



Transformation of Corridor Economy in Northern Economic Corridor

- Master Plan on Logistics
in Northern Economic Corridor -

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SAFE JOURNEY
BON VOYAGE
URUGENDO RUHIRE

Republic of
Uganda

Outline

Northern Economic Corridor

The Northern Economic Corridor connects Mombasa Sea Port through Kenya and Uganda to Rwanda and Burundi, to Democratic Republic of Congo (DRC) and to South Sudan. It is a multi-modal corridor and is recognized as the most significant corridor for logistics in East Africa.

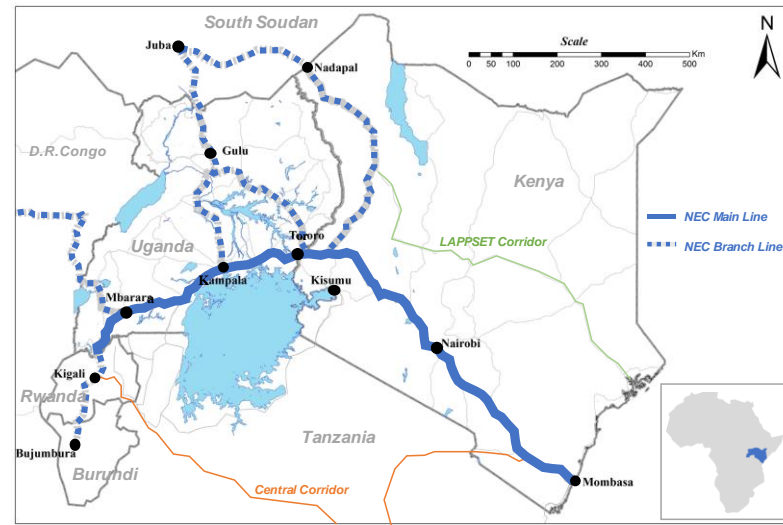
Objective

The objective of this Project is to formulate a master plan on Logistics for Northern Economic Corridor, along with integrated regional development strategy consistent with sub-regional development plans and national development plans, with 2030 as the target year.

Our Approach and Value

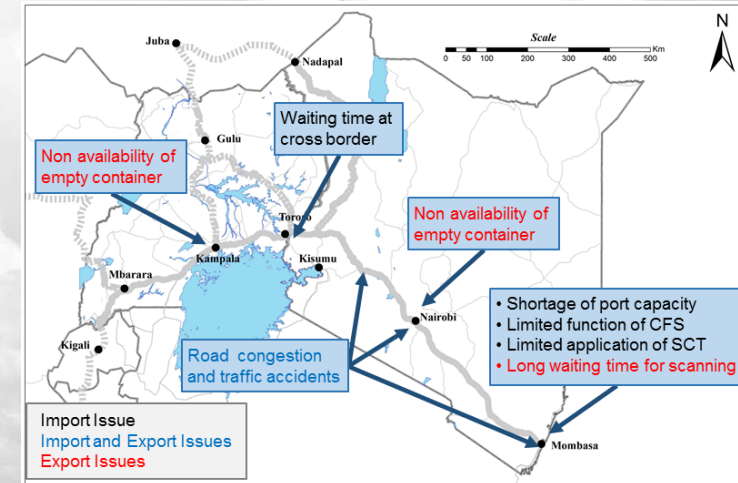
The three approaches were applied for the formulation of the Master Plan;

- 1. Comprehensive: Develop the master plan comprehensively considering regional development and industrial developments** along the corridor with development of transport and logistics infrastructure **to enhance the regional value.**
- 2. Reflecting Latest Plans: Incorporate recent development plans and on-going activities** including Nairobi Integrated Urban Development Master Plan, Comprehensive Development Master Plan in the Mombasa Gate City, Dongo Kundu Port Mombasa Master Plan, the Standard Gauge Railway (SGR) project, One Stop Border Post (OSBP) project **to create new synergy between various development activities.**
- 3. Fact Based: Formulate the master plan based on fact findings** through detailed analysis of value chain survey, goods movement and vehicle traffic survey, and stakeholder meetings **to capture the current regional growth.**



Northern Economic Corridor Connecting East African Countries

Current Conditions and Issues



Remaining Bottlenecks in logistics along Northern Economic Corridor



Traffic Jam to Inland Container Depot in Kampala

Bottlenecks in Logistics

Northern Economic Corridor has several large bottlenecks in logistics which cause inefficiency of logistics and a growth constraint for the region.

