as by tea and coffee. Tea exports increased from 548, 000 tons to 571, 000 tons. Coffee exports increased from 271, 000 tons to 361, 000 tons

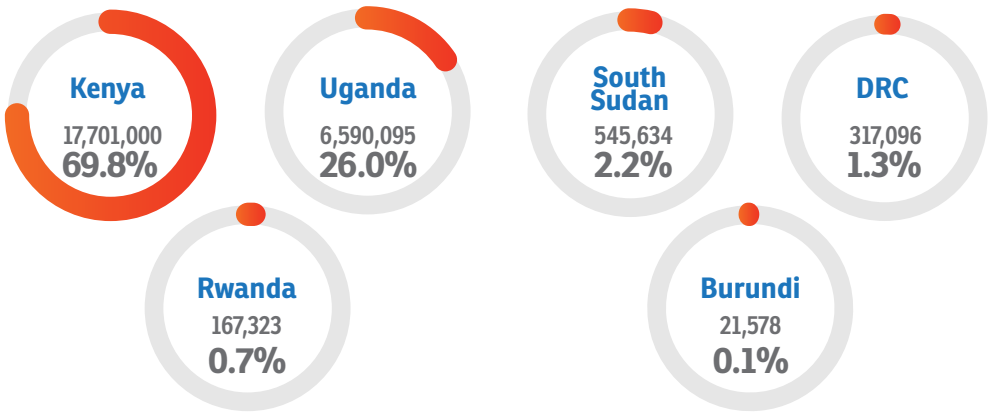
while titanium in bulk decreased from 589, 000 tons to 547, 000 tones.

The highest component of the imports was driven by containerized cargo which represents 35% share of the total Port throughput in 2017. Port performance records indicate that there was growth in container traffic registering 1,189,957 TEUs in 2017 against 1,091,371 TEUs recorded in 2016. This translated to an increase of 98,586 TEUs, an equivalent of 9 percent increment. KPA forecasts the containerized Traffic Demand cargo to grow to approximately 1,469,000 TEUs by 2022.

The rise in imports was mainly driven by the increase in dry bulk commodities such as wheat in bulk, clinker and fertilizer in bulk registering 2, 595, 000 tons, 2, 722, 000 tons and 721, 000 tons in 2017. Other major imports were Iron and Steel (1, 633, 000 tons), sugar (from 356, 000 to 1, 085, 000 tones) and rice (628, 000 tons).

The figure below gives the share of throughput of the port of Mombasa based on the destination market during the year 2017. From the figure, the domestic market (Kenya) accounted for 69.8% while Uganda, South Sudan and, DRC accounted for 26%, 2.2% and 1.3% respectively.

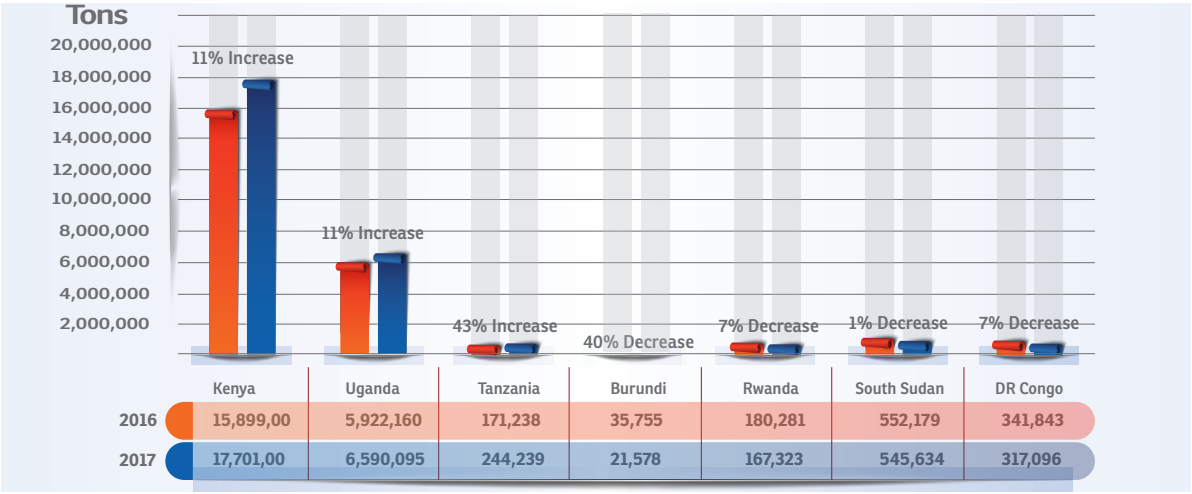
Figure 2: Share of import traffic to Northern Corridor Member States



Source: KPA, April, 2018

The volume to Uganda increased by 11% from 5.9 Million tons to 6.6 Million tons. Volumes to South Sudan increased by 1% from 5.52 million to 5.53 Million while volume to Tanzania increased by 171, 238 tons to 244, 239 translating in 143% increase. Traffic volumes to DRC, Burundi, and Rwanda decreased by 7%, 40%, and 7% respectively as shown in the figure below.

Figure 3: Import Traffic to Tanzania and Northern Corridor Member States



Source: KPA, April, 2018

The recent past has seen a slight shift in the volume of goods being transported through the Northern Corridor by some of the Member States. This is partly due to the longer distances through the Northern Corridor to the destination countries as is the case for Burundi, DRC and Rwanda, multiple transit nodes to cross such as border stations and weighbridges, cost of Road User Charge paid in each country transited and large number of big towns along the Northern Corridor often experiencing traffic jams as compared with the Central Corridor. On the other hand, the road condition for the Central Corridor has also improved greatly.

Ideally, the Central and Northern Corridors serve common States in the region. Comparing the year 2016 and 2017, there was a decline in importation through the Northern Corridor by Burundi, Rwanda, and DRC. The improved infrastructure along the central corridor coupled with the shorter distance from Dar-es-Salaam to Rwanda and to Burundi has seen an increase of 24% and 34% respectively in the use of the central corridor as shown in table 4 below.

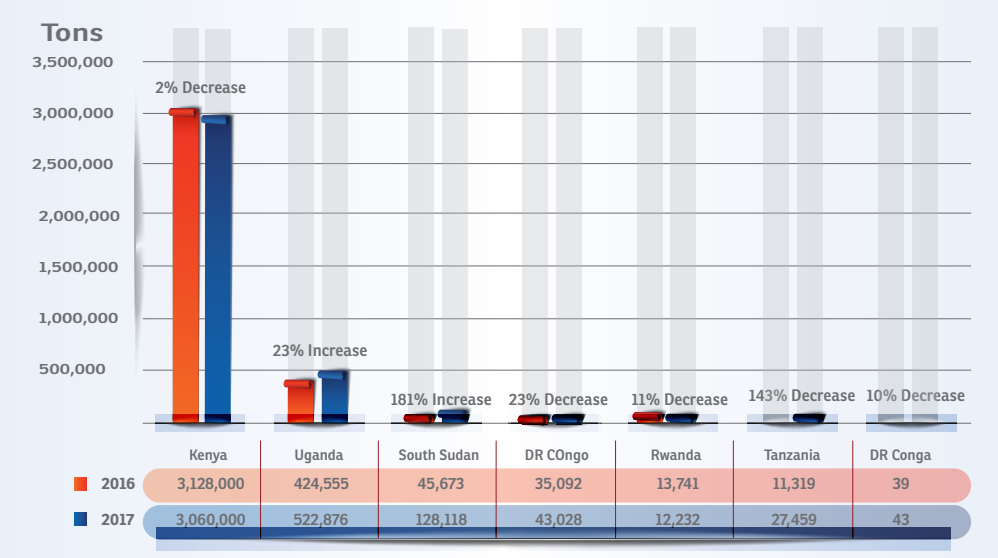
Table 4: Imports (in Tons) through Central and Northern Corridors by Northern Corridor member States and Tanzania

COUNTRY	CENTRAL CORRIDOR (From Dar-es-Salaam)			NORTHERN CORRIDOR (From Mombasa Port)		
	2016	2017	%Change	2016	2017	%Change
Tanzania	7,190,337	6,703,864	-7%	171,238	244,239	43%
Kenya	-	-		15,899,000	17,701,000	11%
D.R. Congo	789,046	785,307	0%	341,843	317,096	-7%
Burundi	301,000	403,823	34%	35,755	21,578	-40%
Rwanda	840,291	1,040,324	24%	180,281	167,323	-7%
Uganda	165,123	270,379	64%	5,922,160	6,590,095	11%
South Sudan	-	-	-	552,179	545,634	-1%
Others	1,807,906	2,154,619	19%	13,638	16,885	24%
Total	**11,093,703**	**11,358,316**	**2%**	**23,116,094**	**25,603,850**	**11%**

Source: KPA & Central corridor Transport Observatory, 2018

On the flip side, the volume of exports transported through the Northern Corridor by DRC increased by 23%. There was a general increase in exports from the Member States that went through the Northern Corridor. For instance, Burundi's exports in 2017 were 43 tons up from 39 tons while DRC Congo registered 43,028 up from 35,092 tons. Uganda also recorded an increase in the volume of exports moving through the Northern Corridor. However, Rwanda registered 12,232 tons in 2017 down from 13,741 tons which is a decline of 11%.

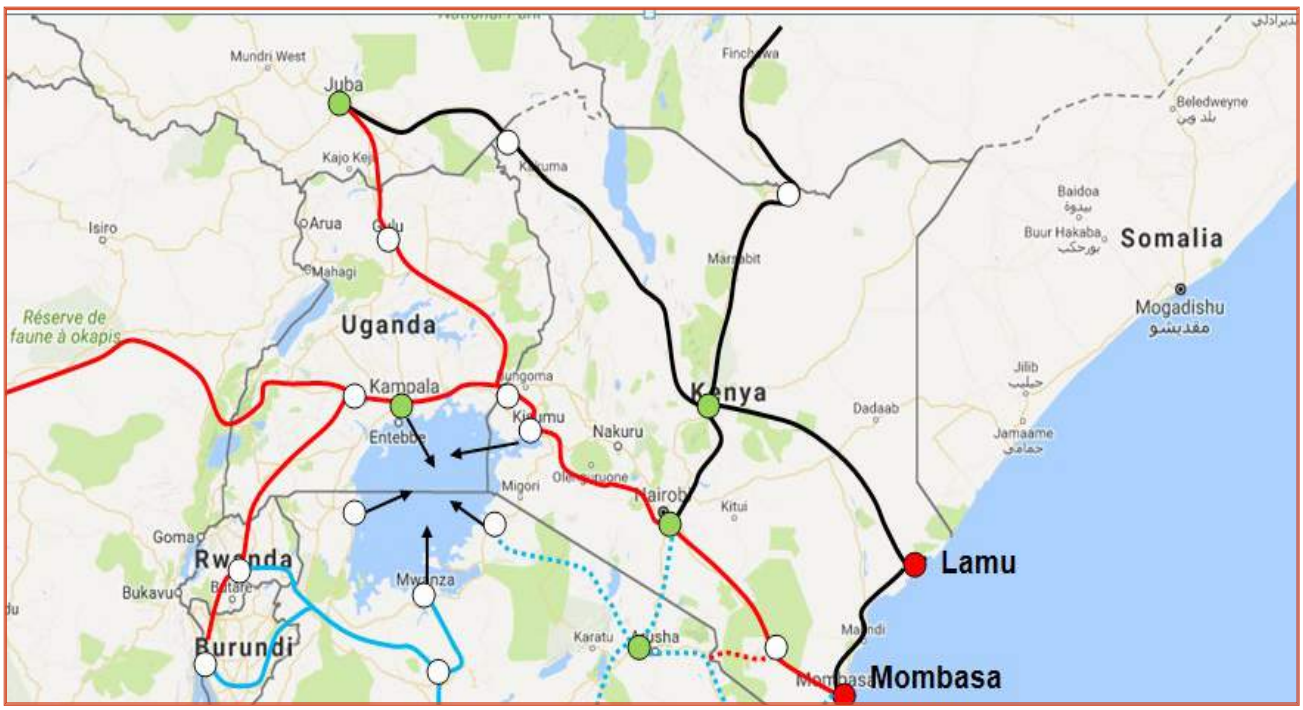
Figure 4: Exports (in Tons) from the Northern Corridor Member States and Tanzania



Source: KPA, April, 2018

2.3. Transport Capacity by Rail

The EA Standard Gauge Railways Master Plan



Rail Transport is increasingly complementing road transport especially with the Standard Gauge Railway (SGR) project that has already been built from Mombasa to Nairobi. Kenya has a rail network of 2,778 Km of the meter gauge railway line and approximately 609km track length of the standard gauge railway. The next phase of the SGR project is expected to connect Nairobi to Naivasha. The meter gauge railway line connects the Port of Mombasa to Nairobi then from Nairobi to Nakuru and to the Kenya-Uganda border at Malaba. A branch line of the Meter Gauge railway connects the main railway line at Nakuru and extends to Kisumu at Lake Victoria though currently not operational. Uganda, on the other hand, has a network of 1,226 Km. Unfortunately, a big portion of this line (more than 50%) is not operational. The Uganda Railway Cooperation took over the operations of their railway line in Uganda on 25th January 2018 after the Rift Valley Railway exited. Rift valley Railways was in charge of both the Ugandan and Kenyan railways lines. Uganda Railways Corporation currently has 600 operational wagons in the network while Kenya Railways has 15 locomotives operating between Kampala and Nairobi.

Table 5 : Exports and Imports (in Tons) through the Metre Gauge Railway

MONTH	LOADED	NET TONES	AVG.WEIGHT
Oct-17	3,398	81,023.77	27.69
Nov-17	2,292	59,615.00	29.24
Dec-17	2,505	65,604.07	29.16
Total:	8,195	206,243	29

Source: KRC, April, 2018

Table 5 above shows the volume of cargo transported through the meter gauge railway between September 2017 and December 2017. A total of 17,496 and 206,243 Net-tones were transported by the railway during the period. Imports to Uganda for the Month of February and March, 2018 are shown in table 6 below.

Table 6: Exports and Imports (in Tons) through the Metre Gauge Railway in Uganda

MONTH	EXPORT	IMPORT	TOTAL
February	2,218.00	15,278.30	17,496.30
March	1,673.00	9,073.00	10,746.00

Source: URA, April, 2018

A total of 17,496 and 10,746 Net-tones were transported by the railway line in the month of February and March 2018 respectively. The low cargo volume carried was as a result of Fuel challenges on the Kenya Railways Corporation (KRC) side, Kenya government directive to move all containerized cargo by SGR instead of MGR and the whole operational challenges at Embakasi container terminals. Clients have not yet taken decisions to move back to rail following the perceived uncertainties as a result of the termination of the Rift Valley Railway (RVR) concession agreement. Additionally, the improvement of the Main Highway connecting Mombasa and Malaba at the Kenya-Uganda Border has seen most transport companies preferring road transport to rail transport.

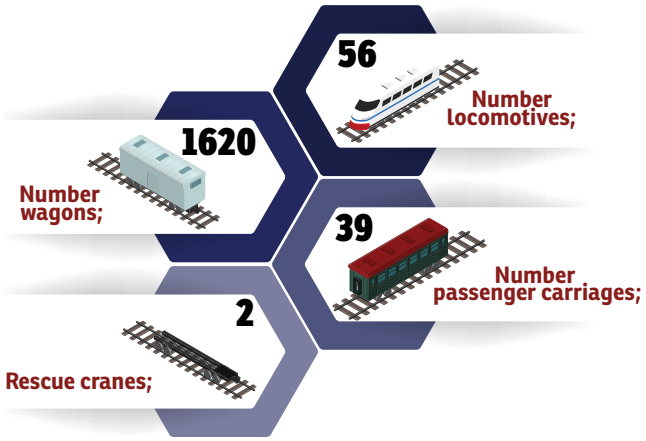
The meter gauge rail still has challenges ranging from vandalism of rail track, poorly maintained track which affects performance and locomotive failures. The designed capacity cannot be achieved due to poor infrastructure conditions resulting from Temporary Speed Restrictions (TSRs). Also, access fee when crossing the border and the complexities of operations as a result of having different operators in Kenya and Uganda.

To mitigate against this, there is need to put in place procedures well documented at Malaba Border post and also Standard Operating Procedures for Trains workings (SOP). There is also a need for a performance Service Level Agreement between Kenya railways and Uganda railways cooperation to enhance performance along the railway lines.

2.3.1 Standard Gauge Railway (SGR)

The Governments of Kenya, Uganda, Rwanda and South Sudan are committed to providing high capacity and effective railway transport within the Northern Corridor. The first phase from Mombasa to Nairobi is complete and commercial operation officially commenced on 1st January 2018. Construction of the second phase from Nairobi to Naivasha is ongoing and it is expected to ease congestion on the road once the construction is complete. The launch of the 485 Km Mombasa – Nairobi Standard Gauge Railway (SGR) has stirred the container transport and logistics systems by providing faster cargo transport and handling up to the Nairobi Inland Cargo handling depot.

The SGR operates at speed of up to 80Km/hr. for cargo and 120 Km/hour for passengers. Each train has a haulage capacity of 216 TEUs takes an average of eight hours to arrive in Nairobi ICD from the port of Mombasa. The speed and the convenience of the SGR have so far made it a superior mode of transport to the road and the Meter gauge railway not to mention the safety and security that comes with the use of the SGR.



SGR equipment and rolling stock

The optimum freight carrying capacity is 22 million tons per annum. It is expected that by 2019, SGR will be moving 22 million tons per year with an intermediate target of 7.2 million tons by mid-2018.

Table 7: Volume of Import cargo through SGR

MONTH	NO. OF TRAINS	TBL TEUS	NON TBL TEUS	TOTAL	TONNAGE (Tons)
January	14	854	110	964	16,581
February	36	2,792	50	2,842	47,135
March	93	9,242	-	9,242	141,174
April	120	9,229	3,115	12,344	184,486
TOTAL	263	22,117	3,275	25,392	389,377

Source: KR, April, 2018

Containers delivered by rail recorded a significant increase from 964 TEUs in January 2018 to 12,344 TEUs in April 2018. The total weight moved during the period was 389,377 tons as shown in the table above.

The SGR currently runs five scheduled trains to the ICD Nairobi each ferrying 108 Twenty-Foot Equivalent Units (TEUs) and therefore a total 432 TEUs daily. Target number of freight trains is 11 up trains per day from Mombasa by December 2018.

To ensure fast and efficient rail bound cargo evacuation from the port by SGR a one-stop center has been established and 24-hour working schedule at the ICD Nairobi implemented. Currently, there is an extension of the line at the port to the conventional and bulk cargo section. On completion of the Port Relief lines to berth 1, the freight service will be able to handle conventional cargo arriving at the port.

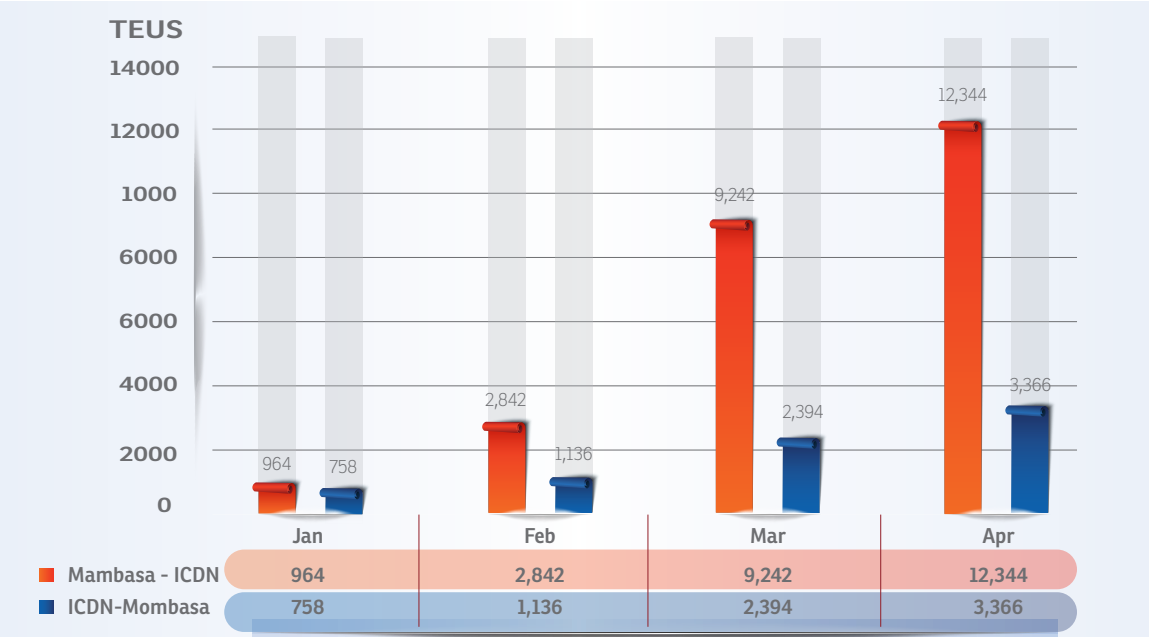
Table 8: SGR Service Performance at the ICD Nairobi

MONTH	NO. OF TRAINS	EXPORT TEUS	EMPTY TEUS	TOTAL	TONNAGE
Jan	17	316	442	758	5,764
Feb	26	526	610	1,136	10,498
Mar	36	1,211	1,183	2,394	23,434
Apr	37	1,146	2,220	3,366	24,090
TOTAL	**116**	**3,199**	**4,455**	**7,654**	**63,787**

Source: KR, April, 2018

From January to April, 2018, the utilization of the SGR service has been on the upward trend with a total of 63,787 tone move from the Nairobi inland container depot (ICDN) to Mombasa. The figure below gives the trend in TEUs for both imports and exports

Figure 5: Total TEUS moved by the SGR



Source: KR, April, 2018

2.4. Pipeline Transport Capacity

The Pipeline is one of the transport infrastructures within the Northern Corridor. The pipeline infrastructure currently consists of 1,342 kilometers of multiproduct pipeline and associated facilities system for transportation of refined petroleum products and runs from Mombasa to Nairobi, then to Nakuru, Kisumu and Eldoret. The Mombasa-Nairobi pipeline consists of 450km, 14-inch diameter pipeline, eight pump stations and a flow rate of over 830,000 liters per hour and a parallel 20-inch pipeline is under construction to provide an additional flow rate of 1 million litres per hour upon commissioning in June 2018. The new line is designed to provide up to 1.9 million litres per hour to meet demand, through installation of additional pumps.

The Western Kenya Pipeline Extension (WKPE) consists of a 325 km 8-inch and 6-inch diameter pipelines running from Nairobi to Eldoret with a flow rate of 220,000 liters per hour and a 14-inch diameter parallel line with a flow rate of 311,000 liters per hour. WKPE also has a 6-inch and 10-inch parallel pipelines running from Sinendet to Kisumu with a flow rate of 110,000 litres per hour and 311,000 litres per hour respectively.

Kenya Pipeline has refined products storage facilities at its depots with total capacity of 622,000,000 litres, and construction of additional storage of 133,000,000 litres is under way at the Nairobi Terminal. A jetty has been constructed in Kisumu, linked to the Kenya Pipeline Kisumu Depot, and is aimed at opening up the Lake Victoria transport option and reduce reliance on road transport.

Pipeline development is one of the regional project's initiatives to promote multimodal sustainable transport systems that encompass maritime, railways, road, pipeline and inland waterways transport. The volume to the landlocked countries and to Tanzania had gone down. However, the Kenya Pipeline Company has continued to recover the lost export market share whose demand is projected to be 7.5 billion litres by year 2020. Demand for the landlocked countries and Tanzania, based on year 2017 imports data was 6.5billion liters. Regional re-alignment which led to crude oil pipeline route adjustment and oil and gas importation and transportation through the Central Corridor, as well as a result of increased competition and operational changes, has seen in a

slight reduction in volumes through the pipeline

Loading challenges and congestion at the Kenya Pipeline Company's (KPC) depot in Eldoret had led to traders from transit countries switching to Dar es Salaam port. This coupled with improved infrastructure along the Central Corridor led to the shift. However, the Kenya Pipeline has been improving the loading facilities and expanding capacity to meet the region demand. All the agencies involved in clearing or handling of goods have developed a stakeholder's engagement program to continuously address challenges as they arise.

Table 9 below gives the fuel dispatch from three Depots namely; Eldoret, Kisumu, and Nakuru from where refined products are trucked to various destinations. Other depots include; Embakasi Aviation, Nairobi Terminal, Moi Airport, Kipevu Oil Storage Facility, Konza and Kenya Petroleum Refineries depot.

The data reveals that there was a decline in the volume of fuel products transported to Uganda by 8% between the periods of March-September 2017 and October 2017 to March 2018. However, the table also reveals an increase of 11%, 13%, and 11 percent respectively to DRC, Rwanda and Southern Sudan.

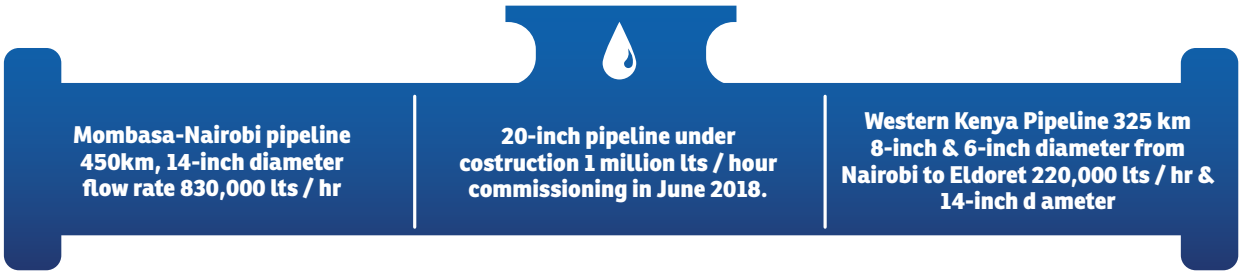


Table 9: Fuel Dispatch (in Cubic Meters) from Nakuru, Kisumu and Eldoret depot per country

PRODUCT	D.R.C.		UGANDA		SOUTH SUDAN		RWANDA	
	Apr-Sep-17	Oct-Mar-18	Apr-Sep-17	Oct-Mar-18	Apr-Sep-17	Oct-Mar-18	Apr-Sep-17	Oct-Mar-18
Automotive Gas Oil	54,128	56,674	329,912	269,448	70,203	83,199	7,950	9,458
Illuminating Kerosene	1,583	43	27,384	26,548	325	162	2,490	2,342
Jet A-1		645	63,108	65,302	45,598	50,962	37	-
Motor Spirit Premmium	39,157	47,541	256,312	260,680	37,296	35,597	4,521	5,206
Total	94,868	104,903	676,716	621,978	153,422	169,921	14,998	17,006
%Change	11%		-8%		11%		13%	

Source: KPC, April, 2018.

