PIONEERING INNOVATORS IN THE SOUTHERN RAJASTHAN

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CERTIFICATE

This is to certify that the thesis titled **"Pioneering Innovators in the Southern Rajasthan"**, embodies results of original investigation which was carried out by Mr. Rakesh Kumar Gautam (Reg. No. VMOU/15/MA/85) under my supervision in the Department of Management Studies, School of Commerce and Management, Vardhman Mahaveer Open University, Kota-Rajasthan-324010 for partial fulfillment of Ph.D. degree to be awarded by Vardhman Mahaveer Open University, Kota-Rajasthan-324010.

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DECLARATION

The research work embodied in this thesis entitled "Pioneering Innovators (PI) In Southern Rajasthan" has been carried out by me duly following UGC Regulations on Minimum Standard and Procedure for the award of Ph.D. Degree Regulations, 2009 at Department of Management Studies, School of Management and Commerce, Vardhman Mahaveer Open University, Kota, Rajasthan, India. The work is submitted for consideration of award of Ph.D. is original. The content of this is neither full nor in parts has been submitted to other Institute or the University for the award of any degree or fellowship previously.

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ABSTRACT

An organization comes into existence only because of the efforts put in by an individual, who would be prepared to assume responsibility of leading the enterprise with him. For that, the individual must have special quality that is known as innovation.

Innovation as an economic activity emerges and functions in sociological and cultural environment. It could be conceived as an individual's free choice activity or a social group's occupation or profession.

The innovators perform vital function in economic development of a nation. They have been referred to as the human agents needed to mobilize capital, to exploit natural resources, too often develop innovative products or concepts, to create markets and to carry on business. It may be construed that the innovative contribution spells the difference between prosperity and poverty among nations.

A successful innovator is always aware of the new developments and changes that take place around him in the society and is prepared to adapt to the changing needs of the society. He is the central point, around whom all other factors of production, productive resources and techniques shall revolve. He integrates talent, abilities and drives to transform the resources into profitable ventures.

Studies on innovators have revealed that personality and cultural or social factors are related to innovative behaviour. Traits such as self-confidence, creativity, persistence, calculated risk-taking capacity, determination, need for achievement, individuality, leadership, versatility, optimism and liking for challenges characterize the innovative person.

A person who has a business of his own is called an innovator. But

what differentiate an innovator from a successful innovator are his achievements in the field of his business.

Expected outcome of the study

- To explore the traits of innovators from Southern Rajasthan
- To differentiate innovators from Southern Rajasthan with others.
- To trace the success stories of selected successful innovators from Southern Rajasthan
- To identify their winning strategies for success in business
- To summarize the findings of the study and establishing as bench mark for future innovators to be successful

Methodology of the Study

Primary and Secondary data: Interview and secondary sources were referred in this case study method. Out of the available innovators in Southern Rajasthan, few successful innovators, who had their investment options from their own sources, were considered for this study.

Based on the hypothesis proposed as above, a sample of few successful innovators from Southern Rajasthan were carefully selected for the study. The methodology chosen is case study method; their history is studied in depth, the factors deciphered as to identify their secret of success.

Suggestions are made to resolve the various issues relating to innovator ship in small enterprises. The suggestions are given categorically to the government, to the banks and other financial institutions and to the innovators.

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CHAPTER 1
INTRODUCTION

1.1 Introduction

In India, Independence has made innovation grow faster after that. A significant step forward has been taken in government industrial policy statements by the government of India spelling out steps for rapid and balanced industrialization of the country. In 1991, the government declared that the private sector is essential to the country's economic development after it had undergone major economic liberalisation.

Innovation in agribusinesses helps to increase the food production and engage in value-added processing. Farmers as an entrepreneur must have innovative ideas and should have ability to conceive new business ideas.

The government's policy goals are to encourage innovation and innovative skills by diffusing innovation from the existing centres to other cities, towns, and villages.

The government has therefore decided to foster the growth of small-scale facilities. Providing various incentives and concessions, SSI provides capital, technical know-how, markets, and land to help its clients, especially those in the underdeveloped regions of the country, develop and launch successful new ventures.

The agricultural sector in India is on the verge of major change. While farming is a multifaceted issue, we do have a remarkable storey to tell. Export markets for agriculture continue to be strong, and demand within the country has become a huge opportunity. This business also has a solid base of other businesses and a large workforce of human resources that are focused on agriculture. Agriculture has made advances. The challenge is that most farmers do not have. There is currently a big debate over how to provide opportunities to small farmers, the so-called smallholder farmers.

There are no farmers in India or any other country who farm because they want to secure the food supply. The farmers run the farm because they want to generate a profit and earnings. However, farm-centric or production-centric large agricultural reforms have happened in India in the past, and the focus was not always on boosting farmers' incomes. Without these reforms, the outcome would have been completely different. However, our systems are still primarily designed for production-oriented agricultural initiatives. To accomplish this, smallholder farmers will need to gain market access in place of the current production-centered infrastructure. Farmers have been waiting for this shift for a long time. It will require moving away from doing things the way they have always been done and toward a focus on customers. This means abandoning agriculture as a "welfare sector" and moving it into the business sector.

As elsewhere in the world, the cell phone has changed the lives of rural households in India. Telecommunication was available to just 10% of the population two decades ago. Now, about 80% of the households in the country now have access to a cellphone. The growth of this new technology has been propelled by the people themselves, particularly small-scale farmers and the poor. Think about the farmer-led applications of digital platforms, such as WhatsApp. Women in Bihar account for 98% of goat-keeping, and they are among the most impoverished because they cannot afford even a half-acre of land. They eat their goats instead. We can infer that they are using their smartphones to upload photos of their goats on websites like eBay-like websites in order to boost their marketing potential. New buyers now have the ability to purchase livestock more than 700 to 800 kilometres away. On the low end, the goats fetch 20-47% more per head than previously; on the high end, the goats can fetch 50-138% more. This demonstrates how the benefits of the digital innovation that we commonly associate with increased efficiency have also benefitted small-scale farmers who are the most economically disadvantaged.

For a second example, the use of data to inform decision making, policy making, and operational efficiency of governments at both federal and state levels in India is another example of digital innovation having a significant impact. The majority of the

attention has historically been focused on data collection, rather than data utilisation, and there is an emphasis on production data. We have a tremendous amount of data, but we are not using it well, state-by-state. In addition to that, we have lots of information on crops like the one I mentioned, but we often don't know how much the farmer is earning. It would be ideal if we had the data to comprehend the gap between potential income and yield, but we only have the data for the yield gap. We're thinking a lot more about what data we're collecting and how we're using it to make sound decisions. Instead of data, it is data for what.

1.2 Government of India Schemes

Government of India launched its flagship project called Agri-Clinics and Agri-business Centers (AC&ABC) on 9 April, 2002. As a nodal agency, the National Institute of Agricultural Extension Management (MANAGE) coordinates and implements the initiative that includes a network of 132 members.

This programme aims to tap the wide array of agricultural expertise that is available among those who have graduated from agricultural schools. Agri-Clinic or Agri-Business Center facilities are open to everyone, whether you are a fresh graduate or employed, or you are simply looking to help farmers. Both the Federal and Provincial governments have now come on board to provide start-up training to students who plan to go into farming, or any of a number of other farming-related fields, like horticulture, sericulture, veterinary science, forestry, dairy, poultry farming, and fisheries. Special startup loans are available to participants in the training programme who are interested in launching a business.

The training institutions of the nodal training network are located across the country. the goal of the strategy is to enhance actions by public extension in the name of increasing the pool of Agricultural professionals qualified to start new Agri-ventures as well as providing value-added extension advisory services to farmers, who can access the delivery on their doorstep.

Making it possible for Agripreneurs to provide self-employment. the stakeholders' efforts have led to for a total of 60,063 agri-graduates, training, and for the sake of 25,865 Agri-ventures, the future of Indian agriculture has been established. Meeting the country's employment needs reduced the rural youth migration a number of success stories involving Agripreneurs can be found.

India's business history emerges the young Indian innovators who have thrived since the country's deregulation. Checking the characteristics of their personal data reveals certain notable attributes:

- Work ethic and a willingness to stick it out even when the business is about to fail.
- To achieve high goals in business, you must have a strong desire.
- hopefulness for the future that doesn't get discouraged by the attitudes of others and strives on their own terms.
- As an individual, and without any regard for the issues that might impact them, they're completely independent.
- Seeing the likely changes in the business and acting on them early has saved the company much time and money.
- The ability to unite all of the necessary resources for launching the company.
- to meet the ever-changing needs of customers with new research and initiatives

The study of innovation is relevant today because it supports innovators in the process of helping them to fulfil their personal needs, but it also has a significant economic impact through the contributions of new ventures. Technological innovation has a positive effect on the economy because it functions as a bridge between innovation and the marketplace. It is critical that government continues to support basic and applied research, but without commercialization, scientific innovations are useless. In contrast to the promise of marriage of corporate research capabilities and intrapreneurship, little has come of intrapreneurship thus far. Due to this, the only people who are well equipped to lead and conduct economic growth and revitalization are those who possess both technical and business acumen. This link is critical to a country's economic prosperity, and proper study of innovation and training of innovators are

necessary in any attempt to strengthen it.

1.3 The imperative to carry out the study

In order for India to fulfil her goal of global power and in order to successfully meet the social obligations such as poverty alleviation, raising the standard of living, and offering meaningful employment to all, the country will need an expansion of both the industrial and agricultural sectors. There is no question that innovators play a key role in this regard. Indians have played a key role in creating opportunities for millions of people by helping them get jobs in their companies, investing in fields previously considered risky, and introducing cutting-edge business strategies. Our curiosity is naturally piqued by this; we must investigate to see how Indian innovators succeed in their endeavours and what factors contribute to their achievements.

1.3 Scope of the study

Based on the conditions under which they started their career (as low-level employees of some organisations or as entrepreneurs with their own small investment), the study participants from Southern Rajasthan are chosen to be innovators. To this extent, they are their own masters, in that they received no backup in the form of financial support or inheritance of family wealth from their family members. They began with a humble start, and gradually and steadily gained traction because of their innovative talents. It was through difficult experiences that they grew, but they never gave up. They kept their hope and confidence up, which proved to be successful innovators in terms of ingenuity and spirit.

1.5 Predicted result of the study

To elucidate the traits of successful innovators in Southern Rajasthan

1.6 The methodology of the study

Primary and secondary data: This case study utilised interview and secondary data. For this study, only a few of the most successful innovators in Southern Rajasthan are being considered.

The methodology they've decided to use is case study, and their history is studied in-depth; as a result, their winning formula can be identified.

1.7 Limitations of the Study

The researcher was not able to undertake extensive journeys due to time constraints. This reduced sample size is due to the difficultly in identifying qualified innovators in the South of Rajasthan to meet the conditions of the hypothesis. There are likely to be errors or biases in the result of the study. Despite these findings, they will still give us insight into specific elements that foster success and be of use as an aid for the next generation of innovators.

1.8 The scope and organisation of the thesis

This exploratory study of the successful innovators may be most efficiently conducted through a content analysis of unambiguous and published examples of the method described below. Cases of this type were discovered and studied, with only a small number of interviews taking place in order to bolster the data already gathered.

1.9 Agriculture/Agri-Business Promotion in Rajasthan

Agriculture/Agri-Business Promotion Facility RACP's PDO is to develop the feasibility of increasing the agricultural productivity and the income of rural farmers while promoting the environmentally friendly farming practises and agricultural technology in different locations across all the Cluster areas that form the ten agro-ecological zones of Rajasthan.

Improved on-farm water use efficiency, reduced water-intensive cropping patterns, and the resulting water savings from agriculture to serve the state's water policy objectives, while also advancing the state's sustainable and efficient use of water resources the development of value chains in processing and marketing of agricultural and food goods to help advance the state's agro-processing and agri-business policy.

Added capacity for delivering agriculture support services has been created in the public sector. Additionally, the project aims to make big strides in providing farmers

with more adequate marketing facilities, like more income from selling goat from small ruminants. Structured interventions in the areas of a More Efficient Use of Water Market-driven advisement and technology transfer.

Small Ruminant Livestock Support Services agriculture industry promotional facility Market intelligence and market information services.

Virtual markets and warehouse receipt development.

To improve marketing and processing efficiency, a value chain approach shall be used. The farmer groups and farmer service centres, or FCSC, will be responsible for making the primary contribution to service value by providing cleaning, grading, and packaging services. PCs with capacity building support will be able to help their members expand their input management operations to aid the economy. These PCs will have increased capacity and market linkages will be made available to the market to help sell their produce. Study and support the goat value chain to help the goat rearers.

To allow farmers to run profitable market-oriented production, which is sustainable and to connect them with other value chain participants and agribusinesses, is the main role of the market and value chain. To encourage involvement in commodity value chains, this component gives producer groups, agro-enterprises, and commodity associations partial grants to finance demand-driven investment proposals, provided that the investment returns directly to the groups.

Develop the capacity and skills of the producers through organising them into higher-level institutions (cluster level producer groups) and giving them training. Increased economies of scale in procurement of inputs and marketing of agricultural produce are expected from aggregation of farm-produced goods. Producer organisations, located in their jurisdiction, can help their industries use market-oriented production techniques and act as centres for disseminating technology and providing input and output marketing. The project aims to support

It Helps strengthen the connection between local farmers and agribusinesses by facilitating long-term partnerships and market linkages between farm groups and agribusinesses by creating an Agri-Business Promotion Facility (ABPF).

In addition, try to find alternate sales channels. A strong Agri Business Promotion Facility is foreseen to provide human resource development support for agribusiness infrastructure, in order to support agricultural marketing competitiveness (ABPF). In conclusion, RACP is dependent on one of the important elements, which is ABPF.

(i) The overall objective of the Agribusiness Promotion Facility (ABPF) is to increase the share of agribusiness production in the total production, earnings from agricultural production, and jobs for agricultural producers. In order to help farmers in Rajasthan better market their goods both domestically and in foreign markets, ABPF will provide them with better marketing abilities. Thus, under the project, the ABPF, a facility that supports agriculture and agribusiness, shall be set up.
The participative value chains identification and stakeholder consultation have already started to roll out.

(ii) Support investments in agriculture, foster inter-linked value chains for agricultural products, and provide assistance to agribusiness entrepreneurs seeking financing; and (iii) Promote agriculture-related investments, foster interlinked value chains for agricultural products, and provide financing to agribusiness entrepreneurs who are seeking finance.

- Help in putting Rajasthan's latest Agribusiness Policy into effect
- Coordinate state and federal grants.
- The organisation and scope of the material

There will be a total of seventeen districts spread across all clusters of the ABPF project, i.e. Mokampura, Kota, Sangod, Gudha, Tonk, Deoli-Anwa, Baran, Jhalawar, Chittorgarh, Orai, Bassi, Pratapgarh, Jakham, Ajmer, Pisangan, Nagaur, Sawai Madhopur, Bonli, Alwar, Dholpur, Sri Ganganagar, Bikaner, Jaisalmer, and Banswara (Kushalgarh).

Under the terms of the agreement, ABPF will establish one headquarter and three sub offices at cluster level based on the scope and effectiveness of operations. the existing law; law already in place

The head office is located in Jaipur, with offices located in Jaipur, Alwar. Sub-Office-1: Kota Base. Residents within this district include those in Kota, Bundi, Baran, Jhalawar, Tonk, Sawai Madhopur, and Dholpur. Sub Office-2: Base: Chittorgarh, Districts covered: Ajmer, Pratapgarh, Banswara. Sub-Office 3: Base Bikaner, Districts covered Bikaner, Sri Ganaganagar, Jaisalmer, Nagaur.

ABPF works to foster agriculture entrepreneurship and development of business plans for, among others, producer companies, MTAs, and helps develop agri business policy to create higher-paying jobs for farmers. Since further improving sustainability of agriculture is of such broad interest, increasing the value of agricultural produce is of the utmost importance. One strategy farmers could use to add to their income is the development of various business activities that either support agriculture or are based on the production of agricultural goods. thus, the work to be done includes:

1) In order to identify commodity commodities with the purpose of analysing their value chain and identify gaps in the value chain, an in-depth investigation on micro-level gaps will be done and appropriate intervention plans for the identified gaps will be put in place.

Design business models/plans that reflect the specific value chains and resources within a cluster. Also, provide business models/plans for agriculture entrepreneurs and Community-based organisations on the basis of these existing frameworks (CBOs).

A partnership between agriculture entrepreneurs and CBOs, as well as the availability of government credit and grant schemes, should financially link them. The development of skill sets for future entrepreneurs and community-based business development.

Using workshops, seminars, and a web portal to disseminate knowledge. Developing an extensive network of industry, expert, aggregator, processor, exporter, and publisher professionals.

For farming and Goats : Cluster wise deliverables have been identified. To promote the stipulated Agri Business Policy of the State, the ABPF is to work in total harmony. With this hope in mind, we hope that the RACP's Agribusiness projects will provide farmers in the project areas with additional market links to increase their incomes.

1.10 Rajasthan Agro-Processing, Agri-Business & Agri Export Promotion Scheme 2019

Agriculture provides the majority of the rural poor in India with their primary source of income, accounting for more than 80 percent of the population. However, despite the fact that it employs approximately 52 percent of the labour force, it contributes only 14.4 percent of GDP and 10.23 percent of total exports. Rural women, who account for 30% of the agricultural labour force, are among the most vulnerable groups.

Workers who are paid the least. Any effort to ensure livelihood security and economic development must be accompanied by a plan. address the issues that the agricultural sector is currently dealing with and turn the difficulties into opportunities. Poor people have more economic opportunities.

Since 1966, India has experienced unprecedented agricultural growth. The increase in the production of food grain. The increase in production from a meagre 51 million tonnes in 1950 to 257.44 million tonnes in 2012-13 represents a significant increase. This is a remarkable accomplishment that has no precedent in the history of world agriculture. Enhancement in a similar vein. There has also been an increase in the production of milk, fish, oilseeds, and fruits and vegetables. Green, The blue, yellow, and white revolutions have all played a role in bringing prosperity to the people of the world.

A farming community is defined as follows: Aside from government policies and high expectations, the cradle of success is the individual. The establishment of institutions of higher learning has been facilitated by the receptivity of the farming community.

Agricultural education is important. A new breed of skilled human resource was developed by these institutions, and who played an important role not only in the development of new technologies but also in their evaluation refining the product and making it available to the farming community

Figure 1.1 Agro-Climatic Zones

Rajasthan is a one-of-a-kind state in a variety of ways. It is noted for its rich culture, traditions, and colour, as well as for its biodiversity, which includes both plants and animals, and for its natural resources, in addition to its valour and notable historical landmarks. Rajasthan is the country's largest state by population and geographical size, accounting for about 10.4% of the country's total land area. Nearly 65 percent of the country's population relies on agriculture for a living (56.5 million people).

According to the United Nations Development Programme, the state is currently organised into 33 administrative districts and contains ten agro-climatic zones.

Rajasthan's agriculture is mostly rainfed, and it covers 13.27 percent of the country's total land area. Groundwater is rapidly depleting and becoming polluted. Drought years happen around every third year on average. Despite these difficulties, the country has made substantial progress since independence, including achieving cereal and pulse self-sufficiency.

Due to increased output, the state of Rajasthan now has a surplus of oilseeds. Its agro-biodiversity is especially significant, with medicinal and fragrant plants, as well as seed spices and legumes, flourishing in abundance across the state. The khejadi, rohida, ker, and ber are among the desert plants and shrubs found in Rajasthan. A number of specialist crops and varieties are grown almost exclusively or entirely in Rajasthan. Crops farmed in the region include moth, guar, coriander, cumin, fenugreek, isabgol, and mehndi, as well as animal breeds such Rathi, Tharparkar, Kankrej, Gir, and Nagauri cattle, Magra and Bikaneri Chokla sheep, Marwari and Sirohi goat, and others. The importance of maximising Rajasthan agriculture's potential, which has yet to be fully realised, cannot be overstated. As a result, in this setting, the resuscitation of Rajasthan's agrarian sector is highly suggested.

Food grains, on the whole, occupy 66% of the land cultivated during Kharif season and 58% of the land cultivated during Rabi season. In Kharif months, food grains for people are pearl millet, maize, sorghum, and paddy; grains for animals are black gram, green gram, and pigeon pea; and pulses are black gram, green gram, and pigeon pea. Wheat and barley are the most important grains grown in cereal and pulse crops in the winter Rabi season. During the Kharif season, these oilseed crops are mostly soybean, groundnut, sesame, and mustard, but during the Rabi season, they are mostly linseed. While it's relevant to mention that Rajasthan is India's largest producer of mustard (a type of oilseed crop), pearl millet (also known as bajra), and three spices: coriander, cumin, and fenugreek, it is also true that the state is the country's second-largest producer of maize, cluster beans, and isabgol.

The Rajasthan livestock herd, which comprises around 10% of India's milk production and 30% of mutton, is among the country's largest. With the help of the X Plan, the

state's cereal production increased by more than 2.5 times and oilseed production by 3.5 times by the end of the time period. When it comes to rapeseed, mustard, coriander, cumin, fenugreek, guar, and moth, the State is in first place. One of the state's distinction is that it is one of the country's top two states in the pulse production. Rajasthan currently contributes a significant amount to agricultural crop production, including bajra (40%), moth bean (85%), rapeseed and mustard (51%), coriander (66%), and fenugreek (51%). (87 percent). In the Kota, Baran, and Jhalawar districts, the coriander cultivation is mostly found. Jodhpur, Jalore, and Barmer have the most cumin of all the districts in India. Most of the fennel production comes from Jodhpur, Nagaur, Tonk, and Sirohi districts in Rajasthan. In the states of Jhalawar, Nagaur, Sikar, and Chittor, fenugreek is mainly grown. Despite this, increasing crop productivity and the amount of profit it generates is still required for improving farmers' livelihoods. This means that the Cropping intensity varies between 106 to 126%, indicating that there is even more room for growth.

However, after independence, food grain production has increased dramatically, but storage capacity has remained quite low, which results in a considerable loss of produce. To ensure that farmers are not forced to sell their produce immediately after harvest, the warehousing capacity must be improved. production.

The state of Rajasthan has made attempts with multiple plans to increase food grain, fruit, vegetable, seed spice, livestock, etc. production, both by means of new technology and development. In addition to the investments in agriculture, new technologies, and its usage by the farming community, Rajasthan has recently become both food surplus and the country's No. 1 producer of mustard and seed species and third in milk production. While the accomplishments have been significant, significant challenges and gaps still remain which have to be addressed to ensure that farmers are receiving a fair wage for their labour. Many challenges still face the Rajasthan agriculture sector, which includes not only security of livelihood but also growth of economic equity, social justice, and inclusive growth so that farmers remain involved in agriculture.

In order to propel agricultural transformation, the adoption of appropriate, sound, and effective basket of technologies is absolutely essential. This increases farm employment, boosts productivity, and adds to profitability. Another approach to increase income would be to better manage natural resources, processing, and value addition while also working with farmers to market their produce as a federation. RACP uses previous proven technologies in an integrated and holistic manner and combines them with a comprehensive marketing and value chain strategy to develop and provide a better quality of life for families in the identified clusters.

Due to limited irrigation facilities, farmers in rainfed areas are increasingly opting for mono-cropping. Replacement seed rate is extremely low. As a result, productivity, production, and profitability are all falling. Livestock such as goats is important for providing sustenance for tribal families in rural areas. Despite the soil and climate of the area being ideally suited for horticultural crops, only about 1% of the land is used for horticulture. Thus, farmers' income is largely dependent on what crops and livestock they grow, and has remained stagnant for a long time. Unfortunately, while malnourishment in women and children continues to remain a widespread problem, farms are shrinking in size, natural resources are being depleted and deteriorating in quality, and so on.

Poor land and water management, the lack of adoption of modern technology, and limited processing and value addition are all primary reasons for lower productivity in many regions. For resource-poor farmers, any new technology adoption is inherently risky. Farmers are in danger because the yield is primarily rainfed dependent, and lack of access to knowledge, access to credit, and poor resource management have increased the amount of farmers vulnerable. They have an incredibly high vulnerability index. It gets even worse because they have inadequate infrastructure, and as a result, they are even more vulnerable. As well, because the land is divided and population pressure is increasing, it is no longer possible for everyone in the farmer's family to find employment. Because of this, many people in the agricultural sector are unemployed. Creating employment opportunities for rural youth during the off-season is a must.

For the region where people get their food from rain alone, state-of-the-art technologies have been developed that can transform both productivity and income. Opportunities for reaching those who have yet to be reached have opened up with the help of information technology. Due to the current situation, a multitude of different segments of the population must be engaged in a coordinated effort in order to raise both production and income.

In this Integrated Farming System approach, we can see how food security, a quality food basket, an improved farm income, increased employment, social upliftment, improved soil health, and lower environmental pollution are all benefits that result.

There is only one reliable way to ensure a livelihood security. That means using technologies like HYV, better management practises like soil test-based fertilisers, IN&WM, and IPM, and post-harvest management. To increase productivity, profitability, and income, as well as to create on-farm and off-farm jobs, a strategy is employed. A number of different strategies involve finding ways to improve crop and small ruminants productivity per unit of water, as well as promoting horticulture for higher income and employment, reducing post-harvest losses, employing improved crop production, promoting protection technologies, and supporting farm-level collective entrepreneurship.

The project aims to use cutting-edge technology to help farms produce natural resources more efficiently and reliably, improving their overall sustainability, security, and robustness. This ultimately leads to more reliable and consistent income and improved access to food. A climatically suitable environment for horticultural crops exists where horticulture covers 1 person per square kilometre.

The challenge in promoting entrepreneurship in agriculture is that it is difficult and simplistic. Rather, in addition to the following challenges, there are a number of hurdles associated with starting a business in agriculture.

A shortage of skilled and managerial manpower is common in rural areas, as well as in rural-urban migration, the main factor being male migration. Denudation of educated and skilled manpower in rural areas occurs as a result of this. Due to the lack of educated and managerial personnel in rural areas, there is a lack of skilled and managerial personnel in rural areas. Due to various problems that rural areas face, even people who aren't originally from rural areas do not want to go back to rural areas to work.

The proof of production is found in consumption; if proof of pudding lies in eating, the proof of production lies in production. Until products are sold or consumed, there is no value in producing them. Lack of marketing channels and networks, promotional facilities, support system, and inferior products are the main problems faced by agri-entrepreneurs.

Many agri-preneurs' firms have no marketing department. Due to this, their products fall short of those of larger organisations.

A lack of awareness about agri-preneurship has lead to the assumption that a respectable career in agriculture does not exist. Entrepreneurship has been perceived as a distinct lifestyle for people belonging to specific cultural and social groups, such as Gujeratis, Marwaris, and Rajasthanis.

Though the general perception of business as being inferior to entrepreneurship has been steadily decreasing, it is still widely held. The majority of the population still aren't aware of the opportunities, advantages, and significance of being an entrepreneur, for the entrepreneur and the rest of society.

1.11 Incapable of utilising modern equipments and technologies

The new era of information technology is marked by power being derived from information. Although technology gives various advantages to competitors, in order to stand out, businesses must identify unique value to their customers. As an example,

this brings to light how modern technology empowers rural farmers when they use it to promote their products. However, one of the greatest obstacles that agri-entrepreneurs in rural areas face is either a lack of efficient or necessary equipment and technology.

More efficient use of available resources and more effective management efforts are expected from new technologies like satellite-based geographic information systems (GIS), but these capabilities are rare outside of urban areas. It may also make the products more costly, but that is irrelevant because it also impacts the quality of the products.

Harsh infrastructure and distribution costs: Facilities are needed to bring inputs to the location where they are used and to bring outputs to the location where they are consumed, which requires them to be located on large, spread-out territories. Since most of the agri-enterprises are located far from urban areas, these have to deal with both the lack of available transportation as well as transportation for the products or materials being shipped.

In this context, either there is a lack of required inputs and outputs at the right time and place, or everything that is available is at a higher cost and as a result, the final product is more expensive.

Potato grown in the hill areas of Uttarakhand here is a case in point In the hill areas, some of the potato harvest is shipped to storage facilities located in the plain areas. The price of a potato that has been re-transported to hills and then to plains will be higher on the hills because of double transportation costs, i.e. where it was grown.

Insensible Governmental Practices: We see this demonstrated through various industry-specific governmental programmes that have been in place in our country for a long time. Industrial policies have had a clear effect on the development of industry, contributing to the creation of the proper setting and pace for industrial growth in our country.

Realizing this, country-wide industrial policies have been announced at times. This industrial policy, which goes by the name "Promoting and Strengthening Small, Tiny and Village Enterprises, 1991," has had a huge impact on the small-scale sector's growth.

Recently, the Indian government announced a new industrial policy to help micro, small, and medium-sized businesses called the Micro Small and Medium Enterprises Development (MSMED) Act, 2006. For now, there is no specific policy for agri-business development in the country, and that is why agri-business growth has been restricted.

An absence of the required infrastructural facilities hinders every activity. Prior-built up infrastructural facilities are required to conduct any economic activity, including starting a business. More rural areas have weak infrastructural facilities, such as inadequate road, rail, telecommunications, and electricity. Due to this, agri-resources can be utilised effectively only if their use is also limited, and the same holds true for labour efficiency and mobility.

CHAPTER-2
CONCEPTUAL FRAMEWORK

2.1 Farmers as self-employed people

The farmers and farm-entrepreneurs consider their farms to be businesses. To be profitable, they see their farms as a source of income. They are fully invested in their farm enterprises, and are motivated to take calculated risks to grow and increase their profitability.

2.2 A fun and challenging entrepreneurial environment

Farming entrepreneur-farmers are dealing with a dynamic and complex environment. Other farmers, suppliers, traders, transporters, and many others are also a part of this larger collection. All of these play a role in producing goods and moving them from one point to another — that is, they are all elements of the value chain. In order to succeed, each entrepreneur needs to be a creator. They must respect and cooperate with each other to maximise profit for the organisation.

2.3 Entrepreneurial Dynamics

On top of this, successful farmers-entrepreneurs have above-average technical skills, have an innovative mindset, and are prepared to foresee and navigate the enterprise development stages, from survival and establishment to rapid growth and maturation. Although there are numerous challenges these farmers face, the most significant are societal, economic, and regulatory issues as well as accessibility to finance and information.

Entrepreneurship is a difficult concept to understand. Every enterprise is unique, and there are various stages of development the new enterprise will experience during its lifecycle. In order to meet the varied management demands of the enterprise, the farmer's skills must also change and develop.

A farm enterprise can be seen as a business when it passes through five distinct

phases.

(a) Growth (and possible decline)

At this stage in the company's life, the organizational structure is usually quite simple. Like potential for the market, motivation of the farmer, availability of resources, and basic business skills, challenges can influence market presence. The new farmers need the ability to talk to banks and other assistance providers in order to begin their businesses.

How can this start-up turn into a profitable business?

On the whole, how will it affect my farm?

How can I find customers?

Is it financially feasible to set up the business given the existing financial constraints?

