



*Introduction of
Project for Formulation of
Master Plan on Logistics in
Northern Economic Corridor*

Stakeholder Meeting #1

November 2015

JICA Study Team



Structure of the Presentation

1. Introduction
2. Objectives & Implementation Structure of this Master Plan Study
3. Implementation Schedule
4. Regional Profiling of Northern Economic Corridor (NEC)
5. Logistics and Related Infrastructure Review in NEC
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1.

Introduction



Northern Economic Corridor

- The Northern Economic Corridor (NEC) is a multi-modal corridor, consisting of road, rail, pipeline, and inland waterways transport.
- The main road network runs from Mombasa Sea Port through Kenya and Uganda to Rwanda and Burundi and to Democratic Republic of Congo (DRC).
- The road network also links Kenya and Uganda to Juba in South Sudan.
- The importance of the Corridor is increasing and the current combined transit, and transshipment traffic through the Corridor has been growing at a rate of 20% annually.



Target Area (1)

The target area of the study will cover the following routes with its surrounding area.

- Main route:
 - Mombasa – Nairobi – Tororo – Kampala – Katuna – Kigali (Rwanda)
- Sub-routes:
 - Eldoret - Nadapal – Juba (South Sudan)
 - Tororo - Gulu – Elegu – Juba
 - Kampala- Gulu – Elegu – Juba
 - Mbarara- Mpondwe– Kisangani (DRC)

Target Area (2)





2.

Objectives & Implementation Structure of this M/P Study



Objective of this M/P Study

- The objective of this Master Plan (M/P) study is to formulate a Master Plan on Logistics for Northern Economic Corridor (NEC), along with integrated regional development strategy consistent with sub-regional development plans and national development plans.
- The target year of this M/P is 2030.



Implementation Structure (1/2)

- The Government of Uganda (GOU) requested Government of Japan (GOJ) to implement a project to formulate a M/P on logistics in NEC in order to promote regional development.
- Concurrently with this, the Government of Kenya (GOK) also requested GOJ for a project on NEC which shares same goal and outputs.
- In response to the request of GOU and GOK, Japan International Cooperation Agency (JICA) dispatched “Detail Design Formulation Team for the project” in 2014.
- The team proposed to apply a project concept as NEC, since the project should cover not only logistics but also the regional development along the NEC.



Implementation Structure (2/2)

- The GOU and GOK agreed with the concept and signed the Record of Discussion with JICA for the implementation of the Project for Formulation of the Master Plan on Logistics in Northern Economic Corridor.
- Owners of this M/P are Ministry of Works and Transport (MOWT) in Uganda and Ministry of Transport Infrastructure (MOTI) in Kenya.
- JICA Study Team, consisting of 16 experts employed by JICA, is now conducting the project of M/P study.



3. Implementation Schedule

Work Plan (2015-2016)

Major Works	2015			2016		
	Mar ~ June	July ~ Sept	Oct ~ Dec	Jan ~ Mar	Apr ~ June	July ~ Sept
Understanding of current situation and issues (situational analysis)	→					
Freight Transport Survey, Market Survey, and Freight Lead Time Survey	→					
Identification of Development Potentials and Bottlenecks		→				
Formulation of Development Vision			→			
Establishment of Social and Economic Framework			→			
Formulation and Comparison of Alternative Development Scenarios				→		
Formulation of Comprehensive Development Strategy				→		
Development of Draft M/P on Logistics with Regional Development Strategy					→	
Strategic Environmental Assessment / Stakeholder Meetings		→				
Deliverables	▲ ICR	PR 1 ▲	PR 2 ▲	ITR ▲	DFR ▲	FR ▲

Deliverables

Report	Main Contents	Timeline
1. Inception Report	<ul style="list-style-type: none"> • Plan and Deliverables 	April 2015
2. Progress Report No.1	<ul style="list-style-type: none"> • Situation Analysis and Preliminary Assessment of Current Bottlenecks 	August 2015
3. Progress Report No.2	<ul style="list-style-type: none"> • Bottlenecks and Potential Assessment • Framework of Regional Economy and Logistics Development 	December 2015
4. Interim Report	<ul style="list-style-type: none"> • Comprehensive Development Strategy for Northern Economic Corridor 	February 2016
5. Draft Final Report	<ul style="list-style-type: none"> • Draft Logistics Master Plan with Regional Development Strategy 	June 2016
6. Final Report	<ul style="list-style-type: none"> • Final Logistics Master Plan with Regional Development Strategy 	September 2016



4.