Table 10 provides a summary of monthly average volume of fuel dispatched to various Northern Corridor Member States between January, 2017 and March 2018 from three depots.

Table 10: Monthly Average Fuel dispatch (Cubic Meters)

MONTH	UGANDA	KENYA	S SUDAN	DEM. REP. CONGO	RWANDA	TANZANIA
Jan-17	99,063	105,513	27,379	16,683	302	0
Feb-17	96,349	100,574	39,090	17,133	231	0
Mar-17	100,130	116,697	37,032	19,038	558	0
Apr-17	100,601	99,882	26,470	15,091	1,804	38
May-17	120,999	103,591	32,313	15,203	426	62
Jun-17	106,361	102,790	27,746	15,821	1,378	102
Jul-17	113,546	105,707	26,054	16,037	1,395	0
Aug-17	121,479	103,416	22,285	15,783	2,596	0
Sep-17	113,730	95,994	18,553	16,934	7,398	0
Oct-17	104,949	94,991	23,087	16,754	3,690	0
Nov-17	100,677	100,396	26,936	16,917	5,624	0
Dec-17	103,538	112,977	30,579	15,356	2,979	0
Jan-18	106,031	116,682	31,855	20,160	1,675	0
Feb-18	104,949	107,177	27,931	17,511	1,678	0
Mar-18	100,677	113,561	29,533	18,205	1,359	38
Total	**1,297,536**	**1,257,163**	**323,343**	**199,770**	**32,003**	**239**
%Share	**42%**	**40%**	**10%**	**6%**	**1%**	**0%**

Source: KPC, April, 2018

The table below provides a summary of the volumes of fuel dispatched per terminal stations during the period of October, 2017 to March, 2018. The products include; Motor Spirit Premium (MSP), Motor Spirit Regular (MSR), Automotive Gas Oil (AGO), Jet A-1 and Illuminating Kerosene (IK). KPC has installed additional loading facilities increasing efficiency and loading capacity at Eldoret. In addition, transit goods are loaded first from 4.00 AM before local products are loaded.

Table 11: Transit volume (M3) dispatched per terminal.

TOWN	AUTOMOTIVE GAS OIL	ILLUMINATING KEROSENE	JET A-1	MOTOR SPIRIT PREMIUM	TOTAL VOLUME
Nakuru	232,701	45,382	0	198,820	476,903
Eldoret	489,680	71,750	80,214	402,655	1,044,298
Kisumu	390,852	84,719	99,857	304,671	880,098
Total	1,113,233	201,851	180,070	906,146	2,401,300

Source: KPC October, 2017-March, 2018

One of the factors that continue to hamper modal shift in this form of transport is the pricing. The recent promotional discounted tariff for products to western Kenya and transit countries that was introduced in April 2017, so an increase in uptake of the products and use of KPC storage facilities. There is the need for the pipeline company to adjust their prices so that they can be competitive. Pricing and unclear transportation policy saw a decline in the offtake of fuel by the pipeline. Other reasons for the decline in exports were as a result of competition and lack of a mechanism to reinforce the standard of fuel once off from the KPC depots. With the implementation of fuel sensors on trucks to visualize the density and the proposed increase of taxes on kerosene which is used for adulteration, the matter of contamination is going to be addressed. Uniform implementation of the axle load limits as per the EAC vehicle load management charter within the region, guarantees uniform loading of trucks with similar configuration across the region. There is the necessity to fast-track the growth plans and also the extension of the pipeline to fulfill the regional fuel demands. Apart from the above-mentioned policies, the company has also embarked on instituting information systems that will ensure faster clearance of fuel.

Through its KPC vision 2016-2025, the company has embarked on a transformational process to place it on the global map as far as petroleum and gas consumption is concerned.

3 TRANSPORT RATES AND COSTS

3.1. Introduction

The efficiency of freight movement is one of the major requirement under the Northern Corridor transit and transport agreement which provides for an environment enabling a smooth flow of goods from producers and suppliers to marketplaces or consumers in the region and internationally. Transport costs include charges such as for tracking, sea freight, and associated administration cost. The key factors that affect transport costs include distance, delivery time, fuel price, cargo value and weight, the direction of freight routes, and load factors. Logistical capability improvement can be achieved by reducing delivery times and transport costs.

This section provides a quick overview of transport rates. This report features the average rates charged by transporters across the region. Fixed costs such as road user charges for freight operators will also be highlighted. Due to the commercial sensitivity of the data, only aggregated data is given and comments are anonymous to an individual or organization.

From the results, the direction of a freight route and trade imbalances have a significant effect on the transport costs. With limited cargo for export, the back-haul rates are about 50% cheaper than freight charges for imports from the port of Mombasa. The effect of competition on freight rates has also been established with the introduction of SGR from Mombasa to Nairobi.

3.2. Freight charges in Kenya

The table below gives a comparison of road freight charges in Kenya to different destinations along the Corridor in US dollars for the period September 2017 to March 2018. From Mombasa to Nairobi the average transport charge on average is $ 833 for containerized cargo with an average of about 9.5 roundtrips in a month.

Table 12: Road Transport Rates from Mombasa to Nairobi.

FROM	TO	20 FEET CONTAINER & < 12 TONES	40 FEET CONTAINER
Mombasa	Nairobi	650	833
Nairobi	Mombasa	200 {Empty},	220{Empty}, 450{loaded}
		350 {loaded}	

Source: Analysis from Transporters, 2018

Table 13 below provides tariff rates for standard gauge railway from Mombasa to Nairobi.

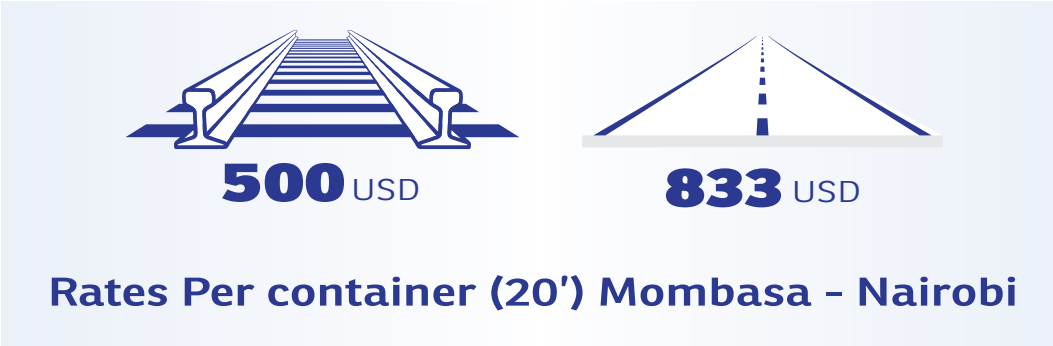
Table 13: Rail Transport Rates from Mombasa to Nairobi.

SIZE	WEIGHT RANGE IN TONES	RATE FOR LOADED CONTAINER BY RAIL (USD)		EMPTY CONTAINER RETURN RATE (USD) – DOWN DIRECTION	
		Up Direction	Down Direction	Ex Up Direction by Rail	Ex Up Direction by Road
20' Container	Full Range	500	250	100	150
40' Container	Full Range	800	400	100	150
Promotional Tariffs ending on 31st December 2018					
20' Container	Full Range	250	150	100	150
40' Container	Full Range	300	200	100	150

Source: Kenya Railways published tariff, 2018

In a bid to attract exporters to use the Standard Gauge Railway (SGR), a 50 percent discount has been given by the Government of the Republic of Kenya. Currently, there is a promotional tariff of USD 250 for a twenty-foot loaded container and $ 300 for a 40-foot container going in the upward direction. For downwards direction, the rates are $ 150 and $200 for loaded twenty-foot and 40-foot container respectively. Empty containers are charged $100 for both 20 foot and 40-foot containers upwards or downwards. Promotional Tariff was introduced on commencement of MEF service and will be operational until 31st December 2018

Figure 6: Comparison between Road and Rail for 20' Container



Source: Transport Observatory Analysis

The figure above shows that the rates for the twenty-foot container are cheaper when transported by SGR compared to the road. The SGR rates are not inclusive of last mile cost estimated at USD 250 for Nairobi and TBL mark-up by shipping lines estimated at USD 100. The container handling charges at the ICD are about $80 for a 20-foot container and $90 for a 40-foot container. For fuel products, transporters have an option of either using the road transport, Meter gauge railway or the pipeline. The meter gauge railway transports vegetable oils, Palm Fatty Acid Distillate (PFAD) and Diesel/ petroleum products. PFAD is transported at a rate of 36USD per ton while the average rate for diesel or petroleum product is 36 USD per ton which is about USD 28.8 per cubic meter. On the road transport, the average rate of transportation is USD 97 per ton.

The figure below gives the average rates for oil products as transported by road, the meter gauge railway and pipeline from Mombasa to Nairobi as extracted from the Transport Observatory records. The rates are higher for the road, followed by road and the pipeline transport.

Figure 7: Comparison between Road, Rail and pipeline

Source: Transport Observatory estimates

3.2.1. Transport Rates from Kenya to various destinations

The average transport cost from Mombasa to Kampala is USD 2168 or $ 1.85 per container per km. Kenya registered trucks travelling from Malaba to Kampala a distance of approximately 236 kilometres pay a Road User Charge of US $50 for the return journey to and from Kampala.

Table 14: Transport Rates from Kenya to various destinations

FROM	TO	DISTANCE	AVERAGE COST PER KM/CONTAINER (USD)	
		(Km)	2017	2018
Mombasa	Kampala	1,169	1.79	1.85
Mombasa	Kigali	1,682	2.23	2.28
Mombasa	Juba	1,662	3.01	2.41
Nairobi	Kampala	688	2.62	2.51
Nairobi	Kigali	1,201	2.5	3.16
Mombasa	Goma	1838	3.13	3.26
Mombasa	Bujumbura	1,957	3.07	3.32

Source: Road Transport Survey, 2018

From the table 14 above, Mombasa to Bujumbura rates are 3.32 per container per km through Kampala- Kigali route. The Central Corridor transport observatory report on the other hand gives the rate of 1.82 USD/km from Dar es Salaam to Bujumbura through the Central Corridor.

3.2.2. Annual distance covered by trucks in Kenya.

The Mombasa port community charter provides the target of 120,000 Km as the annual distance trucks have to achieve as a benchmark to international standards. The average distance covered by trucks in Kenya was about 74,686 km in 2017. The number of return trips is mainly influenced by distance to respective destinations. Nairobi-Mombasa route which has the shortest distance recorded 9.5 return trips per month up from 7.5 registered in September 2017. Port/border post procedures and documentation are the biggest contributors to high turnaround time while non-availability of cargo was ranked the second contributor based on the survey from transporters.

Table 15: Number of round trips to various destinations

FROM	TO	DISTANCE (KM)	MAR-2017	SEP 2017	MAR 2018
Mombasa	Nairobi	481	10	7.5	9.5
Mombasa	Kampala	1169	3	3	3
Mombasa	Kigali	1,682	3	2	2
Mombasa	Bujumbura	1957	2	1.2	-
Mombasa	Goma	1,838	2	2	-
Mombasa	Juba	1662	2	2	1

Source: Road Transport Survey April, 2018

3.3. Road Freight tariff in Burundi

Most of the goods to Burundi pass through the Central Corridor. In 2017, 21,578 metric tons were imported through the port of Mombasa while 403,823 tones came through the port of Dar-es-salaam. Some of the reasons hampering transportation along the Northern Corridor has been the longer traditional route from Mombasa through Kampala and Kigali which is longer (1,957Km) than Dar-es-salaam to Bujumbura (1,640Km). The route also attracts more road user charges and has multiple border stations which sometimes cause major delays.

Table 6 summarizes transport charges per container to and from Bujumbura in USD for 20-foot containers which have remained the same since November 2017. Exports to Bujumbura from Nairobi pass through Namanga road via Tanzania which is considered shorter than the traditional route. Transporters, however, have raised concern especially on the proliferation of charges being introduced by counties for one reason or another which is making the cost of doing business through the Port of Mombasa and the Northern Corridor more expensive. For instance, Kajiado County charges Ksh 2000($20) for all Burundi transit trucks in Kenya. The tariff to Mombasa and Nairobi has increased by $10 and $ 20 respectively as shown in the table 16 below.

Though the uptake is not good as a result of limited sensitization, the Taita-Taveta which in good condition offers the shortest access to Mombasa (1,626km) from Bujumbura. Moreover, the road user charges have been reduced from $500 to $152 by the Tanzanian Government. It is expected that when transporters start using such alternative routes then the rates are likely to go down.

"Taita-Taveta road which is in good condition offers the shortest access to Mombasa (1,626km) from Bujumbura."

Table 16: Road Transport Tariffs by Burundi Transporters

FROM	TO	DISTANCE(KM)	RATES PER TON(USD)		AVERAGE COST PER KM/TON	
			Sep - 17-	Mar-18	Sep -17	Mar- 18
Mombasa	Bujumbura (through Kampala-Kigali)	1,957	160	180	0.08	0.09
Nairobi	Bujumbura	1,476	140	135	0.09	0.09
Juba	Bujumbura	1,441	-		-	-
Kigali	Bujumbura	275	-	40	-	0.15
Kampala	Bujumbura	788	100	100	0.13	0.13
Goma	Bujumbura	431	80	80	0.19	0.19
Bujumbura	Goma	431	60	80	0.14	0.19
Bujumbura	Kampala	788	80	60	0.1	0.08
Bujumbura	Mombasa	1,957	140	160	0.07	0.08
Bujumbura	Nairobi	1476	120	130	0.08	0.09
Bujumbura	Kigali	275	40		0.15	-
Bujumbura	Juba	1,441	-		-	-

Source: Association of Burundi International Transporters (ATIB), April 2018

The number of road trips made during the period under review has remained low with most truckers from Burundi making one round trip in a month between Bujumbura and Goma, Kampala, Kigali or Nairobi. The average annual distance covered by trucks has remained about 35,000 Km for licensed trucks plying between Mombasa and Bujumbura.

3.4. Road Freight charges in DRC

The table below provides charges incurred for both 20-foot and 40-foot containers for imports and exports from Goma to various destinations along the Northern Corridor. The tariff includes port charges, clearing fees, and road toll fees paid per respective destination. Imports from Mombasa attract higher freight charges than from other destinations due to the distance. Imports from Mombasa attract a higher rate of $1.77 per kilometer.

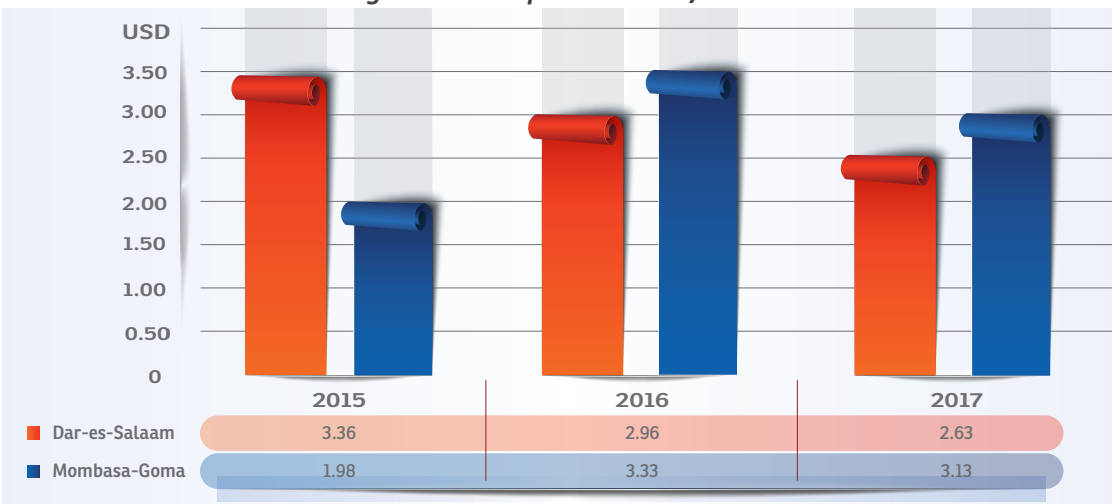
Table 17: Transport rates by DRC Transporters

FROM	TO	DISTANCE(KM)	RATES PER CONTAINER(USD)	AVERAGE COST PER KM/CONTAINER
Mombasa	Goma	1,840	3250	1.77
Nairobi	Goma	1,357	1,680	1.24
Kampala	Goma	669	1060	1.58
Goma	Kampala	669	1,120	1.67
Goma	Nairobi	1357	1680	1.24
Goma	Mombasa	1,840	1,820	0.99

Source: FEC, September 2017

Figure 8 below gives comparison of freight charges from Mombasa and Dar-es-salaam. The distance from Goma to Mombasa is 1, 840 kilometers while Dar es Salaam Goma is 1635Km Comparing the two corridors, the distance through Dar-es-Salaam corridor is slightly shorter.

Figure 8: Rates per Container/KM



Source: Northern corridor transport Observatory Analysis

Freight charges in DRC vary depending on the state of the infrastructure, especially for the seasonal roads and the distances. Furthermore, the charges may be affected by the fees charged by the numerous agencies along the transit route to the different destinations.

Table 18: Average of Truck Kilometre per year by DRC Transporters

			(ROUND TRIPS PER MONTH)		
FROM	TO	(KM)	MAR-2017	SEP 2017	TRUCK KM PER ANNUM
Goma	Kampala	669	2	2	32,112
Goma	Nairobi	1,357	1	1	32,568
Goma	Mombasa	1,838	1	1	44,160

Source: FEC, September 2017

The table 18 above provides a summary of the average number of round trips and truck kilometer per annum made by transporters from Goma to other destinations. The number of round trips has remained constant for the last 12 months. With little return cargo guaranteed, there are minimal round trips made in 2017.

3.5. Road Freight charges in Rwanda

The table 19 below provide freight charges for the 20-feet container as well as 40-foot container in Rwanda. A container transported from Mombasa to Kigali at the rate of $ 2.38 per container per kilometer (USD 4000 per container). On the other hand, a similar container is charged $3000 from Dar es Salaam through the Central Corridor.

Table19: Transport Rates to various destinations by Rwanda Transporters

FROM	TO	DISTANCE (KM)	RATE/CONTAINER (USD)		RATES PER CONTAINER/KM(USD)	
			2017	2018	2017	2018
Mombasa	Kigali	1,682	4,300	4,000	2.56	2.38
Nairobi	Kigali	1,201	3,200	3,000	2.66	2.5
Kampala	Kigali	513	2,000	2,000	3.9	3.9
Goma	Kigali	156	1,000	1,000	6.41	6.41
Bujumbura	Kigali	275	1,800	1,800	6.55	6.55
Kigali	Nairobi	1,201	2,000	2,000	1.67	1.67
Kigali	Mombasa	1,682	3,000	3,000	1.78	1.78
Kigali	Kampala	513	1,600	1,600	3.12	3.12
Kigali	Goma	156	1,000	1,000	6.41	6.41
Kigali	Juba	1,166	7,500	7,500	6.43	6.43
Kigali	Bujumbura	275	1,800	1,800	6.55	6.55

Source: ACPLRWA, 2018

Table 20: Number of round trips per month by Rwanda Transporters

FROM	TO	(KM)	MAR-17	SEP-17	APR, 2018
Kigali	Juba	1,166	1.5	1	1
Kigali	Bujumbura	275	-	2	2
Kigali	Mombasa	1,682	2.5	2.5	2.5
Kigali	Nairobi	1,201	4	4	4
Kigali	Goma	156	10	6	6
Kigali	Kampala	513	7	7	7

Source: ACPLRWA, 2018

Table 20 above provides a summary of the average number of round trips The Number of round trips has remained constant from April, 2017 with Kampala registering the highest number of trips at 6.

3.6. Number of registered trucks in Rwanda

The total number of registered transit truck for 2018 are 1,657. The registration is usually done at the borders as shown in the table 21 below. The average distance covered per truck in 2017 was recorded as 69,500 KM.

Table 21: Number of registered trucks in Rwanda

BORDER	NUMBER OF TRUCKS REGISTERED
Dar Es Salaam	1
Bugarama	18
Gisenyi Poids Lourds	20
Cyagungu	22
Akanyaru haut	28
Kagitumba	38
Gikondo	57
Gisenyi Corniche	111
Mururu	125
Gatuna	346
Rusumo	891

Source: RRA, April, 2018

Fuel products destined to Rwanda are picked either from the Port of Mombasa, Dar es salaam, Kisumu and Eldoret pipeline depots. A bigger proportion of Rwanda's fuel comes in through the Central Corridor which a longer route. The Kigali-Dar es Salaam route is nearly 1,495 kilometers, compared to the Kigali-Eldoret route which is 860 kilometers.

Table 22: Transport Rates for oil tankers by Rwanda Transporters

FROM	PRODUCT	USD/CUBIC METER
Mombasa	Fuel Oil	130
Kisumu	Diesel/Petrol/Jet-A1	60
Eldoret	Diesel/Petrol/Jet-A1	60
Dar	Fuel Oil	130
Dar	Diesel/Petrol/Jet-A1	80

Source: ACPLRWA, April 2018

3.7. Road Freight charges in South Sudan

The transportation rates have remained constant since 2017. Goma-Juba route covering a distance of 1,322 Km was the most expensive at $5.3 per Km per container. Mombasa to Juba covering a distance of 1,662 Km was the least expensive in terms of cost per kilometer per container at 3.01. However, most transport business still takes place between Juba and Kampala which indicated an average round trip of 4. Nonetheless, truck utilization is still low with only an average of 50,692 Km per truck covered in the year 2017. The high freight charges are as a result delayed return of empty containers that attract Demurrage charges. Additionally, other charges emanate from the compliance with vehicle load limit that trucks seem to ignore as well as the numerous roadblocks between Nimule border and Juba.

Table 23: Road Freight Charges per destination by South Sudan Transporters

FROM	TO	DISTANCE (KM)	AVERAGE COST PER KM/ CONTAINER(USD)	RATE ($)/TONE
Kampala	Juba	653	3.83	107
Nairobi	Juba	1,145	4.37	214
Kigali	Juba	1,166	3.43	214
Mombasa	Juba	1,662	3.01	232
Bujumbura	Juba	1,441	3.12	232
Goma	Juba	1,322	5.3	286
Juba	Goma	1,322	5.3	286
Juba	Kampala	653	3.83	107
Juba	Kigali	1,166	3.43	214
Juba	Nairobi	1,145	4.37	214
Juba	Bujumbura	1,441	3.12	232
Juba	Mombasa	1,662	3.31	232

Source: B&S group of companies, 2018

Table 24: Average Truck round trips per month by South Sudan Transporters

FROM	TO	(KM)	SEP 2017	APRIL, 2018
Juba	Goma	1,322	1	0
Juba	Kigali	1,166	1	1
Juba	Bujumbura	1,441	1	0
Juba	Kampala	653	4	3
Juba	Nairobi	1,145	2	1
Juba	Mombasa	1,662	1	3

Source: B&S group of companies, April, 2018

For oil tankers with a capacity of 30, 000 liters, the following rates apply.

Table 25: Transport Rates for oil tankers by South Sudan Transporters from various sources to Juba.

FROM	USD/TANKER
Kisumu	3,000
Eldoret	3,500
Nakuru	4,500
Nairobi	5,000
Mombasa	6,500
Dar-es Salaam	7,500

Source: B&S group of companies, April 2018

It can be noted that the charges from Kisumu are the lowest while from Dares salaam, the rates are very high. The high charges can be attributed to the long distance between Juba and Dar-es Salaam making it more expensive than along the Northern Corridor.

3.8. Road Freight charges in Uganda

Freight charges in Uganda are presented in the table 26 irrespective of the container type. The transport rates between Kampala and Mombasa have remained constant since March, 2018. The Goma- Kampala, and Kampala - Juba routes are the most expensive. As at March 2018, the rate per container per km was 4.19 dollars between Kampala and Goma while the rates for transportation from Kampala to Juba stood at $4.18 per container per km for the same period.

Table 26: Road Freight Charges per destination by Uganda Transporters

FROM	TO	DISTANCE (KM)	RATE ($) PER CONTAINER		RATE ($) PER CONTAINER PER KM	
			MARCH 2017	MARCH 2018	MARCH 2017	MARCH 2018
Mombasa	Kampala	1,169	2200	2200	1.88	1.88
Juba	Kampala	653		900		1.38
Goma	Kampala	669	550	1100	0.82	1.64
Kigali	Kampala	513	800	900	1.56	1.75
Bujumbura	Kampala	788	450	1500	0.57	1.9
Nairobi	Kampala	688	1400	1500	2.03	2.18
Butembo	Kampala	577		2000		3.47
Kampala	Goma	669	3000	2800	4.48	4.19
Kampala	Bujumbura	788		3400		4.31
Kampala	Juba	653	1950	2700	2.97	4.18
Kampala	Kigali	513	1650	1750	3.22	3.41
Kampala	Bunia	718		200		2.79
Kampala	Nairobi	688	600	800	0.87	1.16
Kampala	Mombasa	1,169	800	800	0.68	0.68

Source: UNTA, April, 2018

Table 27: Number of monthly round trips

FROM	TO	(KM)	MAR-17	SEP-17	MAR-18
Kampala	Kigali	513		4.5	5
Kampala	Nairobi	688	5	5	4.5
Kampala	Bujumbura	788		3.5	4
Kampala	Goma	669	3	3	4
Kampala	Mombasa	1169	5	4.5	3.5
Kampala	Bunia	718	-	-	3.5
Kampala	Butembo	577	-	-	3.5
Kampala	Juba	653	3	3.5	3

Source: UNTA, April 2018

The average annual distance covered per truck is 78,000Km. Table 28 provides the number of round trips per month for trucks registered in Uganda. The target for distance covered per truck per year is 12000km

Table 28: Transport Rates for oil tankers by Uganda Transporters

FROM	USD/TANKER
Mombasa	5,500
Nairobi	4,500
Kisumu	3,000
Nakuru	5,000
Eldoret	5,000
Dar-es Salaam	5,000

Source: UNTA, April 2018

Transport costs along the corridor can be reduced by reducing the unnecessary stops and delays especially along Nimule– Juba. Also, the costs can be reduced further by improving on the truck turnaround time at the port and the fuel depots as well as the clearance time at the border crossing points. Reliability and congestion at pick-up and drop-off locations should be looked into so as to ensure timely delivery of the goods being transported. Quite often customers lose confidence and trust in the Corridor and as a result major delay. Such are the reasons as to why some customers are opting for optional routes other than the Northern Corridor. Eventually, such avoidable challenges end up affecting future economic opportunities.

