



Issue: #2 2020

SUDAN

THE NORTHERN DIGEST

For an Efficient, Smart and Green Corridor

DUGANDA

RWANDA

BURUNDI



DEVELOPMENT PARTNERS







Global Affairs Canada







MINISTRY OF FOREIGN AFFAIRS OF DENMARK Danida









Keep Trade and Cross-Border Transport Facilitated



Exective Secretary

Before the spread of the COVID-19, the Northern Corridor region was performing well. In the period January-December 2019, the Port of Mombasa recorded 34,439,264 tons with a growth of 3,515,976 tons or 11.4 per cent compared to the 30,923,288 tons registered in the corresponding period in 2018.

The overall share of intra-Northern Corridor trade has been increasing over the years. For instance, in 2018, intra-Northern Corridor trade grew by about 2 per cent for Burundi; 13 per cent for DRC; 33 per cent for Kenya; 14 per cent for Rwanda and 38 per cent for Uganda.

Before the pandemic, Transit times had improved on most routes along the Northern Corridor suggesting that interventions are being implemented to facilitate cargo movement. Weighbridge crossing time also improved as a result of implementation of High-Speed Weigh-in-Motion.

Now the "new normal" we are seeing low arrivals of ships at the Port of Mombasa and cancellation as countries tightened travel to contain the

spread of COVID-19. The Long Distance Drivers Association also is claiming that its members are taking longer to deliver cargo and return empty containers to the ports, as drivers cannot move during the set times of curfew in Member States.

In this time of global crisis, as the UNCTAD's Secretary-General Mukhisa Kituyi said, "it was more than ever to keep supply chains open and to allow maritime trade and cross-border transport to continue. Transit needs to be facilitated, too. Landlocked countries need access to food and medical supplies through neighbouring countries' seaports. Shipping and ports hold the world economy together. They connect countries, markets, businesses and people, on a scale not otherwise possible".

At the Northern Corridor Secretariat, we understand the difficult situation our Corridor finds itself in and we fully support the national, regional and international measures being taken to flatten the curve of COVID-19 spread.

Our top priority in this unsettling time is to ensure continuous supply of essential goods including medicines, fuel, and food is fully facilitated along the Northern Corridor and at the same time limit the spread of COVID-19.

In line with measures announced by the six Northern Corridor Member States of Burundi, Kenya, DRC, Rwanda, South Sudan and Uganda, on mitigating the impact of the virus within the Corridor, the Northern Corridor Secretariat reiterate steps it's taking in assisting and advising Member States and all Stakeholders to observe the safety measures such as limiting the spread of the COVID19 through cross border transport, facilitating the implementation of National COVID-19 measures such as national lockdowns, facilitating the flow of essential goods such as fuel, food, medicines and other essentials, limiting unnecessary and mass movement of passengers across borders, harmonizing and coordinating national COVID-19 policies, regulations and response measures, and above all, keeping inbound and outbound movements of transit and Cross border transport in the member states' territories.

Together, we shall overcome.



Measures to Limit the Spread of COVID 19 through Cross-Border Trade and Transport Logistics

1. Limit the spread of the COVID-19 through cross border Trade and Transport Logistics

- Provide hygiene facilities at each transport node, such as ports, ICDs, CFSs, RSSs, transit border posts and inland terminals.
- Design and implement a sensitization program for transit operators and their employees;
- Designate Facilities to spray trucks and cargo at the point of loading and discharge;
- Place health workers with COVID-19 detection and testing facilities at the port and inland terminals, as well
 as drive wellness centres;
- Register all transit operators and their employees, formally engaged in the provision of cross-border transport services;
- Provide isolation or quarantine facilities for retention of suspected truck crew before testing;
- Developments Partners to assist Member States to acquire more testing kits;
- To ensure that trucks/ vehicles carrying goods:
 - i. Have only 2-3 crew members per vehicle to facilitate smooth border crossing in the region;
 - ii. Crew members are in good health, screened and if found to be at high risk or positive for COVID-19, they be quarantined for 14 days and the truck decontaminated before it is allowed to continue to its final destination;
 - iii. Truck owners/ operators make necessary arrangements to backup crew to ensure that goods are delivered to the intended destination if the crew are quarantined while in transit;
 - iv. Make arrangements for truck drivers to declare their final destination and ensure they stop only at designated points along the transport corridors;
 - v. Determine crew for vessels by the specifications of the ship and set international guidelines;
- Etc.

