

Chapter-1

Introduction: The Concept of Enterprise Ecology

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The word ecology, in common usage, has two distinct, albeit essentially connected, senses: ecology as a scientific discipline and ecology as environmental philosophy. Scientific ecology refers to the study of the relations that determine the abundance and distribution of organisms in their surroundings. Environmental ecology covers a diverse range of concerns, from grassroots green movements to international efforts, various social, economic, management efforts directed generally towards sustaining the Earth's natural resources and its proper utilization. These two streams in ecology have much to contribute to both scholarly and pragmatic development in the field of entrepreneurship. An ecological perspective in entrepreneurship emphasizes the many scales at which entrepreneurial activity occurs, and leads to testable research hypotheses. The ecological approach provides a rich set of concepts for organizing knowledge about the environment of successful entrepreneurship with social, economic, techno-managerial, physical, biological and cultural environmental dimensions and points the way towards sustainable agricultural enterprises.

OBJECTIVES

General Objective

- To determine the role of Enterprise Ecology in Agribusiness.

Specific objectives

- To present the conceptual domain of Enterprise Ecology in Agribusiness.
- To select and decide on variables in the set of dependent variables vis-a-vis performing Enterprise Ecology (Y) and independent variables (x_1 to x_{19}) to study their interaction and relation.
- To estimate the interaction at inter and intra level, between dependent variable i.e. performing Enterprise Ecology and 19 independent variables or agro-economic and socio-personal characteristics.

To derive micro level policy implication as applicable to the research scale to performing better entrepreneurial ecology.

THEORETICAL ORIENTATION AND CONCEPT

1.1 SCIENTIFIC ECOLOGY

The science of ecology is a wide ranging discipline organized into levels of complexity: individual organisms and their relationships to their physical environments; populations– groups of individuals of the same species in one area; communities–assemblages of different species in one area; ecosystems–combinations of communities and their physical surroundings. (SenSuan TAN, 2004). 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 ecosystem (Tansley, 1935).

Each region of the Earth is inhabited by a characteristic assemblage of organisms. These are interrelated in many diverse ways as competitors, mutualisms, predator-prey, and so on. The members of each assemblage are not determined by chance but by the sum of the many interacting physical and biotic factors of the environment. The niche concept expresses the relationship of the individual to all aspects of its environment; niche dimensions describe physical conditions and resource qualities (Hutchinson, 1957). Different species with overlapping niches can coexist through resource partitioning. In succession, communities change in orderly fashion along with the physical conditions in a given area, leading to a stable climax community (Clements, 1936).

A population has characteristics which are a function of the whole group and not of the individual members; these are population density, birth rate, death rate, age distribution, biotic potential, rate of dispersion, growth form, etc. Different life history adaptations are favored under conditions of high and low population density, relative to the carrying capacity of the environment. At low density, adaptations promoting rapid population increase are selected; hence high rates of productivity, regardless of

efficiency, increase fitness. At high density, selection favors individuals able to survive and reproduce with few resources. These contrasting strategies are referred to as r-selected and K-selected traits, respectively, after the variables of the logistic equation for population growth (Boyce, 1985)

1.2 ENVIRONMENTAL ECOLOGY

As stated earlier environmental ecology of an enterprise covers wide range of concepts which determine the viability of an enterprise in an ecosystem. The concept of enterprise ecology encompasses social, economic, environmental and techno-managerial dimensions of an enterprise and how these dimensions interact with each other to establish equilibrium between the enterprise's structure and function to maintain its productivity. For a sustainable enterprise, close study of its social, economic, environmental including the physical, biological and cultural component, techno-managerial dimensions are necessary. The entrepreneurs are main actors who play vital role in determining the functions of these multiple dimensions.

Entrepreneurs are major contributors to economic growth, development, and prosperity; see Schramm (2006a) and Baumol, Litan, Schramm (2007). Entrepreneurs are responsible for a large share of technological innovation in products and production processes, driving economic transformation and international trade. Entrepreneurs establish new forms of organizations and employ new types of business methods.

Economic theory must keep up with these critical developments by understanding the fundamental contributions of entrepreneurs. Such an

understanding is essential for formulating economic policies that do not restrict productive entrepreneurs. Yet, despite the essential nature of their economic contribution, the importance of entrepreneurs has not been recognized fully in neoclassical economics. In this paper, I propose an economic framework for understanding the economic contribution of the entrepreneur. Entrepreneurs play a central role in the modern economy because they are the prime movers—the makers of firms. Entrepreneurs are fundamental to economic equilibrium because they set the economy in motion. Firms are responsible for practically all economic activity outside of government: innovating, pricing, contracting, employing resources, labor, and capital goods, raising financial capital, organizing production, and marketing goods and services. In equilibrium, firms create markets as well as organizations, making both types of institutions endogenous. Economic equilibrium, including prices, allocation of goods, and the structure of transactions, thus depends on the actions of entrepreneurs.

1.3 ENTERPRISE POPULATION PROCESSES

The traditional approach in entrepreneurship tends to focus on the characteristics of Entrepreneurial individuals; an ecological approach emphasizes the behavior of Business populations in the entrepreneurial field. Organizational change is viewed as an outcome of the availability and distribution of environmental resources, with entrepreneurial founding's and disbanding as the source of population level change (Aldrich, 1979). Darwinian selection operates through the market, competitive pressures, and other forces; deliberate or unintended organizational variations can prove more or less beneficial than others in acquiring resources in the

environment. Over time, populations become characterized by the attributes of surviving organizations. Thus, selection pressure may explain the similarities in psychological profile and business practice of successful entrepreneurs.

As particular enterprise forms proliferate, selection fuels the competitive struggle over resources and opportunities; as resources become scarce, competition increases mortality rates, lowers founding rates, and populations stagnate, decline or evolve. Using these principles, ecology explains how particular forms of enterprise come to exist in specific kinds of environments. The enterprise ecosystem constitutes an opportunity structure containing a resource pool uniquely suited to organizational forms that adapt to it well and in turn shape it (Carroll, 1984).

