

**Republic of Kenya
Ministry of Transport and Infrastructure
Kenya Ports Authority**

**Republic of Kenya
The Project for Technical Assistance
to Kenya Ports Authority
on Dongo Kundu Port,
Mombasa Master Plan
Project Completion Report**

October, 2015

Japan International Cooperation Agency

**The Overseas Coastal Area Development Institute of Japan
Oriental Consultants Global Co., Ltd.
Nippon Koei Co., Ltd.**

EI
JR
15-169

Abbreviations

Abbreviation	Description
C/P	Counterpart
CD	Chart Datum
CFS	Container Freight Station
DWT	Deadweight Tonnage
E/N	Exchange of Notes
GOJ	Government of Japan
GOK	Government of Kenya
JCC	Joint Coordination Committee
JICA	Japan International Cooperation Agency
KPA	Kenya Port Authority
M/P	Master Plan
MIED	Ministry of Industrialization and Enterprise Development
MOTI	Ministry of Transport and Infrastructure
MPDP	Mombasa Port Development Project
NK	Nippon Koei Co., Ltd.
OC	Oriental Consultants Global Co., Ltd.
OCDI	Overseas Coastal Area Development Institute of Japan
PDM	Project Design Matrix
PPP	Public Private Partnership
R/D	Record of Discussion
RMG	Rail Mounted Gantry Crane
RTG	Rubber Tired Gantry Crane
Ro/Ro	Roll on/ Roll off
SAPROF	Special Assistance for Project Formation
SEZ	Special Economic Zone
SSG	Ship to Shore Gantry Crane
TEU	Twenty-Foot Equivalent Unit
TMEA	Trademark East Africa
TWG	Technical Working Group
UN	United Nations
WBS	Work Breakdown Structure

Contents

1. Outline of the Project.....	1
1.1 Background of the project.....	1
1.2 Purpose of the project.....	1
1.3 Project site.....	1
1.4 Current situation and issues of the Mombasa Port.....	1
1.4.1 Current situation.....	1
1.4.2 Issues.....	5
1.5 Concerned agencies on the Kenyan side.....	6
2. Basic approaches to the project implementation.....	7
2.1 Technical Aspects.....	7
2.2 Operational Aspects.....	8
3. Activities.....	10
3.1 Activities.....	10
3.2 Project implementation flow chart.....	10
3.3 Work schedule.....	10
3.4 Project management.....	10
3.5 Dispatch of experts.....	14
3.6 Assignment of counterparts.....	15
3.7 Joint Coordination Committee (JCC).....	15
3.8 Technical Working Group (TWG).....	15
3.9 Workshop.....	16
3.10 Counterpart Training in Japan.....	16
3.11 Seminar.....	20
3.12 Stakeholder Meeting.....	21
4. Achievements.....	22
5. Conclusions and Recommendations.....	24
5.1 Conclusions.....	24
5.2 Recommendations.....	24
6. Appendix.....	25

1. Outline of the Project

1.1 Background of the project

Mombasa Port, located in Mombasa City, is the largest port in the East Africa region. Mombasa port is used not only for the trade of Kenya, but also for inland countries such as Uganda and Rwanda. Due to the rapid economic development in the region and the increasing container handling volume, the Japan International Cooperation Agency (hereinafter referred to as “JICA”) is supporting Kenya Ports Authority (hereinafter referred to as “KPA”) in expanding the container terminal on the northern side of the port under the “Mombasa Port Development Project” (hereinafter referred to as “MPDP”) of which a loan agreement was signed in November 2007 for the amount of 26.7 billion Japanese Yen. In addition, at the request of the Government of Kenya (hereinafter referred to as “GOK”), JICA commenced “The Project on Master plan for Development of Dongo Kundu, Mombasa Special Economic Zone” which is expected to contribute to the acceleration of economic growth in Kenya and the East Africa region.

In recent years, the cargo handling volume of Mombasa port has been increasing much more than forecast. Taking the current situation into consideration, it is required to formulate the Master Plan for the Development of Mombasa Port which contains the vision and concept of Mombasa Port development after completion of the above mentioned Yen loan project. A Detailed Planning Survey Team was dispatched to Kenya in November 2013 and held a series of discussions with Kenyan authorities on formulation of the Project. Based on the discussions, a consensus was reached on the objectives and methodology of the Project.

1.2 Purpose of the project

The purpose of the project is as follows.

(1) Overall goal

Projects are to be implemented in accordance with the Mombasa Port Master Plan.

(2) Project purpose

Capacity of KPA staff regarding port development is enhanced.

(3) Project output

- 1) Mombasa Port Master Plan (revised in 2009 by KPA) is reviewed and revised.
- 2) Strategic planning and management system in KPA is improved.
- 3) Future capacity and forecast method in KPA is improved.
- 4) Comprehensive Mombasa Port development implementation/investment plan is prepared.

1.3 Project site

The project area shall be Mombasa port as well as other areas related to the project.

1.4 Current situation and issues of the Mombasa Port

1.4.1 Current situation

(1) Port administrator

Ministry of Transport and Infrastructure (MOTI) is responsible for all the port and maritime related activities in Kenya. KPA is in charge of port management under MOTI. Because Mombasa Port is only

the international maritime port in Kenya, KPA is specialized as an administrator of Mombasa Port. The organization of KPA is shown in the figure below.

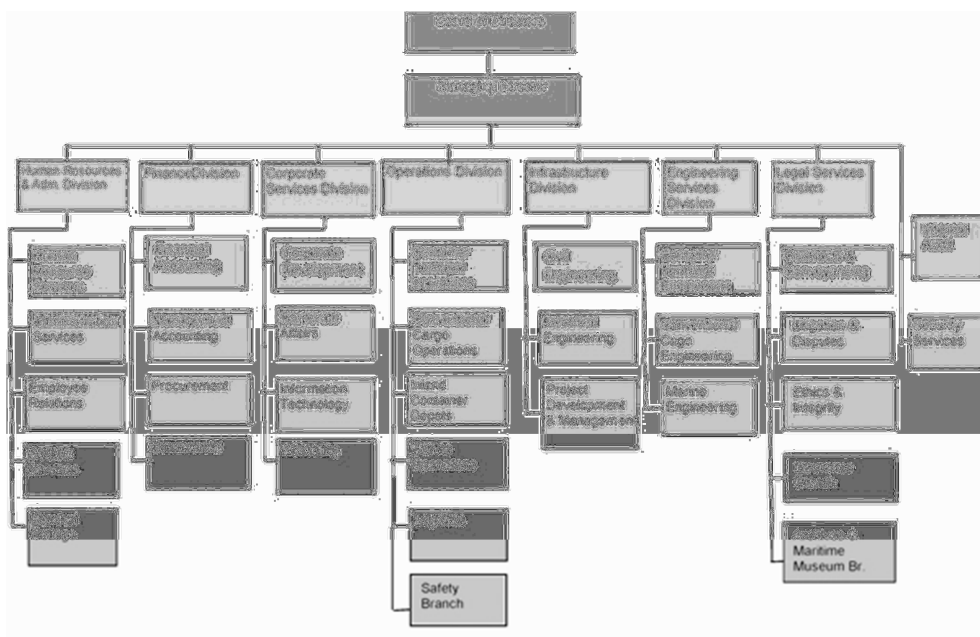


Figure 1.1 Organization of KPA

Source: KPA

Mombasa Port is categorized as a “Public Service Port” which is often the case in developing countries. In addition to the port facilities, KPA is directly managing all the port related services including dock workers. KPA has been trying to transform the port into a “Landlord Port” type but it had not been successful to date due to opposition from dock workers.

(2) Cargoes

Around 2.2 million tons of cargoes are handled in Mombasa Port in 2013 including 85% of import cargoes. Container cargo handling volume reached 894 thousands TEUs in 2013, accounting for 40% of the total cargo volume. Major non-container cargoes are oil/bunker products, clinker and wheat. As the gateway port to land locked countries in the east African economic zone, volume of transit cargoes is also remarkable.

Cargo volumes handled in Mombasa Port are shown in the table below.

Table 1.1 Cargo Volumes Handled in Mombasa Port

	2010	2011	2012	2013	2014
IMPORTS ('000' DWT)					
Containerized Cargo	4,591	5,226	5,954	5,974	6,524
Conventional Cargo	1,397	1,298	1,302	1,726	1,830
Dry Bulk	3,827	3,807	4,811	4,913	5,231
Liquid Bulk	6,386	6,607	6,665	6,537	7,192
TOTAL	16,201	16,938	18,732	19,150	20,777
of which Transit In	5,004	5,166	6,201	6,196	6,691
EXPORTS ('000' DWT)					
Containerized Cargo	2,218	2,337	2,626	2,690	2,791
Conventional Cargo	192	171	153	128	108
Dry Bulk	70	122	106	65	422
Liquid Bulk	95	158	160	100	45
TOTAL	2,575	2,788	3,045	2,983	3,366
of which Transit Out	377	430	425	513	508
TOTAL IMPORTS & EXPORTS	18,776	19,726	21,777	22,133	24,143
Transshipment ('000' DWT)	158	227	143	174	732
TOTAL THROUGHPUT ('000' DWT)	18,934	19,953	21,920	22,307	24,875
Container Traffic (TEU)	695,600	770,804	903,463	894,000	1,012,002
Total Vessel Calls (No.)	1,579	1,684	1,763	1,768	1,832

Source: KPA Annual Review and Bulletin of Statistics 2014

(3) Facilities

a) Berths

There are 17 berths from berth No.1 to berth No. 19 in Mombasa Port. Berth No.1 to No. 10, located in Mombasa Island, mainly handle general cargo ships including PCC and RoRo Ship. Berth No. 11 to No. 19 located in the main land handles container cargoes. Next to berth No.19 beyond the oil berth, a new container terminal, named Mombasa Port Development Project (MPDP), is under construction.

The details of the berths are shown in the table below.

Table 1.2 Details of the Berths

Berth	Usage	Cargo Handling Equipment	Length (m)	Design depth - m below CD	Built in
Mbaraki Wharf	Bulk import of coal, clinker, gypsum, iron ore, bauxite, cement Edible oils & molasses Export of bagged cement & fluorspar	Traveling dry bulk loader Pneumatic unloader Pipework	306.3	10.5	1970
Berth 1	Cruise liners, passengers, RoRo		173.1	10.5	1921-1929
Berth 2	Cruise liners, passengers, RoRo		166.4	10.5	1921-1929
Berth 3	Bulk grain	2 x300 tons/hr unloaders plus conveyor system	166.4	10.5	1921-1929

Berth	Usage	Cargo Handling Equipment	Length (m)	Design depth - m below CD	Built in
Berth 4	General cargo, containers		190.2	10.5	1921-1929
Berth 5	General cargo, RoRo, steel, containers		178.6	10.5	1921-1929
Berth 7	General cargo, bulk		208.2	10.0	1943-1944
Berth 8	General cargo, bulk		197.5	11.5	1943-1944
Berth 9	General cargo, bulk, steel	Overhead conveyors for soda ash	179.8	11.5	1957-1958
Berth 10	General cargo, bulk		204.2	10.0	1957-1958
Berth 11	General cargo, bulk, RoRo, containers		184.4	10.0	1957-1959
Berth 12	General cargo, containers		182.9	10.0	1957-1959
Berth 13	Containers, general		174.0	10.5	1957-1959
Berth 14	Containers, general	3 RTGs on Berths 14	181.4	10.0	1957-1959
Berth 16	Containers	7 SSG, 19 RTGs & 2 RMGs (rail terminal) on Berths 16-19	177.7	12.5	1975
Berth 17	Containers		182.3	12.5	1975
Berth 18	Containers		239.0	12.5	1977
Berth 19	Containers		240.0	13.5	2013
Kipevu Oil Terminal	Crude oil, oil products		Dolphin berth – max length approx 260 m	13.41	1963
Shimanzi Oil Terminal	Oil products, LPG		Dolphin berth – max length approx 150 m	9.76	1931
Northern Lighter Quay	Not used		Approx. 170 m	2.86	1908-1910
Southern Lighter Quay	Not used		30 m	2.40	1952-1954

Source: Summarized by JICA Team from KPA's records

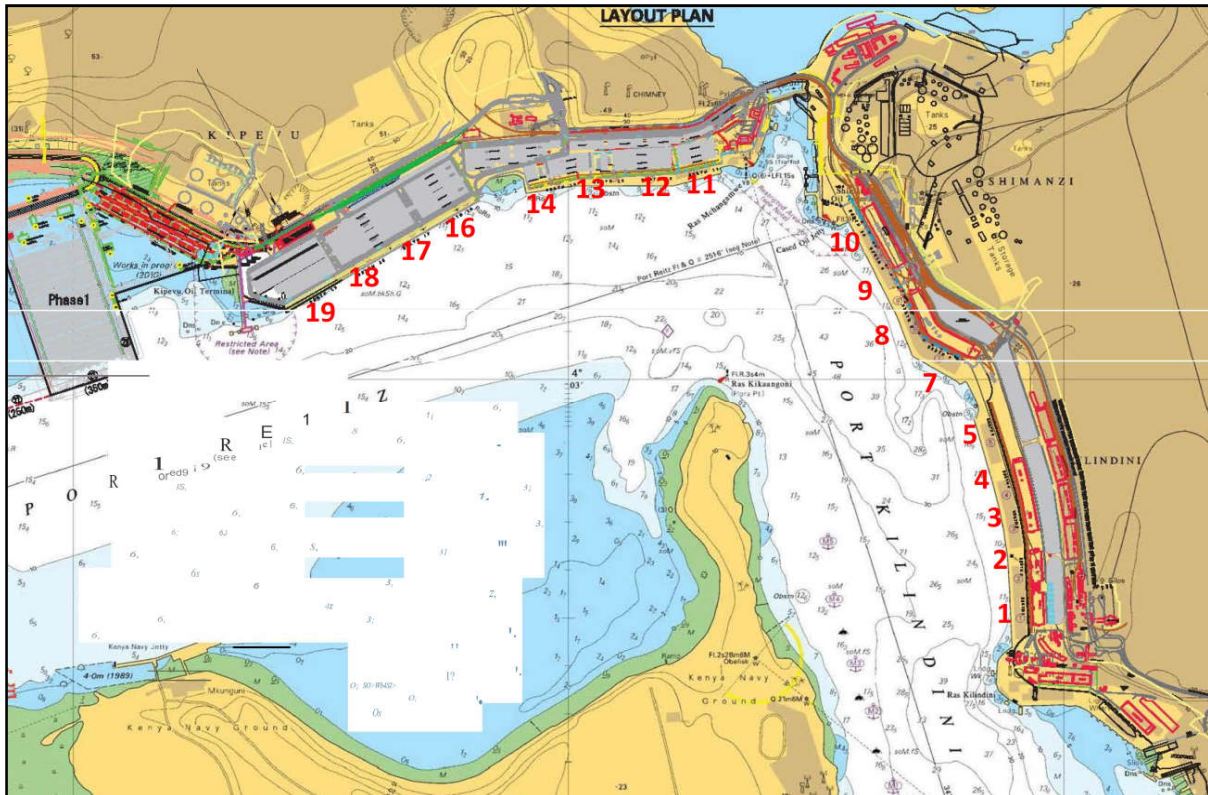


Figure 1.2 Berth Layout

b) Navigation Channel

Channel depth of 15m is maintained for an approximately 10km stretch from the entrance of the bay where Likono Ferry is crossing until the very end of the bay (Port Reitz). Since the tidal stream in this channel is considerably fast, tug boat assistance is mandatory.

c) Terminal Area

An exclusive container terminal area of 290,828m² is located behind berth No.11 to No.19. However, the area behind the berth No.11/12 is often used for project cargoes while the berths are used for both container ships and conventional cargo ships. The area behind berth No.19 was extended in 2013 to mitigate congestion of container cargoes.

d) Access

Mombasa Port can be accessed by road and rail, but availability of the railway is limited due to its deteriorated railway system and lack of maintenance. Therefore, most of the cargoes are transported by truck. However, the road network to the port is not well planned and the road is not designed for heavy transportation. Arterial roadways connecting Mombasa port and its hinterland including Nairobi through Mombasa’s urban area are always congested due to the shortage of transport capacity.

e) Cargo handling

Container handling from/to ship using gantry cranes is available only in the container terminal at berths No.16 to 19. Container handling at berth No.11 to 14 is done using ship cranes. Currently, 7 gantry cranes, 22 RTGs, 2 RMGs and 19 reach stackers are available in the container terminal.

1.4.2 Issues

Mombasa port is suffering constant congestion of cargo movement since development of port facilities are not well implemented against the increasing cargo demands. The situation is exacerbated by the

narrow port space and inefficient cargo handling by KPA's direct port labors.

There is no available space to expand on land due to the existence of hills of 20~50m in height behind the port as well as a power plant, oil tanks and residential housing.

As a countermeasure, KPA adopted a system to deliver containers at private CFSs located outside of the port area forcibly evacuating unloaded containers from the port. However, the faulty road system surrounding the port, which is also used for local traffic, is seriously obstructing cargo traffic including containers to/from the port.

Not only Kenyan cargo owners but also surrounding landlocked countries which have no other choice but using Mombasa port have expressed their dissatisfaction with the current situation at Mombasa port to the Kenyan government. Improving efficiency of Mombasa port has been the urgent issue for Kenya.

1.5 Concerned agencies on the Kenyan side

Concerned agencies on the Kenyan side are as follows;

- Ministry of Transport and Infrastructure (MOTI)
- Ministry of Industrialization and Enterprise Development (MIED)
- The National Treasury
- Vision 2030 Management
- Kenya Maritime Authority
- Kenya Port Authority

2. Basic approaches to the project implementation

2.1 Technical Aspects

(1) Assignment of the most appropriate experts

The most appropriate experts having a high level knowledge in the fields of technical transfer have been assigned considering their expertise and technical competence. In addition, experts who have been engaged directly/indirectly in various projects related to Mombasa port and can take advantage of their experience and the networks they have developed have been assigned when possible.

(2) Master plan of various challenges, comprehensible and easily re-adjustable

Framework and contents of the master plan have been decided as below following a series of discussions with KPA.

- 1) Target Year : 2035 (20 years of MP establishment)
- 2) Phased Plan : 2015 - 2020 (Urgent Plan)
2021 - 2025 (Mid-term Plan)
2026 - 2030, 2031 - 2035 (Long-term Plan)

The urgent plan includes the on-going new container terminal construction (Phase 1/2), renovation of the Lighter Berth and rehabilitation/expansion of existing berths. The mid-term plan includes extension of the new container terminal (Phase 3) and 2 multi-purpose terminals (D1/D2) corresponding to Dongo Kundu SEZ M/P. The long-term plan includes further extension of the new container terminal (Phase 4/5).

The alternative plan includes relocation of dry bulk terminal such as clinker and coal to Dongo Kundu. In this alternative, 2 more berths (D3/D4, 4 berths in total) will be constructed.

Continual review and planning corresponding to the updated environment is necessary for the mid-term and long-term planning. The master plan was made easily re-adjustable through technical transfer to KPA of the demand forecast model and the capacity forecast model used in the master plan.

(3) Challenges and policies to be included

In addition to facility planning, various challenges on port administration such as, 1: Utilization of private fund, vitality and know-how by privatization/PPP, 2: Pros and cons on direct cargo handling management, 3: Introduction of IT on various port procedures, are included.

(4) Grade of economic and financial analysis

An economic analysis and a basic financial analysis are made under this master plan stage. The economic analysis and financial analysis can be re-examined by KPA itself using the knowledge obtained through the technical transfer program.

(5) Technical transfer on specific technical subject

Capacity development of KPA staff was promoted through workshops and a seminar on site targeting port planning related subject such as cargo demand forecast and port capacity forecast since this project is similar to a development study in some aspects.