Other causes of the high costs along the Corridor are issues to do with insecurity along some parts of the Corridor prompting the transport firms to incur further high insurance costs that are then passed on to the customers. Given that Southern Sudan is not a member of the COMESA makes it a requirement for transporters to incur fresh insurance cover because they do not benefit from the COMESA Yellow Card Insurance Scheme. Eliminating such cases of double insurance can also help cut down on the transport costs that have been incurred in the past.

VISA requirements continue to be a challenge that needed to have been abolished as per the Northern Corridor Agreement. Abolishing the VISA fee that ranges between fifty and one hundred dollars may as well see a further reduction in the transport costs.

4 PRODUCTIVITY AND EFFICIENCY

4.1. Introduction

The Northern Corridor is supposed to enhance both economic and social development of the ever-growing population of the Member States. As such its productivity and efficiency has to be constantly evaluated to ensure that its outcomes live up to the expected standards. Several elements attached to the Northern Corridor will often affect its operation and efficiency as well. Such elements include the ports, the revenue authority policies, subsidiary infrastructure and maintenance of the main Corridor. The Mombasa Port Charter led to the development of specific indicators that would aim at enhancing an efficient, effective and competitive port as well as a supply chain system that should drive regional economies into attractive investment destination for both local and international investors.

Additionally, these efficiency and productivity indicators serve as a guideline for the Northern Corridor Secretariat to assess the performance of the Corridor. The productivity measurements, for instance, provide information on the current performance on transport logistics chain against the best practices. Efficiency would, therefore, entail such practices as reducing wastage of inputs while developing the necessary infrastructure that enhances customer sustainable. As such this section of the report shall focus on indicators such as the ship turnaround time at the port of Mombasa, quality of the transport infrastructure along the Corridor, weighbridge traffic and weighbridge compliance.

4.2. Ship turnaround time

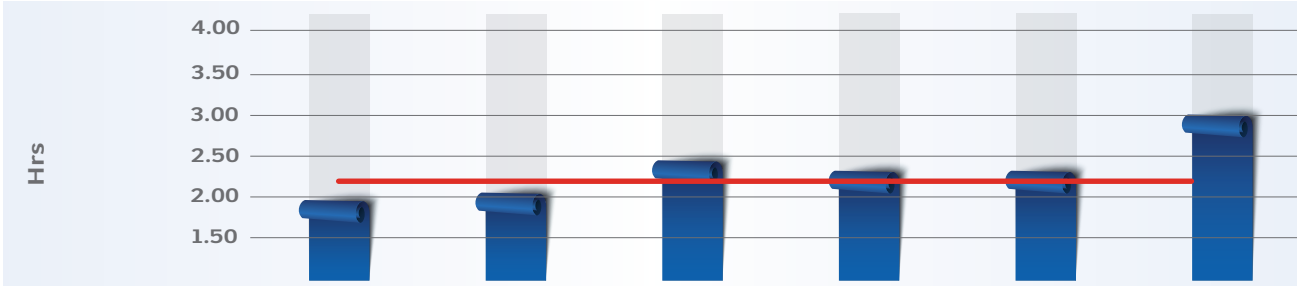
This indicator is measured from the time the vessel arrives at the Port area (Fairway Buoy) to the time it leaves the port area.

The Ship turnaround time involves ship Service Time and Waiting Time. The Mombasa port community charter has set 72 hours (3 days) as the target for this indicator. This is an intermediate target with the ultimate goal being to achieve a 24 hours benchmark.

> **The average ship turnaround time for the six months between October and March, 2018 was 77.9 hours**

The figure below gives performance for ship turnaround from October, 2017 to March 2018.

Figure 9: Containerized Ship Turnaround Time



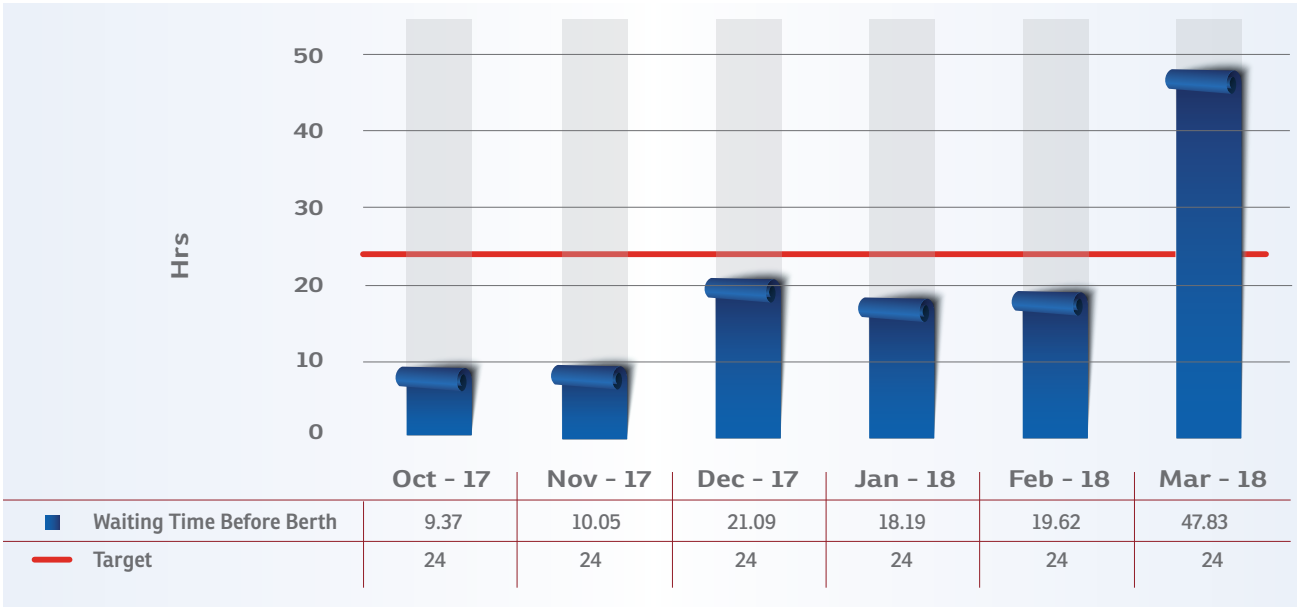
	Oct - 17	Nov - 17	Dec - 17	Jan - 18	Feb - 18	Mar - 18
Turnaround Time	55.4	60.9	85.9	75.5	78.0	116.3
Target	72	72	72	72	72	72

Source: KPA, March 2018

4.3. Ship Waiting time before berth

This time is measured from the time the vessel arrives at the fairway buoy to the time of its first berth. This is a subset of the vessel turnaround time.

Figure 10: Vessel waiting time before Berth



	Oct - 17	Nov - 17	Dec - 17	Jan - 18	Feb - 18	Mar - 18
Waiting Time Before Berth	9.37	10.05	21.09	18.19	19.62	47.83
Target	24	24	24	24	24	24

Source: KPA, April 2017

From the graph above, the target for this indicator has generally been achieved except for the month of March, 2018 that registered 47.8 hours occasioned by bunching of vessels. The bunching was caused by vessels arriving at almost the same time and thus making it difficult to allocate some vessels their actual arrival time slots.

The average ship waiting time before berth for the period October 2017 to March 2018 was 20.5 hours. Statistics also show that for the same period (between October, 2016 and March 2017), the average waiting time was 22.8 hours. Various initiatives that have been implemented to improve this target include; implementation of fixed Berthing Window to allow shipping lines plan their time, improved crane productivity and sufficient terminal capacity. The report recommends a review of this target and initiatives to reduce the waiting time further in comparison with best practices.

4.4. Quality of road transport infrastructure within the Northern Corridor Road Network

There are key routes designated by Member States as the channel through which people and goods can be transported along the Corridor as provided in the Northern Corridor Transit and Transport Agreement. As such, they form the core of the Northern Corridor through which economic integration within the region is enhanced. Improved transport infrastructure serves to open up the interior regions of the Northern Corridor and thus reaching out to the untapped markets and unlocking unrealized economic potential. These routes also stimulate private investment. This section of the report is interested more in the quality of roads within the Member States as defined by the International Roughness Index (IRI). It also outlines projects that are likely to improve general development along these routes. The IRI is measured on a scale of 1 to 8.

Table 29: International Roughness Index

IRI SCALE	ROAD CONDITION DESCRIPTION
1 to 1.5	Excellent
1.6 to 3	V. Good
3.1 to 4	Good
4.1 to 6	Fair

4.4.1. Road conditions in Burundi

Northern Corridor Infrastructure Map-Burundi

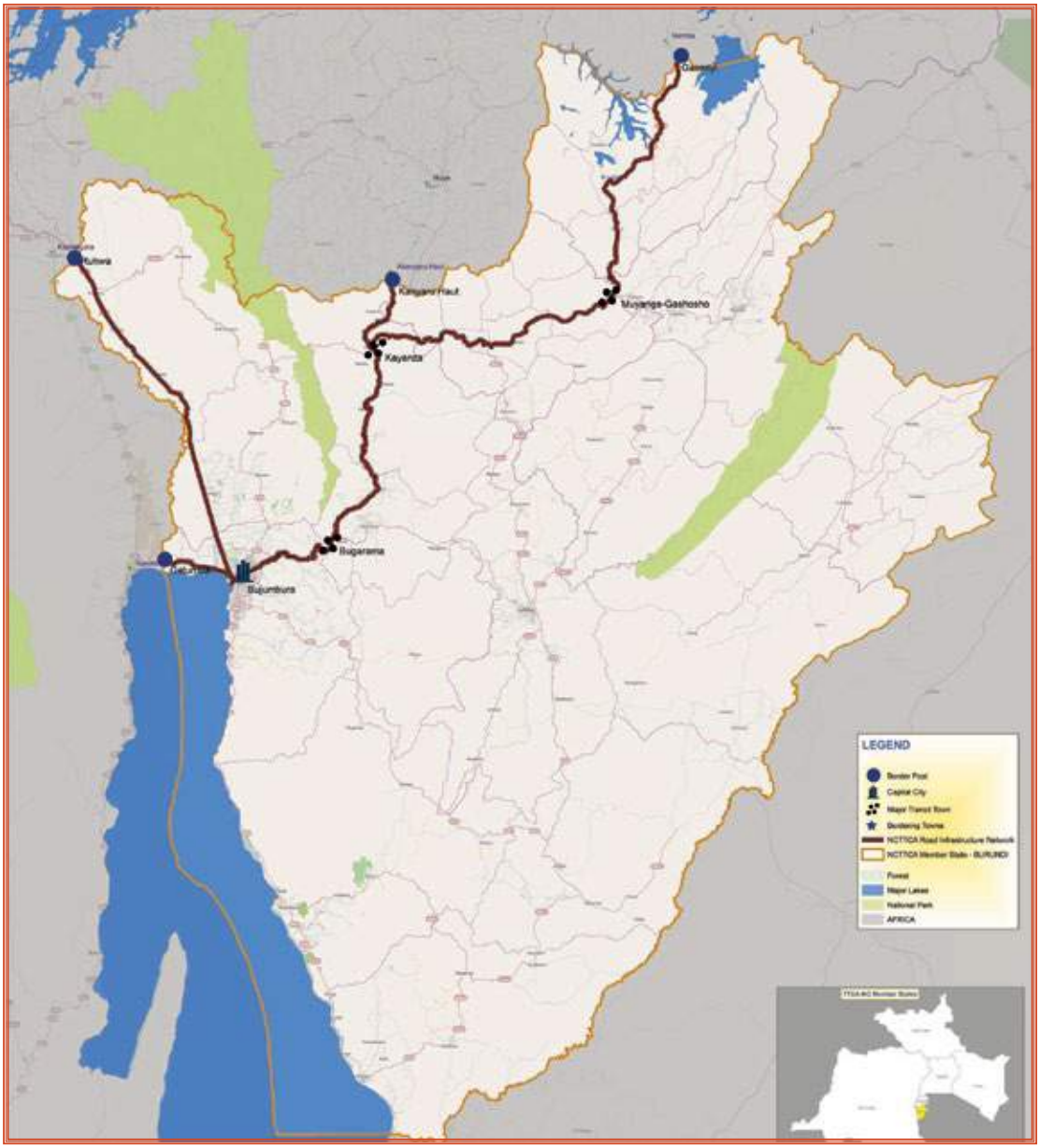


Table 30 shows designated road section for the Northern Corridor in Burundi.

Table 30: Transit Road Sections in Burundi

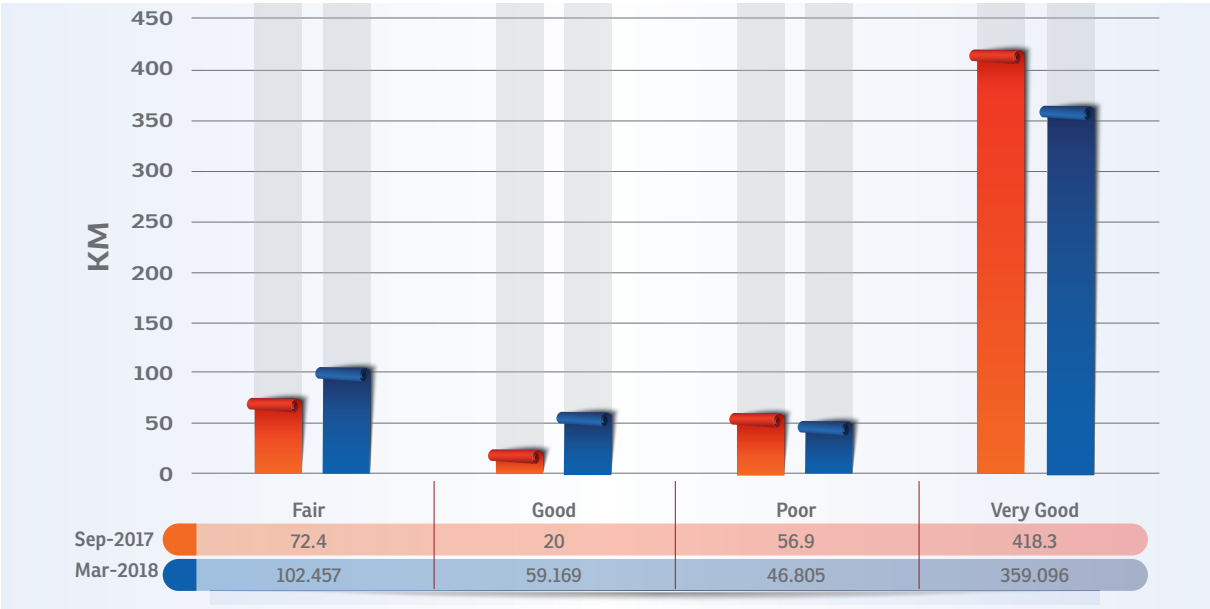
DESIGNATED NORTHERN CORRIDOR ROADS IN BURUNDI		
FROM	**VIA**	**TO**
Kanyaru Haut	Kayanza-Bujumbura	Gatumba
Gasenyi	Kirundo-Ngozi	Bujumbura
Ruhwa	Rugombo-Bujumbura	Gatumba
Kanyaru Bas	Ngozi	Gitega

Source: NCTTA, 2007

Majority of the Road Sections in Burundi are paved and in a good state as shown in the table below. From a total of 567.5 Km that were surveyed, 359.1 kilometers are in very good state, 59.2 kilometers are in good state, 102.5 kilometers can be categorized to be in a fair state and 46.8 kilometers of the route are in poor state. In September, 2017, it was reported that 418.3Km were in very good state, 20 Km is in good state, 72.4 Km in fair state and 56.9 Km poor state. The poor roads have declined by 17.7 % while also the very good roads have declined by 14.1%.

The figure further shows a comparison between the 2018 statistics against what had been collected in 2017. It can be noted that there is a mixed indication on the state of the roads with the number of kilometers that had been declared as very good declining from 418 km to 359 km. However, roads that can be categorized as good have drastically improved by approximately 40 Km from 20 km.

Figure 11: Summary of the road condition in Burundi



Source : Office des Routes Burundi, April 2018

The table below gives the status of various sections. For instance, Gihanga to Bujumbura, and Nyamitanga to Gihanga sections are under rehabilitation while Kanyaru Haut to Kayanza requires additional funding. A 30.1 Km section between Bujumbura and Nyamitanga is under rehabilitation being financed by the Republic of Burundi with support from Arab bank for economic development in Africa (BADEA), Kuwait Fund, Saudi Fund and OPEC Fund. The section will have foot bridges, 4 bus shelters and parking and installation of traffic lights.

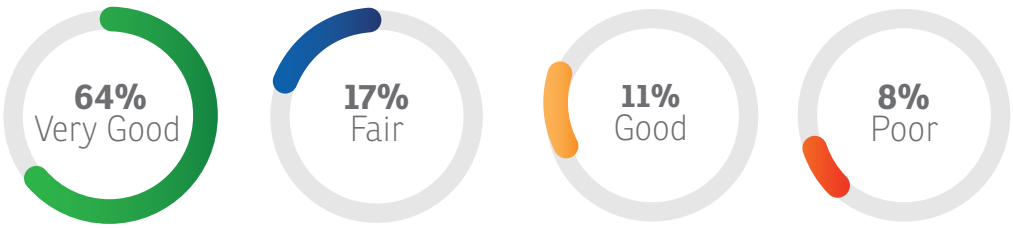
Table 31: Status of the road sections in Burundi

FROM	TO	LENGTH (KM)	IRI	CONDITION
Gasenyi	Gashoho	68	2	Very Good
Gashoho	Ngozi	40	5	Fair
Ngozi	Kayanza	32	5	Fair
Kanyaru Haut	Kayanza	22	7	Poor
Kayanza	Bugarama	59	4	Good
Bugarama	Bujumbura	35	3	Very Good
Bujumbura	Gatumba	23	2	Very Good
Ruhwa	Nyamitanga	51	2	Very Good
Nyamitaanga	Gihanga	10	6	-
Gihanga	Bujumbura20	20	4	Fair
Kanyaru bas	Ngozi	25	8	Poor
Ngozi	Gitega	80	2	Very Good
Gitega	Bujumbura	102	3	Very Good

Source : Office des Routes, April 2018

From the chart below, 359 km (64%) are in Very Good State, 59 km in Good State, 92km are in fair state while 47 km are in Poor state.

Figure 12: Summary of the road condition in Burundi



4.4.2. Road condition in DRC

Northern Corridor Infrastructure Map

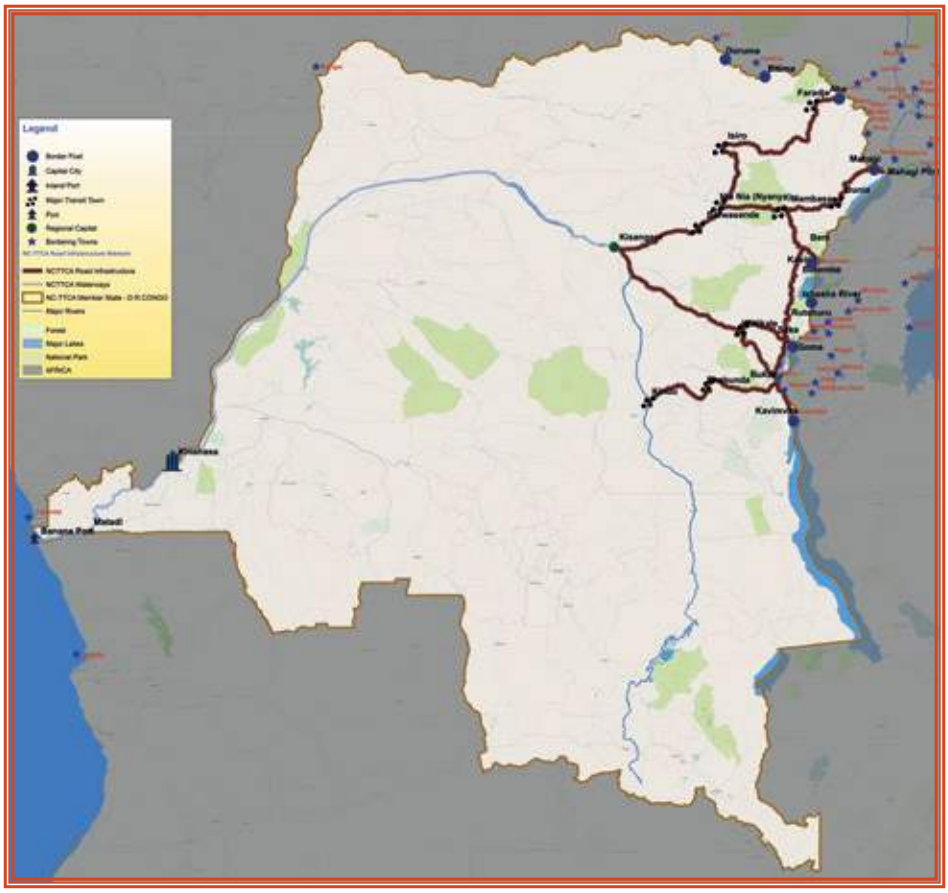


Table 32: Transit Road Sections in DRC

FROM	BY WAY OF	TO
Aru	Bunia	Kisangani or Isiro
Mahagi	Bunia	Kisangani or Isiro
Kasindi	Beni	Kisangani or Bunia
Ishasha	Rutshuru	Goma Town
Bunagana	Goma	Goma Town
Bukavu	Kindu	Kisangani
Kiliba	Uvira	Kalundu
Kavimvira	Uvira	Kalundu
Kamanyora	Bukavu	Kalundu

Source: NCTTA, 2007

Table 33 gives the current status of various subsections in DRC. From the reported figures, about 2,407 Km of the road condition in DRC is in a good state, which translates to about 53% of the reported road sections. This is an increment of about 432 km from what was reported in 2017. Poor roads are 1,199 Km while the distance for fair routes declined by 342km.

Table 33: Status of the road Sections in DRC

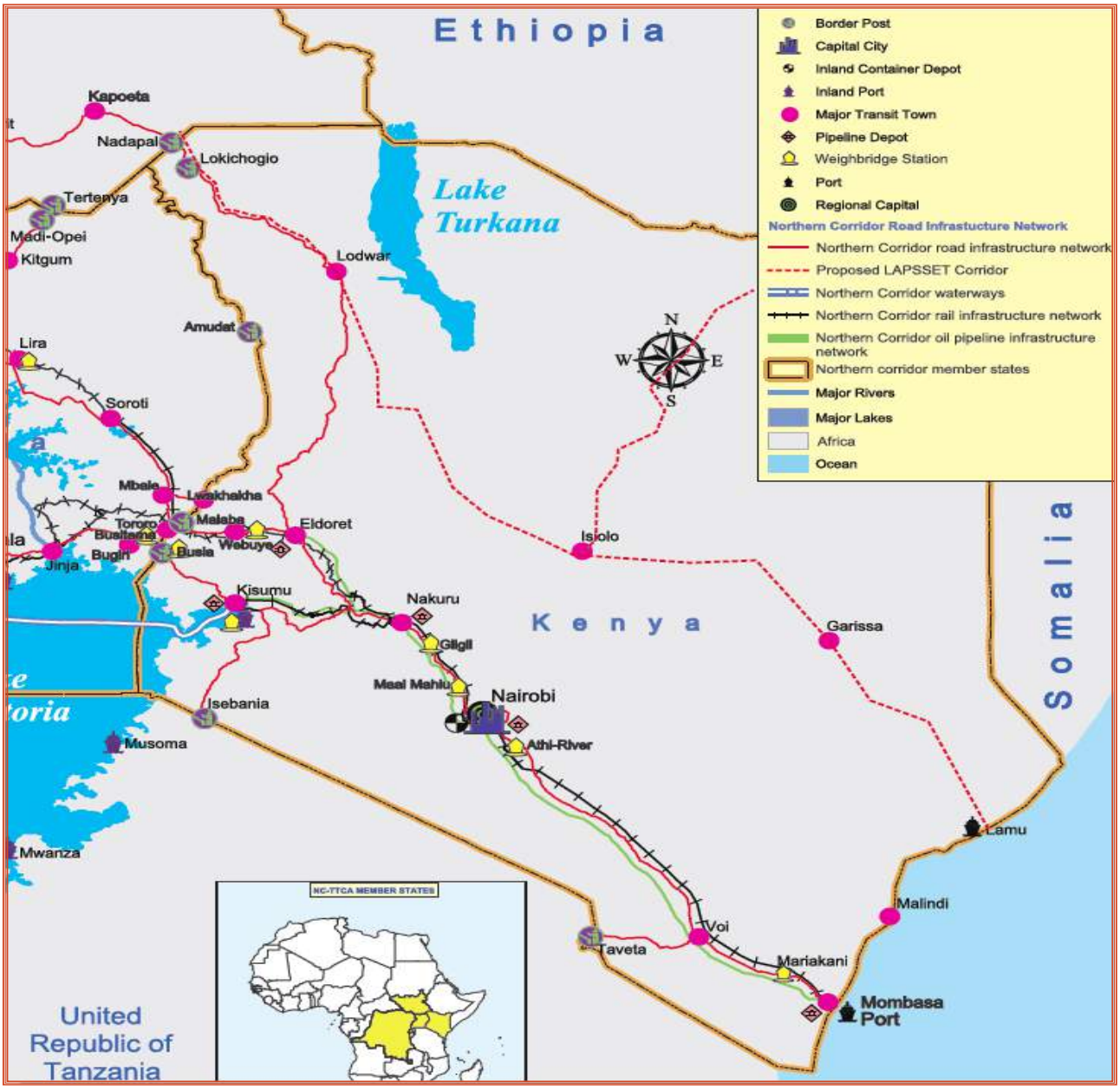
ROUTE SECTION	LENGTH(KM)	GOOD	FAIR	POOR
Bukavu-Kindu-Kisangani section				
Bukavu -Burhale	55	24	25	6
Burhale - Shabunda - Lubile	363	0	108	255
Lubile - Kalima - Mali	117	14	55	48
Mali - Kindu	36	10	24	2
Mali - Lubutu	318	0	72	246
Lubutu - Kisangani	297	105	94	98
Lubutu - Osokari - Walikale	219	192	27	0
Walikale - Hombo	107	0	0	107
Hombo - Miti	93	0	4	89
Miti - Bukavu	-	-	-	-
Bukavu-Uvira Section				
Bukavu - Kamanyola	55	5	45	5
Kamanyola - Uvira	86	61	15	10
Uvira - Kamvivira - Front Burundi	7	7	0	0
Kisangani - Beni -Kasindi section				
Kisangani - Niania - Komanda	650	650	0	0
Komanda - Luna	65	65	0	0
Luna - Beni	60	60	0	0
Beni - Kasindi	80	80	0	0
Komanda - Bunia – Mahagi section				
Komanda - Bunia	71	71	0	0
Bunia - Mahagi - Goli	190	190	0	0
5.Axe Kisangani - Isiro – Aru section				
Kisangani - Niania		369	0	0
Niania - Isiro	232	38	108	86
Isiro - Watsa - Aru	422	179	103	140
Beni - Butembo – Goma Section				
Beni - Ndoluma	132	54	68	10
Ndoluma - Rutshuru - Goma	199	12	114	73
Goma - Sake - Minova	58	52	6	0
Minova - Kavumu - Bukavu	150	133	0	17
Rutshuru - Bunagana	27	0	27	0
Rutshuru - Ishasha	63	36	20	7
TOTAL	**4,152**	**2,407**	**915**	**1,199**

Source: Office De Routes, DR Congo, April, 2018

Total length of unpaved road network is 2, 668. 1, 221 km are paved while 263km are partially paved. Bukavu -Burhale, Burhale- Shabunda – Lubile, Mali – Lubutu, Niania – Isiro, Isiro- Watsa – Aru, Beni – Ndoluma, Rutshuru – Bunagana, Rutshuru – Ishasha are unpaved and have a total 750 km of poor road network. Bukavu – Kamanyola, Goma - Sake – Minova, Minova - Kavumu -Bukavu are partially paved subsections. However, maintenance and rehabilitation works are in progress on Bukavu-Burhale, Lubutu – Kisangani, Bukavu – Kamanyola, Kamanyola – Uvira, Kisangani - Niania – Komanda, Komanda – Luna, Kisangani – Niania, Niania – Isiro, Isiro - Watsa – Aru, Beni – Ndoluma, Ndoluma - Rutshuru – Goma and Goma - Sake - Minova

4.4.3. Road condition in Kenya

Northern Corridor Infrastructure Map-Kenya



The table below provides the status of road conditions in Kenya measured by International Roughness Index. The port of Mombasa serves as the starting point for the Corridor. The main Northern Corridor transit section in Kenya covers a total network of 1,184 Km; Mombasa – Nairobi (481 Km), Nairobi - Malaba (452 Km), Mau Summit to Busia (251 Km). The Corridor also connects to Tanzania through Voi- Taita-taveta road and to South Sudan though Lokichar – Nadapal route.