Many basic population processes depend on the size of the population itself. Early on, rising density tends to further increase rate of founding's after a new organizational form becomes established. Later, at high densities, inhibiting factors set in as competition rises and profits diminish. When a population approaches carrying capacity, several negative effects become apparent, including a reluctance of investors to fund new organizations and a dwindling supply of potential entrepreneurs, customers, and suppliers. Thus, one can predict an inverse U-shaped pattern between organizational density and the rate of foundlings. Populations in which all organizations are roughly the same size may have very different competitive dynamics than those with a small number of large organizations and many smaller ones. The impact of size distribution within a population has not been studied.

1.4 WHAT IS ENTERPRISE ECOLOGY?

Broken down, the term “ecology” has two parts. “Eco” means life, habitat or environment, and “ology” means the study of a discipline. Enterprise ecology therefore refers to the study of “life” in an entrepreneurial habitat. The wonderful richness of life within enterprises is a complex mixture of unseen, intangible relationships—relationships between the people, their emotional intelligence, their values, their ethics, their personal tacit knowledge, and their day-to-day experiences; and the interplay between the people and the policies, values, ethics and practices of an organization broadly classified under four basic dimensions namely the social, ecological, economic and Techno-Managerial.

1.5 WHY STUDY ENTERPRISE ECOLOGY?

Enterprise ecology aims to explain how social, economic, ecological and Techno-managerial conditions affect the relative abundance and diversity of organizations and to account for their changing composition over time. Research in enterprise ecology is grounded in three observations. Firstly, collection of enterprises shows diversity in them. Secondly, enterprises’ have difficulty devising and executing changes fast enough to meet the demands of uncertain, changing environments. And, thirdly, enterprises arise and disappear continually. Given these observations, ecological analyses formulate entrepreneurial change and variability at the population level, highlighting differential creation of new and demise of old organizations and populations with heterogeneous attributes. This formulation contrasts adaptation approaches, which explain entrepreneurial

diversity in terms of ongoing enterprises' leaders' cumulative strategic choices.

1.6 BASIC CONCEPTS OF ENTERPRISE ECOLOGY

A. Basic Definition

Enterprise ecology is defined as “a more productive set of processes for developing and commercializing new technologies” that is characterized by the “rapid prototyping, short product-development cycles, early test marketing, options-based compensation, and venture funding, early corporate independence”.

B. Borrowing Concepts from System Science

A system is a complex whole comprising of components having integration and interactions towards achieving a system goal. Every system has got following elements:

1. System components
2. Interactions at component level
3. System hierarchy
4. System goal
5. System Niche

- **Systems: Its types, components and properties**

Isolated systems are completely isolated from their environment. They do not exchange heat, work or matter with their environment. The only truly isolated system there could be is the universe, but even that is up for debate if the Big Bang is considered. *Closed systems* are able to exchange energy (heat and work) but not matter with their environment. A greenhouse is an example of a closed system exchanging heat but not work with its

environment. Whether a system exchanges heat, work or both is usually thought of as a property of its boundary. *Open systems* may exchange any form of energy as well as matter with their environment. A boundary allowing matter exchange is called permeable. The ocean would be an example of an open system.

Boundary

A system boundary is a real or imaginary two-dimensional closed surface that encloses or demarcates the volume or region that a thermodynamic system occupies, across which quantities such as heat, mass, or work can flow. In short, a thermodynamic boundary is a geometrical division between a system and its surroundings. Topologically, it is usually considered to be nearly or piecewise smoothly homeomorphic with a two-sphere, because a system is usually considered to be simply connected.

Boundaries can also be fixed (e.g. a constant volume reactor) or moveable (e.g. a piston). For example, in a reciprocating engine, a fixed boundary means the piston is locked at its position; as such, a constant volume process occurs. In that same engine, a moveable boundary allows the piston to move in and out. Boundaries may be real or imaginary. For closed systems, boundaries are real while for open system boundaries are often imaginary. For theoretical purposes, a boundary may be declared to be adiabatic, isothermal, diathermal, insulating, permeable, or semi-permeable, but actual physical materials that provide such idealized properties are not always readily available.

Anything that passes across the boundary that effects a change in the internal energy needs to be accounted for in the energy balance equation.

The volume can be the region surrounding a single atom resonating energy, such as Max Planck defined in 1900; it can be a body of steam or air in a steam engine, such as Sadi Carnot defined in 1824; it can be the body of a tropical cyclone, such as Kerry Emanuel theorized in 1986 in the field of atmospheric thermodynamics; it could also be just one nuclide (i.e. a system of quarks) as hypothesized in quantum thermodynamics.

- **Surroundings**

The system is the part of the universe being studied, while the *surrounding* is the remainder of the universe that lies outside the boundaries of the system. It is also known as the *environment*, and the *reservoir*. Depending on the type of system, it may interact with the system by exchanging mass, energy (including heat and work), momentum, electric charge, or other conserved properties. The environment is ignored in analysis of the system, except in regards to these interactions

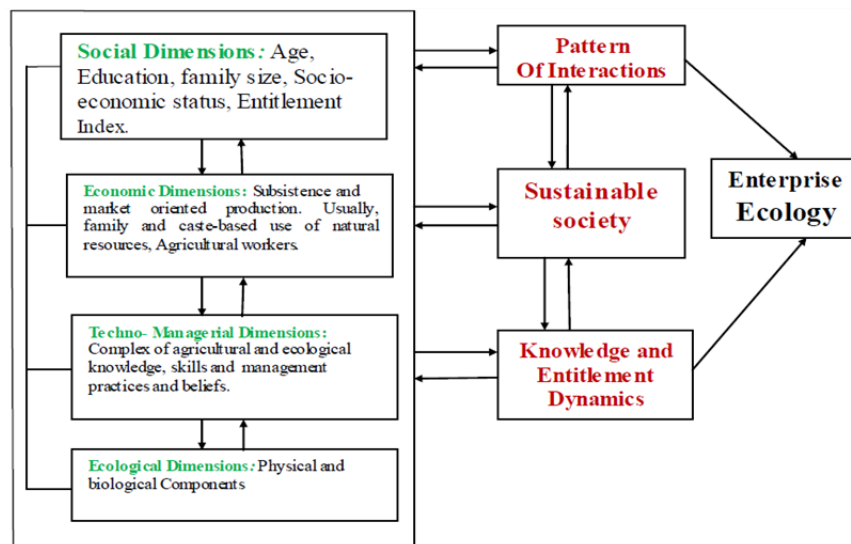


Fig. 1: Enterprise Ecology Process

When this kind of ecosystems framework is applied to enterprises, it suggests that one cannot understand entrepreneurial performance, including informal learning, by examining any single facet, component, or element of the overall system. It is the interdependencies and the overall pattern that count; not the individual element in it.

