## FISHERIES LIVELIHOOD SUPPORT IN INDIA

Improving the sustainability and resilience of fisheries

#### AT A GLANCE

#### **Country** India

Risks Climate change exacerbating extreme weather events Area of Engagement Promoting resilient infrastructure

The governments of Tamil Nadu and Puducherry have adopted a comprehensive strategy to improve the sustainability and resilience of fisheries in their respective coastal regions.

### FISHING INDUSTRIES UNDER THREAT FROM CLIMATE CHANGE

Located in South India, the densely-populated regions of Tamil Nadu and Puducherry together have a coastal length of more than 1,000 kilometers, making the fishing sector essential to local and regional economies. Their fish production centers are among India's major seafood producers.

Events like the 2004 tsunami, Cyclone Nilam in 2010, and the Chennai floods of 2015 have shown that fishery-dependent communities in the coastal areas are highly vulnerable to the devastating impacts of natural disasters, which are only being exacerbated by climate change. Marine fish landings in both Tamil Nadu and Puducherry have fluctuated considerably in recent years, which may be a manifestation of climate change. Unsustainable fishing methods and non-compliance with fishing regulations are contributing to the rapid degradation of the marine environment, causing further pressure on the marine fish stock. Accordingly, there is a growing need for the implementation of responsible fishing management measures and governance for the sustainability of livelihoods.

Supported by the Global Facility for Disaster Reduction and Recovery (GFDRR) and the World Bank, the Sustainable

### Fish landing centers in North and South Tamil Nadu



Source: Center for Coastal Zone Management and Coastal Shelter Belt

Fisheries component of the Coastal Disaster Risk Reduction Project (CDRRP)—launched in 2013 by the governments of Tamil Nadu and Puducherry—commits \$82 million to improve the sustainability and resilience of fisheries in the coastal regions.

### A COMPREHENSIVE APPROACH TO TO SUSTAINABLE FISHERIES

The governments of Tamil Nadu and Puducherry, with the support of GFDRR, have adopted a comprehensive, multipronged strategy toward implementing the Sustainable Fisheries component of CDRRP. Main components of this strategy are highlighted below.

Providing modern infrastructure has been a key focus for both governments, with the aim of enabling the fisheries sector to adhere to international standards for seafood processing, storage, and hygienic fish marketing including export. Existing fisheries infrastructure was renovated to meet these standards, and new facilities were created to ensure safe, hygienic, and environment-friendly practices.

GFDRR

These new facilities include cold storage, use of ice plants for fish preservation, hygienic auction halls and adequate clean water supply.

- Under the CDRRP's Sustainable Fisheries component, the governments of Tamil Nadu and Puducherry are also moving forward with the implementation of fisheries comanagement (between user groups and the government). All fisheries infrastructure in Tamil Nadu are now being managed by asset comanagement committees established by CDRRP which represent all key stakeholders, including fisher communities.
- In addition, steps are also being undertaken by the governments of Tamil Nadu and Puducherry to build capacity, strengthen knowledge management, support livelihoods, and promote hygienic fish processing and marketing in fisher communities in both coastal region. In Tamil Nadu, an effort is progressing to provide a wireless communication system for the safety of fishers at sea.
- Alternative livelihood activities, such as coconut shell-based crafts production, which target women and unemployed youth, are another key feature of the Sustainable Fisheries component. GFDRR supported the design of the component and provided expertise during implementation.

### LESSONS LEARNED

## Comanagement bodies are a key tool toward building sustainable fisheries.

Comanagement bodies established under CDRRP have been instrumental to ensuring that the facilities built under the project are maintained and operated properly. In particular, comanagement has fostered a collaborative decision-making process that has not only encouraged active engagement from fishers, but also strengthened local cohesion.

## Policy reforms must come with effective enforcement mechanisms.

While there has been marked progress in promoting sustainable fisheries through the implementation of comanagement and other key reforms, these can only be fully effective if they are backed by enforcement. Currently, the Fisheries Departments of Tamil Nadu and Puducherry lack capacity to enforce compliance. There is a need to create an effective enforcement mechanism in both regions, with appropriate levels of funding and supporting infrastructure.

# OVER 700 FAMILIES

benefitting from livelihood projects

### INFRASTRUCTURE MODERNIZED

In Tamil Nadu, the project supported construction of two fish landing centers, reconstruction and

modernization of two fishing harbors, and provision of a permanent opening for two river bar mouths. In Puducherry, the newly built 37,886 square-foot Puducherry Modern Hygienic Fish Market provides safe and hygienic fish storage, processing, and selling practices in adherence to the international standards.

#### LIVELIHOODS IMPROVED

Livelihood programs, which include aspects like macroalgal culture, fish cage culture, bivalve farming,

and ready-to-eat products, have benefitted over 700 families. The majority of families benefitted from the macro-algal culture livelhood program.

### FISHERIES COMANAGEMENT PILOTED

In order to ensure the continued maintenance of newly built infrastructure, the project has supported the establishment of

fisheries comanagement platforms comprised of members of the fishing community and local officials. Since the introduction of comanagement, there has been a significant improvement in the quality of maintenance of fishing facilities.

"We are finding this fish landing center very useful for our work. We can store our nets and other fishing gear. There are rooms with locking facility."

-- Karthiban, Nallavadu Fish Landing Centre in Puducherry

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