(6) Consistency with other on-going projects

Since various projects are underway simultaneously as stated in (1), consistency with those projects is ensured. The utmost attention is paid for the SEZ M/P project since commodities, volumes, facility layout and scale will be very much different depending upon the industries to be introduced in the SEZ.

(7) KPA's intent on technical transfer and competency of C/P

As this “technical cooperation” project includes aspects of a “development study”, a balance between the various aspects must be pursued in implementing the project. The technical transfer program was formed and implemented after confirming KPA's intent on technical transfer at the beginning stage of the project and grasping the competency of the counterpart staff to be assigned.

(8) Enhancement of quality in technical transfer and its sustainability in KPA

Data collection, analysis, modeling etc. related to technical transfer items are done in collaboration with C/P to raise the quality of the technical assistance. In particular, modeling of demand forecast and port capacity forecast was made as easy to understand as possible to enable KPA to use and modify models even after the completion of this project.

(9) Training in Japan suitable for target staff

Two training programs were conducted in Japan. Four persons from the members of the Technical Working Group (TWG) underwent a 2weeks program on “Strategic port planning and port management”. Four persons engaged in technical transfer items such as demand forecast received training on “Capacity development for future maritime transport demand forecast etc.” over a 4-week period

(10) Appropriate monitoring and evaluation of the project

Progress of the project was managed in accordance with the WBS and PO produced based on the PDM. Evaluation sheet is used for monitoring of the project.

(11) Involvement of local consultants

Local consultants are employed for carrying out the bathymetric survey, topographic survey, soil investigation and environmental and social consideration survey. In addition, competent local consultants who know the local situation well and can collect and compile necessary data by themselves were also employed to obtain necessary information and data in a timely manner.

(12) Attention to gender consciousness

Attention to socially vulnerable groups such as women and children is paid throughout the study of the port development.

2.2 Operational Aspects

(1) Flexible project management based on the PDM and WBS

This project is based on the PDM and PO in Annex 1, 2 of the R/D concluded between KPA and JICA on 29th May 2014. The Work Plan contains the WBS based on the revised PDM and PO which have been approved in the JCC meeting held on 26th August 2014.

Management of the project has been done based on the approved PDM. It is envisaged that the direction of the project may be changed depending on the progress, the outcomes and the surrounding circumstances. The project has been monitored closely and the situation is reported to JICA timely for flexible execution of the project.

(2) Appropriate control of the information and reports obtained through the project

Information and reports obtained through the project implementation is appropriately and strictly controlled since they may be confidential for KPA or concerned private entities. Materials, results of analysis and reports prepared by the experts are also handled in the same way.

(3) Coordination with other donors

Visits to other donors such as TEMA to exchange opinions have been done actively for data collection and coordination.

(4) Reporting, communication and consultation to JICA Kenya office

As for JCC and TWG meetings regarding the work plan and progress reports, timely pre-consulting on the date and agenda and prompt reporting of the results of discussions are made to JICA Kenya office. Progress of the project and matters related to safety and security of the experts are also reported in a timely manner.

(5) Safety during the project implementation

Associated consultants in this project take safety and security issues seriously. There have been reports of terrorist incidents, riots, burglary and any other crime in Mombasa or Nairobi. Therefore, a safety and security manual has been prepared separately and followed during the course of this project including selection of safe and secure accommodation and means of transportation. Potentially dangerous areas such as public security offices area, down town, areas where demonstration were held were avoided when travelling. Furthermore, to ensure the safety of experts, the latest information on security issues was obtained from the embassy, JICA office, C/P, media and internet.

3. Activities

3.1 Activities

Activities to be implemented in this project are shown in the table below. Activities subject to Activity 6 of Capacity Development (CD) are Activity 3 and Activity 5.

Table 3.1 Activities

Activity 1:	Review of existing port development plan and related information
Activity 2:	Information collection and analysis, which is related to Mombasa area development
Activity 3:	Future demand forecast
Activity 4:	Set-up of vision and concept for Dongo Kundu port facility and Mombasa Port Master Plan
Activity 5:	Port development implementation / investment program
Activity 6:	Provision of necessary technical assistance

3.2 Project implementation flow chart

The project was implemented based on the work flow chart (Figure 3.1) shown in page 11.

3.3 Work schedule

The project was implemented based on the work schedule (Figure 3.2) shown in page 12.

3.4 Project management

Capacity development items for KPA staff are related to the Activity 3 and Activity 5 as stated in 3.1 Activities. Work Breakdown structure (WBS) was produced for the Output 3 and Output 5 as shown in Figure 3.3 in page 13. Progress of the project was monitored based on the WBS.

The levels shown in the WBS are defined as follows;

- Level 1: expected output defined in the PDM
- Level 2: summary of achievement of the works
- Level 3: project management categories
- Level 4: work package categories
- Level 5: each activity

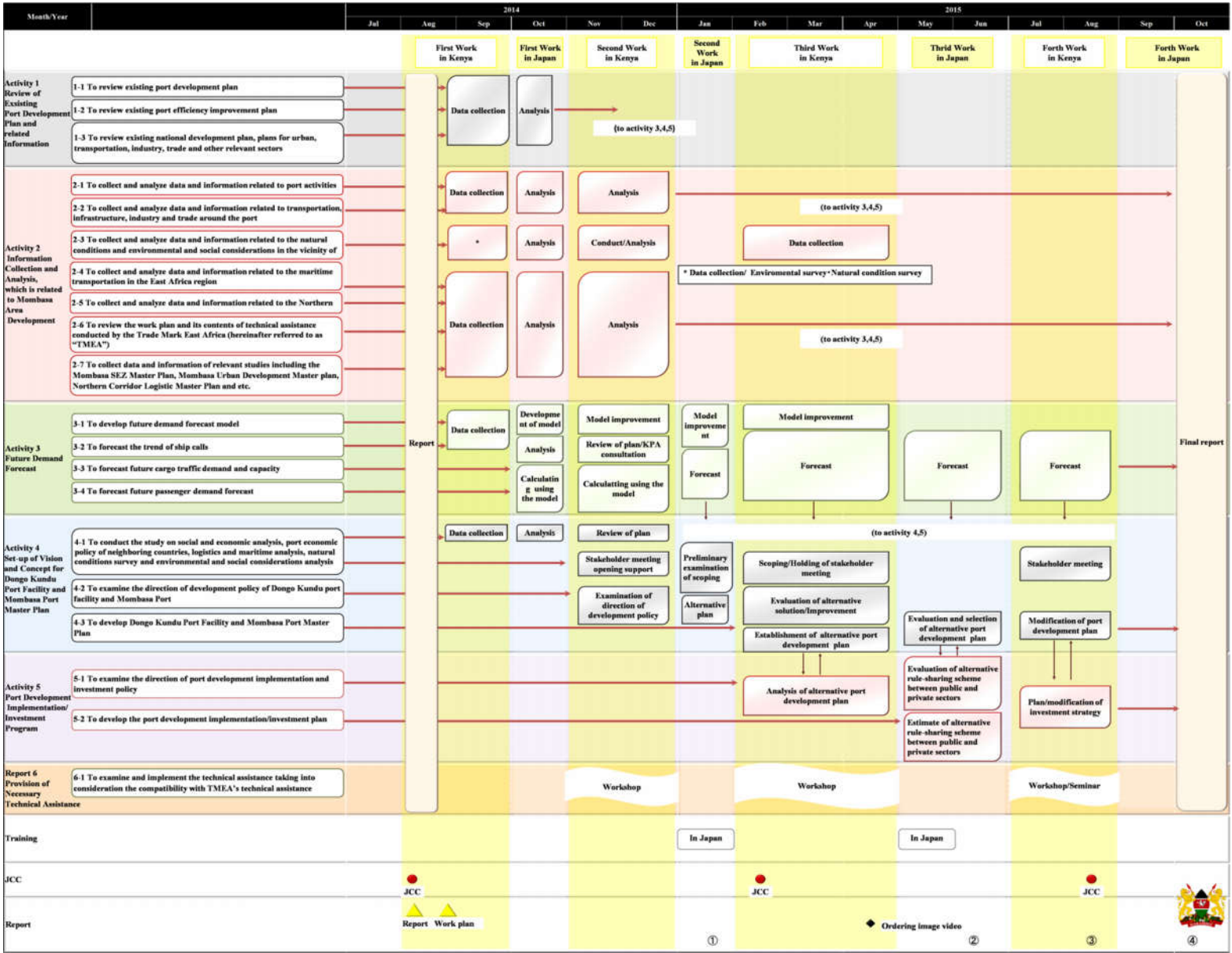


Figure 3.1 Project Flow Chart

	2014						2015										
	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	
1-1 to review existing port development plan		█	█	█													
1-2 to review existing port efficiency improvement plan		█	█	█													
1-3 to review existing national development plan, plans for urban, transportation, industry, trade and other relevant sectors		█	█	█													
2-1 to collect and analyze data and information related to port activities		█	█	█	█	█											
2-2 to collect and analyze data and information related to transportation, infrastructure, industry and trade around the port		█	█	█	█	█											
2-3 to collect and analyze data and information related to the natural conditions and environmental and social considerations in the vicinity of the port		█	█	█	█	█	█	█	█	█	█						
2-4 to collect and analyze data and information related to the maritime transportation in the East African region		█	█	█	█	█											
2-5 to collect and analyze data and information related to the Northern Corridor		█	█	█	█	█											
2-6 to review the work plan and its contents of technical assistance conducted by the Trade Mark East Africa (TMEA)		█	█	█	█	█											
2-7 to collect data and information of relevant studies including the Mombasa SEZ Master Plan, Mombasa Urban Development Master Plan, Northern Corridor Logistics Master Plan and etc.		█	█	█	█	█											
3-1 to develop future demand forecast model		█	█	█	█	█	█	█	█	█	█						
3-2 to forecast the trend of ship calls		█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
3-3 to forecast future cargo traffic demand and capacity		█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
3-4 to forecast future passenger demand forecast		█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
4-1 to conduct the study on social and economic analysis, port economic policy of neighboring countries, logistics and maritime analysis, natural conditions survey and environmental and social considerations analysis		█	█	█	█	█		█	█	█	█		█	█	█	█	█
4-2 to examine the direction of development policy of Dongo Kundu port facility and Mombasa Port					█	█	█	█	█	█	█						
4-3 to develop Dongo Kundu port facility and Mombasa Port Master Plan							█	█	█	█	█	█	█	█	█	█	█
5-1 to examine the direction of port development implementation and investment policy							█	█	█	█	█	█	█	█	█	█	█
5-2 to develop the port development implementation / investment plan										█	█	█	█	█	█	█	█
6-1 to examine and implement the technical assistance taking into consideration the compatibility with TMEA's technical assistance		█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█

Figure 3.2 Work Schedule

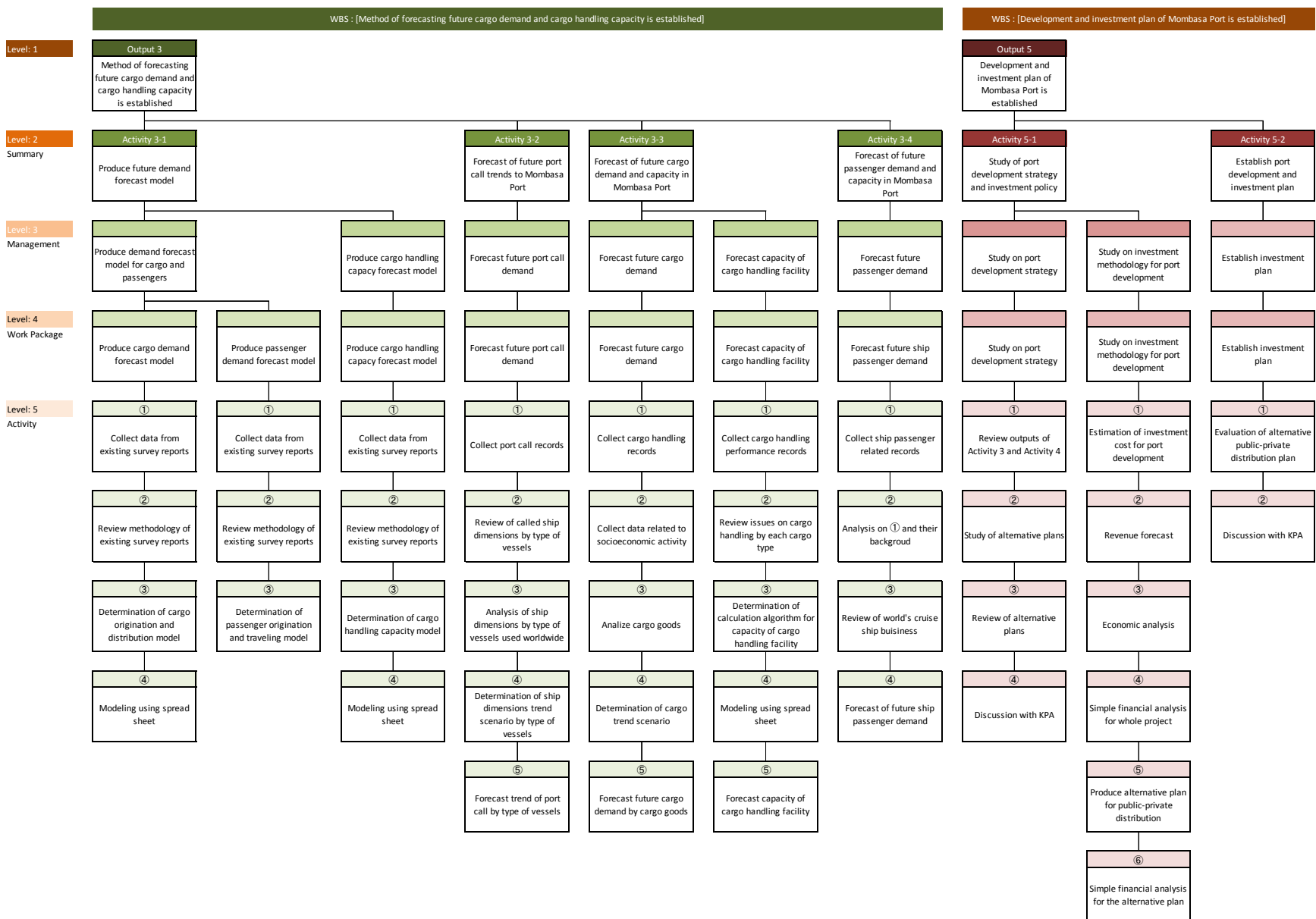


Figure 3.3 WBS

3.5 Dispatch of experts

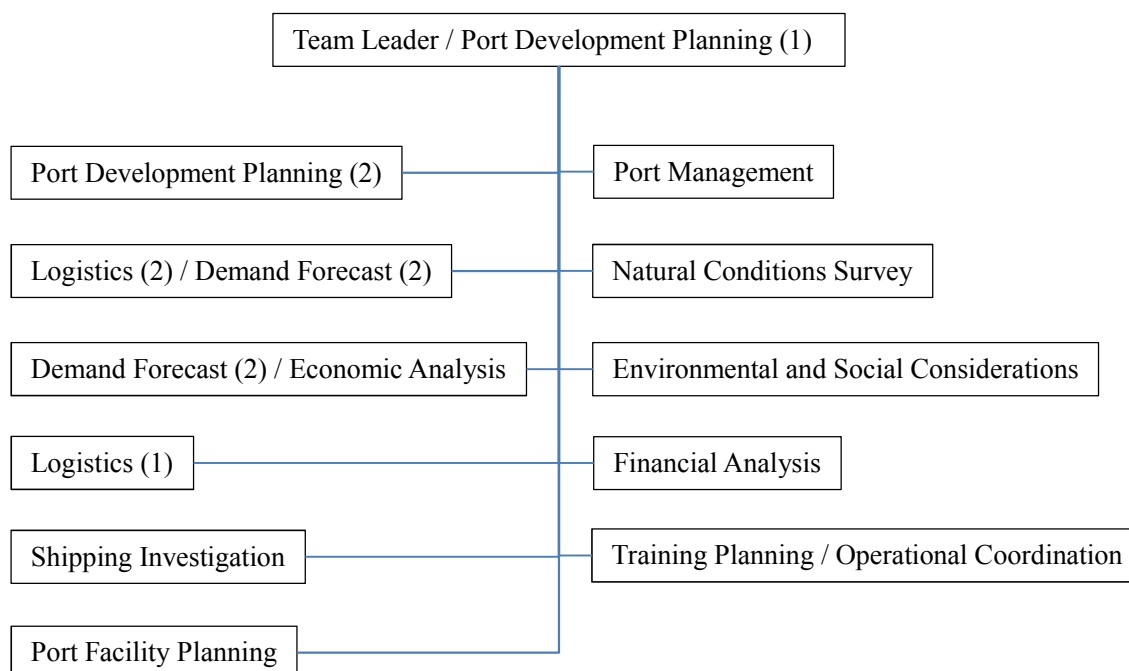


Figure 3.4 Organization of JICA Experts

The expert teams were dispatched 4 times between August 2013 and August 2015.

Table 3.2 JICA Experts Dispatched

Field of expertise	Name	Dispatch	Duration
Team Leader / Port Development Planning (1)	Mr. Toshio Azuma	1 st Dispatch	22 nd Aug – 6 th Sep, 2014
		2 nd Dispatch	2 nd Dec – 13 th Dec, 2014
		3 rd Dispatch	21 st Mar – 4 th Apr, 2015
		4 th Dispatch	18 th Jul – 17 th Aug, 2015
Port Development Planning (2)	Mr. Masato Suzuki	2 nd Dispatch	30 th Nov – 14 th Dec, 2014
		3 rd Dispatch	21 st Mar – 4 th Apr, 2015
		4 th Dispatch	4 th Jul – 17 th Aug, 2015
Logistics (2) / Demand Forecast (1)	Mr. Hideki Yokomoto	1 st Dispatch	22 nd Aug – 20 th Sep, 2014
		2 nd Dispatch	16 th Nov – 14 th Dec, 2014
		3 rd Dispatch	21 st Mar – 5 th Apr, 2015
Demand Forecast (2) / Economic Analysis	Mr. Shingo Shiratori	3 rd Dispatch	7 th Mar – 11 th Apr, 2015
		4 th Dispatch	10 th Jul – 17 th Aug, 2015
Logistics (1)	Mr. Michiharu Nose	1 st Dispatch	7 th Sep – 25 th Sep, 2014
		2 nd Dispatch	29 th Nov – 14 th Dec, 2014
		3 rd Dispatch	26 th Feb – 22 nd Mar, 2015
Shipping Investigation	Mr. Harushige Nishida	1 st Dispatch	30 th Aug – 20 th Sep, 2014
		3 rd Dispatch	15 th Mar – 3 rd Apr, 2015
Port Facility Planning	Mr. Hiroyuki Takakaze	1 st Dispatch	25 th Aug – 19 th Sep, 2014
		2 nd Dispatch	1 st Dec – 13 th Dec, 2014
		3 rd Dispatch	5 th Mar – 4 th Apr, 2015
		4 th Dispatch	18 th Jun – 12 th Jul, 2015 26 th Jul – 16 th Aug, 2015

Field of expertise	Name	Dispatch	Duration
Port Management	Mr. Takashi Shimada	1 st Dispatch	23 rd Aug – 12 th Sep, 2014
		2 nd Dispatch	21 st Nov – 14 th Dec, 2014
		4 th Dispatch	11 th Jul – 17 th Aug, 2015
Natural Conditions Survey	Mr. Satoshi Ando	1 st Dispatch	23 rd Aug – 26 th Sep, 2014
		2 nd Dispatch	20 th Oct – 17 th Dec, 2014
Environmental and Social Considerations	Ms. Tomoe Takeda	1 st Dispatch	10 th Sep – 29 th Sep, 2014
		2 nd Dispatch	1 st Dec – 4 th Dec, 2014
		3 rd Dispatch	14 th Mar – 11 th Apr, 2015
		4 th Dispatch	23 rd Jul – 13 th Aug, 2015
Financial Analysis	Mr. Hiroshi Horikawa	3 rd Dispatch	21 st Mar – 4 th Apr, 2015
		4 th Dispatch	19 th Jul – 17 th Aug, 2015
Training Planning / Operational Coordination	Mr. Masaomi Komoto	1 st Dispatch	22 nd Aug – 29 th Aug, 2014 20 th Sep – 26 th Sep, 2014
		2 nd Dispatch	30 th Nov – 14 th Dec, 2014
		4 th Dispatch	12 th Jul – 17 th Aug, 2015

3.6 Assignment of counterparts

Counterparts are selected from the TWG members and working staff in charge of port planning and statistics. They participated in the workshops and 8 members experienced training in Japan.

