

3. FISHPRENEURSHIP OPPORTUNITIES

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Introduction

Fisheries and aquaculture remain important sources of food, nutrition, income and livelihoods for hundreds of millions around the world. World per capita fish supply has increased considerably during recent years, thanks to vigorous growth in aquaculture, which now provides half of all fish for human consumption. Fish continues to be one of the most-traded food commodities worldwide with more than half of fish exports by value originating in developing countries. Recent reports suggest tremendous potential of the oceans and inland waters to contribute significantly to food and Nutritional security for a global population expected to reach 9.7 billion by 2050. With 3rd rank in capture and 2nd rank in aquaculture, India reached to production of 13.76 million metric tonnes in 2018-19 and leads to employ 145 million people. Per capita fish consumption in India is 8-12 kg which is lesser compared to average global per capita fish consumption. Fisheries are considered to be raising sectors in Indian economy due to an availability of diversified opportunities for employment. Any undertaking to achieve larger goals having economic or social dimensions may be considered as an enterprise. Right from aquaculture, harvest to post harvest fisheries sector, socioeconomic backwardness of fishing community is common in India. Encouraging diversified employment in fisheries sector is a need of an hour. Fisheries may be capture based or culture based. Fisheries activities may be pre-harvest, harvest and post-harvest and from gender based view, men fish and women process and market is the reality. Economic growth of India is attributed to development based on entrepreneurship with an aim for small scale entrepreneurship development. Hence, the entrepreneurial opportunities involved in fisheries sector have to be explored and utilized through entrepreneurial motivation, technology empowerment, skill up-gradation through different management techniques and sustenance mechanism.

Fisheries sector is very important in socioeconomic development of country. In Indian agriculture, fisheries sector occupies a very important place in the socio-economic development

of the country. It has been recognized as a powerful income and employment generator as it stimulates growth of a number of subsidiary industries and is a source of cheap and nutritious food besides being a foreign exchange earner. Most importantly, it is the source of livelihood for a large section of economically backward population of the country. India's inland water resources including rivers, canals, ponds, lakes, and marine resources comprising the east and west coasts of the Indian ocean provide employment to nearly six million people in the fisheries sector.

Entrepreneurship in fisheries means undertaking a new business venture to make it profitable. It comprises of activities as gathering of information, communication with chain partners, market orientation, strategic decision making, learning etc. Entrepreneurship deals more with strategic issues than management which focuses more on operational and tactical decisions. Craftsmanship and management can be learned more easily than entrepreneurship; the first two aspects have a more technical or procedural character, whereas entrepreneurship involves a lot of 'special' skills of the farmer, like communication and risk management, and competencies like leadership, initiativeness, openness to signals from society, vision, creativity, self-reflection, etc. Entrepreneurship development (ED) comprises the activities related to enhancing entrepreneurial attitude, skills and knowledge through various capacity building programmes.

Who is fishpreneur?

An entrepreneur is a person who develops a new idea and takes the risk of setting up an enterprise to produce a product or service which satisfies customer needs in the field of fisheries. Fishpreneurship development aim to enhance the capacity and willingness of business people to develop, organize, and manage their business ventures in the fisheries field. Commercial fish farming, seed production, fish and fish product development and export, ornamental fish breeding and marketing, aquatic plants and their sale are few areas having potential and great demand too.

There are several areas in which a fish preneurship can be started. A fish preneur should learn and imbibe several qualities required for him to become a successive entrepreneur from fishermen who have some unique qualities. Consistency (though not assured of a catch, fisherman goes for fishing regularly), meticulous utilization of assets and resources (like a

fisherman repairing and maintaining his boat and net meticulously), community oriented activities, teamwork (fishing is essentially a teamwork), and willingness to change are such qualities required for a good fishpreneur.

In fisheries sector, there are further divisions as fish harvest sector, aquaculture, post-harvest sector and marketing sector wherein fishpreneurship development is possible.

In fish harvest sector, areas wherein fishpreneurship development is possible include; Boat Building Yards, Net Manufacturing Units, Gear Manufacturing Units, Ice Factories, Navigational Equipments, Communication Equipments, Craft and Gear Repairing Workshops, etc.

