

PROGRAM PROFILE

**'Sustainable Fisheries'**

*A component of Tamil Nadu and  
Puducherry Coastal Disaster Risk  
Reduction Program (CDRRP)*

# Fisheries Livelihood Support

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*Enabling coastal communities  
to stay resilient to disasters and  
the fisheries - sustainable.*

## FOCUS AREA

### Coastal districts of Tamil Nadu and the Union Territory of Puducherry.

**AIM:** Improvement of fisheries' sustainability through upgrading infrastructure, provision of work shelters, modernization of fishing harbors and fish markets, developing an approach for co-management of fisheries and addressing safety at sea.

**DEVELOPMENT OBJECTIVE:** Implement local reform process to support improved performance in the marine fisheries sub-sector, characterized by more sustainable flow of social and economic benefits to coastal fisheries communities and a healthy marine environment.

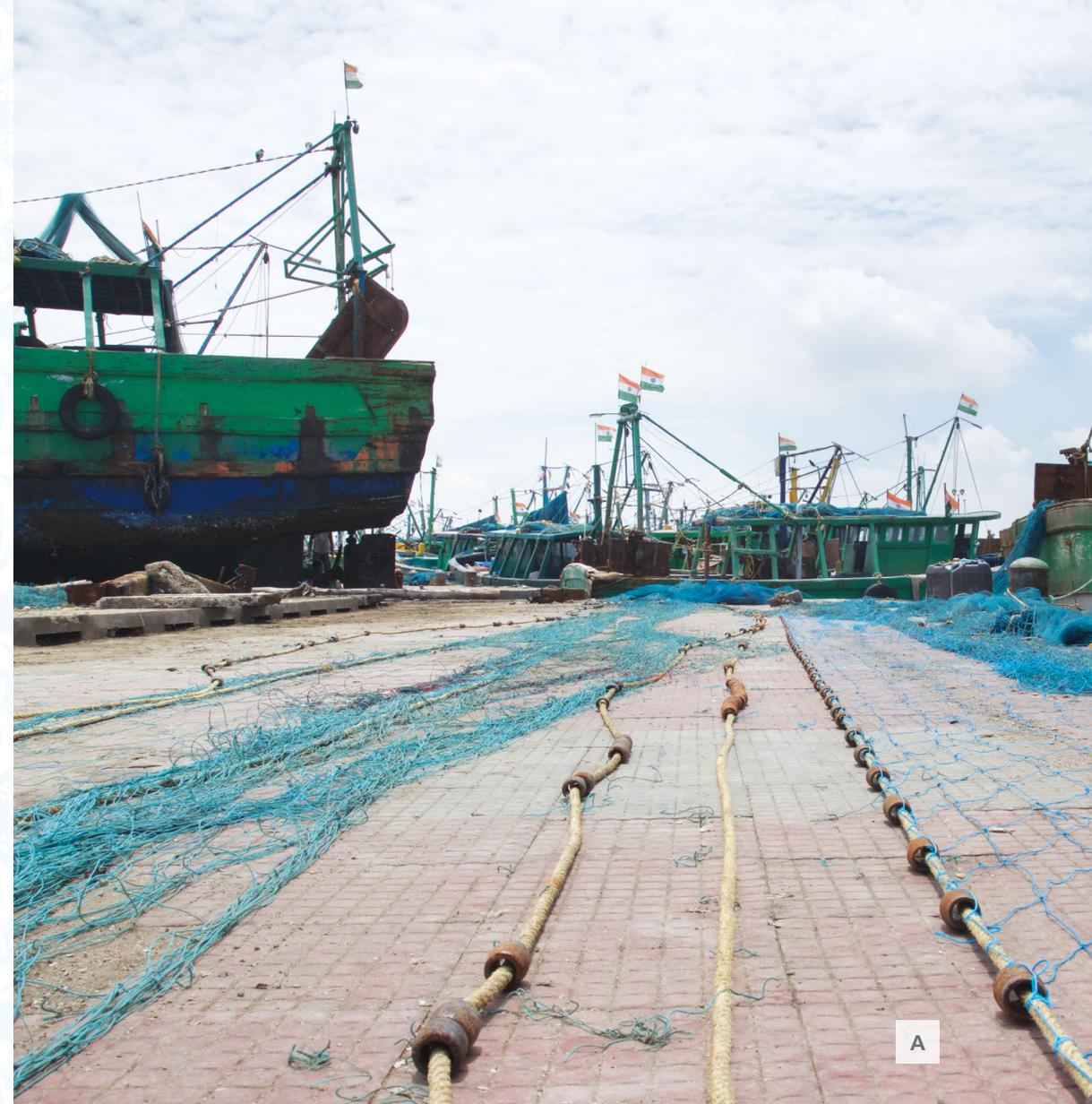
#### IMPLEMENTATION AGENCY:

- **Tamil Nadu:** Fisheries Department
- **Puducherry:** The Department of Revenue & Disaster Management (DR&DM).