The following projects were fully completed by the time of compilation of this report: reconstruction works for Timboroa-Eldoret (73km), rehabilitation of Kericho - Nyamasaria (76 km), Mau Summit – Kericho (57km), Nyamasaria – Kisian (87), and Kisumu Bypass (24km), rehabilitation of Eldoret-Webuye (60km) and Webuye-Malaba (62km) road sections.

> **"The main Northern Corridor transit section in Kenya covers a total network of 1,184 Km; Mombasa – Nairobi (481 Km), Nairobi - Malaba (452 Km), Mau Summit to Busia (251 Km)."**

Table 34 gives the current status of the road infrastructure along the Northern Corridor. It includes information on vital links from the Northern Corridor to the Tanzanian border through Athi River to Namanga and Voi to Taita- Taveta.

Table 34: Road condition in Kenya

ROAD SECTION	LENGTH (KM)	IRI	CONDITION
Mombasa -Kwa Jomvu	11.3	8	Poor
Kwa Jomvu - Mariakani	30	8	Poor
Magongo Road [Old Mombasa Road]	4	6	Fair
Mariakani - Maji Ya Chumvi	13	4	Good
Maji ya Chumvi - Bachuma Gate	53	2	Very Good
Bachuma Gate – Voi	54.1	8	Poor
Voi - Mtito Andei	95.1	6	Fair
Mtito Andei - Sultan Hamud	132.7	3	Good
Sultan Hamud - Machakos Turnoff	80	2.5	Good
Machakos Turnof - Athi River	25	3	Good
Athi River – JKIA	15	2.5	Good
JKIA - Likoni Road Junction	5.7	2.5	Good
Southern Bypass	29	1.5	Excellent
Likoni Road junction - James Gichuru	15	2.5	Good
James Gichuru – Rironi	26	6	Fair
Rironi - Mai Mahiu	20	3	Good
Mai Mahiu - Naivasha	38	3	Good
Rironi – Gilgil	89	3	Good
Gilgil - Mau Summit	90	3	Good
Mau Summit - Timboroa	38.8	3	Good

ROAD SECTION	LENGTH (KM)	IRI	CONDITION
Timboroa - Eldoret	80	2	Very Good
Eldoret – Webuye	60	2	Very Good
Webuye – Malaba	57.8	2	Very Good
Mau Summit - Kisian	150.1	2	Very Good
Kisian – Busia	101	8	Poor
Isebania – Kisii	80	6	Fair
Kisii – Ahero	85	5	Fair
Ahero – Kisumu	17	2	Very Good
Kisumu - Mamboleo Junction	4	8	Poor
Mamboleo Junction - Kakamega	47	6	Fair
Kakamega - Webuye	40	8	Poor
Webuye – Laseru	58.4	3	Good
Laseru – Kitale	60	3	Good
Kitale – Morpus	68.5	4	Fair
Morpus – Lokichar	147	8	Poor
Lokichar - Loichangamatak	50	8	Poor
Loichangamatak - Lodwar	50	8	Poor
Lodwar – Lokitaung	80	8	Poor
Lokitaung - Kalobeiyei	80	8	Poor
Kalobeiyei - Nadapal	80	8	Poor
Voi- Mwatate	45	2	Very Good
Mwatate – Taveta	99	2	Very Good
Athi River - Namanga	137	3	Good

Source: Kenya National Highways Authority (KeNHA) Sep 2017

Kenya National Highway Authority has taken it upon themselves to improve the road sections that complement the Northern Corridor. As such it has rolled out several by-passes which are either in progress while some are almost complete. So far, the condition of the main highway connecting the port of Mombasa to Malaba border is in a good condition with the major by-passes being constructed to ease congestion from the main highway. If KeNHA can sustain its short-term as well as long-term projects then efficiency shall be attained especially on the subsidiary routes.

4.4.4. Road condition in Rwanda

Northern Corridor Infrastructure Map-Rwanda

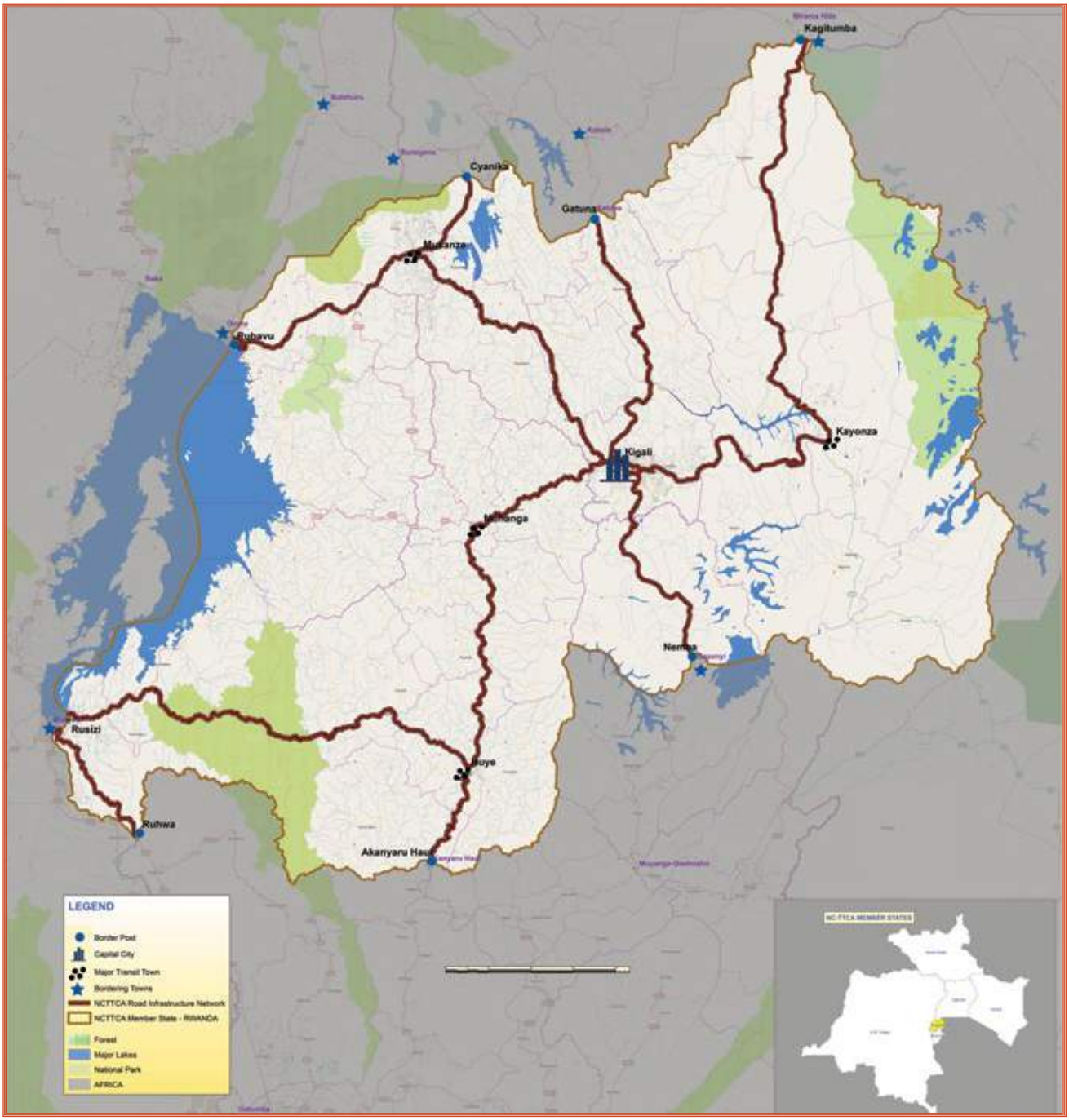


Table 35 below shows designated routes in Rwanda.

Table 35: Transit Road Sections in Rwanda

ROAD SECTION	LENGTH (KM)
Kagitumba - Kayonza	116
Kayonza - Kigali	75
Kigali - Huye	123
Huye - Akanyaru haut	35
Huye-Buhinga	115
Buhinga - Rusizi	30
Gatuna - Kigali	78
Kigali - Musanze	86
Musanze - Rubavu	64
Rusizi - Bugarama	39
Cyanika - Musanze	25
Kicukiro - Nemba	62
Muhanga - Rubengera	62
Rubengera - Buhinga (Kivu Belt)	86
Rubengera - Pfunda (Kivu Belt)	72

Source: RTDA, April, 2018

By 2017, approximately 1,068km were designated as Northern Corridor routes in Rwanda. About 82.3 percent of the Northern Corridor road network in Rwanda was paved and in very good condition. The 116 km from Kagitumba- Kayonza is under rehabilitation with the support from African development fund and the European Union. Other sections that are under rehabilitation are the Cyanika-Musanze and Rubengera-Pfunda. The other sections are under periodic maintenance contracts which include upgrading all safety features such as the horizontal & vertical signage signposts and guardrails.

Table 36: Northern Corridor Road condition in Rwanda

ROAD SECTION	LENGTH (KM)	IRI	CURRENT CONDITION
Kagitumba-Kayonza	116	-	-
Kayonza-Kigali	74.5	1.8	V.Good
Kigali-Huye	123	2.1	V.Good
Huye-Akanyaru haut	34.8	2.5	V.Good
Huye-Buhinga	115	2.1	V.Good
Buhinga-Rusizi	30	2.2	V.Good
Gatuna-Kigali	78	1.3	Excellent
Kigali-Musanze	86	1.7	V.Good
Musanze-Rubavu	64	1.7	V.Good
Rusizi-Bugarama	39	2.2	V.Good
Cyanika-Musanze	25	-	-
Kicukiro-Nemba	62	1.6	V.Good
Muhanga-Rubengera	61.5	3.5	Good
Rubengera-Buhinga (Kivu Belt)	85.8	1.9	V.Good
Rubengera-Pfunda (Kivu Belt)	72	-	-

Source: RTDA, April, 2018

4.4.5. Road condition in South Sudan

Northern Corridor Infrastructure Map-South Sudan

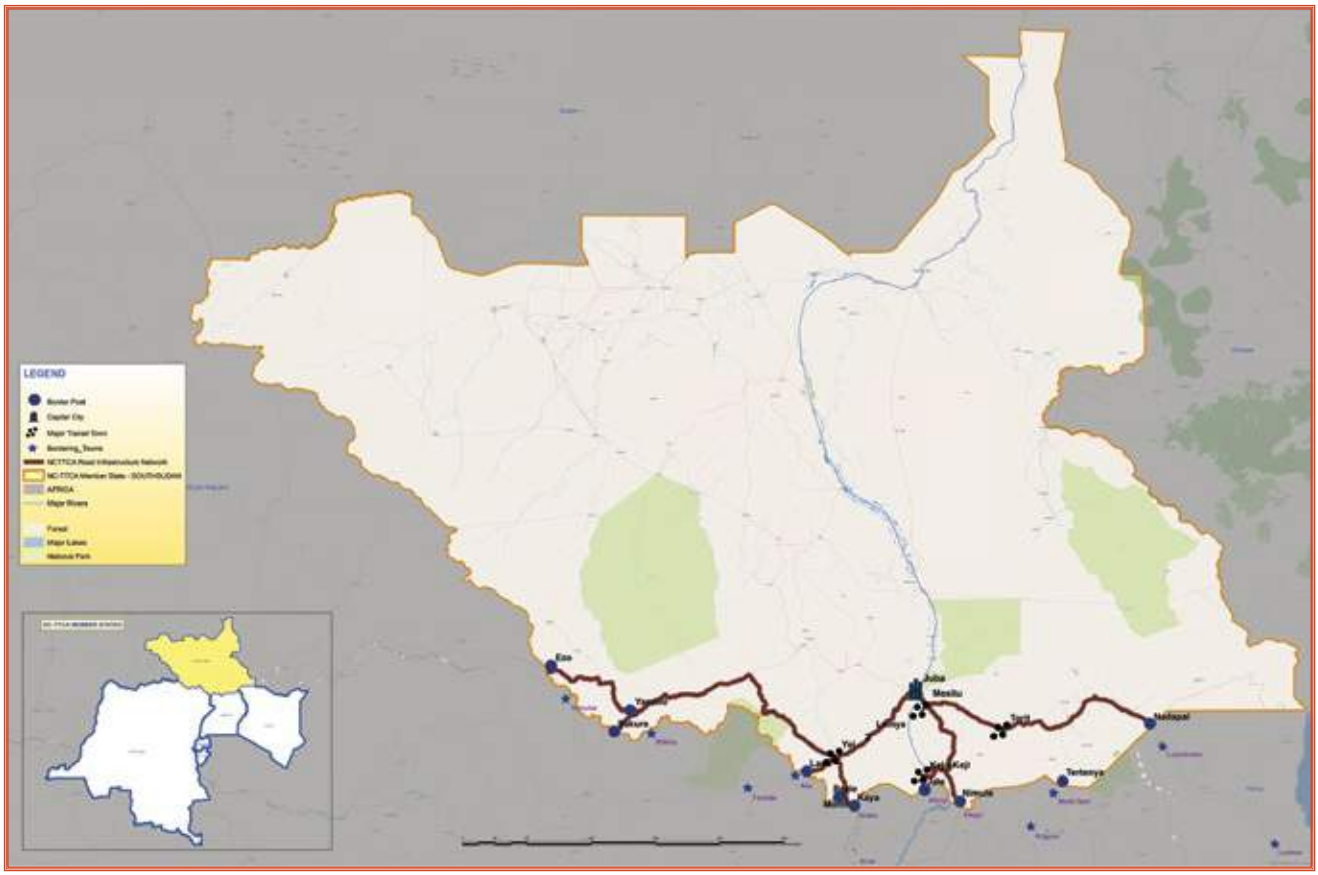


Table 37: Condition of Road Sections in South Sudan

ROUTE / ROAD	PAVEMENT TYPE	WORKS STATUS	PLANNED	ROAD CONDITION (KM)		
				Good	Fair	Bad
Nimule - Nesitu - Juba	Paved	Constructed	Maintenance	-	192	
Nadapal - Kapoeta - Torit - Nesitu	Gravel	Designed	Awaiting construction	-		335
Juba - Lainya - Yei - Kaya	Gravel	N/A	N/A	-		225
Yei – Maridi	Gravel	N/A	N/A	-		180
Juba - Mundri - Maridi - Yambio – Nabiapai	Gravel	N/A	N/A	-		427
Yambio - Tambura - Wau - Aweil	Gravel	N/A	N/A	-		591
Wau - Kwacjok - Agok - Mayom - Bentiu	Gravel	N/A	N/A	-		520
Juba - Bor - Ayod - Malakal	Gravel	N/A	N/A	-		614
Mundri - Rumbek - Wau	Gravel	N/A	N/A	-		459
Total				0	192	3351
Percentage				0%	5%	95%

Source: South Sudan Roads Authority, September 2017

4.4.6. Road condition in Uganda

Northern Corridor Infrastructure Map-Uganda

The Designated Northern Corridor Roads in Uganda are: Malaba-Katuna, Malaba – Ishasha, Malaba – Mpondwe, Malaba – Goli, Malaba – Arua, Busia-Katuna, Busia-Ishasha, Kasese – Kikitumba, Busia – Arua and Busia – Goli.

In March 2017, it was reported that 36.6% of the Northern Corridor routes were in good condition, 58.4% in fair condition while 5% were in poor condition. In March 2018, 31% were reported to be in good condition, 61% in fair condition and 8% poor condition.

The table below provides a summary of the condition of various subsections as at March 2018. The status of 1,205 KM out of 2,072 Km had not been established.

Table 38: Condition of Road Sections in Uganda

ROAD /NAME	LENGTH(KM)	IRI	CONDITION
Malaba (Uganda/Kenya border) -Tororo junction	12	2.3	V. Good
Tororo junction - Namutere	28	2.1	V. Good
Namutere - Bugiri	4	2.2	V. Good
Bugiri - Nakalama	51	2.1	V. Good
Nakalama - Iganga	5	2.3	V. Good
Iganga - Kakira junction	27	2.2	V. Good
Kakira Junction - Jinja	12	2.4	V. Good
Jinja - Njeru	2	3.3	Good
Njeru - Lugazi	30	2.9	V. Good
Lugazi - Mukono	24	2.8	V. Good
Mukono - Kampala	18	4.0	Good
Kibuye - Natete - Busega	7	4.1	Good
Busega - Mpigi	25	2.6	V. Good
Mpigi - Buwama	32	2.5	V. Good
Buwama - Lukaya	31	2.7	V. Good
Lukaya - Masaka - bypass	34	2.2	V. Good
Masaka - Lyantonde	68	2.4	V. Good
Lyantonde - Mbarara (Bushenyi junction)	67	2.6	V. Good
Mbarara (Bushenyi Junction) - Ntungamo	62	3.2	Good
Ntungamo - Rubaale	15	2.9	V. Good
Rubaale - Muhanga - Kabale	59	3.0	Good
Kabale - Katuna	22	3.0	Good
Busega - Bujuuko	33	3.3	Good
Bujuuko - Mityana	27	3.6	Good
Mityana - Naama - Myanzi	16	3.5	Good
Myanzi - Kiganda	28	3.6	Good
Kiganda-Kitenga	20	3.2	Good
Kitenga-Mubende-Lusalira	30	3.7	Good

ROAD /NAME	LENGTH(KM)	IRI	CONDITION
Lusalira - Nabingoola - Lubaale	16	3.1	Good
Lubaale - kyegegwa	12	2.9	V. Good
Kyegegwa - Kakabala - Kyenjojo	52	3.3	Good

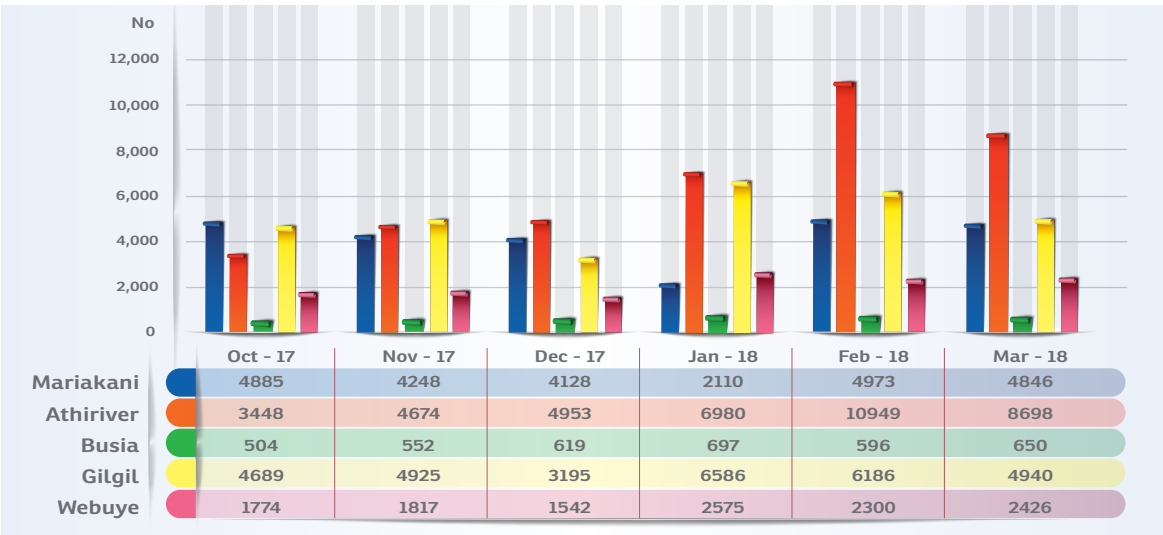
Source: UNRA, April, 2018

4.5. Weighbridge Traffic

This Indicator measures the average number of trucks weighed per day at a particular weighbridge along the Northern Corridor.

Due to the fact that the alternative mode of transport in these countries linked by the Northern Corridor road infrastructure are either underdeveloped or unviable, road transport serves as the most convenient mode of moving an overwhelming 95% of the Goods along the Corridor. As such there are several weighbridges that serve as check points that are used to check whether these trucks comply with the transport vehicle load limits. Unfortunately, Weighbridges that are not high-speed-weigh in motion lead to unnecessary charges or affect the time taken by these trucks to arrive at their final destinations.

Figure 13: Average daily weighed traffic for Kenya Weighbridges



	Oct - 17	Nov - 17	Dec - 17	Jan - 18	Feb - 18	Mar - 18
Mariakani	4885	4248	4128	2110	4973	4846
Athiriver	3448	4674	4953	6980	10949	8698
Busia	504	552	619	697	596	650
Gilgil	4689	4925	3195	6586	6186	4940
Webuye	1774	1817	1542	2575	2300	2426

Source: KeNHA, Mars2017

"Athi-river weighbridge records the highest number of vehicles weighed"

The Northern Corridor in Kenya has 5 weighbridges and these are; Mariakani, Athi-river, Gilgil, Webuye, and Busia. All these weighbridges are High-Speed Weigh-in-motion except for weighbridge at the Busia border.

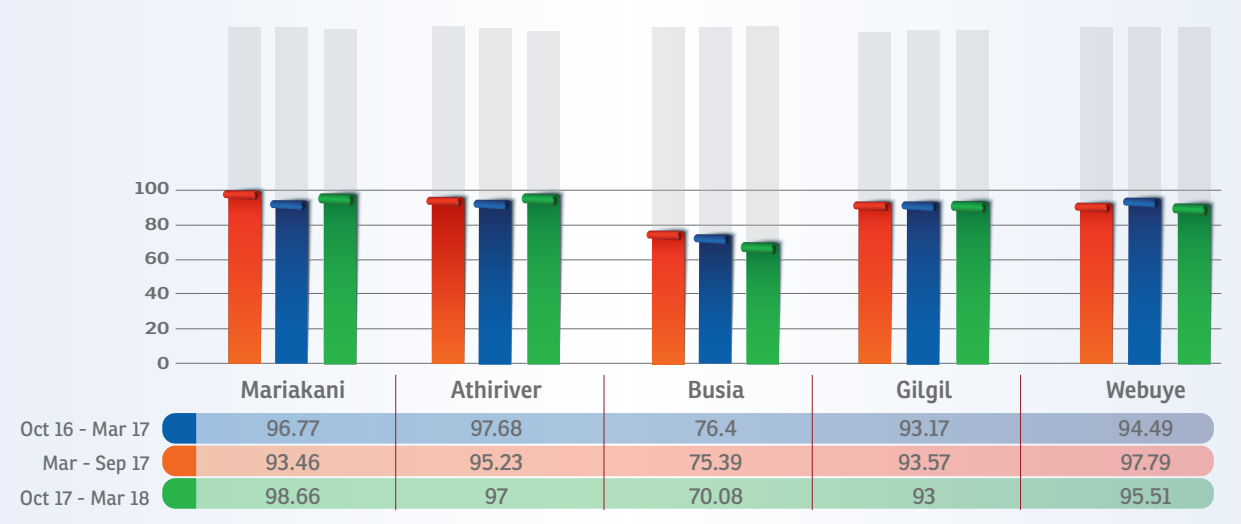
Athi-river weighbridge records the highest number of vehicles weighed followed by Gilgil and Mariakani. The higher traffic weighed at Athi-river is due to cargo that originates from Namanga route, Nairobi, and its environs. The Kenya National Highway Authority has improved the facilities at these weighbridges and installed weighing scales on either side of the road to minimize delays. The expected launch of the 20-inch diameter new oil pipeline from Mombasa to Nairobi in July 2018 is expected ease pressure at the weighbridges hence eliminating over 700 fuel tankers from the roads that are used to transport the petroleum products. Additionally, the expansion of the SGR to Naivasha and later on to Kisumu will even have a greater impact on reducing traffic at the weighbridges.

