

*CHAPTER 3*  
*IMPLEMENTATION PLAN*

## CHAPTER 3 IMPLEMENTATION PLAN

### 3.1 Implementation Plan

#### 3.1.1 Implementation Concept

##### (1) Basic Concept

The Project will be implemented by the following procedures within the frame of Japan's Grant Aid System.

- a) When the Exchange of Notes (E/N) regarding the implementation of the Project is signed between the Government of Japan and the Government of Tanzania, the executing agency (Ministry of Natural Resources and Tourism) in collaboration with the government agency for maintenance and operation (Dar es Salaam City Commission) will commence preparatory works.
- b) A Japanese consultant will enter into the agreement of consulting services with the MNRT to provide service as the Engineer on behalf of the Tanzanian Government, and will arrange for a tender followed by the detailed surveys, detailed design of facilities and tender documents.
- c) A Japanese contractor selected through tender will sign a contract with the executing agency and will carry out the works under the supervision of the consultant.
- d) The Japanese contractor will undertake the construction works in accordance with the effective procurement plan and schedule of the Project.
- e) Upon completion of the construction works, the responsibility of operation and maintenance of project facilities will be transferred to DCC.
- f) The Project consists of civil work, building work, and procurement. Phase1 of the Project is mainly civil work and Phase2 is mainly building work and procurement of fishery equipment.

##### (2) Implementation Concept

- a) The construction method will be planned considering procurement of locally available materials and local conditions of the construction industry in Tanzania as much as possible. Certain construction materials such as steel products are available in the local market which are imported from South Africa and Kenya,

but the procurement source will be determined based on the market price since some materials are expensive compared with Japanese products.

- b) In Tanzania, several Japanese contractors have been engaged in construction works under the Japan's Grant Aid Program. These contractors have employed local contractors as subcontractors in order to supply manpower and to lease construction equipment. But they have little experience with marine work.
- c) A local engineering consulting company is not available. Engineers will be employed individually.

### **3.1.2 Implementation Conditions**

To implement the Project, the following factors concerning the coordination with related agencies, construction methods, etc., should be considered:

- a) As the project site is located near the existing channel where large commercial vessels pass frequently, close communication between THA and shipping lines is mandatory to secure safety of sea traffic. In particular, operation of marine construction equipment and temporary work offshore need to be well planned to avoid interference with passing vessels in the channel.
- b) Frequent communication with DCC and existing associations of the fish market is required to minimize interruption to the present fishery activities at the site during the construction work. Similarly, traffic at West Ferry Point should be secured along Ocean Road and Magogoni Street by coordinating traffic activities with the Ministry of Works
- c) Tax exemption will be applied for the construction works under the Japan's Grant Aid Program. In Tanzania, the value-added tax (VAT) of 20% is imposed by law. MNRT, the executing agency of the Project, will coordinate the exemption process with the Ministry of Finance (MOF). After receiving application forms, MOF will issue an approval letter to MNRT. The procedures of the tax exemption for import and domestic materials are different. The Contractor, with full coordination with the executing agency, should follow prompt procedures for each case.

### **3.1.3 Scope of Work**

The scopes of the work for which the Japanese Government and Tanzanian Government are each responsible for are listed below:

(1) Works and Facilities to be Undertaken by the Government of Japan

Phase1

- a) Construction of fish landing facilities including required fittings, dredging and slope protection.
- b) Construction of revetments and land reclamation.

Phase-2

- a) Construction of a wharf, revetments, and ancillary facilities.
- b) Construction of buildings which include an auction hall complex, fish retail market, fish preparation, fish fry processing, vegetable/grocery, fuel buildings, and restaurants.
- c) Construction of water supply, wastewater and flood water drainage facilities.
- d) Construction of sanitary facilities including public toilets, wastewater treatment and garbage collection carts.
- e) Construction of electricity supply facilities.
- f) Construction of roads.
- g) Construction of parking including bus stop.
- h) Procurement of fishery equipment.

(2) Works and Facilities to be Undertaken by the Government of Tanzania

- a) Demolition/removal/relocation of the existing market facilities and buildings.
- b) Provision and clearance of land for Project site and a temporary construction yard.
- c) Construction of necessary gates and fences in and around the site.
- d) Construction of water supply line, electricity line, and telephone line to the site.
- e) Supply of office furniture.
- f) Supply of trees or plants at site.
- g) Arrangement for the tax exemption and payment of bank commission fees.