C. Borrowing Concepts from Ecology

Some environmentalists have used "enterprise ecosystems" as a way to talk about environmental issues as they relate to enterprise rather than as a metaphor to describe the increasing complexity of relationships among enterprises. According to Townsend, enterprise ecology is the study of the reciprocal relationship between enterprise and organisms and their environments. The goal of this "business ecology" is sustainability through the complete ecological synchronization and integration of a business with the sites that it inhabits, uses, and affects.

Other environmentalists believe that the ecosystem metaphor is just a way for business to appear 'Green'. For example, in the book 'The Unity of Nature', published in 2002 by Imperial College Press, Alan Marshall shows that the metaphor is used to make out that somehow business operates using natural principles which should be left to run without interference (by governments).

The Cooperative Bank, established in the United Kingdom in 1872, launched its National Centre for Business Ecology in 1995. This Centre promotes itself as "a low cost, high quality environmental advisory service to small and medium sized UK businesses". The bank reports that in keeping with its Ecological Mission Statement, it will not invest in

businesses that focus on fossil fuel extraction, the manufacture of harmful chemicals, or the non-sustainable use of natural resources. Yet, exactly what business ecology means to the bank and how it differs from current approaches to greening business are unclear.

Kinetix advertises that it provides sustainable business solutions to companies by working with them on strategy, design, and project management. Located beneath its name on the company's web site are the words "business ecology," which the company defines as "the effective use of material, social and financial resources—the key to sustainability". The company cites pollution, climate change, the need for corporate transparency, and the 2001 economic downturn as creating a market opportunity that is being met by firms involved in renewable energy, working toward creating zero waste, attending to product life cycles, and using the triple bottom line in their accounting practices. In its online brochure, the company has explained that it offers resource audits, workshops for organizational change, environmental management systems, and other services.

Ecological entrepreneurship is a reward-based approach to addressing environmental problems, rather than a punitive approach, and may prove more successful at changing attitudes and practices in the long run.

Business practices fundamentally affect the business world, the environment and our lives. Ecology implies community, and ecological entrepreneurs understand the connections between their actions and the greater community as a whole. The field is socially important because ecological entrepreneurs are instrumental in reshaping the way we approach

the environment and its relation to business. It is believed that social enterprises can contribute to the improved delivery of services, stronger and more resilient communities, and empowered people collaborating with the state in order to achieve social, economic and environmental benefits. Claims are made indicating that through setting up and running social enterprises communities will engage in service co-production building sustainable communities. This suggests that people will take some responsibility for organising services traditionally delivered by the state.

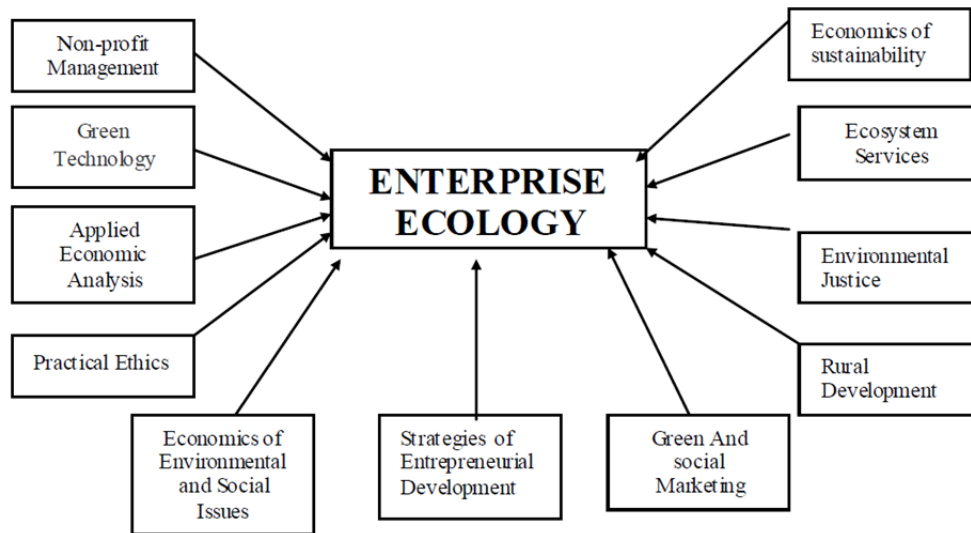


Fig. 2: Interrelated Areas of Enterprise Ecology

2 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 specifically related to business, and there are wider meanings indicating a way of behaving that can apply in a variety of contexts, including business.

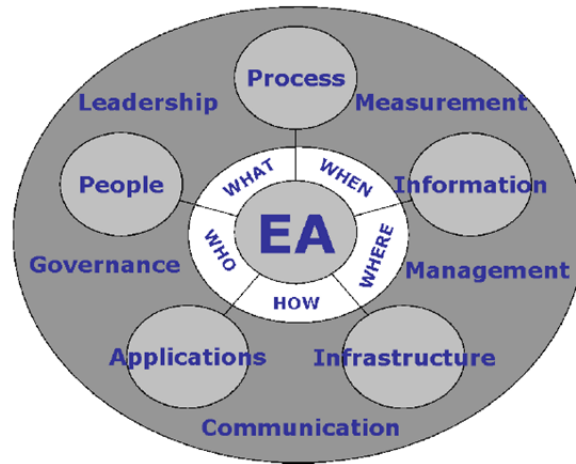


Fig. 3: Enterprise Architecture

An enterprise is an activity or a project that produces services or products. There are essentially two types of enterprise:

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

2.1 Business Enterprises

There are lots of different enterprises in our community; many are small businesses. Sometimes one person owns and runs them; sometimes they're a family business; other businesses are owned and run by partners who aren't family relations.

