

Theoretical Orientation and Concept

It is the scholastic structure and theoretical exercises that configure the definition and text of the entire research process. The conceptual inputs, the inputs, the logic of discourses and the pursuit's knowledge come together to the theory in compliance and in congruence with the set of objectives and research spelt out in the research process.

2.1The operational definition of farmer:

A farmer (also called agriculture) is a person engaged in agriculture, raising organisms for food or raw materials. The term usually applies to people who do combination of raising field crops, orchards, vineyards, poultry, or other livestock. A farmer might own the fanned land or might work as a labourer on land owned by but in advanced economies, a farmer is usually a farm owner, while employees of farm are known as farm workers, or farmhands. However, in not so distant past, there a was a person who

promotes or improves the growth of (a plant, crop, etc.) by and attention, land or crops or raises animals (as livestock or fish).

In developed nations, a farmer (by profession) is usually defined as someone with ownership interest in crops or livestock, and who provides land or management in production. Those who provide only labour are most often called farmhands. Alternatively growers who manage farmland for an absentee landowner, sharing the (or its profits) are known as sharecroppers or share farmers.

2.2 The functional concept of farming System:

Farming system is a resource management strategy to achieve economic and sustained agricultural production to meet diverse requirements of farm livelihood while preserving resource base and maintaining a high level of environment quality (Lal and Miller 1990). Fanning system is a set of agro economic activities that are interrelated and interact with themselves in a particular agrarian setting. It is a mix of farm enterprises to which farm families allocate its resources in order to efficiently utilize the existing enterprises for increasing the productivity and profitability of the farm. These farm enterprises are crop, livestock, aquaculture, agro forestry and agri-horticulture (Sharma et al 1979).

2.3 Dentitions of ecology:

Scientific ecology is concerned with the biology of groups of organisms and their relations to the environment. This includes studies of individual organisms or of populations of single species and their relations to their environment; and groups of organisms associated to form a functional unit

of the environment. Groups of organisms may be associated in three different levels of organization - populations, communities and ecosystems. A population is a group of individuals of any one kind of organism, a single species. A biotic community includes all of the populations occupying a defined physical area. The community, together with the physical environment, comprises an (Tansley, 1935).

2.4. Ecological Concepts:

The discipline of ecology is more than a century old, which is an adequate time to a firm foundation" Ecology has emerged as the primary source of principles, and concepts for solving environmental problems during the last four decades Odum 1971; Ricklefs and Miller 2000). Fueled by Charles Darwin's dangerous about ecology and evolution and an increasingly scientific approach to the study of natural history, ecology rose to prominence as a scientific discipline in the late nineteenth (McIntosh 1985). Ecology entered the public consciousness during the 1960s and 1970s when the roots of many social problems—pollution, overpopulation, and allocation of resources—were recognized as issues to which ecologists had something important to say. Rachel Carson's 1962 book, Silent Spring, found an attentive audience.

2.5. Concept of enterprise:

The word 'enterprise' is, at present, much used in a variety of contexts and with a wide range of meanings. Within this range there are narrow meanings of the word specially related to business, and there are wider

meanings indicating a way of behaving that can apply in a variety of contexts, including business.

An enterprise is an activity or a project that produces services or products.

There are two types of enterprise:

- a) **Business enterprises,** which are run to make a profit for a private individual or group of individuals. This includes small business.
- b) **Social enterprises,** which function to provide services to individuals and groups in the community.

Source: Unpublished Thesis, "Enterprise Ecology in Agribusiness; the concept and performances" by S. Das, 2013.

Fig. 1: Enterprise Function

2.6 Meaning of Entrepreneur:

The word "entrepreneur" is derived from the French verb "entrepreneur". It means "to undertake". (Robert C. Ronstadt, 1984).

"An entrepreneur is the one who always searches for change, responds to it and exploits it as an opportunity. innovation is the specific tool of entrepreneurs, the means by which they exploit changes as an opportunity for a different business or different service" (Peter Drucker, 2006).