The organization is simple during this stage; the farmer must take care of everything himself. Quality is extremely important, especially when it comes to the product's creation, getting to market, and sale. Everything is new, as this is the first time he is producing this product. Entrepreneurship is an enormous challenge. Many new businesses do not succeed in the first year of operation. Those who are able to meet this criteria are moved into the survival stage.

Startup: A farmer showing entrepreneurial skills has started a new enterprise. Trying to make it through the first stage of the company proves that the new company has short-term viability. When the survivor is at the survival stage, their concern is focused on how much money is coming in and how much money is being spent. the basic questions to ask are:

I will need to be able to generate enough income to break even in the short term and to fund equipment replacement.

Can I generate income that is sufficient to expand or diversify production in response to changes in the market in order to keep the business viable for the long term?

Survival Stage: Surviving enterprises are in the survival stage for the most part. While continuing to grow, the farmer will have to consider if he wants to do the work

to maintain that growth. Should he or should he not do so, he will have to discover how to continue to enhance the company's progress and successfully proceed to the next stage.

Fast growth: If the farmer plans to grow his new business beyond merely surviving, the business needs to quickly expand. This can be accomplished by developing a wider range of products and customers while making sure the farm continues to be profitable. Also, farm operations must be as efficient as possible, gather relevant information for improved management, and attract more skilled workers to meet the increased workload. The farm management activities and decisions, while still simple, call for more managerial skills and qualities as the farm grows.

Rapid growth: When the farm business is integrated and working smoothly, it is able to make rapid growth. Another method of increasing crop yield is to expand the area of land under cultivation and/or to raise more livestock. This will result in greater profits. Another way is to process and/or package the product to add value.

The farmer is likely to delegate some managerial responsibilities as they experience rapid growth. To implement these changes, he will have to fundamentally alter how interpersonal communication is done, and make some day-to-day activities routine. It will be necessary for the farmer to develop even broader managerial abilities in order to do this. Farmers must also develop managerial and entrepreneurial skills as the business scope expands.

A small-scale farmer may prefer to remain small, instead of becoming a large-scale farmer. Once his farm is big enough to satisfy his current farming needs and purpose, he may prefer to keep the farm the way it is. Even if the decision is made due to a lack of knowledge, skill, or opportunity, this does not give others the right to do as they please.

Risk Finally, the farm business reaches a point of high risk. It means that it stays the same size or does not grow or expand. This point is reached when the farm's resources

(size, availability of markets, and range of activities) are equal to the farmer's skills and vision. The farm business will continue as long as the farmer and farm business are in balance. An enterprise that is profitable and well-managed will have a sustainable future.

2.4 Entrepreneurship Barriers

Assumptions cannot be made about the likelihood of every company succeeding. An optimal working environment is required. However, in many cases there are things outside of the farmer's control that inhibit growth and make the environment difficult for new businesses. Government policy and levels of investment in agriculture impact this environment. As the saying goes, the environment is different in every country, varying greatly from place to place. To help farm businesses to thrive, legislators must contend with the following obstacles:

An inadequate or absent infrastructure often prevents new and growing farm businesses from getting off the ground. Things such as subpar roads leading to markets, inadequate storage, and unworkable market facilities are among the many challenges faced by smallholder farmers who seek to become business owners.

Laws and regulations that are unfriendly to entrepreneurship: Governments must hold a positive view of farming entrepreneurship. There are numerous legal factors that affect farm business development, such as land tenure and ownership, banking laws, trading regulations, business law, and tax law. Because of these issues, the environment in which new farm businesses must operate is affected by the ability to buy, sell, and hire land, the legal status of women, the complexity of business regulations, and the amount of bureaucratic procedures. Countries must closely examine legislation and regulations to see if they benefit the development of farm businesses for small-scale farmers.

Lack of financial support: The biggest barrier to farmers increasing production or entering new high-value ventures is a lack of access to capital. Investing capital is

challenging for farmers who are starting new enterprises.

Farmers also face social barriers. Entrepreneurship is not widely accepted by different cultures and societies. The fear of failure can be a significant obstacle. Innovation and creativity are not always highly regarded traits. Social systems that promote dependence and hopelessness exist in some countries. A lot of women in business are not supported or even discouraged from pursuing their ambitions. Depending on the country, businesses that use a cooperative or collective model may be more accepted than those that use a for-profit model. Farmers will need to learn how to work around these social barriers.

Training facilities must be readily available to farmers to support the farming sector. These kinds of educational institutions must be developed to meet a certain need and at a certain time, in a particular location, and with a blend of practical know-how and tech-savvy.

Improper Support Services: Without the support services and extension workers trained to give it, information, advice, and support would be lacking for farmers advancing through the five stages of development. Advice and support are needed to identify, prepare, design, and implement farm businesses that are efficient. To meet the unique needs of farmers, there must be counselling and support that goes beyond traditional production-based services. A wider support is required for farmers – it has to go above and beyond everything they do as farmers to run a profitable, market-oriented farm business.

Especially in rural and remote areas. One of the critical functions of the public sector is to provide a wide range of information, advice, and support in these regions.

Running a farm business means producing always has to be tied to a market. These are a number of factors that restrict your ability to access the market. In addition to these problems, there are a lack of good communications, inadequate infrastructure, unreliable and untimely market information, low purchasing power, and even negative

attitudes on the part of buyers.

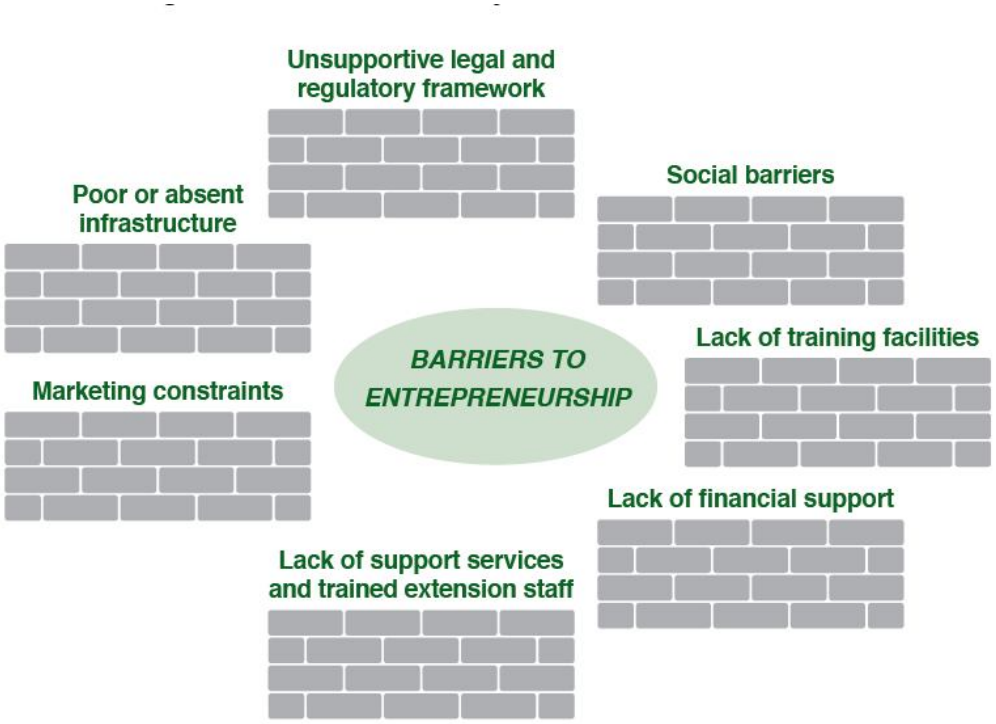

Figure 2.1 Barriers to Entrepreneurship

2.5 Challenges

When the farmer-entrepreneurs have been provided in which they've grown their farm businesses. Increasing the amount of production and processing, as well as packaging, are additional ways to increase value. Handicrafts and eco-tourism are also included. Farmer-entrepreneurs who own and run their farms have developed their farm businesses, but they will face many issues in the future. The future of farming depends on being as prepared as possible to deal with these issues.

A few of the most significant issues to contend with include:

- Business risk
- Access to Information
- The availability of money and credit

- Low bargaining power
- Risk in the market
- Access to Training

Aboriginal small-scale farmers work in a risky environment. When they produce solely for the market, the risks increase. They must make difficult decisions, particularly when it comes to where they will sell their goods. Production of just one or two goods for the global market could prove disastrous if prices in the international market plummet.

Producing for the local market, rather than exporting riskier crops, is a rational, entrepreneurial choice for many small-scale farmers. While there are benefits to local market production, there are also risks involved. Over-supply of local markets causes low prices and thus low profitability. For other small-scale farmers, the most rational decision is to farm first for home consumption and then for the market.

There are different export markets and local markets to consider. In which markets will the farmer decide to sell all of his produce? It is also possible that he will decide to sell some on both markets. As the farmer balances the various market opportunities and risks, he or she will determine which markets to use. For farmers, this is a challenge that's not to be taken lightly.

Farmers have to bear substantial risks in order to reach markets. Markets do not always function well; they are dynamic and diverse and they are not completely predictable.

But increased market participation does offer many opportunities. Deciding on the combination of markets to use, as well as assessing the opportunities and risks, is essential for farmer-entrepreneurs. Farmer farmers face a difficult challenge ahead.

Being able to get loans and credit

Financial assistance is required to make a home consumption farm more market-oriented. Additional resources, vehicles, equipment, or space may be required in order

to reach the market. Everything here requires financing. Before the farmer checks his own resources, he will require credit.

Access to credit is yet another obstacle that small farmers and business owners face. Farmers in rural areas may find it difficult to locate a reliable moneylender, which could result in debt problems.

An individual's access to credit is insufficient, in and of itself. Having an understanding of how credit works is essential for farmer-entrepreneurs, especially in regards to loan repayments and interest. The investment needed to support long-term assets (such as equipment and machinery) as well as short-term assets used in production (production inputs and other seasonal production costs) must be clearly understood.

Also, they must have the necessary skill and experience in contract negotiation in order to safeguard their interests and avoid being taken advantage of or surprised by longer-term consequences of utilising credit.

Access to information

A business needs a wide range of information to remain healthy and profitable. However, the main focus of extension and support services (including NGOs) is production technologies rather than market pricing, contact information, business management strategies, or any other information. It is now starting to see the growth of market information systems in many developing countries; however, a majority of these systems are inaccessible and do not offer relevant information on time or at reasonable costs.

In order to support farmer-entrepreneurs, information must be organised, packaged, and communicated in ways that are beneficial. We aren't always giving out information this way. All these elements — the content, how it is presented, and how it is communicated — are equally important. Farmers can benefit from using radio, posters, leaflets, and learning groups in order to be successful businesspeople.

Insignificant bargaining power

Many micro-entrepreneurs can be at a disadvantage when negotiating terms. Their production is usually limited to an individual level, which makes it difficult for them to bargain with suppliers. They may be forced to pay higher prices for the various inputs and equipment, due to their limited bargaining power. In exactly the same way, bargaining power in the market places is absolute. Small-scale farmers are often forced to accept lower prices for their produce because of their limited bargaining power. They'd have better negotiating power if they had more power in the market.

Vulnerability to economic shocks, natural disasters and currency devaluations. Unforeseen yield or crop failure, changing input and product prices, moving markets, adding fees for services (e.g. levies, fees, changes in packaging requirements).

Such challenges may help determine whether the farm business is profitable or not. Inability to recover from such shocks puts farmers at a high risk. When dealing with such obstacles, the asset base of the farm business should be enhanced or risk exposure should be reduced.

Training and challenges related as an entrepreneur and as a successful farmer, growing your capacity is no simple matter. Many small-scale farmers have a hard time learning new skills without assistance. There are many elements to consider: educational attainment, work experience, property size, financial standing, interest and proximity to markets. Small-scale farmers also often have fewer resources and fewer ways to handle the increased market participation that comes with it. For these farmers to grow into successful entrepreneurs, they will need assistance.

On the other hand, farmers may not know about financing options or be financially constrained to using moneylenders in their locality, who may not be reliable. Because they lack collateral, have no credit history, and their incomes are too low, a large percentage of people can't get credit.

When we develop entrepreneurship programmes for all farmers, not all farmers can

benefit. Farmers may want to seek clarification about the type of training they need and what strategy and specific approach will provide the greatest return. If farmers want support to achieve their goals, then the system must first determine where they are on the entrepreneurial ladder. The system must design programmes to match farmers' capacity and focus.

Farmer farmers at the bottom of the economic ladder require wide support to guarantee basic necessities like health, nutrition, education, and a number of other things. Some farmers might also need additional support in terms of production to help them make the transition to self-reliance.

Market-oriented farmers selling surplus produce may need help to improve business skills, but at a basic level. Additionally, this could also be provided alongside with literacy and numeracy training.

Specialized training in entrepreneurship will benefit farmers who have made a conscious decision to run their farms as a profit-making business and to invest profits back into the business to generate long-term growth. Business and entrepreneurial skills are the main focus of such a training programme.

2.6 Capturing value within the value chain

After farmers have sold their products, the majority of farm revenue is earned. To actively seek out value-added opportunities within a value chain, an entrepreneurial farmer looks for ways to extract value. Increased profits are expected from this."

Farmer-entrepreneurs understand that the best approach to making money is to produce for the people who will buy the end products and services. However, selling and producing on their own does not address the real problem. To do this, you must have a firm grasp of the various value chains and their individual elements. To get better results, you must have a plan for participation at the base of the value chain.

How can farmers increase their profitability? Regular fresh produce can be purchased

directly from customers. The best way to sell high-value products, such as organic products, is to employ multiple sales channels. Rather than mass-producing commodity products, farmers produce specialised goods that meet the needs of a niche market, such as organic fruit, unique types of meat, or specialised goods for a specific type of customer. When produce is produced at a time of the year when few other farmers can compete, a niche market can be created.

Entering into production and marketing contracts adds even more value to a company. Agreements have emerged between farmers and suppliers of agricultural inputs, as well as between farmers and processors, and between farmers and the buyers of agricultural produce.

Farmers can accept different types of contracts: market specification contracts, where the farmer agrees to produce to an agreed standard of quality. A production management contract is entered into between the buyer and the production manager, with the buyer participating in the inspection of production processes and input usage.

Supplier of resources contracts: the buyer is responsible for providing key production and supplies. Farmers are paid by the amount of product they produce.

Finally, there are additional ways to realize value in the supply chain by partnering with or buying existing value-adding entities. There are a number of options.

Pre-production enterprises

Businesses that supply inputs, such as seed, fertilizer, pesticides, tools, and equipment, are worth getting into if you plan to either sell or purchase those inputs.

Product processing that takes place after harvest

If your company is not yet providing post-harvest operations and processes that contribute to the quality of your products, think about purchasing them.

Post-harvest processing of food and beverage products

Producers of agricultural commodities such as
Milling maize and other grains;
• Cooking, curing or drying meat;
• Drying fruits and vegetables;
• Mixing commodities such as nuts and raisins;
• Create handcrafts with commodities such as grasses and flowers

These all represent additional value-added possibilities where entrepreneurial farmers can take part. They can start a business to provide one or more of these functions, provided they can raise the required funds.

But for many newer farmer-entrepreneurs, these areas may be difficult for them to enter at this time. In other words, even if the connections and contacts of stakeholders do recognise and evaluate these opportunities, they will make use of these assets to search for new pathways to create linkages that lead to an increasingly greater share of the value being added throughout the value chain.

Farmers can greatly benefit from the involvement of extension workers, who can provide an array of services that will help them identify, investigate, and evaluate various opportunities throughout the value chain. They can also be used to help provide easy access to these opportunities and also to help link them to one another in a measured and sustainable way.

2.6 Enhancing and managing efficiency in production

Farmer-entrepreneurs look for ways to cut costs, boost productivity, and increase efficiency over and over again. Reducing the investment in equipment could lower the amount of money that is being spent, or finding inputs that cost less and offer equivalent or better production results. Perhaps by using a less costly production system, the result could be achieved. This could be perceived as giving up the manner in which one has done things for a long time.

It is possible to change production systems but doing so means making a compromise.

As farmers strive to increase productivity, they must also budget for the initial costs of the investments that increase productivity. Investigation and consideration of various elements are required for this to work, such as finding ways to save money on inputs and materials, and using farm resources such as labour and waste products more effectively.

It is possible to transfer risks and reduce ownership costs by pooling funds. To reduce their costs, business owners can share the use of their machinery in return for access to better machinery technology. Among farmers who have similar sized farms and produce similar products, shared ownership agreements work well. Agreements reached by farmers stipulate that they will pay for their own operation and maintenance, but they will pay for the same proportional usage of the land (regardless of where the machine breaks down). while the resulting decreased ownership costs that occur as a result of sharing usually exceed any yield/income losses that are caused by delays in mechanical operations.

Maintaining current land management practices. A question that farmers and extension workers need to confront is whether a particular path to sustainable land use will lead to more or less land in the long run. The motivation to earn a better income combined with a desire to strengthen links with the national, regional, or international markets could prompt farmers to expand the farm acreage under cultivation or to change farming systems but without undertaking measures to preserve the productivity of the land. Increased incomes could be the best guarantee for sustainable land use if promoted properly. In order to make profits, farmers must reinvest profits back into soil fertility, the environment, and the use of new technologies. Additionally, it enables them to produce locally or domestically for the market. Productive land lasts longer, which means that profit will continue longer.

Many farmers could benefit from new technologies that are developed and shared by others. To improve productivity and profitability, extension workers facilitate partnerships between farmers and researchers.

2.7 Adopting new technologies and practices

Developing new technologies and practices is also a way to change production system.

Information technology (IT) is present and available in rural areas, making it a great tool for extension workers to pass on new ideas, innovations, and information to farmers. Extension workers may not be able to share information with farmers due to the distance and lack of transportation options. These physical barriers can be overcome by using mobile phones, tablets, and computer-based systems. The challenge is to find ways in which information technology can be utilised to help extension agents and farmers, while maintaining and elevating the unique characteristics of both.

New technologies are constantly being developed. The research of the government, as well as that of private agricultural corporations, is responsible for some of these discoveries. To benefit more farmers, these ideas and technologies need to be shared.

2.8 The five core principles of innovation

This innovation gives farmers an opportunity to reap the benefits:

- The best way to understand an innovation is to learn what it does and how it works.
- See if people will be interested in using the innovation by analysing the opportunity.
- Best innovations focus on a specific need or opportunity, while also being simple.
- Many successful innovations have started small. Put your effort into a small, affordable market with a product that does not require many people to make and sell. Keep in touch with market trends, and then fine-tune your business processes to stay ahead of the competition.
- To set oneself apart from competitors by leading the market from the start The more ambitious the innovation, the greater the likelihood of success.

2.9 Broadening management skills

Agricultural entrepreneurs see the need to pay attention to more than just production. They know that management training is critical to growing their farm business.

Marketing is critical for profits, and therefore is essential for your business.

Entrepreneurial farming is rife with risk, and it is imperative to have effective risk management in place. Although it is possible to ascertain a profit only if income and costs are accurately recorded, proper accounting is extremely important. Particularly as the farm business grows, the importance of Labour Management increases. The role of production management in the enterprise should not be overlooked, and as for risk management, this is important. A change in profits can easily happen if the right employee is not hired. To ensure profitability and competitiveness, an integrated approach to management in all these areas is necessary. Farmers-entrepreneurs who are successful usually focus on making money, but they are also conscious of the lasting consequences of unwise land use. Proper land management at the same time guarantees that profits will be sustained for the long term, as well as making the farm viable. Realistic entrepreneurship also entails sustainable resource usage, because it calls for wise resource usage in order to remain in business for an extended period of time.

2.10 Loyalty and respect in business

Managing farm businesses with trustworthiness and respect has to do with sustainability. to trustworthiness and respect implies honest dealings, greater transparency, and building trust between colleagues in the value chain. These advantages result in improved commitment and information sharing for staff, better creativity, and a better reputation for the business. A number of these influences impact on the profitability of each enterprise and the farm as a whole.

In terms of core values, farmers and entrepreneurs can both set standards. These standards apply to farm businesses' relationship with stakeholders as well as within-business relationships. Apply these values to distinguish the business from others, and clients will have greater confidence in the company.

All areas of work in a farm business must adhere to the core values in order to maintain and sustain the business. To avoid confusion and ensure quality and safety, a produce seller should be honest about weights and measures. In the short term, those who are attracted to the short-term benefits may do questionable things and make unwise decisions to take advantage of the moment. However, the entrepreneur farmer knows that deviating from reliable practises will put his company in jeopardy in the long term. Entrepreneurial farmers should strive to benefit all stakeholders, and should make sure their business sustains itself. Good business practise is to use the company's core values in all transactions.

2.11 Main beliefs

- Worthiness: Belonging to and deserving of trust and confidence. Integrity, keeping promises, loyalty, dependability, and reliability are values that are also included in the dictionary. Actions are in keeping with what was said.
- Loyalty: being trustworthy and consistent in all business dealings.
- Respect: Worthy of regard for the personal dignity, worth, individuality, and equal standing of all individuals. Courtesy, politeness, and kindness toward others are vital skills to learn. the ability to tolerate others
- Responsibility: Being aware of your duties and acknowledging and performing them. Taking responsibility for one's actions and remaining self-disciplined.
- Equity: Making decisions based on an objective analysis of relevant factors. an objective, neutral position; having no conflict of interest consistency and reasonableness Just play fair.
- Compassion: Pertaining to or indicative of concern for the well-being of others. proposing various kindness, compassion, consideration, unselfishness, and charity
- Community responsibility: Asking yourself if you have done everything you can to help your community and connect with your neighbors to be a law-abiding citizen being an active participant Bringing greater good to society.

To be a trustworthy and respected business owner requires patience. Farmer-entrepreneurs know they must be patient because the business must focus on long-term results. If they lose their patience, they could find themselves frustrated and tempted to

use other, less reliable options.

Additionally, the farmer-entrepreneur knows the importance of maintaining perspective. Things that need to be done almost never have the time to be done. A farmer-entrepreneur who succeeds has mastered the ability to pause and reflect on their progress, why they're moving in that direction, and how they'll arrive at their destination. Through such contemplation, farmers are able to remain calm and have a clear view of the long-term and short-term consequences of their decisions.

An entrepreneurial spirit can be nurtured in a group of eager participants. This process begins by identifying farmers who have a genuine interest in starting a new business, taking calculated risks, and working cooperatively on a shared production process.

A significant number of businesses are formed outside of the group because, for example, employees or consultants extend the group. For as long as a group remains divided, members are likely to focus on their own interests. The educational, literary, and managerial expertise of group members can prove to be a liability. Individual farmer-entrepreneurs need more long-term support than this.

In addition to helping businesses and entrepreneurs access markets and raw materials, they are also employed to help businesses and entrepreneurs build linkages with their input suppliers and customers, and to increase the capacity and ability of group members to manage and lead.

The extension worker's relationship with the group is essential. Support that is trustworthy strengthens trust. This will promote group members' enthusiasm and encourage them to unite more strongly. It is imperative that the extension worker knows when to stop helping the group. This is right for farmer organisations, support needs to be greater than for each individual farmer.

Extension workers must have a good relationship with the members of the group to be effective.

2.12 More dependable support creates trust.

Farmers can use a business strategy make smart decisions in the dynamic and constantly changing world in which they operate.

Once training is completed, the group must assume responsibility for the business management. This presents a major challenge to extension providers and providers of extension services. If the group's structure collapses before it is ready, it can be caused by members ceasing their support. If the movement towards self-reliance is impeded, dependency on the outside world is increased, and movement toward independence is slowed or even stopped. When a group entrepreneurial development leads to a viable venture, it is successful.

2.13 The strategy of strategic land management

To be successful in starting and running a farm, farmers must be strategic about their business planning and implementation. They consider their farms on a long-term and wide-angle basis. They make sure their farm businesses support their goals and objectives, ensuring all of the major aspects are working in harmony. They search for ways to grow the farm business by appealing to buyers, meeting performance standards, and staying committed to reaching the business's long-term goals.

Farmers are going to need to manage their operations strategically in order to position their farms for the future. Big picture thinking is involved. Strategic planning helps farmers make good decisions when there are various possible courses of action that could result in different outcomes. For a farmer, making decisions that are in line with his long-term goals can be made easier by doing so for a shorter timeframe. Farmers are required to constantly monitor and interrogate their own actions: How do I keep pace with the competition, stay relevant, and accomplish my goals? The choice I am about to make helps in achieving my goals, correct?

Growth Strategies

Farmer-entrepreneurs can profitably employ various approaches, including:

- Diversify
- Lower costs
- Enlarge the corporation's scope;
- Provide value to the company
- Specialise;
- Differentiate the product;
- Integrate

Diversifying: It involves producing and selling a larger number of products. This spreads the risk of loss. Using under-utilized resources on the farm, unfilled demand, and the farmer's skill and knowledge, successful diversification strategies search for new products to produce.

Broadening the array of farm enterprises an increase in income sources, and the fact that they are sources of risk alleviated.

When it comes to lowering costs, production of products at the lowest possible cost is of primary importance. It is a common farming practise. The goal is to reduce the amount of money required to produce an item while still retaining or increasing its overall quality. Increasing volume to reduce the per-unit cost can also be involved. The cheaper the products are to produce, the lower the prices they can be sold for and still be profitable.

Expanding the size of the business means increasing sales, acquiring financial and physical assets of the farm, and building new facilities. To increase the size of the farm, capacity expansion, replication, and modernization can all be employed. If the farm is already profitable and competitive, this strategy will work. To add value to existing or diversified enterprises: The objective is to maximise income by increasing the value of the existing or diversified enterprise. Increasing the value of a product depends on the needs of the buyer. What different buyers look for as value has to be discovered by farmers.

Diversification may also take place along the supply chain by incorporating enhancing the value of ‘niche' products.

An important part of value-addition is conducting careful analyses to find ways to improve existing produce. Adding value allows farmers to respond to market demand by providing products of varying value and types to meet varying customer needs.

Specialization: concentrating on fewer enterprises, or operations, so the farmer can give their full attention to each one. A specialised approach enables farmers to create a specific type of product that is ideal for the market. In addition to capacity expansion, replication, and modernisation, they will also increase the volume of the product by an amount equal to, or greater than, that of the prior year.
distinguishing the product: farmers distinguish their produce by making it better and by making it distinct from competitors' products The farmer aims to make customers and consumers see his product in an entirely new light. This is accomplished by completely different processes from competitors, which ensure that the final product reflects what consumers actually want. The higher price that can be charged now allows the farmer to profit. There is a well-defined market niche for high-value organic produce.

Focusing on product development can be referred to as specialisation. Differentiation is created by the presence of:

- The inherent qualities of the product
- Farmers' knowledge of their customers
- The presentation of the product

2.14 The distribution method.

Modern value chains need to be linked through both vertical and horizontal integration. In order to deal with changing market conditions, farmers will have to choose between different business stabilising strategies.Integration: horizontal and vertical. Farm vertical integration means being involved in one or more value-chain links. There is a possibility that the farm will implement ‘forward' processing methods

in its production, or ‘backward' sourcing of inputs.

Integration where one farm combines with other farms to produce the same product is known as horizontal integration.

2.14 Stabilising Business Strategies

It's important to stabilise a farm operation too, as it can fluctuate in terms of income. A method of keeping the farm business the same size and in the same organisational structure includes using stabilising strategies. Many of these strategies are adopted when a business is first started or after it has reached a certain level of growth. A number of possible strategies could include doing nothing, full employment, having an adequate income, and making a profit.

Full employment: Until all family members are employed, the business grows. As long as everyone is fully engaged, growth remains at this level. An expansion by full-time hired labour is not an option. Income that enables the farmer to provide for his or her basic needs. Income levels must be maintained over time for the business to remain stable.

The farmer might decide to sacrifice future growth by using profits to purchase luxuries and using the remainder for personal expenses rather than reinvesting in the business.

In the current economic and business climate, the farmer may decide to wait until the environment improves before considering further expansion. In the event that this is not well managed, a farmer may risk losing their chance for expansion because they will be too late to the market.

It is possible that some individuals will delay expansion until the conditions improve. Better harvesting technology, which lessens post-harvest losses, is becoming more prevalent among farmers.

In order to be entrepreneurial farmers, you must maintain your farms profitably and sustainably while simultaneously keeping abreast of changes in the agricultural environment.

It is critical for successful farming to include farm planning: a farm advisor leading a farmer in developing a cropping pattern women have a lot of entrepreneurial potential a floriculturist in India who is solely focused on floriculture

Long-term management strategies might include increasing the enterprise's value by providing a benefit. Management must take a more active role in day-to-day farm operations, as well as anticipating the future.

Reduced costs and increased income are the benefits of diversification into new products. Farmers specialising in house plants in India meet the demands of specific markets.

2.15 The strategic management process

The three facets of strategic management are strategic planning, strategic implementation, and strategic control. Strategic management is concerned with many different issues and opportunities that have a significant impact on the farm business. The administrative issues of the farm are not included in the definition of day-to-day management of the farm. Plan for long-term success This is comprised of:

- Choosing long-term goals and core values for the farm business;
- Analyzing the environment on the outside and inside
- Creating the most effective approach for accomplishing the goals in the present environment.

Selecting the best of several possible options requires careful planning and decision-making. When devising a strategy, it is important to leverage the business's internal strengths. The structure of a farm enterprise should reflect what it is good at.

The farm's strategic implementation addresses how to structure the farm so that the overall strategy can be successfully implemented. To implement a strategy, it's about coming up with structures and procedures, obtaining and directing the resources needed, and making them happen.

Strategic control: This entails the design and implementation of monitoring and control systems, along with regular comparison of results to the objectives. It also includes attention to the business environment, as well as modifications to the organisation structure, implementation plan, or even the overall strategy, to meet the objectives.

Management skills and an approach that is more entrepreneurial are needed in order to farm in a market-oriented manner. Farm business management is not the same as entrepreneurship. A successful farm business operation is all about careful planning, consistent implementation, effective control, and prudent risk management. Entrepreneurship is about looking ahead and visualising new business opportunities.

Entrepreneurs are quite different from ordinary farm managers.

2.16 Entrepreneur Characteristics

In the following figure, some “typical” characteristics of a farmer-entrepreneur are shown. In six different categories, you can identify them: the essence of values, problem-solving skills, the capacity for flexibility, motivation, competitive drive, and self-confidence. This list has some skills that we'll be looking at in greater detail later in this chapter.