People usually decide to set up small business to earn an income from producing and selling products or delivering services to individuals or other businesses.

To earn an income from a small business, the enterprise has to run at a profit; that is, some money should be left over for the business owner once all the costs of making the product or delivering a service have been met.

2.1.1 Common small businesses

Some small businesses are easy to recognize because they have a shop front or a site where we can see them in operation, making or fixing things and serving customers. For example:

- Restaurants
- Corner shops, milk bars
- Printing works
- Furniture repair shops
- Hairdressing salons
- Smash repairers
- Small factories & farms.

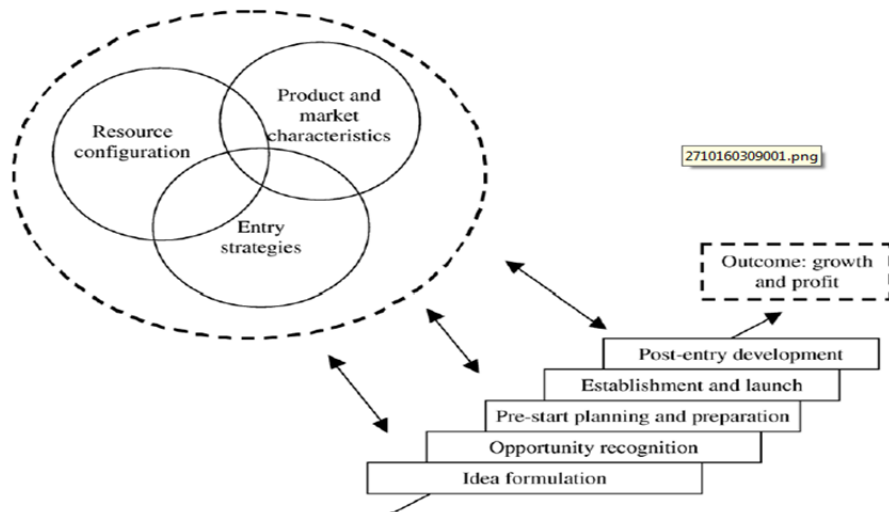


Fig. 4: Enterprise Function

2.1.2 Franchises

An individual franchise operation is a small business that is linked to a larger enterprise. Petrol, food, clothing, mortgage consultancy - almost any product or service is available through some type of franchise operation.

Franchising is a way for successful, proven enterprises to extend their reach, and for individual investors to take part in their success. There are three parts to a franchise:

- The franchise - the business idea, process, product, brand-name, and so on,
- The franchisor - the person or organization that owns the business idea, process, product or name that they sell,
- The franchisee - the person who buys and uses the business idea, process, product or name.

2.1.3 Other small businesses

Most trade related services are also small businesses; for example, plumbers, electricians, builders. They're not as obvious as shops and farms, because they deliver their services directly to the customer, and don't always have a workshop or a shop front. Often they do business mostly over the phone, at times and sites that change according to their clients' requirements.

2.2 SOCIAL ENTERPRISES

Social enterprises are organizations led by local communities. They, too, are small businesses, but they have been set up for a social purpose. Social

enterprises need to be successful just as business enterprises do, but their success is measured in terms of social rather than monetary benefits.

Some examples of social enterprises are:

- community-based child care centers
- health care centers
- sports clubs
- Farmers' club

3.ENTREPRENEURSHIP

It is often said that a person cannot win a game that they do not play. In the context of Entrepreneurship, this statement suggests that success depends on people's willingness to become entrepreneurs. Moreover, because the pursuit of entrepreneurial opportunity is an evolutionary process in which people select out at many steps along the way, decisions made after the discovery of opportunities—to positively evaluate opportunities, to pursue resources, and to design the mechanisms of exploitation-also depend on the willingness of people to “play” the game.

Entrepreneurship is the act of being an entrepreneur or "one who undertakes 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. The most obvious form of entrepreneurship is that of starting new businesses (referred as Startup Company); however, in recent years, the term has been extended to include social and political forms of entrepreneurial activity. When entrepreneurship is describing activities

within a firm or large organization it is referred to as intra-preneurship and may include corporate venturing, when large entities spin-off organizations. Entrepreneurial activities are substantially different depending on the type of organization and creativity involved. Entrepreneurship ranges in scale from solo projects (even involving the entrepreneur only part-time) to major undertakings creating many job opportunities. Many "high value" entrepreneurial ventures seek venture capital or angel funding (seed money) in order to raise capital to build the business. Angel investors generally seek annualized returns of 20-30% and more, as well as extensive involvement in the business. Many kinds of organizations now exist to support would-be entrepreneurs including specialized government agencies, business incubators, science parks, and some NGOs. In more recent times, the term entrepreneurship has been extended to include elements not related necessarily to business formation activity such as conceptualizations of entrepreneurship as a specific mindset resulting in entrepreneurial initiatives e.g. in the form of social entrepreneurship, political entrepreneurship, or entrepreneurship have emerged.

3.1 CONCEPT OF ENTREPRENEURSHIP

Entrepreneurship is the act of being an entrepreneur, which is a French word meaning "one who undertakes an endeavor". 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 of entrepreneurship is that of starting new businesses; however, in recent

years, the term has been extended to include social and political forms of entrepreneurial activity. When entrepreneurship is describing activities within a firm or large organization it is referred to as intra-preneurship and may include corporate venturing, when large entities start spin-off organizations.

An entrepreneur is an individual who owns a firm, business, or venture, and is responsible for its development. Webster's defines Entrepreneur as "One who organizes, operates and assumes the risk in a business venture in expectation of gaining the profit." So we can say that Entrepreneurship is the practice of starting a new business or reviving an existing business, in order to capitalize on new found opportunities.