"A person who pays certain price for a product to resell it at an uncertain price thereby making decision about obtaining and using resources while assuming the risk of enterprise" (Richard Cantillon, 1931).

2.7 Qualities of a successful entrepreneur:

According to Dr. N. Santhi and S. Rajesh Kumar (2011), being an entrepreneur is not just starting a business; it is about having attitude and the drive to succeed in business. All successful Entrepreneurs have a similar way of thinking and posses several key personal qualities that make them so successful in business. Successful entrepreneurs like the ambitious Richard Branson have an inner drive to succeed and grow their business, rather than having a Harvard Business degree or technical knowledge in a particular field. Entrepreneurship is a mindset more than anything; Qualities that make an entrepreneur successful are,

- a) **Dreamer:** A big idea of how something can be better and different.
- b) **Inner Drive to Succeed:** Entrepreneurs are driven to succeed and expand their business. They see the bigger picture and are often very ambitious. Entrepreneurs set massive goals for themselves and stay

committed to achieving them regardless of the obstacles that get in the way.

- c) **Innovator:** All entrepreneurs have a passionate desire to do things better and to improve their products or service. They are constantly looking for ways to improve. They're creative, innovative and resourceful.
- d) Ability to Organize: He should be able to organize various factors effectively. He has to understand all the aspects of the business Passionate: Expressive so the idea creates energy and resonance with others.
- e) **Risk Taker:** Pursues the dream without all the resources lined up at the start and distributes the risk over a network of capabilities. in short he should be ready to bear risk and uncertainties.
- f) Decision Making: One has to take right decision at a right time by showing his promptness. Quick decisions are expected but hasty decisions shouldn't be taken. Delay in decisions may increase cost of project and reduce the profits.
- g) **Continuous Learner and Openness to Change:** Constantly exploring and evolving to do best practice. If something is not working for them they simply change. Entrepreneurs know the importance of keeping on top of their industry and the only way to being number one is to evolve and change with the times. They're up to date with the latest technology or service techniques and are always ready to change if they see a new opportunity arise.

- h) Negotiation Skills: Businessman regularly comes into contact with various persons like consumers, workers, government officials, etc. so he should communicate tactfully.
- i) **Strong Belief in Themselves:** Successful entrepreneurs have a healthy opinion of themselves and often have a strong and assertive personality.

2.8. Extension support for developing entrepreneurial capacity:

According to David Kahan (2012) in "Entrepreneurship in farming", followingsupports are needed for developing entrepreneurial capacity. R93

- a) Training and extension support: Extension support is required before, during and after training. Training programmes should be balanced and take into account the learning capacity of the farmers, the time available, resource constraints and desired learning outcomes. Extension workers need to follow up formal training with guidance and support in taking actions on what has been learned. Training will be effective only if farmers have access to get the resources and services needed to establish and expand their farm businesses, such as finance and markets. Extension workers may also need to facilitate the establishment of producer organization that can contribute to stimulating entrepreneurship, and to guide farmers through changes.
- b) Access to finance and markets: Extension workers have a responsibility to support farmers by facilitating links with financial institutions and advising them on the terms and conditions of loans.

Similarly they have a role in providing information on market opportunities and facilitating links with buyers.

- c) **Supporting partnerships and networking:** Extension workers have an important role to support entrepreneurial farmers by facilitating linkages and developing networks and partnerships. Partnerships and networks can be developed among farmers and with other actors in the value chain.
- d) Creating a culture of entrepreneurship: Often a culture of entrepreneurship is needed for farmers to achieve their entrepreneurial vision. Extension workers can play a part by communicating a common vision to both farmers and other stakeholders in the value chain as well as the values needed to conduct business in an ethical way. Extension workers can support these farmers by reducing the risks for innovation.

2.9. Entrepreneurship:

Entrepreneurship value chains and market linkages are terms that are being used and more when talking about agriculture and farming. Many small-=scale farmers' extension organisations understand that there is little future for farmers unless they more entrepreneurial in the way they run their farms. They must increasingly for markets and for better profit. Becoming more entrepreneurial can be a challenge to small-scale farmers. They will need help from -extension workers and other Institutions. (David Kahan, 2012).