3.7 Joint Coordination Committee (JCC)

Joint Coordination Committee (hereinafter referred as “JCC”) has been established in order to facilitate inter-organizational coordination. JCC will be held whenever it is deemed necessary. The members of JCC are representatives from the following organizations.

[Japanese Side]

- JICA Experts
- JICA Kenya Office
- Embassy of Japan (observer)

[Kenyan Side]

- Ministry of Transport and Infrastructure (MOTI)
- Ministry of Industrialization and Enterprise Development (MIED)
- The National Treasury
- Kenya Maritime Authority
- Kenya Ports Authority

3.8 Technical Working Group (TWG)

Technical Working Group (hereinafter referred as “TWG”) has been established in order to implement the day to day activities and consultation for the project. The members of TWG are as follows.

[Japanese Side]

- JICA Experts
- JICA Kenya Office

[Kenyan Side]

- Managing Director, KPA (Chair)

- General Manager, Human Resources & Administration Division, KPA
- General Manager, Finance Division, KPA
- General Manager, Corporate Services Division, KPA
- General Manager, Infrastructure Development Division, KPA
- General Manager, Infrastructure Division, KPA
- General Manager, Engineering Services Division, KPA
- General Manager, Legal Services Division, KPA
- Head of Procurement, KPA
- Secretariat (Corporate Department), KPA

3.9 Workshop

Technical transfer has been done through lectures conducted each time experts have been dispatched for the technical transfer subjects.

Table 3.3 List of workshops

No.	Workshop No.	Session No.	Title	Date
1	1st	1	Updated Demand Forecast – Demand Forecast Model	2014-12-04
2		2	Natural Conditions Survey	
3		3	Strategic Port Management in the World	
4	2 nd	1	Operation Procedure - Demand Forecast Model	2015-03-26
5		2	Port Capacity Model	
6	3 rd	1	Capacity Evaluation	2015-08-13
7		2	Compiling port data	

3.10 Counterpart Training in Japan

Two counterpart trainings were conducted during the project period. In the 1st training program, 4 managers from KPA visited Japan for a 2-week period. In the 2nd training, 4 working staff from KPA visited Japan for a 4-week period.

(1) The 1st counterpart training in Japan

The 1st counterpart training in Japan intended for manager class KPA staff was conducted in January 2015. List of the participants and the training program are shown in Table 3.4 and Table 3.5 respectively.

Table 3.4 List of Trainees

No.	Name	Organization/Department	Title
1	Martin John MUTUKU	Kenya Port Authority Corporate Development	Head of Corporate Development
2	Peter Manyonge MASINDE	Kenya Port Authority Container Terminal Operations	Principal Operations Officer
3	Captain Abdulaziz Ahmed MZEE	Kenya Port Authority Marine Operations	Senior Marine Pilot
4	David Thomas ARIKA	Kenya Port Authority Infrastructure Development	Senior Permanent Way Officer

Table 3.5 Training Program

Date	Time	Type	Description	Lecturer / PIC	Venue
18-Jan (Sun)	~		Arrive at Narita		
19-Jan (Mon)	10:00 ~ 11:30		JICA Briefing		TIC
	13:30 ~ 14:30		Training Orientation	Mr. Komoto, Senior Researcher, OCIDI	TIC
	16:30 ~ 17:00	Courtesy Call	Overseas Coastal Area Development Institute of Japan (OCIDI)		OCIDI
	19:00 ~ 20:00		Welcome Party		
20-Jan (Tue)	10:00 ~ 10:30	Courtesy Call	Ministry of Land, Infrastructure, Transport and Tourism (MLIT)	Mr. Takada, Director of Industrial Port Policy Division, Ports and Harbors Bureau, MLIT	MLIT
	14:00 ~ 15:30	Lecture	Waterfront Area Development and Port Planning	Mr. Koyama, Principal Researcher, OCIDI	OCIDI
21-Jan (Wed)	10:00 ~ 11:30	Lecture	Port and Port Area Development	Dr. Ikeda, Professor Emeritus, Yokohama National University	OCIDI
	13:30 ~ 15:00	Lecture	Port Related Issues and Measures in the World	Mr. Naruse, Secretary General, IAPH	OCIDI
	16:00 ~ 16:30	Courtesy Call	Courtesy Call to Japanese Shipowner's Association (JSA)	Mr. Nakamura, Manager, Planning Department, JSA	Nagatacho
22-Jan (Thu)	10:00 ~ 12:00	Field Training	Ooi Container Terminal	Mr. Ogawa, Director, Utoku Corporation	Ooi
	14:00 ~ 16:00	Field Training	Nippon Automated Cargo and Port Consolidated System, Inc. (NACCS)	Ms. Yoshioka, Solution Business Promotion Department, NACCS	Kawasaki
23-Jan (Fri)	10:00 ~ 12:00	Field Training	Kashima Port	Ms. Nagano, Administration Manger, Kashima Office, Kanto Regional Development Bureau, MLIT	Kashima
	14:00 ~ 16:00	Field Training	Nippon Steel & Sumitomo Metal - Kashima Works	Mr. Nakano, HE & General Affairs Office, Administration Dept., NSSMC Kashima Works	Kashima
24-Jan (Sat)	~				
25-Jan (Sun)	~				
			Move from Haneda to Oita		
26-Jan (Mon)	14:30 ~ 16:30	Field Training	Mitsui Engineering & Shipbuilding (MES) - Oita Works	Mr. Arimoto, Assistant Manager, Cranes & Systems Sales Dept., Machinery & Systems HQ, MES	Oita
			Move from Oita to Itami		
27-Jan (Tue)	14:00 ~ 16:30	Field Training	Kobe Port - PC18	Mr. Futagami, Manager, Port Planning Dept. Kinki Regional Development Bureau, MLIT	Kobe
			Move from Shin-Kobe to Nagoya		
28-Jan (Wed)	13:30 ~ 14:30	Field Training	Nagoya Port - Nabeta Container Terminal	Mr. Toyama, Assistant Manager, Port Planning Dept., Chubu Regional Development Bureau, MLIT	Nagoya
29-Jan (Thu)			Move from Nagoya to Tokyo		
			Preparation for presentation		
30-Jan (Fri)	10:00 ~ 11:00	Presentati on	Presentation by each trainee	Mr. Komoto, Senior Researcher, OCIDI	JICA HQ
	11:00 ~ 12:00	Evaluation	Evaluation by JICA	Mr. Koyanagi, Transportation & ICT Group, Infrastructure & Peacebuilding Dept., JICA HQ	
31-Jan (Sat)	~		Depart from Narita		

JICA Japan International Cooperation Agency
 TIC JICA Tokyo International Center
 MLIT Ministry of Land, Infrastructure, Transport and Turism
 OCIDI Overseas Coastal Area Development Institute of Japan
 IAPH International Association of Ports and Harbors

NACCS Nippon Automated Cargo and Port Consolidated System, Inc.
NSSMC Nippon Steel & Sumitomo Metal Corporation
MES Mitsui Engineering & Shipbuilding Co., Ltd.

(2) The 2nd counterpart training in Japan

The 2nd counterpart training intended for working class KPA staff engaged for planning, statistics, operation etc. was conducted in May ~ June 2015. List of the participants and the training program are shown in Table 3.6 and Table 3.7 respectively.

Table 3.6 List of Trainees

No.	Name	Department / Organization	Title
1	Kavate Geoffrey Kilonzo	Finance Department, Kenya Ports Authority	Senior Accountant (Asset Management)
2	Mwandawiro Benjamin Mwawuda	Container Terminal Operations Department, Kenya Ports Authority	Export Documentation Officer
3	Kahindi Amani Alphonse	Corporate Development Department, Kenya Ports Authority	Statistician (Traffic)
4	Abbas Rukia Mohamed (Rukia Alawi Husni)	Corporate Development/Corporate Services Department, Kenya Ports Authority	Assistant Statistician (Traffic)

Table 3.7 Training Program

Date	Time	Type	Description	Lecturer / Person in Charge	Venue
05-24 (Sun)			Arrive at Narita		
05-25 (Mon)	9:30 ~ 12:00	Orientation	JICA Briefing		TIC
	14:00 ~ 14:30	Orientation	Training Program Orientation	M. Komoto, Senior Researcher, OCDI	TIC
	15:30 ~ 16:00	Courtesy Call	Courtesy Call to MLIT		MLIT
	17:00 ~ 17:30	Courtesy Call	Courtesy Call to OCDI	M. Okada, President, OCDI	OCDI
	18:00 ~ 20:00		Welcome Party		OCDI
05-26 (Tue)	10:00 ~ 11:30	Lecture	Port Development and Economic Growth	T. Ikeda, Prof. Emeritus, Yokohama National Univ.	OCDI
	13:30 ~ 15:00	Lecture	Ideas for Competitive Port Development - General idea and an example of Yokohama Port	A. Kaneko, Guest Researcher, Toyo University	
	15:30 ~ 17:00	Lecture	IAPH & Challenges facing World's Ports	S. Naruse, Secretary General, IAPH	
05-27 (Wed)	10:00 ~ 11:30	Lecture	Port and its Hinterland Transportation	J. Sugawara, Tokyo Institute of Technology	OCDI
	14:00 ~ 16:00	Lecture	World Trends of Container Terminals (1)	Y. Tateno, Maritime Consultant	
	16:00 ~ 17:30	Lecture	World Trends of Container Terminals (2)		
05-28 (Thu)	10:00 ~ 12:00	Lecture	Port Planning (1)	T. Kadono, Research Director, CDIT	OCDI
	13:30 ~ 15:30	Lecture	Port Planning (2)		
05-29 (Fri)	10:00 ~ 12:00	Lecture	National Land Planning	T. Shimada, Principal Researcher, OCDI	TIC
	13:00 ~ 15:30	Lecture	Integrated Transport Planning		
05-30 (Sat)					
05-31 (Sun)					
06-01 (Mon)	10:00 ~ 12:00	Lecture	Demand Forecast (1)	S. Shiratori, Project Manager, Oriental Consultants Global	OCDI
	14:00 ~ 16:00	Lecture	Demand Forecast (2)		
06-02 (Tue)	11:00 ~ 12:00	Lecture	Advanced Demand Forecast (1)	R. Shibasaki, Researcher, NILIM	OCDI
	13:30 ~ 16:30	Lecture	Advanced Demand Forecast (2)		
06-03	10:00 ~ 12:00	Lecture	Financial Analysis	H. Horikawa, Chief Engineer,	OCDI

Date	Time	Type	Description	Lecturer / Person in Charge	Venue
(Wed)				MSE	
	14:00 ~ 16:00	Lecture	Economic Analysis of Port Project	S. Shiratori, Project Manager, Oriental Consultants Global	
06-04 (Thu)	10:00 ~ 12:00	Lecture	Beneficial Use of Dredged Soil in D-Runway of Haneda International Airport	K. Arita, Principal Researcher, Institute of Construction Management, SCOPE	OCDI
	14:00 ~ 16:00	Lecture	Maintenance for Port Facilities	T. Hyodo, Principal Researcher, Institute of Construction Management, SCOPE	
06-05 (Fri)	10:00 ~ 12:00	Lecture	Operation and Management of Container Terminal	H. Morimoto, Team Leader, Utoc Corp.	Tokyo Port
	13:00 ~ 16:00	Field Training	Oi Container Terminal #3/#4 Berth		
06-06 (Sat)					
06-07 (Sun)					
06-08 (Mon)	10:30 ~ 12:00	Lecture	Siltation by Sediments	Y. Nakagawa, Team Leader, Coastal Environment Division, PARI	PARI
	13:30 ~ 15:00	Lecture	Tidal Wave	T. Tomita, Director, Marine Information and Tsunami Division, PARI	
	15:00 ~ 16:00	Field Training	PARI's Experimental Facility	PARI	
06-09 (Tue)	10:30 ~ 12:00	Lecture	Outline of international cooperation - Japan's overseas port development and operation	Y. Nakajima, Director for International Policy, Ports and Harbors Bureau, MLIT	OCDI
	13:00 ~ 14:30	Lecture	Institutional Arrangement for Port Operation and Management	Y. Aoyama, General Affairs Division, Ports and Harbors Bureau, MLIT	
	14:45 ~ 16:15	Lecture	About the Port EDI system of Japan	S. Azuma, Port Economy Division, Ports and Harbors Bureau, MLIT	
06-10 (Wed)	10:30 ~ 12:00	Lecture	Japanese Legislation & Policy for Port Security Measures	T. Furukawa, Security & Emergency Management Office, Ports and Harbors Bureau, MLIT	OCDI
	13:00 ~ 14:30	Lecture	Ports, Harbors and Regional Development ~ History and Current Situation of Coastal Area Development ~	M. Teraoka, Industrial Port Policy Division, Ports and Harbors Bureau, MLIT	
	14:45 ~ 16:15	Lecture	Environmental Policy related Port and Harbor	Y. Ohta, Chief, Ocean & Environmental Policy Division, Ports and Harbors Bureau, MLIT	
06-11 (Thu)	10:00 ~ 12:00	Field Training	Yokohama Port	Port & Harbor Bureau, City of Yokohama	Yokohama Port
	14:00 ~ 16:00	Lecture	Comprehensive Logistics Information Platform in Japan	Ms. Yoshioka, Solution Business Promotion Department, NACC	NACCS (Kawasaki)
06-12 (Fri)	10:00 ~ 12:00	Field Training	Kashima Port	Kanto Regional Development Bureau, MLIT	Kashima
	14:00 ~ 16:00	Field Training	Nippon Steel & Sumitomo Metal - Kashima Works	NSSMC Kashima Works	
06-13 (Sat)					
06-14 (Sun)					
06-15 (Mon)			Move from Haneda to Oita		
	14:30 ~ 16:30	Field Training	Mitsui Engineering & Shipbuilding (MES) - Oita Works	MES Oita Works	Oita
06-16 (Tue)			Move from Oita to Itami		
	13:30 ~ 16:00	Field Training	Kobe Port	Kinki Regional Development Bureau, MLIT	Kobe

Date	Time	Type	Description	Lecturer / Person in Charge	Venue
06-17 (Wed)	13:30 ~ 17:00	Field Training	Move from Shin-Kobe to Nagoya		
			Nagoya Port	Chubu Regional Development Bureau, MLIT	Nagoya
06-18 (Thu)	~		Move from Nagoya to Tokyo		
			Preparation for Individual Presentation		TIC
06-19 (Fri)	10:00 ~ 11:00	Presentation	Presentation by each trainee	M. Komoto, Senior Researcher, OCDI	JICA HQ
	11:00 ~ 12:00	Evaluation	Evaluation by JICA	Mr. Koyanagi, Transportation & ICT Group, Infrastructure & Peacebuilding Dept., JICA HQ	
06-20 (Sat)	~		Leave from Narita		

JICA Japan International Cooperation Agency
 TIC JICA Tokyo International Center
 MLIT Ministry of Land, Infrastructure, Transport and Tourism
 OCDI Overseas Coastal Area Development Institute of Japan
 IAPH International Association of Ports and Harbors
 CDIT Coastal Development Institute of Technology
 NILIM National Institute for Land and Infrastructure Management
 MSE Mitsui Zosen Steel Structures Engineering Co., Ltd.
 SCOPE Service Center of Port Engineering
 PARI Port and Airport Research Institute
 NACCS Nippon Automated Cargo and Port Consolidated System, Inc.
 NSSMC Nippon Steel & Sumitomo Metal Corporation
 MES Mitsui Engineering & Shipbuilding Co., Ltd.

3.11 Seminar

To explain the master plan and as a final technical transfer program, a seminar was held on 14 Aug 2015 inviting KPA staff. In addition to presentations by JICA experts, KPA staff who participated the counterpart trainings in Japan made presentations on their experience in Japan for further capacity development and to motivate other KPA staff.

Table 3.8 Seminar Program

Time	Program	Presenter
09:00 ~ 09:10	Opening Remarks	Mr. Azuma, Team Leader, JICA Project Team
09:10 ~ 09:40	Some Remarks on Mombasa Port M/P including Dongo Kundu	Mr. Azuma, Team Leader, JICA Project Team
09:45 ~ 10:15	Demand Forecast	Mr. Shiratori, JICA Project Team
10:20 ~ 10:50	Port Planning and Management	Ms. Rukia Alawi Husni, Assistant Statistician (Traffic), Corporate Development/Corporate Services, KPA
10:50 ~ 11:05	Tea/Coffee Break	
11:05 ~ 11:35	Port and Railway	Mr. Shimada, JICA Project Team
11:40 ~ 12:10	Important lessons learnt in Japan and their application on Mombasa Port	Kavate Geoffrey Kilonzo, Senior Accountant (Asset Management), Finance, KPA
12:15 ~ 12:25	Closing Remarks	KPA
12:30 ~	Lunch Buffet	

3.12 Stakeholder Meeting

In the course of the project, a total of three stakeholder meetings were held to solicit opinions from stakeholders (see Table 3.9 for summary of stakeholder meetings).

Table 3.9 Summary of Stakeholder Meetings

No	Date	Place	Objective	Participants
1	4th December 2014	Bandari College, Mombasa	<ul style="list-style-type: none"> - To share the information on current situation of port activity including the Phase 1 container project and future vision - To explain the outline of the Project - To get feedback from the stakeholders 	Total 60 participants including representatives from Mombasa County Government, relevant authorities and private companies of port users
2	1st April 2015	Bliss Hotel, Mombasa	<ul style="list-style-type: none"> - To explain the outline of the Project including the preliminary port development plan - To obtain opinions on environmental and social concerns from the stakeholders 	Total 28 participants including representatives from the authorities especially related to environmental safeguard
3	AM, 29th July 2015	Bliss Hotel, Mombasa	<ul style="list-style-type: none"> - To explain the outputs of port development master plan - To explain the findings of environmental and social considerations study - To obtain opinions on the proposed master plan and project-related concerns from the stakeholders 	Total 42 participants including representatives from Mombasa County Government, NGOs and other governmental organizations
	PM, 29th July 2015	Bliss Hotel, Mombasa	<ul style="list-style-type: none"> - To explain the outputs of port development master plan - To get an opinion on the proposed master plan and project-related concerns from the stakeholders 	Total 39 participants including representatives from the private companies of port users

Source: JICA Team

4. Achievements

The achievements in this project are evaluated based on the PDM as shown in Table 4.1.