4.6. Weight Compliance at the Weighbridges in Kenya

The indicator measures the percentage of trucks that comply with the gross vehicle weight and the vehicle axle load limits before and after re-distribution of cargo as stipulated in the EAC Vehicle Load Control Act.

From the figure below the weighbridges in Kenya recorded a steady performance in terms of compliance levels of over 90 percent performance except for Busia weighbridge. Low compliance at the Busia weighbridge could be attributed to the fact that most of the cargo through Busia are exports originating from Kenya and the Busia weighbridge offers the first opportunity for the loaded trucks to be weighed especially for exports as well as fuel products from Kisumu.
High level of compliance has been noted at the Mariakani and Athi-river weighbridges and this is often attributed to the high level of awareness by transport associations in Kenya and transport Saccos in Nairobi. Furthermore, a good proportion of trucks carry containers which are weighed prior to shipment at the port of loading. KeNHA is in the process of modernizing the weighbridges by having all weighbridges high speed weigh in motion and on either side of the road at busy sections. Such weighbridges have already been installed at four weighbridges apart from one at Busia. It is also in the process of procuring Virtual weighbridges which will be remotely monitored without interfering with the smooth flow of traffic along the Corridor. SACCOs for local transporters are being formed as one of the channels to promote voluntary compliance to Vehicle Load Limits in Kenya.

Figure 14: Weight Compliance Level at weighbridges in Kenya



	Mariakani	Athiriver	Busia	Gilgil	Webuye
Oct 16 - Mar 17	96.77	97.68	76.4	93.17	94.49
Mar - Sep 17	93.46	95.23	75.39	93.57	97.79
Oct 17 - Mar 18	98.66	97	70.08	93	95.51

Source: KeNHA, Kenya October 2016 to March 2018

Members of the EAC are implementing the East African Community Vehicle Load Control Act though there are variations to the extent of implementation. South Sudan is yet to adjust and enforce the regional vehicle load limits. There is planned construction and installation of one static weighbridge with high speed in motion option near Kagitumba border. This will be implemented under Kagitumba – Kayonza – Rusumo road rehabilitation and widening project. Uganda has eight Fixed Slow Speed Weigh in Motion weighbridges located at Busitema, Lukaya, Mbarara, Mubende, Mbale, Luwero, Magamaga and Malaba.

5 TIME AND DELAYS

5.1. Introduction

One of the objectives of the Northern Corridor is to expedite timely movement of goods (imports and exports) between Member States which in turn should increase economic integration and synergy for the social and economic well-being of their citizens. Costs and time-related indicators are key variables in determining efficiency. Therefore, ensuring minimum congestion, less time and minimal cost improves port efficiency and significantly increases trade volumes. The inefficiencies may arise from the longer time taken to complete a trade transaction and the attendant costs directly related to administrative processes during movement of goods within the domestic markets and across the borders. Both public and private sector stakeholders should commit to undertake measures that will increase the efficiency of the Mombasa port and the Northern Corridor. This will provide direct benefits of trade for societies and economies at large.

This section analyses and presents some key findings on time-related indicators including transit time and time taken for business processes, border crossing time and delays at major nodes. The data on transit time and delays within the Northern Corridor are obtained from electronic data sources including customs business systems and Electronic Cargo Tracking System (ECTS).

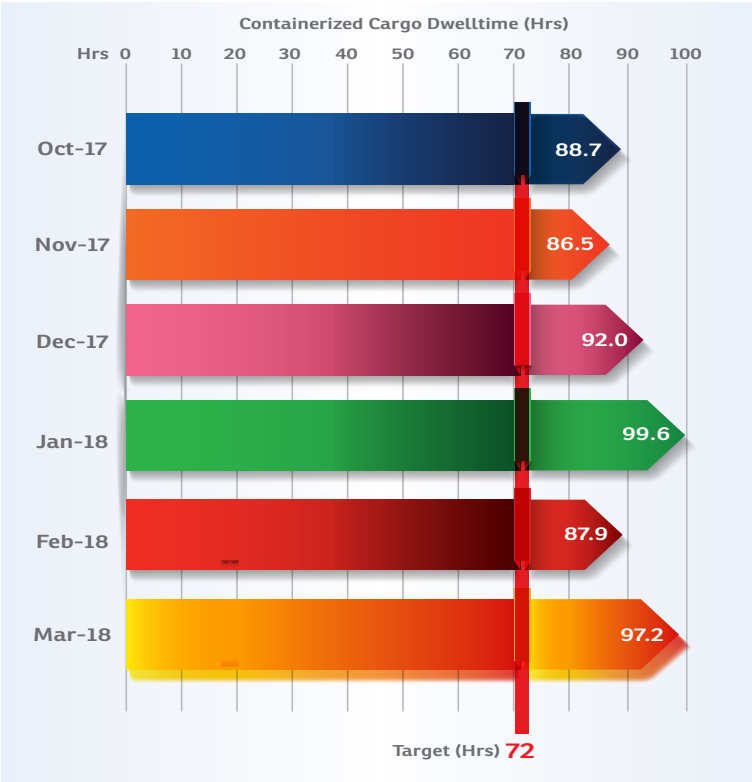
5.2. Dwell time at Mombasa port

Cargo Port Dwell Time is the measure of time that elapses from the time cargo is offloaded at the Port to the time it leaves the Port premises.

Lower cargo dwell time is important as it frees up container yard space in the port, thereby reducing congestion at the port. From the results, the average containerized cargo dwell time is slightly higher than the set target of 72 hours. The average dwell time for the six-month period between October 2017 and March 2018 was 92.15 hours. Various initiatives that have been implemented towards the realization of port efficiency such as conducting joint verification at all cargo freight stations in Mombasa, port expansion and modernization as well as pre-clearance of cargo before docking of vessels albeit for few authorized economic operators among others.

The average port dwell time for the six-month period between October 2017 and March 2018 was 92.15 hours.

Figure 15: Containerized cargo dwell time at the Port of Mombasa



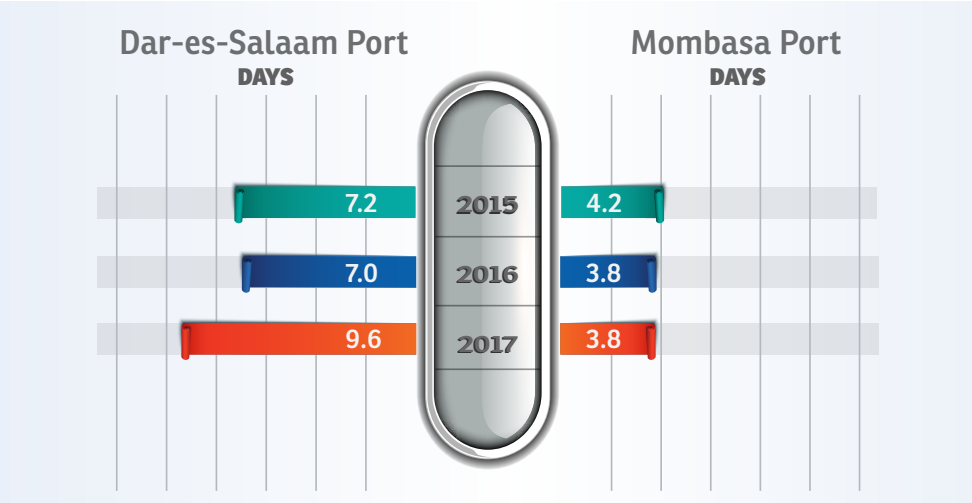
Source: KPA October 2017 - March 2018

Figure 15 shows dwell time for the Port of Mombasa. Kenya Ports Authority reported that the improvement was attributed to 24/7 clearance and evacuation of cargo from the port, armoring of electronic cargo tracking system, automation of systems and expansion of exit lanes at the gates. Gate 18/20 was expanded with two additional lanes having been introduced to improve truck turn around.

It can be noted that even though there has been good performance across years, the set target of 72 hours has not yet been attained. A lot of effort need be put in place to enhance efficiency and service delivery at the port. There is also the need to develop a parking yard outside the port with a proper truck calling system to the port. Currently, the majority of the truck owners do not have a parking yard prompting them to park alongside the roads causing congestion or blocking access to the port when they park and shop for cargo. There is also the need to evaluate in details the processes in cargo clearance and identify and address sources of delays including delay areas and parties responsible for each delay.

As shown in the graph, there is a slight improvement of the dwell time from 2016 to 2017. The average yearly port dwell time for containerized cargo for the Port of Mombasa and was 3.8 days for the year 2017. The target for the Mombasa Port is to have a dwell time of 3 days. Achievement of the dwell time target is also affected by the grace period. For instance, the grace period for transit cargo in Kenya is 9 days while the Tanzania port authorities give 15 days for transit cargo with an exception of DRC which has 30 days.

Figure 16: Containerized cargo dwell time at Mombasa Port (2015, 2016, and 2017)



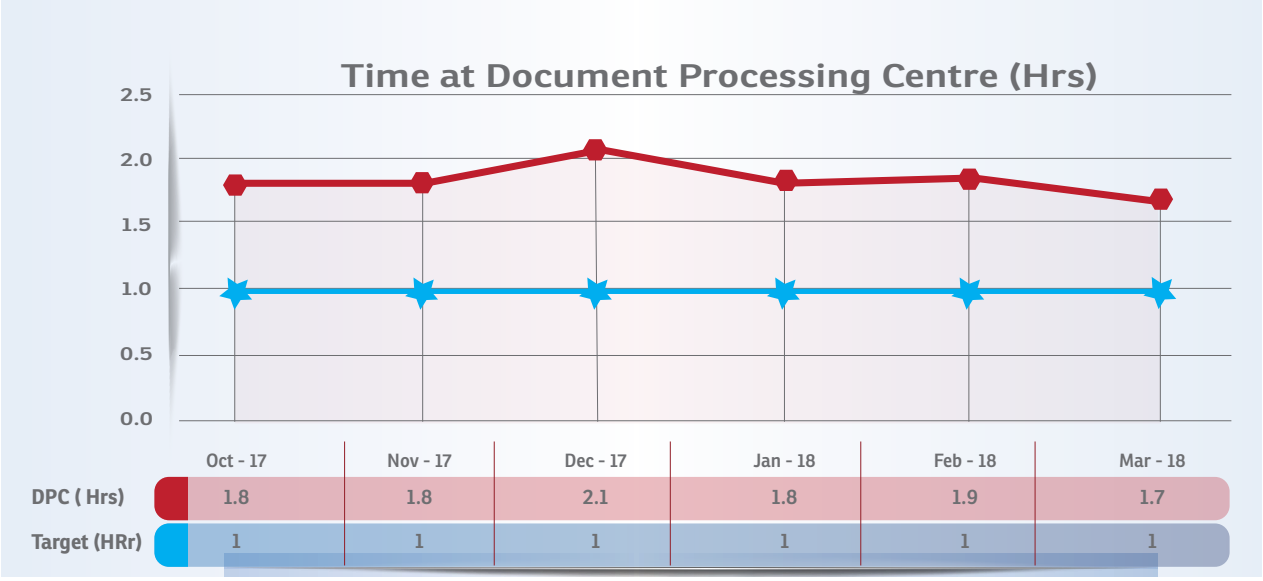
Source: KPA data (2016, 2017), CCTFA Transport Observatory

5.3. Time for customs clearance at the DPC

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

The data shows a steady improvement in performance from October 2017 to March 2018. The month of March 2018 recorded the least time taken at the Document Processing Centre. Delays in customs clearance at DPC is partly due to the SIMBA system instability; documents awaiting processing in between the shifts and the quality of declaration by the relevant agents and other stakeholders. This section has a target time of 1 hour. It is evident that more effort is needed for speeding-up clearance of cargo processes by the respective stakeholders involved so as to realize this target. The new Integrated Customs Management System (ICMS) which is expected to replace the Simba 2005 System will eliminate the need for the DPC by replacing it with automated risk module that will reduce clearance time. The rollout of the Integrated Customs Management System (ICMS) is also expected to seal the loopholes at the Customs to prevent concealment, undervaluation, misdeclarations, and falsifications of import documents.

Figure 17: Time Taken at the Document Processing Centre (DPC)



Source: KRA data, April 2018

5.4. Time taken at Mombasa One Stop Centre (OSC)

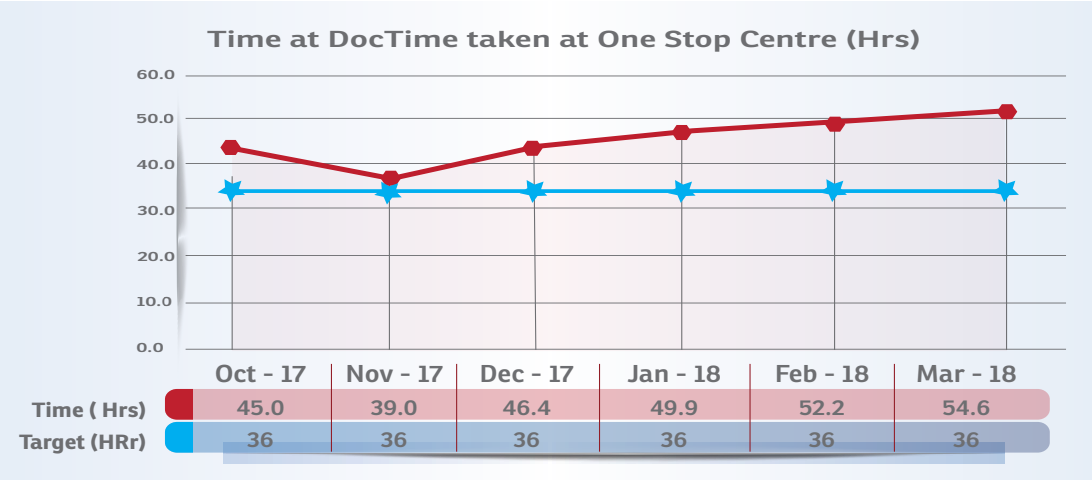
One Stop Centre Clearance Time measures the average time between passing of customs entry which has been registered and issuance of release order.

The following steps define the processes at the One Stop Center:

(i) Agent submits documents to the receiving clerk who hands them to the Head Verification Officer
(ii) The clearing and forwarding agent also submits copies of the file to the other concerned agencies.
(iii) Head Verification Officer reviews the file and refers it to the Verification Officer who then returns it to the Receiving Clerk
(iv) The Receiving Clerk then prepares a letter to KPA advising that the container is subject to verification simultaneously sends an email to the Clearing Agent advising him of the same.
(v) The container is sighted to ensure that it is available for verification and inspection. Agent speaks to Verification Officer to arrange time of verification/inspection
(vi) Joint verification by KPA and concerned agencies
(vii) Agent obtains release stamps from all agencies involved in verification
(viii) Document file returned to Verification Officer who creates examination report and submits to Head Verification Officer for examination
(ix) Head Verification Officer releases cargo on the system which generates Release Order electronically
(x) Release Order electronically transferred to KPA

Figure18 illustrates the trend for the time taken at Mombasa One Stop Centre (OSC). Time taken at OSC indicates an increase in the time taken with the most recent month of March 2018 recording 54.6 hours. This indicates a decrease in the performance at the One Stop Centre where the trend seems to be moving away from the set target of 36 hours. This poor performance could be partly attributed to uncoordinated joint verification of cargo and late submission of documents by clearing agents at the OSC thus contributing to delays.

Figure 18: Time taken at One Stop Centre

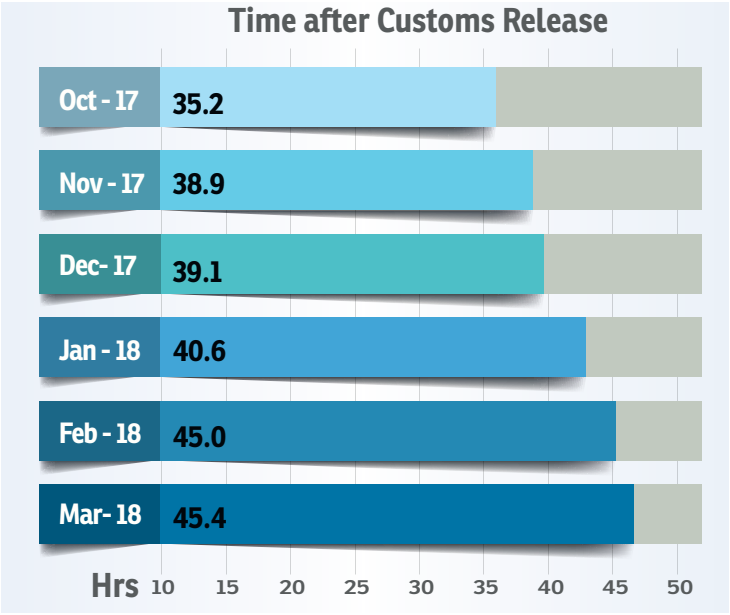


Source: KRA data October 2017-March 2018

5.5. Time taken after customs release

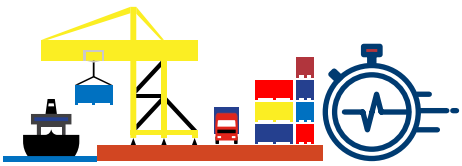
Delay after customs release refers to the period it takes to evacuate the cargo from the port after it is officially released by Customs.

Figure 19: Time taken after customs release



Source: KRA data October 2017-March 2018

The average time taken to evacuate cargo from the Port after customs release was 42.97hours. The previous similar period between October 2016 and March 2017 was 43.33 hours. Some of the port charter commitments that aim at improving performance of this indicator include: automating the gate clearance procedures, dedicating special gates to CFSs and ensuring 24-hour operations. Figure 19 gives the monthly average for the period between October 2017 and March 2018. The target of 36 hours was achieved in March 2018. The good performance is also partly attributed to the SGR train that expeditiously evacuates good number of containers at ago from Mombasa Port.



Improving this performance requires automating the gate clearance procedures, dedicating special gates to CFSs and ensuring 24-hour operations

5.6. Transit Time

The table below shows the time it takes for a cargo to move from the port of Mombasa to various destinations in the Northern Corridor Member States. This transit time is greatly affected by stoppages along the Corridor. Some of the main stoppage reasons include; drivers' personal reasons, police checks, weighbridges, company checks, road conditions, custom checks among other reasons that are tracked under section seven on road survey in this report. Some of the measures that have been put in place to minimize stoppages and improve transit time include the implementation of the High-Speed Weigh in Motion (HSWIM) weighbridges, one-stop border points, and the establishment of the Northern Corridor Transit Patrol Unit among others. Implementation of the Single Customs Territory (SCT) is also another measure that enhanced clearance of the goods across borders. The SCT is being implemented by Kenya Customs Services Department (CSD) in collaboration with other East African Community (EAC) Partner States that include Uganda, South Sudan, Tanzania, Burundi, and Rwanda.

Table 39: Trends in road transit time from Mombasa to Various destinations

ROUTE	DISTANCE (KM)	DURATION (DAYS)	
		April-Sep, 2017	Oct-17-Mar- 18
Mombasa-Busia	947	3.5	3.12
Mombasa - Kampala via Malaba	1169	4.5	5.23
Mombasa-Elegu	1471	4.4	4.36
Mombasa-Malaba	933	3.7	2.72
Mombasa –Kigali	1682	7.3	-
Mombasa –Mpondwe	-	-	6.14
Mombasa- Katuna	-	-	5.07
*Mombasa-Juba	1662	10.4	-
*Mombasa –Goma	1838	6.24	-

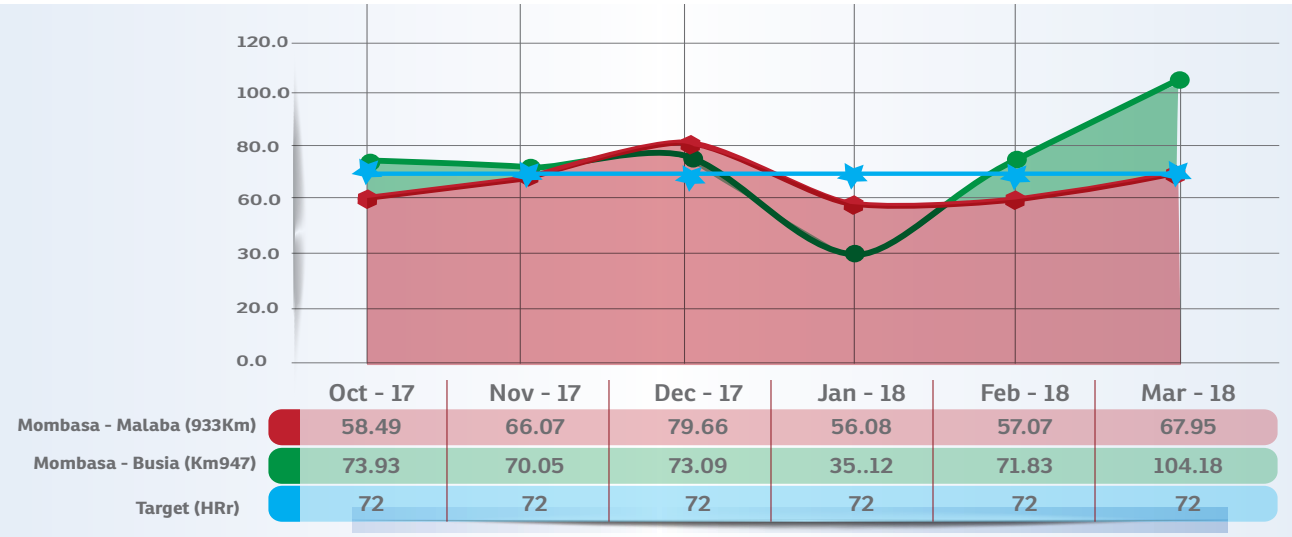
Source: RECTS, September 2017-March, 2018

Transit time from Mombasa to Kampala slightly increased from 4.5 days to 5.23 days. This could be attributed to longer time to clear and disarm the ECTS for trucks destined to ICDs in the Kampala. It was also observed that whereas border stations work 24/7, inland stations where cargo is deposited pending clearance do not operate 24/7. Furthermore, the region has been experiencing a lot of rains which affects the movement and clearance of trucks along the Corridor.

5.7. Transit Time in Kenya

This indicator measures the time taken by a cargo from the time it exits the port to the time the ECTS device is disarmed at the border either at Malaba or Busia. Using the Customs data from the SIMBA system, the time from when a release order is issued by customs at the Port of Mombasa to the time the export certificate is generated by KRA after cargo crosses the Kenya- Uganda border is also provided in the figure 20. The distance from Mombasa- Malaba is 933 kilometers and 947 kilometers to Busia.

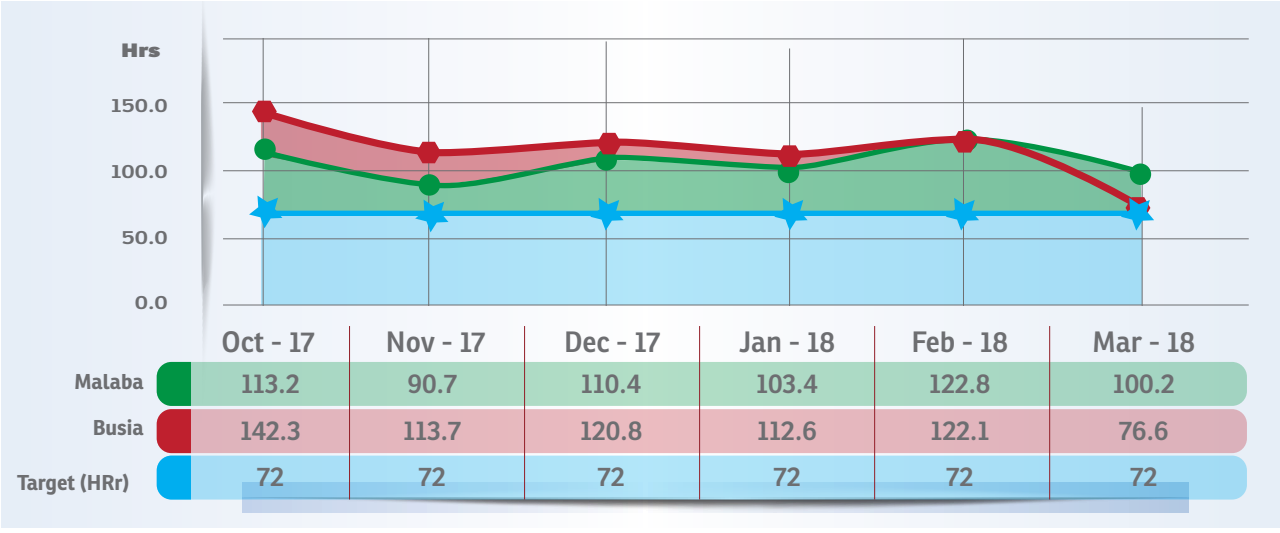
Figure 20: Transit Time (hrs) from Mombasa to Malaba and Busia



	Oct - 17	Nov - 17	Dec - 17	Jan - 18	Feb - 18	Mar - 18
Mombasa - Malaba (933Km)	58.49	66.07	79.66	56.08	57.07	67.95
Mombasa - Busia (Km947)	73.93	70.05	73.09	35..12	71.83	104.18
Target (HRr)	72	72	72	72	72	72

Source: RECTS, April, 2018

Figure 21: Time taken from Customs release at the port of Mombasa to generation of export certificate at the borders (Malaba & Busia)



	Oct - 17	Nov - 17	Dec - 17	Jan - 18	Feb - 18	Mar - 18
Malaba	113.2	90.7	110.4	103.4	122.8	100.2
Busia	142.3	113.7	120.8	112.6	122.1	76.6
Target (HRr)	72	72	72	72	72	72

Source: KRA (SIMBA system), October 2017 to March 2018

The data shows that the time has been fluctuating over the period under review with the month of November 2017 recording the lowest time of 90.7 hours while the month of February 2018 recorded the highest of 122.8 hours. Similarly, the average time to exit at Busia shows a positive trend with the month of March 2018 recording the lowest time of 76.6 hours while the month of October recorded the highest time of 142.3 hours. Generation of export certificates sometimes delays due to system failures and manual update later after the cargo has exited the border.

