

Fishpreneurship development – A New Direction in Enhancing the Farm Income

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Entrepreneurship in fisheries- need of the hour

Since independence, India has made tremendous progress with respect to food and overall livelihood security. The country's population is almost tripled in the last five decades and its food grain production has more than quadrupled, significantly enhancing the per capita food grain availability. On the other hand, the share of agriculture in national GDP has declined substantially from 55 per cent in early 1950 to about 42 per cent in 1980s and further to 17.4 per cent in 2015-16. Agriculture shares nearly 17.4 % of the national GDP (2015-16) and accounts for 13 % of total exports of the country (GOI, 2016-17), where fishery accounts for about 5.8 % of agriculture GDP and shares a substantial chunk in total exports (11 %) of the country (MoA, GOI, 2014). Indian fishery is considered as a flourishing sector with varied resources and potentials sharing about 10 % of global fish diversity. Due to research and technology developments, this vibrant sector has witnessed both horizontal and vertical expansion, with a quantum jump in total fish production from 0.75 million tonnes in 1950-51 to 11.41 MT in 2016-17, over 14.5 fold increase in fish production in just 6.5 decades, for which India has established its strong hold in global fish production, next to China. This resulted due to an unparalleled average annual growth rate of more than 4.8 percent in production and 7.5 percent in fish and fish product development over the years, fetching a foreign exchange earnings to the tune of US\$ 148.1 million out of India's total agri-export turnover of nearly US\$ 19.4 billion by the end of 2016 (APEDA). Besides meeting the domestic needs, this sector provides ample employment opportunities to more than 14.5 million people dependent on fisheries activities for their livelihood. Sharing more than 10 percent of the global fish diversity, Indian fisheries amply justifies the importance of the sector on the country's economy and in livelihood security.

Presently the changing scenario of Indian economy has resulted in large scale migration of farming community (10 lakhs per year) towards non-farming sector that may be due to the improved purchasing capacity and cosmopolitan lifestyle of people blended with rapid urbanization, international market integration and trade liberalization in India, thus posing an alarming situation of declining the farming population in rural

India. Besides, the regular migration of rural people shows a decreasing trend of rural population from 95 per cent (1901) to 65 per cent (2006) and which is estimated to decrease by 50 per cent by the end of 2020. It is needless to mention that in India 74.6 crores of rural population contributes towards 55.6 % of the national income which is higher than the contributions (44.6 %) made by about 25.4 crores urban population as rural India endowed with abundant natural resources. Hence, India cannot march forward in socio-economic front unless and until it creates enterprising farmer with sufficient knowledge, skill and attitude in the field of agriculture and allied sector and agrarian entrepreneurship development can be considered as a potential factor in its economic prosperity.

Development of agripreneurship can bring a paradigm shift in the agricultural scenario of the country thereby developing of a sustainable farming system, which is technologically feasible, economically viable, socially acceptable, and ecologically stable that determines the growth and development of the country. Sustainable farming system defines as an appropriate combination of different farm enterprises *viz.*, agriculture, horticulture, floriculture, livestock, fisheries, forestry, poultry etc. that helps them to raise the livelihood standards of small farm holders without disturbing the ecological and socio-economical balance on one hand and attempts to meet national goals on the other. Hence developments in the agricultural marketing (globalisation, enlargement of the EU, certification, food safety standards *etc.*), reformation in the agricultural policy (Common Agricultural Policy of the EU, WTO-negotiations, and so forth) and growing concern about some important issues (environment, nature, biodiversity, landscape, animal welfare, natural resources *etc.*) urge for higher levels of entrepreneurship under sustainable farming system.

Why fishpreneurship is important?