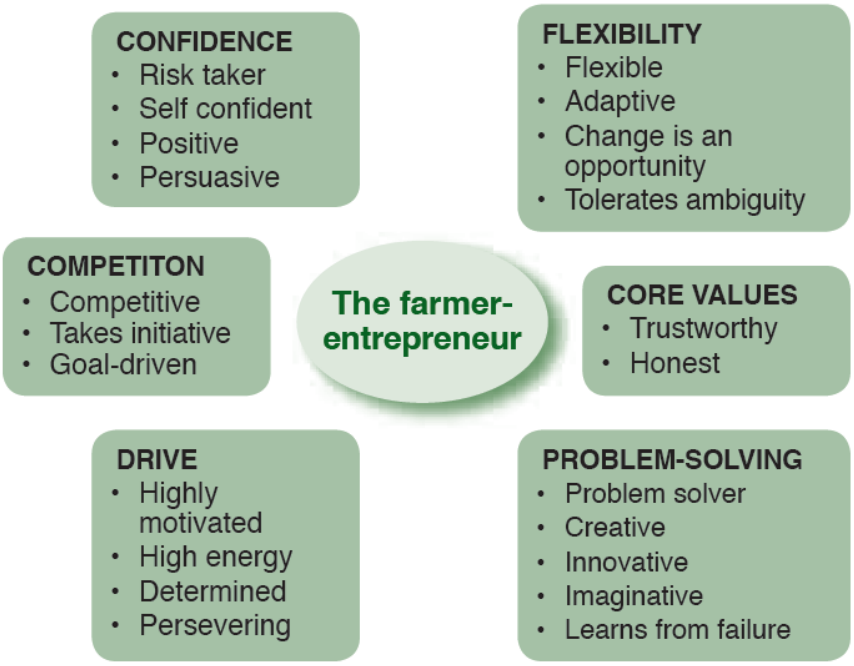

Figure 2.2 Entrepreneurship characteristics

The following characteristics are commonly associated with entrepreneurs:

In Figure 2.2, we see the characteristics which make farmers consider taking business risks and search for new business opportunities, design and initiate new business ideas, gather resources such as finances, people, and land, and set long-term goals.

Many farmer-entrepreneurs have different traits, but not all of them have the same degree of each trait. They will have them to some degree, but not all of them. They wouldn't be entrepreneurs without their values of trustworthiness and honesty, as well as their problem-solving nature, their flexibility, their drive, and their desire for competition and confidence.

Farm managers need to develop these personal characteristics in order to become truly entrepreneurial. A self-employed farmer has the imagination and determination to go into business for themselves.

2.17 Knowledge

Not only do entrepreneurs need their personal characteristics, but also many other things. Additionally, a range of competencies and abilities that can be learned or developed through training and experience needs to be available for learners. The extension system can support this goal.

In order to acquire a competency, you must first learn about it. Knowledge is a critical component in effective farm management. By increasing their knowledge, farmers will be able to make more informed decisions. As a result, it helps them see the current practises in contrast with alternative options.

While education (especially literacy and numeracy) could influence knowledge development and use, this may only be the case at particular educational levels. Even less-educated farmers can be effective learners and knowledge-givers.

Entrepreneurs need more than just their personality or personal traits—they need personal characteristics as well. In addition, it is important to have a variety of competencies; such as knowledge, skills, and behaviours or training, extension, and experience. Knowledge in key areas of farm management is critical for farmers. Controlling, preparing, and implementing encourage farm profitability. To make sure that information is presented in a way that they can understand, they may have to work closely with extension workers and other sources of information. For a successful entrepreneur, the farm must be managed as a learning environment.

Knowledge for farmers is obtained in a variety of ways. As learners, they acquire knowledge through personal experience, observation, and through reading, speaking, or visual information. Their grandparents and parents have passed down some of their knowledge to them. Many farmers get their knowledge in a similar manner: they observe how other farmers do things, listen to their advice, and then practise it. Another source of knowledge is extension workers. There is some research indicating that farmers, like the rest of the population, learn best through hands-on experience.

One of the most important aspects of knowledge creation and accumulation is the exchange of information and information communication. In many countries, information is hard to come by, and there are few well-developed information systems. where there is available information, farmers find it difficult to make use of it One good example of this is the differences in price from region to region, as well as from state to state.

Knowledge in all the areas of farm management must be readily available to farmers: planning, implementing, and controlling. Information about their primary production, harvesting, processing, wholesaling, and retailing must be compiled and documented before they can be engaged in their main functions. They must know the type of support they can expect from their various functions: cash supply, financial services, transportation, packaging, marketing, and advisory services.

For each farmer, it is a different process to gather and use knowledge. Traditional farmers are more likely to keep to the farming techniques that they learned from their fathers. Farmers who make a conscious effort to keep themselves updated about what's happening in the market place market-oriented farmer-entrepreneurs actively seek new and reliable information that will help them decide how to make their farms more profitable. Successful farmers understand how to utilise knowledge because that reflects their seriousness about earning profits and being an entrepreneur.

2.18 Entrepreneurial competencies

There are nine key entrepreneurial competencies for a farmer-entrepreneur: initiative, ambition, focused problem-solving, creative thinking, taking risks, flexibility and adaptability, interpersonal abilities, networking and readiness to learn.

Entrepreneurial competencies are required of farmers and farmers-entrepreneurs, as they must have the following abilities: being entrepreneurial, being innovative, having the focus to solve problems, possessing creative thinking, attempting to take risks, being flexible and capable of change, and knowing how to network.

A way to put it would be to say farmers will be more competitive and will be able to benefit from new market opportunities because of these competencies.

Through experience and practise, these abilities can be developed and refined. Training can also increase their potency.

Taking action (Initiative) : People who take initiative show that they are willing to work. Farmers are typically entrepreneurial, eager to get started. They're always ready to begin. Innovative farmers are trailblazers, and they're the first to take advantage of new opportunities. They have a clear idea of what must be done, and they can make and express their personal vision of success.

Agents who have initiative begin projects without waiting for others to get involved. Entrepreneurial farmers spearhead the action, jumping on opportunities as soon as they arise. Agriculturalists who strive to reach their goals are driven by ambition. Innovative farmers are actively on the lookout for a solution.

Ambition: Ambition is a deep-seated passion and desire to accomplish objectives. When it comes to being entrepreneurial, farmers are tenacious. They are highly motivated and don't give up easily when they encounter setbacks.

Farmer managers need to be excellent problem-solvers and decision-makers if they want to be effective. However, as entrepreneurs, they must maintain their attention and focus. Entrepreneurs want to find new problems to solve and new opportunities to take advantage of. They work to find creative solutions.

Farmer-entrepreneurs see the big picture, and thus are creative thinkers. The farm business is viewed as a complex system by them. They know how things work and how problems and opportunities might be found. They see opportunities for business and know how to make them successful. They are constantly innovating and coming up with unique ideas and solutions. They are put to the test to see if they work.

Unconventional -Creative thinking

Use your imagination and come up with new and innovative ideas and solutions

Knowledge: Consider the farm business as a whole have a clear understanding of the opportunities that arise.

Skills: Inspire yourself by generating new ideas Search for information that is relevant. Consider all the available information and potential opportunities as well as all the existing problems.

Behaviour: Conduct an assessment of the farm business and its components. determine the possibilities calculate all available options the most relevant Identify an implementation strategy.

Being willing to take risks: Farmer-entrepreneurs have demonstrated that they are actively ready to do so. They have a solid understanding of risk and how to evaluate it. They can balance the various factors. Failure is not viewed as a barrier to be overcome, but rather seen as an opportunity to better one's operation. Farmer-entrepreneurs have a big picture view of the farm business and understand it as a whole system Farmer-entrepreneurs are eager to undertake risky undertakings experimenting awareness of risks. Know the risks that come with each decision

Farmer-entrepreneurs have no problem changing strategies when things change. Farmers are constantly in a state of flux as their methods change. Farmer-entrepreneurs are used to responding to changes quickly. They are aware of the changes and make every effort to respond quickly. They don't get discouraged easily.

The strategies for farmers and entrepreneurs alike involve setting and meeting a business goal, and making those objectives a reality while doing so in a sustainable way. They know how crucial it is to set and meet longer-term objectives, rather than solely dealing with urgent issues.

Farmers with entrepreneurial visions see their goals in the long term. Farmer-entrepreneurs have interpersonal abilities that enable them to understand that their success often relies on the assistance of others. So, therefore, they understand the necessity of cooperation. They are effective communicators. They share information openly, and they make active efforts to hear and respond to what others have to say. They are trustworthy and honest with others when working and doing business. Farmers who are also entrepreneurs are great communicators and can be trusted.

The results of Farmer-entrepreneur collaborations are both apparent and considerable.

Innovation-driven farmers are always on the lookout for new ideas and abilities

Networking: Farmers and business owners who are good at forming successful partnerships and other relationships are known as "Farmer-entrepreneurs. Farmers are well aware of who their key stakeholders are. They have great communication skills and are capable of handling negotiations and agreements.

Networking means find relationships and partnerships that work. Knowledge to have a good understanding of who the key stakeholders and partners are. Skills Have trade talks and come to agreements & keeping in touch with partners, customers, suppliers, and the like the combination of trustworthy and honest. Behaviour of the farmers are such that they are always ready to learn.

Readiness to Learn: They are ready to learn at all times. They have figured out how to learn. They become accountable for their own learning. They stay up-to-date on new training opportunities and make a point of learning from their mistakes.

2.19 New understandings of entrepreneurial skills

Business opportunities are what they are. If you see them, you should be able to take advantage of them. These attributes additionally include a market and customer orientation, an understanding of threats, and the ability to innovate.

Business strategy-building abilities include the capacity to implement and evaluate

strategic plans. Another plus is that they include the capability to obtain and utilise feedback, and the ability to reflect. These include: the ability to monitor and evaluate processes, problem-solving skills, strategic planning abilities, the ability to make strategic decisions, and the capability to set and accomplish goals.

Reflection includes knowing your strengths and weaknesses as well as self-knowledge. An ability to analyse the company's current market situation and the competitive environment is a critical part of strategic planning. Additionally, having the ability to identify and respond to a differentiating marketing opportunity is considered a requisite feature of success.

These abilities include networking and making use of contacts, as well as communication, teamwork, and cooperation. In addition to skills that support cooperation and networking, leadership is also important.

Because these particular entrepreneurial skills work best when utilised in tandem, it is critical to understand that these abilities are only relevant when paired with others. To be integrated in thought and action, these things need to be considered. In this way, it's not surprising that people who can recognise a new business opportunity are also good at networking and communicating with other people who are connected to the value chain. As with networking, the main goal of professional development is to identify or develop and implement new opportunities.

2.19 Informal Technological Competencies

Farmers with good agricultural knowledge can produce a quality crop or raise livestock. Farmer-entrepreneurs strive to obtain high-quality inputs at the lowest cost for better productivity.

Entrepreneurial farmers are excellent farmers, too. The farmers bring together all the attributes of an entrepreneur to their farming endeavours. When it comes to managing input, managing production, and managing marketing, it is important to have technical competencies. One thing that sets successful entrepreneurial farmers apart from other farmers is their actions. In addition to being highly adaptable, farmers and

entrepreneurs are highly experimental.

Managing inputs: A key component of successful market-oriented farming is properly managing inputs. The farmer-entrepreneur has the ability to find, acquire, and utilise the required supplies for the farm. To get things done, farmers have to be familiar with the kinds of inputs that they'll need for each enterprise, where to acquire them, and how to utilise them. Both the farmer-entrepreneur and his farming knowledge and skills are necessary to his ongoing success, but he will always be looking for lower prices, better quality inputs, and more efficient alternatives. He's willing to take risks and learn.

Production is at the core of any farming enterprise. A good farmer knows how to make the type of enterprise he has chosen. Farmers who run a business or are self-employed have the best idea of how to farm profitably and sustainably. A good farmer will be able to produce a good crop even if he does not have all the skills necessary. Entrepreneurial farmers are aware of time; they understand that doing things now is better than postponing them. A key aspect of the entrepreneur-personality farmer's is that they're prepared to experiment with new production systems.

Production Management: the proper identification, organisation, and implementation of production on the farm understand which profit and sustainability route will be the most profitable and sustainable for your company. Following skills and behvious required :

- For food crops: to plough, plant, deal with pests, eradicate weeds, and reap the crop
- When raising livestock, they include: rearing, feeding, watering, disease control
- For all production activities, maintain accurate records.
- Mindful of time; proceed immediately
- Find newer and more effective production methods
- Always open to trying new approaches

To be successful in today's economy, a businessperson needs to have both entrepreneurial and technical competencies as well as competence in diagnosis, planning, organising, leading, controlling, and evaluating.

In the pursuit of profit and sustainability, entrepreneurs seek out profitable and sustainable production techniques.

Farmer entrepreneurs need to be able to alter their business practises in response to changing market conditions.

In order to generate profits, businesses have to market and sell their products. Farmer-entrepreneurs are intimately aware of the profitability of each product's market. They do well in contract negotiations. When they are found, they take advantage of new marketing opportunities as soon as possible. Following knowledge and skills required:

- Farm product marketing can be profitable.
- Have a good sense of where the best opportunities for each business are
- Assert dominance in negotiations
- To keep track of every single transaction
- Look for better opportunities in other markets
- Respond quickly to changes in the market and opportunities in the market

Management skills

In order to succeed as a farmer-entrepreneur, one must effectively and efficiently use farm resources. There is a great difference in the amount of profit that can be generated by farms with identical physical resources, markets, and the availability of labour and capital. If there is a substantial difference, then it is likely due to management. Considerations such as these lead to the following: therefore, entrepreneurs and technical competence must be combined with managerial competence.

Managerial functions include identifying problems, planning strategies, organising

operations, leading and controlling, and evaluating results. In each of the farm business's critical areas, the farmer-entrepreneur carries out the responsibilities of managing inputs, production, and marketing. In order to run a successful farm business, the entrepreneur must be knowledgeable in all of the management functions.
Assessment: Farmers who are entrepreneurial in business can understand the farm enterprise and the various subsidiaries very well. They can see what aspects of profitability are governed by constraints and opportunities. The first step of this is to figure out the root of the problem and to find ways to overcome it. Following diagnosis and skills required for :

- Look for issues that could affect profitability when analysing the farm's business.
- Have a clear understanding of what is needed in order to conduct business.
- Identify the issues and opportunities that the farm business presents.
- Define possible solutions and implement them
- Conduct an in-depth investigation to discover the cause of a problem. Study others' techniques

Identify possible solutions

Successful farmers plan ahead, whether they are entrepreneurial or not. When it comes to running a profitable farm enterprise, planning is key. Plans that are effective are prepared using available resources and farmers' objectives. The planning process is made up of different choices you must make, with the goal of accomplishing specific objectives. Small-scale farmers and agricultural entrepreneurs must be able to diagnose farm performance. Farmer-entrepreneurs need to have a long-term vision and adaptability in order to overcome challenges.

Organizing: This indicates getting ready to put the plan into action, as well as ensuring everything is in order. It includes getting the necessary inputs and resources to implement the plan. Agricultural entrepreneurs who achieve success are great implementers. They are well-organized and persistent when it comes to following their strategies. For organizing the following skills and knowledge required:

- Readying to put the plan into effect

- Be aware of the type and availability of resources and the location of the places where these resources can be found.
- After sequentially going through each step scouring the globe for resources

Behaviour Determined Methodical

The entrepreneurial farmer who is successful is a capable leader. To achieve the goals of the farm business, it involves getting employees to motivate, enable, and inspire each other. Building trust and confidence, encouraging performance, and developing the capabilities, skills, and competencies of staff are the keys to a high-performing workforce.

Farmers who are successful in their entrepreneurial endeavours understand the importance of being able to manage their farm operations in order to help ensure that outcomes and expectations are met. It is also known as supervision. Controlling suggests making regular checks on the farm business progress, whether at a particular point in time or over time. While progress is being made, it is also important to regularly assess plans to see if everything is on schedule. The plan calls for routine checking of what occurs, and using those findings to compare actual performance and results to predictions. By discovering and implementing adjustments to various aspects of the farm, we are better able to improve farm operations and productivity. For controlling the following things are required:

- Consistent monitoring of activities and evaluation of results versus expectations are required.
- The better you understand the value of control, the better you will manage your firm's profits.
- Tracking and tracking accurate record keeping
- Methodical attention to detail

Evaluating is conducting an assessment of the farm business's overall success and the consequences of management decisions. To accurately describe the farm business performance over time and against other farms, it requires making comparisons. The findings identify strengths and weaknesses and map out the long-term future. Farming-

entrepreneurs who are successful possess a combination of patience and objectivity.

2.20 Integrating Competencies

Successful market-oriented, entrepreneurial farmers can be discussed as being possessed of an array of individual skills. In order to become a successful farmer-entrepreneur, you must be able to combine the skills. While there are many resources the farmer has access to, it is his ability to use these resources and interact with the market and production methods that allows him to react quickly to changes in the market and methods of production to increase the performance of his farm business.

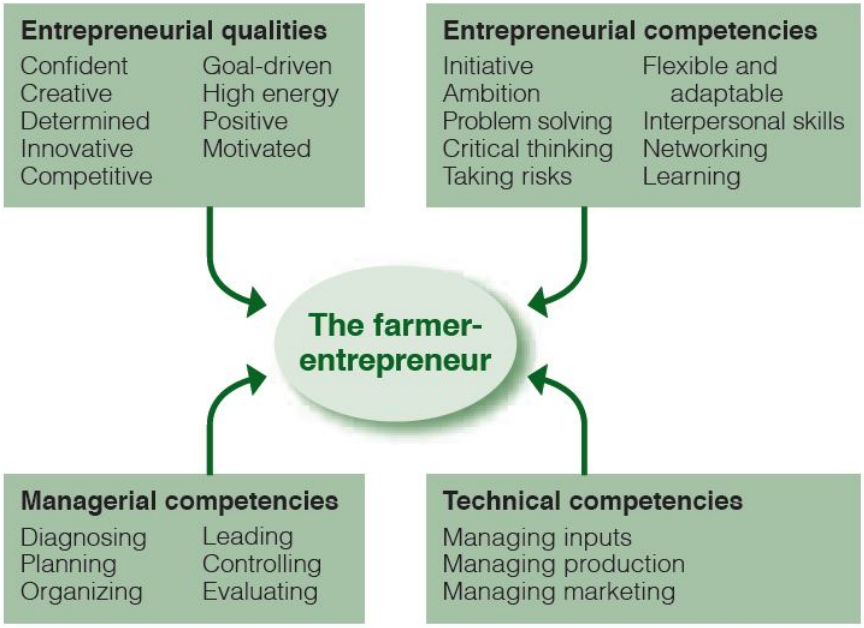

Figure 2.3 : A visual representation of integrating qualities and competencies

The successful farmer-entrepreneur combines and integrates these qualities and competencies in order to come up with response to change, and this helps lead to increased chance of success and profitability.

An integrated response

A savvy farm entrepreneur changes with the ever-changing agricultural environment by combining abilities in the fields and in the marketplace. By blending the two, he is

able to continue and advance his current plan, as well as go into a new direction or market.

Entrepreneurial farmers brings together their expertise in various areas of expertise, as well as their resources to form new business ideas.

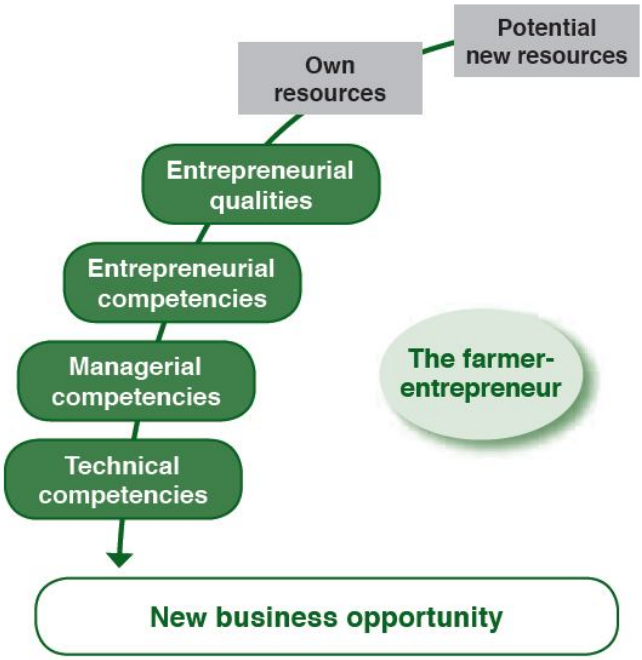

Figure 2.4 Enterpreneurship Competenties

In the example shown in Figure 8, entrepreneurs combine their various competencies and resources to generate new business ideas.

It can be a lot cheaper to create canals using an irrigation hose than to use a low-cost irrigation hose as an alternative to them. Entrepreneurship blends personal traits with both professional expertise and business knowledge. A farmer is using his tractor as a transport service and as a farming tool. Competency in irrigation techniques is another important crop production skill. The Waste Water Treatment Plant uses irrigation hoses to transport water from the plant. A small training ground for on-the-job training. a farm planning session extension worker facilitates. While certain qualities may be innate, one's level of knowledge and capabilities can be improved through

educational or training programmes a community volunteer who acts as a facilitator Learning between farmers. Entrepreneurship is the ability to take concepts and turn them into profitable businesses. a group of farmers conducting field tests to determine if their new equipment works.

Entrepreneurial personality includes

- A willingness to take risks
- You might devote an excessive amount of time to your business.
- Trustworthy
- Building Entrepreneurial Skills

Learning and developing entrepreneurial knowledge, skills, and behaviour are best viewed in the context of the farmer's farm business. It's a powerful teaching tool. Regardless of whether the farmer is already conscious of it or is a potential farmer-entrepreneur, this is true.

Farmers and their farms are quite closely related, which means learning in this setting is much easier. Learning is just as important in the real world as it is in classrooms. This generally compliments farmers and entrepreneurs who are practical and action-oriented. It meshes well with their eagerness to quickly put new techniques to use.

One of the processes involved in a learning journey is for farmers' skills and competencies to grow gradually. The first step in helping them discover their identity is to get them to investigate who they are, clarify their values, and identify their personal resources. Having gained a better understanding of their capabilities, they should be better equipped to recognise their own relative strengths and weaknesses. Once this is completed, then they should set goals and prepare plans. After this stage, there is an emphasis on doing in the real world. At the end of the training, individuals should be empowered to know and apply their own abilities and weaknesses as well as attain a defined goal. Figure 2.5 illustrates the way in which each stage of entrepreneurial development builds on the one before it. The box that follows lists out each stage in the process.

Learning and developing entrepreneurial competencies is best learned and developed in the context of running a farm business.

Figure 2.5 Stages for effective entrepreneurial development

Stages for effective entrepreneurial development as shown in Figure 2.5 is described below:

Aspiration: The desire to constantly learn and to seek excellence. He recognises who he is and what he has for the first time.

Acceptance: Confers honour and is the foundation of human decency. In addition to setting a long-term goal for himself and his farm business, he also looks toward the future.

Vision & Forecasting a corporation's future identifies his objectives

Business planning: devises a plan of action to achieve them.

Learning from experience: Evaluate real-world experiences as opposed to theoretical discussions. Implements the plan, then reflects on the results to gain an in-depth understanding of what occurred.

Empowerment: He acquires new competencies that strengthen his strengths and compensate for his weaknesses and objectives.

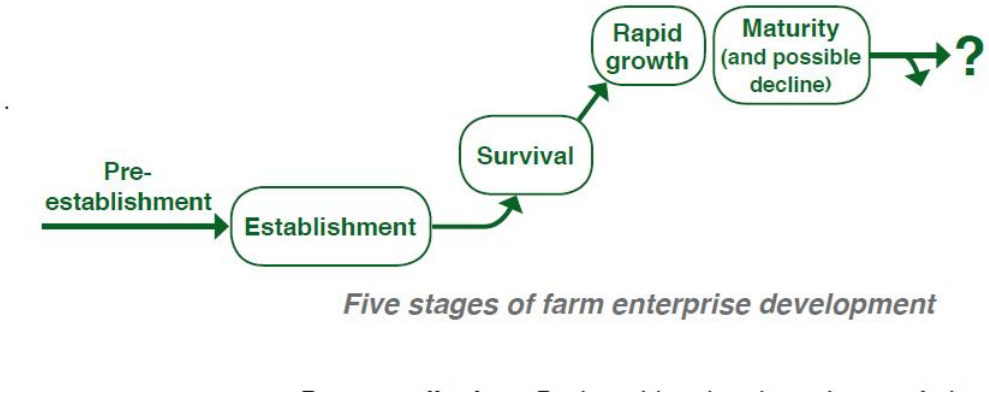

Figure 2.6: Stages of farm enterprise development

The farmer has the opportunity to grow by progressing through the stages of awareness to empowerment. A reflective learning process is involved. Empowerment comes directly in proportion to the level of commitment the farmer has to learn through a process of planning, action, and reflection. One of the extension worker's important functions is to help the farmer maintain a strong interest in the learning process.

In addition to the entrepreneurship training outlined above, people who want to start a business can use it to further their own training, while those who are already running one can use it to further their own professional development. Farmers deal with both issues. A significant number of people who are already farmers want to change their farm-based enterprise to a more profitable venture geared toward the market. Additionally, there are a multitude of young and old people, both male and female, who are embarking on their first farming venture, a new business.

Farmers who are using the extension workers' services will find these stages valuable markers for gauging their progress. They note the ever-evolving nature of learning and incorporate new lessons onto one another, creating a supportive ecosystem for the farmer-entrepreneurs.

Many trainees wrongly believe that training for entrepreneurship is similar to other

forms of technical training, or farm management training. Training for entrepreneurship focuses on different skill sets, knowledge, and behaviours. The topics related to business management, including but not limited to agriculture, may be taught in the programme to help with the development of entrepreneurship, but the curriculum of the programme focuses on personal development.

As a farm business grows and develops, there are several stages in which entrepreneurship development can take place. These stages include the planning, start-up, survival, and growth phases. Agricultural training should be developed to meet the current demands of farmers, whether those demands change or not.

In spite of its inescapable variability, entrepreneurship can be improved through training. Business skills, knowledge, and behaviour are all components of entrepreneurial training. Capacity skills are important for farmer-entrepreneurs to supervise and analyse the farm operation. Evaluating: describing the outcomes of the farm and the possible consequences of various decisions. Knowledge: Have a clear understanding of the effect each section of the farm has on profits Skills: Name the variables which influence the results Inflexible, unyielding, and rigid.

The farmer-ability entrepreneur's to take advantage of new business opportunities is reliant on their ability to incorporate different competencies.

Farm enterprise development has five stages.

Developing basic entrepreneurial skills, such as self-awareness, spotting opportunities, and understanding and insight into the business development process, are prerequisites before launching a training programme.

Such training is aimed at young people, and can be seen as an example of it. It is not just to have young people start out as self-employed entrepreneurs or risk-takers, diving in right away. In order to empower them to search for and launch a business opportunity, we wish to help people recognise and understand the responsibilities, risks, procedures, characteristics, attitudes, and skills required for entrepreneurship.

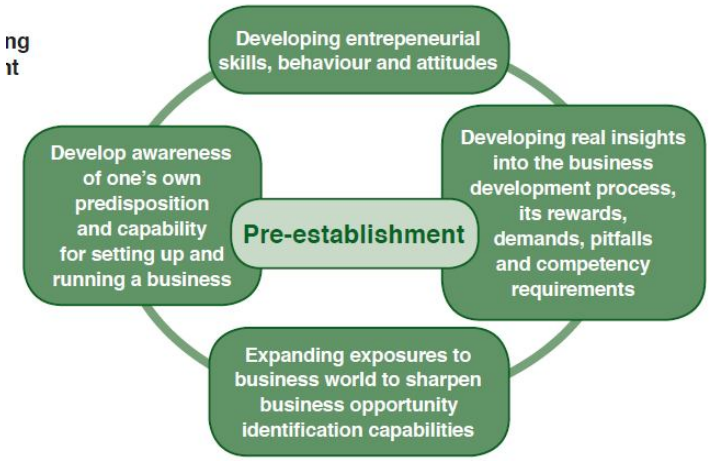

Figure 2.7 Key learning concepts

Identifying, promoting, and nurturing the entrepreneurial mindset, behaviour, and attitude It is important to become aware of one's own innate tendency. acquisition targets, and measurement of effectiveness, success, and return on investment as well as being able to establish and manage a business.

Pre-establishment: requirements, pitfalls, and competence increasing professional exposure to the business world to enhance the ability to identify business opportunities

Establishment: In this stage, farmers decide whether or not to pursue their business ideas. Deciding on products, target markets, and business strategies is a requirement. Start-up process length depends on the size and complexity of the idea.

When the final decision has been made to begin a new enterprise or to make a change to the current production, the resources and linkages must be mobilised to bring the new enterprise into existence. This is the midway point in the development process. At this point, farmers will need specific skills and competencies. Skills training and business planning development are frequently undertaken as part of management training and development. Farm business management fundamentals and introductions are given during this early stage of the process and the beginning of the programme.

Learning demands must be matched to the individual's rate of learning.

All-encompassing decisions

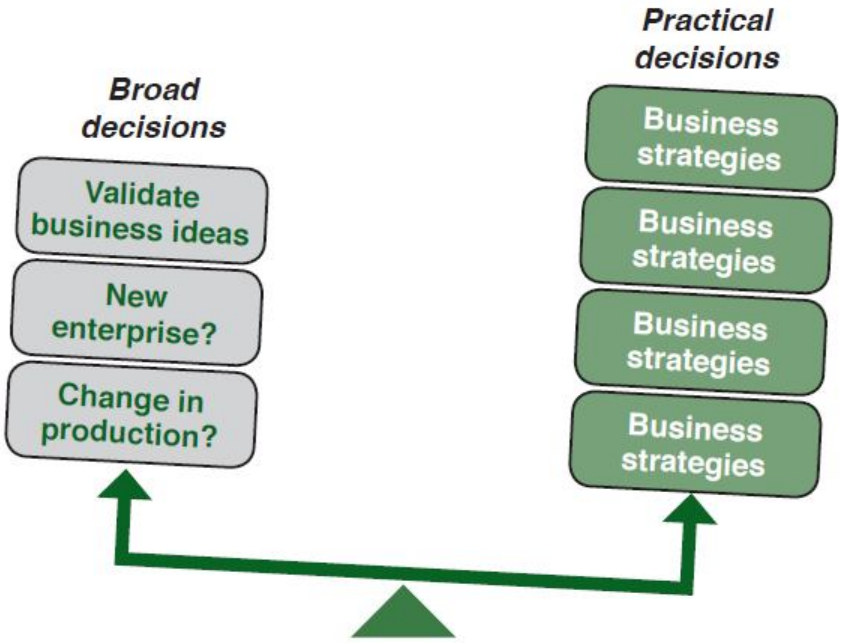

Figure 2.8 Weighing broader and more practical decisions

Once the participants have completed their introductory (do-a-little; learn-little) processes, they can begin the iterative (do-a-little; learn-little) processes involved in starting or diversifying a business. The farmer goes through each step of establishing a business as he learns. the extension worker is able to identify

Training and practise go hand in hand when it comes to learning.

Entrepreneurs must strengthen their existing competencies while learning some new ones in order for a new venture to succeed. Training is beneficial for everyone if done in a systematic way, and courses, workshops, group discussions, and briefings are available for everyone prior to and during the training programme. Combining special courses, self-study, action learning, and counselling, it is possible to better identify the

personal training needs, which can be met by a variety of methods, such as study courses, self-study, and action learning. The good thing about these is that they can be incorporated into the business development process at just the right time. Additionally, the combination of training and other interventions and assistance helps increase the likelihood of the business startup succeeding.

Training can be tailored to the learning preferences and learning pace of each participant. Finally, training can be targeted not only to the characteristics of an individual, but also to the requirements pertaining to his project and business idea.

