

17. INSULATED VEHICLE

Fish is an exceptionally important constituent of the human diet and a global industry exists to provide a huge variety of consumer products in which fish is the only and/or major component. These offerings range from whole fish, large and small, to pieces of fish such as cuts and fillets. A number of surveys have shown that consumer awareness about quality of their food is increasing. Fish and fishery products are in the forefront of food safety and quality improvement because they are among the most internationally traded food commodities. It has been used to describe a wide range of characteristics of the fish, from the flesh and skin, to how well it can be processed to the impact of the fish on the environment. Quality deterioration of fishes may originate from poor slaughter process, handling of raw materials during processing and post harvest periods. But the most critical gap is the travel time of the product from capture end to consumer end. Freshness makes a major contribution to the quality of fishes and the contribution of cold chain during the supply chain is crucial to provide its freshness and overall quality.

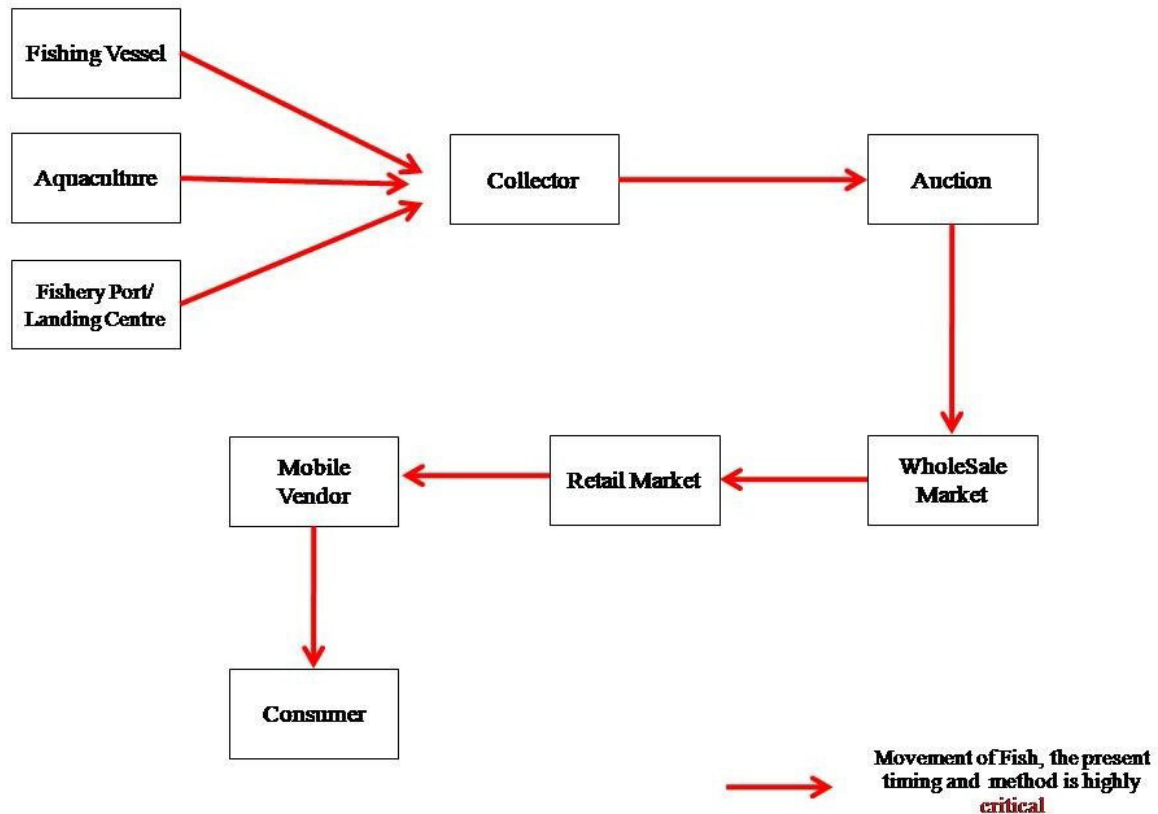
Fish is highly perishable commodity. As spoilage of fish starts right from the time it is caught, proper storage, preservation and prompt disposal or transport services are essential. Various studies have pointed to the high levels of wastage in the Indian fish and fishery products due to spoilage. This is a vital area to be addressed, and may result in increased economic returns to those dependent on the fishery without any increase in fishing effort.

West Bengal, contributing 12.6 percent to total national fish production and is also the second largest producer of fresh water fish in whole India in the year 2019-20. Challenges in the sector necessitate the need for adopting innovative supply chain solutions from Boat to Fork, so as to ensure supply of safe, hygienic & nutritious fish to the consumer, at a reasonable price. With the growth of the modern retail market and increasing consumer awareness about fish as a healthier source of animal protein, the domestic fishery sector is well poised to grow at a faster pace along with the export sector there is a strong need for the cold chain industry to come up with innovative & cost effective transportation and storage facilities to ensure supply of superior product to the consumer. Innovative & integrated cold chain solutions across the domestic supply chain can act as a critical enabler to guarantee superior quality of fresh, chilled, frozen and processed fishery products across the country.



** Picture is indicative only*

Bengalees, a fish loving community, used to make a habit to go to market with a bag just after bed tea to fetch a couple of fresh fishes. There are 477 nos of Wholesale markets and 3157 nos of retail markets throughout the West Bengal. 3718 nos of wholesalers and 44347 nos of retailers are engaged to sell the fishes. 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. But the most critical gap is the travel time of commodity. As longer the travel time, shorter is the shelf life. It is vividly described in the figure below.



It is needless to say that our motive should try to shorter the red marked travel time in the above figure.

Name of Scheme

“Insulated Vehicles” under INFRASTRUCTURE AND POST-HARVEST MANAGEMENT of beneficiary oriented activities under centrally sponsored components of the Government.

Objectives

- To reduce travel time of perishable fish items with better and hygienic transport facilities.
- To maintaining the quality of fish products upto the end buyers by increasing shelf life
- To encourage and establish the cold chain with additional employment generation

- To afford better prices to the sellers/ fishermen
- To reduce post harvest losses
- To uplift the socio-economic condition of fishers.

Name of the Component:

1. A Vehicle with the ability to load and move with a container having capacity on 10-20 tons. The Vehicle should have Chassis of new truck with Substantial Power Saving, Lower Operating Cost & Highly Reliable.
2. They should be of a suitable size for accommodating the range of fresh fish caught/harvested, so that they are not bent or distorted in anyway. They should be able to withstand relatively rough handling.
3. A PUF/ Galvanised steel made body of Container are designed to insulate and operate that have been suitably insulated for transportation of fresh or frozenfish products. The Plates are mounted inside a chamber which is separate from the main load system. The product inside the storage compartment should have techniques keep the temperature fixed from -250 C to +100 C. The container of the vehicle should have drains for ice melt water should possess good insulating properties to avoid high heat in filtration, rapid rises in temperature of fish and quick melting of ice.

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 Refrigerated Vehicle has been worked out as 20.0 lakh as per the Governmental guidelines.

Benefits from Implementation of Plan:

- Shorten the duration of transport
- Increase the possibility of hygienic transport and shelf life of perishable fish products.
- Lower the transport cost which lead to buy the product in lower price with assured quality by the end user
- Socio-economic upliftment of fishers

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

Government assistance

The total admissible Government subsidy will be limited to