It is common to differentiate between an entrepreneur and a small business owner. Entrepreneurs usually use innovation to generate higher profits during a shorter period of time by assuming more risk. Small business owners may found businesses or organizations that grow more slowly but more stable rate.

Entrepreneurship is one of the four mainstream economic factors– land, labour, capital and entrepreneurship. During 14th century, references speak about tax contractors- individuals who paid a fixed sum of money to a government for the license to collect taxes in their region. Known as tax contractors they used to take the risk of collecting taxes. If they collected more than the sum paid for their license, they made profits and kept the excess. The concept of entrepreneurship of was existing in 17th century and was a common topic in economic essays for much of the 18th and 19th centuries.

Entrepreneurship refers to a process of actions an entrepreneur undertakes to establish his business. It is a creation and innovative response to the environment and an ability to recognize, initiate and exploit an economic opportunity.

In today's world of modernization and development the term entrepreneurship is a well known term. Entrepreneurship is the ability to foresee or ascertain the various opportunities related with investment and then to evaluate these various opportunities and forming enterprise, the purpose of which is to give the maximum contribution in the national's growth. When we combine these activities performed by entrepreneurs the resultant is known as entrepreneurship.

The concept of entrepreneurship has a wide range of meanings. On the one extreme an entrepreneur is a person of very high aptitude who pioneers change, possessing characteristics found in only a very small fraction of the population. On the other extreme of definitions, anyone who wants to work for him or herself is considered to be an entrepreneur.

The word entrepreneur originates from the French word, entrepreneur, which means "to undertake." In a business context, it means to start a business. The Merriam-Webster Dictionary presents the definition of an entrepreneur as one who organizes, manages, and assumes the risks of a business or enterprise. Someone who exercises initiative by organizing a venture to take benefit of an opportunity and, as the decision maker, decides what, how, and how much of a good or service will be produced.



Fig. 5: Entrepreneur Concept

An entrepreneur supplies risk capital as a risk taker, and monitors and controls the business activities. The entrepreneur is usually a sole proprietor, a partner, or the one who owns the majority of shares in an incorporated venture. According to economist Joseph Alois Schumpeter (1883-1950), entrepreneurs are not necessarily motivated by profit but regard it as a standard for measuring achievement or success. Schumpeter discovered that they (1) greatly value self-reliance, (2) strive for distinction through excellence, (3) are highly optimistic (otherwise nothing would be undertaken), and (4) always favor challenges of medium risk (neither too easy, nor ruinous).

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3.2 CHARACTERISTICS OF ENTREPRENEUR

Here are 10 characteristics that are found within all successful entrepreneurs and without which most people will fall short of what it takes to succeed in an entrepreneurial enterprise.

1) Confident

Confidence is a hallmark of the entrepreneur. Not all of us are born with confidence, but that does not mean we are not capable of it. Many confident women and men gain their sense of self-esteem and faith in their ability to greet challenges by acting - even when they lack the confidence - and then gaining strength and belief in them by seeing the results and gaining the praise and respect of others.

2) Feels a Sense of Ownership

Taking responsibility for getting things done - and doing them with care and attention - means to act like an owner. Rather than viewing a problem as someone else's, the entrepreneur sees it as his or her own and takes pride in finding a solution, leaving things in better shape than they were before encountering them, and improving upon situations rather than leaving them unattended. While a sense of ownership makes for a stellar employee, the entrepreneur knows that the goal is not to be owned by the enslavement of too much responsibility. Rather than controlling situations in an attempt to

possess them, the entrepreneur teaches other people how to take charge. In that way the clever entrepreneur uses individual accountability in the ultimate pursuit of profitability, teamwork, and overall success.

3) Able to Communicate

Entrepreneurs recognize that the most important part of any business is the human element. Human resources -whether in the form of clients, employees, or strategic partners - are what makes or breaks a business, and communication is the key to successful relationships with people. The entrepreneur works to hone communication skills, whether those are written, spoken, or non-verbal messages conveyed through body language. And to support communication, he or she will take advantage of all available tools and resources. Those might include foreign language or public speaking classes, computer and telecom technology, search engine optimization or neuro linguistic programming as it relates to sales and marketing, or specialized writing such as that needed for grants, business proposals, mission statements, or policy manuals. Above all, the entrepreneur develops a keen ability to listen and hear what others are trying to say, because the best communicators got that way by first being the best listeners.

4) Passionate about Learning

Entrepreneurs are often "autodidactic" learners, which means that much of what they know they learned not in a formal classroom setting but instead on their own by seeking out information, asking questions, and doing personal reading and research. They also are quick to learn from their own mistakes, which mean they are less prone to keep repeating them due to

arrogance, ego, or blindness to one's own faults, shortcomings, or errors in judgement. To teach is to learn. And to lead, train, and impart experience to others the entrepreneur is constantly striving to learn more and get better educated. Because of the passion for education, true entrepreneurs surround themselves with people who either know more than they do or know things that are different from what they know. They entertain the views of others and perspectives that may be unlike their own, for instance, in order to be better students of human nature. In this way they continue to enrich themselves with knowledge while also making a concerted effort to grow that knowledge by sharing it with others who are also front row students of life's valuable and unlimited lessons.

5) Team Player

Those who goes into business for themselves but do not utilize teamwork wind up without the team but still have all the work to get done. They shoulder the whole burden for themselves, and wind up just trading their old job for a new and more demanding one - in an attempt to be self-employed. Rut the new venture carries greater personal and financial risks. On the other hand, team players know how to succeed by employing the physics of interpersonal synergy and dynamic relationships. One twig can be easily snapped, but a bundle of those small twigs becomes stronger than the sum of its individual parts and can be impossible to bend, much less break. The same goes for businesses, and successful entrepreneurs leverage teamwork to get the heavy lifting done without breaking stride.