Survival & Growth

Farm viability and profitability are critical. A lot of new ideas don't make it past a year or two. To succeed in the survival stage, the farmer-entrepreneurs must use all of their managerial and entrepreneurial abilities to maximise the profitability of their enterprise. It is also the period of maximum learning, especially for those who are just starting out. To ensure the successful running of the farm business, the initial skills acquired will not be enough. While current competencies must be strengthened, as well as some new competencies will be required in marketing, production, finance, networking, contracts, and personnel management, as well as in quality and productivity, more generally, a variety of additional competencies will be required in all of these areas.

Strengthen and develop the farmer's managerial competencies in the following areas.
Financial forecast and cash flow management Learning this skill early on in the life of the business is critical. market-oriented workforces, and product- and process-development capabilities, those assets are not well utilised due to an absence of profitable markets, innovative products, and cutting-edge technologies.

Due to a lack of available funds, farm businesses with limited resources end up failing the efficiency and quality strategies. Developing this competency is especially important due to the increasingly competitive nature of agricultural businesses based on product quality and delivery timeliness.

Researching information via networking. In this stage of their business development, farmers must become more knowledgeable about the various resources available to them, including their networks of family, other farmers, buyers, and suppliers. Specifically, farmers must maximise their learning from the experiences of others.

Computers and electronic communications must also be used and applied competently. The price of computer hardware continues to decrease while at the same time there are plenty of business applications that aid farm businesses in their day-to-day operations. It is now common for companies to make technical and market information readily available using electronic and computer-based services.

This assertion can be seen earlier in the article, when it was stated that when it comes to these training needs, training and development interventions must be suitable for the farmer's learning needs and abilities. must also be provided for addressing the farmers' need for short training on general management, financial management, marketing, and production management.

These qualities include mutual respect, trust, belonging, cooperation, and community.

There are issues that are unique to different products; there are also challenges that have to do with the market environment.

Training and development interventions should be appropriate to the individual by pinpointing one's weak areas. This can be accomplished by performing a diagnostics on the business to discover the reasons for problems or weaknesses. Once an accurate diagnosis has been made, the best course of action follows. Let's look at an example. In our current situation, the shortage of liquidity can be addressed by training farmers in the management of cash flow and credit, and by establishing linkages with financial institutions that provide short-term credit.

Increased levels of growth and expansion

Additional competencies are required of the farmer during this stage. The reasons for a company's success often stem from a rise in business volume, which can be defined as the amount of business and employment, an expansion in the variety of product types and product lines, a willingness to enter new markets, and an investment in new technologies.

The business has patterns of relationships that change over time. When it used to be more personal and informal, communication and interaction have become more formal and structured. The successful running of a farm business depends on effective interpersonal relations, mutual respect and trust, and having a sense of community and belonging.

Communication is particularly important as the business grows because it is needed to increase understanding, cooperation, and mutual trust. Everything in the farm business, including production, marketing, finance, and personnel management, must function as a whole. The factors also include communicating well with customers, consumers, vendors, financial institutions, the government, and the community. The farmer-entrepreneur had time to spend on building personal relationships because of the size of the farm operation. As the size and complexity of the business increases, assigning responsibility for effective communication and developing relationships is no longer solely in the hands of the owner. Due to his already-too-full schedule, he will not have enough time to attend to everything, so he must delegate.

As small an informal business as they have, some farmers find the transition to a larger formal business difficult and painful. This farmer-entrepreneur might have difficulty delegating authority and making decisions if he is used to running the business by hand and making all the decisions.

Letting others handle things can make him feel disconnected or out of control. On the other hand, he is devoting increasing amounts of time to more strategic activities that demand more and more managerial attention.

It is very important that farmer-entrepreneurs become aware and understand the personal transformation and the business transformation that they will be going through. If these programmes educate and prepare them on all three levels, then they will be in good shape when it comes time for the change process. These farmers will also benefit from learning how to critically examine their companies' strengths and weaknesses as well as the threats and opportunities in the business environment. They will also develop competencies that are necessary for strategic planning. Preparation for the new management role includes acquiring skills such as facilitating, negotiating, team building, and networking.

Great communication is crucial as the business grows, as it enables greater understanding, cooperation, and mutual trust. In order to develop entrepreneurial capacities, an organisation must first put in place a combination of programmes designed to facilitate education, training, information dissemination, and extension.

A school, college, or university can make a significant contribution to the development of entrepreneurship. The concept of innovation didn't gain widespread popularity until after World War II. Economic growth and competitive advantage were explicitly linked to technological innovation in this era.

It is commonly believed that Joseph Schumpeter (1883–1950) popularised the term, and he significantly contributed to the study of innovation. the study of economics is essential for both business and economics, where innovation serves as a catalyst for growth. Long-held concepts of inputs such as factors of production and comparative advantage, which focused on an area's unique inputs, are obsolete in today's global economy because of advancements in transportation and communications. Schumpeter explained that industries must constantly innovate in terms of process and product, as well as market distribution, which can be shown by the relationship between a craftsman's shop and a factory. When asked to explain what was fundamentally different about capitalism, famous investor Howard Marks famously replied, "Creative destruction is the essential fact about capitalism."

Innovation occurs constantly as entrepreneurs seek out better ways to satisfy their customers' demands with higher quality, long-lasting, on-time and budget-friendly services.

Silicon Valley's explosion of startup companies can be attributed to one company, the Stanford Industrial Park. Unhappy Shockley Semiconductor employees in 1957 left to form Fairchild Semiconductor, co-founded by Nobel laureate and co-inventor of the transistor, William Shockley. Following several years, Fairchild built into a significant competitor in the industry. Leading employees left to start their own companies based on their latest ideas, and soon there were a number of these CEOs, as well as founders, running their own enterprises. This snowball process, which started around the year 2000, ushered in a remarkable era of IT company start-ups. 65 new start-ups arose out of the eight former Shockley employees. Since then, globally recognised hubs of innovation have appeared, including Silicon Alley (which includes New York City) Another noteworthy example is the business incubators phenomenon – which was borne out of necessity, especially in areas around research and development knowledge clusters, such as universities and other government excellence centres – that's set up in order to channel the knowledge generated there to the results of applied innovation for the purposes of stimulating local or national economic growth. A variety of definitions have been found in research on innovation. In 2009, Baregheh et al. found over 60 definitions in various scientific papers, while in 2014 a survey revealed that there were over 60 definitions in the scientific literature.

In the survey conducted by Baragheh et al., they arrived at a definition of multidisciplinary worthiness based on their findings.

The multi-stage process of innovation involves ideas being developed and transformed into improved products, services, or processes to serve a purpose of advancement, differentiation, and competition in the marketplace.

An industry survey on how the software industry defines innovation used the

following definition by Crossan and Apaydin: change or expansion of products, services, and markets; renewal and enhancement of products, services, and markets; and the creation of new management systems. The process and the result are interdependent.

For Prof. Everett Rogers, influential scholar, the definition is as follows: new by an individual or other unit of adoption

Innovation also includes the creation of new ideas, products, services, and processes as well as the inventive utilisation of old ones. the degree of novelty (i.e. whether something is new) creative new things for the company, for the market, for the industry, or for the world (i.e., whether it is processor product-service system innovation).

Research in organisations also distinguishes between innovation and creativity, by providing a definition of these two concepts that incorporates recent discoveries.

Creative processes are used when trying to generate new ideas in the workplace. When trying to implement new ideas, workplace innovation concerns the processes applied. For innovation to occur, some kind of combination of the following must take place: 1) Identifying issues, 2) Generating new ideas, 3) Making these ideas known, and 4) Getting them adopted and/or implemented.

According to Peter Drucker, who defined innovation as "specific entrepreneurship functions in an existing business, a public service organisation, or a new venture started by a lone individual in the family kitchen," innovation can be viewed as the principal occupation of entrepreneurship. Entrepreneurs use the means to either create new sources of wealth-producing resources or to enhance the potential of existing resources in order to generate new sources of wealth.

To build a successful company, one should focus on exploiting a particular opportunity. These allow them to have an advantage over older companies who were

built to deal with the problems of the past and must now be re-imagined to meet the challenges of today. Innovators can help establish new businesses. They can also assist firms by buying them out and starting them from scratch. Corporate innovation is also known as starting new companies within existing companies.

2.21 Importance of Innovation

An organisation can only come into existence if a single individual is prepared to assume responsibility for running it, and is willing to take on the leadership role. This individual must have something called innovation in order to fulfil this requirement.

The emergence and function of economic activity depends on the societal and cultural context. For someone it could be viewed as an individual's free choice activity, while for others it could be viewed as a social group's occupation or profession.

Innovation entails a powerful, and often desperate, desire to take risks in the face of uncertainties and an innate ability to recognise those risks. To put it another way, an innovator displays sagacity by boldly venturing into uncharted waters and dealing with the consequences, with complete confidence that he will accomplish this task.

An innovator is defined as a person who takes the risk of organising, managing, and running a business or enterprise. Innovators serve vital roles in the growth of a nation's economy. They are often referred to as the human capital needed to bring capital to bear, in the form of natural resources, to expand on those resources, and to use these resources to develop new concepts and products. The innovative contribution could be perceived as the difference between economic prosperity and economic poverty for countries.

The statement "No innovator, no progress" says it all. Lack of innovation has, in many Asian countries, at times been seen as a major barrier to economic development. The abundance of natural resources, labour, and capital have failed to inspire people to become inventive.

Innovation is an important input in any country's economic development. as far as activities designed to innovate are concerned, the better the development. Innovation is a vital ingredient of any economy, and Southern Rajasthan is in a developing state. These are the topics of growth:

- We believe that increasing the growth rate of the economy by developing new value.
- Make innovative use of the factors of production to increase productivity.
- establishment of new job opportunities.
- separating various sectors of the economy and looking for new opportunities of growth.
- Backward and tribal areas development.
- Societal changes that are more equitable.
- The improved standard of living of the underprivileged groups in society.
- Have a major impact on society.
- Contribute to technological advancement.
- Promote a healthy business culture and grow the commercial sector.
- Infuse change into a market by responding to market changes and customer demands.
- inculcate an achievement mindset
- a system for classifying innovators

When an economy is just getting off the ground, businesspeople have the freedom to experiment with new ventures and find creative ways to start new enterprises. Innovative innovators discover new products, techniques, and markets. Entrepreneurs who built modern capitalism are the innovators. A spirit of innovation that results in market openings and development of businesses is made possible by enterprising innovators.

As well as the first group of innovators, who are referred to as initiative innovators, these people are identified as either copycat innovators or mere imitators. In addition, they support the growth of the economy in less developed nations. The suitability for

the local conditions is the major factor for the adaptation. They serve as a catalyst for the industrialization of the poorer countries.

Third, Fabian innovators. These innovators, by their natures, are reserved and lazy. They follow the procedures, customs, traditions, and religions that have been established by others. They prefer to avoid taking risks. Second-generation innovators have been present in their family business for decades.

Drone innovators who refuse to copy or utilise opportunities that arrive on their path are included in the fourth category. They adhere to their tried-and-true methods, techniques, and products, while using only conventional approaches. Laggards may be referred to as being late bloomers. When a company loses market share, it is forced to exit the market.

2.22 Characteristic's of Successful innovators

An innovator is a human being, who designs an industry from scratch in his mind. He spends a great deal of time and effort to help realise his dreams. It is a goal-oriented effort to manage and promote the economy's wealth production and distribution. To combine all three of these aspects—mind, heart, and intention—and convert them into the production or creation of goods and services wanted by the people, there must be a person with these characteristics. Innovators have to do these activities related to production in order to meet the customer's needs.

is aware of new developments and is prepared to use them to meet the needs of the society. Everything in production revolves around him. He integrates various talents, abilities, and interests to create financially viable projects.

People who are different, those who are open to new ideas, and those who are comfortable with social and cultural differences are all related to innovator behaviour, according to research. The innovative person possesses traits such as self-confidence, creativity, persistence, calculated risk-taking capacity, determination, and the ability to

achieve goals.

An entrepreneur is a person who has started a business of his own. To be distinguished from a successful innovator, an innovator must have already demonstrated proficiency in the business's field.

CHAPTER 3
REVIEW OF LITERATURE

3.1 Introduction

There have been several studies conducted on particular aspects of the field of innovation, as well as in India and elsewhere. Here the researcher presents a few research studies conducted in India and abroad to help her accomplish the study's objectives, which are to identify the factors that enable successful innovators from the state of Southern Rajasthan to be successful.

3.2 Review of Literature

James J. Berna (1960) brings us to the question of appropriate business criteria in the underdeveloped countries. Without producing first, and in many ways the humbler type of contractor, a country with little or no industrial tradition can hardly produce innovators capable of substantial transformations. This type of entrepreneurship involves many subfunctions and is a complex phenomenon. Business promotion, capital provision and risk-taking, technical innovation and adaptation and business management are the primary functions of these divisions. The list of subfunctions listed shows clearly that enterprise is essentially a kind of skill or a combination of skills and skills. The most important ones are organisational and administrative capacities, a certain amount of business and technical knowledge, awareness of opportunities, willingness to accept changes and psychological ability to risk.

According to James J. Berna, a real entrepreneur, in addition to his functional qualities, must have a broad personality, which contributes to initiative development and to great tasks and challenges. The author emphasised the qualities of a good entrepreneur:

1. He is an entrepreneur, is energetic, hard-working, resourceful, aware of new opportunities and is in a position to adapt himself easily and willingly to accept the risks of change.

2. He wants to see the advancement of technology and the quality improvement of his product or service.

3. By reinvesting his earnings, he is interested in expanding his operation.

4. The changes are visualised and adapted to changing conditions.

5. He believes firmly in planning and systematic work.

6. He works for the wider society and for his fellow creatures.

The above qualities sum up what the phrase, the entrepreneurial spirit, usually implies. A leading industrial entrepreneur cannot be conceived without being adaptable to change, eager to expand and improve technology. Entrepreneurship is a personal quality that allows certain people to decide with far-reaching consequences. The personal qualities that contribute to an entrepreneur's success encourage performance, creativity and clarity.

James J. Berna recounts the study by James T. McCrory on a small business in a northern Indian city. Unlike industrial entrepreneurs from a merchant background, McCrory found that the craftsman he met had "all the qualities of a good businessman." He describes these qualities as follows: They live and save frugally. They are highly qualified or employ skilled staff. They are qualitatively aware, are able to improve techniques on their own and learn quickly from others. As entrepreneurs, they are extremely tenacious. When an industrial enterprise fails, its first act is to start scrapping savings together for another. As manufacturers, the few resources at their command are versatile and resourceful. They're going to build it themselves if they can't buy a machine. They will improvise one of their own if they cannot replicate a technique. Most of them are as sensitive to new demands and hanges to the market as their knowledge and circumstances allow.

Based on his findings, McCrory stressed the qualities of frugal living and saving, purpose tenacity, versatility and resourcefulness as the principal attributes of businessmen. He also notes that there are no technological or organisational reasons why small industrial enterprises of this sort should not grow steadily and without losing their identity as medium or larger companies.

In Srivastava's book The Achieving Society, David C. McClelland, (1961) said a) an unusual creativity b) a risk-taking propensity c) a high need to achieve successful

entrepreneurs. An entrepreneur has the following characteristics:

1. Want to assume personal responsibility
2. Likes to take moderate risks
3. Wants to know the result of his efforts
4. Tends to persevere in adversity
5. Innovative tendencies
6. Is future-oriented
7. Tends to be mobile and not fully satisfied

Prof. Tandon (1975) described the following qualities of a genuine entrepreneur: capacity to take on risk, technical know-how and willingness to change, capacity for managing and organising resources. A long list of entrepreneurs is historically available who are instrumental in introducing new methods, products, new markets and new forms of industrial organisation. Such people were drawn from all walks of life. But they had common features. They were men who valued companies as a tool and a sign of success, who valued the possibility of innovation and who sought to overcome the resistance and obstacles to doing new things. Their motivation was to increase profit and efficiency through cost reduction. They have earned the reputation of innovators and organisers in England as the great figures of the Industrial Revolution. They performed the duties of the capitalist, financial, manager, dealer and salesman in person.

In his article Profile of a Small Entrepreneur by S.B. Srivastava, S.K. Bhattacharya and M.M.P. Akhouri (1975), describe the following aspects as important components of the entrepreneurial profile:

1. Enterprises have a high need for performance
2. They take moderate and calculated risks
3. Their personal efficiency is high.
4. They have leadership skills
5. They are very committed to the task
6. Good at teamwork

7. You have good planning skills

8. They have sound capacity for decision-making

Understanding business characteristics and quality allows entrepreneurs to identify and choose themselves and to develop suitable programmes to upgrade their knowledge and skills and develop the right motivation to take on and manage their own businesses properly.

In their compiled Developing Entrepreneurship, Learning Systems manual, T. Venkateswara Rao, Udai Pareek, and Prayag Mehta (1978) declare that not every entrepreneur may have all the characteristics it is believed to have. Actually, there is no research to show this. However, the more these characteristics are present in an individual, the more effective it may be.

In general, each contractor is assumed to have the good qualities listed below:

a) Realization requirement

b) Need for influencing others

c) Sense of efficacy

d) Risk taking

e) Openness to feedback and learning from experience

f) Independence need

g) Hope to be successful

h) Employee expectations

i) Concurrence and collaboration

j) Relationship of flexible authority

k) Society concern

l) Social awareness

m) Work dignity

n) Future savings.

The authors ask whether entrepreneurship is a package of characteristics. The depiction of entrepreneurial characteristics so far can give the impression that they are a special type of person and that nobody can be an entrepreneur. But that's not true. The characteristics listed so far are based on several studies and experience and most

of them are not conclusive.

Nevertheless, an entrepreneur would certainly be different in psychological and social terms from a non-entrepreneur. But he doesn't need all of these features together. Without some of these features, there is no evidence that an entrepreneur cannot succeed.

Entrepreneurs with creative strengths may be successful without having many of these features. Answers to questions like what are the optimal combinations of characteristics needed to an entrepreneur are not clearly available. The evidence only points to some dominant traits in successful entrepreneurs. In such situations, certain generalisations could, however, be made. a) The above characteristics can be developed in people via psychological learning c) The presence of these characteristics increases the likelihood that a successful entrepreneur will emerge.

S.V.S. Sharma (1979) describes the characteristics of successful entrepreneurs and compares them with the successful entrepreneur, among other things, in his book Developing Entrepreneurship: Problems and Problems. Entrepreneurship research shows a gradual convergence of interest in the factors contributing to successful entrepreneurship and has tried to answer the following questions.

1. What are the individual or psychological characteristics of an entrepreneur?
2. Is there any typical social background which characterizes an entrepreneur?
3. Are most successful entrepreneurs from specific occupational groups?

Social scientists have tried to find answers to the above questions. The huge amount of research produced by the great interest in entrepreneurship and entrepreneurial behaviour is generally linked to sociological and psychological aspects of entrepreneurship.

A study of the personalities factors of succeeding and failing entrepreneurs at the SIET Institute (Alladin, M.T., 1979) and 16 personality dimensions found that successful entrepreneurs were considerably more social, emotional and confident than failing entrepreneurs. Furthermore, the results showed that successful entrepreneurs were less suspicious but more apprehensive than unsuccessful entrepreneurs. However, the differing aspects between successful and unsuccessous entrepreneurs were found to be negligible in dimensions like intelligence, timeliness vs awareness, sly versus risky,

tough-minded versus tender-minded, practical versus imaginative, far-sighted versus shrewd, conservative versus experimentation, group dependence versus autonomous, and relaxed versus tense.

Finally, the role of characteristics associated with entrepreneurial success – personal, social and psychological, individually or in combination – is significantly distinguished. It seems possible and perhaps necessary to develop ways and means to identify potential entrepreneurs that could be selectively encouraged and supported. It is not suggested that a universal and invariant portrait of an entrepreneur could be reached. But the view is that some people have more entrepreneurial qualities than others in every society. And these people must be involved in developing activities. While entrepreneurial behaviour, as a common pattern, seems to vary from culture to culture at the root of such behaviour. A more conclusive picture will only emerge from well-planned research efforts in individual and non-coordinated countries.

Mark Casson (1982) says the contractor must be a generalist and not a specialist. In other words it is important for entrepreneurs not to be highly proficient in certain aspects but not to be inadequate in all aspects of decision-making. Entrepreneurs who are lacking in certain qualities are principally employing delegates with these qualities. The contractor and delegate are mutually complementary and can make successful decisions as a unit. The entrepreneur requires additional qualities, namely delegating skills and organisational skills, to acquire complementary qualities.

Some qualities have far greater difficulty in screening and developing incentives than others. Among these scarce qualities, imagination and foresight are the most difficult to screen. These qualities are therefore essential for the successful entrepreneur. However, the entrepreneur himself must either be a generalist besides these qualities so that he can fulfil his role without delegation or have delegation and organisational abilities.

All business qualities must be innate. But not all of them are completely innate. Some can be enhanced or experienced by training. For example, analytical skills and computer skills in school or university can be improved while practical knowledge and search skills can be enhanced through general daily experience. The desire to increase

quality, which is scarce but difficult to achieve by delegation is strongly influenced by entrepreneurial careers because of the problem of screening for them. Figuration is almost entirely innate of the two essential qualities mentioned above, and foresight, though to a certain extent innate, can be enhanced by a varied experience. Although not essential delegation skills and organisational skills are very desirable whenever broad decision-making is envisaged. These too are qualities that can be improved by experience.

In her book, The Practice of Entrepreneurship, Meredith Geoffrey G, Nelson Robert E and Neck Philip A (1982), describe the characteristics of entrepreneurs. They are action-oriented, highly motivated persons who take risks in order to achieve objectives. Most entrepreneurs have certain objectives and expectations.

The clearer the goals, the more likely they will be. Each person is a unique person and no two people are the same. All people have different past experiences, live in different life situations, have different responsibilities and commitments and have different life goals. An entrepreneur's previous experiences are generally extensive and diverse and determine his current life situation. Most entrepreneurs have modelled on another; probably an older entrepreneur and a close recognition of such a "role model" will lead to entrepreneurial conduct and skills.

Today's job and the financial, family and other factors contribute to determining the attitude towards entrepreneurship. He is committed to himself and others, including his family, employer and employees, friends and other members of the community. If he has too many obligations and responsibilities outside his work, it is difficult for him to be an entrepreneur. In planning the future, he must be realistic in determining what can and cannot be changed. Hispastexperiencesshouldhelphimtounderstandbetterhispresentsituation.

To a certain extent, success as an entrepreneur depends on your willingness to take responsibility for your own work. Although the risk of failure is always present, entrepreneurs risk their actions by taking responsibility. Some

entrepreneurs only succeed after many failures. Enterprises have a sound mental perspective on life. They are mature people who have developed a way to look at all experiences in a healthy way. Entrepreneurs are people who are happy at work and proud of their achievements.

Successful business leaders are whether they lead a few or a few thousand employees. Based on the nature of their work, entrepreneurs are leaders because they have to look for opportunities, initiate projects, collect the physical, financial and human resources needed to carry out projects; set objectives for themselves and others and direct others to achieve objectives.

In her article The Practice of Entrepreneurship, Meredith Geoffrey G, Nelson Robert E and Neck Philip A (1983), S.B. Srivastava outlined that entrepreneurs are people who have the ability to see and evaluate business opportunities, collect the resources necessary, take advantage of them, and take appropriate action towards success. The following list of features and characteristics gives a business profile:

A person may not have all these qualities, but the more one has, the more an entrepreneur is likely to be.

Dr. Nagendra P Singh (1985) said several studies have shown that the entrepreneur is a person who bears, innovates, or organises the business. The effective exercise of various functions related to his role can justify his existence. Employers can learn and learn entrepreneurial skills if he possesses certain qualities that can be identified through his obvious behavioural manifestation.

A study of the entrepreneurial characteristics revealed 57 characteristics of the contractor based on several investigations and past experience. It suggests that the entrepreneur should define any or most of the characteristics.

EDI-I Faculty's Handbook for New Entrepreneurs (1986), (unpublished data), and experts provide an entrepreneurial version. It is not a question of heritage; it is an entire expression of the potential that anyone born in any caste, community or class

can have. As such, a person with certain behavioural characteristics and mental abilities can become an entrepreneur. Furthermore, there is no need for such a person to become an entrepreneur from childhood onwards. Even if he/she has grown up, worked on another path and developed these features and skills, he/she can be tailored and developed as an entrepreneur with advice and motivational action.

In his research into Indigenous Entrepreneurship, V.S. Patwardhan (1990) conducted a detailed B.D. Gareware study and entrepreneurial expansion, as part of a study of prominent Maharashtra families involved in business and industrial activities. The author sheds light on BDG's personality, its motivation and the atmosphere in which he grew up, the uncanny business sense of his ability to exploit the possibilities at the right time, the way he reacted to the changing economic and social conditions, the factors that make up his business expansion decision, entrepreneurial aspects of It is recognised that BDG is extremely careful and chosen when choosing its managers, train them and shape them, test them and then rely on them when they succeed in meeting its expectations. The creation of management quality in his managers and a sense of confidence among them was one of his favourite activities in the running of his various companies. While a non-technician, he likes to learn by himself and remains a better shadow than his best technical staff. He has successfully experimented in creating a combination of hereditary and professional management in two of his companies. He can generate a sense of affiliation and identity among the employees he used to work with inside the organisation. He makes every effort and effort to foster awareness of quality as a way of life.

BDG believes in the process of staff growth that provides them with avenues to promote and encourages active participation in ownership and management of its companies. He encouraged his managers to take responsibility and acknowledged their achievements. He would try to know his employees' problems, show understanding and create an atmosphere in which they would be happy.

The overall thinking or philosophy of his companies' administration was based on a futuristic approach based on practical conservatism. "Hunches" management may be a

unique feature of his business decisions. He constantly searches for new products and the market. He understands the market and the emerging competition and does not attach himself sentimentally to particular products. A single minded devotion to the goal and perseverance can also be regarded as an important contribution to BDG. He is imbued by the true entrepreneurial spirit to take on and practise challenges. He is a visionary man who is persistent and willing to do a great deal of hard work.

The writer has illustrated the vivid example of a successful businessman and the significant attributes needed for success with his careful examination of the characteristics, qualities and practises of B.D. Gareware.

In his book Entrepreneurship Development: Principles, Policies and Programs, P. Saravanavel (1991) depicts a true entrepreneur's right qualities. A contractor should carry on, innovate or initiate and organise the company. As he exercises such functions successfully, he justifies his existence. The effectiveness of these functions depends on the nature of quality control, cost reduction, improved industrial relations, profit and so on. All these are possible if the entrepreneur is especially a talented person and he possesses the following qualities in him:

1. Capacity to assume risk and possessing self-confidence
2. Technology, awareness of new opportunities, readiness to accept change and ability to start.
3. Ability to resource marshal
4. Capacity to manage and organise

A study of the European entrepreneurs during the Industrial Revolution of the 19th century shows that a typical entrepreneur has been found to be more self-centered than others. He believed in breaking up the old traditions and establishing new traditions. Such a contractor was found to be very ambitious. He had the desire to conquer, an incentive to fight and succeed and a tendency to prove superior to others. True entrepreneur, apart from the functional qualities mentioned above, must have the broad personality contours that help him to develop initiatives and to fulfil such tasks as he occasionally decides. An economist such as J.B. Say observed early on that an entrepreneur must have the following special qualities: He must have "judgement, perseverance and a world and business knowledge. The importance of a specific

product, the likely amount of demand, and the means of producing it, are to be assessed with tolerable accuracy; the raw materials are otherwise bought or ordered and the workers are collected, consumers are found and rigid attention given always to order and economy.

Joseph Prokopenko and Igor Pavlin (1992) draw a rather not so rosy picture about the entrepreneurship development activities in public enterprises. Given the limited business practises and opportunities within the public sector, in particular in previous socialist economies, a systemic effort should be made to develop endogenous entrepreneurship. Many western researchers, including Peter Drucker, point out that entrepreneurship and entrepreneurship can be developed through conscious action. From this point of view, the development of entrepreneurship can be stimulated by a set of supporting institutions, deliberate innovative activities stimulating change and, above all, by giving full support to capable individuals and groups of entrepreneurs to the management of existing firms. While the individual's role with innovative ideas and adequate drive remains highlighted, the systematic and purposeful management of this process is also essential. As a result, various forms of entrepreneurship development have been tested, from business training courses at different levels of education and management/company purchases to new business incubators.

In his book A Practical Guide for Industrial Businessmen (1992), S.B. Srivastava says that certain qualities are inherent but other qualities are most acquired, based on studies on the characteristics and characteristics of successful entrepreneurs. Overall, the four most important qualities are intelligence, motivation, knowledge and opportunity. Although inherent in intelligence, knowledge is generally acquired through a continuous process. Dynamic and successful entrepreneurs generally create their own possibilities; however, the government plays a major role in creating basic infrastructure and opportunities. In addition, the qualities of entrepreneurs can be subdivided: Risk ability, hard work capacity, desire for slow consumption, ability to take advantage of external conditions, imagination, emulation, initiative, socio-flexibility, skills and knowledge, both informative and technical.

Kalpana Vaish (1993) quotes Prof. Schumpeter about his views on entrepreneurs in her book Entrepreneurial Role of Development Banks in Backward Areas. The supply of entrepreneurs depends, according to him, on the rate of profits and social contracts. Profit leads the prospective entrepreneur to become involved and start new activities. This does not necessarily mean, however, that the entrepreneur deals only with financial benefits. He is essentially an innovator, with a motive for achievement that seeks more than money. The necessary business culture and social climate conducive to industrialisation are necessary for such entrepreneurs to work effectively.
Developing business involves identifying potential entrepreneurs, training them and developing in them the characteristics or capacities necessary for the success of the business and assisting trained entrepreneurs in all subsequent stages of actual building.

In their book, Small Business Entrepreneurs in Asia and Europe, Mario Rutten and Carol Upadhya (1997) highlight the general characteristics of entrepreneurs in Asia and Europe. The author quotes Harvey (1989) and others who argue that the growth of small-scale and rural enterprise classes across Asia and Europe is linked to the profound transformation in the capitalist world system in the last two decades. Many small businesses, both manufacturing and service-oriented, have sub-contractual relationships with large companies.
The majority of studies on entrepreneurs have found social networks central to their workings, and this applies to European and Asian entrepreneurs. If social networks are seen more broadly as a sort of 'social capital,' they can better understand their ubiquity among business entrepreneurs. The creation of social capital is important not only for successful business transactions and prestige improvement, but also for insurers against an uncertain future.

The research project of the Trivandrum Center for Management Development, entitled "Management Skills for rural enterprises: A Field Investigation," Ratna Ghosh, Meenakshi Gupta and S. Dian Dhar (1998), describes the project "Women and Entrepreneurship in India." The project involved motivating, training and supporting men and women in the development of independent business enterprises. This study

focused on the experiences of micro-enterprises starting women. Based on quantitative analysis of data from the questions given to 73 women investing in small industries, a profile of female entrepreneurs was attempted and certain impacts were drawn for study.