Initiatives to eliminate barriers to free movement along the Corridor will remain a key agenda. This includes addressing the problem of traffic congestion in urban areas along the Northern Corridor including the port city of Mombasa. The construction of bypasses in Nairobi, Nakuru, Eldoret, Kisumu, dueling of part of the Nairobi-Mombasa road, construction of interchanges along the Corridor are some of the steps that will address the barriers associated with inadequate infrastructure and rationalization of the number and standardization of speed humps constructed along the Corridor.

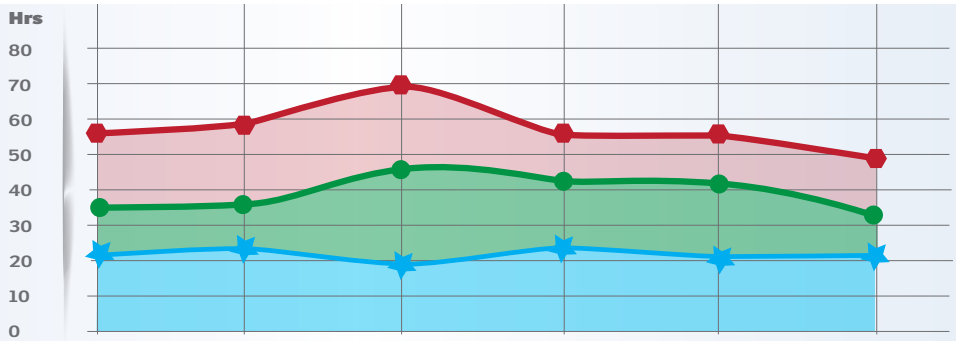
Moreover, efforts to reduce delays at the port after customs release and minimize the number of checkpoints and time taken at these checkpoints are necessary to reduce the time taken to move cargo along the Corridor.

There is also need to address the challenge of lack of adequate number of R-ECTS seals which delays offtake of cargo by road from the port. It is recommended that the transporters be allowed to purchase the R-ECTS devices and Customs Retains the operations part for the devices, i.e. arming, disarming and monitoring their usage. This will eliminate delays and attendant costs incurred by the transporters while awaiting the Customs to receive back by courier the devices from the destination points of cargo sent from Mombasa Port.

5.8. Transit Time in Rwanda

The average monthly transit time varies with the distance covered. Figure 22 and table 40 gives the average transit time for the period under review.

Figure 22: Transit time in Rwanda



	Oct - 17	Nov - 17	Dec - 17	Jan - 18	Feb - 18	Mar - 18
Gatuna - Nemba (150km)	21.65	23.25	19.69	23.42	21.53	21.21
Gatuna - Akanyaru Haut (238km)	34.58	36.49	46.64	43.96	42.41	34.26
Gatuna - Bugarama (410)	56.99	60.12	69.90	56.71	55.94	49.59

Source: (RRA ASYCUDA October 2017– March 2018

Table 40: Summary of average transit time per destination

ROUTE	DISTANCE (KM)	AVERAGE DURATION
Gatuna-Akanyaru	238	39.9
Gatuna –Nemba	150	21.8
Gatuna-Mururu	385	64.1
Cyanika –Goma	87	39.9
Gatuna –Bugarama	410	60.3

Source: (RRA ASYCUDA October 2017– March 2018)

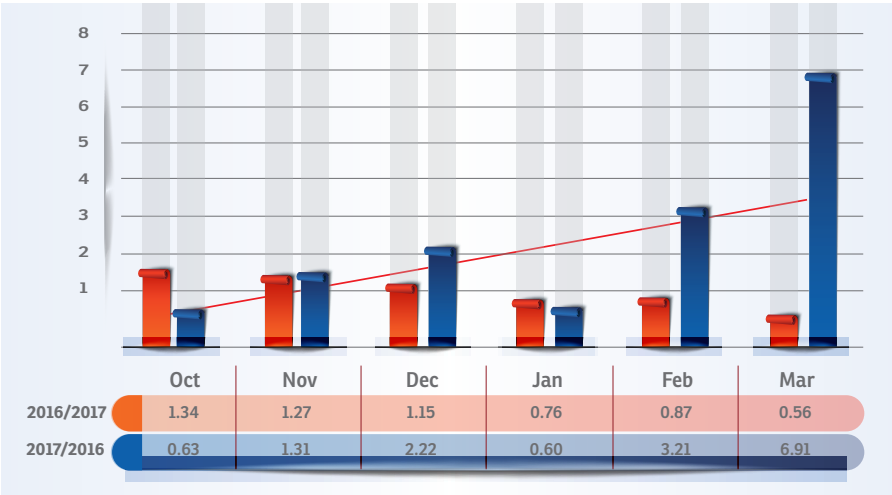
The average transit time for the longest distance between Gatuna and Bugarama (410 km) is 60.3 hours including all the rest stops.

5.9. Truck Dwell Time within MAGERWA in Rwanda

Truck dwell time is measured from the time the driver of the vehicle receives authorization to enter the MAGERWA gate to departure of the truck from the terminal exit gate after offloading the container/cargo in Magerwa. Figure 23 shows the cargo dwell time at Magerwa for all the cargo.

Cargo from the Northern Corridor originates from Gatuna border post for trucks accessing MAGERWA ICD.

Figure 23: Dwell time within Magerwa in Hours



Source: (RRA, October 2016 – March 2018)

2018) the average dwell time has been increasing. The minimum average time that was registered was 0.6 hours in January 2018

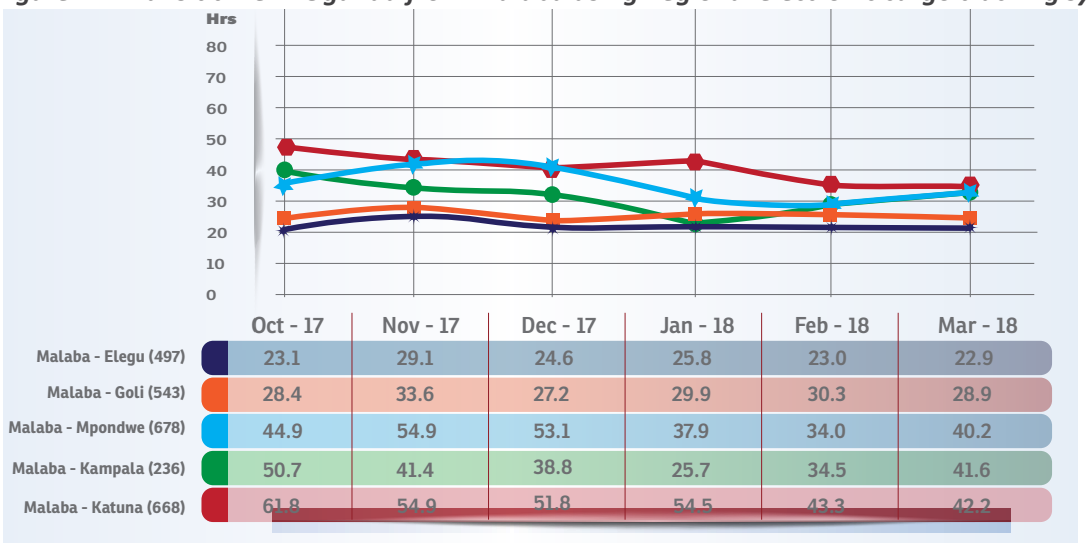
5.10. Transit Time in Uganda

This indicator tracks the time taken to move cargo from the two border points of Malaba and Busia to the various destinations in Uganda.

Figure 24 below shows the transit times in Uganda using the electronic cargo tracking system (ECTS). Not all goods are tracked using ECTS. The time taken varies depending on the destinations.

Not all goods are tracked using ECTS. The time taken varies depending on the destinations.

Figure 24: Transit time in Uganda from Malaba using Regional electronic cargo tracking system

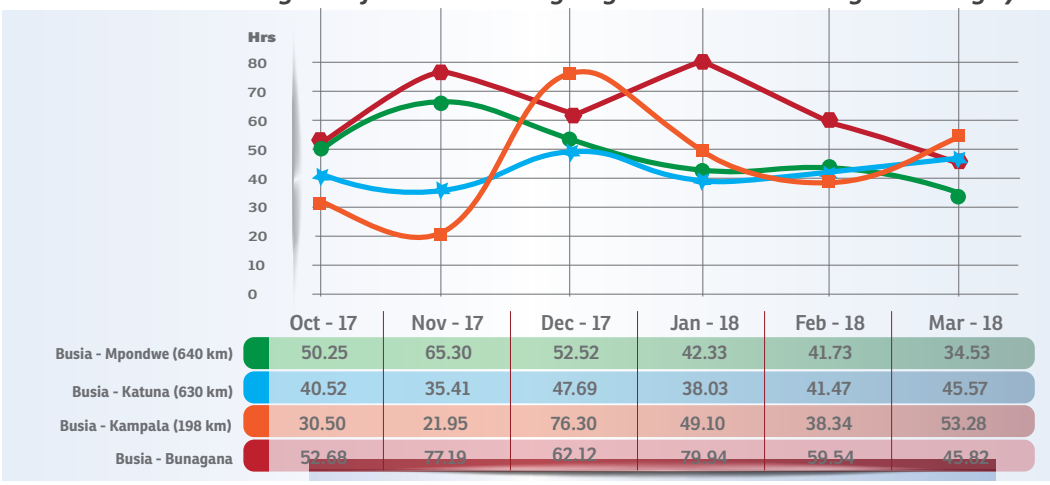


	Oct - 17	Nov - 17	Dec - 17	Jan - 18	Feb - 18	Mar - 18
Malaba - Elegu (497)	23.1	29.1	24.6	25.8	23.0	22.9
Malaba - Goli (543)	28.4	33.6	27.2	29.9	30.3	28.9
Malaba - Mpondwe (678)	44.9	54.9	53.1	37.9	34.0	40.2
Malaba - Kampala (236)	50.7	41.4	38.8	25.7	34.5	41.6
Malaba - Katuna (668)	61.8	54.9	51.8	54.5	43.3	42.2

Source: URA RECTS April, 2018

From the analysis, Malaba- Kampala takes longer despite the Short distance compared to other destinations. This ranged between averages of 34.5 to 50.7 hours. Delays could be associated with acknowledgment of receipt of cargo and clearance at the final destination as well as delays in dis-arming the R-ECTS after the trucks have arrived at their destinations. It takes longer using Busia-Katuna (630km) which is a shorter route than Malaba - Katuna (668km).

Figure 25: Transit time in Uganda from Busia using Regional electronic cargo tracking system



	Oct - 17	Nov - 17	Dec - 17	Jan - 18	Feb - 18	Mar - 18
Busia - Mpondwe (640 km)	50.25	65.30	52.52	42.33	41.73	34.53
Busia - Katuna (630 km)	40.52	35.41	47.69	38.03	41.47	45.57
Busia - Kampala (198 km)	30.50	21.95	76.30	49.10	38.34	53.28
Busia - Bunagana	52.68	77.19	62.12	79.94	59.54	45.82

Source: URA RECTS, April 2018

The table below gives the summary of average transit times in Uganda for the period October, 2017 to March 2018.

Table 41: Summary of average Transit Time in Uganda

ROUTE	DISTANCE(KM)	AVERAGE DURATION(HOURS)
Busia-Elegu	524	18.9
Malaba-Elegu	497	24.28
Malaba-Goli	543	29.62
Malaba-Oraba	659	36.2
Malaba-Kampala	236	38.49
Busia-Katuna	630	40.8
Malaba-Mpondwe	678	45.16
Busia-Kampala	198	45.4
Malaba-Bunagana	749	46.41
Busia-Mpondwe	640	47.1
Malaba-Katuna	668	50.76
Malaba-Vurra	584	50.79
Busia-Bunagana	711	63.6

Source: URA RECTS, April 2018

6 INTRA-REGIONAL TRADE

6.1. Introduction

This chapter, takes a close look at the recent trends focusing on intra-regional trade in the Northern Corridor region. It presents aggregate statistics for the individual Member States for the period of January 2017 to March, 2018. Comparisons are also made with the previous period. The data were obtained from countries' own trade data. Where sufficient data would not be gathered for purposes of analysis then mirror statistics were used. Statistics on international trade in essential between the Member States, it provides essential information for integration and trade facilitation policies.

6.2. Trade between Burundi and Other NC Member States

Table 42: Summary of Burundi Formal Trade USD in 2017

EXPORTS DESTINATION				
MONTH	DRC	KENYA	RWANDA	UGANDA
Jan	2,496,250	18,309	478,622	105,240
Feb	2,860,645	171,603	74,736	32,006
Mar	2,157,232	51,804	126,577	36,611
Apr	2,761,416	69,859	265,780	22,920
May	2,140,897	158,639	105,010	371,000
Jun	2,270,694	151,188	145,938	121,892
July	1,770,958	248,628	182,873	117,131
August	2,614,634	722,328	280,483	131,202
September	2,580,032	152,974	135,382	288,658
October	1,582,051	367,871	115,859	437,671
November	1,629,121	1,237,006	460,596	354,008
December	2,429,544	271,558	117,910	2,135,781
Total	**27,293,474**	**3,621,767**	**2,489,766**	**4,154,120**

IMPORTS ORIGIN				
MONTH	DRC	KENYA	RWANDA	UGANDA
Jan	76,598	2,858,219	791,682	2,614,749
Feb	73,381	4,738,663	786,190	3,319,933
Mar	75,239	3,129,488	323,746	4,631,193
Apr	58,229	3,587,918	289,291	4,679,065
May	75,196	3,098,905	432,019	3,487,958
Jun	68,028	3,424,281	742,213	3,803,190
July	159,587	3,617,112	715,579	3,675,182
August	143,327	4,878,334	908,579	3,932,142
September	43,597	3,202,373	736,464	3,590,427
October	82,001	4,688,548	566,951	3,329,229
November	52,541	3,126,479	625,457	3,853,308
December	58,583	3,035,478	533,376	2,438,183
Total	**966,307**	**43,385,799**	**7,451,547**	**43,354,559**
Balance of Trade	**26,327,167**	**-39,764,032**	**-4,961,781**	**-39,200,439**

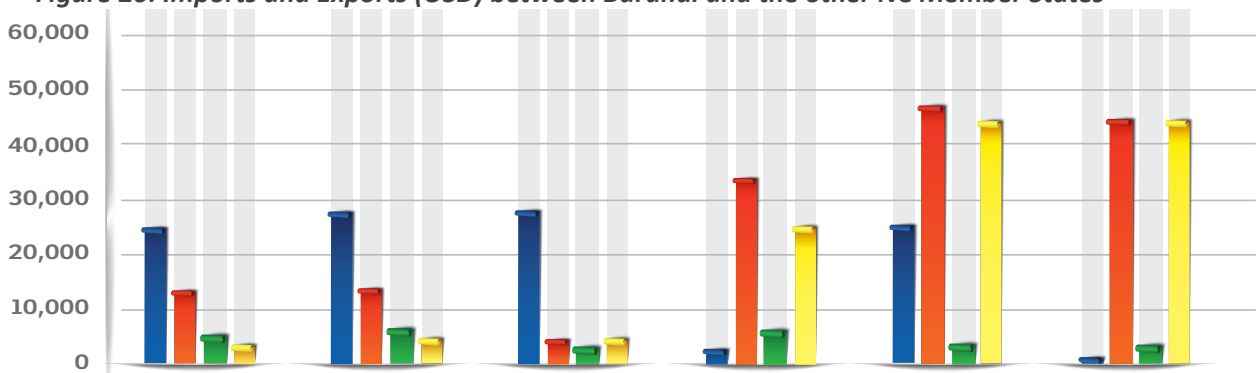
Source: Burundi Bureau of Statistics. Jan-Dec 2017

Burundi is a net importer of products from Kenya, Uganda, and Rwanda. However, it had a positive trade balance of $ 26,327,167 with DRC during the year 2017. Top ten export countries for Burundi are United Arab Emirates, Democratic Republic of Congo, Germany, Uganda, Pakistan, Belgium, Kenya, Singapore and England. Most imports originate from Saudi Arabia, China, India, Emirates Arabia, Tanzania, Kenya, Uganda, Zambia, Belgium and Japan. Burundi main exports are coffee, tea, cotton and skins.

From the results, Burundi exports more to DRC than any other Northern Corridor Member State. Imports from within the Region are mainly from Kenya and Uganda.

Burundi is a net importer of products from Kenya, Uganda, and Rwanda. It had a positive trade balance of $ 26,327,167 with DRC during the year 2017.

Figure 26: Imports and Exports (USD) between Burundi and the other NC Member States



	EXPORT			IMPORT		
	2015	2016	2017	2015	2016	2017
DRC	25,594,472	27,638,938	27,293,474	2,903,351	3,768,287	966,307
KENYA	12,767,104	14,469,721	3,621,767	34,351,639	47,760,130	43,385,799
RWANDA	4,187,519	5,622,225	2,489,766	6,080,180	13,,029,232	7,451,547
UGANDA	2,907,587	3,885,012	4,154,120	26,155,774	45,151,502	43,354,559

Source: Burundi Bureau of Statistics. 2015- 2017

6.3. Trade between DRC and the Other NC Member States

Table 43: Summary of formal Trade (USD) in DRC

EXPORTS DESTINATION				
MONTH	BURUNDI	KENYA	RWANDA	UGANDA
Jan	76,598	35,041	511726	205,585
Feb	73,381	240,069	525103	493,029
Mar	75,239	221,036	689362	472,350
Apr	58,229	56,153	666207	380,987
May	75,196	298,118	629366	426,074
Jun	68,028	166,393	713377	337,525
Jul	159,587	458,674	480474	382,154
Aug	143,327	460,169	818762	501,894
Sep	43,597	331,750	669,760	335,176
Oct	82,001	560,937	628,840	330,122
Nov	52,541	636,182	474,695	314,097
Dec	58,583	1,514,469	855,820	497,588
TOTAL	**966,307**	**4,978,991**	**7,663,492**	**4,676,583**

IMPORTS ORIGIN				
MONTH	BURUNDI	KENYA	RWANDA	UGANDA
Jan	2,496,250	13,322,259	18,472,885	12,867,511
Feb	2,860,645	15,834,739	18,423,306	13,698,013
Mar	2,157,232	19,046,014	22,465,313	18,179,263
Apr	2,761,416	12,687,782	21,018,977	16,832,157
May	2,140,897	17,129,635	26,326,243	17,892,939
Jun	2,270,694	15,041,890	24,920,119	16,087,592
Jul	1,770,958	16,095,411	22,558,025	14,658,813
Aug	2,614,634	12,673,368	25,136,162	14,411,285
Sep	2,580,032	14,220,176	24,319,580	19,316,594
Oct	1,582,051	14,757,490	24,527,957	14,923,261
Nov	1,629,121	10,554,153	25,152,511	15,851,395
Dec	2,429,544	14,353,511	32,362,138	14,886,924
TOTAL	**27,293,474**	**175,716,428**	**285,683,217**	**189,605,748**
Balance of Trade	**-26,327,167**	**-170,737,437**	**-278,019,724**	**-184,929,165**

Source: Northern Corridor Transport Observatory Compilation, January -December, 2017

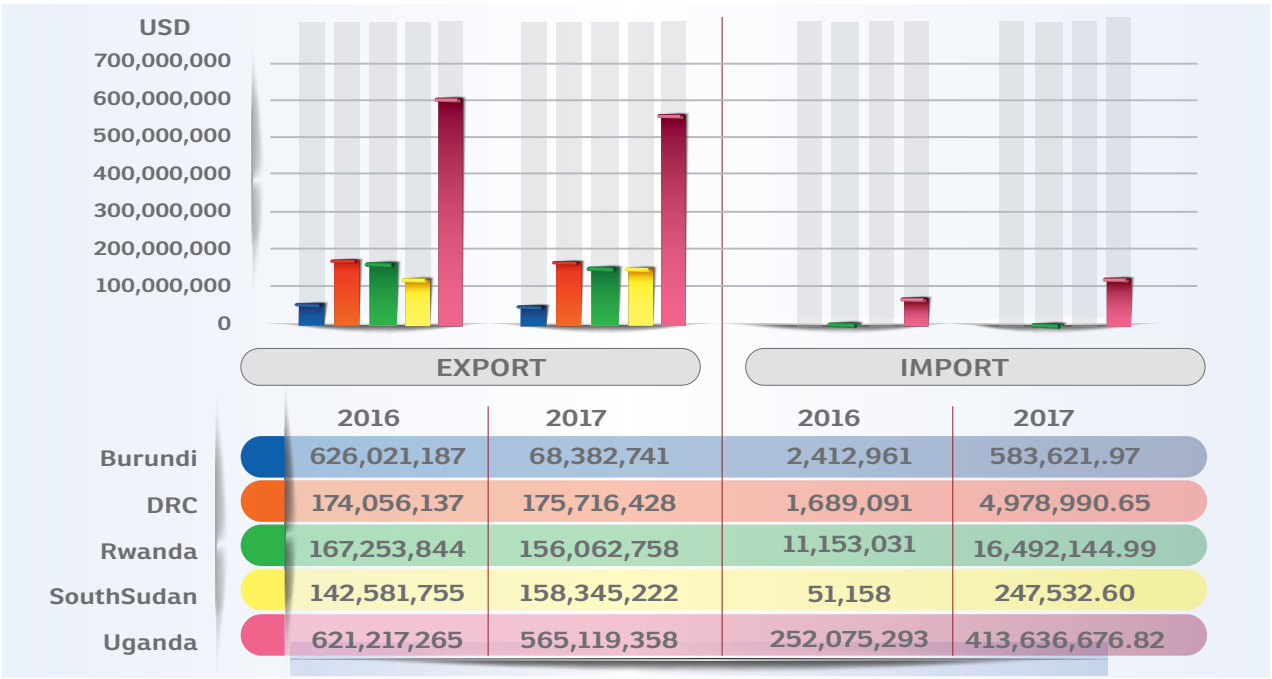
From the table 43, it can be noted that DRC is a net importer due to its negative balance of trade. Most of the exports are minerals which are destined outside the region. Imports in this year comprised mostly food products as well as industrial products. Some of the imported products include aluminum strips, Cigarette paper rolls, artificial filaments Cables, acetic acid, cloths, plastics, vegetables, cigarette papers, diesel Generators, vegetable fats and oils, tobacco, Salt, among others. The biggest imports and exports of slightly over 293 Million USD formal trade is between Rwanda and DRC.

Exports to the Northern Corridor Member States account for 3 % (USD 678 Million) of the Total trade value

6.4. Trade between Kenya and the Other NC Member States

Kenya is still the leading exporter in the Northern Corridor region trading in various products such as tobacco, machinery, and transportation equipment, petroleum products, oils, motor vehicles, iron and steel, agricultural products, paper and paper products, pharmaceuticals, fertilizer, construction materials among others. Most of the exports to the NC region goes to Uganda

Figure 27: A Share of Kenya Exports and Imports (USD)



	EXPORT 2016	EXPORT 2017	IMPORT 2016	IMPORT 2017
Burundi	626,021,187	68,382,741	2,412,961	583,621,.97
DRC	174,056,137	175,716,428	1,689,091	4,978,990.65
Rwanda	167,253,844	156,062,758	11,153,031	16,492,144.99
SouthSudan	142,581,755	158,345,222	51,158	247,532.60
Uganda	621,217,265	565,119,358	252,075,293	413,636,676.82

Source: Kenya National Bureau of Statistics, 2016-2017

Comparing 2016 and 2017 exports reduced from USD 1,167,711,188 to USD 1,123,626,506 while imports almost doubled from USD 267,381,534 to USD 435,938,967. Imports from Uganda increased by 64% from USD 252,075,293 to USD 413,636,677.

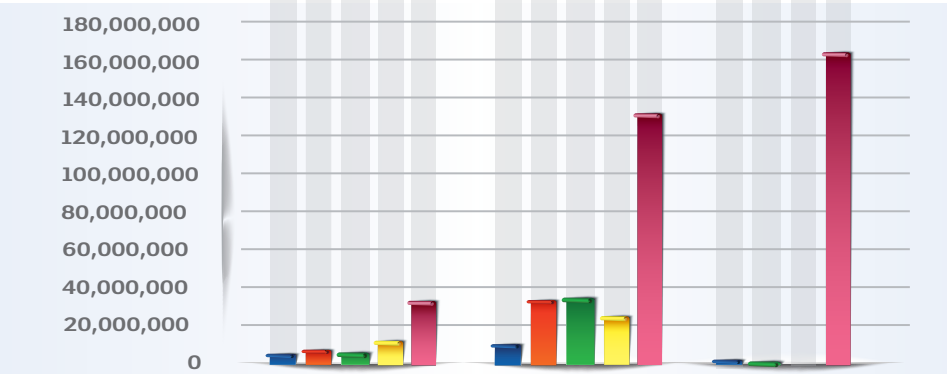
Table 44: Summary of formal Imports and exports in USD

EXPORTS DESTINATION					
MONTH	BURUNDI	DRC	RWANDA	SOUTH SUDAN	UGANDA
Jan	6,060,181	13,322,259	11,172,471	16,180,674	52,240,971
Feb	5,605,459	15,834,739	12,327,269	11,527,183	55,084,969
Mar	5,552,332	19,046,014	13,910,454	17,497,329	56,474,578
Apr	5,374,049	12,687,782	13,445,961	14,608,953	46,307,929
May	10,907,375	17,129,635	14,354,535	13,242,439	46,345,351
Jun	6,777,232	15,041,890	13,761,645	19,552,556	47,362,379
Jul	5,939,956	16,095,411	18,073,411	16,844,930	52,152,746
Aug	6,373,305	12,673,368	13,561,723	7,172,253	43,306,322
Sep	5,224,744	14,220,176	14,479,875	10,891,262	48,219,797
Oct	3,367,259	14,757,490	9,038,336	5,965,582	32,647,127
Nov	3,771,195	10,554,153	10,955,266	12,028,991	49,029,489
Dec	3,429,653	14,353,511	10,981,811	12,833,070	35,947,700
TOTAL	**68,382,741**	**175,716,428**	**156,062,758**	**158,345,222**	**565,119,358**
IMPORTS ORIGIN					
MONTH	BURUNDI	DRC	RWANDA	SOUTH SUDAN	UGANDA
Jan	6,497	35,041	389,270	33,830	21,164,126
Feb	30,932	240,069	659,904	2,829	22,575,905
Mar	198,070	221,036	617,285	4,213	22,426,879
Apr	3,957	56,153	611,518	465	15,062,411
May	22,075	298,118	851,590	61,648	35,147,969
Jun	40,301	166,393	3,485,704	16,095	34,015,722
Jul	44,130	458,674	3,616,859	9,634	26,456,650
Aug	3,718	460,169	669,189	10,732	28,182,957
Sep	417	331,750	694,314	40,554	39,929,108
Oct	171,149	560,937	3,513,697	5,438	29,158,415
Nov	9,028	636,182	885,578	0	75,639,653
Dec	53,349	1,514,469	497,238	62,094	63,876,882
TOTAL	**583,622**	**4,978,991**	**16,492,145**	**247,533**	**413,636,677**
Balance of Trade	**67,799,119**	**170,737,437**	**139,570,613**	**158,097,690**	**151,482,681**

Source: Kenya National Bureau of Statistics, 2017

There are few imports from South Sudan and Burundi. Kenya has a positive trade balance with all the other Northern Corridor Member States. The Leading import sources for Kenya is China, Egypt, Germany Indonesia, Japan, Russian Federation, Saudi Arabia, South Africa, United Arab Emirates and United States of America.