6) System-Oriented

Like mathematical formulas, good systems allow us to reproduce great results every time - with less and less exertion of energy or resources. Entrepreneurs rely upon systems before they rely upon people, and they look for system based solutions before searching for human resource solutions. If the person gets the job done but falls sick or leaves, the job is threatened. But if a system is created to get the job done, anyone can step in and follow the blueprint to get the desired result. Similarly, when troubleshooting and problem solving, the entrepreneur will first examine and study the system - because a flaw in the system will produce a flawed outcome each and every time. Designing, implementing, and perfecting systems is one of the most useful and rewarding skills of an entrepreneur.

7) Dedicated

Entrepreneurs dedicate themselves to the fulfillment of their plans, visions, and dreams, and that tenacity of purpose generates electricity throughout the whole organization. One of the biggest reasons that companies fail is because they lose focus. Target a goal, clarify the objective, refine the brand, and narrow the margin of error. Regardless of what the effort might involve, an entrepreneur brings a single-minded dedication to the task by being committed to a positive outcome and ready and willing to do the needful. No matter what that might mean in terms of rising to meet a challenge or acting above and beyond the call of duty, the entrepreneur shows steadfast dedication.

8) Optimistic

A positive outlook is essential for the entrepreneur, who learns to see setbacks as bargain priced tuition for the valuable business lessons gained through first-hand experience. Past shortcomings, failures, or disappointments are relegated to the past so that they cannot continue to haunt the present or obstruct the future. And when things go right and business prospers, this further fuels the optimism and positive mind set of an entrepreneur, helping to give impetus and momentum for greater accomplishments and increased hopefulness.

9) A Leader by Example

Entrepreneurs not only lead themselves through self-motivation as self-starters who jump into tasks with enthusiasm, but they are also skilled at leading others. They know the importance of teamwork, and they understand the need to appreciate others, support them, and reward them accordingly. True leaders do not become indispensable, otherwise things fall apart in their absence and they can never rise to the highest level of entrepreneurial freedom and prosperity. Neither do they squander the potential of those working under their guidance. As renowned business consultant and retired United States Air Force Major General Perry M. Smith once wrote, "Leaders who share their power and their time can accomplish extraordinary things. The best leaders understand that leadership is the liberation of talent; hence they gain power not only by constantly giving it away, but also by not grabbing it back."

10) Not Afraid of Risk or Failure

Many people could be successful if they only took chances. And many people who do take chances and become somewhat successful find the realization of their dreams an overwhelming possibility, so they sabotage their continued success by retreating back into a comfort zone of smallness. As discussed earlier, the employee mind set is preoccupied with a need for security. Those who cling to what is familiar to them - even if it means the denial of their dreams - lack the perseverance and ambition that the real entrepreneur exhibits.

Entrepreneurs are not immune to fear. But they prioritize their approach to life so that the fear of failure, frustration, boredom, drudgery, and dissatisfaction far outweighs the lingering fear of success.

3.3 Entrepreneurship in India

The early history of entrepreneurship in India reflects from the culture, customs and tradition of the India people. The Baliyatra Festival of Cuttack, Orissa, reminiscence of the past glory of International trade. To 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. Which is based on social sanctions? 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 new meaning for attaining economic development within the shortest possible time. But in the process they were seriously handicapped by the rigid institutional setup, political instability, marketing imperfection and traditional value system.

Agriculture and allied sectors are considered to be the mainstay of the Indian economy. They are the 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 (GDP) of India; about 65-70 per cent 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 of 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.

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.

3.4 Features of Entrepreneurship

1. **Innovation** is an important function of entrepreneurship. Innovation means doing something new or doing old things in new or different way. It is the introduction of new methods and ways of doing the work. An entrepreneur should be innovative.

2. Risk bearing

Risk bearing is also an important function of entrepreneurship. Prof Knight in his theory 'RISK UNCERTAINTY AND PROFITS' DEFINES there are two types of risk;

- **Foreseeable risk**—is the risk which can be insured and capable of being calculated.
- **Unforeseeable risk**- is the risk which can't be insured and it is tough to calculate it.

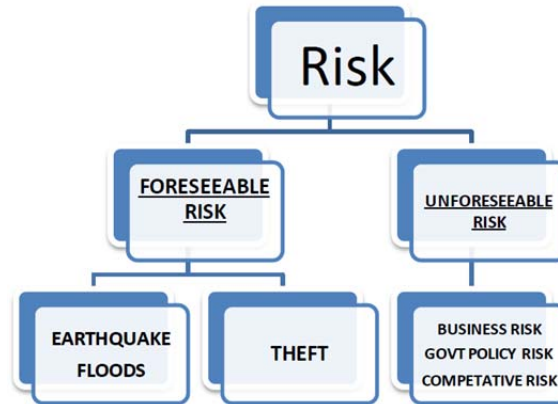


Fig. 6: Different Risks

- 3. Organizing function-** entrepreneurship can also be defined as an organizing function. Organization means organizing all the factors of production and directing them towards the attainment of the goal of organization.
- 4. Management skills-** Entrepreneur must possess managerial skills like motivation and leadership. Motivation is inner urge that emerges the behaviour towards achievement of goals. It can be positive and negative, financial and non-financial and leadership is to direct the people to do what you want your men to do.
- 5. Economic activity-** Entrepreneurship is an economic activity as it is concerned with earning more and more profits.

- 6. Goal oriented-** Entrepreneurship is an goal oriented activity. It is undertaken to achieve the predetermined goals of the entrepreneur.
- 7. Decision Making-** Entrepreneur takes decisions regarding activities of enterprise. He decides about the type of business to be done and the ways of doing it. An entrepreneur has to make decisions to take actions with unknown and unpredictable results.
- 8. Function of High Achievement-** People for high need for achievement are more likely to succeed as entrepreneur.
- 9. Resource Mobilisation-** Gap filling is the most significant feature of entrepreneurship. The job of entrepreneur is to fill the gap or make up the deficiencies which always exist in the production function. He has to perform the functions of input completing and gap filling.

4. CONCEPT OF AGRIPRENEURSHIP

Amidst the changing paradigms and demanding global structure, India, in order to remain a front-runner needs to primarily focus on the agriculture sector, the backbone of the economy. This specialization will develop agripreneurs with distinct traits and skills to exploit opportunities galore in the field of agriculture. Among the various strategies to promote planned growth in this sector, focus on promoting viable enterprises will certainly help exploit its operational efficiency to the hilt.