Regional Profiling of Northern Economic Corridor



Regional Profiling of NEC (1/2)

- Urbanization levels of Kenya (25%) and Uganda (18%) are still much lower than high and middle income countries.
- Kenya's urban centers within 50km from the main route of NEC consist of 66% of its urban population while that of Uganda is 64% and there is potential for cities along the corridor to grow.
- Kenya's GDP has the highest share (50.2%), though the average growth is slowing down.
- Uganda's GDP has the third highest share (19.5%), their average growth is also third, though it's reducing gradually.
- EAC remains big destination for Kenya's as well as Uganda's export, comprising 23% and 29% respectively of total export, and having the potential to expand further.



Regional Profiling of NEC (2/2)

- Development plans of major cities were made or are being made based on Kenya Vision2030 and Uganda Vision2040.
- Kenya has a vision to make the country a top logistics hub in the growing regional and other emerging markets, while Uganda has a vision to improve trade facilities with economic developments.
- To promote urbanization more efficiently, existing major cities should be developed with effective linkages with other cities and connections to NEC
- Designing infrastructure around production zones and sites to underpin agricultural and mineral processing along the Corridor is the key vision for infrastructure development.



5.

Logistics and Related Infrastructure Review

Transport Infrastructures on NEC (1/2)

Infrastructure	Number	Distance	Notes
Road	5 routes	4,830km	Including 4 branch lines Main line is the route on Mombasa-Nairobi-Kampala-Kigali-Bujumbura with a distance of 1,900km
Railway	6 routes	3,919km	Including two new lines Not including Lake transport line
Port	4 ports		Including 3 ports on the Victoria lake (Port Bell, Jinja, Kisumu)
Airport	7 airports		
Border Post	8 border posts		Kenya, Uganda, Rwanda, Burundi, DRC, South Sudan
Inland Depots	6 depots		Kenya, Uganda
Pipeline	3 routes	1,221km	Mombasa – Nairobi - Eldoret / Kisumu



Transport Infrastructures on NEC (2/2)

- The road condition is at a satisfactory level with less than 4 of International Roughness Index (IRI).
- The railway suffered from under investment in infrastructure, rolling stock and equipment.
- Although One Stop Border Posts (OSBPs) have contributed to time saving, trucks still take a lot of time around borders. Bottlenecks are clearly generated by cargo traffic.



Traffic Volume

- Highest rate of cargo traffic is 72% of total traffic volume at Mombasa. The cargo traffic volume is 5,226 vehicles/day.
- Highest total traffic volume is 12,868 vehicles/day between Nairobi and Nakuru.
- Rate of cargo traffic at Malaba (78%) is higher than at Busia (39%). However total traffic volume at Malaba (1,153 vehicles) is less than at Busia (2,256 vehicles).
- Cargo traffic volume at:
 - Nadapal (Kenya / South Sudan) is 9 vehicles which is 27% of total volume.
 - Katuna (Uganda / Rwanda) is 287 vehicles which is 47% of total volume.



Existing and Future Road Traffic Situation

- Cargo traffic is estimated to increase by three times by 2035 based on Mombasa Port M/P Study. The capacity shortage is expected on road even after the construction of SGR.
- Estimated traffic conducted shows that the necessary number of lanes more than 8 lanes between Mombasa and Nairobi. It means 6 additional lanes will be necessary in the future.
- In Uganda, bottlenecks of road traffic are in city centers of Kampala, Entebbe and Jinja. The passengers car demand is greater than cargo truck demand.



