

Live Fish Vending Centers

The establishment of domestic markets plays a very crucial role in the development of fisheries sector in the country. Apart from ensuring nutritional and food security, it also helps in minimizing post-harvest losses, increase revenue; enhance employment opportunities and offers high standards of hygiene and sanitation leading to food safety. The importance of domestic marketing can be understood from the fact that only about 15% of the total fish landing is utilized for export of fishery products and the remaining about 85% is distributed through domestic markets.

About 70% of the fish catch is marketed fresh and the remaining is utilized in the form of processed, dried, smoked, reduced to fishmeal, etc. As per the available data, a majority of the total population consumes fish in the country with an average per capita consumption of 12 kg. Whereas the figure in the state of WB is nearly double i.e. 20.4 Kg. However, the harvested fish is not evenly distributed to interior areas due to lack of transportation and non-availability of proper storage facilities. Therefore, there is a need for balanced system of distribution to make fish available in the interior areas at reasonable rates.

Fish vending is getting diversified like agriculture to meet the requirements of changing consumer preferences. Delivering live, dressed and ready-to-cook fish at consumer door steps is a popular method that gives lot of convenience to the consumers. Fish consumption frequencies and their preferences are influenced by purchasers' geographic locations, and socio-cultural features. Fish preference is also exaggerated by several factors, including sensory (freshness, taste, and smell) and non-sensory factors (personal behavior, views, risk perception, and so on). It is reported that there has been growing concern about the quality of fish sourced from the market also. This has led to on-farm fish vending where the consumers visit the farm, see live fish, and purchase. Less road accessibility to most of the farms is a limitation. Live fish vending is an extension of on-farm fish vending where instead of consumers visiting the farm, live fish is transported to the market. This type of fish marketing is gaining popularity in recent times. The live fish vending unit can also be made mobile so as to reach the doorsteps of consumers.



**Picture is indicative only*

Bengalees are used to search 'Janto Mach' (Live Fish) every morning at fish market. For these fish loving community LIVE FISH VENDING CENTRE will be huge popular. Consumers will get a chance to choose from the live, in swimming products. It will reduce the chance of use of chemicals and preservatives in fishes. It also minimises the middleman system in the supply chain of fishes. The 'Mache Bhate Bangalee' must be attracted to the 'Fresh from Farm' products, which led to catch a better market price for the fishers.



Fishes are in a showcase aquarium for consumer choose

**Picture is indicative only*

Name of Scheme

"Live Fish Vending Centers" CSS-Beneficiary Oriented Scheme- Post Harvest and cold chain infrastructure of beneficiary oriented activities under centrally sponsored components of the Government.

Objectives

- To provide fresh and live fishes directly to the end consumers in hygienic condition.
- To reduce middleman inference.
- To ensure additional employment generation
- To afford better prices to the sellers/ fishermen
- To uplift the socio-economic condition of fishers.

Name of the Component

- Infrastructure: Infrastructure with seamless Polyurethane (PU) flooring and 5 feet tall plastered masonry wall at three sides leaving open area in the customer side and PU coated inside. Ceiling using 6.0 mm thick PVC TKT panels (light colour) equipped with electrical LED spot lights to fish tanks and cutting table. The open space between wall and ceiling needs to be covered using bird proof netting. Waste water drains alleys with stainless steel gratings needs to be fixed. In addition, covered area is required to dispose solid wastes by converting into organic manure.
- Power back up: Sufficient capacity Generator set
- Aeration unit: 360 liters per minute capacity aeration unit along with necessary

aeration lines and injectors.

