Punjab's fish farming making a splash as Blue Revolution adds Rs 500 crore to farmers' income in 5 years

Courtesy: Anju Agnihotri Chhaba



With stagnant earnings from the traditional wheat-paddy cycle and mounting inflation, many farmers in Punjab are now turning to fish farming alongside conventional agriculture — and reaping substantial returns. Once considered a marginal activity, fish farming in Punjab has undergone a quiet revolution over the past five years, emerging not only as a key pillar of agricultural diversification but also a profitable alternative source of income for thousands of farmers. The government is also supporting this shift by providing subsidies under the Pradhan Mantri Matsya Sampada Yojana (PMMSY) launched in 2020. Since 2020-21, Punjab's fish production has increased by over 35,000 tonnes, worth around Rs 500 crore, in the past five years, while the total production amounts to over 2 lakh tonnes, now worth Rs 2,600 crore to Rs 3,000 crore. Sukhjeet Kaur, a farmer from Ransih Kalan village in Moga district, began fish farming in 4.5 acres of pond just a year ago. In her very first season, she sold fish worth nearly Rs 7 lakh. Encouraged by the returns, she now plans to expand the area under fish farming. "You can't earn this kind of profit from wheat or paddy on the same land after deducting expenses," she said. In 2024-25, she received a subsidy of Rs 8.80 lakh from the Department of Fisheries to set up the pond and procure fish seed at a subsidised rate. Collective efforts are also bearing fruit. The Guru Nanak Cooperative Society, comprising 11 members, has developed fish ponds over 20 acres in Faridkot's Machaki Mal Singh village — an area known for waterlogging. "We started this initiative in a region where

agriculture was becoming unviable. Fish farming has turned that challenge into an opportunity," said Mandeep Singh, secretary of the society. "With support from the Fisheries Department — both technical guidance and financial aid — we were able to get a subsidy of Rs 30 lakh last year. After deducting costs, we are earning around Rs 1.5 lakh per acre annually through fish farming." Gursimrat Singh Sandhu from Ladda Munda village in Gurdaspur district started a fish farming venture in 2022 and received a government subsidy in 2024. "The process was smooth. We got clear guidelines and timely support," he said. Sandhu has also diversified into dairy and duck farming. "I believe farmers must take up allied activities along with traditional agriculture to remain profitable," he added. These are not the only farmers who have benefited from subsidies in Punjab — hundreds more have already availed the scheme, and many others are eligible to do so.

Sustainable option in water stagnation areas

As with government support and promising returns, fish farming is steadily emerging as a viable and sustainable option especially in areas affected by water stagnation and declining soil productivity. According to the Department of Fisheries, Punjab, the area under fish farming has expanded from 41,093 acres in 2020–21 to 43,683 acres in 2024–25, marking an increase of 2,590 acres. The number of ponds under fish culture has also grown from 12,112 to 12,881 during the same period. Annual fish production has surged by over 35,000 tonnes, reaching a record 2,00,003 tonnes in 2024–25, up from 1,64,879 tonnes in 2020–21. "Fish farmers, cultivating on private lands, panchayati ponds, and natural water bodies, are earning Rs 1.5 to 2 lakh per hectare annually by rearing six commonly cultivated carp species and several catfish varieties," said Gurpreet Singh, Director and Warden of Fisheries, Punjab. "While carp species fetch around Rs 130–140 per kg, catfish — which are boneless and in high demand — command a much higher price of Rs 600–700 per kg. However, catfish production in Punjab is still limited.

₹833.34 lakh earmarked for fishery development projects

Principal Secretary, Animal Husbandry, Dairy Development, and Fisheries, Punjab, Rahul Bhandhari told <u>The Indian Express</u>, "As the state looks to diversify from the traditional wheat-paddy cycle, fish farming offers a viable, scalable, and eco-friendly alternative. It not only boosts rural incomes but also addresses nutritional and employment needs. The Blue Revolution in Punjab has begun." He added that a <u>budget</u> of ₹833.34 lakh has been

earmarked this year alone for further fishery development projects in the state, and farmers can avail themselves of it. He said Punjab yields around 8 tonnes per hectare — significantly higher than the national average of 3 tonnes per hectare. "While modern technologies such as biofloc systems and Recirculating Aquaculture Systems (RAS) are also driving productivity, especially in compact, indoor setups, some progressive farmers using these methods are producing 15-20 tonnes of fish on less than an acre — a significant leap compared to conventional techniques," said Bhandhari. The Department of Fisheries is supplying over 22.72 crore fish seed annually at subsidised rates through 16 government-run fish seed farms, including 11 feed mills and seven laboratories across Punjab. Under PMMSY, Punjab is witnessing targeted support for fish farmers through subsidies ranging from 40 per cent to 60 per cent for a variety of projects and activities. These include pond construction, hatchery setups, biofloc systems, refrigerated vans, and marketing infrastructure. Since the launch of PMMSY, a total of 637 beneficiaries in Punjab have received ₹30.64 crore in financial assistance. This has led to the development of 417 acres for fish farming and 832 acres for shrimp farming. Infrastructure created under the scheme includes four biofloc or Recirculating Aguaculture Systems (RAS) each, two mini feed mills, one cold storage unit, eight fish kiosks, one refrigerated van, three insulated fish vehicles, 16 auto-rickshaw-based ice boxes, and 178 motorbike-mounted ice boxes to help farmers. Experts believe that progressive farmers in Punjab can further boost profitability by adopting integrated fish farming models — combining aquaculture with poultry, piggery, dairy, and horticulture — to maximise income and better utilise available resources, said Director of the Fisheries Department. "Also, the state government has identified 1,100 panchayati ponds for development under the convergence of the Panchayati Raj and Fisheries Departments. These ponds will be revitalized and brought under fish production, creating local jobs and strengthening rural livelihoods, said Director Singh. The department has also emphasized that, alongside free training programmes, it facilitates bank loans and infrastructure development to empower youth and marginal farmers to take up fish farming as a sustainable and low-investment enterprise. From expanding fish seed production — which has increased from 1,387 lakh to 1,600 lakh in five years — to developing export-grade fish, Punjab's fisheries sector is charting a new growth path. Although Punjab is a landlocked state, the Department of Fisheries auctions riverine areas for fish culture. The key challenge now is the development of high-quality catfish seed, as market demand is not an issue — traders are purchasing fish directly from farmers' ponds and even providing catchers for harvest.

Shrimp farming reaping rich dividends in areas with saline soil

Some of the most remarkable success stories in aquaculture are emerging from districts where thousands of acres of land have been rendered unfit for traditional agriculture due to saline water and poor soil quality. Shrimp farming has revived incomes in these barren zones. As of 2024–25, 985 acres in Punjab are under shrimp cultivation, producing 2,550 tonnes of shrimp annually. Despite a temporary slump in international shrimp prices in recent years, farmers have regained momentum, now earning net profits of ₹3 lakh–₹4 lakh per acre annually. The Fisheries Department has set an ambitious target of bringing 5,000 acres under shrimp farming over the next five years. However, to meet this goal, farmers are demanding free power for shrimp cultivation, in line with the support provided to other agricultural activities in Punjab.