Excess of Import

The rates of cargo traffic volume from Mombasa Port to East African Countries (EAC) and in the opposite direction are 9:1, respectively. This indicates that much income is outflowing.

Concentration of Functions on Primary Cities

Nairobi and Kampala have attracted too many functions. Nairobi earns over 55% of the gross domestic product (GDP) in Kenya. This trend will lead to imbalanced development in the region.

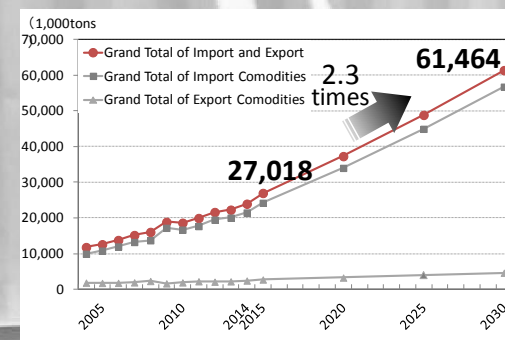
Limited Value Addition

Despite the primary commodities production from the agricultural and mining sectors in Kenya and Uganda, value-addition within both countries is limited. This is due to limited linkages between the primary commodities and industries.

Future Forecast

Increasing Freight Traffic Flow via Mombasa Port

It is forecasted that the total import and export freight from Mombasa Port in 2030 will be 61 million tons, which is 2.3 times than in 2015. The volume in 2030 was 1.5 times increased from the predicted figure in Northern Corridor Infrastructure Master Plan (2011) based on recent rapid freight growth.



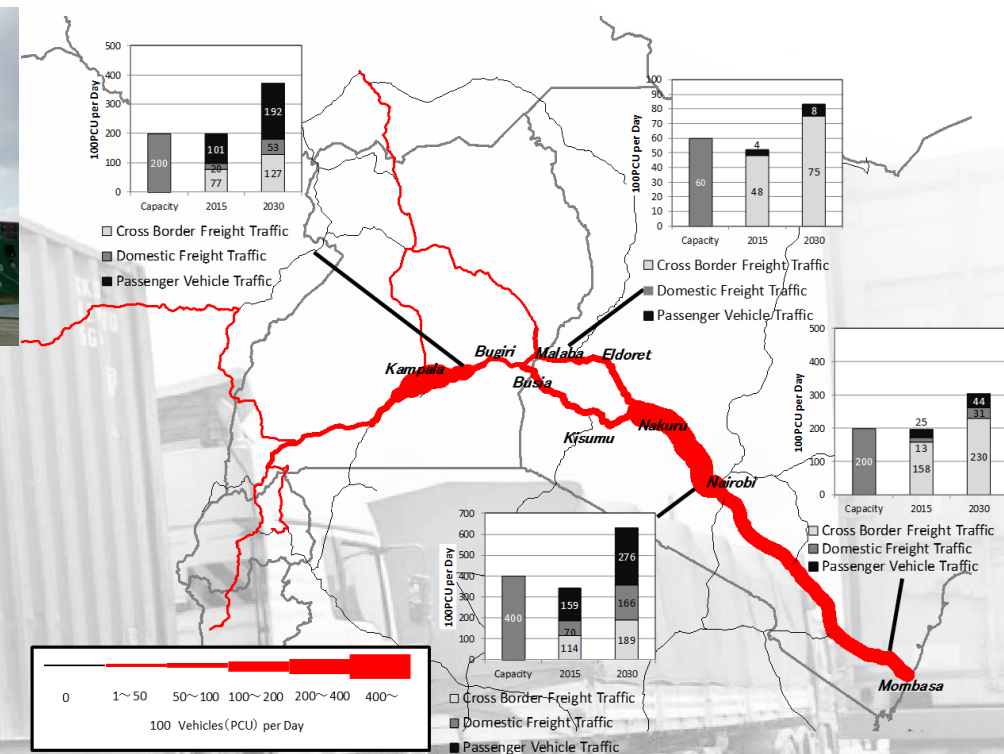
Forecasting Result of Import and Export Commodities via Mombasa Port