**3.1.4 Detailed Design and Construction Supervision**

(1) Schedule of the Consulting Services

The Project will be commenced with the signing of E/N, pertaining to the engineering services for the detailed design between the Governments of Japan and the

Government of Tanzania. The contract for the detailed design and supervision of the construction works will be concluded between MNRT and a Japanese consultant who will provide the following engineering services within the limits of the Grant Aid:

1) Detailed design stage

The Consultant will carry out the detailed engineering design of the civil and building works for the Project in compliance with the specifications and concepts of the basic design. The contents of the detailed design are as follows:

- Design criteria and standards,
- Design reports,
- Drawings,
- Quantity and cost estimate,
- Construction planning, and
- Tender and relevant documents.

2) Pre-construction stage

After the completion of the detailed design and tender documents, MNRT will select a Japanese contractor through open tender. The Consultant will assist MNRT on the following tasks;

- Bid announcement,
- Pre-qualification of contractors,
- Pre-bid conference and site inspection,
- Tender and tender evaluation, and
- Contract negotiation.

3) Construction supervision phase

The engineering services for the construction supervision will begin with the issuance of a Notice to Proceed (NTP) to the Contractor by MNRT.

The Consultant will perform his duties in accordance with the criteria and standards applicable to the construction works and will exercise the powers vested in him as the Engineer under the contract to supervise the field works by the Contractor.

The Consultant within his capacity as the Engineer shall directly report to MNRT about the field activities and shall issue field memo or letters to the contractor regarding the various matters, including progress, quality, safety and payment of

the Project.

## (2) Staffing

The required staff and their responsibilities at the detailed design and construction stages are described below:

- Team Leader
- Civil Engineer (Marine Civil Engineer)
- Civil Engineer (Structure Engineer)
- Civil Engineer (Pavement and Ancillary Facilities)
- Geotechnical Engineer
- Architect
- Structural Engineer
- Electrical Engineer
- Mechanical Engineer
- Water Supply & Sewerage Engineer
- Equipment Engineer
- Construction Planner / Cost Estimator
- Document Specialist
- Resident Engineer (Civil and Building)
- Supervisor (Civil, Electrical, Mechanical and Equipment)

## (3) Construction Schedule

### 1) Preparation Works

#### a) Construction Yard

With the issuance of a Notice to Proceed, the Contractor will initiate the preparation works. These include mobilization of construction materials and equipment and labor force. Especially, opening of the base camp in Dar es Salaam is essential for the transportation and smooth implementation of the Project.

#### b) Provision of temporary utilities

Provision of electricity, water, and other utilities necessary for the construction work has to be done prior to the commencement of the construction.

2) Construction works

a) Construction Order

The Project consists of offshore work and landside work. Therefore, the construction shall start for the fish landing wharf and revetments for the reclamation work. The construction of fish related buildings will be carried out after completion of the reclamation work.

b) Quality Control

The quality control of the work will be carried out by the Japanese contractor. Examination of the quality of the products by each item of construction work will be executed by the Engineer.

c) Traffic Control

The construction works have to be carried out without interrupting daily market activities and traffic flow at site. This should be done under well-designed method of construction system organized by the contractor, DCC, and the police.

### **3.1.5 Procurement Plan**

(1) Labor Force

It is easy to procure common labors such as earth workers, carpenters and steel benders, etc., in Tanzania. However, local contractors have little experience with offshore work excluding common civil work and building work.

(2) Construction Materials

Portland cement is produced at a factory located in northern Dar es Salaam and supplied as 50 kg per bag. Moreover, cement tank lorries are available to supply mass concrete if required. As for steel materials such as steel bars, bolts, nuts and members, etc., they are available in the market and are imported from abroad such as South Africa and Kenya. However, they are expensive compared with Japanese market prices.

Course aggregate is produced at a quarry site located in Lugoba, approximately 130 km west of the Project site. On the other hand, fine aggregate is supplied from the riverbed of Mupigi, approximately 40km north of the Project site. The particle size is small.

Pre-cast concrete materials such as curbstones, concrete blocks, and Hume concrete pipes, etc., are produced at local factories and piled at the storage yard.

### (3) Construction Equipment

General construction equipment, most of which is secondhand, is available in Tanzania.