Entrepreneurship is the act of being an entrepreneur, which is a French word" one who undertakes an endeavour". Entrepreneurs assemble

resources including innovations, finance and business acumen in an effort to transform innovations into economic goods. This may result in new organizations or may be part of revitalizing mature organizations in response to a perceived opportunity or necessity The most obvious form entrepreneurship is that of starting new businesses; however, in recent the term has been extended to include social and political forms of entrepreneurship activity. When entrepreneurship is describing activities within a firm or large organization it is a referred to as entre-preneurship and may include corporate venturing, when large entities start spin-off organization.

2.10. Entrepreneurship in India

According to T. Swetha and Dr. K. VenugopalRao, (2013), the early history of entrepreneurship in India reflects from the culture, customs and tradition of the India people. The BaliyatraFestival of Cuttack, Orissa, reminiscence of the past glory of International trade. The process of entrepreneurship therefore passed through the potential roots of the society and all those who accepted entrepreneurial role had the cultural heritage of trade and business. Occupational pursuits opted by the individual under the caste system received different meaning of value attached to entrepreneurship.Vaishyas are considered to venture in to business pursuits. As society grew and the process of business occupation depended and the value work tended towards change and the various occupational role interchanged with non-role group and sub-groups. People from different castes and status also entered into the entrepreneurial role.

The emergence of entrepreneurship in this part of the country got localized and spread effect, took its own time. The concept of growth theory seems to be closely related in explaining the theory of entrepreneurship development as well. After the Second World War, entrepreneurship received the new meaning for attaining economic development within the shortest possible time. But in the process they were seriously handicapped by rigid institutional setup, political instability, marketing imperfection and traditional value system.

Agriculture and allied sectors are considered to be the mainstay of the India's important source of raw material and demand for many industrial products, particularly fertilizers, pesticides, agricultural implements and a variety of consumer goods. They contribute nearly 22 per cent of Gross Domestic Product (GOP) of India; about 60-65 percent of the population is dependent on agriculture for their livelihood.

'Agriculture and allied industry is further divided into several segments, namely: — horticulture and its allied sectors (including fruits and vegetables, flowers, plantation crops, spices, aromatic and medicinal plants); fisheries sector, animal husbandry and livestock; and sericulture India's varied agro-climatic conditions are highly favourable for the growth of large number if horticultural crops, which occupy around 10 per cent of gross cropped area of the country producing 160.75 million tones.

India is the second largest producer of fruits and vegetables in the world. It is also second largest producer of flowers after China. It is also leading

producer, consumer and exporter for spices and plantation crops like tea, coffee, etc.

The Ministry of Agriculture is the main authority in India for regulation and development of activities relating to agriculture, horticulture, fishing, animal husbandry etc. It is implementing various schemes and policies for the sector through its divisions like 'Department of Agriculture and Cooperation' and 'Department of Animal Husbandry, Dairying and Fisheries'. Further, the Ministry of Food Processing Industries is actively engaged in promotion of entrepreneurial activities in the segments of fruits and vegetables processing. Besides, commodity boards, like tea board, coffee board, rubber board, medicinal plants board, etc. have been set up to boost the growth of the sectors like tea, coffee, rubber, medicinal plants, respectively.(KapilGulati and Suniel Shanna,2013).

Large scale industrialization entrepreneurs like DirubaiAmbani emerge. Globalisation arrives, and with it the Premjis, the NarayanaMurthys, the Rajesh Jainsetc., Over the last 60 years, India has seen the entrepreneur evolves in different role. The modern entrepreneurs are wealth creators, communicators, change agents, entertainers etc., the third millennium honestly belongs to Indian entrepreneurs (C.K.Prahlad, 2008).Indian entrepreneurs seek domestic opportunities for serving around 400 million people living below the poverty line. There is a need to focus on creating wealth rather than sharing wealth. Hence, there exists innumerable business opportunities in the agriculture and allied sectors. Investors from all over the world are making more and more investments into the sector for

unleashing its existing potentialities as well as for exploring the untapped areas.