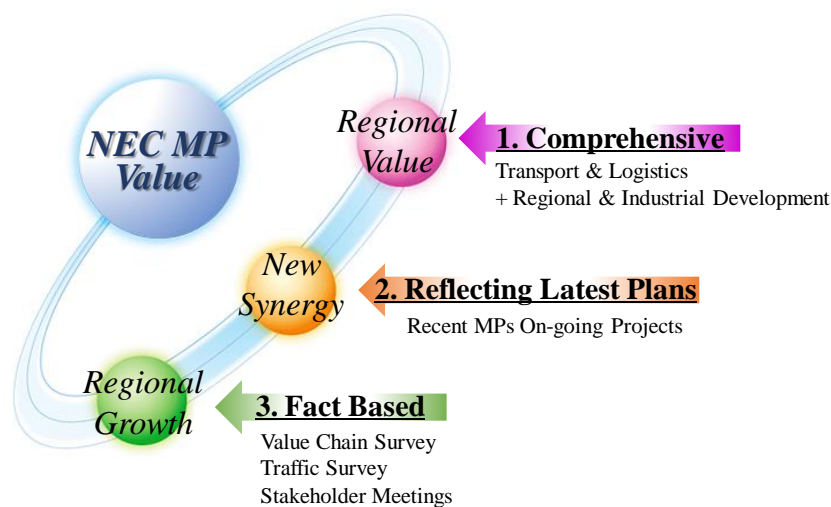
Increasing Volume of Containers via Mombasa Port

Overcapacity of Road

Future road traffic demand will increase according to the increase of freight volume. Total traffic will exceed 40,000 pcu/day between Nairobi and Nakuru and around Kampala area. Even if the current lanes were to be increased to four lanes, the road capacity would still not be sufficient.



Future Traffic Demand and Bottlenecks on the Road in 2030



Approach and Value of Northern Economic Corridor Master Plan (NEC MP)

Development Vision

“To be the Leading Economic Corridor with Integrated Transport and Logistics Systems in Africa”

Key Words in the Vision:

Leading: to be the leading, most efficient, and reliable corridor in Africa.

Economic Corridor: to stimulate regional economic development in the area surrounding the corridor.

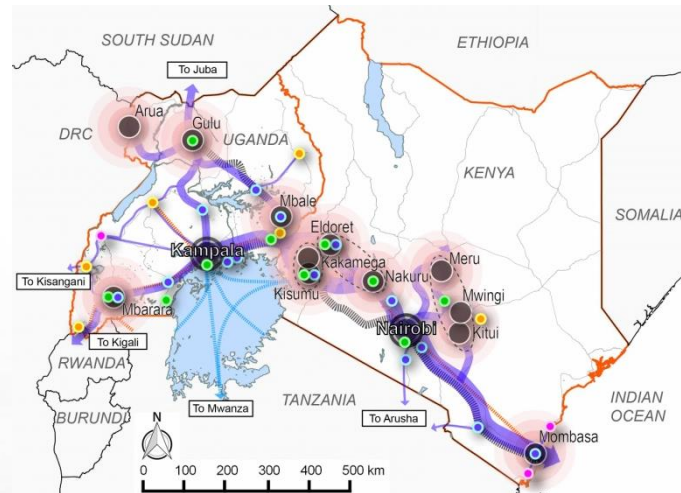
Integrated: to get transport and logistics system integrated with diversified and multi-modal options, which facilitates regional integration in East Africa.

Development Strategy

1. Regional Strategy

Linking Production Centers through Secondary City Development

The function of existing middle cities will be promoted as regional hub of logistics, processing, business, commerce and urban service for the surrounding region as Secondary Cities to enhance the regional structure.