Table 4.1 Evaluation based on the PDM

Description in the PDM		Achievements	
Narrative Summary	Objectively Verifiable Indicators	Outputs up to September 2015	Evaluation of the progress as of September 2015
Overall Goal Projects which aim at Mombasa Port development are implemented in accordance with the Mombasa Port Master Plan.	At least one project is implemented among the several number of components which are listed in Dongo Kundu Port, Mombasa Master Plan	Mombasa Port Master Plan including Dongo Kundu (Draft Final) was prepared and is under review by KPA. Some of the relevant projects such as highway, railway and MPDP Phase 2 projects are underway or under preparation	Implementation of the project components need to be monitored after completion of the project
Project Purpose Capacity of KPA staff on port development is enhanced.	1. Dongo Kundu Port, Mombasa development plan is established and shared by KPA and MTI. 2. All necessary documents including port development policy are prepared.	1. Mombasa Port Master Plan including Dongo Kundu (Draft Final) was prepared and shared by KPA and MTI 2. All necessary documents including port development policy were prepared in the Master Plan	Targets will be accomplished upon submission of the final report
Output 1 Mombasa Port Master Plan (revised in 2009 by KPA) is reviewed and revised. 2 Strategic planning and management system in KPA is improved. 3 Future demand and capacity forecast method in KPA is improved. 4 Comprehensive Mombasa Port development implementation/ investment plan is prepared.	1-1 Future demand forecast is established. 1-2 KPA's strategy for port development is compiled. 1-3 Dongo Kundu Port, Mombasa master plan is drafted. 2-1 Human resource capacity of strategic planning and management of KPA is developed. 2-2 Analysis and recommendations are made for solutions against issues such as port development plan, port management, concession contract, etc., by joint work between KPA staff and JICA experts. 3-1 Future demand forecast model is developed. 3-2 Future capacity forecast method is developed. 4-1 Port development implementation plan is prepared. 4-2 Port development investment plan is prepared.	1-1 Future demand forecast in SAPROF review 2013 was reviewed and updated based on the current situation 1-2 Strategic Plan 2013-2017 by KPA was reviewed 1-3 Draft Final report of Mombasa Port Master Plan including Dongo Kundu was prepared in Aug 2015 2-1 Capacity development programs were implemented 2-2 Issues were studied and the solution were presented to and discussed with KPA staff in the workshops and seminar 3-1 Future demand forecast model was developed 3-2 Future capacity forecast method was developed 4-1 Port development implementation plan was prepared 4-2 Port development investment plan was prepared	Targets accomplished

Consisting of technical transfer and master plan study in this project, technical transfer program related to port development planning was implemented on the progress of master plan study through workshops etc. In addition to port planning practices, lectures/field studies related to port management

/operation and port area industrialization were included in the counterpart trainings in Japan. Focusing on port development and port management/operation, the technical transfer program was arranged to ensure trainees obtained a wide range of useful knowledge related to the subject.

(1) Overall goal

A draft final report of “Mombasa Port Master Plan including Dongo Kundu” was submitted and the plan was explained in a TWG meeting, a JCC meeting, stakeholder meetings and a seminar. However, the development plan has not yet been implemented.

(2) Project purpose

The draft final report of “Mombasa Port Master Plan including Dongo Kundu” includes a development plan as well as its development policy and various information related to the development of Mombasa Port. The details of the development plan were presented in a TWG meeting, a JCC meeting, stakeholder meetings and a seminar.

(3) Project output

1) Mombasa Port Master Plan (revised in 2009 by KPA) is reviewed and revised.

Various related plans including “Strategic Plan 2013-2030” by KPA have been reviewed. A new cargo demand forecast model was established and the forecast in SAPROF Review 2013 was updated using the new model. Mombasa Port development plan was established based on the result of this cargo demand forecast.

2) Strategic planning and management system in KPA is improved.

KPA staff capacity development for strategic port planning was implemented through workshops and counterpart trainings in Japan. The counterpart trainings in Japan included lectures and field trainings for port management and operation through which issues related to port management and operation were addressed. Solutions/countermeasures for the major issues raised through the trainings were recommended in the “Mombasa Port Master Plan including Dongo Kundu”.

3) Future capacity and forecast method in KPA is improved.

Lectures for cargo demand forecast and cargo handling capacity forecast were conducted in workshops and counterpart trainings in Japan as a part of strategic port planning program for KPA staff described in 2) above. Exercises for the same also conducted using a program so that the development plan can be modified based on the actual cargo volumes in future.

4) Comprehensive Mombasa Port development implementation/investment plan is prepared.

Development plan of Mombasa Port was established in “Mombasa Port Master Plan including Dongo Kundu” and presented in a TWG meeting, a JCC meeting and a seminar. Effectiveness of the investment plans under certain conditions were also analyzed and included in the master plan. However, further detailed and precise financial analysis is required for the implementation stage as the analysis which was carried out is a simplified version.

5. Conclusions and Recommendations

5.1 Conclusions

Cargo, vessel, stevedoring statistics of Mombasa Port were well prepared by persons in charge. It was very useful for us to analyze the cargo demand forecast. The persons in charge have a decent level of knowledge on cargo demand forecast, economic analysis and financial analysis. By using the method and the model introduced in this project, KPA will be able to modify the plan based on the actual cargo volumes in future.

On the other hand, there are a lot of issues to be improved in actual port management and operation. In parallel with the realization of the development plan proposed, management and operational improvement as well as infrastructure improvement around the port need to be tackled urgently by KPA and also by the related authorities. Merely implementing the development plan will not result in the desired outcome if such improvements are not made.

5.2 Recommendations

Focusing on port management and operation, the master plan includes the following recommendations.

- Efficient port operation by introducing PPP scheme and concession
- Improvement of gate system by computerization
- Improvement of land transportation infrastructure focused on road transportation
- Awareness on the need to preserve the environmental
- Review and adjustment of the master plan every 5 years
- Coordination among related projects by MOTI's strong initiative
- Establishment of port and harbor bureau in MOTI and Port and Harbor Law
- Study of new international port development other than Mombasa and Lamu

While some of the above recommendations have started to be implemented, results have been far from satisfactory. KPA generally acknowledges that the above issues need to be tackled but many obstacles currently stand in the way.

It is recommended to continue technical support / technical transfer program as well as to establish new comprehensive master plan for a new international port including road and rail transportation infrastructure.

6. Appendix

Appendix 1	Project team	1
Appendix 2	Record of Discussions	2
(1)	Record of Discussions.....	2
(2)	Project Discription	4
(3)	Project Design Matrix (PDM).....	8
(4)	Plan of Operation	10
(5)	Project Organization Chart.....	11
(6)	List of Proposed Members of Joint Coordination Committee	12
(7)	List of Proposed Members of Technical Working Group.....	13
(8)	Main Points Discussed.....	14
Appendix 3	Revised Project Design Matrix (PDM) and Plan of Operation (PO)	15
(1)	Project Design Matrix (PDM).....	15
(2)	Plan of Operation (PO).....	17
Appendix 4	Joint Coordination Committee	18
(1)	The 1 st JCC	18
(2)	The 2 nd JCC	19
(3)	The 3 rd JCC	21
Appendix 5	Technical Working Group	28
(1)	The 1 st TWG.....	28
(2)	The 2 nd TWG.....	30
(3)	The 3 rd TWG	32
(4)	The 4 th TWG	34
Appendix 6	Stakeholder Meeting	37
(1)	The 1 st stakeholder meeting.....	37
(2)	The 2 nd stakeholder meeting.....	38
(3)	The 3 rd stakeholder meeting.....	39
Appendix 7	Workshop	40
(1)	The 1 st workshop.....	40
(2)	The 2 nd workshop	41
(3)	The 3 rd workshop.....	43
Appendix 8	Seminar	44

Appendix 1 Project team

JICA expert team consists of twelve (12) members whose names and responsibilities are shown below.

Responsibility	Name
1. Team Leader/ Port Development Planning (1)	Mr. Toshio AZUMA (OCDI)
2. Port Development Planning (2)	Mr. Masato SUZUKI (OC)
3. Demand Forecast (1)/ Logistics (2)	Mr. Hideki YOKOMOTO (OC)
4. Demand Forecast (2)/ Economic Analysis	Mr. Shingo SHIRATORI (OC)
5. Logistics (1)	Mr. Michiharu NOSE (OCDI)
6. Shipping Investigation	Mr. Harushige NISHIDA (OC)
7. Port Facility Planning	Mr. Hiroyuki TAKAKAZE (NK)
8. Port Management	Mr. Takashi SHIMADA (OCDI)
9. Natural Conditions Survey	Mr. Satoshi ANDO (NK)
10. Environmental and Social Considerations	Ms. Tomoe TAKEDA (NK)
11. Financial Analysis	Mr. Hiroshi HORIKAWA (OCDI)
12. Training Planning/Operational Coordination	Mr. Masaomi KOMOTO (OCDI)

Appendix 2 Record of Discussions

(1) Record of Discussions

RECORD OF DISCUSSIONS

ON

**THE PROJECT FOR TECHNICAL ASSISTANCE
TO KENYA PORTS AUTHORITY
ON DONGO KUNDU PORT, MOMBASA MASTER PLAN**

IN

REPUBLIC OF KENYA

AGREED UPON BETWEEN

**MINISTRY OF TRANSPORT AND INFRASTRUCTURE,
KENYA PORTS AUTHORITY**

AND

JAPAN INTERNATIONAL COOPERATION AGENCY

Nairobi, 29th May, 2014

 _____ Mr. Hideo Eguchi Chief Representative Kenya Office Japan International Cooperation Agency	 _____ Mr. Nduva Muli, EBS Principal Secretary Ministry of Transport and Infrastructure Republic of Kenya
	 _____ Mr. Gichiri Ndua, MBS Managing Director Kenya Ports Authority Republic of Kenya

Based on the Minutes of Meetings on the Detailed Planning Survey on the Project for Technical Assistance to Kenya Ports Authority on Port and Cargo Handling (hereinafter referred to as “the Project”) signed on March 11st, 2014 among Ministry of Transport and Infrastructure (hereinafter referred to as “MOTI”) , Kenya Ports Authority (hereinafter referred to as “KPA”) and the Japan International Cooperation Agency (hereinafter referred to as “JICA”), JICA held a series of discussions with MOTI, KPA and relevant organizations to develop a detailed plan of the Project.

All parties agreed the details of the Project and the main points discussed as described in the Attachment 1 and 2 respectively.

All parties also agreed that MOTI, the counterpart to JICA, will be responsible for the implementation of the Project in cooperation with JICA, coordinate with KPA and other relevant organizations and ensure that the self-reliant operation of the Project is sustained during and after the implementation period in order to contribute toward social and economic development of Republic of Kenya.

The Project will be implemented within the framework of the Agreement on Technical Cooperation signed on April 29, 2004 (hereinafter referred to as “the Agreement”) between the Government of Japan (hereinafter referred to as “GOJ”) and Republic of Kenya.

Attachment 1: Project Description
Attachment 2: Main Points Discussed

(2) Project Description

Attachment 1

PROJECT DESCRIPTION

I. BACKGROUND

The Mombasa Port locates at Mombasa City, the second largest city of Kenya and is the largest port at East African region. Mombasa port is used not only for trade of Kenya, but also for inland countries such as Uganda and Rwanda. Due to the rapid economic development at the region and increase of container handling, JICA is supporting Kenya Ports Authority (KPA) for expansion of container terminal at the northern side of the port through its finance for "Mombasa Port Development Project" of which loan agreement has been signed on November 2007 for the amount of 26.7 billion Japanese Yen. Also, based on the request from GOK, JICA has commenced "The Project on Master Plan for Development of Dongo Kundu, Mombasa Special Economic Zone" which is expected to contribute to the acceleration of economic growth in Kenya and East African region.

Recent years, the cargo handling volume in Mombasa Port is increasing drastically exceeding the previous future demand forecast. Taking the current situation into consideration, it is required to formulate the Master Plan for the Development of Mombasa Port which contains the vision and concept of the Mombasa Port development after completion of the above mentioned Yen loan project. In response to the request of GOK, Detailed Planning Survey Team was organized by JICA and visited Kenya in November 2013 to have a series of discussions with Kenyan authorities concerned on formulation of the Project. As results of the Survey, both sides agreed upon the details of the Project.

II. OUTLINE OF THE PROJECT

Details of the Project are described in the Logical Framework (Project Design Matrix: PDM) (Annex 1) and the tentative Plan of Operation (Annex2).

1. Title of the Project

The Project for Technical Assistance to Kenya Ports Authority on Dongo Kundu Port, Mombasa Master Plan

2. Input

(1) Input by JICA

(a) Dispatch of Mission

[Area of experts]

- Chief Advisor/ Port Development Planning
- Demand Forecast/ Economic Analysis
- Logistic Planning
- Maritime Trade
- Port Facility Planning
- Port Operation
- Natural Condition Survey
- Environmental and Social Considerations

Input other than indicated above will be determined through mutual consultations among JICA, MOTI and KPA during the implementation of the Project, as necessary.

(2) Input by MOTI and KPA

MOTI and KPA will take necessary measures to provide at its own expense:

- (a) Services of MOTI and KPA's counterpart personnel and administrative personnel;
- (b) Suitable office space with necessary equipment;
- (c) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the equipment provided by JICA;
- (d) Information as well as support in obtaining medical service;
- (e) Credentials or identification cards;
- (f) Available data (including maps and photographs) and information related to the Project;
- (g) Running expenses necessary for the implementation of the Project;
- (h) Expenses necessary for transportation within Republic of Kenya of the equipment as well as for the installation, operation and maintenance thereof; and
- (i) Necessary facilities to the JICA experts for the remittance as well as utilization of the funds introduced into Republic of Kenya from Japan in connection with the implementation of the Project

3. Implementation Structure

The Project organization chart is given in the Annex 3. The roles and assignments of relevant organizations are as follows:

(1) Joint Coordinating Committee

Joint Coordinating Committee (hereinafter referred to as "JCC") will be established in order to facilitate inter-organizational coordination. JCC will be held at every six months and whenever deems it necessary. JCC will approve an annual work plan, review overall progress, conduct monitoring and evaluation of the Project, and exchange opinions on major issues that arise during the implementation of the Project. A list of proposed members of JCC is shown in the Annex 4.

(2) Technical Working Group

Technical Working Group (hereinafter referred to as "TWG") will be established in order to implement the day to day activities and consultation for the Project. A list of proposed members of TWG is shown in the Annex 5.

(3) JICA Experts

The JICA experts will give necessary technical guidance, advice and recommendations to MOTI and KPA on any matters pertaining to the implementation of the Project.

4. Project Site(s) and Beneficiaries

(1) **Project Site:** Project activity will be mainly implemented in Mombasa Port.

(2) **Beneficiaries:** The Direct beneficiaries are staff of KPA. Effective and efficient development and management of KPA will contribute to stimulate the logistics of entire Kenya and East African Region.

5. Duration

The duration of the project will be one (1) year and three (3) months from the commencement of consultancy agreement. The tentative project schedule is shown in the Annex 2.

6. Reports

MOTI, KPA and JICA experts will jointly prepare the following reports in English.

- (1) Inception Report at the time of commencement of the project
- (2) Interim Report at the time about six (6) months after the commencement of the project
- (3) Draft Final Report at the time about three (3) months before the completion of the project
- (4) Final Report at the time of project completion.

7. Environmental and Social Considerations

MOTI and KPA agreed to abide by 'JICA Guidelines for Environmental and Social Considerations' in order to ensure that appropriate considerations will be made for the environmental and social impacts of the Project.

III. UNDERTAKINGS OF MOTI AND KPA

MOTI and KPA will take necessary measures to:

- (1) ensure that the technologies and knowledge acquired by Republic of Kenya nationals as a result of Japanese technical cooperation contributes to the economic and social development of Republic of Kenya, and that the knowledge and experience acquired by the personnel of Republic of Kenya from technical training as well as the equipment provided by JICA will be utilized effectively in the implementation of the Project; and
- (2) grant privileges, exemptions and benefits to the JICA experts referred to in II-2 (1) above and their families, which are no less favorable than those granted to experts and members of the missions and their families of third countries or international organizations performing similar missions in Republic of Kenya.

Other privileges, exemptions and benefits will be provided in accordance with the Agreement on Technical Cooperation signed on April 29, 2004 between the Government of Japan and GOK.

IV. EVALUATION

JICA will conduct the following evaluations and surveys to mainly verify sustainability and impact of the Project and draw lessons. MOTI and KPA are required to provide necessary support for them.

1. Ex-post evaluation three (3) years after the project completion, in principle
2. Follow-up surveys on necessity basis

V. PROMOTION OF PUBLIC SUPPORT

For the purpose of promoting support for the Project, MOTI and KPA will take appropriate measures to make the Project widely known to the people of Republic of Kenya.

VI. MUTUAL CONSULTATION

JICA, MOTI and KPA will consult each other whenever any major issues arise in the course of Project implementation.

VII. AMENDMENTS

The record of discussions may be amended by the minutes of meetings among JICA, MOTI and KPA.

The minutes of meetings will be signed by authorized persons of all parties who may be different from the signers of the record of discussions.

- Annex 1 Logical Framework (Project Design Matrix: PDM)
- Annex 2 Tentative Plan of Operation (PO)
- Annex 3 Project Organization Chart
- Annex 4 A List of Proposed Members of Joint Coordinating Committee
- Annex 5 A List of Proposed Members of Technical Working Group

(3) Project Design Matrix (PDM)

Annex 1

Project Design Matrix (PDM)

The Project for Technical Assistance to Kenya Ports Authority on Dongo Kundu Port, Mombasa Master Plan

Project Implementation Period: From July 2014 (15 months)

Target Area: Mombasa Port Area

Date Prepared: May , 2014

Target Group: Kenya Ports Authority

Version: 1

Narrative Summary	Objectively Verifiable Indicators	Data Source/ Means of Verification	Important Assumption
<p>Overall Goal Projects which aim at Mombasa Port development are implemented in accordance to the Mombasa Port Master Plan.</p>	<p>At least one project is implemented among the several number of components which are listed in Dongo Kundu Port, Mombasa Master Plan</p>	<ul style="list-style-type: none"> - KPA annual report/ strategic plan - Interview Survey from KPA - National Transport Integrated Policy - Vision 2030 - Kenya Constitution 2020 	
<p>Project Purpose Capacity of KPA staff on port development is enhanced.</p>	<ol style="list-style-type: none"> 1. Dongo Kundu Port, Mombasa development plan is established and shared by KPA and MTI. 2. All necessary documents including port development policy are prepared. 	<ol style="list-style-type: none"> 1. Approved port development plan (master plan) 2. Budget allocation plan, human resource development plan and other necessary documents 	
<p>Output</p> <ol style="list-style-type: none"> 1 Mombasa Port Master Plan (revised in 2009 by KPA) is reviewed and revised. 2 Strategic planning and management system in KPA is improved. 3 Future demand and capacity forecast method in KPA is improved. 4 Comprehensive Mombasa Port development implementation/ investment plan is prepared. 	<ol style="list-style-type: none"> 1-1 Future demand forecast is established. 1-2 KPA's strategy for port development is compiled. 1-3 Dongo Kundu Port, Mombasa master plan is drafted. 2-1 Human resource capacity of strategic planning and management of KPA is developed. 2-2 Analysis and recommendations are made for solutions against issues such as port development plan, port management, concession contract, etc., by joint work between KPA staff and JICA experts. 3-1 Future demand forecast model is developed. 3-2 Future capacity forecast method is developed. 4-1 Port development implementation plan is prepared. 4-2 Port development investment plan is prepared. 	<ol style="list-style-type: none"> 1-1 KPA annual report/ strategic plan 1-2 KPA strategic plan 1-3 Port master plan (draft) National Transport Integrated Policy Vision 2030 Kenya Constitution 2020 2-1 Human resource development plan in KPA 2-2 Analysis and recommendation report on current issues in KPA 3-1 Future demand forecast model in KPA 3-2 Future capacity forecast method in KPA 4-1 Port development implementation plan in KPA 4-2 Port development investment plan in KPA 	<ul style="list-style-type: none"> - KPA secures budget and necessary number of personnels required for establishment of the port development plan.

