

# *Socio-Economic Impacts of Fisheries Development Schemes: Lessons from Jharkhand and Maharashtra*

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## **ABSTRACT**

Fisheries development schemes play a crucial role in enhancing rural livelihoods, food security, and employment in India. This article evaluates the socio-economic effects of key government initiatives such as Matsya Mitra, housing schemes, seed stocking, and farm ponds in Jharkhand and Maharashtra. While these programs have successfully increased fish production, created new farmers, and improved living conditions, beneficiaries continue to face financial, administrative, and extension-related constraints. Drawing on social impact assessment (SIA) approaches, the article highlights the need for holistic, community-centered strategies to ensure sustainable development in the fisheries sector.

## **INTRODUCTION**

**F**isheries and aquaculture are vital for India's economy, contributing to nutrition, income generation, and employment for millions of rural households.

The sector supports food security for a large population, with states implementing targeted schemes to boost production and improve livelihoods (Mallick & Dash, 2019). However,

the success of these programs depends on understanding their real-world impacts and addressing implementation challenges. Global experiences emphasize the importance of comprehensive social impact assessments (SIA) that go beyond economic indicators to include well-being measures (Clay & Colburn, 2020; Pollnac *et al.*, 2006).

In Jharkhand, schemes like “Matsya Mitra”, fishermen housing, reservoir seed stocking, and 30-decimal tanks have been implemented to strengthen the fisheries sector. Similarly, farm pond-based fish culture is gaining popularity in Maharashtra’s Vidarbha region. This article examines the positive outcomes and persistent constraints of these initiatives, offering practical insights for policymakers and extension workers.

### Positive Socio-Economic Impacts:

Government interventions in Jharkhand’s Saraikela and West Singhbhum districts have yielded encouraging results. Matsya Mitras, working as community change agents, have effectively linked rural fishers with government support. Their efforts resulted in the creation of 152 new fish farmers in West Singhbhum and 226 in Saraikela. Spawn distribution also increased significantly, reaching 874 lakhs in West Singhbhum and 625 lakhs in Saraikela during 2009-10 — a four-fold rise compared to the previous year (Mallick & Dash, 2019).

The fishermen housing scheme constructed over 1,080 dwelling units between 2001-02 and 2009-10, enabling families to replace mud-thatched houses with better shelters. This improvement in basic infrastructure has enhanced living conditions and livelihood security for poor fishing communities. Additionally, the 30-decimal tank rearing scheme has benefited 351 families, boosting local seed production and encouraging the shift from traditional extensive to semi-

intensive aquaculture practices (Mallick & Dash, 2019).

In Vidarbha, Maharashtra, farm pond fish culture integrates aquaculture with irrigation, providing supplementary income to small and marginal farmers. A study of 120 farm pond owners revealed that most are middle-aged (52%), educated up to graduate level (36%), and primarily male (77.5%), with many belonging to Other Backward Classes and practicing diversified farming (Pawar *et al.*, 2025). These findings indicate growing interest and potential for scaling integrated farming systems.

### Challenges Faced by Beneficiaries:

Despite notable achievements, several constraints limit the full potential of these schemes. A comprehensive study in Vidarbha involving 450 beneficiaries identified 35 constraints categorized under extension, financial, infrastructure, core fisheries, and administrative heads. Financial constraints (weighted severity score 107.89) and administrative bottlenecks (94.05) emerged as the most severe (Rathod *et al.*, 2024). Common issues include delays in scheme approval, inadequate credit access, lack of regular training, and poor coordination among implementing agencies.

Global SIA frameworks stress the importance of assessing broader well-being indicators — such as job satisfaction, family stability, and community cohesion — alongside economic gains (Pollnac *et al.*, 2006; Clay & Colburn, 2020). Applying such approaches can help policymakers anticipate and mitigate negative impacts while maximizing benefits.

**Table 1: Key Impacts and Constraints in Selected Fisheries Schemes**

| Aspect          | Positive Outcomes                        | Major Constraints                    | Reference             |
|-----------------|--|--------------------------------------|-----------------------|
| Human Resources | Creation of new farmers via Matsya Mitra | Lack of regular training & extension | Mallick & Dash (2019) |

|                    |  |                                       |                       |
|--------------------|--|---------------------------------------|-----------------------|
| Infrastructure     | 1,080+ housing units constructed         | Administrative delays                 | Mallick & Dash (2019) |
| Production         | Four-fold increase in spawn distribution | Financial constraints (credit, costs) | Rathod et al. (2024)  |
| Overall Livelihood | Improved income, housing & seed supply   | Medium severity of overall barriers   | Rathod et al. (2024)  |

## CONCLUSION

Fisheries development schemes in Jharkhand and Maharashtra have demonstrated significant positive socio-economic impacts by increasing participation, boosting fish seed availability, improving housing, and supporting integrated farming systems (Mallick & Dash, 2019; Pawar et al., 2025). These initiatives have enhanced rural livelihoods and contributed to food security. However, financial difficulties and administrative hurdles continue to challenge beneficiaries (Rathod et al., 2024).

To achieve long-term sustainability, it is essential to adopt holistic social impact assessment methods that prioritize community well-being (Clay & Colburn, 2020; Pollnac et al., 2006). Simplifying procedures, strengthening extension services, ensuring timely credit, and improving coordination among stakeholders will help overcome existing constraints. With focused policy support, the fisheries sector can play an even greater role in rural development and inclusive growth in India.

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