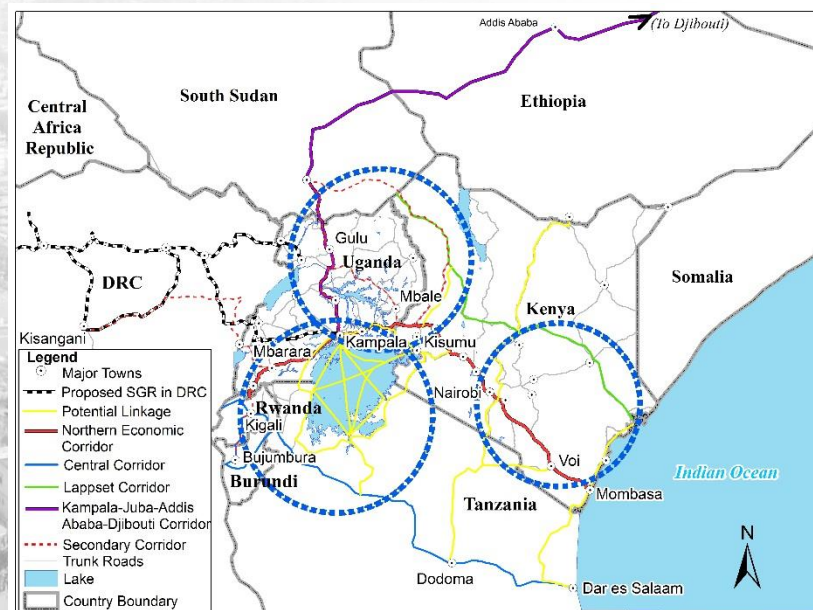


Future Regional Structure

Linking with Surrounding Corridors

African countries including EAC are major export destinations from Kenya and Uganda. They account for 45% and 66% of the current volume of exports from Kenya and Uganda, respectively.

In order to take full advantage of the export potential to the regional market, traffic linkage to surrounding corridors which are major lines leading to the market will be strengthened.



Surrounding Corridors of Northern Economic Corridor

2. Industrial Strategy

Promotion of Growth Drivers

Growth drivers which can play the role of providing good initiatives for upgrading the industrial structure in the region were selected.

Expected Effect	Kenya (20 Drivers)	Uganda (15 Drivers)
a) Expansion of Export	<ul style="list-style-type: none"> Tea Coffee Cut Flower Crude Oil Leather Soap 	<ul style="list-style-type: none"> Soda Ash Processed Fruits and Vegetable Niobium and Rare Earth Elements Construction Materials Cosmetics and Detergents Textile and Apparel
b) Replacement of Import	<ul style="list-style-type: none"> Rice 	<ul style="list-style-type: none"> Palm Oil Rice Petroleum
c) Value Addition to Local Economy	<ul style="list-style-type: none"> Meat Products Coal Tourism Plastics Packaging Natural Gas Logistic Service 	<ul style="list-style-type: none"> Meat Products Tourism Leather Articles Logistic Service

Growth Drivers of Northern Economic Corridor



Connecting Industrial Areas with Logistic Hubs through Cargo-oriented Development

Development of smooth logistics network is a key point for the future promotion of regional industries.

Logistic hubs which play several roles including modal shift, container depot, inventory management will be strategically developed in major cities considering the location of standard gauge railway (SGR) stations.

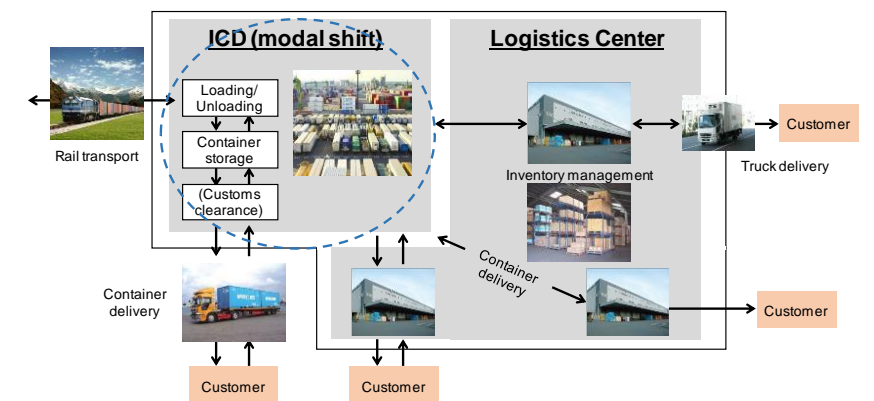


Image of Logistics Hub Function

3. Transport Strategy

Modal Shift from Truck to Railway and Pipeline

In both Kenya and Uganda, around 95% of cargo freight is transported by truck.

It is more efficient to transport large amounts of heavy freight such as coal and construction material over long distances by railway, and oil products by pipeline. In addition, since overcapacity of road is expected in the future, modal shift to railway is crucial matter for transport of Northern Economic Corridor.

