Socioeconomic importance of fish farmers - A Review

Shivendra Kumar Singh
Research Scholar, Department of Zoology, Magadh University, Bodh Gaya (Bihar)- India

Abstract
Fisheries plays an important role in developing countries' socio-economic growth. This economic operation is going to be a partner of Farming in populous nations, such as India. Fishing is not only a source of revenue, but also a source of our body's essential nutrients. In addition, fisheries impact the local and national economies, create scopes of participation for rural women and disadvantaged farmers, alleviate poverty by generating jobs. India is recognised as a developing country for its inland fishing opportunities, with a rich diversity of indigenous fisheries. The rural population depends on these species for their livelihoods and food security. The fishing sector in India now accounts for 60 percent of the country's fish production, providing jobs for about 23 lakh households in the country. It makes providing food security and creating jobs for landless, small and marginal farmers more productive and sustainable.

Keywords: Fisheries, socio-economic importance and employment

Introduction
It is believed that 12 million people are actually involved in fishing and that about 60 million rely exclusively on it to survive in India (Sekhar et al., 2006). Worldwide, the role of international trade in fisheries is important. By contributing to national income, employment and foreign exchange, the fishing sector plays an important role in the Indian economy. It has vast potential for both inland and marine fish resources. India has freshwater lakes, wetlands, and swamps of around 1.6 million hectares, and about 64,000 kilometres of rivers and streams. Fisheries-related activities in India provide essential livelihoods for almost 7 million people. The fisheries sector provides many millions of people across the globe with gainful jobs. Someone who catches fish, shellfish, or other animals from a body of water is a fisherman. Salmon, catfish, tilapia, cod, carp, trout and others are fish species produced by fish farms. The rising demands of commercial fishing for wild fisheries have led to widespread overfishing. An alternative solution to the growing consumer demand for fish and fish protein is provided by fish farming. It is probable that the frequency or regularity of fish catches, the volume and yield of benefit from the aquaculture enterprise, the efficiency of management, the participation of the members of the cooperative / group in the management pattern of the aquaculture pond, would have an impact on the socio-economic status of fishermen primarily engaged in catching fish from the ponds concerned. Fish is a source of protein that is easily digestible.
and a good source of vitamin B and iodine. The fish's liver contains a decent supply of vitamins A and D. The most significant obstacles to the development of fisheries in Bihar are the need for awareness of scientific fish culture, illiteracy and disorganised links between fishermen's communities. Due to these large numbers of fish farmers, fish culture is still interested in conventional methods. In addition, next to the existing demand of 4.5 lakh MT. fish tones. India is recognised as a developing country for its inland fishing opportunities, with a rich diversity of indigenous fisheries. The rural population depends on these species for their livelihoods and food security. The fishing sector in India now accounts for 60 percent of the country's fish production, providing jobs for about 23 lakh households in the country. It makes providing food security and creating jobs for landless, small and marginal farmers more productive and sustainable. Fisheries provide billions to food and a livelihood for millions of people around the world (FAO 2014a)

**Empowerment**

Inland fisheries offer opportunities to enable people to meet and provide for their dependents with their own physical and psychological needs. This position is especially important for marginalised communities in poverty reduction, including minorities, rural poor and women (Weeratunge et al. 2014). Inland fisheries empower them with low livelihood and subsistence investment opportunities. Women, as another example, in developing countries usually have low empowerment. However, they make up 20 % of the world 's inland fishermen and complete about 90% of post-harvest processing (FAO 2014b). In terms of its contribution to gross domestic product and factor incomes, agriculture in India occupies a prime role. It accounts for 27 per cent of India's gross domestic product, 65 per cent of total labour force jobs and 21 per cent of the country's total exports (Venkitaramanan, 2001).

**Fisheries sector: contribution and growth**

The contribution of India to worldwide fish production grew from 3.26 percent in 1985 to 4.41 percent in 1997. Fish production in India has increased at a faster pace compared to the growth in world fish production, largely due to the growing amount of inland fish production. India accounted for 4.9 percent of the world 's inland production of fish and 4.07 percent of its marine production in 1997. On average, India ’s fisheries sector accounts for approximately 0.8 per cent of its gross domestic product. Since 1970–71, this has been almost unchanged. Nevertheless, its contribution to the domestic agricultural product has been continuously growing. It increased from 1.98% during the 1970s to 2.74% during the 1990s. This may be attributed to the decreasing share of gross domestic product in the agricultural sector and the faster growth in the fisheries sector relative to the agricultural sector (Krishnan et. al., 2000).