A profile of a woman entrepreneur — It is obvious that she is not a highly qualified person but that the knowledge she has been able to achieve combined with her experience and circumstances. Age and marital status have important successful roles. The typical female entrepreneur is married to under 3 children and over the age of 32. It could come from a nuclear family or a joint family. In all cases, she should have both personal independence and household support advantages and disadvantages. In comparison to its economic background, its initial investment range is quite high. She can obtain sufficient government funds to establish a small, lucrative business that would give her economic independence and social status as a result of increased family income.

The woman entrepreneur has a father or a husband, who is at least a registrant and works in the service sector, characterises a lower - middle class family. But she succeeded in becoming an individual owner and was encouraged by her family members to do this. She uses mainly females and has male support for external transactions.

The need for economic independence and self-performance is quite strong, among the numerous reasons to become an entrepreneur. Although she is interested in her project and how she implements it, she clearly needs male support both in the home environment and in her entrepreneurial work. Social and cultural values affect her outside of her home, making her difficult to work in male fields of activity. She is obliged to make her work and home fit for smooth and pleasant operation.

Dr. C.B. Gupta and Dr. N.P. Srinivasan (1999) quote Jeffrey Timmons (1985) who researched entrepreneurial aspects and identified the following: full commitment, determination and perseverance; efforts to achieve and develop: opportunity and goal orientation. Taking initiative and personal responsibility. Internal control locus, Calculated risk and risk search, Low status and power requirements and integrity and reliability.

The characteristic approach to entrepreneurship is useful. By developing a profile of a successful entrepreneur, entrepreneurs can be identified and developed. However, we do not know what characteristics are necessary for business success. Many characteristics used to describe entrepreneurs apply to many managers as well. The approach to characteristics lacks specificity and does not apply to all cultures. Another problem is that the list of features is all positive. The approach to characteristics is therefore not fully satisfied.

In their Entrepreneurship Development Manual G.R. Basotia and K.K. Sharma (1999) explain the part entrepreneurs play in developing companies. An entrepreneur has to coordinate and control various production factors in order to achieve a given goal. All factors are equally important to the success of the company. Different departments should work in coordination and properly determine organisational and financial planning. Modern business has become complicated and complex. Entrepreneurs face more challenges by improving technology and changing consumer preferences. All aspects of a company – production, financing, marketing and so on, should be arranged and coordinated in order to make a company successful. Preconditions for a company's success are: setting targets, proper planning, sound organisation, Proper location and plant layout, Marketing and distribution and leadership dynamics.

B.S. Rathore and S.K. Dhameja (2000), in their book Entrepreneurship in the 21st century, describe the challenges future entrepreneurs face. The future entrepreneurs will face substantial challenges and tough competition not only from domestic industries, but also from global companies. The Indian entrepreneur faces competition from global players with liberalisation, even in areas like consumer products, which have recently received some protection.

Training and exposure for the planning and launch of a company must prepare future entrepreneurs. Another important task in serving the 21st-century entrepreneur is the development and delivery of appropriate technology and available data banks, the establishment of technical links between competent, open-minded entrepreneurs in the country and entrepreneurs/investors in selected developed and developing countries.
In its preparatory notes on Entrepreneurship and Small Business Management, Center for Entrepreneurship (unpublished data) identifies successful entrepreneurs as one who is always aware of new developments and changes taking place in society and who is willing to adapt to the changing needs of society. It is the pivot to which all other production factors, productive resources and techniques should revolve. In order to turn the resources into successful undertakings, he blends talents, abilities, and drive.
Entrepreneurial studies have shown that personality and cultural/social factors have a relationship with entrepreneurship. Cross-cultural studies covering India, Japan, Guinea, Malaysia, Mexico, Phillippines and Indonesia show characterising the entrepreneur's characteristics: self-confidence, creativity, persistence, computed risk-taking ability, determination, need for performance, initiatives, flexibility, individuality, leadership, versatility, optimism and desirability.

In the past three decades, knowledge of entrepreneurial skills has been strengthened. The following are the main competencies that provide top performance: taking initiative, examining and acting on opportunities, perseverance, seeking information, concern for high quality of life, work contract engagement, efficiency orientation, systematic planning, problem solving, confidence, confidence, perseverance, the use of influential strategies and the monitoring and care of employees.

New Venture Creation has discussed the numerous success factors for entrepreneurs in detail in the book Entrepreneurship: New Venture Creation by David H. Holt (2000). The entrepreneur's "team" made up of partners, associates, or a large network of advisors ranks at the top of the success factor list.

In his book Entrepreneur Development: New Venture Creation, Sathish Taneja and Dr. S.L. Gupta (2001) explain the characteristics and roles of entrepreneurs. The wide range of businesses and entrepreneurs who have started to conduct them are at best risky and at worst misleading about their characteristics. For example, product-oriented companies differ markedly from service-oriented businesses. It has been found that technical entrepreneurs have different educational backgrounds than non-technical and service entrepreneurs. In addition, the demand to build a large company is different and more demanding than the personal requirements needed to set up a small business or even a franchise.

Enterprise characteristics such as goal setting can be developed and certain requirements such as knowledge of a specific company can be learned. A person who starts a part-time/full-time venture in his 20s can start a small business or partnership business. In such companies, early success provides valuable learning. The experience gained provides a platform for later creation of a bigger, more complex and more demanding undertaking.

The nature and extent of one's entrepreneurial potential is of paramount importance to the entrepreneur, prospective partner and investor. The criteria can be a useful guide to identify major shortcomings or a fatal flow that could not lead to success in the pursuit of a business career. It can help determine whether or not there is a reasonable opportunity to start a successful venture to meet the goals, values and needs of an individual.

Research has identified 14 dominant features of successful entrepreneurs:

1. Need to reach .
2. Want to be a winner
3. Perseverance – 4. Quality of adherence
5. Modest risk-taking
6. Prefer road middle 6. Use feedback 7. Know how it works
8. Uncertainty – ambiguity and unfamiliar situations tolerance 8.
9. Stress users – power and drive
10. Confidence in themselves – confidence in their abilities Seeking Initiative – Responsibility

11. Positive self-concept – self-conscious and control locus
Motivators – have interpersonal abilities
12. Flexibility – decision-making flexibility Independence – I do not want to work for others
13. Analytical ability – without personal love or dislike. 13.
14. Finding and exploreing opportunities

A large and intense level of these entrepreneurial characteristics is not sufficient. In addition, the role of entrepreneurship is inherent to certain conditions, pressures and demands. These role requirements have significant consequences for an individual's entrepreneurial suitability and the eventual success of a new enterprise. While successful entrepreneurs can share several characteristics with successful persons in other careers, their preference for the combination of needs and their tolerance, unique to the entrepreneurial role, are an important characteristic. An entrepreneur has important roles – accommodation for businesses, complete immersion and commitment, economic values, integrity and reliability.

Entrepreneurship for Engineers, as described by Badhai (2001), identifies entrepreneurs as those who have already started a business or who are currently in the process of starting one. In doing so, the author includes the characteristics of an entrepreneur in Indian conditions. Among these characteristics are need for achievement, a willingness to take risks, the need to influence others, the ability to identify opportunities, a positive self-concept, an expectancy level, initiative, an inclination to accept challenges, independent thought and action, problem solving, and a quest for answers.

In his book Enterprise and Entrepreneurs, Dilip Gangopadhyay (2001) draws our attention to their intense relationship and underlines the importance of entrepreneurship for a nation's economic growth. Enterprise is a variable, depending on the resolution of the country for economic growth and its scope is limited by the national policy agenda. It is encouraged in relation to our country:

a) Social justice Social justice
b) Removal of regional imbalances and distribution of entrepreneurial activities in backward rural areas
c) Equitable income distribution by creating jobs for the unemployed
d) Substantial GNP addition and late removal
e) Technoeconomic dependency through economic liberalisation and industrial globalisation through the transformation of a mixed economy into a market economy.

Once an entrepreneur's role and functions are properly understood, the qualities to be present or developed to undergo successful entrepreneurship should be determined. Such characteristics as are known as:

Capability to take risk, work capacity, search ability, ability to exalt skills, creative thinking ability, ability to influence and convince, quality of awareness and desires for deferred consumption.

The concept of entrepreneurial philosophy has been discussed by J.S. Saini and B.S. Rathore (2001) in their book titled Entrepreneurship: Theory and Practice. The authors claim that a successful entrepreneur takes on responsibility for their own work. He takes risks, although the likelihood of failure is always present. Instead of making mistakes and having to start over again, he will be able to learn from his mistakes and improve his outcomes and perseverance will help him succeed in the long term.

To learn at first hand the factors that have led to entrepreneurship promotion in the small business sector, B.S. Batra conducted a study (2002). This led to a detailed analysis of business people's socio-economic profile and of the various factors promoting, succeeding or failing entrepreneurs.
There are several factors that motivate a person to enter a company. Both internal and external factors exist. Among the external factors, incentives for the establishment of new units led to entrepreneurship. High product demand, high profit margin and other

external factors led them to start up their business units in the countries. Among the inner factors, there was a strong urge to do some independent work. The analysis of personality factors showed that entrepreneurial skills and the ability to take risks were a major driving factor.

In general, many factors affect entrepreneurial growth. These include previous occupations, families, castes, education, technical know-how, financial position, government aid and entrepreneurs' personalities. These factors affect the industrial growth process. In order to promote industrial growth and development, a climate that helps to foster entrepreneurship needs to be created.

In addition to the desire to gain cash benefits, the entrepreneurial spirit, as described by various studies and experience on the subject, is a blend of a high level of need for achievement and every motivation that can be seen in an achievement. A long-term commitment to a goal set by the businessman creates the need to persist with the company even facing numerous obstacles.

The advanced countries have performed spectacularly on the basis of industrial enterprise. Similar underdevelopment occurs in the Asian region. Most industrialised countries in India have shown high industrial growth rates in recent decades. There are predominantly small units with a tendency to growth. The countries have many small businesses, but there are a few who have entered medium and large sectors. However, entrepreneurs have matched their counterparts to their risk-bearing abilities and entrepreneurial skills in developed regions. In large part, what the different states have achieved is mainly due to the efforts of the entrepreneurs.

Low-capital entrepreneurs depended mainly on family funds, whereas medium-capital entrepreneurs tried to draw on nearby sources like friends and relatives. More than half of high-capital people received resources from governments and various financial institutions. Company families provide more entrepreneurs than any other type. Individuals from the business family are exposed to family businesses directly or indirectly, which familiarise them with business practise. Business families provided a large number of entrepreneurs.

Neeta Baporikar (2002), through her book "Entrepreneurship and Small Enterprises," establishes the role of entrepreneurs in the economic and industrial development of countries. The contractor is not an inventor. The great number of innovations would have been waste if the entrepreneurs had not made them commercially viable. That is why entrepreneurs are honoured for the Industrial Revolution's success. What qualities or characteristics is a successful entrepreneur required? Whilst it is difficult to definitely answer this question, it seems that a successful businessman has the following qualities: willingness to sacrifice, leadership, determination, project confidence, marketing orientation and a strong ego.

S.K. Dhameja (2002) explains women entrepreneurs' opportunities, performance and problems in relation to our country. In India, women have been kitchen managers since the very beginning and have exclusively dominated household activities. Today, non-traditional companies are easily managed and effectively handled by women as decision makers. They are thriving, as are consultants, publishers, exporters, producers, designers, interior designers and the like.

With the growing sensitivity to society's role and economic status, the hidden enterprise potential of women has gradually changed. Women are increasingly aware of their lives, rights and working situations. Today, women entrepreneurs are a group of women who break away from the beaten track and explore new avenues of economic participation. The reasons why women run organised companies include their knowledge and skills, their business talents and skills and their determined desire to do something positive.

Women entrepreneurs are regarded as people who play a challenging role in alleviating their personality needs and becoming financially independent through appropriate family and social adjustments. They are constantly looking for new and innovative ways that lead to strong economic engagement. Their aptitude, skill and skill, their skill in business and their willingness to do something positive are among the reasons why women establish, manage and engage in challenging activities in

organised industries.

According to R. Nagendran, Dr. K. Banumathy, and Dr. N.R.V. Prabhu (2002), successful entrepreneurs possess the following characteristics: To be a successful entrepreneur, you must always keep up with new developments and changes in society, and be ready to shift to meet people's changing needs. Everything should revolve around him because he is the pivot point for all other resources, resources, and techniques. In order to turn the resources into successful undertakings, he blends talents, abilities, and drive.

The studies that examine entrepreneurs have demonstrated how personal characteristics, as well as the influences of culture and society, combine to lead to entrepreneurial activity. The overall conclusion from an international study was that entrepreneurial candidates demonstrate certain traits such as self-confidence, creativity, persistence, calculated risk-taking capacity, determination, and interest in achievement.

He takes risks and is innovative, opportunistic, creative, flexible, dynamic, and growth-oriented. However, while these facets are neither conclusive nor definitive, each of them represents one facet of the entirety. To illustrate, successful entrepreneurs include individuals such as Jack Welch of GE and Ray Kroc of McDonald's, both of whom did not start their own companies. It is doubtful whether anyone would argue that they are not entrepreneurs. While not all are the same, this is a representation of that concept. While some of these strategies and behaviours have some similarities, each entrepreneur's personal approach to starting and growing a business is distinct in its own way.

From a specific and pragmatic standpoint, Naunihal Singh (2003) wrote his book Effective Enterpreneurial Management: "No innovative genius or hard work nor luck is a guarantee in itself of company success. If these are all present in at least trace amounts in the new enterprise, the missing catalytic element often seems to be the 'entrepreneurial state of mind.' The ability to think

tactically on one's feet as well as to plan strategically within the business school sense can also be characterised as a degree of tough-mindedness, a confidence in one's intuitive and one's rational capabilities; an ability that makes a sense of timeliness based on sometimes inadequate information and in advance of protracted evidence;

In his book Entrepreneurship: Strategies and Resources, Marc J. Dollinger (2003) explains how the modern entrepreneur is different from the older. It's because the concept of being an entrepreneur has changed that entrepreneurship is today one of the hot labels. A company manager might have been described 15 years ago as a business version of a cowboy John Wayne, who managed his business without training, without the assistance of bankers or other experts, through a commercial rodeo. Businessmen were once seen as founder of small businesses with a strong independence and can be a flair for the dramatic actions. Businessmen were born once, not made.

Now things are different. What emerged now is a class of professional entrepreneurs who are more dependent than good on their minds and who are trained to analyse the business environment using both methods and technology.

According to Bill Wetzel, Professor at New Hampshire University, the old business enterprise entrepreneur was mainly intended to learn to live, whereas today's entrepreneur plans to build a large company that can generate wealth for him and the investment community.

The new contractor also comes from various sources. Many of them are drop-outs, driven out by a downsizing or lured out by searching for status, big money or personal control. Globalization has many small start-ups that compete with large companies.

This new professional entrepreneurial class was also helped by Academia. In its programme of business study, Harvard Business School, which once had 3 or 4 professors teaching courses in small businesses, now has 17 full-time faculties. The staffing of other universities and colleges reflects the same trend. The contents of many financial, marketing and other business courses have also been adapted to reflect new development concerns. The new class of entrepreneurs not only does, they understand what they do.

In her book Entrepreneurial Development, Renu Arora and Dr. S. K. Sood (2004) explain that an entrepreneur must have all such characteristics to successfully perform. It should be: the calculated riskmaker, innovator, organiser, creative, self-assured, socially responsible, optimistic, driving skill, human relationships, communication ability, decision making, business planning, visionary, ability to identify and take advantage of opportunity and courage to deal with adversity.

In his book The Rising Indiapreneur: Instilling Entrepreneurial Skills, Sathish Khanna (2004) discovered the unique characteristics of an entrepreneur who wanted to succeed in the Indian business environment. Entrepreneurs are at the heart of any country's economy. To succeed in the post-WTO era, India needs a new culture to fill this lacuna. It's not that we lack the resources or the skills to do more than we are. Instead, its employees are more than qualified.

Even the definition of a contractor must be changed. Previously, anyone who started a company with their own money or loan money - regardless of the merits of the project was an entrepreneur. He was often just launching the project because the government offered fiscal subsidies or the project had duty protections or because easy loan money was available. For some, it was a chance to syphon away money. Some started a particular business because others profited from it - the so-called entrepreneur could employ some staff and literally steal the technology and copy the project from the client base. In the process, he did not profit himself or allowed the original player, based on his being the actual contractor, to continue making profits.

This was a "destructive building" era. The majority of investments made in those days stagnate or lose value. Some good investments have also been made by value erosion in the destructive mode. It is time to deliberately destroy companies that have used enormous national resources, which have been inefficiently grown and can no longer compete globally. Such destruction will be a "Constructive destruction," and new businesses will now have to be built based on global competitive merits. In India and abroad they should find opportunities. This is "constructive building" and those who

contribute to this mode of creation are the entrepreneurs who are able to restore themselves to respect.

R. Setty (2004) draws our attention to women's entrepreneurship potential and challenges. Woman has been the economic partner of man in several fields, but man seems to dominate the world of entrepreneurship externally. Entrepreneurship is not merely a male job as an army or army. She too has the psychological qualities and management skills that are important for successful entrepreneurship. The environment and opportunities for both men and women are sometimes the same. Interestingly enough, however, entrepreneurship in traditional developing societies was restricted.

The potential female entrepreneur can generally be a teacher, nurse, secretary or any woman who is stuck in a job not fulfilling her or not earning enough money. The business woman is just the woman who wants to start her own business. The promotion of women's entrepreneurship depends greatly upon their organisation, education, simulation and motivation by means of a concerted and systematic approach, focused on individuals and groups. This goal can be accomplished gradually by working with people and showing opportunities for women to engage in business activities accompanied by adequate rewards – development and social growth.

Dr. A. Peter (2004) in his book Youth Entrepreneurship Everywhere explains youth innovation as a process of transforming ideas into opportunities and opportunities into successful businesses through the practical application of one-to-one mentoring.The author backs up his assertions by providing an example of a child who is growing up. Through the example of this individual, the author demonstrates that amazing entrepreneurial potentials lie dormant inside every child. Entrepreneurial potentials are hidden inside every youth, which means young people have tremendous business potential. According to the author, everyone is born with a number of entrepreneurial characteristics. This includes qualities such as courage, creativity, initiative, self-confidence, self-motivation, risk-taking, and persistence.

In his book Entrepreneurship Development: Program and Practices, Jasmer Singh Saini (2005) quotes Kilby (1971) who says entrepreneur carries out four tasks: (a) Exchange relationship (b) Management management (d) Technology. All of these areas of business involve entrepreneurs in decision-making under uncertain conditions. Thus, the contractor in accordance with Kilby's proposed framework would include: a) establishing the types and degrees of uncertainty with respect to the operation; b) making the decisions necessary to achieve the goal.

Kilby concludes that entrepreneurial performance is vigorous and effective in those roles that involve exchange relations and practical management. On the other hand, entrepreneurs typically do not use their tasks in the fields of management control and technology with equal intensity. In many instances, shortcomings in these last areas represent operational bottlenecks for the development of indigenous individuals.

S.B. Verma (2005) in Entrepreneurship and Employment: Human Resource Management Strategies, highlights the economic development role of entrepreneurship. Entrepreneurship emerges as an economic activity and works in a sociological and cultural environment. It could be conceived as an individual free choice or as an occupation or profession of a social group. In Indian contexts, entrepreneurs come from communities traditionally dedicated to entrepreneurship or from non-business groups. Furthermore, entrepreneurship can transform the client community in a fundamental, partial or total manner.

The entrepreneur is defined in this context as one who may initiate a new business or company that is a deviation from its traditional family profession or profession. Business can also be considered as a creative activity. The company is an innovative manufacturer that introduces something new to the economy: an untested method of production, a product that consumers are unfamiliar with, a new raw material source, or an unpredictable new market, and similar innovations.

Chris Boulton and Patrick Turner (2006) concentrate on the essential qualities necessary to succeed in an entrepreneurial undertaking in the Asian region in their book Mastering Business in Asia. Due to the fact that there are wide variations between business activities in various countries, including the distinction between

necessity-based and opportunity-based entrepreneurs, the whole subject area is expanded to see which factors influence people to become entrepreneurs and stimulate entrepreneurship.
You are more likely to become a businessman if someone is or has become a business person in your environment. It can be said that if there is a strong entrepreneurial community in which you were raised or even a group of towns in your area, this can also encourage you to think of yourself as an entrepreneur.

The GEM report found that post-secondary or graduate education is likely to be twice a business company as those with less education. GEM report found that one of three statistically significant factors contributing to the high level of enterprise activity was an individual's belief that he had the necessary skills to start and manage a business. On average, people who believed that were five times more likely to engage in entrepreneurship.

This finding can be seen alongside the third of the three major favourite factors, which was the perception of business opportunities, which are three times as much a contractor for those who could see good opportunities as the rest. The level of entrepreneurship was also influenced by how easy or difficult it was to become an entrepreneur, in other words, the level of official and administrative burdens a businessman must face. In addition, the costs faced by the entrepreneur both at startup and during running of the business and the availability of funding for entrepreneurial activities were other factors to be addressed.

Neal Thornberry (2006) describes the corporate philosophy as an entrepreneur in his book Lead. The entrepreneurial half of business leadership requires the daily use of an entrepreneurial hat. Some people call this focus a "mindset," a "philosophy" or perhaps a lens through which a leader tends to consistently look at his business world. The fact that people can learn to wear this hat is more fruitful to see this as an attitude than as an inherent or innate characteristic.
This mentality, simply defined, is a way of thinking and acting that is entrepreneurial in nature and manifests itself in many externally observable conducts. Unlike a

feature, thoughts can be learned by most people if they want to do so. What separates most corporate managers from business leaders is desire. Some people naturally have this desire, but we saw others working in large companies combine education, personal development and well-designed compensation and motivating strategies.

The entrepreneurial attitude included the following ten qualities:

Internal control focus, Ambiguity tolerance, Willingness to recruit people less than yourself, A steady drive to build, build or change things, Passion for a chance, A sense of urgency, perseverance, resilience, optimism and humour.

Entrepreneurship is about identification, development and capture of opportunities. This is the whole and the end. That's what businesspeople do and why they're called. What distinguishes most of us from successful entrepreneurs is that they are prepared to spend time and energy in this process. It is not a magic process; it can be learned. A clear discipline helps turn an idea into a chance. Companies that want to reinvigorate their entrepreneurship must create an environment in which managers are passionate about an idea to the point that they are prepared to do so, even if obstacles exist.

H. Nandan (2007) highlights the ultimate success of any business effort in his book Fundamentals of Entrepreneurship. According to him, success depends on the entrepreneur's personality, that is, his composite characteristics. The entrepreneurial personality refers to the overall characteristics of the entrepreneur, including attitudes, habits, emotional tendencies and behavioural patterns. Indeed, extraordinary personal characteristics are not only employers but also identify others.

Entrepreneurship requires specific characteristics and skills. People seeking to become successful entrepreneurs should be able to achieve their desired goals instead of having the necessary qualities and skills. Studies have shown that all successful entrepreneurs do not and do not necessarily have a certain range of exactly similar attributes. This means that no two entrepreneurs will ever have the same skills, intensity and combination. However, a strong belief that many entrepreneurs often share a number of distinguishing qualities and skills that are not apparent to average people.

The principal characteristics of the company are: a) an investigative mind studying the

business environment and looking for opportunities to enter the market; and b) continuous alertness adapting business strategies to achieve their targets. In particular, entrepreneurs have a foresight of market trends and the ability to evaluate consumer needs and are looking for change. Enterprises understand that the need for innovation is becoming all the more important in the fight to gain ground or to survive in a competitive free market economy. In short, successful entrepreneurs are characterised by a creative frame of mind, the desire to break away from the old traditional practises, the desire to think profoundly about various untried ideas aimed at creating new production means, new devices, products or services, the conceptualisation of new ideas and independent energetic spirit to translate their ideas into reality. They decide very clearly what they want, decide what to do and prioritise what steps they have to take. They can assemble the necessary resources, risk uncertainties and confront challenges. In dealing with everyday operations, owners and entrepreneurs exercise persevering care, clear thought and good judgement. They have an interest and knowledge in practical business matters and the ability to identify and resolve problems. They are capable of dealing with difficult situations and all kinds of people. Most entrepreneurs have good health, dynamic leadership, emotional stability and organisational skills. In particular, the remarkable characteristic features commonly owned by the vast majority of entrepreneurs include sharp intelligence, strong perception of practical business matters, optimism, determination, high level of energy, persuasion, uniformity and hard labour.

In its referential book, Developing New Entrepreneurs, the Entrepreneurship Development Institute of India (EDI-I) draws a detailed picture of the ideal contractor and maintains some standards as standards for identifying future successful entrepreneurs. In the successful entrepreneurs that the EDI-I selection process aims to determine the following are among the most frequently mentioned personal variables: the need to achieve moderate and calculated risk-taking, initiative and independence, problems solving, future-orientation hopefully, time limitation, a tendency to analyse the environment and a desire to influence.

An international project of research aimed at identifying and validating the enterprise

features and competences in which EDI-I participated identified the personal enterprise characteristics of successful and average entrepreneurs in India, Malawi and Ecuador.

Important entrepreneurial skills that became relevant to entrepreneurial success in all three countries include:

(a) Cluster: initiative; seeing and acting on opportunities; persistence; search for information; concern for high-quality work; commitment to contract work; orientation towards efficiency.

b) Cluster thinking and problem solving: systematic planning; problem solving.

c) Cluster of personal maturity: self-confidence.

d) Cluster of influence: persuasion; use of strategies of influence.

e) Cluster management and control: assertiveness.

The research findings also suggest that most of these PECs are cross-cultural, irrespective of their personal background, social status, values, culture, and the degree of society's economic growth. This research shows strong indications that the success of a small-scale entrepreneur depends on these PECs, which include a cluster of competences related to achievement motivation, the concept used by EDI-I in the choice adopted and extended to other parts of the country.

Entrepreneurs should have certain characteristics according to a book on entrepreneurship by Robert D. Hisrich, Michael P. Peters, and Dean A. Shepherd (2007). In his opinion, the entrepreneur should have a firm commitment, a burning desire, and a wide range of skills in order to start and maintain a business. If the entrepreneur determines that the management team has the necessary complementary skills, he or she must be confident that these skill sets can help the venture succeed. The successful entrepreneur possesses certain characteristics: An entrepreneur is required to build a team and keep it motivated so that everyone may grow and advance in their career. As a general rule, the more confidence an entrepreneur has in their abilities, the better their chances of success. Also, an entrepreneur must have a commitment for at least five to seven years, and the project must last long enough for this commitment to take effect. d) high energy level – the entrepreneur's success requires the ability to work long hours on a sustainable basis. e) A persistent problem

solver – an intensive desire to complete or resolve a task needs to be a key ingredient in creativity. f) Initiative – it needs to be able to set challenging but realistic objectives. g) Moderate risk-taking and acquire faults. These personal characteristics make an entrepreneur a success. However, no contractor has total strength. In such cases, he acquires and/or associates, strengthening his company.

In their book Entrepreneurial Climate: An Annotated Bibliography, Lakshman Prasad and Subhashish Das (2008) examine the climate for innovation both in terms of psychology and society, taking the role of entrepreneurs as innovators into consideration. The integrated behavioural framework contends that various character traits are brought together to form an integrated framework in which those traits operate in a non-restrictive setting.

Several studies conducted by the authors have highlighted numerous distinct characteristics of successful entrepreneurs. These qualities make a good leader and a great vision holder.

In his book Small Scale Industries and Entrepreneurship, Dr. Vasanth Desai (2008) points out that the characteristics of a successful entrepreneur are the result of his achievement motivation. A successful entrepreneur is a person who began the business where none had previously been. He is basically an entrepreneur who can recognise the potential profitable opportunity and who initiates the production of marketable products through the combination of various technologies and the organisation of people, finance and material resources tools to ultimately turn the idea into physical reality. In summary, entrepreneurs are the people who start, build, maintain and expand a new company. He is essentially an innovator, creator and implementer.

Research studies indicate that there are more than fifty personality traits, all of which are characteristics, attributes and attitudes of a successful entrepreneur. Although all the characteristics cannot be found in a single contractor, yet the presence of more than one person makes him/her an entrepreneur and only then can he/she succeed in achieving the objectives of entrepreneurship. A successful entrepreneur has certain characteristics or qualities as follows: Need for accomplishment, risk taking, independence requirement, sense of effectiveness, social awareness, extension,

optimistic, open-minded, non-fatalistic, low affiliation, pragmatic, aggressionist, commitments and convictions, capacity for analysis, initiative, hopefulness, efficiency, technical expertise, good judgement, intelligence, leadership, self-confidence, energy, creativity, quality,

An employer with a high degree of administrative ability, mental ability, ability to interact, communication and technical knowledge is much more likely to succeed than his counterpart, whose basic qualities are low. Glamorous men with high-class university degrees hesitate to become entrepreneurs because one thing they cannot teach is to cope with human emotions.

According to Poornima M Charantimath (2008), entrepreneurs must possess certain characteristics in adequate measure in order to be successful. They are all of the qualities related to the creative process and problem solving, as well as some related to leadership, achievement motivation, and decision-making ability. According to the author, the process of idea development is typically a creative one, in which people use their imaginations to develop ideas and successfully nurture and nurture them. An idea develops through five distinct stages, starting with its germination and progressing through the other stages of preparation, incubation, illumination, and verification.

In the book Essentials of Entrepreneurship and Small Business Management, authors Thomas W. Zimmerer and Norman M. Scarborough define an entrepreneur as someone who starts a new business in the face of risk and uncertainty in order to make a profit and increase in size by discovering new opportunities and getting necessary resources.

The authors assert that none of the identified traits identified in previous research studies serve as an essential component for entrepreneurship success. However, their presentation briefly outlines the traits of an entrepreneur who achieves success. These six items can be combined in a variety of ways to create a wide range of characteristics: an interest in personal responsibility, a desire for moderate risk,

confidence in their ability to succeed, a desire for immediate feedback, high levels of energy, and future orientation. In addition to the characteristics often exhibited by entrepreneurs, the authors have also added other factors, including a high degree of commitment, tolerance of ambiguity, flexibility, and tenacity.

At the end of their study, the authors provide a general overview of the entrepreneurial personality and summarise by saying that entrepreneurs are not one-dimensional people; no one set of characteristics can accurately identify whether or not someone will become an entrepreneur and whether or not they will succeed. All people, regardless of age, race, gender, colour, nationality, or any other characteristics, can take part in the process of starting and building a company as an innovative entrepreneur. Anyone can practise creative entrepreneurship; it is a just a discipline to master. Many people can learn this skill, not everyone has it innately.

Dr Bhawna Bhatnagar and Ankur Budhiraja (2009) quote the modern contractor as Vasant Desai. According to Vasant Desai, "the entrepreneur brings the overall change to the maximum social benefit through innovation. Human values continue to be accurate and inspire him to serve society. He believes strongly in social improvement and fulfils his responsibility with conviction. In the process, it speeds up personal, economic and human development. The contractor is a visionary and integrated man with excellent leadership skills. With the desire to excellence, research and development are the priority of the entrepreneur. He always works for society's well-being. More importantly, business activities encompass all fields/sectors and foster a company spirit for human welfare." Based on the above definition, we can conclude that a modern businessman seeks to keep up to date in order to evaluate new situations and analyse his environment to explore new prospects, takes risks and then arrange the necessary resources to start his business.