The economic growth of a country is largely attributed to commodity based entrepreneurship development in various sectors which brought out the concept of entrepreneurship with the objective of developing small-scale industries. In spite of India's high-profile economic growth in recent times, more than 300 million population still live in poverty, in which more than two-thirds of the population depend on agriculture and allied sectors for their livelihood, which is largely at small-scale or subsistence level. Today, Indian fisheries is considered as a sunrise sector with high potential for rural development, gender mainstreaming, food and nutritional security as well as export earnings that can be treated as an enterprise in the form of a rural entrepreneur-led hybrid model for small scale. Being a potential foreign exchange earner, this sector stimulates growth of subsidiary industries assuring availability of affordable nutritious food for socio-economically

backward small farm holders. Hence, the entrepreneurial opportunities involved in fisheries sector have to be rightfully explored and utilized through entrepreneurial motivation, technology empowerment, skill up-gradation through different management techniques and sustenance mechanism.

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

“An entrepreneur is one who organizes and manages a business undertaking, assuming the risk, for the sake of profit. The entrepreneur evaluates perceived opportunities and strives to make the decisions that will enable the firm to realize sustained growth.”

Pickle & Abrahamson (1990)

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 (De Lauwere et al., 2004b).

Entrepreneur VS Entrepreneurship

Entrepreneurs are those who manage an enterprise as a viable business. *The word 'entrepreneur' is derived from the French word 'entreprendre' which means 'to undertake'. Schumpeter has portrayed Entrepreneur as an innovator. He considered entrepreneurship as the catalyst that disrupts the stationary circular flow of the economy and thereby initiates and sustains the process of development (Block et al, 2017).* The entrepreneur is characterised by innovative behaviour and employs strategic management practices in the business (Cartland, 1984). Entrepreneurship has traditionally been defined as the process of designing, launching and running a new business, which typically begins as a small business, such as a startup company, offering a product, process or service for sale or hire (Yetisan et al, 2015). Entrepreneurship comprises of any purposeful activity that initiate, maintain or develop a profit oriented business in interaction with the internal situation of the business or with the economic, political and social circumstances surrounding the business (Harvard School).

Entrepreneur according to E.E. HAGEN is an economic man, who tries to maximize his profits by innovations. The process of creating something

different with value by devoting the necessary time and effort, assuming the accompanying financial, psychic and social risk and receiving the resultant rewards of monetary and personal satisfaction is called entrepreneurship (Fry, 1996). Thus, the entrepreneur is the key agent in transition processes of development.

Entrepreneurship Development

Entrepreneurship development deals with the study and analysis of entrepreneurial behaviour, to support the establishment and growth of the enterprise. Entrepreneurship development (ED) comprises the activities related to enhancing entrepreneurial attitude, skills and knowledge through various capacity building programmes. It intent to create an environment of confidence which can boost the morale of entrepreneurs so that more and more venture will be established. This will add to the employment generation and economic development of the region. Such initiatives have the potential to absorb the skilled youth of the nation so that unemployment issues can be sorted out. Entrepreneurship development can help in sustainable utilization of resources which was hitherto unexploited. New entrepreneurships can cater to the varying needs of general populace, which could not be served by Government services alone. Entrepreneurship is promoted to help alleviate the unemployment problem, to overcome the problem of stagnation and to increase the competitiveness and growth of business and industries. Various attempts have been made to promote and develop entrepreneurship. By giving specific assistance to improve the competence of the entrepreneur and his enterprise so as to enhance his entrepreneurial objectives and accommodate more people to become entrepreneurs as well.

Mishra (2005) regarded entrepreneurship development as an approach of developing human resources. It is concerned with the growth and development of people towards high level of competency, creativity and fulfillment. Entrepreneurship development has different phases viz. stimulatory phase, support phase and sustaining phase.