- Water storage: Fresh water storage tank minimum 5000 liter capacity in shaded area and seawater storage tank minimum 1000 liter capacity in open area to facilitate seawater ageing. Both the tanks need to be equipped with aeration facility and bottom discharge valve to occasionally drain wastes. The sea water lines must be with anti-corrosive piping. Minimum fresh water requirement per day is 6000 liters and sea water requirement per day is 400 liter
- Fish tanks: Minimum of two numbers of Fiber reinforced plastic (FRP) tanks each 1500 liter capacity and having wall thickness 8 mm placed side by side and connected with single biological filtration unit (placed 5 feet from water level) are required for maintaining one species. Vigorous aeration needs to be ensured in these tanks.
- Aquarium: Two 6 feet X 3 feet X 1.5 feet aquarium which are used for showcase
- Water cleaning unit: Biological filters of minimum 100 liters capacity 3 Nos.
- Fish cutting table: Cutting table made of Stainless steel and equipped with sink, water connection and solid waste chute.
- Fish handling tools: Scoop nets minimum 5 numbers and stainless steel trays minimum 5 numbers
- Weighing balance: Minimum 1 number 10 kg capacity
- Trolley: 250 kg capacity 1 number.
- Live fish transportation vehicle: Sufficient load carrying capacity carriage vehicle equipped with live fish transport tanks having wall thickness 10 mm, two numbers minimum 750 liter each capacity, Oxygen cylinder and Oxygen injector. Battery power unit is required to operate aerator. Scoop nets of size 2 feet, minimum 3 numbers required in the vehicle.
- Water quality monitoring system: Portable water quality test kit 1 number and hand refractometer 1 number
- Water pump: Sufficient capacity to exchange water in the tanks

Project Location

Different districts in the State of WB as detailed in Fund Requirement Table.

Expenditure on the scheme:

The estimated project cost of one unit of *Live Fish Vending Centres* has been worked out as 20.0 lakh as per the Governmental guidelines.

Benefits from Implementation of Plan:

- Fishers will get better price

- Socio-economic upliftment of fishers
- Consumers will get fresh and live fishes directly in hygienic condition.

Eligible Beneficiary

All Fishers, Fish farmers, Fish workers and Fish vendors, Fisheries Development corporations, Self Help Groups (SHGs)/Joint Liability Groups (JLGs) in fisheries sector, Fisheries cooperatives, Entrepreneurs and private firms, Fish Farmers Producer Organizations/Companies (FFPO), SCs/STs/Women/Differently abled persons

Implementation of Plan

The proposed scheme “Live Fish Vending Centres” is a beneficiary-oriented scheme. After the due approval of schemes by the Government, the schemes will be implemented through District Fisheries Officers by the beneficiary under the technical guidance of Block Fishery Extension Officers (FEO).

Government Assistance

The total admissible Government subsidy will be limited to 40% of the project cost for general category beneficiaries and 60% of the project cost for Scheduled Castes(SCs),Scheduled Tribes(ST) and women.

Beneficiary contribution can either be self-financed or bank loan or both.

Sources of Finance

The estimated project cost of one unit of *Live Fish Vending Centres* has been worked out as 20.0 lakh as per the Governmental guidelines.

Time line for Project Implementation

Activity	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
Inviting application												
Scrutiny and verification and site selection												
Issue of advance approval for construction												
Construction & Purchase of material												
Verification of construction and recommendation for subsidy release												
Release of subsidy to beneficiary												

Model Scheme for "Live Fish Vending Centre"

Sl. No	Particulars	Amount
A	Capital Cost-	
1	Construction of a house store for live fish 20'x15'.	200000.00
2	Construction of over head tank (10000 Ltrs.) (Excluding pipe fittings.)	50000.00
3	Construction of 6"x4" dia deep boring, with pump set.	30000.00
4	Construction of Pucca Drain 50'-0" length.	20000.00
5	Cost of Pipe fittings in FRB tank, Selling place, Stocking tank, Drain System over head tanks with all required fittings i.e required valves, tees, elbows, nipples, bends etc. as required.	40000.00
6	Construction of working Platform 15'-0" X 10'-0" is optional and may be included if Capital Cost decreases from its given limit.	30000.00
7	Cost of electrification and Generator set/ pump set as required.	100000.00
8	Cost of one big size cooling refrigerator	50000.00
9	Cost of 6 no(s) of 4'x4'x4' FRB Tank.	100000.00
10	Cost of Air pump 4 (Nos) , One D.C. Air pump and one 12 Volt 180 Amp battery.	70000.00
11	TATA YODHA PICKUP (CREW CABIN 2956 CC) for live fish transportation	1110000.00
12	Contingent and miscellaneous expenses etc.	25000.00
	Total-	1825000.00