2. Facilitate the implementation of National COVID-19 measures such as national lockdowns

• Identify areas where the EAC can assist Member States in enforcing the national lockdowns. This will require creating a platform for sharing information on measures put in place by Member States.

3. Facilitate flow of essential goods such as fuel, food and medicines

• Put in place a mechanism at the Port of Mombasa to identify and accord priority to the clearance and transportation of essential goods (fuel, food and medicine).

4. Limit unnecessary and mass movement of passengers across borders

• Discourage or ban movement of inter-state passenger transport for a definitive time.

5. Harmonize and coordinate national COVID-19 policies, regulations and response measures

- · Review national policies, regulations and response measures and identify inconsistencies;
- Based on the review, pick out best practices and propose to the Member States harmonized policies, regulations and measures;
- Put in place a mechanism to enable Member States to share information on best practices and experiences Win the implementations of the various measures.



Rwanda Stakeholders Laud the Government of Kenya for Infrastructure Developments along the Northern Corridor

Following the Multi-Agency Stakeholders' sensitization mission organised and carried out by the NCTTCA Secretariat and Kenya Ports Authority (KPA) in December 2019 in Burundi, DRC and Rwanda, Stakeholders in those countries requested for a tour of Mombasa Port facilities and other cargo handling and clearance facilities in Kenya managed by KPA.

It is in that context that from 3rd to 6th March 2020, KPA organised a series of meetings and guided tour for the Stakeholders at the Mombasa Port, ICD Nairobi and Naivasha ICD facilities. The guided tour and meetings attracted participation from the Kenya Maritime

Authority (KMA), Kenya Pipeline Corporation (KPC), Kenya Railways (KR), Kenya Revenue Authority (KRA), Northern Corridor Transit and Transport Coordination Authority (NCTTCA), Private Sector Federation (PSF) Rwanda, and Rwanda Revenue Authority (RRA).

The objective of the tour for the Rwanda stakeholders was to appreciate the initiatives in place to facilitate users of Mombasa Port; learn about the Port, SGR and ICDs operations; strengthen cooperation and collaboration for a favourable working environment, and discuss issues affecting the use of the Mombasa port by Rwanda Stakeholders.



Rwanda Stakeholders group photo outside KPA offices

During the Rwanda Stakeholders' meeting with KPA officials, the visiting delegation was briefed on key infrastructure and technological developments that have been implemented to enhance the efficiency of the Port operations.

The Rwanda delegation, led by the Chairman of Rwanda Private Sector Federation; Mr Robert Bapfakurera lauded the Government of Kenya and implementing agencies for the extensive and mega infrastructural developments and efficient services to promote global trade.

On the Performance of the Port, KPA revealed to the Rwanda delegation that in the period January-December 2019, the Port of Mombasa recorded 34,439,264 tons with a growth of 3,515,976 tons or 11.4 per cent compared to the 30,923,288 tons registered in the corresponding period in 2018. Container traffic during the period January-December 2019 increased by 112,792 TEUs or 8.7 per cent after registering 1,416,654 TEUs compared to the 1,303,862 TEUs handled in 2018.



Rwanda Stakeholders meeting in KPA boardroom during their tour of the port facilities

KPA also gave a brief on the progress of Sh30 billion Dongo Kundu free port with an area of 3,000 acres where a Free Economic Zone is being developed. The Free Port will allow traders to bring in their cargo, repackage and export it.

At the Port, the delegation toured the Ship Container Terminal, SGR Cargo yard and the Cruise Terminal.

The tour proceeded in ICD Nairobi where the delegation was received by the Manager ICDN; Peter Masinde and taken through the operations at the ICD Nairobi and performance of the facility. The stakeholders were taken round to the container yards, ICD security checks, train and trucks container loading and offloading zones and dangerous goods container yard.

The ICD Nairobi Manager told the Rwanda Stakeholders that the ICD has 2,978 ground slots with holding capacity of 15,000 TEUs and an annual throughput of 450,000 TEUs. The SGR has improved operations by enabling receipt from Mombasa Port of 800-1000 TEUs

sit countries including Rwanda will be allotted land for construction of storage facilities for cargo destined to their countries.

ICD Naivasha is a 45,000-square-meter facility linked by a 2.6-kilometre connection road to the Maai Mahiu-Narok road. It will serve outbound transit cargo and exports in transit to Mombasa being transported by SGR.