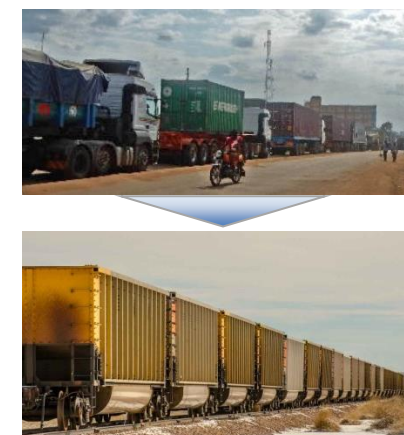
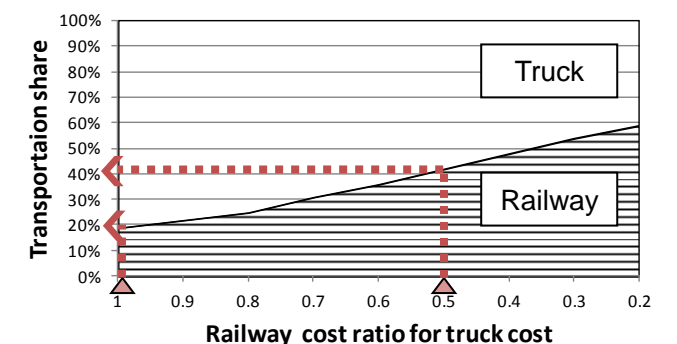


Image of Modal Shift to Railway

The modal shift to railway depends on its transport cost. Our model indicates that the railway share becomes approximately 40% assuming that SGR transit cost is half that of truck costs and the railway share becomes approximately 20% assuming that SGR transit cost is the same as that of truck costs.

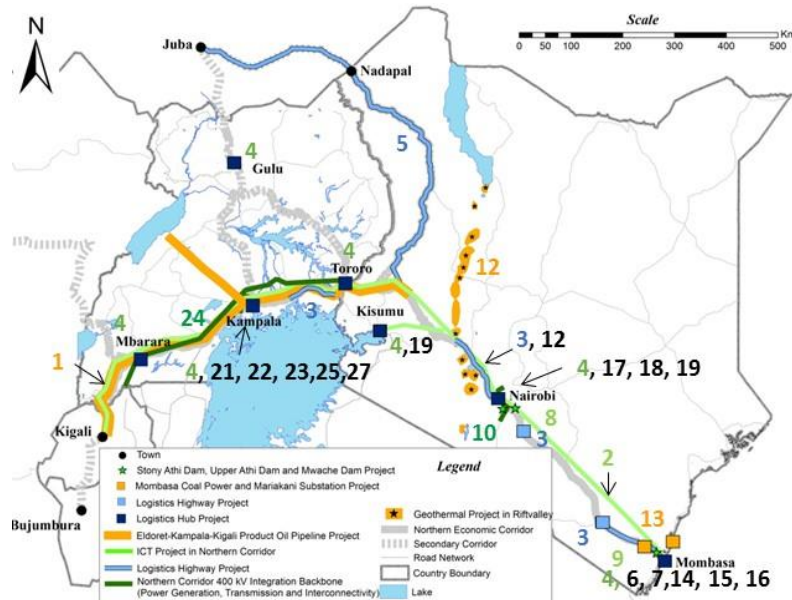


Model of Freight Mode Share Compared to Cost

Development Projects

Flagship Projects

In order to increase foreign investment in the region, 27 flagship projects were selected from all 119 suggested projects consisting of road, railway, port, airport, waterway, logistics, oil and gas, agribusiness, industry, water, and power sectors.