When we go through India's business history, people who emerged as great, successful contractors, such as Tata, Birla, Modi, Dalmia, Kirloskar, Ramasamy, TVS Iyengar and Ananth Ramakrishnan, come across the names. When we study them, we find several other characteristics, besides 12 characteristics of the entrepreneurs listed

above. These are: hard work, time/speed, self-confidence, motivator, initiative, discipline: power, confidence, optimism, strategism, knowledge technology, self-assurance, passion, flexibility, self-assurance, independence, creativity, human relationships, participation, pride, adaptability, values, foresight, conviction, dynamism, courage, dreaming and determination

Business magnate Bhola Nath Dutta (2009) explores the influences on innovation, including education, legality, infrastructure, finance, procedures, IT and communication, rapid changes, size of the firm, R & D and technology, stakeholders, and globalisation in his book, Entrepreneurship Management: Texts & Cases. In a lengthy passage, the author illustrates various characteristics of a successful entrepreneur. He claims that there are multiple critical elements to success, including skills, a creative mind, including all the factors of production, decision making, being creative, being dynamic, being in charge, being an entrepreneur, having great wealth creation abilities, being self-confident, and having an adventurous mindset.

S.S. Khanka (2009) in his book Entrepreneurship Development explains that successful entrepreneurs have a strong work ethic, a drive for success, an optimistic attitude, a self-motivated nature, self-reliance, an ability to see things ahead of time, and the ability to innovate. Success of a small business is heavily dependent on the success of the entrepreneur. An entrepreneur's typical age, at the time of starting his or her business, is in the thirties. Typically, most technical entrepreneurs start their businesses to satisfy a previous career need. While stressing the relationship between success and a well-developed knowledge base and broad-based experience in related fields, Holt emphasises the importance of having a substantial knowledge base and operational experience. a strong foundation for building a team or support network.

J. Gayathri (2009) quotes as examples of successful entrepreneurs Tata, Birla, Modi, Dalmia, Kirloskar and others, starting their business enterprises with a small size and good fortune. The success or otherwise of a small company is largely due to the success or otherwise of the contractor itself. What's successful for them? Whether in their personal characteristics they have anything in common? The scanning of their personal features shows that certain qualities of entrepreneurs are usually found

prominent in them. The main features identified are hard work, high performance, highly optimistic, independent, foresight, good organisation and an innovative mind.

In his article Development of women entrepreneurs in India, Pankaj Kumar and P.N. Sharma (2009) paints the picture of women aspiring to become entrepreneurs with particular reference to Bihar. The development of entrepreneurship in a society depends largely on the economic, social, religious, cultural and psychological factors that prevail in society. In recent years, the emergence of entrepreneurship for women has been an important development in advanced countries and even in developing countries. Today we find women in various kinds of industries, both traditional and non-traditional. An interesting thing to explore and analyse is what motivates women to aspire to a career. Motivation is a crucial factor leading to entrepreneurship, according to McClelland and Winter. The challenge and adventure to do something new, business-like and self-employed are some of the attractive leverages for women. These factors demonstrate that the entrepreneur's commitment to the business profession is relatively deeper. The driving force behind responsibility due to death or incapacitation of close ones is the tax benefit for oneself and relations. Special qualifications for management, the identification of demand for the market, external motivation, the needy and the destitute to set up a supporting unit, already family-owned business, are some factors that encourage entrepreneurs.

R. Kumaresan (2009) gives a detailed list of qualities required to be successfully run by an entrepreneur in his book Entrepreneur versus Entrepreneurship Development. Entrepreneurs are people who have, apart from their economic status, their dignity, their respect for themselves, values, feelings, aspirations and dreams. Analyzing India's business history and people who came up as successful entrepreneurs like Tata, Birla, Kirloskar, Ambani and TVS Iyengar we can find that entrepreneurs have common qualities: risk-taking capacity, work capacity, higher intelligence and broad knowledge, self motivation, vision and foresight, willingness to change consumption, ima.

Dr B.S. Patil (2009) details the role and responsibilities of social entrepreneurs in his book on social entrepreneurship. Any definition of social entrepreneurship should reflect the need to replace business entrepreneurs with the market discipline. The definition combines a focus on discipline and responsibilities with the concepts of value creation adopted by Say, Schumpeter's innovation and change representatives, Drucker's pursuit of opportunity and Stevenson's resources. In short, this definition is as follows:

1, The role of the social entrepreneur in the social sector is played by social entrepreneurs.

2. Recognize and constantly pursue new ways to serve the task

3. Engaging in an ongoing innovation, adaptation and learning process

4. Action courageously without being limited by currently available resources

5. Increased accountability to served constituencies and the results

Social entrepreneurship describes a number of exceptional behaviours. Those who have the capacity and temper for that kind of work should be encouraged and rewarded for these behaviours. Social contractors are one special race of leaders and should be recognised as such. We need them to help us find new ways of improving society.

In an article in MBA Review, Mary Kay Copeland (2010) considered the characteristics of a successful entrepreneur. According to the author, the research that finds entrepreneurial success factors such as self-confidence, risk-taking capacity, the capacity to identify power, the capacity to tolerate ambiguity and uncertainty, the capacity to be creative, resourcefulness, the aptitude for personal autonomy and control, and an understanding of opportunism has discovered characteristics and behaviours such as tenacity, adaptability, optimism, action orientation, and persuasiveness.

They believe translating these characteristics into actions increases the efficacy of a business owner. When you add these additional elements to your personality, your attributes will include the following: total commitment, determination, drive to achieve, the orientation to goals and opportunities, taking initiative, personal

responsibility, veridical awareness, a sense of humour, seeking and using feedback, internal locus of control, tolerance of ambiguity, stress and uncertainty, calculative risk taking, and risk sharing.

Mahima Rai (2010) in her article, Horning Entrepreneural Skills: Role of B Schools, in MBA Review, identifies the traits of an entrepreneur as having a strong self-confidence and optimism, high energy, willingness to take calculated risks, a strong urge to succeed, and creativity. The main thing to know about all entrepreneurial ventures is that their leaders are able to identify opportunities and then use their companies to help bring those opportunities to fruition.

Sujatha Mukherjee (2010) in her article, Profiling the Urban Women Micro-entrepreneurs in India, in the Journal of Entrepreneurship Development, illustrates a business owner as a) an adventurer who takes risks, employs capital and labour, and formulates a plan to carry out a project. b) A risk-taker who uses capital and labour to form a project proposal. The author believes that combining personal characteristics and financial resources and assets in an environment allow people to start businesses.

BIBLIOGRAPHY

BOOKS

1. James J. Berna (1960), Industrial Entrepreneurship in Madras State, Asia Publishing House, Bombay.
2. James T. McCrory (1956), A Study on a Small Industry in a North Indian Village, Ministry of Commerce & Industry, Government of India.
3. Srivastava S.B. (1975), A Practical Guide to Industrial Entrepreneurs, Sultan Chand & Sons, New Delhi.
4. Tandon, B.C. (1975), Environment and Entrepreneur, Chugh Publications, Allahabad.
5. Akhouri, M.M.P. and Sharma S.V.S. (1978), Small Entrepreneurship Development in North Eastern India, SIET, Hyderabad.

6. Sharma S.V.S (1979), Developing Entrepreneurship: Issues and Problems, Life and Light Printers, New Delhi.
7. Mark Casson (1982), the Entrepreneur: An Economic Theory, Martin Robertson & Co. Ltd., Oxford.
8. Meredith Geoffrey G (1982), Nelson Robert E, and Neck Philip A, the Practice of Entrepreneurship, Sultan Chand & Sons, New Delhi.
9. Neck Philip A (1983), Meredith Geoffrey G, and Nelson Robert E, the Practice of Entrepreneurship, Sultan Chand & Sons, New Delhi.
10. Nagendra, Dr. P. Singh (1985), Emerging Trends in ED: Theories and practices, International Foundation for Development Management, New Delhi.
11. Patvardhan V.S. (1990), Growth of Indigenous Entrepreneurship, Bombay Popular Prakashan Pvt Ltd., Bombay.
12. Saravanavel P. (1991), Entrepreneurship Development: Principles, Policies and Programmes, Ess Pee Kay Publishing House, Madras.
13. Joseph Prokopenko and Igor Pavlin (1992), Entrepreneurship Development in Public Enterprises, Oxford & IBH Publishing Co. Pvt Ltd., New Delhi.
14. Srivastava S.B. (1992), A Practical Guide to Industrial Entrepreneurs, Sultan Chand & Sons, New Delhi.
15. Kalpana Vaish (1993), Entrepreneurial Role of Development Banks in Backward Areas, Concept Publishing Company, New Delhi.
16. Carol Upadhya and Mario Rutten (1997), Small Business Entrepreneurs in Asia and Europe, Towards a Comparative Perspective, Sage Publication, New Delhi.
17. Dina Dhar S. (1998), Ratna Ghosh, and Meenakshi Gupta, Women and Entrepreneurship in India, in the book edited by Rabindra N. Kanungo, Sage Publications, New Delhi.
18. Gupta, Dr. C.B. and Dr. Srinivasan, N.P. (1999), Entrepreneurship Development: Text and Cases, Sultan Chand & Sons, N. Delhi.
19. Basotia G.R. and Sharma K.K. (1999), Handbook of Entrepreneurship Development: An Entrepreneur's Guide to Planning, Starting, Developing and Managing a New Enterprise, Mangal Deep Publications, Jaipur.

20. Dhameja S.K. and Rathore B.S. (2000), Entrepreneurship in the 21st Century, Rawat Publications, Jaipur.
21. David H. Holt (2000), Entrepreneurship: New Venture Creation, Prentice – Hall of India Private Ltd., New Delhi.
22. Gupta, Dr. S.L. and Sathish Taneja (2001), Entrepreneur Development: New Venture Creation, Galgotia Publishing Company, New Delhi.
23. Badhai B. (2001), Entrepreneurship for Engineers, Dhanpat Rai and Co. Pvt Ltd., New Delhi.
24. Dilip Gangopadhyay (2001), Enterprise and Entrepreneurs, Basabi Gangopadhyay, Howrah.
25. Rathore B.S. and Saini J.S. (2001), Entrepreneurship, Wheeler Publishing, New Delhi.
26. Batra, G.S. and Bhatia, B.S. (2002), Entrepreneurship and Small Business Management, Deep & Deep Publications Pvt. Ltd., New Delhi.
27. Neeta Baporikar (2002), Entrepreneurship and Small Industry, Himalaya Publishing House, Mumbai.
28. Dhameja S.K. (2002), Women Entrepreneurs: Opportunities, Performance, Problems, Deep & Deep Publications Pvt Ltd., New Delhi.
29. Banumathy, Dr.K., Dr. Prabhu N.R.V. and Nagendran R. (2002), Entrepreneurship Management and Development of Small Business, Centre for Research and Action for Integrated Development, Chennai.
30. Naunihal Singh (2003), Effective Entrepreneurial Management, Anmol Publications Pvt Ltd., New Delhi.
31. Marc J. Dollinger (2003), Entrepreneurship: Strategies and Resources, Pearson Education, New Delhi.
32. Renu Arora and Dr. Sood S.K. (2004), Entrepreneurial Development, Kalyani Publishers, New Delhi.
33. Sathish Khanna (2004), the Rising Indiapreneur: Instilling Entrepreneurial Skills, Macmillan India Ltd., Delhi.
34. Setty R. (2004), Clinical Approach to Promotion of Entrepreneurship among Women, Anmol Publications Pvt Ltd., N. Delhi.

35. Peter, Dr. A. (2004), Youth Entrepreneurship Everywhere, Youth Entrepreneurship Development Organization, Chennai.
36. Jasmer Singh Saini (2005), Entrepreneurship Development: Programmes and Practices, Deep & Deep Publications Pvt Ltd., N. Delhi.
37. Verma S.B. (2005), Entrepreneurship and Employment: Strategies for Human Resource Management, Deep & Deep Publication Pvt Ltd., New Delhi.
38. Chris Boulton and Patrick Turner (2006), Mastering Business in Asia, Entrepreneurship, Willey India Pvt Ltd., New Delhi.
39. Neal Thornberry (2006), Lead like an Entrepreneur, Tata McGraw – Hill Publishing Company Ltd., New Delhi.
40. Nandan H. (2007), Fundamentals of Entrepreneurship, Prentice – Hall of India Private Ltd., New Delhi.
41. Dean A. Shepherd, Robert D. Hisrich, and Michael P. Peters (2007), Entrepreneurship, Tata McGraw Hill Education Private Limited, New Delhi.
42. Lakshman Prasad and Subhasish Das (2008), Entrepreneurial Climate: AnAssorted Coverage, Excel Books, New Delhi, 2008.
43. Dr. Vasanth Desai (2008), Small Scale Industries and Entrepreneurship, Himalaya Publishing House, Mumbai.
44. Poornima M. Charantimath (2008), Entrepreneurship Development and Small Business Enterprises, Pearson Publication, New Delhi.
45. Ankur Budhiraja and Dr. Bhawna Bhatnagar (2009), Entrepreneurship and Small Business Management, Vayu Education of India, New Delhi.
46. Bholanath Dutta (2009), Entrepreneurship Management: Text and Cases, Excel Books, New Delhi.
47. Khanka S.S. (2009), Entrepreneurship Development, S. Chand & Co. Ltd., NewDelhi.
48. Gayathri J. (2009), Entrepreneurship Development, Mayura Books, Chennai.
49. Sharma P.N. and Pankaj Kumar (2009), Development of Women Entrepreneurs in India: With special reference to Bihar, in the book edited by Dr. Anil Kumar Thakur and Dr. Rahman R., Women Entrepreneurship, Deep & Deep Publications Pvt Ltd., New Delhi.
50. Kumaresan R. (2009), Entrepreneur versus Entrepreneurship

Development,MSK Publications, Salem.

51. Patil, Dr. B.S. (2009), Social Entrepreneurship, ALP Books, New Delhi.

52. Mary Kay Copeland (2010), Strategies for developing Entrepreneurship: Nature or Nurture, MBA Review - Special edition on Entrepreneurial Skills, Hyderabad.

53. Mahima Rai (2010), Horning Entrepreneurial Skills: Role of B Schools, MBA Review - Special edition on Entrepreneurial Skills, Hyderabad.

54. Sujatha Mukherjee (2010), Profiling the Urban Women Micro - entrepreneurs in India, The IUP Journal of Entrepreneurship Development, Volume II, No.3.

CHAPTER 4
RESEARCH METHODOLOGY

4.1 Methodology

The present study is descriptive in nature. The researcher made an attempt to find out the demographical composition of the samples and to analyze their perceptions on the ways and means of innovations**.** The case study method reveals their attributes towards their perception on individualistic patterns in their uniqueness on innovative ventures.

4.2 Objectives:

The objectives of my research shall be as under:

- To trace the pioneer innovators in agri entrepreneurship
- To study traits of pioneer innovators in agri entrepreneurship
- To examine the process of developing agri entrepreneurship
- To examine the factors responsible for development of agri entrepreneurship in India.
- To identify the scope of furthering agri entrepreneurship

4.3 Research Design & Content Analysis:

The study is proposed to be an exploratory study. It shall explore pioneering innovators in Agri entrepreneurship in India.

We have conducted an empirical study to find out the farmers background. The process how they become an entrepreneur & How they did it. Also this study includes the what the farmers as an entrepreneur contributing to the society.

The study involves different analyses, in which content such as speech, text, interviews, images, etc. are classified. It analyses personalities and other innovator variables. Weightages shall be administered accordingly. Which data are they analysed? What is the population they are drawn from? What is the context for analysing the data? What are the

analytical limits?

According to the population census list of India, the innovative population of each State was measurable. In this respect, it can be said that social engineering problems and population growth have provided an impetus for the growth of the innovative ship. Therefore, the scope of this study was restricted to these individuals alone. It consists of a fixed number of successful innovators that were randomly selected. The method used here is stratified random sampling with the list of innovators for sampling and the sample size based on a pilot survey (taking 10 innovators). Indeed, innovators of Indian origin have gained a lot of importance, particularly because of their large population in absorption of labour force. By focusing on only successful innovators, the research samples were further micro-level.

The selection of sample units for the study completely ignored those with less than 5 years of experience and not currently in business. It was also ensured that different types of businesses were represented.

The data for the study were mostly collected from primary sources. For the administration of innovators, an elaborate interview schedule was prepared. In order to discuss the issues, an innovator shall be chosen for each company irrespective of the fact that some are partnership companies and certain are private limited companies.

As the number depicts that out of total **118 pioneering innovators in agriculture related business from southern region** of Rajasthan out of which **20 case studies are taken in this research.**

Apart from that, secondary data were also collected from various departments of government such as Commerce and Industries, District Industries Centres, Economics and Statistics, State Industrial Development Corporation, etc. The data collected were tabulated and properly analysed with their level of performance.

Data Collection:

- The information about the farmers who are pioneer innovators in agriculture was collected from the officials of the agriculture department and horticulture department of Government of Rajasthan.
- From the Krishi Vigyan Kendra located in Southern Rajasthan and
- From the agriculture universities
- The representatives of agriculture industries.

Sample Size: 118 farmers were interviewed.

Population Size: More than 1000 agri entrepreneurs

Case Study Method: 20 Case Studies were written and data was collected using a schedule prepared to ask the questions from the entrepreneurs.

Data Analysis Tools & Techniques: Graphical tools are used to analyse the data collected.Content Analysis technique is used.

4.4 Research questions

1. The development of innovation in any country is very slow and far below the Indian average.

2. The state's industrial growth has been on a low path of growth, mostly due to more small-scale industrial failures.

3. Lack of product demand, shortages of working capital and, above all, infrastructure bottlenecks are the key factors for any state's innovative backwardness.

The problem of sickness in small-scale firms was also complemented by improper project planning, a lack of industrial concept, an absence of innovative class that would adopt competitive and changing market forces and corrupt bureaucracy.

4.5 Scope and limitations of the study

The study carried out has the following scope and limits:

(i) Only Southern Rajasthan was included in the scope of the present study.

(ii) Field surveys have been carried out.

(iii) Based on data collected from selected innovators in the field of research, the results and conclusions of this study are not generalizable for the whole nation.

(iv) The methodology used and the instruments used in data analysis involve certain merits as well as their own demerits, and also take into account the database's limitations.

(v) Capital data, borrowings and innovator time were collected directly from the selected innovators. There were no correct records kept at the individual or company level. The data provided by the sample units may therefore not be accurate. The researchers were, however, very careful to ensure precision by using cross-checking methods.

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CHAPTER 5
DATA ANALYSIS & CASES STUDIES

Survey has been done for case study of **Pioneering Innovators in Southern Rajasthan** in Agri Entrepreneurship. Pioneer Innovators in Agri Entrepreneurship from all the districts from both Kota division and Udaipur division have been identified.

5.1 Case Study – 1 Inspiring Pioneering Innovators of Southern Rajasthan

"EXOTIC VEGETABLES CULTIVATION IN KOTA DISTRICT OF SOUTHERN RAJASTHAN"

Name of the Farmer: Shri Jai Prakash Gehlot
Marital Status & Gender: Married & Male
Age: 43 years
Village: Arjun Pura
Tehsil: Lad Pura
District Kota
Mobile No.: +919950613508
Education: 12th (Senior Secondary)

Mr. Jai Prakash Gehlot is a highly innovative, enthusiastic farmer with marginal land holdings (0.506 ha) in the village of Arjun Pura in southern Kota. He has successfully introduced exotic vegetable cultivation in the district of Kota. Earlier, Goitre and Rickets had been severely affected by diseases that put him on bed at the teenage age of his life. After two years he recovered from the diseases and then started farming with his father. During this initial period, only rice and wheat were grown with some vegetables such as cold cuts, cauliflower, tomatoes, potatoes and bananas. Although this farming practise

provided good returns, it was only necessary to meet the costs of running his family. He passed through a very wretched life. He continued to do this until 2005-06 and continued to live, by taking loans from some of his fellow villagers. Shri Gehlot is a keen and innovative observer by nature. After seeing these things on visits to KVK, Agriculture University, Kota or any other research and development organisations, he has always tried to produce new crops or practises in field crops. He usually cultivated vegetables like coliflower, but he didn't get a good yield. When he got a packet of KVK, Agriculture University, Kota broccoli seeds during a training programme. In his little piece of land which he received from his father he tried to cultivate this crop. Shri Gehlot then continued to grow broccoli until 2009-2010 as he received excellent crop returns. In the 2010-11 training programme organised by KVK, University of Agriculture, Kota, he learned a lot and gained detailed information on the production of exotic vegetables. After the end of the training programme, he wanted technical guidance on exotic vegetable cultivation on his little field because he decided strongly to start it after having known its advantages. He therefore approached us for more technical advice and seed material availability. With an eye to his keen interest, KVK Scientists have arranged the seed materials of various exotic plants such as broccoli, peanuts, red cold, china, tomatoes, etc. KVK scientists guided him and helped him from seed to harvest in every aspect. Scientists from KVK, University of Agriculture visited his field regularly during the cultivation period. During 2010-11 he received more net returns than in previous years and therefore encouraged much with the profitability potentials of exotic vegetables growing. During 2011-12, he began growing these exotic vegetables throughout his country (0.506 ha).

He bought cereals, pulses, oils and other household items. He is now not only the renowned farmer in the area but also the expert for growing exotic vegetables. Scientists at KVK, University of Agriculture, Kota provided him with some links to the availability of exotic vegetable market. Therefore, in various multinational retailers and hotels like Wall Mart Bharti, Big Bazaar etc, he sold these vegetables. Economics: The cost of cultivation of these crops in the 0.506 ha area of exotic vegetables was shown to be Rs 26400.00, giving the gross and net returns Rs 3,36,500.00 and Rs 3,10,100.00 for 2011-12 respectively. The

benefit: the cost ratio based on profit and cultivation costs was 1: 11.75, which is without a doubt a remarkable success for a marginal farmer, Shri Jai Prakash Gehlot. With many more economic returns compared with other crops prevailing in his area, he has begun continually to grow exotic vegetables on his land since 2011-12. (0.506 ha). Now he earns a lot from cultivating these vegetables and therefore raised his socio-economic status of his family.

He has encouraged a number of farmers to cultivate such vegetables for higher economic returns. Now he's an inspiring farmer, not only to local farmers but also to Govt. and non-Govt staff who come into contact with him. Every farmer and associated farmer organisation in Kota district and neighbouring areas says that Shri Jai Prakash Gehlot technology is used for exotic vegetables. Now, the famous innovative farmer of Kota and other neighbouring districts is Shri Jai Prakash Gehlot. Approximately 300 farmers from far away places, 250 Bank of India trainees, governmental and private agencies visit his field regularly. Officials at the University of Agriculture Kota recently also visited his area and appreciated exotic vegetable growing practises in such a remote village. During a visit to its field, the team also quoted that it looked like exotic vegetable farming in the USA.

5.2 Case Study – 2 Inspiring Pioneering Innovators of Southern Rajasthan

"FARMER DEVELOPED A NEW MANGO VARIETY THROUGH GRAFTING WHICH IS AVAILABLE IN ALL SEASONS."

Mr. Kishan Suman
Girdhar Pura (Village), Lad Pura Tehsil,
Kota District, Rajasthan, India.
Mob: +91 9829142509, 7014263562

Innovative farmer based in southern Rajasthan Kota developed a new mango variety, which is available every season. There would hardly be anyone who doesn't like

mangoes when it comes to fruits. That's the storey of a farmer based in Rajasthan – Kishan Suman, 52, who found a new variety of mangoes – Sadabahar available throughout the season. Well, this is good news for all those fruit lovers who even during off-season want mangoes.

After finishing his education, Kishan Suman took his father's footstep in 1995 and began farming in his ancient farm. He initially went on cereal and grain in agriculture, but for him it was loss-making cultivations due to merchant price exploitation and impulsive weather. Kishan Suman therefore moved to Jasmine cultivation. In addition to this, Kishan Suman was keen to learn something different and learned about the rose-plant greasing method from which he cultivated various coloured roses of the same plant. Good experiments with the rose plant only boosted Kishan Suman's confidence and the next plant was mango on which graft was done.

The reason behind Kishan Suman was that mango is usually available only in 2-3 months, and he wanted it to be available all season long so that mango lovers can taste it whenever they want it.

In 2000, Kishan Suman observed a mango tree with good trends of growth and dark green leaves in his olive grove. With a consistent 15-year-old mango-grafting effort, he finally created a new dwarf mango and named it Sadabahar. Due to its dwarf nature, the Sadabahar mango variety is ideal for the production of high density and ultra-high density.

"I have made every effort and determination to develop this variety of mangos – Sadabahar. Although the plant begins to bear fruit in the second year, it is advisable that the plant grow properly for four years so that its strength can be proper. Sadabahar is also a disease resistant variety and does not affect the weather. Fruits can be harvested after four years but until then let the plant grow well." Kishan Suman said,
Some of the characteristics of Sadabahar Mango are:

• Higher yield (5-6 t/ha) • Year-round fruit • deeper orange mango peel with a sweeter taste • Pulp with less fibre

Kishan Suman currently has in its vergers 22 mother plants and 300 grafted mango plants. With the help of the National Innovation Foundation, Mr Kishan sells Sadabahar Variety grafts and plants. Many farmers from Chhattisgarh, Delhi and Haryana visited his farm to purchase his developed grape and appreciated him after seeing the results. Even Sadabahar saplings are also planted in the Rashtrapati Bhavan Mughal Gardens.

He was honours in the 9th National Grassroots Innovation and Outstanding Traditional Knowledge Award for all his efforts and innovation in developing a mango variety that can bear fruit throughout the year.

Although Suman believes that prevention is better than cure, and that is why he prepares natural pesticides from neem fruit, crown flora or cow-urine, it offers excellent plant protection from any sort of disease and pest, Sadabahar is still resistant to all major diseases.

Kishan Suman plans to experiment with jack fruit in the future, since it takes longer to produce fruit, Kishan Suman plans to reduce this time. "Horticulture is a very interesting field, and farms can experiment with their creativity on various plants and make good profits." Mr Suman says.

5.3 Case Study – 3 Inspiring Pioneering Innovators of Southern Rajasthan

"MIXED FARMING SYSTEM OF CULTIVATION (AGRI+HORTI+PASTURE)"

Mr. Narender Kumar Malaw
Dhanawad (Village), Digod Tehsil,
Kota District, Rajasthan, India.

Mob: +91 9649005599, 9414983796

Mr. Narender Kumar Malaw (46 years) comes from Dhanawad, Digod Tehsil, County of Kuta, Rajasthan, India. It has a surface area of 7 acres and a mixed farming system (Agri+Horti+Pasture). In the monsoon season, paddy, maize and horticultural crops were cultivated, including vegetables, paddy, guavava, wheat and a large part of the agricultural area was allocated for household vegetables. In his infancy, he began to develop a passion for beekeeping. His interest grew when his family members saw honey from various parts of Kota district collecting. After graduation, his passion for beekeeping and agriculture became his profession.

In 2006, he received training and guidance from Krishi Vigyan Kendra, Kota, to begin beekeeping professionally. He was given a bee box to maintain during the training programme. He became more interested in beekeeping when he met Dr Mahender Poonia, a resource person in the programme. Subsequently, Krishi Vigyan Kendra (KVK), Kota, was consulted in 2008 and provided further information on scientific beekeeping and useful management practises. He participated for a period of time in various training programmes on scientific beekeeping. With this technical knowledge and expertise, he acquired additional income and farming and associated activities. In 2014-15, Mr. Narender Kumar Malaw has begun participating in both a participant and a resource person in the bee keeping vocational training programme, organised at KVK, Kota. He acquired the ability to multiply bee colonies during the training programme. His technique was successful and he24 can now multiply a single bee colony in 5-6 bee colonies during the season and supply it to beekeepers. It helps 100 beekeepers in South Rajasthan as well. Every year almost 2,000 farmers and students visit his farm to learn about beekeeping techniques. It receives 50 kg of honey per year from this subsidiary company and sells it at Rs 600/kg and 250 bee boxes together with bee colonies at Rs 4 000/box. This company therefore earns him an annual income greater than Rs. 7,00,000/-.

In 2014-15 members of his company received the "Best Farm Mann" Award for a

successful integration with his farm enterprises at the district level, also by Rajasthan, Department of Horticulture, and they also gave him 25 bee boxes in the Horticultural Scheme.

Mr Narender Kumar Malaw started motivating the beekeeping of his fellow farmers. He is not only a successful bee farmer, but a resource person in the area of beekeeping, whose services are used by different agencies such as the KVK-Baran, KVK-Kota, All India Radio (AIR)-Kota, All India Radio-Kota... His plans for the future include the expansion of his beekeeping business with more bee boxes. He also wants to train young people and encourage them to work in agriculture and the allies.

5.4 Case Study – 4 Inspiring Pioneering Innovators of Southern Rajasthan

"APPLE BER -THAI APPLE CULTIVATED FIRST TIME BY INNOVATIVE FARMER BRIJ RAJ NAGAR IN JHALAWAR DISTRICT OF SOUTHERN RAJASTHAN"

Name-Brajraj Nagar
Village-Gurjeni, Post-Jarga, Tehsil-Khanpur
District-Jhalawar (Rajasthan), Pin-code 326038
Land - 1 hectare
Qualification - 9th pass
Mobile No- 9799200706,9983395595

Mr Brajraj Nagar, the progressive innovative farmer in the village of Khanpur in the district of Jhalawar, started cultivating about 350 apple plum saplings of Thailand two years ago. The crop is grown around 3 bighas as a mixed crop, with the farmer's garlic, chilli and pumpkin.
The farmer said there is good demand on the market because of the aroma and taste of this apple ber! The Jhawar Department of Horticulture confirms that this is the first Southern Rajasthan garden developed in Gurjeni village of Khanpur by the innovative farmer Brij

Raj Nagar. The farmer earns more profit in less time by doing this.

Brajraj Nagar has only one hectare of land, from which the farmer in horticulture, the farmer and the thai Apple Ber plantation are planted around three bighas.

This year a small Shree Dharnidhar Nursery Unit was also started by farmer Brajraj Nagar, which prepares and sells almost all vegetables seedlings from chilli tomatoes, cod etc.

Brajraj Nagar is tenth, but the farmer has carried out numerous innovative agricultural activities and devoted his attention to traditional agriculture and to horticultural innovation. In addition, the farmer inspired other village farmers to grow vegetables, and last year, 5,000 fruit trees were planted in the village. The farmer belongs to a poor family, who gained more from horticulture than cereals in the same area.