KPA also shared with Rwanda Stakeholders plans by the Kenyan government to revamp the MGR and link it to the SGR in Naivasha.

During the various meetings held, Rwanda stakeholders and the Northern Corridor trade facilitation agencies engaged on the steps being taken to engage all stakeholders especially those in Tanzania to ensure seamless flow of traffic through the shorter transit route to Rwanda through Taveta/Holili border station; explored the challenge of trade facilitation agents from Rwanda to obtain work permits in Kenya, and Rwanda



ICD Nairobi receives between 800-1000 TEUs daily using SGR from 100-150 TEUs using MGR.

daily from 100-150 TEUs which used to be received using the MGR. The SGR has 1,620 wagons for transportation of containerized and non-containerized cargo of which 490 wagons are for bulk cargo and 80 for special cargo. The ICDN has 336 reefer tracks and an enclosed dangerous goods container yard.

KPA also shared the developments at the inland port of Kisumu which can handle both containerized and conventional cargo-carrying capacity of 200,000 metric tonnes. Also, a refurbished MV Uhuru with a capacity of up to 1,000,000 litres ferries oil to Port Bell in Uganda.

To appreciate the expansion of the rail transit developments, the stakeholders travelled by rail to ICD Naivasha. Countries are advised to consign their cargo being transported by SGR. It was reported that transported to the transported by SGR.

Clearing Agents lack access to the KRA Customs business system to clear goods.

Other main challenges discussed include the need for KPA and KPC to review prices for their services to be competitive as compared to other service providers in the region and the lack of a platform for arbitration to resolve issues amicably and fast.

Rwanda Stakeholders were represented by BRALIRWA, China Road and Bridge Corporation, COFATOLE, ERI Rwanda, Gorilla Logistics, MASTERSTEEL, Ministry of Trade & Industry, ROKO Construction, RWACOF, Rwanda Freight Forwarders Association (RWAFFA), RwandaPrivate Sector Federation (PSF), Rwanda Shippers Council, SAFINTRA, and Société Pétrolière.



NORTHERN CORRIDOR PERFORMANCE DASHBOARD



EFFICIENCY & PRODUCTIVITY



BEFORE

BERTH
The average time taken by the ship before
Berthing. It is measured from the time the
vessel arrives at the fairway buoy to the
time at its first berth.
2018: 13 Hours
2019: 12 Hours
Target: 12 Hours



P TURNAROUND TIME
average time spent by the ship in the
t area, It is measured from the time the
sel arrives
8: 91.2 Hours
99: 94 Hours
get: 81 Hours
ichmark: 24 Hours



FOR CUSTOMS CLEARANCE AT DOCUMENT PROCESSING CENTER

is the time it takes to have an entry ed by a clearing agent passed by

geu foms. 18: 2.3 Hours 19: 2.3 Hours eet: Real-Time/Instant



TIME TAKEN AT MOMBASA ONE STOP

Average time of document processing at One Stop Center. 2018: 80 Hours 2019: 50.8 Hours Target: 64 Hours





VOLUME AND CAPACITY

MOMBASA PORT THROUGHPUT

	2018	2019
Tons	30,923,288	34,439,264
TEUs	1,303,862	1,416,654

11.4% increase in

8.7% increase in TEUs



VESSEL PRODUCTIVITY (GROSS MOVES PER HOUR)

This is measured as average of the gross moves (on-load, offload and repositioning) per hour for each vessel call recorded. The unit of measure is Moves per-ship per-hour

Year	No of ships	Total Moves	Gross Moves per hours	TEUs	Average TEUs Per ship
2018	543	855,118	30.23	1,183,964	2,187
2019	546	927,378	31.96	1,306,510	2,393





TRANSIT TIME & DELAYS

Time taken by transit cargo to move from one node to another e.g. from Mombasa to Malaba Nodes are points along the corridors like weigh-bridges, border-posts, ports.

