



Photo credit: Mallapragada Venkata Narayana/WorldFish

## FACT SHEET

# Odisha Integrated Irrigation Project for Climate Resilient Agriculture (OIIPCRA) in Odisha, India



## Introduction

The Odisha Community Tank Development and Management Society (OCTDMS), under the Department of Water Resources, Government of Odisha, is in the process of implementing the World Bank-funded Odisha Integrated Irrigation Project for Climate Resilient Agriculture (OIIPCRA), which runs from 2019 to 2025. The project's development objective is "to intensify and diversify agriculture production, enhance climate resilience and improve water productivity in selected cascades of Odisha." The proposed project will focus on small and marginal farmers, Pani Panchayats, farmer producer organizations, Primary Fisher Cooperative Societies (PFCS) and other agricultural entrepreneurs, including women and other vulnerable groups.

## Background

The aquaculture sector in Odisha, India, is pivotal for providing both nutritional sustenance and livelihoods, especially for underprivileged communities. Odisha is a prime location for aquaculture industry, boasting fish production of more than 1 million t, ranking fourth in the country and financial year contributing 2.73 percent to the state gross domestic product in 2022–2023. Nearly 94.4 percent of the population relies on fish for animal protein. Spite abundant from neighbouring states freshwater resources, Odisha still imports about 50,000 t of fish annually. This highlights the significant need for self-sufficiency. Challenges such as technological limitations, inadequate infrastructure and climate change impacts hinder the sector's full potential. As such, urgent action is needed to bolster Odisha's aquaculture sector by mitigating and adapting to the climate risks on food and nutrition security. Moreover, leveraging the potential of women self-help groups (WSHG) in community aquaculture could foster gender equity, aligning with Odisha's progress on initiatives to empower women. To address these challenges, the OIIPCRA focuses on enhancing climate-resilient aquaculture practices and intensifying production. In recognizing aquaculture as a crucial component in this endeavor, the initiative aims to fortify agricultural and aquacultural production, diversify value chains and enhance climate resilience in selected 15 districts of Odisha.



## Project

Odisha Integrated Irrigation Project for Climate Resilient Agriculture (OIIPCRA)

## Donor

Fisheries and Animal Resources Development Department, Government of Odisha, India

## Partners

- Fisheries and Animal Resources Development Department, Government of Odisha, India
- Odisha Integrated Irrigation Project for Climate Resilient Agriculture (OIIPCRA), Department of Water Resources, Government of Odisha, India

## Project Duration

1 May 2023 to 30 June 2025

## Goals

The Fisheries and Animal Resources Development (FARD) department, through the Directorate of Fisheries, is currently implementing OIIPCRA Subcomponent A.2: Support to Aquaculture Production. The objective is to intensify and diversify aquaculture production and enhance climate resilience in 15 project districts of Odisha.

During the project's mid-term review by the Government of Odisha and World Bank team, the OIIPCRA decided to implement following activities under this sub-component:

1. Promote climate-resilient aquaculture practices in 263 Minor Irrigation Projects (MIPs) (1122 ha) by WSHGs, PFCS, Water User Groups (WUG) and Pani Panchayats to increase the ability of small-scale farmers, especially women, to adapt to and mitigate climate-induced effects.
2. Promote Species Diversification in Private Tanks through Polyculture of Indian Major Carps (IMC) with Amur Carp, Minor Carps, Mola and Freshwater Prawn and Monoculture of GIFT Tilapia and Pangasius as an adaptation strategy to reduce the risk and mitigate climate change impacts.
3. Promote intensive aquaculture through adoption of new technologies, such as Biofloc fish farming, to generate income, support livelihoods and mitigate the effects of climate change on productivity.
4. Demonstrate freshwater prawn nurseries so that farmers and community-based organizations can produce quality prawn juveniles to generate income, support livelihoods and enhance resilience to climate change on productivity.
5. Provide small feed mixing plants to local community organizations to promote supplementary feeding by farmers using locally available fish feed ingredients to achieve climate resilient growth in the fisheries sector.
6. Provide water testing kits to farmers engaged in fish farming in MIP, individual tanks and Biofloc tanks in order to monitor water quality parameters for adaptive measures to increase fish production in this climate change scenario.
7. Help fish farmers harvest fish by providing drag nets and strengthening post-harvest marketing infrastructure, such as three- and four-wheelers with ice boxes.

8. Implement a capacity building program for aquaculture stakeholders to foster enhanced knowledge on the aquatic food production system and to strengthen community-based institutional architecture.

## Components

The project intends to have an opportunistic approach in terms of promoting fish production using MIP tanks. The approach is to intervene in providing end-to-end solutions, specifically from seed production to market links, where capacity building will cut across all project activities. Based on the feasibility of the tanks, the project will focus on augmenting the promotion of seed for inland species, increasing fish production, supporting management and providing fishers with the facilities they need to market their products.

The fishery sector intervention looks at the following six activities:

1. Use MIP tanks and waterbodies to increase the income of fishers.
2. Propagate scientific fish farming technologies among fishers to improve production.
3. Strengthen quality fish seed production and supply chain management.
4. Demonstrate intensive and semi-intensive fish farming in ponds in the project area so that fishers can earn a higher return.
5. Provide infrastructure and support to fishers to strengthen post-harvest management.
6. Offer support to selected establishment of cooperatives and government institutions for fishery-based enterprises.

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