Railway Transport (Meter Gauge)

- After many years of volume declines in railways Uganda and Kenya chose to engage Rift Valley Railways, Ltd. (RVR) to operate and maintain the railway since 2006. Although RVR increased volume and revenue in 2014, it recorded an operating loss.
- RVR has made investments in tracks, locomotives and wagons funded by debt. RVR has stated that old and shortage of locomotives and wagons are one of the main factors preventing volume increases and improved service. Several operating facilities on the meter gauge system are out of service and have caused cargo traffic and profitability to decline.

Railway Transport (SGR Project)

- Standard Gauge Railway (SGR) project is planned to largely mirror the meter gauge system with possible extensions to Juba (South Sudan) and Kigali (Rwanda).

SGR Line Segment	Status
Mombasa-Nairobi	~30% complete; most of the embankments/earthworks are complete
Nairobi – Nakuru – Malaba	3 alternative routes proposed; KRC has recommended one, under consideration by Steering Committee
Kampala – Malaba – Nimule	Design and construction contract awarded
Kampala - Kasese	Feasibility study commissioned.



Mombasa Port

- Although various improvements have been or will be made on Mombasa Port facilities, accessibility to the port and promotion of modal shift from trucks to railway/pipeline should be considered.
- By 2020 the port expects to be handling more than 2.0 million TEUs through Second container terminal, and LNG terminal construction.
- Construction of a new standard gauge railway links Mombasa with Nairobi, Kampala and others.
- Construction of a southern by-pass for Mombasa links the south to north coasts.



Airport

Both airports of Nairobi and Entebbe have plans to expand the handling capacity for passengers and cargo. In order to promote air cargo handling, the following should be considered.

- Warehouse demand for the goods with a potential as export or import goods by air are important as logistics infrastructure
- Land transport services from the airport by truck and/or railway will comprehensively be planned.



Waterway

Under current constraints: lack of boats and old port facilities, it is very difficult to promote water transport. In order to revive lake transport, the following should be considered.

- Flexible operation by not only rail wagon but also track/car ferry should be introduced to respond to shorter distance demand.
- Kisumu and Port Bell should be well linked with Mwanza port through the improvement of infrastructure of wagon/car ferry port and provision of new vessels including car ferry, passenger vessels.



Import / Export Practice in Kenya

- Transit time from vessel arrival to delivery in Nairobi is assumed to be around 7 days. While over 10 days were required for berthing in past, current berthing time is reduced to 2-3 days. This improvement makes a big contribution to transit time reduction.
- Railway charge is estimated to be USD 1,000 -1,100/40' (from Mombasa to Nairobi). Since truck delivery charge is assumed approximately USD 1,000/40', rail does not have cost competitiveness.
- For exports, long queues for port entry and waiting time for scanning are bottlenecks for transit time.



Import Practice in Uganda

- Although Single Customs Territory (SCT) scheme has been adopted in order to achieve seamless cross border transport, most of the general cargo is not transported through SCT and bonded procedure is still required.
- It takes approximately 1.5 days for border crossing at Malaba. Long queues on Kenyan side is serious. Night time border crossing is not easy, because clearing agents operate during day time only.
- Since the total rail cost is estimated to be USD 2,800/20 feet container and cheaper than truck (USD 3,000/20 feet container), it means that rail can achieve approximately 10% cost reduction.



Export Practice in Uganda

- Export custom procedure does not require a long time. In comparison with import, transit time for border crossing is short.
- Long queues at port entry and waiting time for scanning are bottlenecks for transit time.
- The transport cost is relatively expensive. If exporters find the empty containers at Kampala, transport cost can reduce significantly.



6.
Way Forward



Way Forward

The following works shall have been completed by the end of December 2015:

- Detailed analysis of current bottlenecks based on the results of Market and Value Chain Survey and Good Movement and Traffic Survey,
- Formulation of a Development Vision and Scenario for the Master Plan,
- Identification of Future Bottlenecks through establishment of social and economic framework, and preliminary freight traffic demand forecasting,
- Formulation of a Development Strategy based on potential assessment as well as bottleneck analysis,
- Preparation of Progress Report No.2



° Thank you very much.

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