Country	Route	2019
		(Hours)
Kenya	Mombasa-Malaba	57
under RECTS	Mombasa-Busia	66
Uganda	Malaba to Kampala	46
under the	Malaba-Elegu	19
RECTS	Malaba-Mpondwe	35
	Malaba- Oraba	26
	Malaba- Goli	23
	Busia to Kampala	27
	Busia- Elegu	18
	Busia –Mirama Hills	36
	Busia-Mpondwe	36
	Kampala-Elegu	28
	Kampala-Oraba	27
	Kampala-Mpondwe	43
	Kampala-Ntoroko	41
	Kampala-Padea	42
	Kampala-Goli	42
	Kampala-Madi Opei	72
	Kampala-Mirama Hills	39
	Kampala-Bunagana	28
	Kampala-Vurra	43

Country	Route	2019
		(Hours)
Rwanda	Cyanika-Rubavu/Goma	15
under	Rusumo-Rubavu/Goma	34
RECTS	Kagitumba-Rubavu/Goma	60
	Kagitumba-Akanyaru Haut	36
	Kagitumba –Nemba	13
	Kagitumba-Mururu	61
	Kagitumba-Kigali	18
	Kigali-Rubavu/Goma	27
	Kigali-Mutara	48
	Kigali-Mururu	48
Rwanda under ASYCUDA	Kagitumba- Mururu	75
	Kagitumba-Nemba	24
	Kagitumba- Akanyaru Haut	42
	Kagitumba- Cyangungu	37
	Kagitumba- Bugarama	66
	Kagitumba -Rubavu	48
	Kagitumba - Kigali	44
Burundi	Gasenyi - Bujumbura	61
under	Kayanza-Gasenyi	58
ASYCUDA	Bujumbura-Gasenyi	212



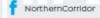
The Transport Observatory, http://top.ttcanc.org The Dashboard: www.kandalakaskazini.or.ke



ttca@ttcanc.org www.ttcanc.org







COVID-19: By flattening the curve, we shall overcome

In epidemiology, the idea of slowing a virus' spread so that fewer people need to seek treatment at any given time is known as "flattening the curve". It explains why so many countries are implementing "self-isolation and social distancing" guidelines.

In the case of the new coronavirus, the pandemic responsible for infecting hundreds of thousands of people in more than 170 countries worldwide with the disease, called COVID-19, the "curve" refers to the projected number of people who will contract COVID-19 over a period of time. The curve takes on different shapes, depending on the virus's infection rate. It could be a steep curve, in which the virus spreads exponentially (that is, case counts keep doubling at a consistent rate), and the total number of cases skyrockets to its peak within a few weeks. Infection curves with a steep



rise also have a steep fall; after the virus infects pretty much everyone who can be infected, case numbers begin to drop exponentially, too.

The faster the infection curve rises, the quicker the local health care system gets overloaded beyond its capacity to treat people. As it was happening in Italy, more and more new patients may be forced to go without ICU beds, and more and more hospitals may run out of the basic supplies they need to respond to the outbreak.

A flatter curve, on the other hand, assumes the same number of people ultimately get infected, but over a longer period of time. A slower infection rate means a less stressed health care system, fewer hospital visits on any given day and fewer sick people being turned away.

Flattening the curve is every one's responsibility

As there is currently no vaccine or specific medication to treat COVID-19, and because testing is so limited in

in most countries especially in African Countries, the only way to flatten the curve is through collective action: Wash hands frequently, Self-isolate (when having COVID-19 symptoms or simply sick) and Social-distancing (essentially, avoiding other people whenever possible) right away.

According to UNCTAD's Richard Kozul-Wright, Director, Division on Globalization and Development Strategies, "apart from the tragic human consequences of the COVID-19 coronavirus epidemic, the economic uncertainty it has sparked will likely cost the global economy \$1 trillion in 2020".

Mr. Kozul-Wright warned that few countries were likely to be left unscathed by the outbreak's financial ramifications. "There's a degree of anxiety now that's well beyond the health scares which are very serious and concerning", He added.

To counter these fears, "Governments need to spend at this point in time to prevent the kind of meltdown that could be even more damaging than the one that is likely to take place over the course of the year", UNCT-AD's Kozul-Wright insisted.

Though Africa remains one of the regions with the fewest cases, the number of countries affected are increasing. The reason why most Governments have already started to lay strategies for coping with the health and economic effects of the COVID-19 pandemic.

While the relatively low number of Corona Virus cases on the continent so far is good news, African policy-makers should not be complacent. They should instead use this window of opportunity to take decisive steps to protect all the citizens and economies from the pandemic.

To achieve these goals, they are undertaking a threestep approach: (1) contain the spread of the virus; (2) swiftly treat identified cases; and (3) cushion the economy from the effects of the pandemic. If these measures are implemented, the human casualties will be limited, and Africa's economic growth will decline by around 1 percentage point or possibly less. If, on the other hand, the measures to contain the pandemic are not swift, the number of deaths will soar, and economic growth could drop by 2.1 percentage points or more.