2.11 Transformation from agriculture to entrepreneurship:

With appropriate training, farmers can become good entrepreneur. Crop diversification by selecting crops targeted for the designated markets shall earn good revenue for the farmers. The profit can further be raised by resorting to organic farming, integrated nutrient management (INM), integrated pest management (IPM) etc.

2.12 Entrepreneurship in agribusiness:

The changing scenario of agribusiness in India reveals good scope of entrepreneurial venture in agribusiness.

Depending on the farmers' needs, focused segmentation could lead to mass customization of farm inputs. Companies that customize formulations and have specially designed products for each crop and soil type will do well in enlisting right buyers. Successful companies are those that innovate and develop new products, either independently or by collaborating with others.

A strategy must be designed to follow up with farmers after the sale to give them their money's worth. Providing registered farmers with add-on services, such as crop advisories, advance weather forecasts, output price information, direct-to-cell phone communication tools, would certainly help maintain customer loyalty.

Creating and utilizing available water resources carefully, rain water harvesting, maintaining soil health by the addition of organic matter to soil, using cell phones to obtain market information and for marketing, opening

bank account, purchasing insurance etc. are some entrepreneurial behaviour changes which the farmers may resort to, to enhance their farm income. Through scientific management of available irrigation or rain water, a poor farmer may become an entrepreneur in raising farm income without incurring any additional expenditure.

2.13. Benefits of entrepreneurship:

Research in entrepreneurship that owners of small businesses believe that if they work hard will earn more money and be happier than if they work in a big company. So, before you engage in creating a small business, every entrepreneur thinks the potential benefits. In general an entrepreneur can benefit from the process of creating its ownwith several advantages (Thomas W.Zimmerer and Norman M.Scarborough,including-

- Independence and opportunity to achieve the desired objectives, it offers the advantage of not depending on others to implement its wishes;
- Chance to notice a difference in a field they are interested in combining the wishes their social insurance with a win for a better life;
- Opportunity to use its full potential for entrepreneurs because there is much difference between the work of business and recreation, making them find their place of business to obtain satisfaction, for their use which have better qualities;
- Opportunities to earn substantial profits, although the reason to start a business, an entrepreneur may not be primarily profit;
- Recognition efforts and contribution to the achievement of social objectives, entrepreneurs become very respected person in the community in which it operates;

• Opportunity to do what you love, because most entrepreneurs develop business in areas where they want to work and they get special satisfaction.

Source: Entrepreneurship in farming by David Kahan, 2012, pt 17.

Fig. 2. Barriers to entrepreneurship:

2.14 Entrepreneurship dynamics:

According to David Kahan (2012), in "Entrepreneurship in Farming", the idea of entrepreneurship is complex. When a farmer introduces a new enterprise into his farming system, there are different stages of development that the enterprise goes through. The skills of the farmer must also change and develop to meet the management demands of the enterprise.

The development of a farm enterprise as a business occurs in five phases.

- 1. Establishment
- 2. Survival
- 3. Early growth
- 4. Rapid growth

5. Maturity (and possible decline)

2.15 Farmers as entrepreneurs:

I Can small-scale farmers become entrepreneurs? Yes. Small-scale farmers all over the world have shown a remarkable ability to adapt. They look for better ways to organize their farms. They try new crops and cultivars, better animals, and alternative technologies to increase productivity, diversify production, and reduce risk and to increase profits. They have become more market oriented and have learned to take calculated risks to open or create new markets for their products. Many small-scale farmers have many of theof an entrepreneur (David Kahan, 2012).

Source: Entrepreneurship in farming by David Kahan, 2012.

Fig. 3. Structure of farm entrepreneur

2.16. Agripreneurs:

In general, agripreneurs should be proactive, curious, determined, persistence, visionary, hard working, honest, integrity with strong management and organizational skills. Agripreneurs are also known as entrepreneurs. Entrepreneurs may be defined as innovators who drive change in the economy by serving new markets or creating new ways doing things; thus, an agripreneurs may be someone who undertakes a variety of activities in agriculture sector in order to be an entrepreneur. (Shoji LalBairwa ,KerobimLakra, S. Kushwaha, L. K. Meena and Pravin Kumar,2014).