Agriculture is the mainstay of the Indian economy because of its high share in employment and livelihood creation. It supports more than half a billion people providing employment to 52 per cent of the workforce. Its contribution to the nation's GDP is about 18.5 per cent in 2006-07. It is also an important source of raw material and demand formany industrial

products, particularly fertilizers, pesticides, agricultural implements and a variety of consumer goods.

Agripreneurship- It is defined as generally sustainable, community oriented, directly marketed agriculture. Sustainable agriculture denotes holistic, systems oriented approach to farming that focuses on the interrelationships of social, economic and environmental process.

4.1 Need for Agripreneurship

- Increasing demand of organic and quality food both in India and abroad
- Competitive advantages for many primary production activities in agriculture. Ex: Rainfed farming, livestock and wild craft production is through low cost production technologies only.
- Private sector is willing to enter in to agribusiness at all levels of operation.
- To reduce malnutrition as majority of women and children in the country are malnourished.

4.2 Scope for Entrepreneurship Development in Agriculture

- Technologies that reduce the cost of production and increase the benefit of the farmers will open new opportunities for Agri-entrepreneurship.
- New technologies that are simple and time saving and keep away farmers from drudgery of labour will also provide opportunity for entrepreneurship in agriculture.
- Technologies that provide social and psychological benefits to farmers will also provide opportunity for entrepreneurship in agriculture.

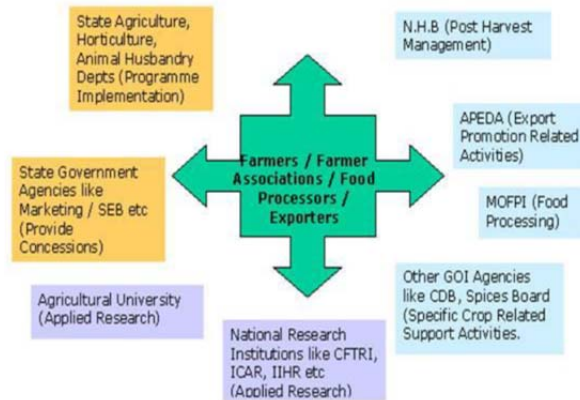


Fig. 7: Agentss in Agripreneurship

4.2.1 On Farm Activities

Depending upon the geographical situation and resources availability, the possible

Areas of entrepreneurship in agriculture are:

- (1) Agro produce processing units: These units do not manufacture any newproduct. They merely process the agriculture produce. Eg Rice mills, Dal mills, Decorticating mills etc.
- (2) Agro produce manufacturing units: These units produce entirely new products based on the agricultural produce as the main raw material. e.g., Sugar factories, Bakery, Strawboard units etc.
- (3) Agro-inputs manufacturing units: These units produce goods either for mechanization of agriculture or for increasing productivity. E.g., Fertilizer manufacturing plants, insecticides production units, food processing units, agricultural implements etc.
- (4) Agro-service centers: These include the workshops and service centers for repairing and serving the agricultural implements used in agriculture.

4.2.2 Off-farm Activities

Entrepreneurship development is also profitable in different off-farm activities like cloth stitching, knitting, embroidery, cloth printing (tie and dye), carpet making, dari making, envelope and plastic bag making, agarbatti making, candle making, rope making, basket making, bamboo-work, distilled water making, oil extraction, chalk making, biogas mechanic, electric wiring, mason, carpentry, black smithy, solar mechanic, electrician, auto mechanic, welding, pottery, and other rural crafts. The possible areas of entrepreneurship in allied activities of agriculture This includes the activities like, Dairying, Sericulture, Goat rearing, Rabbit rearing, Floriculture, Fisheries, Shrimp farming, Poultry farming, Sheep rearing, Vegetable cultivation, Nursery farming, Grafting/budding, Farm forestry, etc.

4.3 Agri-Business Development: Private Sector's Role

Agriculture being vital for Indian economy, Government has very long played an important role. The time has come for private sector to come forward. Today, even Government is encouraging private sector participation by inviting trade bodies to suggest necessary reforms in Indian agriculture.

The Task Force highlighted the potential for global opportunities and India's competitive advantages in the context of WTO and Globalization. Somehow, this initiative while preparing a document to completely transform Indian agriculture got new light through new policies and regulations prevalent in the country. In this document, many successstories have been presented, and final solution come with clear cut action plans for

the future. It also started private sector role that could also complement and supplement the government efforts.

1. Many individuals, small business houses and large corporates were looking for new investment opportunities. In many sectors of the economy, not much scope was available. With the reducing interest rates, business plans with long gestation periods have acquired new relevance for the private sector. Agriculture Export Zones has become a new business opportunity for their entry at any investment level.
2. Agriculture being top priority, its business environment in terms of regulations, is also conducive. It attracts minimum taxes and gets maximum support. Reforms in agriculture have become top agenda for the government in the country.
3. Many private sector players engaged in agriculture related business activities have synergy in either backward or forward business linkages related to AEZ's
4. Increasing demand for quality and convenience food by the world consumers has created new level of business opportunities.
5. Many interest groups and development agencies etc. have also identified Agriculture Export Zones as a new agenda that will create conducive Agri environment for healthy development in future.

4.3.1 AGRI EXPORT ZONES (AEZs)

AEZ are identified by the State Government, who would evolve a comprehensive package of services provided by all State Government agencies, State agriculture universities and all institutions and agencies of the Union Government for intensive delivery in these zones to develop

agripreneurship. Private sector with proven credentials would be encouraged through entrepreneurship development to sponsor new agri export zone or take over already notified agri export zone or part of such zones for boosting agri exports from the zones. Services which would be managed and co-coordinated by State Government/Private sector and would include provision of pre/post harvest treatment and operations, plant protection, processing, packaging, storage and related research & development etc. Nodal agency will supplement, within its schemes and provisions, efforts of State Governments for facilitating such exports.