In early March, the World Bank announced it would commit USD 12 billion in aid to developing countries to help them to deal with the impact of the virus and limit its spread. The Bank said it would prioritise the most at-risk countries. The World Bank also introduced a pandemic bond in 2017, which, as part of the Pandemic Emergency Finance Facility intended to provide money to help developing countries in the event of a pandemic reaching certain thresholds and conditions. So far, these criteria have not been met and the bond has not paid out.

Key African Sectors to be affected by COVID-19

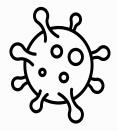
According to the ratings Agency, Fitch, the Coronavirus outbreak will obviously have a downside risk for short term growth for sub-Saharan Africa growth particularly in key sectors namely; Shipping and Trade, Industrials,

Manufacturing and Transportation, Infrastructure, Capital raising and Initial Public Offerings (IPOs), Financial Institutions, Local Markets, Insurance, Energy and Mining, Health care and Pharmaceuticals, Technology, Media and Telecommunications (TMT), Tourism and Hospitality, Consumer goods and retail, etc.

There may be roaming anxiety and uncertainties, but there is hope if African governments continue spending towards mitigating expected negative impacts from COVID-19 on their economies. We shall overcome.



COVID-19: By Flattenning the Curve, We Shall Overcome



TRANSMISSION







Contaminated Surfaces and Objects



Contaminated Food



Human Contact

Cough



Running Nose



Sore Throat



Fever



Shortness of Breath

PREVENTION



Wash Your Hands



Sanitize Your Hands



AVOID Groups of People



Leave Your Face Alone



Wear a Mask



Do NOT Shake Hands



Cough Into Your Elbow



Work From Home



Practice Social Distancing



Do NOT Travel



Keep in Touch

Northern Corridor Region to put in place Road Crashes Management System

With forty per cent of the total throughput at the Port of Mombasa currently carried out by rail Transport to Nairobi leaving a significant volume of cargo on road transport, by all accounts, road transport remains the most important means of transport along the Northern Corridor. Thus the high level of road fatalities still witnessed on the Northern Corridor Road Networks.

Not only Road fatalities present a considerable obstacle to the region's aspiration to achieving targets of the UN General Assembly Resolution Decade of Action for Road Safety but also hindered the achievement of goals of the 4th EAC Development Strategy which targeted to have the Road related fatalities reduced by 20% by the year 2015 and to harmonize fatality rates with the African road safety performance target which is to reduce the road-related fatalities by 50% by 2030.

In the implementation process of the NCTTCA Policy Organs' directive on "Improvement of safety in all transport modes" to facilitate safer transport across the Northern Corridor region, delegates from Member States gathered in Nairobi, Kenya, from 9th to 11th March 2020, to discuss the harmonisation of measures for International Roughness Index (IRI) data collection and validate the Black spots survey reports carried out along the Corridor Routes in Kenya, Rwanda and Uganda, agreed among other things to establish a Road Crashes Management System to achieve the road safety targets reduce the road-related fatalities.



Participants during the Validation Workshops on the International Roughness Index (IRI) data collection and the Black spots survey reports, 9th-11th March 2020, Nairobi, Kenya.

Road Safety has posed one of the major challenges along the Northern Corridor with numerous studies showing that road traffic accidents along the route constitute a significant loss of human lives and property within the region. Road fatalities present a significant impediment to the achievement of some of the key development goals of the East African Community (EAC) such as expansion of health capacities owing to big drain on national resources allocated to health.

In Kenya, road crash statistics from the National Transport and Safety Authority show that an average of 3,000 lives are lost annually with thousands more injured from road accidents. The World Health Organisation in its 2015 Global Status Report on Road Safety ranked Kenya's roads amongst the most dangerous in the world claiming an average of 29.1 lives per 100,000 people. The crashes are mainly attributed to human error as well as other factors such as unsafe road designs, poor condition of vehicles, unsafe road



TMEA's Lucy Chetalam urged Member States to prioritize Road Safety in their Infrastructure development and projects to reduce road fatalities.

user behaviour, inadequate infrastructure for non-motorized traffic and missing or ineffective road signage.

The Northern Corridor has one hundred and ninety-nine (199) black spots in Kenya based on a survey conducted jointly by Safe Way Right Way (SWRW), National Transport and Safety Authority (NTSA), Kenya National Highways Authority (KeNHA), Kenya Urban Roads Authority (KURA) and Kenya Police on the Northern Corridor and Nairobi County dated May 2017.