5.5 Case Study – 5 Inspiring Pioneering Innovators of Southern Rajasthan

"URBAN ROOF TOPS FARMING FOR GROWING ORGANIC FOOD"

Name- Dinesh Sharma
Age- 49 years
Qualification- Post Graduate
Address- Kota
Background

Agriculture is the main source of livelihood because by growing certain crops it is the process of producing food, feed, fibre and many desired products. Urbanization, industrialization and fragmentation of land lead to a reduction in natural resources such as water, land and energy needed to meet world food requirements, fuel and fibre. Roof top gardening is one choice in the densely populated cities to produce fresh vegetables. Roof top gardening will allow fresh vegetables to be harvested in thickly populated areas where

there is scarce land for cooking.

Innovation

Dinesh Sharma is interested in cooking gardening but he was unable to fulfil his desire to farm vegetables, fruit and flowers due to a lack of land in his residential neighbourhood. But his keen interest obliged him to use unused space to grow okra, brinjal, chilli, pea, spinach, ginger, cucumber, gourde-crests, rose and stew on the roof of his urban house. In plastic and tin containers, he used vegetable waste, soil, and decomposed cow dung as substrates. His keen interest in gardening provided his family with good organic food and is a model for urban dwellers. Krishi Vigyan Kendra's scientists visited him constantly regarding space use, seed type, planting time and marketing. His hobby has become an innovative farmer.

Significance

Encouraged by Dinesh's success, other people in the vicinity also take roof top gardens as a farming opportunity and plan to establish this type of garden with the constant supervision and guidance of KVK scientists. Steps were also taken to replicate those models by arranging visits to this model by interested persons. This type of gardening is the best in towns where land is scarce because it promotes rapid and excellent plant growth and reduces water pollution.

Way-forward

Roof top gardening offers the opportunity not ornamental plants but agricultural crops. It is an eco-friendly approach that provides household nutritional security. The desire to spend free time cultivating a vegetable garden and growing agricultural products for family consumption in urban areas must be inculcated. It has enormous aesthetic, economical and environmental benefits, in addition to providing rich organic nutrients.

5.6 Case Study – 6 Inspiring Pioneering Innovators of Southern Rajasthan

"MODIFIED ORGANIC FORMULATIONS FOR SUSTAINABILITY"

Name- Devi Lal Gujjar

Age- 50 years

Qualification- 12th Std

Address- Dhaturiya Kalan, Tehsil Pirawa, District-Jhalawar

Background

Devi Lal Gujjar is native to the village of Dhaturiya Kalan in Jhalawar district. By growing seasonal and off-seasonal vegetables, including exotic vegetables, cereals and pulses with a small dairy unit, he has adopted a multiple farming and cropping system. He used to grow crops using chemical inputs that led to higher costs of cultivation. Such situations forced him to reflect on developing organic formulations.

Innovation

As animal resource, Devi Lal Gujjar has five cattle. He has developed, modified and controlled bio formulations such as Jeevamrit, Beejamrit and White Grub. Ingredients for preparation are Jeevamrit ghol, Cow dung (15 Kg), Cow Urine (15 litres), Lime (1 Kg) Soap Nut (Sapindustrifoliatus), 500 gm, Yeast (100 gm), Jaggery (500 gm), Walnut (Juglans Regia) leaves (2 Kg), Garlic (Allium sativum) cloves/leaf (250 gm/2 kg), Buckwheat (Fagopyrum esculentum), Cannabis sativa (2 kg). In the drum it places the cow dung, cow urine, lime, soapnut, yeast and jaggery, and then adds soil walnut leaves, garlic bundles/leaves. The material is left to ferment for 1,5 to 2 months and is used as a foliar application for seed/seed treatment in 1-10 crops. This solution increases the fertility of the soil and prevents the presence of plant botanic extracts with known insecticidal properties from diseases and pesticides (both chewing and sucking types). For seed treatment he mixes cow dung (10 kilogrammes), cow urine (10 litres), limesa (1 kilogrammes), jaggery (500 gm), yeast (10 gm), pure soil (1 kg) in a tank to allow it to ferment for 5 to 10 days. In order to combat the problem of a white grub the white organic grub control formula has been developed by blending milk in a plastic drum/pot with 1 litre, asafoetida (Ferulaassa-fetida) (30 gm), limestone (500 gm), kerosene oil (1/2 litre), and diluting in 15 L of water

for immediate usage, as drying or sprinkling in fields.

Significance

Amended organic formulations prepared from local resources not only improved soil fertility by enhancing the supply of nitrogen and the action of useful soil microbiota but also reduced the cost and management of insect pests and diseases to almost zero. These formulations are now used in the area under organic farming. About 80 farmers in the neighbouring areas are associated with the transitional enterprise.

Way-forward

Since similar types of formulations also have an importance for the large-scale adoption in natural farming promoted by the State Department of Agriculture, innovation is futuristic and has enormous expansion scope. In particular in Rajasthan, this innovation could be further developed for profitability and environmental sustainability.

5.7 Case Study-7 Inspiring Pioneering Innovators of Southern Rajasthan

"INTEGRATED FARMING SYSTEM IN A CONTEMPORARY SITUATION"

Mr. Devi Lal Nayak
Kethuda (Village), Talera Tehsil,
Bundi District, Rajasthan, India.
Mob: +91 7023780707

Mr Devi Lal Nayak (55), of Talera Tehsil, Kethuda village, in Rajasthan District, India, studied the standard 5. He has a family of one son and four girls. He owns 8 hectares of land, two oxen and two goats, as well. In the Kharif season, he grows red gramme, cotton, ginger, flowers and leafy vegetables. He takes wheat, chilli, chickpea and sorghum into Rabi immediately after the harvest of Kharif crops. Since childhood Mr. Nayak has been farming and wants to continue the integrated farming system in a contemporary situation in

which loss of one crop can be replaced by another company. He has good contact with other farmers and suppliers to facilitate a healthy exchange of information. He has significant exposure to the mass media while listening to radio, watching TV, and reading newspapers regularly.

Mr. Nayak believes that the beauty of the mixed farming system is that he obtains most of his own farm rations. According to him, the supplementary and complementary relationship between businesses provides farmers with more income. He is the only farmer in the village who has 10 different cultivations on 8 acres.

He has a house but he has been on his farm for 8 years to commit to a better return on land.

He believes that agriculture can be successful if one makes the right decision at the right time and works hard. It grows tomatoes over 0,5 acres of soil and obtains a yield of 10 tonnes with effective management. Mr. Nayak says the availability of work in rural areas is the biggest challenge, with a view to purchasing new machinery to replace better returns and help reduce the drudgery that farmer women face. He gets Rs 200 to 300/- daily through his own village selling leafy vegetables.

In the future, Mr. Nayak plans to enter into partnership commercial goat, poultry and farming to increase his net earnings. He refers agriculture to interest and zeal rather than to literacy and believes that calculated risks are necessary to profit by increasing production and productivity.

To avoid intermediary losses, he travels from village to village to sell chilli and vegetables when the market price falls because of the glut. He says agriculture gives him confidence and considerable income to run his family and to maintain a comfortable standard of living. Mr Nayak receives from his 8 acres of land from Rs. 4 to 5 lakh net profit. He is confident he could significantly increase his income if he had access to proper electricity and irrigation during the summertime. He bought two goats for rs. 3,500 per capita, and sold

them, in two months, for rs. 7,000/-, with a profit margin of rs. 2,500/- after deducting the expenses. It draws parallels between agriculture and catching fish on net: to increase production and productivity, you must look over everything for effective implementation at farm level. According to him it gives farmers confidence to have credit at hand while making decisions. He believes that agriculture is compensatory and is correlated with socio-economic events of daily life. Every year, the cattle festival takes place near his village during the Makar Sankranti festival. To make use of this opportunity, he bought two birds and, following deduction of expenses, sold them within four months for Rs. 58,000/- making a profit margin of Rs. 21,000/-. In addition, he has two cow dung tractors as organic manure.

5.8 Case Study-8 Inspiring Pioneering Innovators of Southern Rajasthan

"EARNING ADDITIONAL PROFIT THROUGH RAISING VEGETABLE NURSERY IN POLY HOUSE "

Name- Om Prakash Patidar, Asnawar Road, Jhalarapatan
Age- 55 years
Qualification- B.A.
Address- Village- Juna Kheda, Asnawar Road, Jhalarapatan ,
Tehsil- Jhalawar , Dist. Jhalawar

Background

Patidar is a progressive farmer who practises integrated cultivation of cereals, milk and vegetables on 7 acres of his farm. Mr. Om Prakash Patidar. He has polyhouse in one acre where different vegetable crops are grown, including cucumber, bitter gourd, bottle gourd, bitter gourd and muskmelon. It also grows in one acre different vegetable crops that have a drip irrigation facility. For good quality nursery he faced many problems, as his village is far from the main city. He has built a small polyhouse in his home, where he raises

nurseries for different plants and uses these to transplant the crops in his bigger polyhouse, in the countryside and to sell them to farmers.

Innovation

Mr. Om Prakash Patidar has developed a 20-foot long, 12-foot-wide, and 10-foot-height poly house at home. He places approximately 200 nurseries per tray in this small poly house and plants are raised for its use and for sale to the other farmers. Approximately 20000 vegetable and fruit plants are produced per season. The kindergarten is sold '5 per plant. That earns about 1 lakh from the kindergarten. He spent about 10000/- on the construction of this small poly house. He will sell his factories under the name of "Patidar Nursery" and will set up a point of sale in Jhalarapatan.

He sells his kindergarten to farmers in the villages of Kota, Baran, Jhalawar and the districts of Bundi. This innovative small polyhouse was used by Mr. Om Prakash Patidar to manufacture vegetable nursery for local demand.

Significance

Small polyhouse is important for improving quality vegetables and fruit nursery in this Mandsaur border area. In addition, as this polyhouse in the domestic border, the temperature inside remains 5-7 OC higher than the open field. In this small polyhouse, the use of heaters is also very effective and it is easy to manage all operations in small areas.

Way-forward

This small polyhouse for the production of vegetable nurseries can be extended to other small and marginal farmers. This low cost polyhouse nursery raising technique can be useful in the manufacture of quality plants for field transplants.

5.9 Case Study – 9 Inspiring Pioneering Innovators of Southern Rajasthan

“MODIFIED DIESEL PLOUGH : SUCCESS SOTRY”

Name- Sampat Chaudhary

Age- 34 years

Qualification- B.A.

Address- Village Arniya Panth, Tehsil- Chittorgarh, Dist. Chittorgarh

Background

Maize is the main crop in the South Rajasthan State districts and plays an important role in people's livelihood. In Chittorgarh, the growth of domestic maize production will depend more on farm mechanisation and popularising high-yield maize hybrids than on the expansion of the maize production area. Maize is the main crop in the Chittorgarh district, while weeding and hoeing are the principal cultural practise for weeds that require a lot of labour and time. The wages of labour increase numerous times during hopping and weeding season due to a shortage of labour (' 400-500 per person per day).

Innovation

Timely weaving and hoeing in maize crops is very important in order to increase production. Manual weeding and hoeing is a hard work and time-consuming process, and the farmers of the district face major problems. In addition, the shortage of labour during the high season is another problem in the district's rainfed terrain. Chittorgarh is distant and disturbed, its farmers have very little access to mechanisation solutions and are very affordable. The area, which is hilly, makes most of the existing machines inappropriate for this area. In order to overcome this problem, Mr Sampat Chaudhary modified the diesel plough grower by changing its tine direction. The sharp rim of the cultivator tines was replaced by blunt rims. These stubborn dyes do not cut off or damage the maize plant and loose the soil around the plant and root out the weeds. Weaving and hoeing are done in one operation easily. The weaving of 1 hectare of maize plant area can now be completed by modified diesel plug in 5 hours.

Significance

In addition to solving the labour problem, Mr Sampat Chaudhary also offered a new choice for unemployed young people to take this innovation as a business. This technology has

great potential for business, particularly in hilly terrains with small farms. Because this technology makes intercultural operations easier, the area under maize plants can be increased.

Way-forward

The technology can be improved by further altering diesel plug tines in order to reduce labour consumption to the highest degree and increase economic returns to farmers. The demand for diesel plug in the area will increase significantly during the process of economic development. This innovation is therefore a futuristic one with enormous economic and operational implications.

5.10 Case Study-10 Inspiring Pioneering Innovators of Southern Rajasthan

"TRACTOR MOUNTED RAKE FOR PADDY STRAW COLLECTION"

Name- Sukhraj Singh Sandhu
Age- 54 years
Qualification- Senior Secondary
Address- Village Jal Ki Jhopadiyan Kethuda, Tehsil- Talera, Dist. Bundi

Background

Burning 1 million tonnes of paddy stroke releases a huge number of greenhouse gases that disturb regional atmospheric chemistry. Flaming paddy stubble causes the loss of organic carbon, nitrogen, phosphorus and potassium in soil and degrades the air quality of the environment. The rake mounted on the tractor is used to collect paint cut into winds for subsequent collection. It is also designed to fluff the stroke and turn it over to dry out. Mr. Sukhraj Singh Sidhu has developed new technology to reduce the risk, in particular by using straw as a mulch, which eventually improves soil fertility, helps maintain moisture and reduces the weed threat. But most farmers usually avoid the practise because of its labour intensity.

Innovation

A progressive farmer named Mr. Sukhraj Singh Sidhu from the Jal Ki Jhopadiian Kethuda village, Tehsil–Talera, Dist. Bundi used garlic var. G282 paddy straw for mulching in the surface of an acre. He used a tractor-mounted rake to address the problem of increased inputs in paddy straw management. He took the rake from the field to collect paddy paw.

Comparative economics of tractor-mounted rake and manual collection of paddy straw for an acre

Method of collection	**Individuals involved**	**Time required (hrs)**	**Cost (Rs.`)**
Tractor and labour	15	24	4500
Tractor-mounted rake	**5**	**5**	**2000**

only five hours with the participation of only five workers (Table 1). Otherwise, it takes 24 hours together with at least 15 people. He saved Rs. 2500/- per acre in this way.

Significance

The farmer is using the crop residue in the past season as a mulch after initial irrigation (only after planting) and before the garlic cloves are sprouting. Mulching reduced the number of irrigations for garlic crops to 8 from 10-12. In this way, innovation has reduced irrigation by around 20-33 per cent. Mulching in garlic with paddy straw reduced the incidence of weeds substantially. This ultimately reduced work and herbicides inputs. It also increased yield and obtained a yield of 46 q per acre from the mulched field, compared with 40 q from the unmulched field.

Way-forward

Inspired by his own experience, he has now increased the area of garlic innovation by one to three acres. Mr. Sukhraj thus inspires other farmers who practise cultivation in the area.

5.11 Case Study-11 Inspiring Pioneering Innovators of Southern Rajasthan

"SELF DESIGNED AUTOMATIC LIVESTOCK WATERER"

Name- Madan Lal Chaudhary
Age- 42 years
Qualification- 12th
Address- Village- Shambhupura , Tehsil- Chittorgarh, Dist. Chittorgarh

Background

After training up to the 12th standard, Sh. Madan Lal Chaudhary started the milk industry unit in 2011 with 05 Holstain Friesian cows. He currently has 35 animals in his dairy farm. He used to offer dairy animals water in simple waterers, which in the summer served hot water and in the winter served cooling water to the animals which led to inadequate water intake. He also felt that water wastage was high in usual water. These constraints led to the development of an automatic cattle waterer which provides normal water even in extreme weather conditions (summer and winter) and also reduces water waste.

Innovation

By means of the commonly available plastic drum and floated valve, Sh. Madan Lal Chaudhary developed Automatic Livestock Waterer for his dairy animals. The floating valve controls the water level in the water supply.

He placed a water tank (1000-liter capacity) at a height of 13 feet above ground level and buried a plastic pipe with a diameter of 03 inches horizontally, with a water depth of 5 feet, up to a distance of 70 features. He said that the water temperature from the tank, which passes through the plastic tube, horizontally and under 5 feet, makes it suitable to drink during extreme weather conditions (Summer and winter). The cost of this aquatic tank is

approximately '400, with a capacity of 50 litres and 2 waterers for handling 30 animals.

Significance

The following significance applies to the automatic livestock waterer.

• Provides cool summer water and warm winter water.

• Cheap and cost-effective dairy farming technology.

• Enhances milk yield in milk animals.

• Reduces labour costs as the valve itself regulates its water level without opening and closing.

Way-forward

This technology can be further expanded to reduce wastage, labour costs, normal water supply for summer and winter seasons and increase milk yield and economic gain from milk farming for all dairy farmers.

5.12 Case Study-12 Inspiring Pioneering Innovators of Southern Rajasthan

"CONTRACT FARMING OF EXOTIC VEGETABLES- INNOVATIVE WAY OF FARMING FOR ASSURED INCOME "

Name- Ram Bharos Gehlot

Age- 29 years

Qualification- I.T.I.

Address- Village Arjun Pura, District Kota

Background

Ram Bharos Gehlot is a resident of the village of Arjun Pura, Rajasthan District where most farmers depend on their livelihoods with rice wheat production. He comes from a family of farmers with 12 acres of land. Despite his inherited experience in growing traditional cultures he is motivated to adopt a crop diversification and because of fluctuating prices for traditional vegetables, he thought of growing exotic vegetables during the period 2017-

2018 with contract farming based on his own marketing experience in Mandis. He began growing exotic vegetables such as broccoli, leek, lettuce, coloured capsicum, orange and yellow carot, etc with increased family responsibilities and with the daily needs. Of 12 acres, 4 acres are irrigated by sprinklers and drops. In 6 acres of land, he cultivates exotic vegetables. He also received certificates of appreciation from different agencies.

Innovation

This farmer earned a pleasant livelihood through an innovative blend of technologies and processes such as the cultivation of exotic vegetables through contract farming and the application of latest scientific practises such as micro irrigation, etc. In Kota, Rajasthan district farmers cultivate traditional crops and sell them on local middleman markets. This farmer nevertheless thought of growing exotic vegetables by contract farming with Agro Foods. In addition, he has adopted sprinkler and drip irrigation to increase crop productivity. In addition, he also grew a large nursery of crops such as coloured capsicum (except green). This innovative combination of practises and technologies made it earn around 1,5 lakh per acre of net income annually without any price risk.

Significance

The main meaning of its innovation is that it motivates many local farmers who are reluctant to adopt crop diversification. Many farmers from nearby and remote villages come to its fields to learn how to cultivate these crops. In highly perishable foods and in contrast to paddy and wheat, where farmers are paid a minimum support price, contract farming offers a better alternative to minimise risk and reduce monoculture. Contract farming is an alternative.

Way-forward

He plans to expand its area in the coming years under dripping and sprinkler irrigation. In addition, he plans to build a polyhouse to grow his crops all year round. He is also a member of the Kisan Bachao company that works to prevent suicide by farmers. It is a real model for rural youth wishing to do something innovative in agriculture and therefore to

extend this innovation to other farmers.

5.13 Case Study-13 Inspiring Pioneering Innovators of Southern Rajasthan

"SILAGE IN PORTABLE PLASTIC DRUM FOR SMALL DAIRY UNITS UNDER INTEGRATED FARMING"

Name-Bharat Shah

Age- 49 years

Qualification-Graduate

Address-Chandu Ji ka Garha, Tehsil Paratapur, District-Banswara

Background

The vast majority of the cultivated area of the Banswara District is rainfed and irrigation fields are used for the production of cereals and vegetables. Fodder is only cultivated on marginal lands. Consequently, there is no green fodder during the months of April-June and November-January and, as a result, the health, production and reproduction of animals is affected. Silage preparation is recommended to overcome the scarcity of green fodder. Traditionally, the preparation of silage requires specific structures such as silo towers/tanks. In the Banswara district, as only 2-3 animals are raised, such infrastructure is not viable.

Innovation

In Tehsil Partarpur, a progressive farmer in Chandu Ji Ka Garha, Tehsil Shah started to produce silage in open-mouth plastic drums/barrels that can be manufactured airtight with a seal with these drums. The relatively fresh and moist maize stove is tangled, molasses and urea are added in the kharif season after harvest and after thorough blending of all these ingredients, the mixture is packed in plastic drums and barrels, which are readily available on the market. When filling the chopped corn stove, care is taken not to keep any air in the plastic drum. When the drum is filled, a lid, rim and seal are closed with these drums. The preservation of the chaffed maize pot under the air keeps its nutritional value, palatability

and digestibility for livestock. Similarly, when farmers have superplus green fodder like oat/berseem/elephant grass, etc., in rabbit seasons, these are used for silage production during May and June, when no green fodder is available. Each drum can be filled and stored with a capacity of just over 2 quintals.

Significance

Silage prepared in one drum is sufficient to supply one animal with some of the daily dietary allowance for about 20 days. By producing silage in two or three drums, when green fodder is plentiful, a farmer can ensure that nutritious fodder is available year round. The preparation of silage for those drum types provides an additional advantage of relocating the drums if necessary and also avoids spoiling the silage when the silo pits/towers are opened.

Way-forward

By giving practical training to dairy farmers and exposure visits by farmers to the practising farmer, the innovation can be easily increased. During such a visit, farmers can learn from their fellow farmers and as you know 'seeing you believe,' such a visit motivates other farmers to prepare silage for surplus green food in a portable plastic drum.

5.15 Case Study-15 Inspiring Pioneering Innovators of Southern Rajasthan

INNOVATIVE TECHNOLOGY AND SKILL IN MUSKMELON PRODUCTION

Name- Deepak Saini
Age- 28 years
Qualification- Senior Secondary, ITI
Address- Village Chandresal, Tehsil- Ladpura, Dist. Kota

Background

Off-season vegetable production always has the advantages of higher market price

performance over major seasonal vegetable farming. The introduction of new vegetable crops for off-season production presents a significant risk of insect pests and crop failure diseases. Deepak Saini has successfully achieved early cultivation (off season) of muskmelon under low tunnels.

Innovation

Mr. Deepak Saini is cultivating 2 hectares of muskmelon. The cultivation is cultivated on three feet of wide beds covered in plastic mulch to avoid weeds. Plants are grown at a distance of 1.25 feet. The crop is planted in the second quarter of November. After adding a basal fertiliser dose, foliar sprays will supply plants with nutrition. The plants are protected under low tunnels during the cold month between mid-December and mi-February. The crop was thus ready for harvest until the middle of April. It achieves approximately 8 0 quintal muscle yield under this system. Thus, early crop intercultural operations in the Muscmelon cultivation of muscamelon are grown and the market price is double.

Significance

After muskmelon collection in April, it is transported for sale on the local market. Because of its high quality, muskmelon is found in the local market at a good price. An average of 2,5-3,0 acres of muskmelon are harvested each day for immediate delivery. Selling muskmelon @ '25-30/- per kg is earning '2,00 000/- to '2,40,000/- per acre compared with '10-15/- per kg' main season rate.

Way-forward

The early cultivation of muskmelon produced in low tunnels has a high quality and higher market price. If dry irrigation is unified with low tunnel technology, this technology can be successfully upgraded. Blend of low tunnel technology, mulching and drip irrigation can make the dream of more crop per drop dream come true without farmers' profit margins. Drip irrigation technology can successfully be promoted by presenting success stories of innovative farmers with innovative production technology expertise.

5.16 Case Study 16- Inspiring Pioneering Innovators of Southern Rajasthan

ECOFRIENDLY INNOVATIVE TECHNIQUES FOR ORGANIC FARMING

Name- Ishwar Gautam

Age- 38 years

Qualification- Graduate

Address- Village Kheda Rudha, Tehsil- Ramganj Mandi, Dist. Kota

Background

The indiscriminate use of pesticides causes a number of damage effects including environmental pollution, non-target organism toxicity, pest resistance, spread of pesticide residues and direct toxicity for users. Currently, such farming techniques complement the surrounding ecology are required. This is done well by Mr. Ishwar Gautam, a farmer from Kheda Rudha village. Half a decade earlier he sprayed chemicals like other farmers to enhance crop production. But his inner voice drove him to stop this practise because he saw enormous environmental pollution caused by the use of these harmful chemicals.

Innovation

Mr. Ishwar Gautam started organic farming and developed numerous innovative techniques for improving plant growth and saving crops from pesticide-free pesticide harm. He stores Gaumutra in large drums of his two cows. He uses it as a seed treatment to control pheid, jassid and caterpillar attacks on different crops as an insecticide spray. He uses cow dung cakes for one year and mixes them with water. He sifts water from the blend and sprays it as "Homemade Urea" that helps crop plants to grow quickly. After keeping the mixture in water for the entire night in Hara (a barrel room for the slow cooking of hot coals/dung cakes), he prepares an extract from the same amount of neem, milkweed and dhatura leaves. Alternatively, it sprays this extract and Gaumutra for effective control of harmful caterpillar.

According to him seed treatment with Gaumutra helps control 80% attack by maize borer and sorghum fly inmaize and sorghum for the whole night before sowing. In addition, he mixes one litre of sour lassi to 16 litres of water and sprays it on blight disease pulses as a fungicide.

Significance

Mr Ishwar Gautam is a torch bearer among farmers to adopt environmentally friendly crop management techniques. This is an important step towards popularising and increasing the area in organic agriculture. His innovative ideas will help to achieve an ecological balance with the management of natural resources, increase soil fertility and economically prevent pest problems. In addition, organic products are becoming popular every day.

Way-forward

He would like to popularise his innovative organic farming techniques for the management of crops to save our environment from the pollution of soil, air and water. As organic farming grows rapidly in India, it is spreading a healthy environment for a positive economic result. He's a wonderful example to change farmers' mindset. His thoughts are pioneering and his ability to build a healthy, disease-free society by providing healthy food is immense.

5.17 Case Study 17 - Inspiring Pioneering Innovators of Southern Rajasthan

INNOVATIVE TECHNIQUE OF VEGETABLE NURSERY PRODUCTION IN PRO TRAYS

Name- Shyam Patidar

Age- 58 years

Qualification- Matric

Address- Village Guradiya Joga, Tehsil- Bhawani Mandi, Dist. Jhalawar

Background

The production of vegetable crops in nurseries is an important part of today's agriculture. Poor farmers with small land may adopt this routine income agri-business model. Production of vegetable nurseries is an expert and innovative way of generating income through quality planting material at reasonable prices for other farmers in the area. Production and supply of healthy seedlings from various cash crops makes this farm a paid company. Since this farming company did not require major land holdings and enormous investment, the production of vegetable crop nurseries on demand in the area was a viable undertaking to strengthen small and marginal farming livelihoods. In addition, innovative nursery production methods can produce better profits than traditional nursery production methods.

Innovation

Sh. Shyam Patidar has 3.6 ha of land. He set up a commercial vegetable nursery unit on a 0.2 ha area. The onion, chilli, brinjal, capsicum, cauliflower and tomato are produced in accordance with local demand. In small plots of 24 square feet (3 feet = 8 feet), the nursery has to be raised. His innovative ways of planting cucurbits in pro-trays have added value. Coco-peat, vermiculite and perlite are used as a growing material in this method. Seedlings are prepared under low tunnels well before the beginning of the season. The kindergarten seedlings are watered every day to improve growth. Thus, healthy seedlings without disease become ready for sale in 10-15 days. The seedlings are sold to the farmers and townspeople at three or four leaf stadiums to grow in the nutrition garden.

Significance

This method of raising vegetable nurseries has given traditional farming a marketing angle. These innovative methods of plant seedling have four times higher incomes than traditional ones. Pro-trays are used in this method for growing vegetable seedlings. Plants are thus cultivated in soil-free material; healthier plants can be produced. This method ensures almost 100% germination of seeds. It also uses space and nutrients efficiently. In pro-trays,

seedlings can be maintained for longer periods and thus provide extra time for preparing and planning the field. Crop avoids the problem of germination failure, rodent attack and early cultivation which can lead to better prices on the market.

Way-forward

Small and marginal farmers can take this innovative manner of nursery production on a large scale, after acquiring required skills.

This innovation's business potential can be exploited through the sale of healthy seedlings. In particular, both nursery producers and customer farmers can benefit from the replication of that innovative method of growing healthy seedlings at affordable prices.

5.18 Case Study 18- Inspiring Pioneering Innovators of Southern Rajasthan

"SELF DESIGNED-INNOVATIVE WAY TO CHANNELIZE THE BIOFERTILIZER DOSE"

Name- Mithu Lal Jat
Age- 52 years
Qualification- 10 th
Address- Village- Bhounra , Tehsil- Nimbaheda, Dist. Chittorgarh

Background

Bio-based agriculture takes an hour to get a higher return by selling its edible products. Mr. Mithu Lal Jat and his brother Sampat Lal are renowned for organic farming in the Chittorgarh district. In order to avoid the toxic effects of chemicals in agricultural products, bio fertilisers and manures were prepared on their own farm.

Innovation

Biografting based on jagery (Gur) was the problem faced by Sh. Mithu Lal Jat in the wise

application of this biograft and the precise application of the biograft dose required per unit area represented the challenge with the existing irrigation facilities. After these very problems, he planned to avoid these problems and he built a concrete water tank with a capacity of 500 litres and a fan on the bottom, the lower slope has a nozzle that oozes the bio-fertilizer liquid and is connected to the main water channel to reduce a huge work on drudgery for applications of bio-fertilizers

Significance

The organic fodder, vegetables, fruit, pulses and cereal crops growing makes him a living example of a successful organic farmer as a new agri-enterprise with an integrated farming system. Mr. Mithu Lal Jat has channelled the bio fertiliser in an innovative manner and has successfully governed the accurate and consistent application of organic fertilisers throughout organic farming.

Way-forward

A uniform and accurate 1 litre bio-fertilizer dose per 200 litre of water was standardised as better results were obtained. He is now successful in organic agriculture in ten acres of land. This year, after a period of 3 years, he will register his farm as an organic farm. All certification standards have been met. This innovation is therefore futuristic and has huge economic and operational implications for organics.

5.19 Case Study -19 Inspiring Pioneering Innovators of Southern Rajasthan

"SELF DESIGNED-MANUALLY OPERATED SEED DRILL FOR WHEAT BED PLANTING UNDER ORGANIC FARMING"

Name- Om Prakash Dhakad

Age- 46 years

Qualification- B.A.

Address- Village- Vijaypur , Tehsil- Begun , Dist. Chittorgarh

Background

Organic farming is aimed at producing food with a high nutritional value and healthy quality crops and animals, while improving and protecting the natural properties of the farm. These include fertile soils, which are rich in minerals and micro-organisms and form the foundation of organic farming. Conventional flat planting is often used for organic cultivation of wheat, with flood-irrigation irrigation, but it results in ineffective use of the nutrients applied and also in weed growth. The practise also reduces the efficiency of water use. In contrast, wheat planting not only saves water but also increases efficiency in nutrient use and grain yield. Mr Om Prakash Dhakad has applied his technical skill and expertise to innovate new farming equipment for organically grown wheat beds.

Innovation

In organic agriculture, the main problems are under the flat planting method of wheat sowing, low nutrient efficiency, effective management of irrigation water and weed control. This innovator has designed and developed a manually operated seed drill suitable for planting wheat beds on organic farming to overcome those problems. This machine may sow 0.4 ha/day of wheat and 20 hours/ha of work is required.