## PROGRAM OVERVIEW

### Tamil Nadu and Puducherry together have a coastal length of 1095 kms. This coastal region is densely populated with 50% of the population living

in the 13 coastal districts of Tamil Nadu, while two-third of the total population of Puducherry lives along the coast. Fishing and related activities provide livelihood to about 200,000 families in this region. However, the coastal population and economic assets are vulnerable to multiple hazards including cyclones, storm surges, coastal floods and tsunamis. The coastal areas also face threats of rise in sea-levels, shoreline erosions, salt water intrusion, depletion of ground water resources, degradation of mangroves and increasing commercial development pressures. Such natural and man-made hazards



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significantly affect the coastal population and the risks are likely to increase.

In 2013, the World Bank assisted Coastal Disaster Risk Reduction Project (CDRRP) which was launched by the Government of Tamil Nadu and Puducherry. The focus of CDRRP is to increase the resilience of coastal communities to a range of hydro-meteorological and geophysical hazards

with an aim to reduce their vulnerability to disasters. Sustainable Fisheries is one of the components of CDRRP, under which the fisheries' sector will be supported during the project period from June 2013 to July 2018.



A. Fishing harbor, Pazhayar, Nagapattinam district



## SUSTAINABLE FISHERIES (USD 59.2 Million) Project Activities in Tamil Nadu

Tamil Nadu has 591 marine villages inhabited by 9.15 lakh fishermen. The fisheries sector not only provides livelihood to the community of fisher-folks engaged directly in fishing activities but also caters to a much larger population engaged in other fishing related activities — selling, transporting, processing and others. The 2004 Indian Ocean Tsunami devastated fishers' livelihoods and damaged most of its 3 major and 17 non-major ports.

The focus areas of the sustainable fisheries includes upgrading fisheries infrastructure, developing an approach for co-management of fisheries and addressing fishers' safety at sea.

### Major Activities

- Construction of fish landing centres at Nagore in Nagapattinam district, Portonovo - Annankoil in Cuddalore district, Mallipatnam in Thanjavur district.
- Reconstruction and modernization of two fishing harbors at Pazhayar and Nagapattinam in Nagapattinam district.
- Providing permanent opening of Vellar river bar mouth in Cuddalore district and

Uppanar river bar mouth in Nagapattinam district.

- Establishing one tube ice plant and chilling room at Chinnamuttom fishing harbour in Kanyakumari district.
- Reconstruction and modernization of fishing harbor at Mallipatnam, and permanent stability of coastal inlet at Punnakayal village in Thoothukudi district.
- Under Fisheries Management and Sustainable Livelihoods (FIMSUL II)
  - Provision of wireless communication system for the safety of fishers at sea.
  - Implementation of fisheries co-management.
  - Improved capacities and knowledge management.
  - Fisheries livelihood and management support.

has a waste water and sewage treatment plant, waste management system, toilets for men and women, LED lighting, parking area for vehicles and an administrative block. A new ice plant and a petrol and diesel pump are currently being set up.



**Madhavi with her children at Nagore FLC**

“Earlier, we would sometimes control the urge to answer nature’s call, because we had to leave our work in search of open places. Here we have toilet facility for women with water supply. We have privacy. The place is well lit, so it is safe at night.”



**B.** Fishing harbor, Pazhayar, Nagapattinam district  
**C.** Madhavi with her children at Nagore fish landing centre

### PROJECT HIGHLIGHT | Tamil Nadu

*Fish Landing Centre (FLC) at Nagore, Nagapattinam district*

Nagore is a major fish production centre close to the Vettar estuary in Nagapattinam district. To augment the fisheries activities a new fish landing centre has been constructed with a 200-meter long berthing facility that can safely anchor 350 fiber boats. The FLC has processing, storing facilities, net mending sheds, designated places for cutting, cleaning, washing of fish and storage rooms with locking facility. The FLC

## SUSTAINABLE FISHERIES (USD 22.8 Million) Project Activities in Puducherry

Puducherry has a fishermen population of about 1,00,000 engaged in fishing. The Fisheries Sector is an important source of livelihood to a large extent of the society. A total of 17 works have been proposed and planned.

### Major Activities

- Modernization of fishing harbors at Puducherry and Karaikal
- Provisions of Work Shelters for safe keeping of Out Board Motors (OBM), fishing gears, and net mending sheds. In addition, solar fish drying units and electrically operated winches for hauling catamarans are provided.
- Improvements to the existing fish market in Puducherry at Saram and Goubert market as well as construction of modern hygienic fish market.
- Under Fisheries Management and Sustainable Livelihoods (FIMSUL II).
  - Implementation of marine fisheries co-management.
  - Improved capacity and knowledge management.
  - Fisheries livelihood and management support.