Activities	Inputs (Japanese side)	Inputs (Kenyan side)	Preconditions
1 Review of the existing port development plan and related information 1-1 To review the existing port development plan 1-2 To review the existing port efficiency improvement plan 1-3 To review the existing national development plan, plans for the sectors such as urban, transportation, infrastructure, industry, trade plans and others concerned	1. Dispatch of Japanese Experts Area of Expertise - Chief Adviser/ Port Development Planning - Demand Forecast/ Economic Analysis - Logistic Planning - Maritime Trade - Port Facility Planning - Port Operation - Natural Condition Survey - Environmental and Social Considerations 2. Counterpart training in Japan Trainings required for the Project 3. Natural Conditions Survey Natural conditions survey (i.e. soil investigation, bathymetric survey, Environment and Social Considerations) required for the Project 4. Equipment Items required for the Project	1. Services of KPA's counterpart personnel and administrative personnel 2. Suitable office space with necessary equipment 3. Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the equipment provided by JICA 4. Information as well as support in obtaining medical service 5. Credentials or identification cards 6. Available data (including maps and photographs) and information related to the Project 7. Running expenses necessary for the implementation of the Project 8. Expenses necessary for transportation within Kenya of the equipment as well as for the installation, operation and maintenance Necessary facilities to the JICA experts for the remittance as well as utilization of the funds introduced into Kenya from Japan in connection with the implementation of the Project 9.	- Security situation in Mombasa Port area will not get drastically worse. - Yen Loan Project (Container Terminal Phase 1) and SEZ M/P will be implemented as scheduled. - KPA staff being in charge of establishment of port development plan will not be lost.
2 Information collection and analysis, which is related to Mombasa Area Development 2-1 To collect and analyze the related port activities 2-2 To collect and analyze the related national, urban, transportation, infrastructure, industry, trade information around the port 2-3 To collect and analyze the related natural condition, environmental and social considerations around the port 2-4 To collect and analyze the related maritime transportation around east Africa region 2-5 To collect and analyze the related Northern Corridor information 2-6 To review the work plan and its contents of technical assistance conducted by Trade Mark East Africa (TMEA) and other organizations to KPA To collect the information on relevant study such as Mombasa SEZ Master Plan, Mombasa Urban Development Master Plan, Northern Corridor Logistic Mater Plan, etc.			
3 Future Demand Forecast 3-1 To develop the future demand forecast model 3-2 To forecast the ship call trend 3-3 To forecast future cargo traffic demand and capacity 3-4 To forecast future passenger demand and capacity			
4 Set-up of vision and concept for Dongo Kundu Port Facility and Mombasa Port Master Plan 4-1 To conduct the study on social and economic analysis, port economic policy of neighboring countries, logistics and maritime analysis, natural conditions survey, and environmental and social considerations analysis 4-2 To examine the direction of development policy of Dongo Kundu port facility and Mombasa Port 4-3 To develop Dongo Kundu Port Facility and Mombasa Port Master Plan			
5 Port development implementation/ investment program 5-1 To examine the direction of port development implementation and investment policy. 5-2 To develop the port development implementation/ investment plan			
6 Provision of necessary technical assistance 6-1 To examine and implement the technical assistance taking into consideration the compatibility with TMEA's technical assistance 6-2 To conduct the training program in Japan and/or third countries 6-3 To hold the workshop/seminar in Kenya			

(4) Plan of Operation

Tentative Plan of Operation (PO)

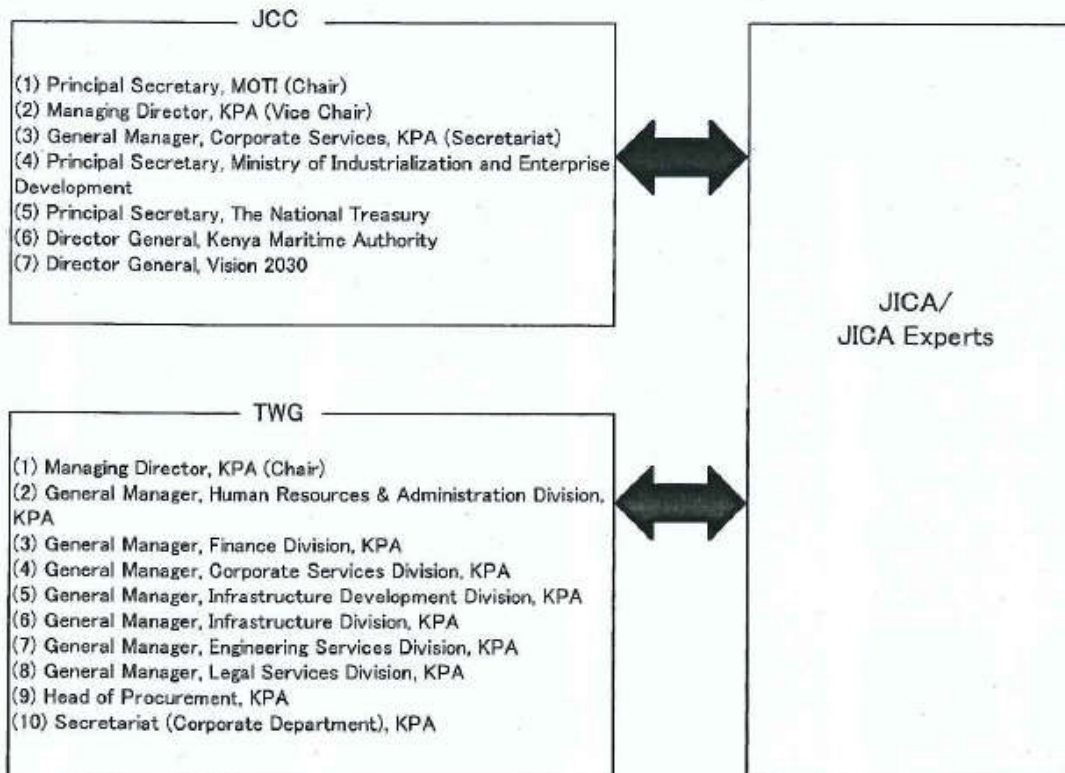
Annex 2

The Project for Technical Assistance to Kenya Ports Authority on Dongo Kundu Port, Mombasa Master Plan

Year	2014						2015									
Month	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	
Total Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1. Review of the existing port development plan and related information																
1-1	←→		←→													
1-2	←→		←→													
1-3	←→		←→													
2. Information collection and analysis, which is related to Mombasa Area Development																
2-1	←→		←→													
2-2	←→		←→													
2-3	←→		←→													
2-4	←→		←→													
2-5	←→		←→													
2-6	←→		←→													
2-7	←→		←→													
3. Forecast demand forecast																
3-1	←→		←→													
3-2	←→		←→													
3-3	←→		←→													
3-4	←→		←→													
4. Set-up of vision and concept for Dongo Kundu Port Facility and Mombasa Port Master Plan																
4-1							←→									
4-2							←→									
4-3							←→									
5. Port development implementation/ investment program																
5-1							←→									
5-2							←→									
6. Provision of necessary technical assistance																
6-1	←→		←→		←→		←→		←→		←→		←→		←→	
6-2																
6-3	←→		←→		←→		←→		←→		←→		←→		←→	
Experts																
Chief Adviser/ Port Development Planning	←→		←→		←→		←→		←→		←→		←→		←→	
Demand Forecast/ Economic Analysis	←→		←→		←→		←→		←→		←→		←→		←→	
Logistic Planning	←→		←→		←→		←→		←→		←→		←→		←→	
Maritime Trade	←→		←→		←→		←→		←→		←→		←→		←→	
Port Facility Planning	←→		←→		←→		←→		←→		←→		←→		←→	
Port Operation	←→		←→		←→		←→		←→		←→		←→		←→	
Natural Condition Survey	←→		←→		←→		←→		←→		←→		←→		←→	
Environmental and Social Considerations	←→		←→		←→		←→		←→		←→		←→		←→	
Joint Coordinating Committee (JCC)																
Holding of JCC																
Stakeholder Meeting																
Holding of Stakeholder Meeting																
Reports																
Submission of the Reports																
	IC/R						IT/R					DF/R			F/R	

(5) Project Organization Chart

Annex 3 Project Organization Chart



(6) List of Proposed Members of Joint Coordination Committee

Annex 4 A List of Proposed Members of Joint Coordinating Committee

Joint Coordinating Committee (hereinafter referred to as “JCC”) will be established in order to facilitate inter-organizational coordination. JCC will be held whenever deems it necessary. The proposed members of JCC are as follows, and additional members are allowed as deemed necessary;

Kenyan Side

- (1) Principal Secretary, MOTI (Chair)
- (2) Managing Director, KPA (Vice Chair)
- (3) General Manager, Corporate Services, KPA (Secretariat)
- (4) Principal Secretary, Ministry of Industrialization and Enterprise Development
- (5) Principal Secretary, The National Treasury
- (6) Director General, Kenya Maritime Authority
- (7) Director General, Vision 2030

Japanese Side

- (1) JICA Experts
- (2) JICA Kenya Office
- (3) Embassy of Japan (Observer)

(7) List of Proposed Members of Technical Working Group

Annex 5 A List of Proposed Members of Technical Working Group

Technical Working Group (hereinafter referred to as "TWG") will be established in order to implement the day to day activities and consultation for the Project. A list of proposed members of TWG are as follows, and additional members are allowed as deemed necessary;

Kenyan Side

- (1) Managing Director, KPA (Chair)
- (2) General Manager, Human Resources & Administration Division, KPA
- (3) General Manager, Finance Division, KPA
- (4) General Manager, Corporate Services Division, KPA
- (5) General Manager, Infrastructure Development Division, KPA
- (6) General Manager, Infrastructure Division, KPA
- (7) General Manager, Engineering Services Division, KPA
- (8) General Manager, Legal Services Division, KPA
- (9) Head of Procurement, KPA
- (10) Secretariat (Corporate Department), KPA

Japanese Side

- (1) JICA Experts
- (2) JICA Kenya Office

(8) Main Points Discussed

Attachment 2

MAIN POINTS DISCUSSED

1. **Title of the Project**
The both sides confirmed that the title of the Project will be “The Project for Technical Assistance to Kenya Ports Authority on Dongo Kundu Port, Mombasa Master Plan”. Both sides confirmed to undertake necessary actions to formalize the title of the Project with relevant government authorities.
2. **Relevant data/information**
Both sides agreed that preparation of the Dongo Kundu Port, Mombasa Master Plan will take into consideration other developments in the Port including Mombasa Port Master Plan (2004, revised in 2009), SAPROF Review Report (2013), Integrated National Transport Policy (2009) and the proposed 50 Year National Transport Master Plan (ongoing).
3. **Coordination with Master Plan for Dongo Kundu**
The both sides recognized the importance of harmonization between the Mombasa Port Master Plan and Special Economic Zone (SEZ) Master Plan in Dongo Kundu Area (“The Project on Master Plan for Development of Dongo Kundu, Mombasa Special Economic Zone” conducted by JICA), and agreed to take necessary actions for the required coordination of the said two Master Plan studies.
4. **Target area of the Project**
Both sides agreed that the target area of the project is whole Mombasa Port comprised of north side (Kipevu area) and south side (Dongo Kundu Area), and comprehensive Mombasa Port Master Plan is reviewed and revised.
5. **Timing of commencement of the Project**
Both sides agreed that the Project will be commenced after the submission of the grand design of SEZ in Dongo Kundu Area by SEZ Master Plan study to the Kenyan side around June, 2014.
6. **Stakeholder Meeting**
The both sides agreed to hold the Stakeholder Meeting aiming at the dissemination of the contents of the Master Plan study to any stakeholder during its implementation in accordance with the Kenyan practice.

Appendix 3 Revised Project Design Matrix (PDM) and Plan of Operation (PO)

(1) Project Design Matrix (PDM)

Project Design Matrix (PDM)

The Project for Technical Assistance to Kenya Ports Authority on Dongo Kundu Port, Mombasa Master Plan

Target Area: Mombasa Port Area

Target Group: Kenya Ports Authority

Project Implementation Period: From August 2014 (15 months)

Date Prepared: August 26, 2014

Version: 2

Narrative Summary	Objectively Verifiable Indicators	Data Source/ Means of Verification	Important Assumption
<p>Overall Goal Projects which aim at Mombasa Port development are implemented in accordance to the Mombasa Port Master Plan.</p>	<p>At least one project is implemented among the several number of components which are listed in Dongo Kundu Port, Mombasa Master Plan</p>	<ul style="list-style-type: none"> - KPA annual report/ strategic plan - Interview Survey from KPA - National Transport Integrated Policy - Kenya Vision 2030 	<ul style="list-style-type: none"> - Mombasa Port development policy and its importance of the Government of Kenya will not be changed.
<p>Project Purpose Capacity of KPA staff on port development is enhanced.</p>	<ol style="list-style-type: none"> 1. Dongo Kundu Port, Mombasa development plan is established and shared by KPA and MTI. 2. All necessary documents including port development policy are prepared. 	<ol style="list-style-type: none"> 1. Approved port development plan (master plan) 2. Budget allocation plan, human resource development plan and other necessary documents 	<ul style="list-style-type: none"> - The Kenyan economy will grow steadily.
<p>Output</p> <ol style="list-style-type: none"> 1 Mombasa Port Master Plan (revised in 2009 by KPA) is reviewed and revised. 2 Strategic planning and management system in KPA is improved. 3 Future demand and capacity forecast method in KPA is improved. 4 Comprehensive Mombasa Port development implementation/ investment plan is prepared. 	<ol style="list-style-type: none"> 1-1 Future demand forecast is established. 1-2 KPA's strategy for port development is compiled. 1-3 Dongo Kundu Port, Mombasa master plan is drafted. 2-1 Human resource capacity of strategic planning and management of KPA is developed. 2-2 Analysis and recommendations are made for solutions against issues such as port development plan, port management, concession contract, etc., by joint work between KPA staff and JICA experts. 3-1 Future demand forecast model is developed. 3-2 Future capacity forecast method is developed. 4-1 Port development implementation plan is prepared. 4-2 Port development investment plan is prepared. 	<ol style="list-style-type: none"> 1-1 KPA annual report/ strategic plan 1-2 KPA strategic plan 1-3 Port master plan (draft) National Transport Integrated Policy Kenya Vision 2030 2-1 Human resource development plan in KPA 2-2 Analysis and recommendation report on current issues in KPA 3-1 Future demand forecast model in KPA 3-2 Future capacity forecast method in KPA 4-1 Port development implementation plan in KPA 4-2 Port development investment plan in KPA 	<ul style="list-style-type: none"> - KPA secures budget and necessary number of personnels required for establishment of the port development plan.

Activities	Inputs (Japanese side)	Inputs (Kenyan side)	Preconditions
<p>1 Review of Existing Port Development Plan and related Information</p> <p>1-1 To review existing port development plan 1-2 To review existing port efficiency improvement plan 1-3 To review existing national development plan, plans for urban, transportation, industry, trade and other relevant sectors</p>	<p>1. Dispatch of Japanese Experts Area of Expertise - Chief Adviser/ Port Development Planning - Demand Forecast/ Economic Analysis - Logistic Planning - Maritime Trade - Port Facility Planning - Port Operation - Natural Condition Survey - Environmental and Social Considerations - Financial Analysis/ Investment Plan - Training Program</p>	<p>1. Services of KPA's counterpart personnel and administrative personnel Suitable office space with necessary equipment 2. Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Project other than the equipment provided by JICA 3. Information as well as support in obtaining medical service 4. Credentials or identification cards 5. Available data (including maps and photographs) and information related to the Project 6. Running expenses necessary for the implementation of the Project 7. Expenses necessary for transportation within Kenya of the equipment as well as for the installation, operation and maintenance 8. Necessary facilities to the JICA experts for the remittance as well as utilization of the funds introduced into Kenya from Japan in connection with the implementation of the Project 9.</p>	<p>- Security situation in Mombasa Port area will not get drastically worse. - Yen Loan Project (Container Terminal Phase 1) and SEZ MP will be implemented as scheduled. - KPA staff being in charge of establishment of port development plan will not be lost.</p>
<p>2 Information Collection and Analysis, which is related to Mombasa Area Development</p> <p>2-1 To collect and analyze data and information related to port activities 2-2 To collect and analyze data and information related to transportation, infrastructure, industry and trade around the port 2-3 To collect and analyze data and information related to the natural conditions and environmental and social considerations in the vicinity of the port 2-4 To collect and analyze data and information related to the maritime transportation in the East Africa region 2-5 To collect and analyze data and information related to the Northern Corridor 2-6 To review the work plan and its contents of technical assistance conducted by the Trade Mark East Africa (hereinafter referred to as "TMEA") 2-7 To collect data and information of relevant studies including the Mombasa SEZ Master Plan, Mombasa Urban Development Master plan, Northern Corridor Logistic Master Plan and etc</p>	<p>2. Counterpart training in Japan Trainings required for the Project</p> <p>3. Natural Conditions Survey Natural conditions survey (i.e. soil investigation, bathymetric survey, Environment and Social Considerations) required for the Project</p>		
<p>3 Future Demand Forecast</p> <p>3-1 To develop future demand forecast model 3-2 To forecast the trend of ship calls 3-3 To forecast future cargo traffic demand and capacity 3-4 To forecast future passenger demand forecast</p>	<p>4. Equipment Items required for the Project</p>		
<p>4 Set-up of Vision and Concept for Dongo Kundu Port Facility and Mombasa Port Master Plan</p> <p>4-1 To conduct the study on social and economic analysis, port economic policy of neighboring countries, logistics and maritime analysis, natural conditions survey, and environmental and social considerations analysis 4-2 To examine the direction of development policy of Dongo Kundu port facility and Mombasa Port To develop Dongo Kundu Port Facility and Mombasa Port Master Plan in consistency with 4-3 Dongo Kundu SEZ M/P</p>			
<p>5 Port Development Implementation/ Investment Program</p> <p>5-1 To examine the direction of port development implementation and investment policy. 5-2 To develop the port development implementation/ investment plan</p>			
<p>6 Provision of Necessary Technical Assistance</p> <p>6-1 To examine and implement the technical assistance taking into consideration the compatibility with TMEA's technical assistance</p>			

(2) Plan of Operation (PO)

Tentative Plan of Operation (PO)

Version 2

The Project for Technical Assistance to Kenya Ports Authority on Dongo Kundu Port, Mombasa Master Plan

Year	2014					2015										
	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	
Month																
Total Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1. Review of Existing Port Development Plan and related Information																
1-1	To review existing port development plan															
1-2	To review existing port efficiency improvement plan															
1-3	To review existing national development plan, plans for urban, transportation, industry, trade and other relevant sectors															
2. Information Collection and Analysis, which is related to Mombasa Area Development																
2-1	To collect and analyze data and information related to port activities															
2-2	To collect and analyze data and information related to transportation, infrastructure, industry and trade around the port															
2-3	To collect and analyze data and information related to the natural conditions and environmental and social considerations in the vicinity of the port															
2-4	To collect and analyze data and information related to the maritime transportation in the East Africa region															
2-5	To collect and analyze data and information related to the Northern Corridor															
2-6	To review the work plan and its contents of technical assistance conducted by the Trade Mark East Africa (hereinafter referred to as "TMEA")															
2-7	To collect data and information of relevant studies including the Mombasa SEZ Master Plan, Mombasa Urban Development Master plan, Northern Corridor Logistic Master Plan and etc.															
3. Forecast Demand Forecast																
3-1	To develop the future demand forecast model															
3-2	To forecast the trend of ship calls															
3-3	To forecast future cargo traffic demand and capacity															
3-4	To forecast future passenger demand forecast															
4. Set-up of Vision and Concept for Dongo Kundu Port Facility and Mombasa Port Master Plan																
4-1	To conduct the study on social and economic analysis, port economic policy of neighboring countries, logistics and maritime analysis, natural conditions survey, and environmental and social considerations analysis.															
4-2	To examine the direction of development policy of Dongo Kundu port facility and Mombasa Port															
4-3	To develop Dongo Kundu Port Facility and Mombasa Port Master Plan in consistency with Dongo Kundu SEZ M/P															
5. Port Development Implementation/ Investment Program																
5-1	To examine the direction of port development implementation and investment policy.															
5-2	To develop the port development implementation/ investment plan															
6. Provision of Necessary Technical Assistance																
6-1	To examine and implement the technical assistance taking into consideration the compatibility with TMEA's technical assistance															
Experts																
Chief Adviser/ Port Development Planning (1)																
Port Development Planning (2)																
Logistic Planning (2) / Demand Forecast (1)																
Demand Forecast (2) / Economic Analysis																
Logistic Planning (1)																
Maritime Trade																
Port Facility Planning																
Port Operation																
Natural Condition Survey																
Environmental and Social Considerations																
Financial Analysis / Investment Plan																
Training Program																
Joint Coordinating Committee (JCC)																
Holding of JCC																
Stakeholder Meeting																
Holding of Stakeholder Meeting																
Training Program																
Implementation of Training Program in Japan																
Reports																
Submission of the Reports																
	W/P					PG/R1					PG/R2	PG/R3			PC/R	

W/P: Work Plan, PG/R: Progress Report, PC/R: Project Completion Report

Appendix 4 Joint Coordination Committee

The project team of JICA (hereinafter referred as “the Team”) will have a series of meetings with the Joint Coordinating Committee (hereinafter referred to as “JCC”) and Technical Working Group (hereinafter referred to as “TWG”) to confirm and identify the detailed scope of the project in the first stage and to confirm the progress of the study at each stage of the project.