However, pontoon, foundation pile machines, vibrohammer, and offshore construction equipment are not available in Tanzania or other neighboring countries. Therefore, they will be supplied from Japan.

### (4) Procurement Equipment

It is possible to provide equipment including imported goods in Tanzania. However, there are few kinds for various containers, storage ice machines and compact refrigerators, etc., and they are weak in terms of quality, strength, and function. Therefore, it is recommended that the equipment be supplied from Japan for efficient procurement. However, equipment, which is maintained by local firms will be procured in Tanzania.

## **3.1.6 Implementation Schedule**

As a countermeasure against cracking of foundations due to settlement after the reclamation is carried out in the early stage, the ground movement will be observed carefully. From the completion of the reclamation, the observation of settlement will be started continuously. The construction of facilities on the ground will not be carried out while the settlement is continuing. The observation period should be 6 months or more.

The implementation schedule of the Project is summarized in Table 3.1.1.

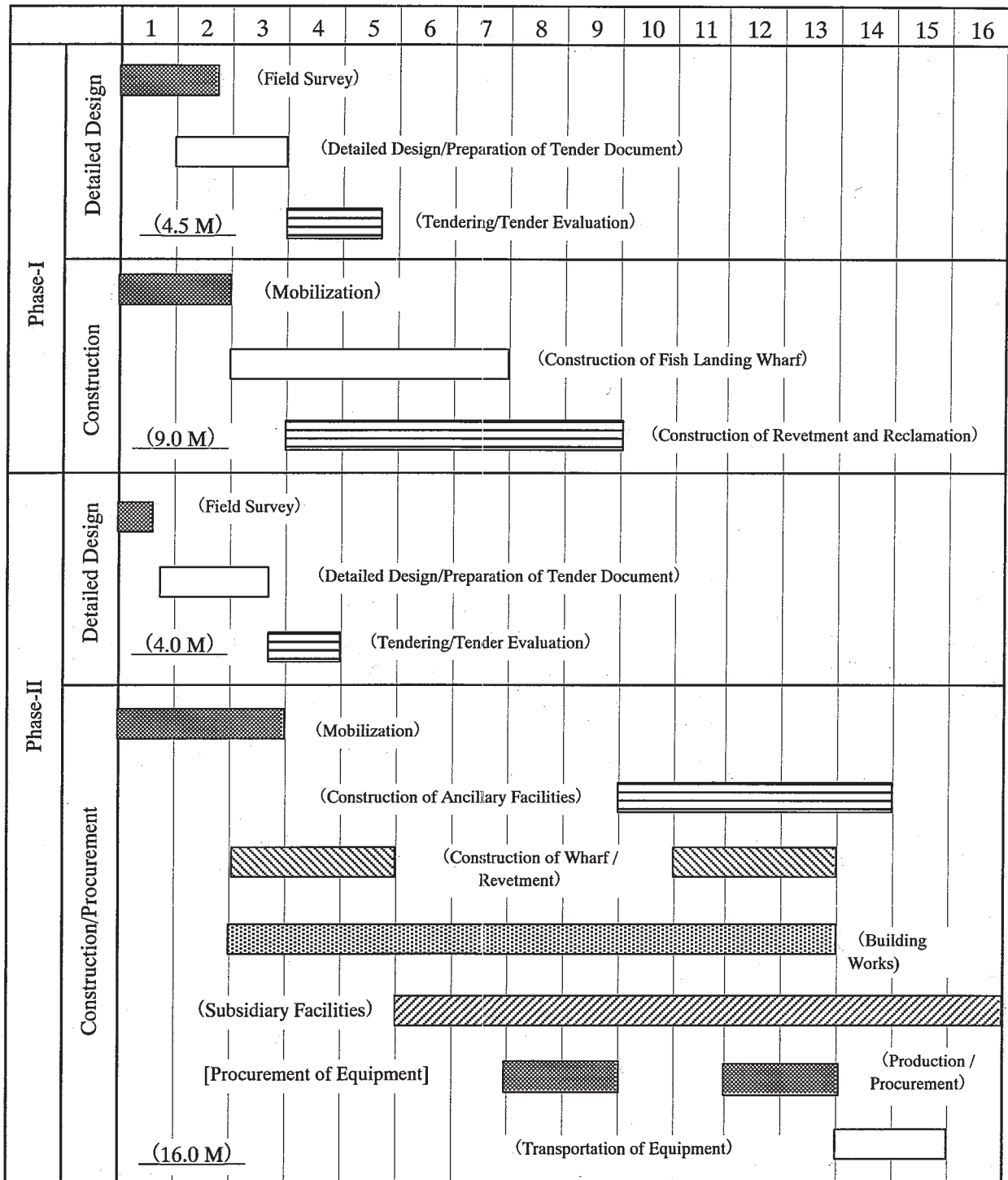
## **3.1.7 Obligations of Tanzania**

- To secure necessary permissions, licenses, and other authorizations for implementing the Project, if necessary.
- To provide the land space for the site office, warehouse, material stockyard, and camp yard, etc, for the execution of the Project.
- To ensure prompt unloading, tax exemption, custom clearance at the port of disembarkation in Tanzania and prompt international transportation of the materials and equipment for the Project purchased under the Grant Aid.



- To accord Japanese nationals whose service may be required in connection with the supply of the Project and the services under the verified contract such facilities as may be necessary for their entry into Tanzania and stay there for the performance of their work.
- To exempt Japanese juridical and physical nationals engaged in the Project from customs duties, internal taxes and other fiscal levies which may be imposed in Tanzania with respect to the supply of the products and services under the verified contracts
- To coordinate land acquisition in the Project area and the construction yard area.
- To coordinate and solve any issues related to the Project, which may be raised, from third parties or inhabitants in the Project area during implementation of the Project.
- To execute the works stipulated in 3.1.3.

**Table 3.1.1 Implementation Schedule**



## **3.2 Estimated Project Costs**

### **3.2.1 Estimated Project Costs**

- (1) Costs undertaken by the Government of Tanzania
  - a) Removal and relocation of the existing market facilities and buildings (1,500,000Tsh)
  - b) Grading the Project area and providing a construction yard area (14,500,000Tsh)
  - c) Construction of gates and fences (15,400,000Tsh)
  - d) Setting of water supply pipe, electrical line and telephone line to the project site (800,000Tsh)