Stimulatory Phase

This is the beginning stage which comprises all activities that can stimulate the prospective entrepreneur/s to take up the initiative. The process begins with awareness generation, identification of opportunities, sensitizing potential entrepreneurs, conceptualization and development of suitable enterprises tuning to the specific context etc. It is meant to handhold and facilitate the persons vouching for entrepreneurship, but lacking the initial momentum. The aim is to create an atmosphere for the making of entrepreneurs and enterprises. Assessing the entrepreneurial intention,

development of entrepreneurial motivation and channelizing it into the action domain are the major activities in this phase, along with imparting required skill sets. This prepares the background from where people start looking for entrepreneurial pursuits. All these taken together stimulate entrepreneurship in a society.

Support Phase

This is the continuation of stimulation phase to facilitate the motivated entrepreneurs to channelize their ideas to action domain. Major activities include facilitated access to resources, infrastructural development, technology backstopping, market linkage, legal assistance and other services. The focus is to remove all the hurdles in the way of prospective entrepreneurs and help them to carry out the activities successfully.

Sustaining Phase

Sustainability of the enterprises is an important concern. Many enterprises fail to sustain after the withdrawal of initial support/ incubation period. Changing socio economic and political context may pose new challenges to the enterprise. New regulations and market condition will further add to the worries of the entrepreneur. Many of the entrepreneurs, especially the small scale entrepreneurs may not be able to cope up with the changing scenario and new set of problems as they are not prepared to face those issues. Lack of adequate finance, inputs and new product requirement may trouble them. Support for sustaining the entrepreneurs is needed in such cases in terms of arranging for finance, legal support, product diversification, modernization expansion etc.

There is always confusion over the concepts of Entrepreneurship and self-employment and both are often used as synonyms. Many self-employed individuals are indeed entrepreneurs, but not all of them. In most of the cases self-employments are micro level initiatives in informal sector, where growth is not focused. Entrepreneurship is broader concept compared to self-employment and focus on growth and development. Entrepreneurship, as opposed to self-employment, is also defined by the spirit of the entrepreneurs (GFRAS,2016). Entrepreneurs are usually creative, take opportunities and accept risks, and can quickly change business strategies to adapt to changing environments. They are often innovators (Kahan, 2012). Entrepreneurship development has to start with assessment of resources, need and market potential. Focus should be on product/services of high growth potential with the aim to initiate and grow dynamic enterprises. Equally important is to identify the risk involved and to develop strategies to overcome the difficulties. Creation of a facilitating environment is important

at policy level including change in the mind sets of individuals, government servants and policy makers towards entrepreneurs.

Many studies have shown that 'intention' antecedent of entrepreneurship development. So, it is important to identify the factors affecting the 'intention' so as to strengthen the supporting dimensions and to lessen the hindering dimensions. It was reported that personal attributes like optimism, innovativeness, risk taking ability etc. are positively affecting the entrepreneurial intention. Entrepreneurship development programme need to have a screening process for identification of the beneficiaries with strong entrepreneurial intention so that sustenance of enterprises will be more. Pervasiveness of entrepreneurs largely depends on the strong intention of the prospective entrepreneurs.

An entrepreneurship development programme has to increase the competency of aspiring entrepreneurs to recognize and design unique entrepreneurial strategies based on the assessment of local situation and market condition. The programme should encourage the entrepreneur to expand or diversify the production in response to the emerging scenarios. A spirited entrepreneur can discover a market for the product, which is other remaining hidden. In a truly entrepreneurial approach, innovative capacity matters more than the size of the market. Diversification can be accomplished by introducing a novelty or new product feature, stressing quality or value added, anticipating a new market or even creating a market.

Challenges for fishpreneurship

- 1. Knowledge and skill gap:** In spite of large numbers of available entrepreneurial fishery technologies, there is weak linkage of professionals with stakeholders those who are on the receiving end with respect to acquisition of knowledge, capacity building and interface for instant solutions of field problems. Therefore, frontline extension should be rightfully utilized to awaken and sensitize the stakeholders about the scopes and opportunities that are available for entrepreneurship development in fisheries.
- 2. Technology gap:** Today the main concern is lack of technology transfer and dissemination to the right people at right time. Without using the appropriate technology, our products are getting low valued with poor quality that fails to fetch the market. This indifference to technology is proving to be very expensive. Hence, disruptive extension system needs to be adhered to bring sustainable development through effective technology dissemination.