No.	Sector	Status	Project Title
1	Oil & Mining	Examined	Eldoret-Kampala-Kigali Oil Pipeline Project
2	ICT	Examined	ICT Project in Northern Corridor
3	Road	Examined	Logistics Highway Project
4	Logistics	Partially Implemented	Logistic Hub Project
5	Road	Examined	Eldoret-Juba Highway Project
6	Port	Not Examined	Mombasa Port Development Project
7	Urban Dev't	Examined	Project for Support of Re-organizing Logistics Facilities around Mombasa Port Area
8	Water	Prepared	Stony Athi Dam and Upper Athi Dam Project
9	Water	Examined	Mwache Dam Project
10	Power	Prepared	Isinya-Nairobi East Transmission Line Project
11	Manufacturing	Partially Implemented	Geothermal Energy Based Regional Industrial Development in Rift Valley
12	Power	Examined	Geothermal Project in Rift Valley
13	Power	Examined	Mombasa Coal Power and Mariakani Substation Project
14	Power	Examined	Dongo Kundu-Mariakani Transmission Project
15	Manufacturing	Not Examined	Mombasa Special Economic Zone Project
16	Manufacturing	Not Examined	Project for Building Up Competitiveness of Construction Materials and Machinery Industry in Kenya
17	Agriculture	Not Examined	Agricultural Financing Improvement Project in Nairobi
18	Agriculture	Examined	Value Chain of Agriculture Development Pilot Project in Kenya
19	Urban Dev't	Not Examined	Great Kisumu Metropolitan Logistic Based Regional Development Project
20	Oil & Mining	Not Examined	Study on Mining Master Plan in Uganda
21	Manufacturing	Not Examined	Project for Building Up Competitiveness of Construction Materials and Machinery Industry in Uganda
22	Agriculture	Examined	Value Chain of Agriculture Development Pilot Project in Uganda
23	Power	Examined	Kampala-North-Namungona-Mutungwe 132 kV Transmission Line Refurbishment
24	Power	Examined	Northern Corridor Integration Backbone (Power Generation, Transmission and Interconnectivity)
25	Urban Dev't	Not Examined	Great Kampala (including Jinja) Logistic Based Urban Development Project
26	Transport	Not Examined	MP for Urban Transport Development for Regional cities
27	Manufacturing	Not Examined	Special Economic Zone Development Project in Jinja

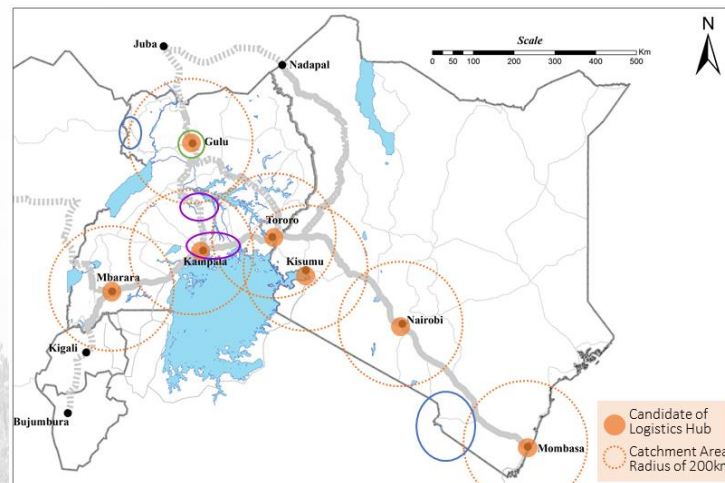
Kenya Uganda Both Countries
List of Flagship Project

Location of Flagship Project

Logistic Hub Project (Flagship Project 4)

The purposes of the project are to:

- i) provide modal shift function among rail, truck, and inland waterway,
- ii) provide container depot function to reduce export cost, and
- iii) provide logistic service including warehouse, distribution center, and one stop shop.



Location of Logistics Hub Project

Study on Mining Master Plan in Uganda (Flagship Project 20)

Uganda possesses a wealth of metallic and non-metallic minerals. The goal of the project is to maximize the value of mineral resources and boost the initial part of the economic development of the country.

Although the legal framework is in place, there are still areas that need to be developed. After the acquisition of mineral identification capability, minerals from Uganda will be proved and sold at the international market.

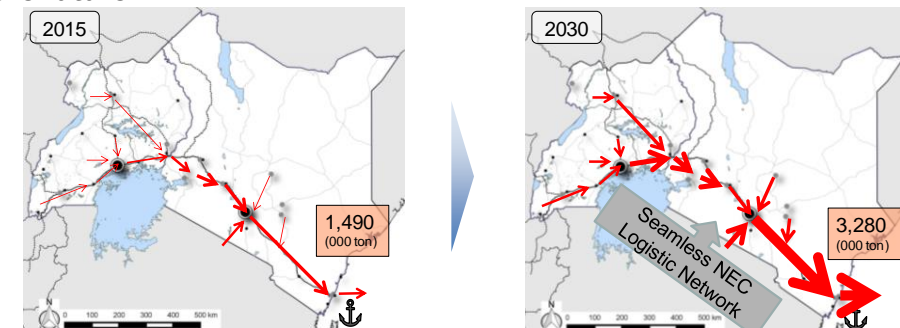
Expected Outcome

Decrease of Transport Cost

It is estimated that 20-40% in case of truck and 30-60% in case of rail of inland transport cost per container can be reduced through the realization of the Master Plan. As a result, USD 988 million in total, which is 0.9% of GDP in 2030 can be saved in Kenya and Uganda.