In aquaculture sector, there are ample opportunities for fishpreneurship in Pond Construction, Brood Stock Maintaining Units, Hatcheries and Allied Activities, Feed Manufacturers, Input Industries for treatment of water, chemicals, medicines, pro-biotic, Equipments ranging from aerators, generators, pumps of various types, etc.

In post-harvest fisheries sector, areas wherein fishpreneurship development is possible include; Pre-processing Units, Ice Plants, Peeling sheds, Processing Units, Fish meal and fish oil manufacturers, Fish drying units, Fish curing units, Fish Canning units, Cold Storages, Quality Assessors, etc.

In the marketing sector too, there are diverse opportunities which include; Fish Wholesalers, Middlemen, Fish Retailers, Fish Vendors, Fish transporters, Cold Chain Related Personnel, Buyers from various processing units, etc. Online marketing of fish is also a growing business one can think of.

Fishery based enterprises include value added products preparation, preparation of dried fish products, fish processing unit, ready to eat fish product development, ready to cook fish product development, ornamental fish culture enterprise, mussel culture, clam collection, edible oyster culture, pearl culture, mud crab culture, Fertifish unit, net building, aqua tourism, fish vending/selling, cage farming, fish and shrimp culture, fish feed production and many more.

Fish chilling, vacuum packaging, modified atmospheric packaging (MAP), active packaging, freezing, IQF Products manufacture, battered and breaded products manufacture, ready to serve

fish products in cans and retortable pouches, ready to eat extruded fish products, fish soup powders, pickled products,

Diversified fishing system includes Recreational fishing, fish folklore museum covering models/ prototypes on fishing, reservoir/ aquaculture based eco-tourism, Fishing implements caretaking, Fishing gear recycling facility, Fishing bait/ feed making, data centres for fishing boats at sea, square mesh net making unit, net assembling units, etc.

World over in the recent past, research in nutraceuticals has shown continuous growth and the progressive approach is aimed at identifying the potential nutraceutical compounds which are having health benefits in human beings. Awareness among the people is the prime reason for the growing demand for nutraceuticals. Nutraceuticals are food products of natural origin from both terrestrial and marine sources having healthcare importance. Manufacture of nutraceuticals from marine sources include Chitin and chitosan, Glucosamine Hydrochloride, Chondroitin sulphate, Hyaluronic acid (HA), Collagen, gelatin and collagen peptides, Fish lipids, Squalene, Minerals, Calcium powder, functional foods like protein hydrolysates and isolates can be great sources for fishpreneurship development. Challenges for fishpreneurship include knowledge and skill gap, technology gap, market gap and Entrepreneurial gap.

Agri Business Incubation and Fishpreneurship development

In the globalization era, business incubators and incubatees are important in new business paradigm. A successful business incubator can create a good entrepreneurial environment and greatly improve a new enterprise's chance for success. As part of translating the research results arising from the field of fisheries and, ICAR set up a unique Agri-Business Incubation (ABI) Centre at ICAR-Central Institute of Fisheries Technology, Kochi. ABI Centre at CIFT has become a "One Stop Shop" for entrepreneurs for receiving pro-active, value-added support in terms of technical consultancy, and access to critical tools such as entrepreneur ready technologies, vast infrastructure and other resources. The Centre provides links to industry; business support services to enhance and develop business; upgrade skills and techniques; technological advice and assistance with intellectual property protection; test marketing; and access to potential investors and strategic partners. It provides a well-tested technology basket to choose from, provides access to a friendly eco-system to start the business, act as a constant

mentor, help in technology optimization and upscaling, branding and labeling, helps in IP protection, approaching financial institutions, Certifications/ approvals/ registrations, test marketing, it also provides linkages to other business mentors, help in establishing a network too. Various lines available with ABI for entrepreneurs includes; Fish Pre-Processing line, Retort Pouch Processing unit, Fish Canning line, Fish Sausage production line, Fish extruded product line, Fish Curing and Drying line, Fish battering and breading line, Fish product packing system line, Chitin & Chitosan Production line.