(1) The 1st JCC

The 1st JCC was held on 26 Aug 2014 at Ministry of Transport and Infrastructure, Nairobi.

Date & Time	26 th August 2014 15:15 – 16:30	
Venue	Ministry of Transport and Infrastructure, Nairobi	
Attendees	Title, Organization	
Kenyan Side		
Mr. Nduva Muli, EBS	Principal Secretary, Ministry of Transport & Infrastructure	
Mr. D. G. Hunda	Senior Economist, Ministry of Transport & Infrastructure	
Mr. Paul Kingori	Senior Economist, Ministry of Transport & Infrastructure	
Mr. Charles W. Mahinda	Ag. Director, Medium & Large Industries, Ministry of Industrialization & Enterprise Development	
Mr. George Makateto	AOI, Ministry of Industrialization & Enterprise Development	
Mr. J. O. Nyalandi	G. M. Corporate Service, KPA	
Mr. Denis Lewa Muganga	Principal Economist (Corporate Development & Planning), KPA	
Mr. Eric Misoka	Marine Officer, Kenya Maritime Authority Kingori	
Japanese Side		
Mr. Masahiro Yoshimi	Executive Technical Advisor to the Director General, Infrastructure and Peace Building Department, JICA	
Mr. Yoshimoto Koyanagi	Team 1, Transportation and ICT Group, Infrastructure and Peacebuilding Department, JICA	
Mr. Koji Jitsukawa	Deputy Head of Mission, JICA Kenya Office	
Dr. Steve N. Mogere	Infrastructure and Evaluation Advisor, JICA Kenya Office	
Mr. Toshio Azuma	Team Leader, JICA Project Team	
Mr. Hideki Yokomoto Mr. Hiroyuki Takakaze Mr. Takashi Shimada Mr. Satoshi Ando Mr. Masaomi Komoto	JICA Project Team	
Minutes		
Detailed plan of the project was explained by the JICA Project Team based on the Work Plan prepared by the team. A questions and answers session in which various opinion was exchanged followed. It was agreed to discuss details of the project during the Kick-off meeting in Mombasa. The following comments were made by the Kenyan side;		
<ul style="list-style-type: none"> ● The project title should be corrected to “Mombasa Port including Dongo Kundu” from the current “Dongo Kundu, Mombasa Port”. ● Short-term development plan from 2015 to 2020 and a midterm plan until 2035 as well as investment planning should be included in the study. ● Close coordination with SEZ M/P is crucial and it must be included in the Work Plan. ● Stakeholder meetings shall be held targeting shipping companies and logistics companies excluding fishery organization. ● Governor of Mombasa state shall be included in the member of JCC. ● Kick-off meeting in Mombasa will be held on 29th August 2014. 		

(2) The 2nd JCC

The 2nd JCC was held on 31 Mar 2015 at Ministry of Transport and Infrastructure, Nairobi.

Date & Time	31 st March 2015, 10:00 – 12:00	
Venue	Ministry of Transport and Infrastructure, Nairobi	
	Attendees	Title, Organization
Kenyan Side		
	Mr. George Ngegwa	Ministry of Transport & Infrastructure
	Mr. Robert Gatonga	National Treasury
	Mr. John Omingo	Kenya Maritime Authority
	Mr. George Makateto	AOI, Ministry of Industrialization & Enterprise Development
	Mr. Lewell Njehia	Ministry of Industrialization & Enterprise Development
	Mr. John Kariuki	VDS
	Mr. Martin Mutuku	Head of Corporate Development, Kenya Ports Authority
Japanese Side		
	Mr. Kenji Yokota	JICA Kenya Office
	Mr. Kiyonori Matsushima	JICA Kenya Office
	Dr. Steve N. Mogere	Infrastructure and Evaluation Advisor, JICA Kenya Office
	Mr. Toshio Azuma	Team Leader, JICA Project Team
	Mr. Masato Suzuki Mr. Hideki Yokomoto Mr. Hiroyuki Takakaze Mr. Shingo Shiratori Mr. Hiroshi Horikawa	JICA Project Team
Minutes		
<p>1. Introduction</p> <p>2. Progress Report on Master Plan</p> <p>The 1st Progress Report was explained by the JICA Project Team Leader providing an overview of the progress made so far. The progress presented includes results of natural condition survey, future development of Mombasa Port and outstanding issues to complete the Master Plan.</p> <p>3. Q&A</p> <p>The Dongo Kundu SEZ and the Mombasa Master plan need to complement each other. It was also agreed that the two JST teams on SEZ and Master plan to work closely together especially on the issue of RAP for Dongo Kundu to avoid duplications. It was agreed that RAP needs to be fast-tracked it is important to work very closely with the County Government of Mombasa.</p> <p>The proposal to have two berths at Dongo Kundu dedicated for wheat and motor vehicles need to be revisited. This is because the Dongo Kundu Free port is meant to server the Special Economic zones that the products expected from the industrial zones etc.</p> <p>The implication of the Second Container Terminal should be analyzed and also the issue of Mombasa Port being a landlord port should also be addressed in the Master plan</p> <p>The Master Plan should also cover the in more detail the future of Lamu port- the management and type of cargo to be handled.</p> <p>The Final Master Plan document should have a clear implementation plan.</p> <p>Agreed that KPA should share with the JST the detailed comments done on 1st Progress Report so that they can be addressed and included in the 2nd Progress Report.</p>		

It was agreed that going forward, progress reports and other documents should be shared in good time so that the counterparts can provide comments for improvement. JST and counterpart team should also work very closely together.

4. Way Forward

Agreed that KPA should share with the JST the detailed comments done on 1st Progress Report so that they can be addressed and included in the 2nd Progress Report.

It was agreed that going forward, progress reports and other documents should be shared in good time so that the counterparts can provide comments for improvement. JST and counterpart team should also work very closely together.

(3) The 3rd JCC

MINUTES OF THE THIRD JOINT COORDINATION COMMITTEE (JCC) MEETING HELD ON 11TH AUGUST 2015 AT THE MINISTRY OF TRANSPORT & INFRASTRUCTURE HEADQUARTERS, PUBLIC WORKS BOARDROOM, NAIROBI

ATTENDANCE

A. PUBLIC AGENCIES

- 1) George Ndegwa - Chief Economist, Ministry of Transport
- Chairing
- 2) Cosmas Cherop - Ag. Director General, Kenya Maritime Authority
- 3) Martin Mutuku - Head of Corporate Development, Kenya Ports Authority
- 4) John Omingo - Head of Commercial Shipping, Kenya Maritime Authority
- 5) Charles Mahinda - Ag. Director Ministry of Industrialisation and
Enterprise Development
- 6) Denis Muganga - Principal Economist, Kenya Ports Authority
- Taking Notes

B. JICA KENYA OFFICE

- 7) Koji Noda - Senior Representative/Deputy Mission Leader
- 8) Kenji Yokota - Representative
- 9) Dr. Steve Mogere - Advisor, Infrastructure
- 10) Kiyonori Matsushima - Representative

C. JICA STUDY TEAM (JST)

- 11) Toshio Azuma - Team Leader
- 12) Masato Suzuki - Port Development and Planning
- 13) Hiroyuki Takakaze - Port Facility Planning
- 14) Takashi Shimada - Port Management
- 15) Tomoe Takaeda - Environmental and Social Considerations

MINUTE 1/11/8/2015: INTRODUCTION

The Chair called the meeting to order and opened with a word of prayer. He then informed members that the Ministry recognised this project as a very important project for the Republic of Kenya that required maximum support. The Ministry was therefore keen on moving this project forward.

The meeting was also informed that the Principal Secretary, Ministry of Transport, would have liked to chair the meeting but was handling other equally important matters.

The Chair indicated that the main purpose of the meeting was to receive the third Progress Report of the Mombasa Port Master Plan Review and provide comments and guidance on the way forward.

The JST was then invited to take the meeting through the presentation.

MINUTE 2/11/8/2015: 3RD PROGRESS REPORT - PRESENTATION

The Team Leader Mr. Azuma, expressed his gratitude for the convening of the JCC and for all officers who were able to make time to attend the meeting. He then updated the meeting on the schedule of

activities for the JST, as follows:

- a. The JCC meeting would receive a presentation of the Progress Report 3 in this meeting;
- b. The JST will then polish the Report by the next day, 12th August 2015;
- c. By Friday 14th August, JST will submit a revised Report 3 to KPA and the JCC;
- d. JST will then travel to Japan over the weekend; and
- e. KPA will be expected to compile comments and submit to JST in Tokyo, based on which the JST will finalise and submit a Final Report.

Presentation of the Report

The presentation provided an overview, scope and background of the project. It then highlighted the main goal of the Master Plan and strategies.

The main topics covered included the following:

1.0 Demand Forecast - important to note is that most cargo components will triple between 2014 and 2035.

2.0 Facility Planning - it was indicated that high occupancy ratios and long waiting time at berths (50% of vessels will be affected by long waiting time) are currently experienced at the Port of Mombasa. Further;

- A mixture of various commodities are handled at one berth, followed by low cargo handling productivity;
- Inadequate berth length for calling vessels (60% of calling vessels were longer than berth length);
- Low productivity rampant; and
- Capacity saturation with cargo demand – total of 17 berths currently at Port of Mombasa. These will not cope with increasing demand in the near future.

3.0 Development Scenarios - two scenarios were considered in this Master Plan Review;

- a. Base scenario – requires minimal investments but maximises utilisation of existing facilities; and
- b. Alternative scenario – proposes utilising Dongo Kundu area for coal and clinker cargoes.

4.0 Phased Development Plan – different aspects of the Master Plan will be undertaken at different stages. The main difference between scenario 1 and 2 is that clinker and coal will be shifted to Dongo Kundu area in scenario 2.

The Lighter area will also be developed for general cargo.

5.0 Urgent, Mid Term and Long Term Plans – specific proposals are made in the Master Plan for projects to be undertaken in response to the needs and growing demand. These cover both new developments and improvements to existing structures/facilities.

- a. **New facilities**, including Phases 2 to 5 of the Mombasa Port Development Plan (MPDP); Multipurpose berths at Dongo Kundu; development of Lighter Area; new Passenger Terminal; and a new Kipevu Oil Terminal (KOT).
- b. **Improvement works** on existing facilities.

6.0 Cargo Handling Capacities – capacity is projected to be 72.9million tons for scenario 2; and 69.8million tons for the base case. The excess cargoes are likely to be handled at a new international port, Lamu or other commercial ports that will be developed by KPA.

7.0 Economic and Financial Analysis – the Plan presents the costs for each scenario and also the costs for rehabilitation of facilities. Further analysis is as presented below:

a. Economic Viabilities

- Overflowing cargo will go to Bagamoyo Port in Tanzania if no new developments occur
- Economic Internal Rate of Return (EIRR) for scenario 1 is estimated at 18.5%
- Economic Internal Rate of Return (EIRR) for scenario 2 is estimated at 17.3%

b. Financial Viabilities

- Costs for comprehensive development of the Plan were analysed and estimated as below:
 - o Scenario 1, New Facilities – \$1,323million over the planning period;
 - o Scenario 2, New Facilities - \$1,645million over the planning period.
 - o Other improvement works for both scenarios - \$696million.
- Revenues, based on current Tariff will be collected from; port dues, stevedoring, shore-handling, wharfage and concession fees.
- Weighted average cost of capital, comprising of Soft loan; GoK funding and Domestic Market financing will be considered.
- Weighted average cost of capital was estimated at 5.1%

c. Financial Internal Rate of Return (FIRR)

- 9.7% for the Scenario 1; and
- 8.9% for Scenario 2.

8.0 PPP Consideration – two main proposals are made, presented in two cases;

- Case A and B
- FIRR for case A – public sector 11.6% and private party 7.0%
- FIRR for case B – public sector 6.9% and private party 12.6%

Various combinations will be considered and conclusions made based on each specific project.

9.0 Environment and Social Considerations

Major concerns noted were as follows:

- channel dredging and reclamation
- clearance of mangroves (36 areas affected)
- reforestation required
- increased pollution
- resettlement and compensation

Suggestions for future studies

- Full Environmental and Social Impact Assessment (ESIA)
- Mangrove study
- Resettlement Action Plan (RAP)

10.0 Administrative Issues

1. Coordination – KPA; KRC and KENHA are carrying out projects that are inter-related and aimed at one goal. These should be harmonised and coordinated in order to ensure smooth implementation;
2. SGR alignment and access road intersecting thus will cause interruptions. This should be resolved;
3. Proposed to have a new Port Act separate from the current KPA Act. This will provide clarity and guide operations of the ports and terminals;
4. Transformation to a Land Lord Port – need for clear structures, including the management of concessions;
5. Introduction of an adequate PPP Scheme;
6. Introduction of a Community Based System; and
7. Upgrade Gate System and Introduce Container Booking System.

MINUTE 3/11/8/2015: COMMENTS FROM THE FLOOR

1. Kenya Ports Authority (KPA)

KPA indicated that the progress made so far is commendable and a lot of improvement has been seen from the First Draft Report. The following issues however, still need to be considered:

- a. It is important to use the latest data for 2014 in all the analysis done;
- b. Comments received from stakeholders' meetings held in Mombasa should be incorporated in the report. These were mainly on the issues below;
 - Port operators - how do they fit in the Master Plan?
 - Operations outside the port – what happens when goods leave the port? Need to align Port Master Plan with County/City Planning (for roads, by-pass, rail, etc.)
 - CFSs not fully tackled in the Master Plan. How are they likely to be impacted by the SGR?
- c. Implications of Lamu port, ICDs and Small Ports will be very useful in the Master Plan Review;
- d. On-going studies supported by Trade Mark East Africa (TMEA) (studies from Inros Lackner) should also be considered in the current analysis.

JST Response

- a) The Team indicated that the base data used was 2014 for demand forecast. 2013 data was used for capacity analysis only. The new data provided by KPA recently will also be considered in final report as much as possible. Currently, sorting and filtering of 2014 data is on-going.
- b) Harmonisation of Port Master Plan and County Urban Development Plan will be considered.
- c) Traffic congestion outside the Port arises from various reasons, such as container handling through the city area. These issues will be eased when Dongo Kundu or new container terminal is fully developed because CFS's function is inside the terminal. The SGR will also ease traffic congestion if container transportation is shifted to railway, but transportation of containers by railway is not much.
- d) Lamu Port, ICDs and Small Ports are recognised as important, the Team is conducting Mombasa Port master plan including Dongo Kundu area, but the scope does not cover a comprehensive KPA strategy. The JST will only provide more descriptions in the next report and a brief analysis of their impact on the Port Master Plan.

- e) JST also confirms the need for berths 11 to 13 to be rehabilitated urgently and used for general cargo. The number of general cargo berths will have a shortage. Therefore, berths 11 to 13 are not required to transform from general cargo to containers. Container terminal capacity will increase rapidly by berths 21 and 22.

2. Kenya Maritime Authority (KMA)

- a) KMA appreciated the comprehensive report. They however expressed the need to embark on completion and implementation so as to ease the current situation in Mombasa and the Northern Corridor. The timelines for addressing emergencies of the current scenario should be highlighted and adhered to.
- b) The Container Freight Stations (CFSs) scenario needs to be addressed. Possibilities should include considering consolidating them for Export Activities. Consolidation of trade volumes for small exporters who may not be able to fill up containers could be done at such stations, among other activities.
- c) We have a lot of capacities in ICDs which are under-utilised. Consider direct cargo transfers by rail from Mombasa to Nairobi, Eldoret and Kisumu. These proposals should come clear in the Master Plan.

3. Ministry of Industrialisation and Enterprise Development (MOIED)

- a) Clarification was sought on the Port Master Plan title. This should already include everything, without having to mention Dongo Kundu.
- b) MOIED is more focused on Dongo Kundu, however, timelines indicated start from 2022, for development of the first berth at Dongo Kundu Free Port. This implies that the SEZ will not be supported by a port facility when ready, which is expected to be before 2022.
- c) The southern by-pass is also expected by 2018, but not well covered in the Master Plan. Even if ready, without the Free Port, nothing much will happen in Dongo Kundu.
- d) There is therefore need to harmonise the timelines.

JST Response

- a) Current situation of ICDs explained in terms of capacities. All are currently under 20% utilization. Despite being more costly than rail, cargo owners seem to prefer road transport – just in time, door to door delivery for their cargo. Secondary handling involved when railway is used poses an additional cost and possible delays, thus as the railway is less considered, highways should also be considered for expansion so as to increase traffic flow and speed up evacuation.
- b) The JST has discussed with Dongo Kundu SEZ Study Team which indicated that the first terminal at the Free Port should be available by 2022. The southern by-pass is also being considered for Phases 2 and 3 of second Container Terminal (CT2), whose timing is around 2019.
- c) The highway therefore remains most important for the SEZ.

4. JICA Kenya Office

- 1) The representatives indicated that the role of JCC is to make certain decisions and clarify some of the issues that need clear direction.
- 2) JICA organised a Mission at KPA last month to look at Dongo Kundu Free Port which is required for the SEZ. It however learnt that KPA priorities are different currently, with more focus on CT2 Phase 2 and 3.
- 3) Ministries represented in the JCC should therefore present their positions and preferences for the JCC to direct on the way forward.
- 4) Financing for Dongo Kundu should then be embarked on as soon as possible. JICA is ready to cater for this and will be open for discussions at the appropriate time.
- 5) On the southern by-pass, funding issues have been addressed but a few challenges still need to be cleared before finalisation. There is need for more coordination for implementation to happen smoothly.
- 6) It should also be noted that the railway is targeting completion by June 3rd 2017.
- 7) This Master Plan process therefore presents a reform agenda for KPA so as to enable it respond to issues.
- 8) JICA proposes the setting up of a Ports Department in the Ministry, which would be important in providing guidance on key issues, including the development of a Port Policy, which needs to be addressed urgently.
- 9) Issues on political economy should also be considered. The World Bank study for instance, presents good findings on the same.
- 10) Key issues also need to be noted for tackling such as labour issues. These would however require clear guidance from KPA management and the Ministry.
- 11) The Master Plan comes out very strongly on the infrastructure side, but how will KPA address the implementation and fast tracking of these issues, especially those which are reform in nature, such as the Ports Regulator, among others.
- 12) Competition between Dongo Kundu and new terminal should also be addressed. What policy will guide this? Government thinking and direction is therefore required.
- 13) A candid discussion on these issues is urgently required for us to move forward.