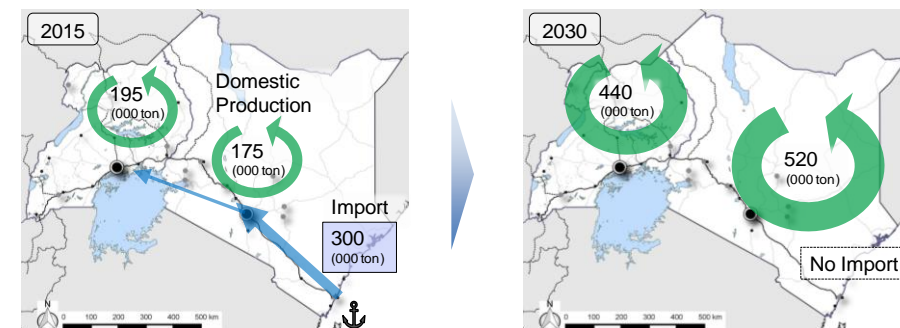
Increase of Export and Replacement of Import

Export-oriented growth drivers consist of tea, coffee, textile and apparel products, Niobium, soda ash, processed fruits and vegetables, palm oil products, and oil seed products. These products are expected to contribute to the growth of the region in terms of volumes of export cargo in the future.



Flow of Export-oriented Growth Drivers through Mombasa Port

In addition, rice, oil products, phosphate fertilizer, and maize from the production centers can replace import goods.



Flow of Rice Products

Conclusion and Recommendation

The 119 suggested projects proposed as key schemes in the Comprehensive Master Plan on Logistics. The followings are recommendations for immediate examination and implementation:

Framework / Organization	1	Authorize Master Plan through adaptation in higher plan (VISION) / cabinet approval
	2	Upgrade the Master Plan through FS/BD/DD.
	3	Establish Task Force at National Level .
	4	Promote community participation in the development activities of the Northern Economic Corridor (NEC).
Transport & Logistics	5	Review service level of SGR to achieve modal share target.
	6	Timely establishment of Logistics Hubs.
	7	Further roads development along NEC including O&M and lane expansion with median strip.
Industry	8	Use the primary commodities for export and connectivity advantage for expansion of production in Kenya.
	9	Consider opportunities for higher value-addition of available primary commodities for regional export in Uganda.

Way Forward

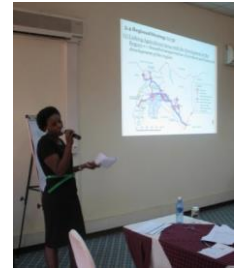
The Final Report will be prepared and submitted by December 2016.

Technical Transfer

Meetings during Planning

Technical Working Groups, Steering Committees and Stakeholder Meetings

A number of meetings were held at each planning stage of the Master Plan with wide stakeholders, including the Ministry of Transport and Infrastructure, the Ministry of Finance and other ten ministries in Kenya, and the Ministry of Works and Transport, the Ministry of Finance, Planning, Economic Development and other five ministries in Uganda.



Steering Committee at Kampala in July 2016



Steering Committee at Nairobi in July 2016

Study Programs for Future Development

Study Programs in Nacala Corridor Region and in Japan

In the planning stage of the Master Plan, two study programs were conducted in Nacala Corridor Region (Mozambique) and in Japan participated by Kenyan and Ugandan officers.

They learned the function of logistics and transport facilities and urban development of similar cases in those countries as well as the challenges and image of future development. These experiences were reflected on the Master Plan and will be utilized for the implementation by the participants.



Nacala Port



Discussion with GAZEDA (counterpart of Nacala Corridor Region Development Project, JICA)



Nacala Corridor



Cargo Railway Marshalling Yard in Tokyo, Japan



International Container Depot in Tokyo



Tokyo Port

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