### PROJECT HIGHLIGHT | Puducherry: *Modern Hygienic Fish Market*

Puducherry Modern Hygienic Fish Market at Lawspet on East Coast Road is an achievement in terms of safe and hygienic fish storage, processing and selling practices in adherence to the international standards. The market was constructed at a cost of INR. 13 crores. The fish market has an area of 37,886 square feet and has centralized air-conditioning. It has two floors with 110 air-conditioned stalls. The ground floor will be used for selling 'high value' fish and the first floor for selling 'low value' fish. Both these floors have facilities for dressing, cutting, cleaning and washing, as well as cold storage facility.

The building has storage rooms, meeting hall, multipurpose hall and a crèche for the convenience of fishers. A separate space for auction hall is also available. The market has an ice-plant with a 10-tonne capacity. The facility has an effluent treatment plant for treatment of waste water which will be used for gardening in the market premises. A 10-KV solar power plant has been provided.



**D.** Puducherry Modern Hygienic Fish Market on East Coast Road

**E.** Multi-purpose hall at Puducherry Modern Hygienic Fish Market



## Good Practices | International Standards in Fish Production

The fish production centres at Tamil Nadu and Puducherry are major seafood producers in India. To adhere with the international standards for seafood processing, storage and export, providing modern infrastructure has been a key focus area of this project. Existing fisheries infrastructure is being renovated keeping this in mind and new facilities are being created to ensure safe, hygienic, sustainable and environment-friendly practices. Cold storage, ice plants for fish preservation with modern ice manufacturing facility within the premises, hygienic auction halls, adequate clean water supply, designated places to clean and cut fish and good storage facilities are being provided.

In all the new Fish Landing Centres (FLCs) and harbors, great care has been given to ensure

safe, clean and hygienic practices in compliance with international standards. The following are some good practices implemented:

- Raised handling platforms have been constructed next to where fish lands and where fish containers are handled to avoid fish contamination.
- Elevated platforms have been provided in fish cleaning and cutting areas for hygienic handling of fish.
- High grade seamless and non-skid epoxy flooring has been provided to avoid bacterial contamination from bacterial deposition in floor crevices and will be resistant to chemicals, disinfectants, shock and impact.
- Provision of high pressure jets for cleaning of fish containers and fish storing and handling crates.
- Proper drainage systems for used water.



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## Challenges

One of the main challenges to ensure that facilities being provided under the CDRRP are operational and being maintained, is the formation of fisheries co-management bodies. Each of these new facilities should have a managing body comprising of members from the fishing community, representatives from the fisheries department and the District Collector or Assistant Collector as the chairman. These fisheries co-management bodies have not been formed yet in most places. As a result maintenance of these facilities is either absent or inadequate. For the Tamil Nadu facilities at Nagore, Annankoil and Pazhayar, formation of a fisheries co-management body that can levy and collect user charge as well as redress grievances is still pending. Consultation with fishers to finalize the rates for user charge

also needs to be initiated at the earliest before these facilities become fully operational. In addition, fishers, management bodies, and other stakeholders also need to be trained in asset management and maintenance to ensure long term sus-tained hygienic environment and fish production.

The Puducherry Modern Hygienic Fish Market faces the challenge of creating a list of beneficiaries for stall-allotment. The facility which is ready to be used remains unutilized due to this delay. The World Bank team has stressed on the need to identify agencies at each of the facilities for efficient management and maintenance.



F. Fisherman Murugan with his catch, Nagore Fish Landing Centre, Nagapattinam district

G. Fish landing centre at Nagore, Nagapattinam district (compost pits in the foreground)



**KARTHIBAN, Nallavadu Fish Landing Centre in Puducherry**

*"We have about 250 boats here. We usually go fishing in a group of four people per boat. So, about a 1000 fishermen come and go daily. We are finding this fish landing centre very useful for our work. We can store our nets and other fishing gear. There are rooms with locking facility."*

## The Way Forward

The provision of fish landing centres, harbors, fish markets, auction halls equipped with modern technology, provision of adequate facilities and infrastructure under the CDRRP is well appreciated by the local communities. This will enable the fishing community in the region to increase their fisheries production as well as store, manage, process and export products in adherence

with the international standards. Several of these measures will also ensure safety of fishers' life, property and livelihoods, more sustainable flows of social and economic benefits to coastal fisheries communities and ensure a healthy marine environment.



**H.** Boats at the Pazhayar fishing harbor in Nagapattinam district

**I.** Karthiban, Fisherman, Nallavadu, Puducherry



 Fish landing centre at Nagore, Nagapattinam district  
February, 2017.