The concept of the Agri Export Zone attempts to take a comprehensive look at a particular produce/products located in a contiguous area for the purpose of developing and sourcing the raw materials, their processing and packaging, finally exporting them. It is a part of agripreneurship development. Thus, the entire effort is centered on a cluster approach of identifying the potential products, the geographical region in which these are grown and adopting an end to end approach of integrating the entire process, right from the stage of production till it reaches the market. The government helps agripreneurs in sourcing for raw materials, the setting up of processing facilities, providing finance at low interest rates and even matching with international buyers. The export zones mooted by the Agricultural and Processed Food Products Export Development Authority (APEDA) to increase international trade in agri-commodities are an attempt to take a holistic approach to encouraging trade in specific commodities located in contiguous areas.

The concept of AEZ can be summarised as “to produce what could be sold rather sell what is produced”. It visualises identification of interventions in a project mode. By making all central, state governments and local agencies to work under a single umbrella and comprehensively address all the issues relating to each stage of the entire value chain from farm to the ultimate consumer we can penetrate in to new markets in international scenario. Under AEZ India has successfully gone ahead to a large extend private entrepreneurs. Traceability of the produce from the farmer to the end consumer is also very important in global trading.

Agri Export zones are concerned with A to Z of Agri–exports. The emphasis is on partnership on various agencies / systems and convergence of interventions of various agencies like APEDA, Ministry of Food Processing Industries (MFPI), and National Horticulture Board (NHB) etc. The focus will be on increasing exports of identified commodities, which is very important factor for entrepreneurship development.

The Concept of AEZ’s which aims to give fillip to agriculture exports through entrepreneurship development, comprises the following

- Identifying a potential zone based on agro-climatic requirements for a particular crop.
- Integrating various assistance programs of Central and State Government agencies and providing fiscal incentives to exporters.
- Implementing the same through involvement of private and public partnership and integrating all the activities till the produce reaches the market.

4.4 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.

As reported in the Economics Times, dated 28.5.09, Japanese watermelon, Taiwanese papaya, American maize and German gherkins, recently introduced by some enterprising farmers in Kheda district of Gujarat, are ready to fly European destination.

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 behavior 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.

4.5 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 speciallydesigned 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.

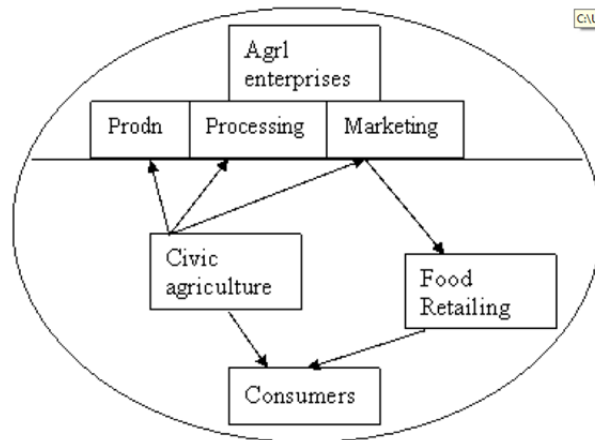


Fig. 8: Agricultural Enterprise

4.6 Business Areas for Entrepreneurial Ventures

The business areas for entrepreneurial venture suitable for the youth in India are almost unlimited. In a rural-urban continuum, the young entrepreneurs may be spread over rural, sub-urban and urban areas. Their choices of an enterprise shall largely depend on where they are located and what are their interests. Some examples are given here to facilitate understanding of the topic.

1. A person interested in growing flowers for selling in the local market, can grow local varieties in the rural areas. However, an entrepreneur who is interested in exporting flowers shall grow improved and exotic varieties of flowers for which there is a demand, in urban fringe areas, preferably near an airport. Growing the flowers under controlled conditions, harvesting, packaging and timely export are important considerations for the entrepreneur (exporter).
2. Fresh fruits and vegetables for export are grown in rural areas, preferably under organic farming conditions. These must be of improved variety, preferred by the countries abroad; collected, graded, transported, packed and stored by creating cold chain and cold storage facilities. Pesticide residues are important negative considerations which must be taken care of. Availability of irradiation facility is an additional advantage. Rural and urban entrepreneurs may form cooperatives to run such enterprises.
3. Processing of fruits and vegetable; marketing of liquid milk and milk products; meat, fish and their products etc. demand strict quality control and cold chain and cold storage facilities. These have market potential both inside and outside the country. The rural and urban entrepreneurs may combine to form teams to run such enterprises.
4. Planting and processing of medicinal, spices and aromatic plants, tissue culture etc. has market potential both inside and outside the country. The joint efforts of both rural and urban entrepreneurs can bring good revenue for them.

5. Eco-tourism is a new area in which both rural and urban entrepreneurs can work together, to make it popular and obtain good income from it.
6. The urban entrepreneurs may specialize in retail marketing, IT-enabled services, insurances, fashion-tailoring etc. which shall earn good profit for them.
7. Foods business is emerging as an important area of entrepreneurial venture, particularly in urban, industrial, commercial and sub-urban areas.

In entrepreneurship development, the knowledge and skill of relevant disciplines, including marketing and financial management, are combined together in the form of an integrated action plan to make an entrepreneurial venture successful.

Limitations of the Study

The study was undertaken in a limited area i.e. Balagarh block under the district of Hooghly in West Bengal. Being a time bound research programme, it was very difficult to cover the larger sample from wider operational area with more dissemination of the study. More over the correctness of the responses, which were based primarily on recall, might in spite of efforts of the investigator leave margin for error to creep in. There was also the problem of inadequate resources, while collecting the data. However, every effort and thought was exercised in making the study objectively and systematically in an orderly manner.

Layout of the Study

The thesis has been divided into 7 chapters. The second chapters following the first of introduction, deals with the review of literature related to the present study. In the third chapter the research setting is described. The fourth chapter deals with research methodology used in the study including the measurement of different variables have been described and fifth chapter about result and discussion. The summary and conclusion has been presented in the sixth chapter and finally the seventh chapter deals with the future scope of research. Bibliography is presented after the seventh chapter. Lastly, the appendix, including the interview schedule, has been presented.