- 3. Market gap:** Growers and producers have no access to market or lack proper understanding of market network as a result middlemen (mostly mafia) siphon away the profits and do not fulfil the market needs adequately and appropriately. Marketing expertise ought to be utilized for such a scenario.
- 4. Entrepreneurial gap:** Mostly the Indian farmers lack the basic entrepreneurial instinct to venture for start-up business. That may be due to lack of entrepreneurial motivation, social responsibility, achievement planning, risk taking ability, poor market linkage above all proper business plan, which needs to be addressed through various capacity building programmes. Today very few persons have the aim for building a career in agri-preneurship rather those who attempt when they fail to find any kind of livelihood because of lack of skills or any reason.

Role of Government:

The government can play a proactive role in this respect which emphasizes the following guidelines.

1. Assessment and sustainable management of the Resource:

Due to 'open access' nature of fishery resources, it often results in scarcity of raw materials. A lot many fishermen chase for limited stock of fish resources that consequently lead to wild fluctuations in supply. Hence there is urgent need for assessment of growing stock, mapping the resources and monitoring the status of the resource base. It is the responsibility of practicing 'Responsible Fisheries' in the interest of natural resource and bio-diversity conservation.

2. Development of Resource base:

The policy level interventions may be made that can contribute meaningfully to sustainable growth of fishery resources in the country :-

- ❖ **Diversified production** - Integration of fishery with agriculture and other allied sectors.
- ❖ **Emphasis on seed production** – specially of carp (projected at 34400 annually), scampi (giant fresh water prawn, projected at 8000 million annually) and shrimp (for brackish water aquaculture, 10000 million annually) and if necessary; additional requirement of seed of other species like catfishes, seabass and ornamental fishes can also be thought of.
- ❖ **Conservation of fish diversity and fish habitat** – Indian fish diversity is estimated to be composed of more than 2200 fish and shellfish species in the marine, brackish water, freshwater and coldwater environments. So remote sensing technology may be

used to protect them from anthropogenic pressure and climatic hazards. Similarly, in case of inland fisheries, it is imperative that habitat restoration, setting up protected habitats and sanctuaries, ranching of rivers with seed of river-based brood stock can be taken up with immediate effect.

- ❖ **Cost efficient mechanization** of fishing gears to make off shore fishing beyond 50 metres of depth not only commercially viable, but also accessible to artisanal farmers.
- ❖ Reduction in by-catch or incidental catches through development of equipment like turtle excluding devices, etc.
- ❖ Cost effective technologies should be available to reduce wastage of harvested fish.
- ❖ Provision of storage facilities for marine and inland fisheries – both on- shore and off-shore.
- ❖ Technological inputs to be provided at affordable prices necessary to provide effective safety network while fishing in deep seas.
- ❖ Introduction of mariculture in marine water and cage and pen culture in inland water bodies.
- ❖ Fish seed production and its availability to fishers at minimum price.
- ❖ *In-situ* and *Ex-situ* conservation of endemic and threatened species.

3. Utilization & enterprise marketing

The sustainable development of fish and fishers calls for removing the following bottlenecks:

- ❖ Focused attention may be given to provide the necessary infrastructural support like *storage*, chilling, transportation and facilitate further value addition through processing, and establish a proper regulatory mechanism to reach to the market without compromising the quality.
- ❖ *Standard* marketing models may be made available for non-agricultural products, and innovative market models like regulatory markets, hygienic market may be developed for other agricultural and allied products, for removing the hurdles in marketing of produce.
- ❖ Steps to be taken to assess the quality of fishes in the market that deter the market development in regard to freshness and extent of contamination etc.