2.17 Agri-preneurship:

Agripreneurship is the profitable marriage of agriculture and entrepreneurship. Agripreneurship turns your farm into an agribusiness. The term Agripreneurship is synonym with entrepreneurship in agriculture and refers to agribusiness establishment in agriculture and allied sector. (ShojiLalBairwa , KerobimLakra, S. Kushwaha , L. K.Meena and Pravin Kumar, 2014).

2.18 Major reasons for promoting agripreneurship in India:

In India, 52% of total land is cultivable as against 11% in the world. All 15 major climates of the world, snow bound Himalayas to hot humid southern peninsula; Thar Desert to heavy rain areas all exist in India. There are 20 agro-climatic regions and nearly 46 out of 60 soil types in the country. Sunshine hours and day length are ideally suited for round the year cultivation of crops. India is the centre for biodiversity in plants, animals, insects, micro-organism and accounts for 17% animal, 12% plants and 10%

fish geneticthe globe. In the live stock sector, India has 16% of cattle, 57% of buffalo, 17% of goats and 5 % of sheep population of the world. Agriculture contributes 13.2% to GDP, 15.2% of total exports and provides employment to 58.4% of country's work force (Mittal, 2009). Agriculture remains a key sector of the Indian economy accounting for 13.2 per cent share in the gross domestic product (GDP) and about 13 per cent of the total export earnings. India is the second largest producer of rice and wheat in the world; first in pulses and fourth in coarse grains. India is also one of the largest producers of cotton, sugar, sugarcane, peanuts, jute, tea and an assortment of spices. In terms of the real value added, the Indian agriculture sector ranks third, after China and the United States. The share of agriculture in the total value added to the economy, at around 13.2 per cent, is still quite high. This implies that agriculture is likely to remain a priority, both for policy makers as well as businesses, in the foreseeable future and any move to ramp up the sector calls for a multi-pronged strategy. In recent years, there has been a considerable emphasis on crop diversification towards horticulture (fruits, vegetables, ornamental crops medicinal & aromatic plants and spices), plantation crops(coconut, cashew nuts and cocoa) and allied activities. Creation of critical infrastructure for cold storage, refrigerated transportation, rapid transit, grading, processing, packaging and quality control measures open major opportunities for investment. India is second highest fruit and vegetable producer in the world (134.5 million tons) with cold storage facilities available only for 10% of the produce. We are second highest producer of milk with a cold

storage capacity of 70,000 tonne and sixth largest producer of fish with harvesting of 5.2 million tonnes. India is fifth largest producer of eggs in the world. Thus, Indian agriculture need to innovate in agribusiness due to above mentioned reasons which only are possible through agripreneurship development.

2.19 Role of agri-preneurship in national economy:

Agri-preneurship plays various roles in the growth and development of national economy through entrepreneurship development which increases the income level and employment opportunities in rural as well as urban areas (Bairwa et al., 2012). Agri-preneurship also plays following role in the economic system 9Sah, 2009). It helps in inducing productivity gains by smallholder farmers and integrating them into local, national and international markets. It helps inducing food costs, supply uncertainties and improving the diets of the rural and urban poor in the country. It also generates growth, increasing and diversifying income, and providing entrepreneurial opportunities in both rural and urban areas.