Figure 28: Total imports and exports (USD) from January to March, 2018



	Re-exports	Export	Import
Burundi	1,707,018	11,372,125	65,311
DRC	4,006,729	31,489,249	3,371,165
Rwanda	4,463,664	34,251,110	3,244,729
SouthSudan	11,704,056	26,769,942	19,403
Uganda	32,361,838	128,825,084	167,480,101

Total imports and exports (USD) from January to March, 2018

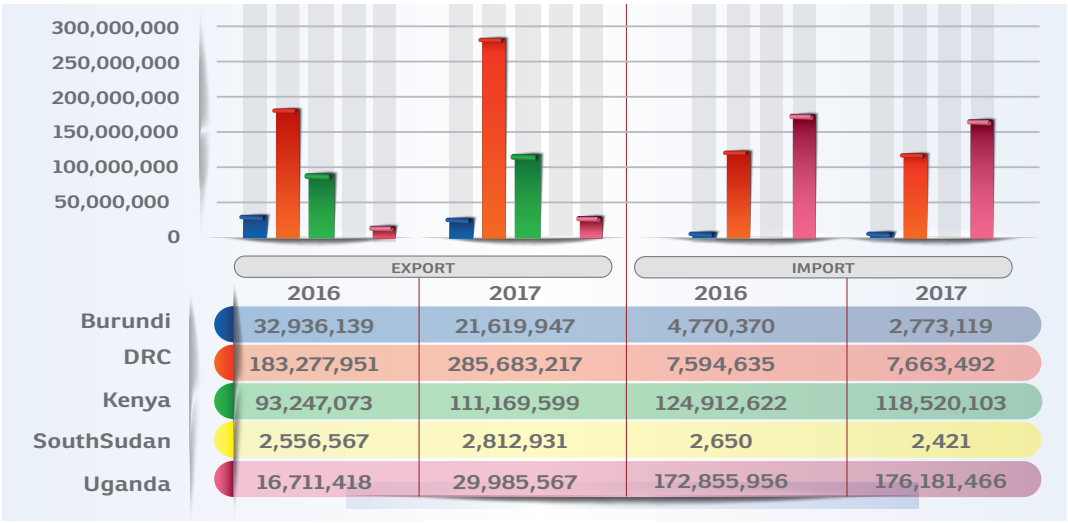
Imports from the region include dried leguminous vegetables, Maize, Milk and cream, Bran, Oil-cake, soya, Buckwheat, millet and canary seed cereals, Millet, Tea, Medium density fiberboard which accounted for 67% of the imports between January and March 2018. Medicines, Salt, Petroleum oils, cigarettes, products of iron or non-alloy steel, cement, Sugar confectionery, pens, beer account for more than 30.7 % for exports

6.5. Trade between Rwanda and the Other NC Member States

6.5.1. Formal Trade in Rwanda

Between January and December 2017, the deficit in the balance of formal trade in goods was US$ 7.4 million and US$ 146.2 Million with Kenya and Uganda respectively. Comparing the performance with 2016, similar period, the value of domestic formal imports reduced by 1.6% while exports increased by 37.3%.

Figure 29: Comparison between 2016 and 2017 (in USD)



	EXPORT		IMPORT	
	2016	2017	2016	2017
Burundi	32,936,139	21,619,947	4,770,370	2,773,119
DRC	183,277,951	285,683,217	7,594,635	7,663,492
Kenya	93,247,073	111,169,599	124,912,622	118,520,103
SouthSudan	2,556,567	2,812,931	2,650	2,421
Uganda	16,711,418	29,985,567	172,855,956	176,181,466

Source: National bank of Rwanda

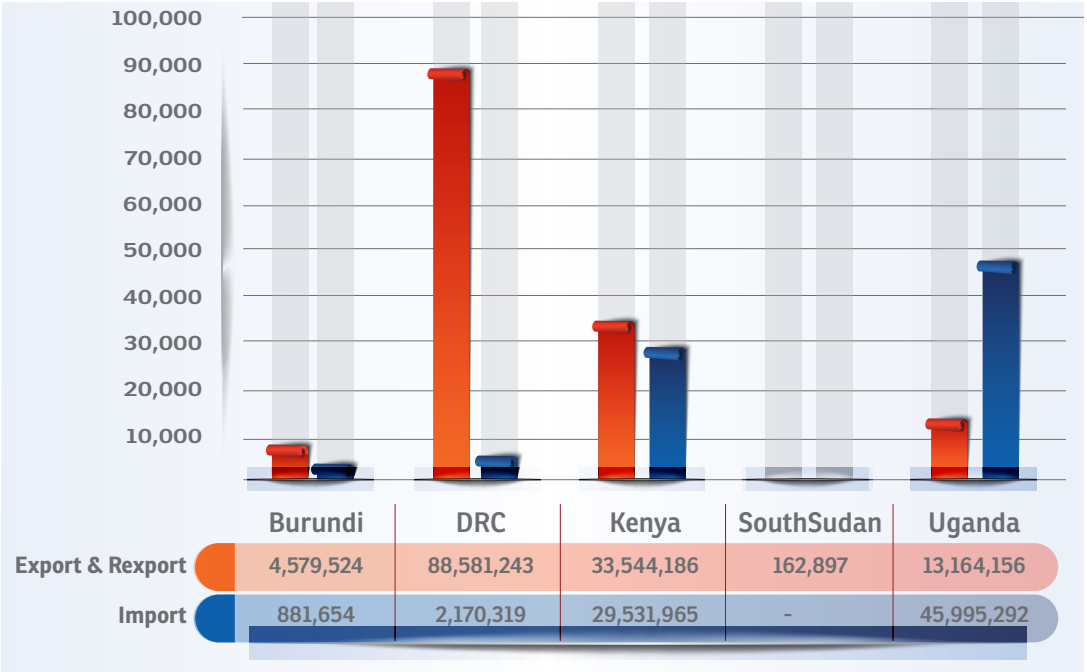
Table 45 shows the value (USD) of commodities exported and imported between Rwanda and other Northern Corridor Members States for the year 2017. Figure 30 gives the trade values for the period January to March 2018. Commodities mostly traded in included beverages, tobacco, crude materials, mineral fuels, lubricants, animals and vegetable oils, fats & waxes, chemicals, manufactured goods, machinery, and transport equipment. Top exports include Food and live animals, beverages and tobacco, Crude materials, except fuels.

Table 45: Summary of Formal Exports and Imports (USD), January 2017 to September 2017

EXPORTS TO:					
MONTH	BURUNDI	DRC	KENYA	SOUTH SUDAN	UGANDA
Jan	2,357,131	18,472,885	9,978,108	40,898	633,606
Feb	1,740,752	18,423,306	7,830,668	54,746	2,188,501
Mar	671,357	22,465,313	7,891,000	266,924	2,096,920
Apr	401,155	21,018,977	8,228,455	33,980	3,794,805
May	1,051,333	26,326,243	13,410,426	39,905	3,604,211
Jun	4,306,626	24,920,119	10,950,668	61,355	2,571,345
Jul	1,768,935	22,558,025	7,427,927	20,443	3,122,826
Aug	2,136,309	25,136,162	5,858,233	61,369	2,582,539
Sep	1,795,289	24,319,580	7,994,913	1,996,502	20,427
Oct	1,887,334	24,527,957	8,312,433	81,758	1,977,213
Nov	1,275,649	25,152,511	12,960,870	82,972	3,280,983
Dec	2,228,078	32,362,138	10,325,898	72,079	4,112,191
TOTAL	**21,619,947**	**285,683,217**	**111,169,599**	**2,812,931**	**29,985,567**
IMPORTS FROM					
MONTH	BURUNDI	DRC	KENYA	SOUTH SUDAN	UGANDA
Jan	252,082	511,726	8,758,837	-	11,651,744
Feb	168,963	525,103	8,718,928	-	13,353,407
Mar	254,669	689,362	9,519,164	-	16,078,023
Apr	179,777	666,207	8,393,778	-	11,770,762
May	100,054	629,366	13,356,378	-	13,635,168
Jun	101,093	713,377	10,369,683	-	15,256,355
Jul	104,437	480,474	11,204,995	-	15,308,954
Aug	82,546	818,762	9,788,870	-	16,923,912
Sep	246,238	669,760	11,682,567	-	14,463,588
Oct	522,620	628,840	8,682,785	2,421	17,564,819
Nov	297,551	474,695	8,437,188	0	15,795,456
Dec	463,089	855,820	9,606,930	0	14,379,279
TOTAL	**2,773,119**	**7,663,492**	**118,520,103**	**2,421**	**176,181,466**
Balance of Trade	**18,846,828**	**278,019,724**	**-7,350,504**	**2,810,509**	**-146,195,899**

Source: National bank of Rwanda

Figure 30: Imports and Exports (USD) January to March, 2018



Source: National bank of Rwanda, April, 2018

6.5.2. Informal trade in Rwanda

Rwanda has been implementing the 2012-2017 cross-border trade strategy which has seen some growth in informal cross-border trade. The Average monthly cross-border informal trade exports were about $ 8.94 Million while imports were approximately US$ 1.83 million. The table below provides a summary from April, 2017 to March 2018. DRC is the major destination for exports while Uganda is the major source of imports accounting for 67% of imports from the three neighboring Member States.

Table 46: Informal trade (USD) in Rwanda

EXPORTS DESTINATION:			
MONTH	BURUNDI	DRC	UGANDA
Apr-2017	336,759	6,339,711	1,669,398
May-2017	430,040	6,015,774	1,415,445
Jun-2017	362,407	6,769,464	936,761
Jul-2017	339,905	6,835,369	1,138,858
Aug-2017	336,460	6,743,840	786,075
Sep-2017	331,459	7,559,662	1,090,909
Oct-2017	308,910	7,332,239	637,835
Nov-2017	276,395	7,786,607	853,098
Dec-2017	291,281	8,436,530	553,912
Jan-2018	328,841	8,987,676	1,288,337
Feb-2018	295,938	8,413,488	1,015,351
Mar-2018	281,603	9,238,510	1,527,653
TOTAL	**3,919,998**	**90,458,869**	**12,913,632**
IMPORTS FROM:			
MONTH	BURUNDI	DRC	UGANDA
Apr--2017	324,876	396,524	1,090,641
May-2017	415,256	480,021	1,202,551
Jun-2017	292,778	325,249	1,198,852
Jul-2017	365,782	276,018	1,227,947
Aug-2017	322,379	273,756	1,349,848
Sep-2017	382,771	288,536	1,706,628
Oct-2017	392,043	199,111	1,476,652
Nov-2017	353,379	186,906	1,320,511
Dec-2017	393,241	105,628	1,023,402
Jan-2018	339,534	102,038	1,026,776
Feb-2018	310,025	152,843	927,108
Mar-2018	392,433	157,834	1,140,578
TOTAL	**4,284,497**	**2,944,463**	**14,691,494**

Source: National bank of Rwanda, April, 2018

Agricultural products and livestock are the major commodities traded in Informal Cross-border Trade(ICBT)_ and the major export products are: Fresh fish tilapia, Dried Beans, Bovine cattle live, Beef meat, Dried fry of Tanzania, pork meat, pig live, Maize flour, Cassava flour, goats live which is 58.5% of total exports between October, 20017 and March, 2018.

The main import products are Maize flour, Sorghum, Irish potato, beer, new Clothing, second-hand clothing, Husked rice, Dried Beans, and coffee accounting for about 48.9 % of the value of imports between October and March 2018. Coffee with a value of Rwf1.9 billion represents 16 percent of total imports brought to Rwanda.

6.6. Trade between South Sudan and Other NC Member States

Despite the challenges in South Sudan, it has not been left behind in the intra-regional trade affairs. Even though the country is a net importer from all the NC member countries it still shows some improvement from previous years. The table below gives a summary of the volumes traded between South Sudan and the member countries served by the Northern Corridor. Additionally, Non-Tariff barriers continue to hurt trade such as poor infrastructure, numerous roadblocks should be removed so that intra-regional traded volumes can increase and hence provide even more varieties to the consumers.

Table 47: Summary of formal exports and imports in USD, South Sudan

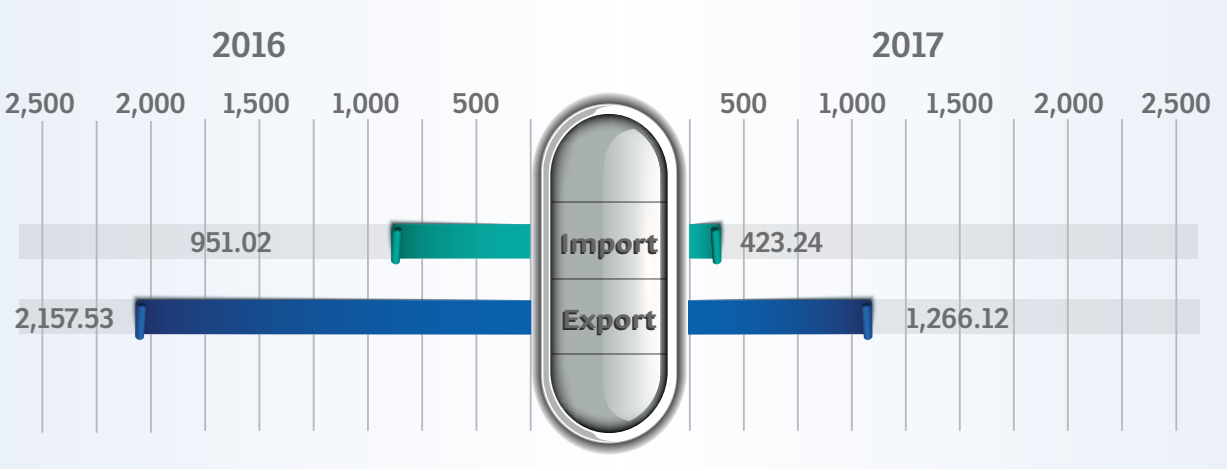
EXPORTS DESTINATION			
MONTH	**KENYA**	**RWANDA**	**UGANDA**
Jan	33,830	-	210,690
Feb	2,829	-	256,140
Mar	4,213	-	323,376
Apr	465	-	515,028
May	61,648	-	428,564
Jun	16,095	-	312,509
Jul	9,634	-	230,009
Aug	10,732	-	236,450
Sep	40,554	-	181,954
Oct	5,438	2,421	249,283
Nov	0	0	325,495
Dec	62,094	0	447,950
TOTAL	**247,533**	**2,421**	**3,717,447**
IMPORTS ORIGIN			
MONTH	**KENYA**	**RWANDA**	**UGANDA**
Jan	16,180,674	40,898	27,324,795
Feb	11,527,183	54,746	30,453,594
Mar	17,497,329	266,924	34,514,343
Apr	14,608,953	33,980	35,003,903
May	13,242,439	39,905	27,286,373
Jun	19,552,556	61,355	19,889,052
Jul	16,844,930	20,443	20,361,626
Aug	7,172,253	61,369	16,525,590
Sep	10,891,262	1,996,502	18,091,821
Oct	5,965,582	81,758	17,761,046
Nov	12,028,991	82,972	27,032,807
Dec	12,833,070	72,079	25,637,678
TOTAL	**158,345,222**	**2,812,931**	**299,882,627**
Balance of Trade	**-158,097,690**	**-2,810,509**	**-296,165,180**

6.7. Trade between Uganda and the Other Northern Corridor Member States

Uganda mostly exports agricultural products with coffee among the top products. Other exports include gold, oil re-exports, fish, metals, electricity, plastic products, cement etc. On average, the total amount in value for imports reduced by 55.5% from US$ 951 Million to US$ 423.2 million for the period between 2016 and 2017. Exports declined by 41.3% from US$ 2157.5 million in 2016 to US$ 1, 266 in 2017.

Figure 31 and Table 48 below provides a summary of formal intra-regional trade volumes between Uganda and the other Northern Corridor Member States.

Figure 31: Summary of annual Formal Imports and exports



Summary of annual Formal Imports and exports

Table 48: Uganda Formal Intra-Regional Trade (USD) in 2017

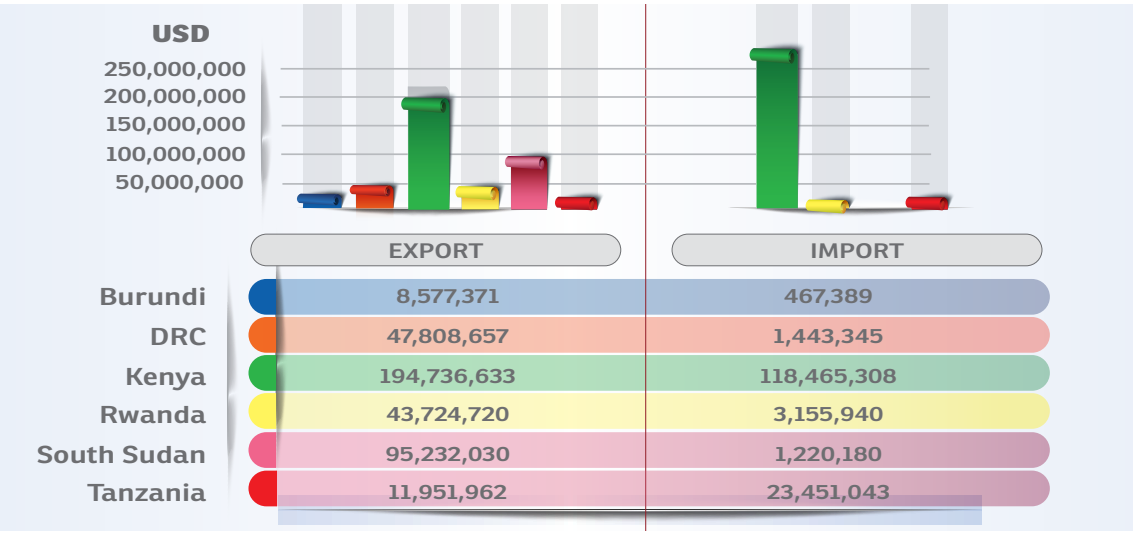
MONTH	EXPORTS DESTINATION					
	BURUNDI	DRC	KENYA	RWANDA	SOUTH SUDAN	TANZANIA
Jan	3,106,528	12,867,511	19,262,590	15,195,407	27,324,795	4,742,058
Feb	3,790,277	13,698,013	15,817,414	13,477,167	30,453,594	6,861,049
Mar	5,556,302	18,179,263	17,359,237	6,288,049	34,514,343	6,605,296
Apr	3,883,242	16,832,157	14,021,538	12,103,019	35,003,903	3,407,547
May	3,446,384	17,892,939	110,647,747	13,679,777	27,286,373	2,959,916
Jun	4,535,564	16,087,592	51,753,989	14,009,786	19,889,052	3,195,544
Jul	4,014,665	14,658,813	46,705,207	12,114,560	20,361,626	1,324,421
Aug	3,865,168	14,411,285	40,025,528	18,499,267	16,525,590	3,687,358
Sep	2,716,993	19,316,594	47,400,607	18,582,067	18,091,821	4,202,462
Oct	2,822,019	14,923,261	49,613,404	17,414,971	17,761,046	3,153,507
Nov	2,970,379	15,851,395	70,674,144	16,068,207	27,032,807	3,743,189
Dec	2,284,128	14,886,924	68,719,613	14,203,635	25,637,678	5,913,766
TOTAL	**42,991,648**	**189,605,748**	**552,001,020**	**181,635,913**	**299,882,627**	**49,796,113**

MONTH	IMPORTS ORIGIN					
	BURUNDI	DRC	KENYA	RWANDA	SOUTH SUDAN	TANZANIA
Jan	45,500	205,585	32,573,639	632,214	210,690	4,880,678
Feb	33,920	493,029	37,070,862	603,156	256,140	6,660,860
Mar	56,306	472,350	42,348,627	559,506	323,376	4,673,860
Apr	16,524	380,987	34,031,912	362,351	515,028	6,307,511
May	17,487	426,074	36,833,225	379,583	428,564	9,570,124
Jun	90,442	337,525	30,774,173	453,516	312,509	5,672,844
Jul	137,558	382,154	32,563,942	384,382	230,009	4,986,934
Aug	90,430	501,894	24,906,531	698,975	236,450	7,864,230
Sep	200,048	335,176	29,488,913	783,973	181,954	8,419,647
Oct	114,283	330,122	33,224,704	2,314,043	249,283	14,802,905
Nov	127,387	314,097	36,215,492	821,412	325,495	5,645,914
Dec	121,077	497,588	34,578,659	1,195,733	447,950	4,900,391
TOTAL	**1,050,963**	**4,676,583**	**404,610,680**	**9,188,843**	**3,717,447**	**84,385,899**
Balance of Trade	**41,940,685**	**184,929,165**	**147,390,341**	**172,447,069**	**296,165,180**	**-34,589,786**

Source: UBOS, 2018

The graph below shows both imports and exports for January to March 2018. Exports to Kenya are highest and comprise of clothing's, telephone sets and accessories, automatic data-processing machines. tubes, pipes and hoses, and fittings, dryer's foods such as onions, shallots, garlic, leeks, vegetables, woven fabrics of cotton, reception apparatus for radio-broadcasting, malt extract flour, grouts, meal, starch or malt extract constituting about 18% of the total goods traded.

Figure 32: Summary of Formal Imports and Exports (USD) from January to March, 2018

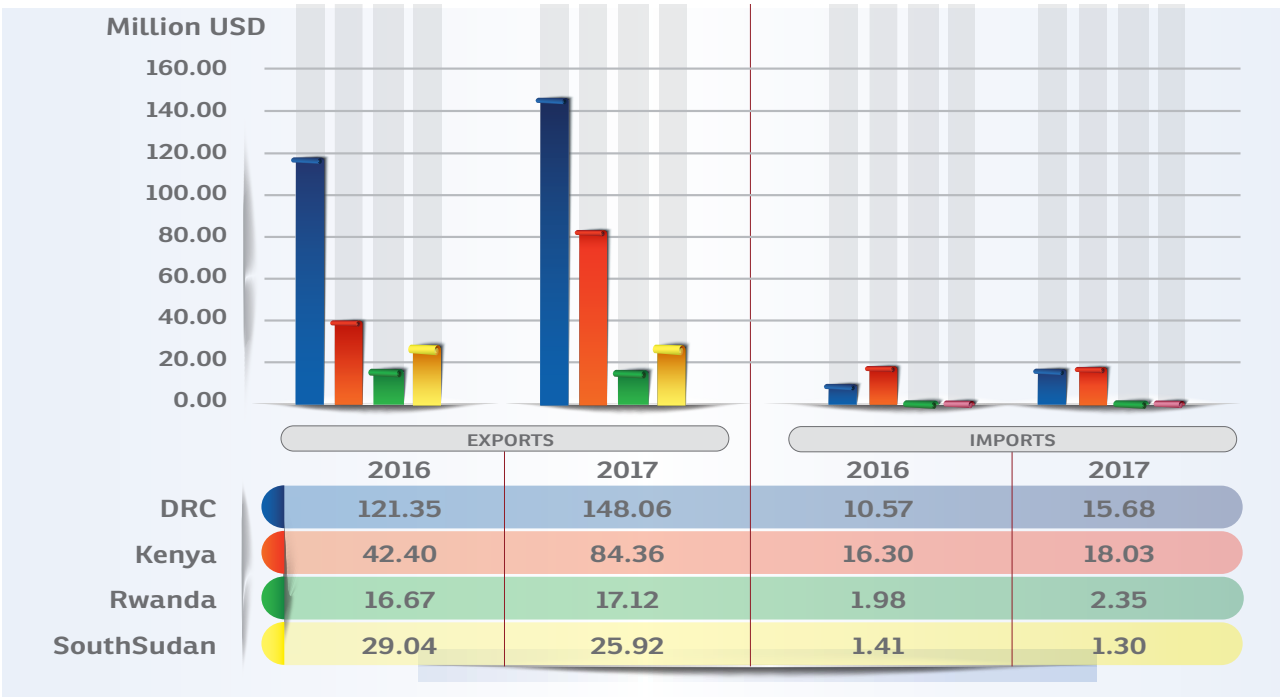


Source: UBOS, April 2018

INFORMAL TRADE – UGANDA

Just like most member States of the Northern Corridor region, Uganda also contributes to the volume of export in the region that emanates from informal trade. Some of the products that have been known to be exported include animals and animal products, clothes, shoes, sandals, timber, alcohol/spirits, salt, motorcycle parts, textile materials, bicycle parts, cooking oil, cement, perfume, fertilizers etc. Kenya and the DRC still remain the biggest receivers of the informal exports from the Ugandan informal trade. For instance, exports to DRC in 2017 were USD 148Million translating into an average of USD 21, 151,488 per month. Nonetheless, Kenya remains the biggest source of the informal sector products. The 2016 – 2017 period saw an increment of 22% of the exports to DRC.

Figure 33: Informal trade in Uganda in USD



Source: UBOS, Jan-July 2016 and 2017

The results from this section reveal that there is a lot of trade among the NC member states. Unfortunately, these countries deal in almost similar goods with a few exporting metals. Informal cross-border goods are agricultural products mainly the primary farm and animal products. The expansion of the Northern Corridor as well as reduced cross-border transportation costs can help improve the volumes traded and hence boost development in the region. It is recommended that the NC countries undertake mirror exercises on their ICBT data for shared borders in order to establish the comparability of collected data.