5. Other Issues

- a) The SEZ Master Plan was finalised but does not seem to have been fully considered in the Port Master Plan. A question was therefore raised as to who carries the day? Prioritisation of issues and harmony between the two Master Plans is necessary.
- b) It should be noted that the Free Port was to support the SEZ. The road was to be ready by 2018. The MOIED would therefore have to try to reconcile itself to these timelines, however, if priorities of KPA are different from those of MOIED then there will be need for further discussions. This needs to be taken up at policy level because the SEZ needs facilitation by 2019, at the very latest. The by-pass alignment challenges should also be ironed out in good time.
- c) Poverty and unemployment are critical needs of the flagship projects of Vision 2030. These needs must be responded to. All projects should therefore be aligned appropriately. The Master Plan which

has still not been finalised should therefore be harmonised to help achieve the greater goals of the country.

- d) Issues of Port Policy also need to be taken up urgently. This will create harmony and coordination in the sector.
- e) Issues of coordination of Concessions could also be tackled along this process.
- f) Reference was made to a meeting held in March 2015 between the Government of Kenya and Government of Japan, when His Excellency the President went to Japan. The two governments agreed on Mombasa Port Development Cooperation, including development of Phase 2 and 3 of the new Terminal and Dongo Kundu area. Considering the costs of the Master Plan development, JICA may not manage to finance all these projects, so GoK will have to consider PPPs, but JICA is ready to discuss most of these financing requirements. It is therefore important to ensure a clear way forward is achieved.

MINUTE 4/11/8/2015: Chair's Remarks and Way Forward

- 1) The Chair indicated that as we progress to finalization, issues coming out must be mentioned and indications provided for addressing them, including alternative options.
- 2) The Ministry will therefore coordinate a meeting soon to have the Principal Secretaries for all institutions represented on the JCC to deliberate on the key issues raised and agree on the best way forward.
- 3) KMA, the Maritime Regulator, was also tasked to initiate discussions on the Port Policy. They will however be supported by the Ministry. Considering that TMEA had indicated readiness to fund a National Port Policy if requested by the Government, this will be considered for follow up.

MINUTE 5/11/8/2015: A.O.B

There being no other business the meeting ended at 12 noon.

Appendix 5 Technical Working Group

(1) The 1st TWG

The 1st TWG was held on 29th August 2014 at KPA Mombasa.

Date & Time	29 th August 2014	
Venue	KPA Mombasa	
Attendees	Title, Organization	
Kenyan Side		
Mr. J.O. Nyarandi	General Manager, Corporate Services, KPA	
Mr. Mohamad Yuraf Faruk	Principal Statistician, KPA	
Ms. Rukia Alawi	Assistant Statistician, KPA	
Mr. Denis Lewa Muganga	Principal Economist, KPA	
Mr. William K. Tenay	Senior Projects Engineer (Civil), KPA	
Mr. Peter Masinde	Principal Operational Officer, KPA	
Mr. Mohamed Mwazuzu	Senior Operational Officer, KPA	
JICA Team		
Mr. Toshio Azuma	Team Leader	
Mr. Hideki Yokomoto	Demand Forecast / Logistics	
Mr. Hiroyuki Takakaze	Port Facility Planning	
Mr. Takashi Shimada	Port Management	
Mr. Satoshi Ando	Natural Conditions Survey	
Ms. Tomoe Takeda	Environmental and Social Considerations	
Mr. Masaomi Komoto	Training Planning / Operational Coordination	
Mr. Koji Yamada	Team Leader, SEZ M/P Project (Observer)	
Supporting Consultant		
Mr. Ngure Mwaniki	Economist, MA Consultant Group	
Mr. Aziz Ramzan	Port Operations Expert, MA Consulting Group	
Mr. Antony Muriithi	Port Planning Expert, MA Consulting Group	
Minutes		
<p>1. Opening by Mr. Nyalandi</p> <p>1) He apologized for the delay due to the President's visit to Mombasa Port. Counterparts of Kenyan side were introduced; the Captain and person in charge of finance were absent.</p> <p>2) As highlighted in the JCC, the title of this project must be “Master Plan Study of the Mombasa Port including Dongo Kundu Free Port”. This project is aimed to update “Port Master Plan Study of the Port of Mombasa including Development of Free Trade Zone” in 2009 and to enhance the capability of KPA staff. For the former matter, plan and schedule of port facilities expansion, schedule and scale of Dongo Kundu SEZ development, investment timing and financial source for dirty cargo terminal such as oil product, clinker, coal etc. shall be studied. For the latter one, KPA itself intend to study financial model including economic and financial analysis. Since demand forecast analysis was carried out in Dongo Kundu SEZ M/P, both JICA teams must cooperate with each other to share their findings.</p> <p>2. Explanation of the Work Plan by Mr. Azuma</p> <p>The Work Plan has been explained and the proposal was accepted in the JCC held on 26th August at MOTI. There are 2 major objectives in this project. The first one is to update the port development plan including Dongo Kundu area targeting year 2035. The second one is to enhance the capability of KPA staff by transferring technologies during the project.</p> <p>3. Questions and Answers</p> <p>1) Q: What does the “Monitoring and Evaluation” stated in 3-10 of the Work Plan entail? (Mr. Denis</p>		

Muganga)

A: Enhancement of capability on demand forecasting and plan formulating is one of the important targets in this project. It is a standard practice to evaluate such result of technical transfer by both JICA team and the counterpart.

- 2) Q: Please show us the guideline and format for the data collection stated in the activities. Please logically explain us the conditions of the calculation since demand forecast and financial model must be reviewed periodically. (Mr. Mohamad Yuraf Faruk)

A: We will seek your input as we carry out this activity. The forecast model will be formulated to be flexible so that demand can be revised depending on changes in economic situations in 2~3 year intervals.

- 3) Mr. Antony Muriithi requested KPA to provide TMEA's technical assistance program so that it does not overlap with JICA's.

4. Closing by Mr. Nyalandi

The organizer of this meeting was Mr. Denis Muganga.

(2) The 2nd TWG

The 2nd TWG was held on 24th March 2015 at KPA Mombasa.

Date & Time	24 th March 2015	
Venue	KPA Headquarters Mombasa	
Attendees	Title, Organization	
KPA		
Mr. Gichiri Ndua	Managing Director	
Mr. Justus O. Nyarandi	General Manager, Corporate Services	
Ms. Muthoni Gatere	General Manager, Board and Legal Services	
Ms. Catherine Wairi	General Manager, Finance	
Mr. Salim Chingabwi	General Manager, Human Resources and Development	
Eng. Atong	General Manager, Engineering	
Capt. Twalib Hamisi	General Manager, Operations	
Mr. Joseph Birir	Head of Port Electrical Engineering	
Eng. D. O. Amadi	Head of Project Development & Management	
Mr. Martin Mutuku	Head of Corporate Development	
Mr. Denis Lewa Muganga	Principal Economist	
Mr. Mohamed I. Golicha	Senior Economist Planning	
JICA Kenya Office		
Mr. Koji Noda	Deputy Chief Representative	
Dr. Steve N. Mogere	Infrastructure and Evaluation Advisor	
JICA Team		
Mr. Toshio Azuma	Team Leader / Port Development Planning (1)	
Mr. Masato Suzuki	Port Development Planning (2)	
Mr. Hideki Yokomoto	Demand Forecast (1) / Logistics	
Mr. Shingo Shiratori	Demand Forecast (2) / Economic Analysis	
Mr. Harushige Nishida	Shipping Investigation	
Mr. Hiroyuki Takakaze	Port Facility Planning	
Ms. Tomoe Takeda	Environmental and Social Considerations	
Mr. Hiroshi Horikawa	Financial Analysis	
Supporting Staff		
Mr. Aziz Ramzan	Port Operations Expert, MA Consulting Group	
Mr. Antony Muriithi	Port Planning Expert, MA Consulting Group	
Minutes		
<p>1. Opening by General Manager Corporate Services Mr. Nyalandi (KPA) He made an opening remark at the beginning of the TWG meeting.</p> <p>2. Explanation of the First Progress Report and issues by JICA Team (JT) The First Progress Report and issues were explained by JICA Team Leader Mr. Azuma to the participants with handouts (attached), while the part of the natural conditions survey results was presented by Mr. Suzuki.</p> <p>3. Questions and Answers Session Prior to the questions and answer session, Head of Corporate Development Mr. Mutuku (KPA) briefed the comments on the First Progress Report, which were raised in the meeting on 23rd March 2015 between the KPA counterparts and JICA Team.</p> <p>1) Q: Dar es Salaam Port has an expansion of the existing container berths and a new port Bagamoyo will also be developed. How will such port development in Tanzania affect the situation of Mombasa Port. More analysis will be needed. (KPA) A: JICA Team will analyze more about the impact. (JT)</p>		

- 2) Q: Clinker should be handled at the Dongo Kundu area. (KPA)
A: Clinker is categorized dirty cargo. Therefore, it is not appropriate to handle such dirty cargo next to the vehicle berth at Dongo Kundu. (JT)
- 3) Q: Any possibility to berth cruise ships at Dongo Kundu (KPA)
A: It is important cruise ships use a berth in the vicinity of Mombasa city. So, existing Berth No.1 should be used in the future for cruise ships. (JT)
- 4) Q: Which side the existing north side or the Dongo Kundu side to be developed first? (KPA)
A: Container berths should be combined in one place. The By-Pass road to Dongo Kundu will be open in the future. (JT)
- 5) Q: Existing KOT will be relocated in the future. Therefore, the surrounding area of KOT can be used for new berths. (KPA)
A: Even KOT is relocated, the surrounding area behind KOT is narrow and very limited and sufficient area cannot be secured for yards. (JT)
- 6) Q: The future container terminal has straight line berths, requiring much reclamation. Is it possible to consider another type of berth structure in order to minimize the reclamation area. (KPA)
A: The container terminal requires enough container stacking yards. Increase of berthing capacity should be followed by adequate container stacking yard to ensure the increase of container handling capacity. (JT)
- 7) Q: According to the previous dredging records, hard rock was found in the shallow depths at nearby area where dredging was carried out. The contractor mobilized a trailer suction hopper dredger at first, but they changed to a cutter suction dredger in this regard. (KPA)
A: JT will reconfirm the investigation results. (JT)

4. Closing Remarks

Mr. Nyarandi made closing remarks and asked the KPA counterparts and JICA Team to have more discussions and meeting during the JT's stay in Mombasa.

Mr. Nyarandi asked Kenyan members of TWG to submit written materials to him if they have any additional comments and questions.

(3) The 3rd TWG

Date & Time	23 rd July 2015
Venue	KPA Mombasa
Attendees	
KPA	
Mr. Gichiri Ndua	Managing Director
Mr. J.O Nyarandi	General Manager, Corporate Services
Mr. Salim Chingabwi	General Manager, Human Resources & Development
Capt. T. Khamis	General Manager, Operations
Ms. Catherine Wairi	General Manager, Finance
Eng. Joseph Atonga	General Manager, Engineering Services
Ms. Maliam Khamis	EXCOM Secretary
Mr. Joseph Birir	Head of Port Electrical Engineering
Mr. M. Y. Faruk	Principal Statistician
Mr. Denis Muganaga	Principal Economist
Advisor	
Mr. Paul Kent	Infrastructure Planning and Economics, Nathan Associates Inc.
JICA Team	
Mr. Toshio Azuma	Team Leader / Port Development Planning (1)
Mr. Masato Suzuki	Port Development Planning (2)
Mr. Shingo Shiratori	Demand Forecast (2) / Economic Analysis
Mr. Takashi Shimada	Port Management
Mr. Hiroshi Horikawa	Financial Analysis
Mr. Masaomi Komoto	Training Planning / Operational Coordination
Supporting Staff	
Mr. Azis Ramzan	Port Operations Expert, MA Consulting Group
Minutes	
<p>1. Opening Remarks by Mr. Nyarandi</p> <p>2. Explanation of the Second Progress Report and Issues by Mr. Azuma</p> <p>3. Questions and Answers Session</p> <p>Prior to the Q&A session, Mr. Ndua expressed a series of remarks before excusing for his duty.</p> <ul style="list-style-type: none"> ● KPA and JICA Team shall communicate and consent each other on the development plan presented by JICA Team before the stake holder meeting. ● There is no analysis done for bulk oil in the report. ● The direction to go ahead the berth 23 to 24 or Dongo Kundu must be clarified taking the reform of berth 11 to 14 into consideration. ● How the lighter wharf is renovated? ● How the Lamu Port development is taken into account in the report? ● The SGR marshalling yard may have great advantages for berth 23 to 24. ● No type or kind of the cargo to be handled in Dongo Kundu is specified in the report. <p>The followings are the discussions made during the session;</p> <p>Mr. Atonga: Coal at berth 11 is not suitable. Handled in Dongo Kundu is not studied? Cargoes handled in Mbaraki to be transported through Mombasa city. It's better to handle such cargoes at the end of the wharfs.</p> <p>Mr. Azuma: Allocation of cargoes in the berth layout can be switched based on KPA's needs.</p> <p>Mr. Nyarandi: (1) Zoning of the port is required to understand the concept of the development. (2) Condition of berth 11 to 14 is very bad. It will be rehabilitated and transformed to container terminals. This transformation may have impacts to the development of berth</p>	

22 to 25 and Dongo Kundu. Direction of the development must be clarified prior to the SHM.

Capt. Khamis: Cargo handling productivity must be per berth length rather than per berth analyzed in the report since larger ships occupy 2 berths exceeding the length of a berth. Depth shall also be taken into account for defining such productivity.

Mr. Atonga: Such situation of occupying 2 berths is stated in page 5-25 of the report.

Mr. Nyarandi: Kenya's economic plan must be explained to JICA Team.

Capt. Khamis: Export cargos must be taken into account for analyzing future cargo volume which will balance with import cargoes.

Mr. Kent: (1) PPP needs better idea to facilitate. (2) Are the projections of 2025, 2030 and 2030 proper interval or duration? (3) Berth length is 200m or 300m? and 1 berth per operator? (4) Capability of the access to the port is the problem. Private investors will not come if the situation is not improved. (5) What is the maximum vessel size allowed to enter the port area?

Mr. Shimada: LOA 300m is the maximum.

Capt. Khamis: LOA 330~340m vessel may become possible after trained by TMEA.

(4) The 4th TWG

Date & Time	5 August 2015, 10:45 -13-30	
Venue	KPA Mombasa IT Block Meeting Room	
Attendees	Title / Organization	
KPA		
Mr. Martin Mutuku	Head of Corporate Development Division	
Mr. Denis Muganga	Principal Economist	
Mr. Weldon Korir	Senior Economist (P)	
Mr. Mohamed Mwazuzu	Senior Operations Officer (P)	
Mr. Geoffrey Kavate	Senior Accountant, Financial/Accounting	
Mr. Isaac O. Omoke	Statistics Officer (MI), Corporate Development Division	
Ms. Joyce Lenga	Statistics Officer, MCC	
Ms. Rukia Alawi Husuni	Assistant Statistician (Traffic), Corporate Development Division	
Ms. Faiza Mohamed	Assistant Statistic Officer, Container Operations	
JICA Team		
Mr. Toshio Azuma	Team Leader / Port Development Planning (1)	
Mr. Masato Suzuki	Port Development Planning (2)	
Mr. Shingo Shiratori	Demand Forecast (2) / Economic Analysis	
Mr. Hiroyuki Takakaze	Port Facility Planning	
Mr. Takashi Shimada	Port Management	
Ms. Tomoe Takeda	Environment and Social Considerations	
Mr. Hiroshi Horikawa	Financial Analysis	
Mr. Masaomi Komoto	Training Planning / Operational Coordination	
Supporting Consultant		
Mr. Aziz Ramzan	Port Operations Expert, MA Consulting Group	
Mr. Antony Muriithi	Port Planning Expert, MA Consulting Group	
Minutes		
<ol style="list-style-type: none"> 1. Opening Remarks by Mr. Mutuku 2. Explanation of PR3 by Mr. Suzuki 3. Q & A Session <ul style="list-style-type: none"> ● Data used in the report to be updated. For example, 2013 data is used in slide #9. (Mutuku) ● What is the difference between Scenario 1 and 2? (Mutuku) <ul style="list-style-type: none"> →Bulk(Clinker/Coal) is handled in existing berths in Scenario 1 but it is handled in Dongo Kundu in Scenario2. (Azuma) ● Why is coal still handled at berth #11? (Mutuku) <ul style="list-style-type: none"> →It must be a mistake. Coal should be handled at another berth. (Azuma) ● What is the LOA of 200,000DWT tanker in slide #35? (Mutuku) <ul style="list-style-type: none"> →Maximum LOA in Mombasa Port is 300m. (Azuma) →100,000~120,000DWT tanker has a LOA of approx. 300m. Because KPA's proposal shows 200,000DWT, dredging to -18m is required for 200,000DWT class tankers to approach. (Shimada) ● Kenya is supposed to export oil by 2020. Is it taken into account? (Mutuku) <ul style="list-style-type: none"> →A part of the planned oil berth could be used for the export. Offshore single buoy berth may be suitable for larger size tankers. (Aziz) ● Cargo demand and berth capacity in slide #36 are not consistent. (Mutuku) <ul style="list-style-type: none"> →Slide 36 is based on Scenario 1. It is consistent under Scenario 2. Berth capacity is larger than cargo demand in 2026/2027, but cargo demand will become dominant in 2030 and therefore a new terminal will be required. (Azuma) ● SGR shown in slide 55 will come up to berth #11 and handle 30% of the total cargo volume. (Mutuku) <ul style="list-style-type: none"> →The marshalling yard in the current plan is separating the road and berths and is not appropriate for smooth cargo handling. SGR can only handle 16~32% of the total cargo volume according to 		

my calculation. (Shimada)

→Eng. Tonga is in charge of this issue. More detailed discussion can be made with him. (Mutuku)

→Is it a good idea to transport clinker by SGR? (Mutuku)

- Slide #7: Import volume growth of sugar seems less and why does the import volume of rice becomes 0 in 2035? (Isaac)

→Both results are forecasted by regression analysis. Volume of rice is based on consumption volume and production volume by the Ministry of Agriculture. (Azuma)

→Rice is not only consumed in Kenya but in other neighboring countries. (Isaac)

- Slide 7: Why are there no individual forecast volumes of Soda/Cement/Fluorspar in dry bulk? And oil as well. (Isaac)

→Past data is insufficient for an accurate analysis. (Azuma)

→Oil and bunkers must have certain figures. (Isaac)

→Analysis is not done for each item but is done for the total. (Azuma)

→Demand in other neighboring countries such as Uganda should also exist. (Mutuku)

- Berth #14 is planned as a container berth and berth #16 is located apart. Does connecting berth #14 and #16 have any advantage? (Denis)

→It was understood that berth #15 could not be used for a certain reason, the same as berth #6. (Azuma)

→According to Capt. Aziz, those 2 berths are curved, soil condition is poor and siltation likely occurs at a dead end of the curved berth line. (Shimada)

- Mbaraki wharf still handles dry bulk even though dry bulk at the existing berths have been moved to Dongo Kundo in slide #21. It still does not resolve the issue as trucks carrying the dry bulk from Mbaraki still need to go through the city. (Mwazuzu)

→Another berth is required to move Mbaraki cargo to Dongo Kundo. In this plan, Mbaraki handles other bulk. (Azuma)

→Is it possible to transport Mbaraki cargo by rail? (Mwazuzu)

→It is not included in the study. (Azuma)

→Railway company usually does not prefer bulk cargo due to its cheap fee. (Shimada)

→Malfunction of the rail system is causing road congestion and cargo stagnation. Hope if the rail system could work efficiently. (Mutuku)

- Handling of titanium started in 2014 and the volume has been increasing constantly. Why does the volume reach a ceiling in 2015? (Isaac)

→Demand of titanium is limited by the capacity of the factory. (Shiratori)

- TMEA has conducted Mombasa Port Detail Study. In the report, rehabilitation of berth #11-#14 was proposed and accepted by KPA management. This should be incorporated in this report. (Mutuku)

→Rehabilitation works are included in Other Improvement Works in the report (Azuma)

- Slide #36: 130% increase in productivity is set in KPA Strategic Plan. How is this plan incorporated into the Master Plan (Denis)

→Additional equipment and facilities are required to raise the productivity up to 130%. It is costly and there is no space to build such additional facilities. (Azuma)

- Master Plan and plan of County Government should be integrated. (Isaac)

→Land transportation was not studied in the Master Plan. (Azuma)

→Such study is underway by another JICA Study Team. (Suzuki)

→Existing CFSs are causing road congestion. The new container terminal does not require CFS and the new bypass road project may mitigate the congestion in the city as well. In addition, existing gate system must be improved at the same time. (Shimada)

- A.1 of the KPA's comments on PR2 is beyond the scope of our study. (Azuma)

→It may be possible to include when and how many cargoes must be handled at Lamu Port

instead of doing a detailed study and analysis. (Mutuku)

Appendix 6 Stakeholder Meeting

To secure the stakeholders involvement in planning, several stakeholder consultations have been held in the course of the Project. The stakeholder engagement has been also implemented by the group focus meeting with fisheries and separate meetings with the key leading agencies.