  - e) Supply of furniture for the site office (2,550,000Tsh)
  - f) Planting work of the Project area (2,000,000Tsh)
  - g) Arrangement for the tax exemption and payment for bank commission fees (10,380,000Tsh)
- (2) Condition of Cost Estimate
  - a) Base Date November 1999
  - b) Exchange Rate 1US\$=115.0 Yen  
1Tsh=0.1492Yen
  - c) Construction Period The Project will be implemented in 2 phases. The schedule of the detailed design and construction is shown in Table 3.1.1.
  - d) Others It is assumed that this Project be carried out according to the Japan's grant aid system.

### **3.2.2 Operations and Maintenance Costs**

#### **(1) Maintenance System**

A steering committee will be established in the new market as shown in Figure 2.17.3. The maintenance and operations of the new market will be conducted by a private company contracted with DCC. The facilities and equipment, which are planned under this Project, will not require technical maintenance staff. The budget for replacements and repairs will be submitted to DCC and simple requests will be handled by the maintenance company and repairs will be consigned to an outside repair shop.

The market will be supported by the beneficiaries and it will be operated and maintained on a self-supporting accounting system. In order to successfully achieve this, it is important that the users cultivate a sense of participation, pay their usage fees, use the facilities with care, and become aware of economizing on water and electricity.

The facilities and equipment will be a property to DCC and market users will make a lease contract with DCC. In order to operate the facilities and equipment effectively, some regulations about dealings in the market and usage of the market will be established. The following regulations will be expected.

**Table 3.2.1 Market Regulations**

Definition of market people and their duties	Regulations on defining market people in terms of handling goods, activity, and scale. Basically, market people are divided into auctioners, fresh fish retailers, fish processors, and other related users.
Operation dates and hours	Regulations on operation hours. Non-operation hours should be set to clean the market.
Market operation company	Regulations on detailed work scope to the market operation company. Refer to those of Maconbusho and Temeke.
Market users and registration	Regulations on registration for users. Basic data that determine tariffs.
Market facilities	Regulations on location, scale, utilization of the shops
Tariffs on facilities	Regulations on tariffs. Tariffs should be set, depending on lots and kinds. It is desirable that tariff depend on turnover, although custom should be considered fully. How to collect tariffs effectively should be considered.
Market Union	Regulations on members for the market union with an aim at improving maintenance and management abilities.
Items forbidden and penal regulation	Regulations on forbidden items such as illegal operation, theft, quarrel, unsanitary condition, and damage to facilities.
Application form and report	Regulations on application forms, permission, and other necessary forms