2.20 Need of agri-preneurship development:

Since the inception of New Economic Reforms, adoption of liberalization, privatization and globalization (LPG) and world trade organization (WTO) in 1992 — 95, it is expected that rural area will grow at par with urban area. Performance of agriculture during first phase of economic reforms till 1998 remained driving force for this notion among all the spheres of academia, administration and government (Singh, 2013). However, things went on different path in the later years and performance of agriculture has not

remained satisfactory. Till recently, agriculture used to be treated as just an activity of land tilling an crop harvesting but growing waste land, depleting natural resources growing migration by rural youth to urban areas, negative perception of thetowards farming, and emerging technologies in agriculture have necessitated redesigning of agricultural activities. Applying the thought and practice of in the field of agriculture generates wide range of economic benefits like - increased agricultural productivity, creation of new business ventures, new Jobs, innovative products and services, development of rural areas and increased wealth. Traditional farmers who are unaware of scientific agriculture and effective agricultural management systems are unable to cope up with delaying monsoons, drought, crop debts, fake seeds and shortage of fertilizer, as a result resort to committing suicide. The managerial, technical and innovative skills of entrepreneurship applied in the field of agriculture will yield positive results and a well trained agripreneurs may become a role model to all such disheartened farmers.(Sah, 2009) state that developing entrepreneurs in agriculture will solve the entire problem like (a) Reduce the burden of agriculture (b) Generate employment opportunities for rural youth (c) Control migration from rural to urban areas (d) Increase national income (e) Support industrial development in rural areas (f) Reduces the pressure on urban cities.

Entrepreneurial Behavior of Vegetable Growers-

Entrepreneurship, a form of human behaviour, is indispensable for the growth and development of an society. Generally, the entrepreneur is considered as a person who initiates, organizes the activities, manages and

controls the affairs of business unit combining the factors of production to supply goods and services. Farmers deciding to take particular crop or use scientific methods to grow crops also exhibit entrepreneurial behaviour. Understanding of such behaviour is essential to improve the quality of extension services offered by the institutional and non-institutional agencies. Since vegetable cultivation is a capital intensive and risky, a vegetable grower needs to possess the ability to take risk, innovativeness, imitative and capacity to marshal resources in order to run the enterprise successfully. These characteristics enable them to decide and accept to adopt appropriate scientific farming methods. Entrepreneurial behaviour is influenced by individual, situational, psychological, social land experiential factors (Rao, 1985).

Vegetable in West Bengal:

Vegetables are the most important factor in maintaining a healthy body. Vegetables are rich in minerals, vitamins and many other important nutrients. You can not only keep your body healthy but also escape lot of diseases by consuming vegetables. Vegetables like garlic, carrot, leeks, onions, bell peppers, asparagus, tomatoes, potatoes, sweet potatoes, squash and all other green and leafy vegetables are healthy for heart.

You can determine whether a vegetable is healthy for your heart from its color itself. Red vegetables are the store house of antioxidants that can protect your heart. Vegetables that are yellow and orange are rich in carotenoids which can save you from heart diseases. The green and leafy

vegetables are rich in minerals and vitamins which are important to keep your heart healthy. Purple and blue vegetables can cure heart diseases.

India is the second producer, consumer and exporter of vegetables in the world. During 1997-98 to 2010-11, the estimated production of vegetables is 14, 72,119 tonnes from an area of 95,898 ha with productivity of 15.35 t ha-1. In West Bengal State, the area of vegetables also increased from 5.6-8.5 '000 tonnes during the period of 1997-98 to 2010-11. The Fruits and Vegetables (F&V) sector has been a driving force in stimulating a healthy growth trend in Indian agriculture. Given the rising shareof high value commodities in the total value of agricultural output and their growth potential, this segment is likely to drive agricultural growth in the years to come (ASSOCHAM, 2013). It plays a unique role in India's economy by improving the income of the rural people. Cultivation of these crops is labor intensive and as such they generate lot of employment opportunities for the rural population. F&V sector is perhaps the most profitable venture of all farming activities as it provides ample employment opportunities and scope to raise the income of the farming community. It also has tremendous potential to push the overall agriculture growth. India has been bestowed with wide range of climate and physio-geographical conditions and as such is most suitable for growing various kinds of F&V. This has placed India among the foremost countries in F&V production just behind China. F&V together constitute about 92% of the total horticultural production in India (ASSOCHAM, 2013).

During 2012-13, India's contribution in the world production of F&V was 12.6 % and 14 % respectively(NHB, 2013).China's share has been highest with 21.2% in world's fruit production and 49.5% in world's vegetables production followed by India and Brazil.