(1) The 1st stakeholder meeting

The first stakeholder meeting was held on 4 December 2014. It focused the information sharing and explanation of background and outline of the Master Plan as presented in the table below.

Item	Findings
Date and Time	9:00 – 12:00, 4 December 2014
Place	Bandari College, Mombasa
Participants	Total 60 participants including representatives from Mombasa County, KenHA, KMA, Bollore Logistics, Kipevu ICD(Inland Container Depot LTD), National Oil Corporation of Kenya, Trade Mark East Africa etc.
Objective	<ul style="list-style-type: none"> - To share the information on current situation of port activity including the Phase 1 container project and future vision - To explain the outline of the Project - To get feedback from the stakeholders
Program	<ol style="list-style-type: none"> 1) Opening Remarks 2) First Presentation by KPA: Background of the Project 3) Coffee Break 4) Second Presentation by JICA Team: JICA Port Master Plan Project 5) Question and Answers /Discussions 6) Closing Remarks
Key comments	<ul style="list-style-type: none"> - Comments on the linkage between Mombasa Port Master Plan and the other plans/projects such as SEZ Master Plan, Southern bypass road project, port strategic plan of port - Request of needs of sharing of project's output - Questions about the planned schedule for the following stakeholder meeting etc.

(2) The 2nd stakeholder meeting

The second stakeholder meeting was held on 1 April 2015 as detailed in the table below.

Item	Findings
Date and Time	9:00 – 12:00, 1 April 2015
Place	Bliss Hotel, Mombasa
Participants	Total 28 participants including representatives from NEMA, Kenya Maritime Authority, Kenya Forest Service, Kenya Wildlife Service, Kenya Coast Development, National Museum of Kenya, NGOs etc.
Objective	<ul style="list-style-type: none"> - To explain the outline of the Project including the preliminary port development plan - To get an opinion on the potentially environmental and social concerns from the stakeholders
Program	<ol style="list-style-type: none"> 1) Opening Remarks 2) First Presentation by JICA Team: Mombasa Port Development Plan 3) Second Presentation by KPA: KPA's Activities for Sound Environmental and Social Management 4) Coffee Break 5) Third Presentation by JICA Team: Study on Environmental and Social Consideration for Mombasa Port Development Plan 6) Question and Answers /Discussions 7) Closing Remarks
Key comments	<ul style="list-style-type: none"> - Confirmation of scope of the project - There is a need for a comprehensive archeological analysis of the project site before any work commences - Regarding the Kayas located in the project site, both the village and Kaya elders properly consulted. - Request of information sharing and consultation with all stakeholders including the engagement of County Government and BMUs. - Question of the concrete mitigation measures against the possible adverse impact rrv.
Conclusion	<ul style="list-style-type: none"> - There is need to seek consultation with officials of the County Government of Mombasa and have their input before conclusion of the study - There is need to create clarity between the SEZ project and the Master Plan. It is apparent that part of the area of the Master Plan falls within the SEZ and causes considerable confusion to stakeholders. - Another environmental stakeholders meeting would be called to present the findings of the environmental and social considerations survey and also make clear issues which are still uncertain so that stakeholders can give their input from a more informed position.

(3) The 3rd stakeholder meeting

The third stakeholder meeting was held before the finalization of the output of Project as shown in the table below.

Item	Findings
Date and Time	Morning session: 9:00 – 12:00, 29 July 2015 Afternoon session: 14:30-16:30, 29 July 2015
Place	Bliss Hotel, Mombasa
Participants	Morning session: Total 44 participants including representatives from Mombasa County Government, KenHA, KMA, NOCK etc. Afternoon session: Total 39 participants including representatives from Trade Mark East Africa, KIFWA, CFS, logistics, and other private port users etc.
Objective	<ul style="list-style-type: none"> - To explain the outputs of port development master plan - To explain the findings of environmental and social considerations study - To get an opinion on the proposed master plan and project-related concerns from the stakeholders
Program	Morning session: 1) First Presentation by JICA Project Team: Mombasa Port Development Plan 2) Second Presentation by JICA Project Team: Study on Environmental and Social Consideration for Mombasa Port Development Plan 3) Question and Answers /Discussions Afternoon session: 1) First Presentation by JICA Project Team: Mombasa Port Development Plan 2) Second Presentation by KPA: KPA's Activities 3) Question and Answers /Discussions
Key comments	Morning session: <ul style="list-style-type: none"> - Suggestions of significance of mangrove forest and the associated resources - Concerns on accessibility of fishing vessels which will use the fishing jetty to be developed in the western part of shore - Comments on the necessity to decongest the traffic jam outside of port in the city - Concerns on the adverse impact on the marine environment and fishing resource by the disposal of dredged materials - Comments on the necessity of the reduction of waste generated from port operations - Questions about the coordination among some on-going development projects (SGR, Southern Bypass Road, Mombasa SEZ etc.) Afternoon session: <ul style="list-style-type: none"> - Question about the possibility of relocation of the existing port facilities - Question about how to decongest the traffic jam outside of port - Pros and cons of moving the dirty cargo to Dongo Kundu side (e.g., it is acceptable from the viewpoint of mitigation measures against dust impact to the Mombasa city area)

Appendix 7 Workshop

(1) The 1st workshop

Date & Time	4 th December 2014
Venue	KPA Meeting Room
Attendees	KPA (11)
	Denis Muganga, M. Pariara, Rukia Alawi Husuni, Peter Masinde, Mohamed I Golicha, Weldor Morin, Capt. Abdulaziz Mzee, Mohamed Ali Mwazyzy, Benjamin Mwandawiro, M. Y. Faruk, Martin Mutuku
	JICA Team (9)
	Toshio Azuma, Masato Suzuki, Hideki Yokomoto, Michiharu Nose, Hiroyuki Takakaze, Takashi Shimada, Satoshi Ando, Tomoe Takeda, Masaomi Komoto
	Supporting Consultant (2)
	Ngure Mwaniki, Antony Muriithi
Programs	
1. Opening Remarks by Mr. Azuma	
2. Updated Demand Forecast – Demand Forecast Model by Mr. Yokomoto The followings were explained	
<ul style="list-style-type: none"> ● Outline of demand forecast analysis ● Demand forecast for major commodities updated from SAPROF Review 2013 ● Demand forecast method 	
3. Natural Condition Survey by Mr. Ando Results of natural condition surveys up to date including topographic survey, bathymetric survey and geotechnical investigation were explained.	
4. Strategic Port Management in the World by Mr. Shimada Overview of several major ports in the world were introduced along with their practice on strategic port management depending on their circumstances.	
5. Closing Remarks by Mr. Azuma	

(2) The 2nd workshop

Date & Time	26 th March 2015
Venue	KPA Headquarters Mombasa
Attendees	Title, Organization
KPA	
Mr. Martin Mutuku	Head of Corporate Development
Mr. Denis Lewa Muganga	Principal Economist
Mr. Mohamed I. Golicha	Senior Economist Planning
Capt. Abdulaziz A. Mzee	Senior Marine Pilot
Mr. Benjamin M. Mwandawiro	Officer Export Documentation Container Terminal
Mr. David Arika	Senior Permanent-way Officer
Mr. Joyce N. Lenga	
JICA Team	
Mr. Toshio Azuma	Team Leader / Port Development Planning (1)
Mr. Masato Suzuki	Port Development Planning (2)
Mr. Hideki Yokomoto	Demand Forecast (1) / Logistics
Mr. Shingo Shiratori	Demand Forecast (2) / Economic Analysis
Mr. Harushige Nishida	Shipping Investigation
Mr. Hiroyuki Takakaze	Port Facility Planning
Ms. Tomoe Takeda	Environmental and Social Considerations
Mr. Hiroshi Horikawa	Financial Analysis
Supporting Staff	
Mr. Aziz Ramzan	Port Operations Expert, MA Consulting Group
Mr. Antony Muriithi	Port Planning Expert, MA Consulting Group
Minutes	
<p>1. Opening by Team Leader Mr. Azuma (JT) Mr. Azuma made opening remarks and introduced two JICA Team members who gave presentation in the 2nd Workshop.</p> <p>2. Presentation by Mr. Yokomoto Demand Forecast (1) / Logistics, JICA Team Mr. Yokomoto made a presentation about Demand Forecast Model to the KPA participants followed by the questions and answer session. The questions raised are listed below. Q1. Is the number of transit countries limited to 10? A1. Yes, at the moment, but we can change the system to increase if we receive a request from KPA. Q2. Is this demand forecast model only for Mombasa Port? For example, is it possible to consider the Lam Port development? A2. It is possible but necessary data should be input manually. Q3. Is it possible to integrate with KPA's statistic system? A3. You had better discuss with KPA system engineers because I'm not familiar to the matter. Q4. As raised also in the TWG meeting, Base Year is set at 2013. Can everybody use the program? A4. At least knowledge about demand forecast is necessary. But if you have knowledge, it is not difficult. Q5. Is it possible to point out important matters on operation of the programme? A5. The JICA Team will prepare a manual later on. Q6. Is it possible to reflect political situations in the programme? A6. Political situations in the country can be reflected by the country's GDP.</p> <p>3. Presentation by Mr. Shiratori Demand Forecast (2) / Economic Analysis, JICA Team Mr. Shiratori made a presentation about Port Capacity Model to the KPA participants followed by the questions and answer session. The questions raised are listed below. Q1. How about the capacity model for conventional cargo? A1. The model for the conventional cargo is still under consideration therefore, we will conduct the presentation of the conventional cargo model in the 3rd Workshop. Q2. This container capacity modeling can be applied to the container cargo volume in 2035? A2. Yes, the required number of container berths is five (5) with 58% BOR (berth occupancy ratio) or six (6) berths with 73% BOR. Five (5) berths are recommend considering the suitable BOR in the New Container Terminal. Q3. How about the container cargo productivity in the New Container Terminal? A3. Productivity of 22 boxes/hour/crane on average in the case of the container handling operation with four</p>	

(4) gantry cranes.

Q4. This model can be arranged not only the gantry crane's productivity, but also container trailer's productivity?

A4. This model only considered based on the gantry crane's productivity because of the core cargo handling equipment.

4. Closing Remarks by Mr. Suzuki

Mr. Suzuki made closing remarks and expressed a gratitude to the KPA participants.

(3) The 3rd workshop

Date & Time	13 August 2015, 14:30 -16:00	
Venue	KPA Mombasa 3th Floor Meeting Room	
Attendees	Title / Organization	
KPA		
Mr. Martin Mutuku	Head of Corporate Development	
Mr. Denis Muganga	Principal Economist	
Mr. Stephen Mwaruta	Senior Research Officer	
Mr. Dalmas Ogwang	Research Officer, Corporate Development	
Ms. Joyce Lenga	Statistics Officer	
Mr. Isaac O. Omoke	Statistics Officer (MI)	
Mr. Makuu A. Salim	Statistician	
Ms. Rukia Alawi	Assistant Statistician	
Ms. Faiza Mohamed	Assistant Statistician	
JICA Team		
Mr. Toshio Azuma	Team Leader / Port Development Planning (1)	
Mr. Masato Suzuki	Port Development Planning (2)	
Mr. Shingo Shiratori	Demand Forecast (2) / Economic Analysis	
Mr. Hiroyuki Takakaze	Port Facility Planning	
Supporting Consultant		
Mr. Aziz Ramzan	Port Operations Expert, MA Consulting Group	
Mr. Antony Muriithi	Port Planning Expert, MA Consulting Group	
Minutes		
<p>4. Opening Remarks by Mr. Mutuku</p> <p>5. Capacity Evaluation by Mr. Azuma</p> <p>How the capacity of the berths is evaluated is explained by Mr. Azuma using power point slides and results of the future cargo demand forecast.</p> <p>Q & A Session</p> <p>Q: Scenario 1 and 2 of the port development plans are presented based on results of the future cargo demand forecast. How about the high case, medium case and low case of the demand forecast? High case and low case studies are included in the previous master plan review.</p> <p>A: This time, the berth capacities are calculated with increased cargo handling productivity, 10% up and 20% up after 2030. High case and low case could be studied by KPA modifying our base study.</p> <p>Q: Development of Dongo Kundu has no progress in these 20 years. How this port master plan including Dongo Kundu development took this real situation into account?</p> <p>A: There is no concern on the Dongo Kundu development now while Mombasa SEZ Master Plan and Mombasa Gate City Comprehensive Development Master Plan are underway simultaneously as well as Dongo Kundu Bypass Road which is about to start its construction works.</p> <p>Q: How cargo volume is converted to container volume?</p> <p>A: Please refer to the relevant excel spreadsheet which contains the calculation formula. Containerization factor is increasing every year. Maximum of 95% is assumed in the calculation.</p> <p>6. Sorting port data by Mr. Suzuki</p> <p>Statistical analysis on each berth is demonstrated using Excel spreadsheet.</p> <p>Q & A Session</p> <p>Q: How the summary sheet was produced from the statistics.</p> <p>A: Figures in the summary sheet are derived from figures in other relevant sheet.</p>		

Appendix 8 Seminar

Seminar on Mombasa Port Master Plan including Dongo Kundu

Date: 14 August 2015
 Venue: Travelers Beach Hotel
 Time: 9:00~12:30

Program

09:00 ~ 09:10	Opening Remarks	Mr. Azuma, Team Leader, JICA Project Team
09:10 ~ 09:40	Some Remarks on Mombasa Port M/P including Dongo Kundu	Mr. Azuma, Team Leader, JICA Project Team
09:45 ~ 10:15	Demand Forecast	Mr. Shiratori, JICA Project Team
10:20 ~ 10:50	Port Planning and Management	Ms. Rukia Alawi Husni, Assistant Statistician (Traffic), Corporate Development/Corporate Services, KPA
10:50 ~ 11:05	Tea/Coffee Break	
11:05 ~ 11:35	Port and Railway	Mr. Shimada, JICA Project Team
11:40 ~ 12:10	Important lessons learnt in Japan and their application on Mombasa Port	Kavate Geoffrey Kilonzo, Senior Accountant (Asset Management), Finance, KPA
12:15 ~ 12:25	Closing Remarks	KPA
12:30 ~	Lunch Buffet	

Participants:

JICA Project Team (7) + Supporting Consultant (2)
 KPA: Expected around 20 people.

Date & Time	14 th August 2015, 09:00 -12:10	
Venue	Travellers Beach Hotel Meeting Room	
Attendees	Title / Organization	
KPA		
Mr. Martin Mutuku	Head of Corporate Development	
Mr. Denis Muganga	Principal Economist	
Mr. M. Y. Faruk	Principal Statistician	
Mr. Peter Masinde	Principal Operational Officer	
Capt. Abdulaziz A. Mzee	Senior Marine Pilot	
Mr. Mohamed I. Golicha	Senior Economist Planning	
Mr. Geoffrey Kavate	Senior Accountant, Financial/Accounting	
Mr. Benjamin M. Mwandawiro	Officer Export Documentation Container Terminal	
Mr. David Arika	Senior Permanent-way Officer	
Mr. Mohamed Mwazuzu	Senior Operations Officer (P)	
Mr. Sipei Jim	Research Officer	
Ms. Joyce Lenga	Statistics Officer	
Mr. Isaac O. Omoke	Statistics Officer (MI)	
Mr. Makuu A. Salim	Statistician	
Ms. Rukia Alawi	Assistant Statistician (Traffic)	
Ms. Faiza Mohamed	Assistant Statistician	
Mr. Martin M. Tureno	Assistant Statistician	
Mr. Kheri Hussein	CA (DL)	
JICA Team		
Mr. Toshio Azuma	Team Leader / Port Development Planning (1)	
Mr. Masato Suzuki	Port Development Planning (2)	
Mr. Shingo Shiratori	Demand Forecast (2) / Economic Analysis	
Mr. Hiroyuki Takakaze	Port Facility Planning	
Mr. Takashi Shimada	Port Management	
Mr. Hiroshi Horikawa	Financial Analysis	
Mr. Masaomi Komoto	Training Planning / Operational Coordination	
Supporting Consultant		
Mr. Aziz Ramzan	Port Operations Expert, MA Consulting Group	
Mr. Antony Muriithi	Port Planning Expert, MA Consulting Group	
Minutes		
7. Opening Remarks by Mr. Azuma		
8. Some Remarks on Mombasa Port M/P including Dongo Kundu by Mr. Azuma		
Briefs of Mombasa Port Master Plan including Dongo Kundu were explained to KPA staff.		
<u>Q & A Session</u>		
Q: Is only 1 berth enough for the new oil terminal?		
A: The new oil terminal located inside the bay consists of 4 berths having berthing capacity of maximum 200,000DWT tanker for each has enough capacity.		
Q: Is the oil terminal nearby KPA H/Q taken into account?		
A: The detail is not clear since it does not belong to KPA.		
Q: Why only berth #14 is assigned for container cargo out of berth #11 to #14 in the future plan?		
A: Berths #11 to #13 are assigned for general cargoes. Berth #14 is assigned only for container cargoes as well as its berth capacity calculation.		
9. Demand Forecast by Mr. Shiratori		
Demand forecast method is demonstrated using excel program and spreadsheet.		
10. Port Planning and Management by Ms. Rukia Alawi Husni (KPA)		
The result of the training in Japan in May ~ June is reported.		
11. Port and Railway by Mr. Shimada		

Port and rail transportation is explained citing various examples.

12. Important Lessons learned in Japan and their Application on Mombasa Port by Mr. Kavate Geoffrey Kilonzo (KPA)

The result of the training in Japan in May ~ June is reported.

13. Closing Remarks by Mr. Mutuku (KPA)

END