Executive Summary

Modernization of Sassoon Dock Fisheries Harbour, Mumbai, Maharashtra

Project Proponent

Maharashtra Fisheries Development Corp. Ltd. Mumbai



Environmental Consultancy and Laboratory NABET/EIA/1417/RA010

Unit no. 201 – 204, Saudamini Commercial Complex, Building C-3, 2nd Floor, Right bhusari Colony, Paud Road, Kothrud, Pune - 411038.

Executive Summary

1. Introduction

Maharashtra Fisheries Development Corporation Ltd. (MFDCL) intends to modernize the existing Sassoon Dock Fisheries Harbour at Survey No: 5/600 Mumbai Maharashtra. The present condition of Sassoon Dock Fishery Harbor is such that with the operating fishing fleet far exceeding the design capacity, dock is a dirty, filthy, bad smelling and grimly place where the fish hygiene and sanitary conditions are worsening day by day. Proposed modernization will be in a systematic manner following the modular concept taking in to account prevailing conditions. It will be confined within existing unit and no additional land will be procured. The project will require:

- Environmental Clearance as per EIA Notification 2006 7(e) Ports, harbors, break waters, dredging Category B
- 2) CRZ Clearance as per CRZ Clearance, 2011

Location: Sassoon Dock Fisheries Harbour at Survey No: 5/600 Mumbai Maharashtra



Geographical Locations

- Latitude: Approx: 18°54'41.66"N
- Longitude: Approx: 72°49'33.15"E
- Nearest City- West direction Colaba approx. 1.28 km
- Nearest Railway Station Chhatrapati Shivaji Maharaj Terminus 3.28 Km
- No National Park/Sanctuary within 10 km.



2. Project Description:

The new and renovated waterside and landside facilities now planned and designed are to supplement and complement each other in their functions and are in tune with the international standards for the hygienic fish landing and sanitation

Sr. No.	Details	Existing	Proposed	Total
1.	Capacity in TPA	>45,000	>45,000	No Change
2.	Area m ²	91,265.35 m ²	91,265.35 m ²	No Change
3.	Built-Up Area m ²	3804 m ²	4051.88 m ²	7855.88 m ²
4	Fishermen Occupancy	10000	10000	No Change
5	Waste Water Treatment	None	ETP, STP	ETP, STP
6	Investment in Cr.	nil	52.17	52.17

Proposed Modernization will include:

Sr. No.	Modernization of Existing Structure			
1	Pump house			
2	Auction shed no 1 – to be modified in to auction hall 1 - up gradation of sea water			
	supply			
3	Auction shed no 2 - to be modified in to auction hall 2 - up gradation of sea water			
	supply			
4	Toilet block – 3 – renovation			
5	Electrical substation			
6	Fresh water overhead tank			
7	Existing building for management and maintenance block - remodeling			
8	Fuel storage facility			
9	Open fish auction sheds			
10	Custom office to be modified as ice crusher shed			
11	Quay – strengthening			
12	Drainage & sewerage system – modernization			
13	Bilge water oil separation - modernization			
14	Spent oil & toxic waste reception shed - modernization			
15	Internal road – modernization			
Sr. No.	Newly Proposed Structure			
1	Auction hall no. 3			
2	High mast light – 7 no.			
3	Fisherman rest room -213.50 m^2			
4	Ice Plant & Chilled Storage			
5	Net Mending Shed (206.95 m ²) Workshop -100.45 m ²			
6	Radio Communication Tower, Winch room & slipway			
7	Fishery Survey of India Building, Compound wall, Security Gate – 2 No			
8	Remodeling of outfitting Activities - fuel pump, storage capacity, ice crusher shed			
9	Fixing bollards, mooring rings and used rubber tyre fenders			
10	Maintenance Dredging of Old Sassoon dock			



3. Baseline Environmental Studies

Environmental data at project site collected by ULTRA TECH (Environmental Consultancy and Laboratory) during October to December 2016 and environmental data within 10 km study area collected during summer season of year 2015 (March 2015- May 2015) were utilized for EIA studies. The meteorological condition of the project site during the study period is presented in report. During study period the pre-dominant wind direction ranges from the region West to North West. The temperature varied from 16.9°C to 36.5°C, whereas, the relative humidity varied from 70.1% to 81.5%. The monthly mean wind speed was recorded 1.32 m/s.

The ambient air quality is determined at 5 locations. The PM_{10} varied from 62 to 99 µg/m³, $PM_{2.5}$ varied from 24 to 56 µg/m³, SO_2 varied from 12 to 39 µg/m³, NO_x varied from 24 to 57 µg/m³. All values within prescribed NAAQS 2009.

The noise data compiled on noise levels of the study area varied from 59.7 dB (A) in day time and 50.3 dB (A) in the night time.

The ecological study of the area has been conducted within 10 km radius of the project site in order to understand the existing status of flora and fauna to generate baseline information and evaluate the possible impacts on biological environment. It has been assessed that the impact on local flora and fauna will be negligible due to the proposed project.

The socio-economic conditions are presented in the report. The impact on socio-economic environment as some direct or indirect employment will be generated during the construction and operation phases.

Marine water quality was studied in Mumbai Harbour. The temperature was measured both in surface and bottom water in the study area. There was no significant difference in the water temperature at different locations and observed to be in range of 28.4 to 29.5°C. pH values were stable and do not show a significant difference in the surface and bottom values. pH ranged between 7.66 to 7.84. The salinity of the water varied from 30.1 to 33.3 ppt. Nutrient values was observed in normal range. Oil and Grease, BOD and heavy metals in water were observed to be below detectable limits.

4. Impact & mitigation measures:

Environmental Impact Assessment study has been carried out to assess the likely impacts during construction and operation phases of the proposed fishing harbor. Environmental Management Plan (EMP) outlining measures to minimize adverse impacts during construction and operational

phases of the proposed project has been formulated. Environmental Monitoring Program (EMoP) has also been formulated for construction and operation phases. Cost estimation for implementation of Environmental Management Plan and Environmental Monitoring Program.

There will be no rehabilitation of any fisherman family. About 200 persons will get the employment during construction phase. Apart from the labours transporter and construction material supplier will also get the business during the construction phase. Thus, the project would have a significant positive impact on the overall economy of the area. In the operation stage the project would lead to mushrooming of various allied activities. This will lead to marginal improvement in the employment scenario, which is a positive impact.

Solid and Liquid Waste

The only solid waste produced will be fish waste which shall be disposed in OWC. In addition, office waste generated shall be disposed to local authority. Liquid waste will be generated in form of sewage, effluents from boats and effluents from ice plants. Sewage will be treated in STP while other effluents will be treated in ETP.

5. Environmental Monitoring Program

An Environmental Monitoring Program for implementation during project construction and operation phases has been suggested to oversee the environmental safeguards, to ascertain the agreement between prediction and reality and to suggest the remedial measures not foreseen during the planning

6. Environment Management Plan

The cost estimates for implementing Environmental Management Plan (EMP) will be Rs. 42 Lakhs. Summary of cost estimate for implementing EMP is given in Table below.

Sr. No.	Environmental Aspect	Capital Expenditure in Lakhs	Annual Recurring Expenditure in Lakhs
1	Emission control measures	2.00	0.50
2	Water & Wastewater management	30.00	5.00
3	Solid Waste Management	8.00	2.00
4	Greenbelt	2.00	0.50
5	Monitoring		5.00
	Total	42.00	13.00