An inter-agency survey on priority black spots by the Northern Corridor Transit and Transport Coordination Authority (NCTTCA), KeNHA, National Transport NTSA Kenya Transporters Association (KTA) and the Kenya Traffic Police in March 2019 prioritized the first ten (10) black spots among the thirty (30) ranked from a study by KeNHA undertaken by SMEC consultants to rank Hazardous/Black spots along Northern Corridor in September 2016.

These priority black spots in Kenya; Mukinya-Migaa-Sobea-Salgaa-Sachangwan; Gitaru- Rungiri; Kibarani-Makupa Causeway; Molem-Nambakana-Nyamasaria-Kasagam; Emali- Pipeline; Bonje; MajiYaChumvi; Konza- Malili; Ngokomi- Kalimbini; and Mlolongo were ranked based on three (3) high crash location identification criteria including crash frequency, crash rate and crash severity and intensity.

In Rwanda, against the projected twenty-six (26) predetermined black spots along the main routes of NR-1, NR-2 and NR-3, the team surveyed twenty-eight (28) hazardous spots in total having identified two more along Kigali-Katuna route.

A general observation was that all the main roads in Rwanda are in a well-maintained condition with no signs of distressed pavement or failing road shoulders along the routes surveyed. However, there are challenges observed with the road design parameters. Most roads' lanes have less than generally accepted 3.5m standard. In some cases, road carriageways going as narrow as 6m; two-lane, two-way; against the accepted road shoulder width of 2M according to East African Highway Design Standards.

A rounded number of 750 fatalities per year put Rwanda at a level of 7 fatalities per 100,000 population and 50 fatalities per 10,000 motor vehicles.

Rwanda scores significantly better than its neighbouring countries which all show figures in the range of 20-30 fatalities per 100,000 population (according to WHO data). Strict enforcement of the use of safety belts in cars and the wearing of helmets by motorcycle drivers and passenger greatly contributes to this better performance without any doubt.

However, in terms of fatalities per 10,000 vehicles, Rwanda has a relatively high incidence of fatalities (50) due to a comparatively small motor vehicle fleet; the score is at the same level as Uganda (also around 50), significantly better than Ethiopia (about 70), but way behind European countries like Netherlands and Sweden.

In Uganda, on average, the Country loses 10 people per day in road traffic crashes, which is the highest level in East Africa. The overall annual cost of road crashes is currently estimated at app 4.4 trillion (\$1.2 billion), representing gross domestic product (GDP). Altho has a robust regulatory transport fran various challenges compromise the in such policies and regulations, leading to vice provision.

The entire country and, in particula is served by an unregulated public tr with most of the vehicles in poor m tion, coupled with poor driving skills tl road crashes. Most vehicles operate la transport regulatory framework. The u system in the cities and along busy exacerbated the transport safety.

Frequently Asked Question (FAQ)

What is Northern Corridor Transport Observatory?

44

Northern Corridor Transport Observatory is a monitoring tool that measures over 40 performance indicators along the corridor.

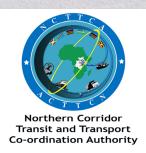
The Observatory tracks the indicators using raw data collected from the stakeholders in all the member states. The information provides a clear picture on various indicators, enabling to identify the bottlenecks that need to be resolved to improve on the efficiency and sequentially improving in the trade and operations along the corridor.

The Transport Observatory has four components:

- i. The Dashboard; Is a weekly monitoring tool for selected performance indicators (eleven) ranging from Maritime Indicators, Port Indicators as well as Corridor Indicators.
- ii. Indicators; A section of the Observatory portal covering Corridor Performance Monitoring on longer time frequencies like monthly, quarterly and annually
- iii. GIS; The Global Information System of the Northern Corridor covering the various sections and nodes of the entire corridor based on the various modes of transport.
- iv. Documents Repository; The Transport Observatory repository for reports, publications and other resourceful material relating to the initiatives



The Transport Observ http://top.ttcar The Dashk www.kandalakakazin



"



"

For an Efficient, Smart and Green Corridor





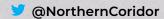
The Permanent Secretariat 1196 Links Road, Nyali P.O. Box 34068-80118 Mombasa, Kenya



Telephone +254 729 923574 +254 733 532485



E-mail: ttca@ttcanc.org Website: www.ttcanc.org





NorthernCorridor