7 FINDINGS FROM THE GPS AND ROAD SURVEY

7.1. Introduction

The NCTTCA Secretariat conducts road transport surveys to gather information from transporters and truck drivers relating to operations and efficiency of the transit route. Previously, data was collected using hardcopy questionnaires that were administered by the Northern Corridor field supervisor. The questions range from cargo origin and destination, vehicle registration and type, type of cargo, duration and reasons for stoppages. In addition, GPS Kits are provided to truck drivers when they are about to start their journey from Mombasa to different destinations and are collected on return. The system has had various challenges including loss of data. The Secretariat has now started using mobile phones surveys to determine the stop locations and the stop reasons. Stoppages and other delays occasion high administrative and operation cost for moving goods along the Corridor and is a hindrance to trade in the region. The stoppages also lead to inefficient utilization of trucks.

7.2. Prevalence of stops along the corridor

During the survey that was conducted between March and September 2017, border posts recorded the highest stoppage time with a median of 6 hours.

Table 49: Prevalence of stops along the Corridor

STOP REASON	MEDIAN DURATION (HRS.)	MIN DURATION (HRS.)	MAX DURATION (HRS.)
Rest/Meals	6.2	0.1	177.8
Vehicle Breakdowns	5.1	0.5	80.0
Others	1.8	0.2	116.6
Customs Checks	1.8	0.0	129.0
Personal Reasons	0.8	0.0	73.1
Road Condition	0.3	0.1	24.0
Weighbridges	0.3	0.0	120.8
Police/Other Security Checks	0.3	0.1	2.0

Source: Road Transport Survey, September, 2017

Rest and meals take most of the time for stops along the Corridor with a median of 6.23 hours. This is followed by border post procedures at 6 hours and vehicle breakdowns 5.13 hours. These many unnecessary stops translate into inefficiency due to delays that translate into an increment in truck turnaround time and cost of doing business within the Northern Corridor. The Northern Corridor Secretariat in conjunction with the Member States is in the process of implementing the Roadside Stations with a variety of amenities and wellness centers for drivers along the Corridor. This will ultimately reduce the delays along the corridor caused by unnecessary stops.

To simplify and expedite border controls, Partner States are required to implement one border stop processing arrangements by establishing and designating control zones at their respective border posts. These control zones are supposed to be arranged so that, for each direction of travel, border controls shall be carried out in the State of arrival to reduce the number of stops by combining border control activities at a single location.

In 2016, the East African community enacted the East African Community One-Stop Border Posts Act. The objective of the Act is to provide for the establishment and implementation of One-Stop Border Posts in the community in order to facilitate trade through the efficient movement of goods and people. These control zones are supposed to be arranged so that, for each direction of travel, border controls shall be carried out in the State of arrival to reduce the number of stops by combining border control activities at a single location. Strengthening the Joint Border Committees will help in ensuring smooth flow of trade across the border thereby reducing the border crossing time.

At the Malaba border station during the September 2017 Northern Corridor trade and transport logistics survey the following recommendations were made to improve the border operations and performance:

A Establishing a terminal at the Customs offices through which the clearing agents can make declarations when the networks are down.

B The survey also recommended the need to prioritize the onstruction of the road sections in Uganda that connected to new weighbridges at the Malaba Border. Once completed, it would pave way for the laying down of the fiber optic cable and improve the flow of traffic across the Malaba border.

C Construction of a shelter at the Malaba Uganda OSBP where officers would comfortably verify trucks upon arrival from Kenya to enable them to continue with their work even when it is raining

D Construct multiple lanes for receipt of trucks at the OSBP with at least an express lane for use by trucks that have been pre-cleared before arrival at the border station.

E Engage Private Sector/County Government of Busia to develop Road Side Stations (RSS) at Malaba Kenya to decongest the roads and offer safe parking for truckers.

F The need to expedite implementation of a High-Speed Weigh in Motion Weighbridge at least 8 Km from the Malaba border station.

8 ROAD SAFETY

8.1. Introduction

The Northern Corridor is also charged with ensuring there is an established expanded and modern transport infrastructure and services that would promote safety. As such the NCTTCA Secretariat has the mandate of ensuring that all the modes used for transportation of goods and people are safe and secure. To achieve this, the Secretariat is keen on ensuring that Member States adhere to set policies such as the compliance with the vehicle load limit, empowering authorities responsible for transport safety in the Northern Corridor Member States as well as creating a data management system that monitors and provide feedback on safety and security in all the transport modes. Other planned developments include the establishment of wellness centers within the parking facilities.

Agencies responsible for road safety continue to report an increase in the number of accidents along the Northern Corridor. These accidents have adverse effects on the economic development of the NC region. These include loss of lives and goods that would have otherwise contributed to GDP growth of the different NC countries. There are also secondary effects that include the amount of money spent by the victims in hospitals and the losses incurred by truck companies. Member States have been developing action Plan aligned to the five pillars of the UN Decade of Action for road safety in order to reduce fatalities by half by 2022.

8.2. Road Accidents in Kenya

The total number of reported accidents declined by 15.9% to 4452 in 2017 according to the Kenya Economic survey 2018. The road traffic accidents are among the leading causes of death in Kenya. Between April and September 2017, there were about 677 fatalities along the Corridor which is 41.7 % of all the traffic accident fatalities in Kenya.

Between April, and September 2017, various causes of accidents along the Corridor were established as shown below. Losing control, overtaking at risky points on the highway such as corners, hills, failing to keep to near side or proper traffic lane, misjudging clearance and error of judgment were some of the causes as shown in the table below. According to the Northern Corridor and Nairobi county route hazard report, black sports make up 390 kilometers of the Northern Corridor route from Mombasa to Malaba. This has led to high rates of accidents in Kenya. A number of crashes occur as a result of lack of adequate parking facility along the corridor. The Northern Corridor Secretariat, however, has started the rollout of the roadside stations that will offer drivers resting place and offer a wide range of amenities for the drivers. NTSA is in the process of developing a comprehensive National Road Safety Action Plan 2018-2023 which is multi-sectorial, multiagency and multidisciplinary in nature with the involvement of the public, private, NGOs and civil society organizations. The Action Plan will be aligned to the five pillars of Decade of Action for road safety which are safer roads and mobility, safer vehicles; safer road users and post crush care and response and rural transport safety.

Table 50: Causes of Accidents in Kenya along the Northern Corridor

CAUSE	PERCENTAGE
Cause not traced	20%
Losing control	18%
Overtaking improperly	13%
Failing to keep to near side or proper traffic lane	7%
Misjudging clearance	6%
Excessive speed	6%
Walking or standing in road	4%
Crossing road not masked by stationary vehicle	4%
Error of judgment	3%
Swerving	2%
Tires failure	2%
Other apparent error of judgment	2%

Source: National Transport and Safety Authority, 2017

8.3. Road accidents in Uganda

In Uganda, the Ministry of works and transport is the lead Ministry responsible for road safety, which is operationalized through the National Road Safety Council. The national road safety policy set a target of reducing the road traffic fatalities to a maximum of 1,400 by the end of 2017.

The following table 51 gives the status of the Road safety as per the Uganda Ministry of works and Transport annual performance report. In 2017 June, the fatalities reported were 3,503 which is way above the target.

National road safety policy set a target of reducing the road traffic fatalities to a maximum of 1,400 by the end of 2017.

Table 51: Road fatalities in Uganda

DESCRIPTION	2010	FY2012/2013	FY204/ 2015	FY2016/ 2017
Total fatalities (Road Deaths)	2954	3,124	2,845	3,503
Fatalities per 10000 vehicles		36	26	26
Total Registered Vehicles		865,823	1,102,021	1,355,090

Source: Transport annual performance report.

In 2010, the road crash fatalities were 2,954. Under the United nation decade of action for road safety, this was to be halved by 2020. It is important the road safety action plan from 2011 to 2020 which is in line with the united nation decade of action for road safety is fully implemented to reduce road carnage.

8.4. Road accidents in Rwanda

Table 52: Road fatalities in Rwanda

SECTION	FATAL	SERIOUS	TOTAL NO.
Musanze-Cyanika	0	0	0
Muhanga –Rubengera	1	0	1
Muhanga - Ngororero-Mukamira	1	0	1
Kicukiro-Nemba	2	4	6
Kigali-Kayonza	3	2	5
Kayonza - Gabiro – Kagitumba	3	8	11
Ruhwa-Bugarama-Rusizi-Buhinga-Karongi-Rubavu	4	7	11
Huye -Kitabi-Buhinga	5	4	9
Kigali-Huye-Akanyaru	6	14	20
Kigali- Musanze-Rubavu	8	7	15
Kigali-Gatuna	12	9	21

Source: Ministry of infrastructure/Rwanda National Police

In Rwanda, between October 2017 and March 2018, a total of 100 accidents occurred out of which 45 were fatal as shown below. Strict law enforcement against over speeding, drunk driving, and poor vehicle maintenance has enhanced road safety in Rwanda.

9 GREEN FREIGHT PROGRAM

9.1. Introduction

One of the pillars of Northern Corridor Strategic Plan 2017-2021 is the social economic dimension pillar for promoting environmentally sustainable green freight transport and addressing other social health and economic dimensions in transport logistics chain. The green freight program falls under Article (3d) of the Northern Corridor Transit and Transport Agreement which aims at ensuring environmental sustainability. To implement this, NCTTCA has carried out a number of studies to establish baselines in terms of greenhouse emissions. The aim of Northern Corridor Green Freight program is to reduce emissions by;

a) Raising awareness of pollutant impacts and mitigation strategies.
b) Advocating for a shift of traffic to more sustainable freight transport systems and modes
c) Streamlining transport activities.
d) Optimizing routes, consolidating loads and reducing empty runs.
e) Identifying areas of action and overcoming barriers by enhancing capacity and mobilizing support.
f) Improving scientific understanding of climate pollutant impacts and mitigation strategies and promoting best practices and showcasing successful efforts.

9.2. Corridor Emissions

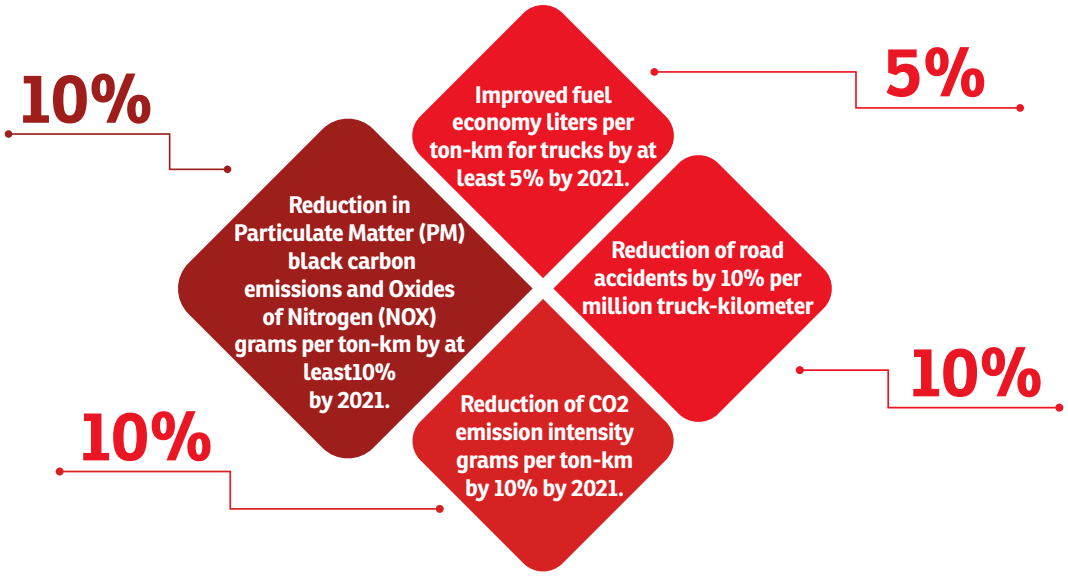
In 2016, the Northern Corridor Transit and Transport coordination Authority in partnership with UNEP, Climate and Clean Air coalition and UNCTAD developed the green freight Transport program and quantified the emission from the Northern Corridor road freight transport as shown in table 52. This formed the baseline upon which the Northern Corridor secretariat plans to monitor the corridor emissions on an annual basis.

Table 53: Corridor Emissions

PARAMETERS	EMISSIONS
Diesel Liters/tonkm	0.029
CO (g/tonkm)	0.19
VOC (g/tonkm)	0.091
Nox (g/tonkm)	0.628
PM (g/tonkm)	0.038
Black carbon (g/ton-km)	0.022
CO2 (g/tonkm)	75

Source: Northern Corridor green freight Transport Program, 2016

The Northern Corridor Green Freight Programme sets outs targets that are aligned to the cycle of the Northern Corridor five-year rolling plan to develop a Sustainable Freight Transport Strategy. The program sets out the following targets



9.3. Port Emissions

The Northern Corridor secretariat with support from UNEP and in partnership with Kenya Ports Authority and Kenya Maritime Authority undertook an Emissions Baseline Inventory for the Port of Mombasa between April and June 2017. The main objective of the baseline was to quantify emissions from operations at the port of Mombasa as a baseline for mitigation and drafting an Action Plan to reduce Particulate Matter and |Black Carbon emissions at the Port.

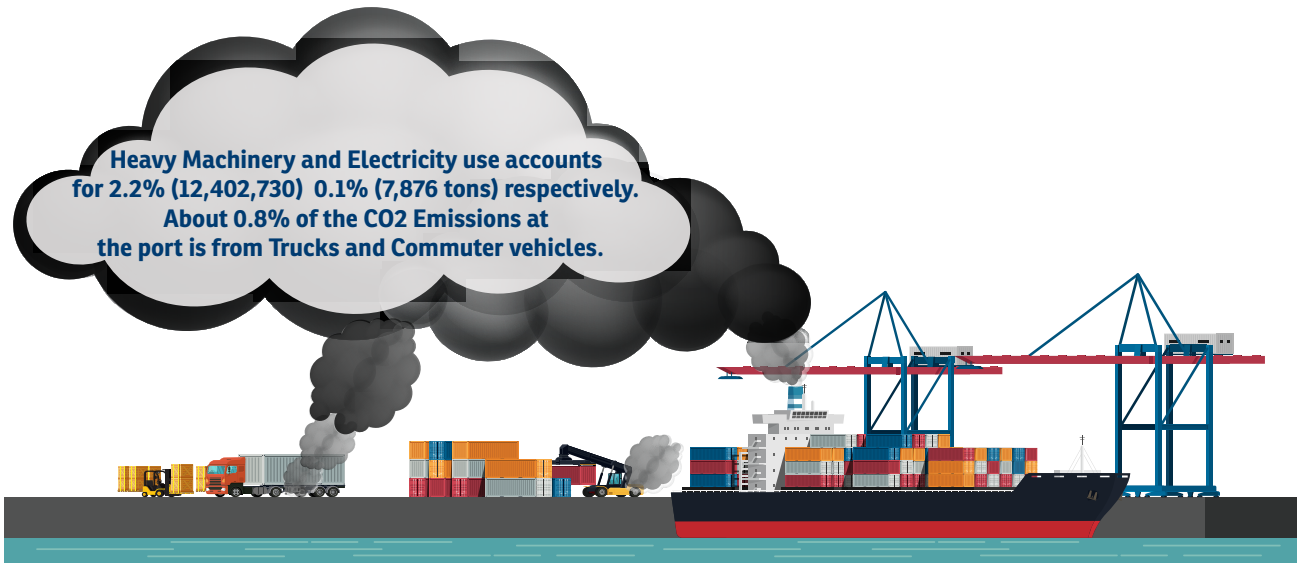
The Baseline Emissions Inventory (BEI) focused on the estimation of the magnitude of emissions from the various sources, linked to emissions from the port. From the results of the study, most of the greenhouse gas emissions are from the ships calling at the port of Mombasa and mitigation measures would mostly focus on ships emissions to reverse the trend. One of the critical interventions would be for the country to ratify MARPOL Annex VI regulations for the Prevention of Air Pollution from Ships. This would be followed by the development of regulations and working with IMO in the designation of emission-free areas. It is projected that GHG emissions will increase by 125% by 2032 in a business as usual (BAU) scenario.

Table 54: Summary of Port Emissions by Sources

SOURCE	CO2 (KG)	NOX	PM2.5
Rail	288,262	4,380	118
Electricity use	7,876,095		--
Tug and mooring boats	400,205	8,474	--
Heavy Machinery	12,402,730	44,258	--
Trucks	4,178,958	14,904	--
Employees Personal cars	4,230,000	--	--
Commuter Buses	117,500	--	--
Emissions at the Port and anchoring	479,302,320	9,544,920	328,865
Emission for Maneuvering	43,396,080	774,360	107,221

Source : NCTTCA Emissions Inventory Baseline Report, June 2017

From the findings, ocean-going vessels account for about 94.7% (522,698,400) of CO2 Emissions while at the port of Mombasa anchoring and maneuvering. Heavy Machinery and Electricity use accounts for 2.2% (12,402,730) and 0.1% (7,876 tons) respectively. About 0.8% of the CO2 Emissions at the port is from Trucks and Commuter vehicles. With the new Standard Gauge Railway in operation, the Secretariat is planning for a follow up study to quantify emissions both at the port and along the corridor. Rail transport accounts for an estimated 0.05% (288,262kg) of the CO2-equivalent at the port of Mombasa. The low percentage figure may be attributed to the ratio of cargo transported by rail from the port.



10 SUMMARY OF FINDINGS AND RECOMMENDATIONS

The Northern Corridor Transit and Transport Coordination Authority (NCTTCA) was established and mandated by the Member States to oversee the implementation of the Northern Corridor Transit and Transport Agreement (NCTTA), to transform the Northern Corridor trade route into an economic development corridor. The agreement complements the provisions of the World Trade Organization Trade Facilitation Agreement (WTO-TFA) which provides for expediting the movement, release, and clearance of internationally traded goods.

There is a need for the full implementation of the WTO-TFA, the African CFTA and other trade and transport facilitation instruments to enable countries to increase their competitiveness and enhance economic growth and development.

1. Green freight Program

To address social and economic dimensions in the transport logistics chain including environmental and social health issues, thee Northern Corridor Green Freight Transport Programme has been conceptualized to address environmental issues in transport logistics.

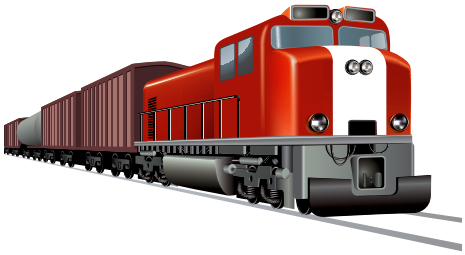
For sustainable transport, Member States are urged to implement the Green Freight Program.

From the report, some of the targets have not been achieved despite having a framework to achieve seamless transport along the Mombasa Port Corridor. For instance, although there are considerable efforts in the adoption of technology and automation, there exist system failures affecting timely clearing of goods. The 24/7 working operation has also not fully materialized as well as the full implementation of pre-arrival clearance.

For the successful implementation of these programs, the Secretariat shall require continued support from development partners, regional institutions, and regional economic communities as well as the Private Sector who are key stakeholders in the trade and transport logistics chain. There is no clear direction on the modal preferences for different cargo types along routes served by rail, road, and pipeline.

The Policy Guidelines on surface modes of transport should be updated. A regional policy should be prepared taking into account the clear advantages of each mode in minimizing public costs, safety and the environment.

2. Railway Transport

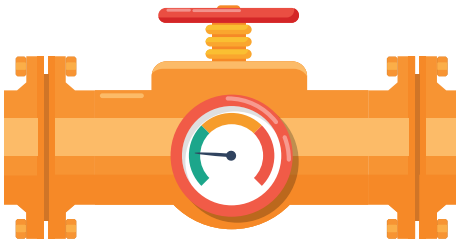


The Concession agreement for the meter gauge was terminated due to underperformance by the concessionaire in regard to undercapitalization by the concessionaire, inadequate technical management, inadequate funds for investment, freight volume performance below targets and default in the payment of concession fee and rent. The service is currently being run by Kenya Railways and Uganda Railways. Integration of the SGR and the Meter Gauge Railway to provide seamless transportation and connections beyond Nairobi. Furthermore, transit nodes, transit facilities and transit links should be developed along the SGR to promote intermodal transport exchange of goods and evacuation of goods at cargo terminals

Stakeholders should be sensitized on the operations of the SGR and the procedures for handling and clearance of cargo by the SGR transshipment in Nairobi to support smooth intermodal transport interchange..

Development of adequate physical infrastructure in the port, ICDs, rail, road, and pipelines together with a maintenance culture to remove physical bottlenecks and expand capacity.

The report advocates for the increase in cargo off-take by rail and utilizing the ICDs to ease pressure on the overstretched road infrastructure and enhance safety along the Northern Corridor.



3. Pipeline Transport

The pipeline capacity has tremendously been increased and the loading bottleneck at the depot have been addressed. Additionally, the pipeline is also upgrading its systems shifting to digital systems that seek to enhance efficiency as its help ease congestion on the main Northern Corridor highway.

There is need to sensitize transit market of the achievements and facilities available.

4. Clearance Processes

Pre-arrival clearance of cargo 48 hours before docking of a vessel has not been fully achieved. This has led to delays thereby affecting dwell time and timely delivery of goods and services to the consumers. On the positive note, the full rollout of the Single Customs Territory has reduced transit times in Kenya, Rwanda

and Uganda and goods under Single Customs Territory cross the borders faster. Clearance procedures for other goods are still taking longer than is targeted. As such the situation requires a quick response towards addressing operational challenges at the border stations and other inland Customs clearance stations.

The NCTTCA Secretariat should support the Member States in the formation of Cross Joint Border Committees at all the key border stations where they do not exist and strengthening the performance of those where they exist.

The document processing center time for KRA is still higher than the target. The current system has not had an effective risk profiling forcing Green Channel entries to be treated like red channel entries. It is expected that upon full implementation of the new Integrated Customs Management System (iCMS) with a robust Dynamic Risk Management module will reduce these delays. iCIMS will also see a reduction in cargo clearance time through re-engineering of customs processes, enhancing AEO Programme and simplifying and harmonizing customs processes.

The Online Real-Time Transit Bond Cancellations is still not fully achieved as the automatic acquittal is still pending thus negatively affecting smooth flow of trade. As such member countries should be actively engaged so that this is achieved. The RCTG presently manages Transit Bonds. Regional Customs Transit Bond should be used for all goods whose taxes are not paid to minimize fresh declarations and bonding of goods at border stations which contributes greatly to the border crossing time and delays. Furthermore, Member States should recognize the RCTG bond executed by forwarders in the other Member States.

Development of a common transit system for internationally traded is recommended to eliminate the challenges of clearance and exchange of information across the region being faced by interconnectivity of customs business systems.

Development of the new Terminal Operating System (TOS) and Truck Appointment System (TAS) should be expedited to enhance container handling and truck turnarounds time at the port Terminal to ease congestion at the port and its environs.

The maritime indicators have shown improvement in performance, with the total numbers of vessels calling at the port having increased from 1, 273 to 1, 452 in 2017 with average gross moves standing at 30.9.

Implementation of the International Maritime Traffic (FAL) Convention by reducing paperwork, simplifying formalities, documentary requirements and procedures associated with the arrival, stay and departure of ships engaged on international voyages is crucial.

Achievement of paperless operations in the clearance of goods and people has not been fully achieved in all the customs authorities hence the need to speed up the implementation of national Single Window systems and their integration. The requirement to fill the migration entry/exit forms at the border crossing points especially for people with machine readable travel documents should be reviewed with an aim of eliminating it.

Member States are called upon to implement Article 43 of the NCTTA which calls for elimination of visa fees.

5. Road Safety

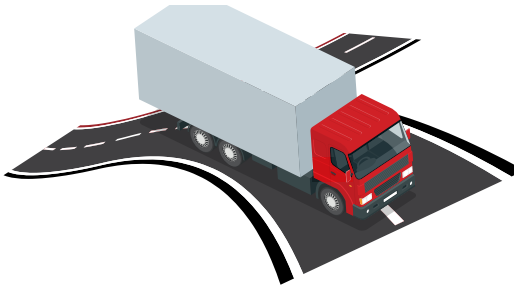
Development of harmonized road safety strategy in the region: this involves the development of road crash database. Sharing of experience across the agencies involved in road safety matters should be encouraged as well as the rollout of the driver training program and sensitization to reduce accidents along the corridor. All the member countries should have strict enforcement of traffic laws.

Fast-tracking implementation of the Roadside Stations with amenities would minimize unnecessary multiple stops made by drivers along the Corridor. It will also avail resting places for driver to reduce driver fatigue which is also a major course of accidents along the corridor.

6. Axle Load Control

Harmonization of Axle-load restrictions by Member States of the Northern Corridor has been done; however there is the need for full implementation of the EAC Vehicle Load Control Act.

The only concept that is lagging behind is the creation of more awareness on the importance of compliance with vehicle load limits.



7. Quality of the road infrastructure

Member States should prioritize the rehabilitation of the sections under the Northern Corridor which have continued to deteriorate over the past years. These sections have led to the delays and even increase the cost of maintaining the vehicles using these sections of the roads hence raising the cost of doing business thereby affecting the flow of intraregional trade. Furthermore, with the signing of the African CFTA, Member States should work towards development of intercontinental transport infrastructure networks to facilitate intercontinental trade. In light of the growing volumes of cargo across the key traditional borders, there is need to open up new trade routes and border stations to support trade across the borders, reduce distances to the border for trading communities where these roads pass and to decongest the traditional borders.

8. Transport Cost

The average distance covered by trucks is very low compared to the target distance of 120, 000 Km per year. Transport rates are still high though this can be reduced by removing restrictions on cabotage regulation to increase in operations and truck utilization.

Liberalization would create a more competitive haulage sector as well as reduce the overall cost of transport. The Member States should work towards reviewing their trade policies on intra-regional trade to support the creation of backhaul cargo for transporters.

The Performance Dashboard in Kenya has helped to improve the timely monitoring of key trade and transport performance indicators and take timely action where it is needed.

The NCTTCA Secretariat should roll out Performance Dashboards to Member States where they do not exit and the Member States are urged to provide data on a monthly basis to the Secretariat to enable this roll out to take place.

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