4. Extension, Training and Information Support

- ❖ Effort should be taken for formation of registered Farmers producers Organisation (FPOs) and Fish Farmers' Development

Agency (FFDA) for equitable distribution of resources and share of benefits thus leading to sustainable development of the sector.

- ❖ Diversification and intensification are some of the key factors for sustainable aquaculture development and therefore the regular information flow among farming communities regarding technical know-how, marketing resources, export information, government schemes, input supply agencies and exchange of information with experts should be provided for steady growth in the farm economy. The IT led extension supported with digital mechanisms like One Stop Aqua Shop (OSAS), Aqua Choupal, Rural Knowledge Centre, e-marketing, e-administration, Mobile based advisory services etc can solve these problems.
- ❖ Asset Based Community Development (ABCD) approach can be followed that intends for the development of community based on the principle of identifying and mobilizing individual and community 'assets', rather than focusing on problems and needs. It is an extension approach in which a community's micro-assets are linked with its macro environment. It believes that communities can initiate and sustain the process of growth and development themselves by recognizing and harnessing the existing but unrecognised assets.
- ❖ Strengthening linkage through pluralistic convergence of different stakeholders associated in the sector in Model village System Of Extension (MVSE) approach. MVSE is an action research taken up in farmers' field based on the principle of leveraging the activities, investments and resources from outside agencies/ externally aided projects resulting higher productivity, ensuring food security and sustainable improvement in overall quality of life by promoting leadership, self-dependency of the community in food chain..
- ❖ Encouraging the market opportunities through commodity based village development following the concept of "One village, One product" as the brand name of the particular product.
- ❖ Regular conduct of skill based capacity building programmes for technology empowerment and follow-up action for effective implementation.
- ❖ Encouraging the farmers-scientist interaction for technology development, assessment and application through Farmers' FIRST approach.

5 . Agri Clinics and Agribusiness centre

The Ministry of Agriculture, Government of India, in association with NABARD has launched a unique programme to take better methods of farming to each and every farmer across the country. This programme aims

to tap the expertise available in the large pool of Agriculture Graduates. Irrespective of whether they are a fresh graduate or not, or whether they are currently employed or not, they can set up their own Agri Clinic or Agri Business Centre and offer professional extension services to innumerable farmers. This centre will advice farmers on crop/ enterprise selection, best farm practices, post-harvest value-added options, key agricultural information (including Internet-based weather forecast), price trends, market news, risk mitigation and crop insurance, credit and input access, as well as critical sanitary and phyto-sanitary considerations, which the farmers have to keep in mind.

Committed to this programme, the Government is now also providing start-up training to graduates in Agriculture, or any allied subject. Those completing the training can apply for special start-up loans for venture. An individual or a group of individuals is eligible for availing of these loans. The outer ceiling for the cost of projects by individuals is Rs.10 lakhs. Besides, in almost every institute in ICAR system, there is provision of Agri-business Incubation for the start-up entrepreneurs, which can be utilized by the rural youth, agril. graduates for developing entrepreneurship in agriculture and allied sector including fishery.

Conclusion

Entrepreneurial possibilities in Indian fisheries and aquaculture sectors are yet to be fully exploited. The 'fisheries and aquaculture sector' is the sunshine sector which has immense growth potential. The sector support large number of subsidiary industries and provides livelihood millions of economically backward population, especially fishermen, of the country. Apart from income and employment generation the sector contributes to food and nutrition security of the country. Entrepreneurial possibilities exist across the value chain in fisheries and aquaculture from see production to value addition and marketing. Technological options for various subsectors like harvest, post-harvest, aquaculture production, byproduct utilization etc are being generated and the process is still going on in research institutes and fisheries universities. ICAR-Central Institute of Fisheries Technology is the pioneer institute in the development of harvest and post-harvest fisheries technologies. Prospective entrepreneurs can effectively make use of these technologies by utilizing the Business Incubation Facilities.

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