**Role of women in fish production and fish trade**

Women are active in production and other significant activities on fish farms, such as washing, sorting, etc. In an integrated strategy, farm households follow multi-enterprise production and marketing operations. Women-family members with no or just marginal land holdings are engaged in large numbers in cultivation and harvesting on or beyond their own farms. Female members of poorer families are also much more involved than their male counterparts in the harvesting of crops, refining, washing, peeling and drying activities. The bulk of women's tasks at home are not sufficiently valued as GDP contributions. In fish-cultural practices, women definitely play important roles such as
• guarding ponds during the daytime
• feeding,
• making feed mix,
• cleaning ponds

The selling of fish is mostly done by women. Women may be auctioneers, traders, sellers of trash fish and even export dealers. Women in Tamilnadu are engaged in collecting seaweed, curing fish, marketing, net making and collecting prawn seeds. In Andhra Pradesh, women’s primary occupations include the collection, processing and marketing of fish. Women also play a major role in the marketing of fish in Maharashtra and power the entire fishing industry around Mumbai.

**Socio-Economic Aspects**

It has been noted that drastic changes in the supply and demand structure of fish, especially in Asia, have occurred over the last three decades. Researchers have concentrated on numerous developing countries including Bangladesh, China, India, Indonesia, Malaysia, the Philippines, Sri Lanka, Thailand, and Vietnam, all of which are important players in changing the global supply and demand for fish. Like aquaculture, fisheries are a significant source of food, jobs and economic well-being.

Demand for fish and processed fish food in the world with a high nutritional value is growing very rapidly. The agricultural land is reduced because of the steep rise in population and the occupation of more land for housing and factories, and the population does not meet the sufficient nutritional value.

India is the world's third largest fish producer and the second largest freshwater fish producer. The United States is the second largest market for imported marine products from India. In South East Asia, India also exports fish products. It imports chilled fish and feed from Bangladesh, Japan, Pakistan, the United States, China and Thailand, on the other hand. While India imports and exports to many countries around the world fish and fish products, the fish markets are highly unorganised as handled by intermediaries and middlemen.

Fishing employs over 14.5 million people in India. There were 1.7 million full-time fishermen, 1.3 million part-time fishermen, and 2.3 million occasional fishermen in 1990, many of whom were working as salt-makers, ferry-makers, or seamen, or worked hire vessels.

In the early 1990s, fish production increased from 800,000 tonnes in FY 1950 to 4.1 million tonnes. From 1990 to 2010, the Indian fish industry accelerated, reaching approximately 8 million metric tonnes of combined marine and freshwater fish production.

In 2006, the Central Government of India launched a dedicated fisheries organisation under its Ministry of Agriculture. Special efforts have been made to facilitate extensive and intensive inland fish farming, modernise coastal fisheries and, through joint ventures, promote deep-sea fishing. Such activities have resulted in a more than
fourfold increase in the production of coastal fish, from 520 000 tonnes in FY 1950 to 3,35 million tonnes in FY 2013.

Prospective

India is the second largest producer of freshwater farmed fish in the world. When improved systems and species are adopted, there is enormous scope for their growth. A significant portion of Indian aquaculture is still focused on conventional methods of farming. Converting them to new methods of farming would improve fish production and address environmental protection as well.

Challenges

For the further development of its fish farming industry, India must address certain challenges, including the following technical challenges: The country's sector is based and operates on a few fish species—carps, pacu and pangasius—and it will increase fish production by growing this base.

Overproduction based on fewer species leads to an over-supply of unique fish types, which inevitably leads to declines in prices and fluctuations.

Lack of technology for hatchery to introduce new species that may include freshwater, brackish and marine species.

Diversification of species will help support prices and improve demand for formulated aquafeeds.

Freshwater fish farming is still based on conventional methods that often contribute to disease-promoting conditions: large ponds, no water exchange, no irrigation, and no removal of bottom sediments.

The sector would greatly benefit from the use of new cultural structures that use less land and water and should be given more priority and prioritised.

Customer acceptance and expectations are influenced by the poor quality of fish produced in inadequately controlled production systems.

Conclusion

Therefore, it can be clearly inferred from the aforementioned evidence that inland fish farming can also play an important role, together with agriculture, in the socio-economic improvement of a developing country. In a country as populous as India, in particular, inland fishing has tremendous potential as a means of livelihood that can provide society with nutritional elements at the same time. Different obstacles, such as illiteracy, lack of knowledge of scientific fish farming, the participation of marginal farmers in this area only during the rainy season, serve as obstacles to the overall flourishing of inland fish farming. Therefore, in order to effectively introduce the 'Blue Revolution,' not only should the consciousness of the farmers concerned be strengthened, but also the entrepreneurship of the local government, state and central government must be increased.
References