B	Recurring Cost (Input Cost)	175000.00
	Grand Total-	2000000.00
Total Rs. Twenty Lakh Only.		
Project items (as per site) and its cost may vary as per local condition and market prices as but for subsidy calculation the project cost limit will be 20 lakh. The above govt. subsidy will be given to a beneficiary with or without institutional finance. Site specific Estimates should be prepared for every project.		

Operational Cost

Operational Cost			
tems	Quantity	Unit Price (Rs)	Total Expenditure (Rs)
i). Cost of Manuring/fertilization	----L.S.-----		21250
ii). Cost of feed	200 KG	RS 50/KG	10000
iii). Electricity & fuel	-----L.S.-----		80000
iv) Labour charge	1 No. 300 DAYS	RS 250/DAY	75000
TOTAL (RS)			186250
			Say Rs. 175000

*Note-The prices of the above-mentioned items are indicative only. the actual prices of the items may vary as per the local marketing conditions. However, for subsidy calculation purposes the amount will be restricted to rupees One Lakh Seventy five Thousand only towards input cost.

Estimates of Output and Value of Output

Fish production cost or purchases:-

IMC fish per year:- $230 \text{ kg/day} * 300 \text{ days} * \text{Rs } 160/\text{kg} = \text{Rs. } 11040000$

Cat fish per year:- $70\text{kg}/\text{day} * 300 \text{ days} * \text{Rs } 560/\text{kg} = \text{Rs. } 11760000$

Total production cost or purchases per year: - Rs. 22800000

Fish sell per year:-

IMC fish avg. Sell per year @ 200/kg

i.e. $230 \text{ kg/day} * 300 \text{ days} * \text{Rs. } 200/\text{kg} = \text{Rs. } 13800000$

Cat fish avg. Sell per year @ 600/kg

i.e. $70 \text{ kg/day} * 300 \text{ days} * \text{Rs. } 600/\text{kg} = \text{Rs. } 12600000$

Total fish sell per year: - Rs.26400000

Gross income per year:- $\text{Rs.}(26400000-22800000) = \text{Rs. } 3600000$

IMC fish sell avg. Profit Rs. 40/kg

i.e. $230 \text{ kg/day} * 300 \text{ days} * \text{Rs. } 40/\text{kg} = 27600000$

Cat fish sell avg. Profit Rs. 40/kg

i.e. $70 \text{ kg/day} * 300 \text{ days} * \text{Rs. } 40/\text{kg} = 8400000$

Total gross income per year:- Rs.3600000

Expenditure:-

Fuel charge, driver and maintenance per year:-

i.e. $\text{Rs. } 4000/\text{day} * 300 \text{ days} = \text{Rs. } 1200000$

Labour charges (one fish cutter, one seller and one manager)

i.e. $3 \text{ men} * 400/\text{day} * 300 \text{ days} = \text{Rs. } 360000$

Bank repayment per year with interest Rs 193750

Total expenditure:- Rs. 1753750

Net income : Gross Income-Expenditure

i.e. $\text{Rs. } (3600000-1753750) = \text{Rs } 1846250$

Estimates of Project Worth/ Feasibility

Financial Analysis

Particulars	Amount (Rs)
Project Cost	20.00 lakh
Capital Cost	18.25 lakh
Recurring Cost (Working Capital)	01.75 lakh
Gross Income	36.00 lakh
Net Income	18.46 lakh
BCR	> 2

Project Cost Analysis

Particulars	Amount (Rs)
Capital cost	18.25 lakh
Recurring cost	1.75 lakh
TOTAL COST	20 lakh