**(2) Revenues and Expenditures Generated from Market Activities**

Expected revenues and expenditures generated from the market activities are shown in Table 3.2.1, indicating the ability to operate independently without financial support. The annual expenditures are expected to be 49.4 million Tsh (US\$ 69,000). However, in order to achieve this figure successfully, a high collection ratio of the facility usage fees is required. Generally, collecting fees from market retailers is a difficult task and time is required to educate the users in order to raise the collection ratio. Therefore, financial assistance from DCC is mandatory to compensate the deficit which may initially occur due to the shortage of fee collection ratio. If 50 % of the

usage fees for the first fiscal year are collected, the estimated deficit is about 14 million Tsh. If the collection ratio reaches 100 % during the first five years, the market will become 100 % self-sustainable. The DCC is reviewing the possibility of utilizing the fish wholesale tax as a financial resource (21,000,000Tsh in FY1999/2000 = US\$29,400 is expected) and therefore, no financial problems will emerge. The same revenues and expenditures are expected for the first 5 years and beyond.

**Table 3.2.2 Expected Revenues and Expenditures at New Market**

1. Revenues	Q'ty	Unit Price (Tsh)		Amount (Tsh)		Remarks
		(Monthly)	(Daily)	(Monthly)	(Yearly)	
<b>1. Fees</b>						
① Fresh fish retailer's lot	122	6,000	200	732,000	8,784,000	
② Scaler's lot	72	1,500	50	108,000	1,296,000	
③ Fried fish processor's lot	48	6,000	200	288,000	3,456,000	
④ Food, vegetable, glossary lot	153	6,000	200	918,000	11,016,000	
⑤ Restaurant (medium)	4	15,000	500	60,000	720,000	
⑥ Restaurant (small)	18	9,000	300	162,000	1,944,000	
⑦ Fire wood sales lot	7	9,000	300	63,000	756,000	
⑧ Chacoal sales lot	2	6,000	200	12,000	144,000	
⑨ Ice sales lot	5	6,000	200	30,000	360,000	
⑩ Fish storage lot	15	6,000	200	90,000	1,080,000	
⑪ Cooperative's office	4	15,000	500	60,000	720,000	
⑫ Public toilet	2	80,000		160,000	1,920,000	
Subtotal				2,683,000	32,196,000	
<b>2. Registration fees</b>						
All traders	472	83	3	39,333	472,000	1,000Tsh/ year
<b>3. Electric fees</b>						
Private management company	1	10,000		10,000	120,000	
Cooperative's office	4	4,000		16,000	192,000	
Subtotal				26,000	312,000	
<b>4. Parking fees</b>	20	18,000	200	360,000	4,320,000	3 rotations per day
<b>5. Rental fee of equipment</b>						
Insulated box (small)	80	3,000	100	240,000	2,880,000	
Insulated box for ice	5	30,000	1,000	150,000	1,800,000	
Insulated box (large)	15	6,000	200	90,000	1,080,000	
Fish container	350	1,500	50	525,000	6,300,000	
Subtotal				1,005,000	12,060,000	
<b>Total Revenues</b>				4,113,333	49,360,000	(US\$69,093) *
<b>2. Expenditures</b>	(Monthly)	Remarks		(Annually)		
1. City water	852,000	57t/day×30day×498.7/t		10,224,000		
2. Electricity	886,400	178.52kw×30day×165.5Tsh/kw		10,636,800		
3. Garbage collection	120,000	15,000/times×4times/month×2 carts		1,440,000		
4. Commission for management company	411,333	10% of revenues		4,936,000		
5. Personnel	1,250,000	For 30 staffs of private company		15,000,000		
6. Maintenance, sundry	412,744	10% of expenditure and pump		4,952,930		
<b>Total Expenditures</b>	3,932,478			47,189,730 (US\$66,055) *		
<b>Revenues – Expenditures</b>	180,856			2,170,270 (US\$3,038) *		

Remarks: Exchange rate US\$1 = 714.4Tsh