Significance

With his innovation of self-designed – hand-operated seed drill, Mr. Om Prakash Dhakad has made wheat seeding under organic conditions simple and sustainable. He also has shown a way to encourage other people to benefit from an economically viable option to seed crops in organic farming. This innovation has great potential because bed planting facilitates mechanical cultivation as an alternative weed-control method during the growing season and increased nutrient efficiency. It also offers the possibility to weave hands, an economic option because of the easy entry into field resulting from the orientation of the crop row in the beds. Moreover, irrigation water management is more efficient and the use of furrows requires less work than conventional irrigation of floods. This technology would increase the area under organic wheat.

Way-forward

The technology can be increased in order to successfully grow wheat crops on organic beds. Grain yield and the efficiency of nutrient use can be increased by planting beds compared to the conventionally flat method. This creation is therefore viable and will have significant economic and operational implications for the production of organic wheat.

Contract Farming Of Exotic Vegetables-Innovative Way Of Farming For Assured Income

Name- Ram Bharos Saini

Age- 53 years

Qualification- Matric

Address- Village- Arjunpura,Tehsil –Ladpura, District- Kota

Background

Ram Bharos Saini is a resident of Rajasthan's village of Arjunpura, Kota District, where the majority of farmers have a livelihood based on rice-wheat farming. It comes from a family of farmers with 12 acres of land. In spite of his knowledge of cultivating traditional plants, he has become self-motivated to adopt crop diversification and based on his own marketing experience in local vegetables, he considered the growing of exotic vegetables for contract farming in 2017-18. With increasing family responsibilities and meeting daily needs, he began growing exotic vegetables such as broccoli, leek, salt, coloured capsicum, orange and yellow carots etc. Out of 12 acres 4 acres are under irrigation and sprinklers. In 6 acres of land, it grows exotic vegetables. He received certificates of appreciation from different agencies.

Innovation

This farmer has gained an attractive livelihood by an innovative mix of technologies and processes such as exotic vegetables by contract farming and the use of advanced scientific practises such as micro-irrigation etc. Farmers cultivate traditional crops and sell them on local markets through intermediaries in Rajasthan district of Kota. This farmer nevertheless

thought about the production of exotic vegetables by contract farming with Pegro Foods. In addition, he adopted sprinklers and drop irrigation to increase crop productivity. Furthermore, he also grew large-scale nursery of crops such as coloured capsicum (other than green). With this innovative mix of practises and technologies, he earned 1,5 lakh/acre net income annually without any price risk.

Significance

The major value of his innovation is that many farmers in the area who are reluctant to adopt crop diversification are motivated. Many farmers from nearby and remote villages come to his fields to learn about cultivation techniques. In vegetables that are highly perishable in nature, and in contrast to paddy and wheat, where farmers receive lowest support prices, contract agriculture is a better alternative in order to minimise risks and reduce monoculture.

Way-forward

He plans to expand his area in the next few years under dripping and sprinkler irrigation. Furthermore, he plans to build a polyhouse so he can grow his crops all year round. He is also a member of Kisan Bachao society, which works to prevent suicide by conscious farmers. It is a real model for rural youth who want to do something innovative in agriculture, and therefore to extend this innovation to other farmers.

5.20 Case Study -20 Inspiring Pioneering Innovators of Southern Rajasthan

INNOVATIVE METHOD OF PREPARING COMPOST FROM FARMYARD MANURE WITH WASTE DECOMPOSER

Name-Umesh Nagar

Age- 31 years

Qualification- Graduate

Address-Village Padasliya, Tehsil Digod, Kota

Background

Agriculture Research Station (ARS) in Ummedganj, Kaithun, Kota has started the culture of waste decomposer, which proves to farmers to be a win-win technology. Waste decomposer is a consortium of microorganisms extracted from desi cow dung and used to produce organic waste compost within 35-40 days. In the following steps, the ARS has recommended waste decomposers to quickly decompose bio-waste into compost:

i) Pile with a thick layer of 18-20 cm on the ground of organic waste (cow dung, agricultural waste & cooking waste).

ii) Wet bio-waste with waste decomposer solution.

iii) Rub another 18-20 cm thick layer of bio-waste over the earlier layer and wet again with a solution for decomposing waste.

iv) The processes above are repeated until the piling reaches the height of 30-45 cm. Turn the pile every 7 days and add additional solutions at every turn.

v) Maintain 60% heap humidity during the entire composting period. In 35-40 days, Compost is ready. Above process looks difficult as it takes a lot of work and time to turn the pile every week.

Innovation

Umesh Nagar has found an innovative method of compost preparation from farm manure (FYM) using waste decomposers:

i) FYM is piled on the surface of the ground up to 4-5 feet high.

ii) Holes are produced in FYM pile/heap with a random depth of up to 3.5-4.0 feet with a timber rod at about 10-12 inches and are packed with waste decomposer solution. Waste decomposer solution spreads uniformly in the FYM pile. The holes are then covered by FYM.

iii) After 18-20 days, the new locations in the heap are once again filled with waste decomposer solution at a distance of 10-12 inches followed by the FYM.

iv) This treatment processes the entire FYM heap with waste disposal solution and produces good compost without turning the heap. In 50days, compost is ready. In this innovative approach, a single person is required to complete the process only in one day and a compost preparation process takes just 10 more days.

Significance

The procedure recommended by ARS takes around 6 man days (3 persons for 2 days) to turn the pile to prepare the compost from the same amount of FYM say 20 tonnes. If 4 turns have to be made in full, the total cost of compost preparation by ARS technique is about 7200,00 @ RS. 300/man day. Umesh Nagar's innovative approach to decompose FYM only requires 1 man (Rs. 300 alone) day to make hole, followed by filling with a waste decomposer solution. If, during the whole process, the same is repeated at least 3 times, the total cost stands at around Rs. 900. Thus, it is possible to save Rs. 6100.00 for the preparation of compost from FYM of 20 tonnes.

Way-forward

The practise of accelerating decomposition of FYM and compost preparation with waste decomposer solutions is truly innovative with much less effort. This technique allows you to save a lot of work and additional costs.

DATA ANALYSIS

1. Like being your own boss.

Table No. 5.1

Like being your own boss	Total	Percentage
Strongly Agree	18	7.2
Agree	77	30.8
Neutral	12	4.8
Disagree	10	4
Strongly Disagree	1	0.4
Total	118	100

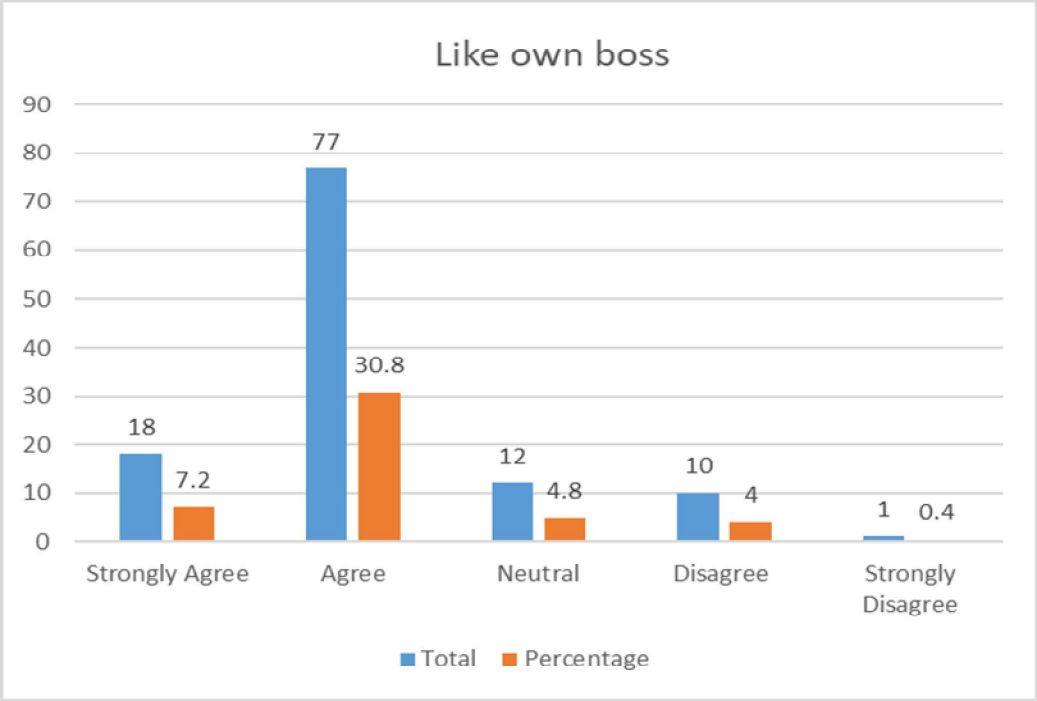

Figure 5.1

Interpretation: About innovative entrepreneurs like to be their own boss, out of the total respondents strongly agree 7.2%, agree 30.8%, neutral 4.8%, disagree 4% and strongly disagree 0.4%. This shows that most of the innovative entrepreneurs like to be their own boss.

2. High Self-confidence.

Table No. 5.2

Self-confidence	Total	Percentage
Strongly Agree	31	12.4

Agree	64	25.6
Neutral	12	4.8
Disagree	10	4
Strongly Disagree	1	0.4
Total	118	100

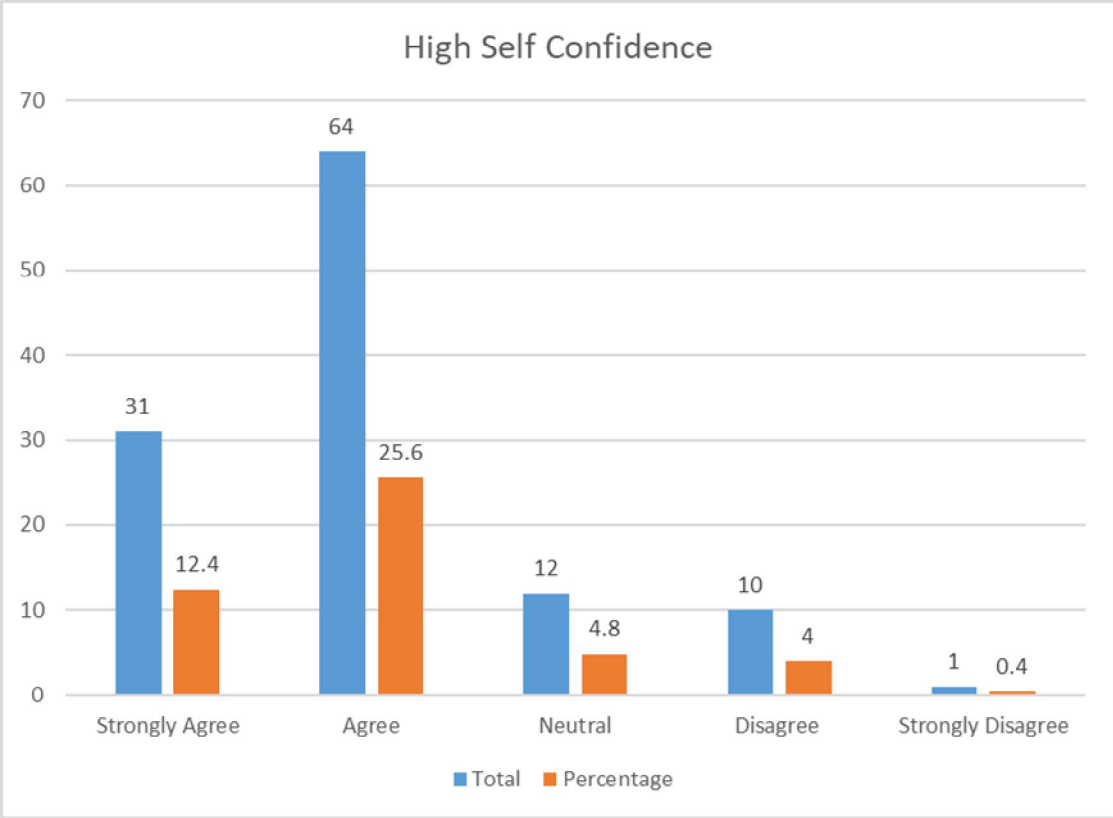

Figure No. 5.2

Interpretation: About innovative entrepreneurs self-confidence, out of the total respondents strongly agree 12.4%, agree 25.6%, neutral 4.8%, disagree 4% and strongly disagree 0.4%. This shows that most of the innovative entrepreneurs self-confidence is high.

3. Sense of urgency.

Table No. 5.3

Sense of urgency	**Total**	**Percentage**
Strongly Agree	16	6.4
Agree	87	34.8
Neutral	8	3.2

Disagree	5	2
Strongly Disagree	2	0.8
Total	118	100

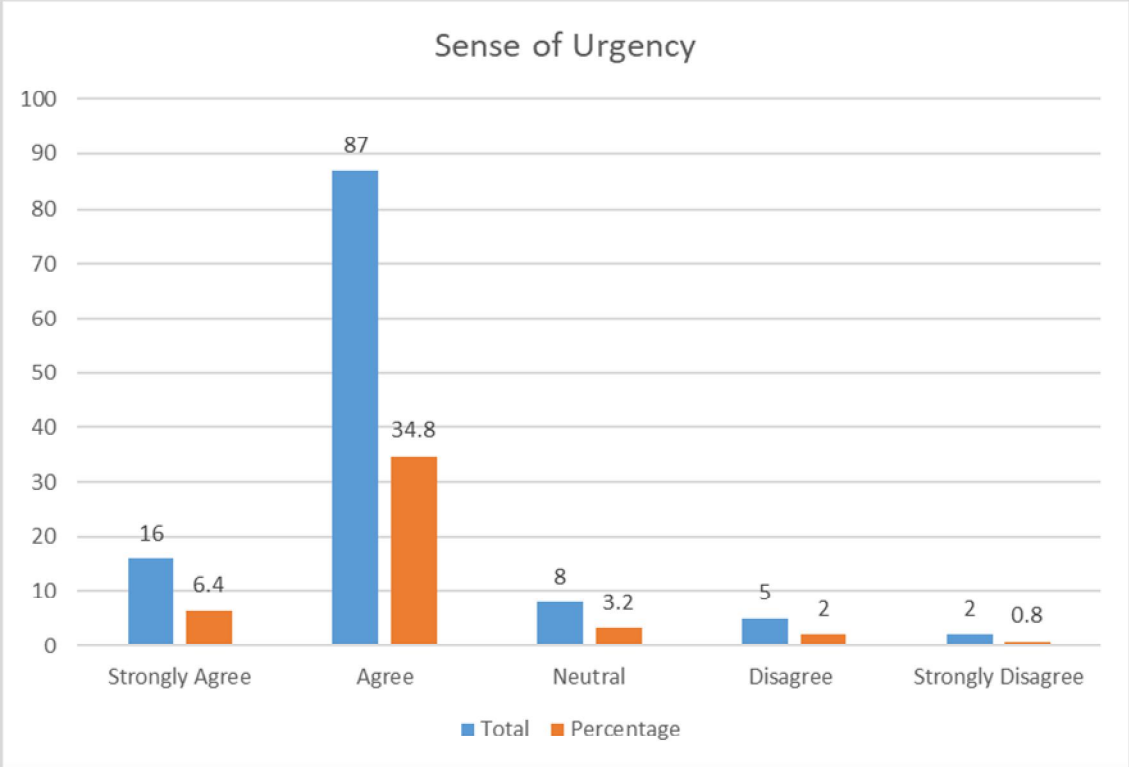

Figure No. 5.3

Interpretation: About innovative entrepreneurs sense of urgency, out of the total respondents strongly agree 6.4%, agree 34.8%, neutral 3.2%, disagree 2% and strongly disagree 0.8%. This shows that most of the innovative entrepreneurs have sense of urgency.

4. High energy.

Table No. 5.4

High energy	**Total**	**Percentage**
Strongly Agree	10	4
Agree	91	36.4
Neutral	8	3.2
Disagree	5	2
Strongly Disagree	4	1.6
Total	118	100

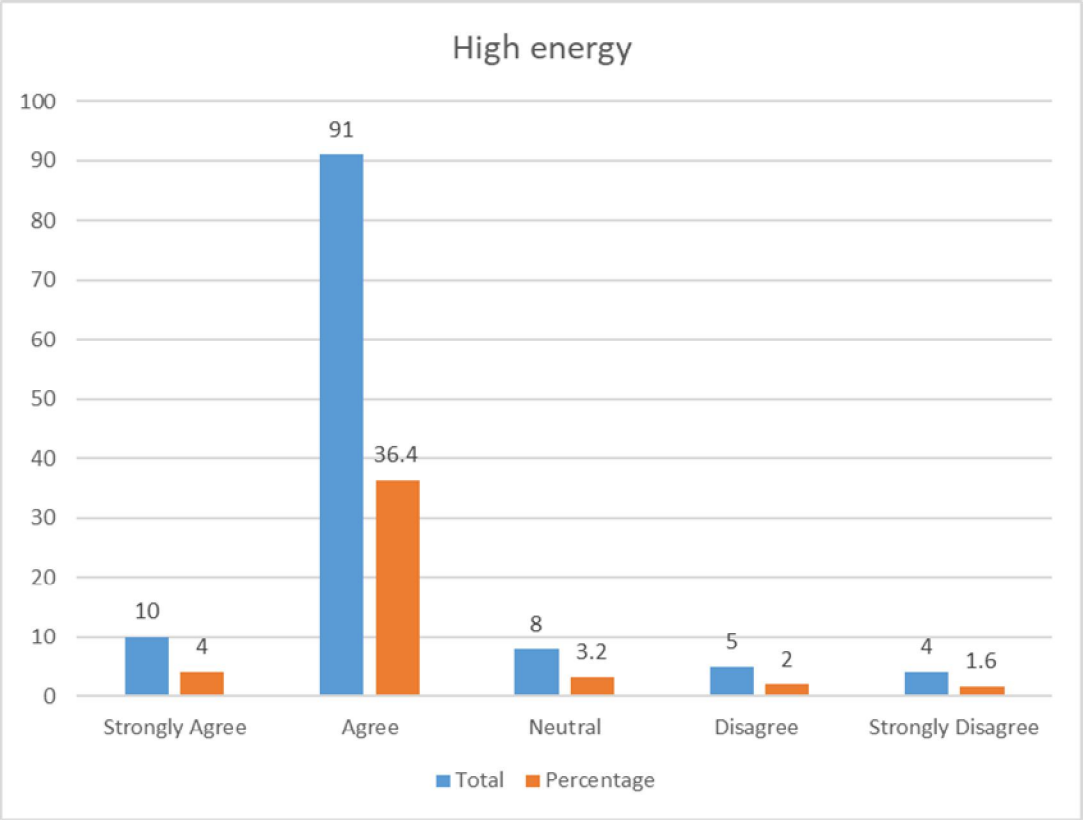

Figure No. 5.4

Interpretation: About innovative entrepreneurs high energy, out of the total respondents strongly agree 4%, agree 36.4%, neutral 3.2%, disagree 2% and strongly disagree 1.6%. This shows that most of the innovative entrepreneurs have high energy.

5. A willingness to risk money and security.

Table No. 5.5

A willingness to risk money and security	**Total**	**Percentage**
Strongly Agree	20	8
Agree	82	32.8
Neutral	11	4.4
Disagree	4	1.6
Strongly Disagree	1	0.4
Total	118	100

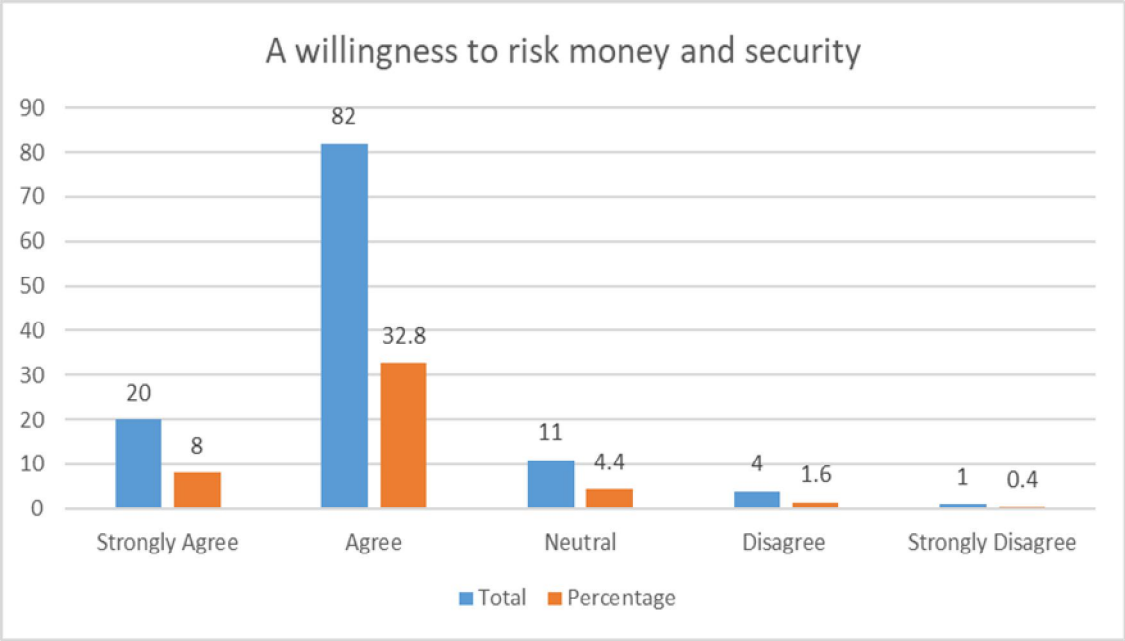

Figure No. 5.5

Interpretation: About innovative entrepreneurs a willingness to risk money and security, out of the total respondents strongly agree 8%, agree 32.8%, neutral 4.4%, disagree 1.6% and strongly disagree 0.4%. This shows that most of the innovative entrepreneurs have willingness to risk money and security.

6. Ability to inspire and energies others.

Table No. 5.6

Ability to inspire and energies others	Total	Percentage
Strongly Agree	18	7.2
Agree	77	30.8
Neutral	12	4.8
Disagree	10	4
Strongly Disagree	1	0.4
Total	118	100

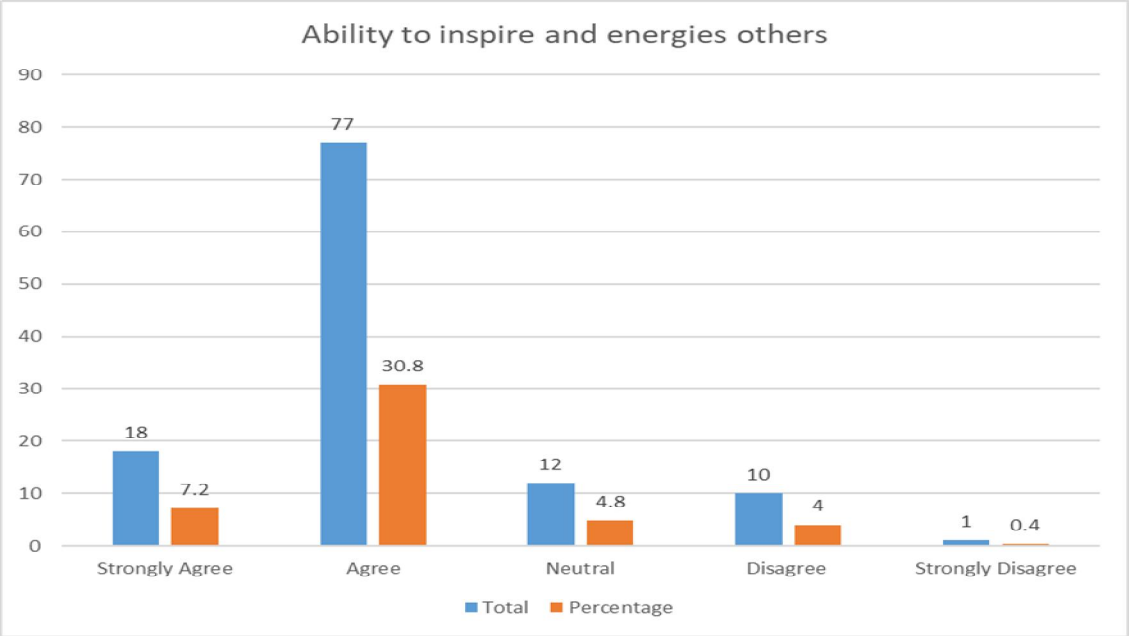

Figure No. 5.6

Interpretation: About innovative entrepreneurs Ability to inspire and energies others, out of the total respondents strongly agree 7.2%, agree 30.8%, neutral 4.8%, disagree 4% and strongly disagree 0.4%. This shows that most of the innovative entrepreneurs have ability to inspire and energies others.

7. Strong will.

Table No. 5.7

Strong will	Total	Percentage
Strongly Agree	31	12.4
Agree	64	25.6
Neutral	12	4.8
Disagree	10	4
Strongly Disagree	1	0.4
Total	118	100

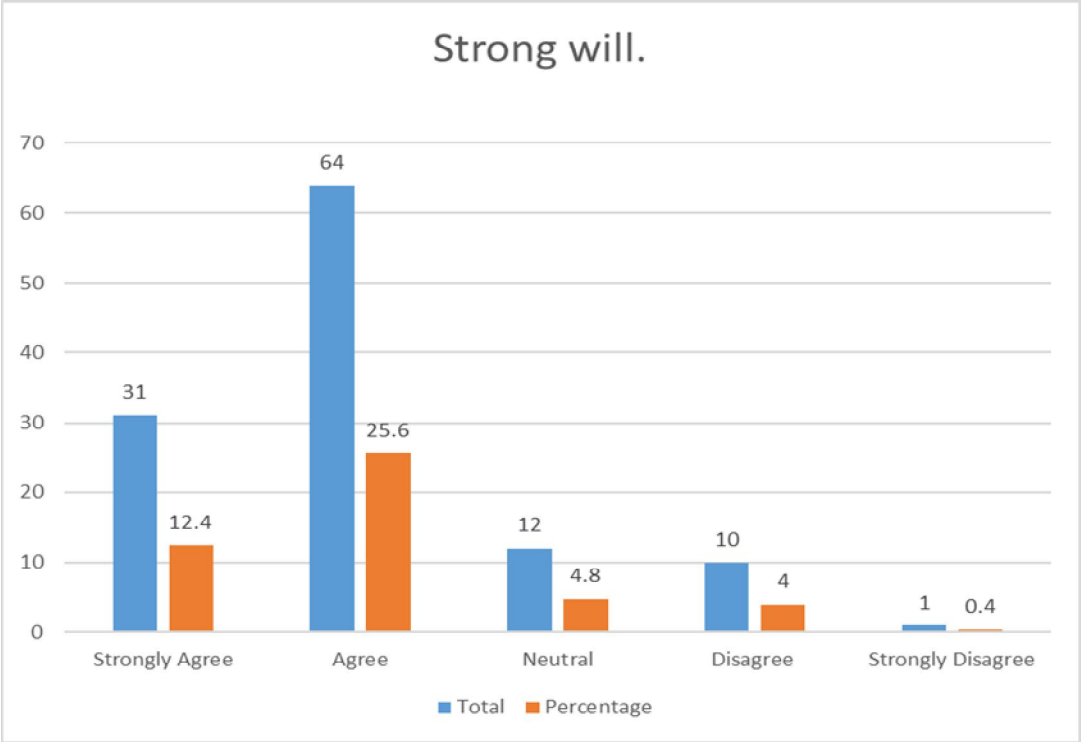

Figure No. 5.7

Interpretation: About innovative entrepreneurs Strong will, out of the total respondents strongly agree 12.4%, agree 25.6%, neutral 4.8%, disagree 4% and strongly disagree 0.4%. This shows that most of the innovative entrepreneurs have strong will.

8. Ability to learn from failures.

Table No. 5.8

Ability to learn from failures	Total	Percentage
Strongly Agree	16	6.4
Agree	87	34.8
Neutral	8	3.2
Disagree	5	2
Strongly Disagree	2	0.8
Total	118	100

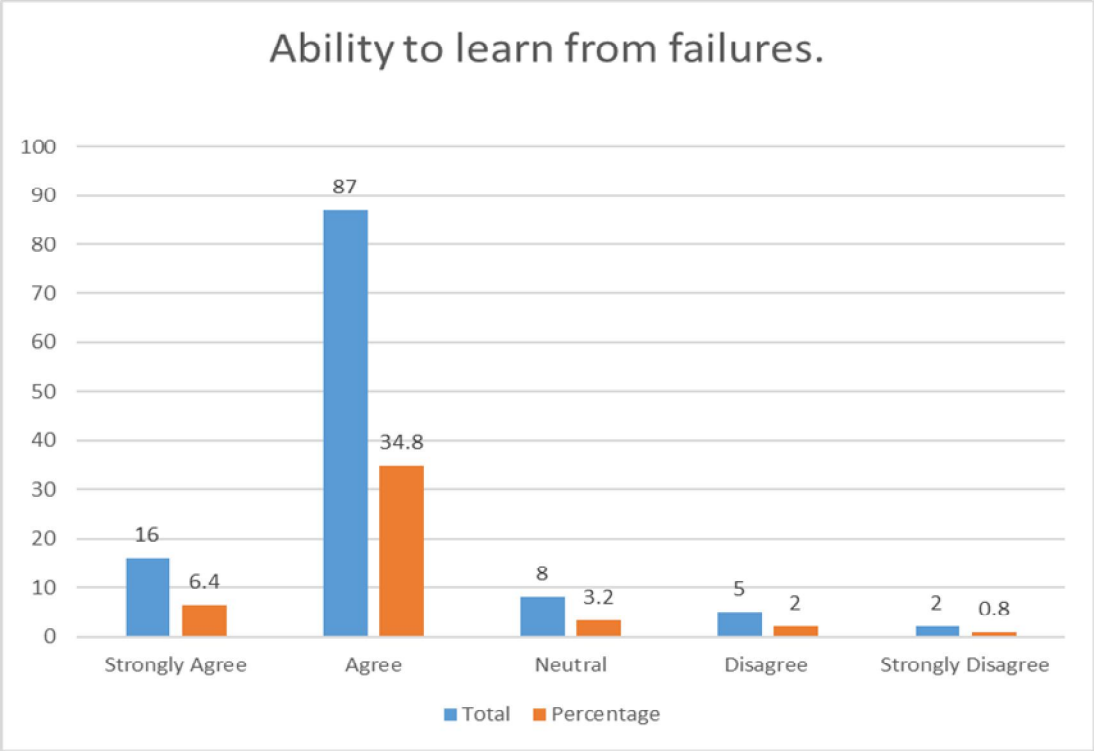

Figure No. 5.8

Interpretation: About innovative entrepreneurs Ability to learn from failures, out of the total respondents strongly agree 6.4%, agree 34.8%, neutral 3.2%, disagree 2% and strongly disagree 0.8%. This shows that most of the innovative entrepreneurs have ability to learn from failures.

9. May devote a disproportionate time to your business.

Table No. 5.9

May devote a disproportionate time to your business	Total	Percentage
Strongly Agree	10	4
Agree	91	36.4
Neutral	8	3.2
Disagree	5	2
Strongly Disagree	4	1.6
Total	118	100

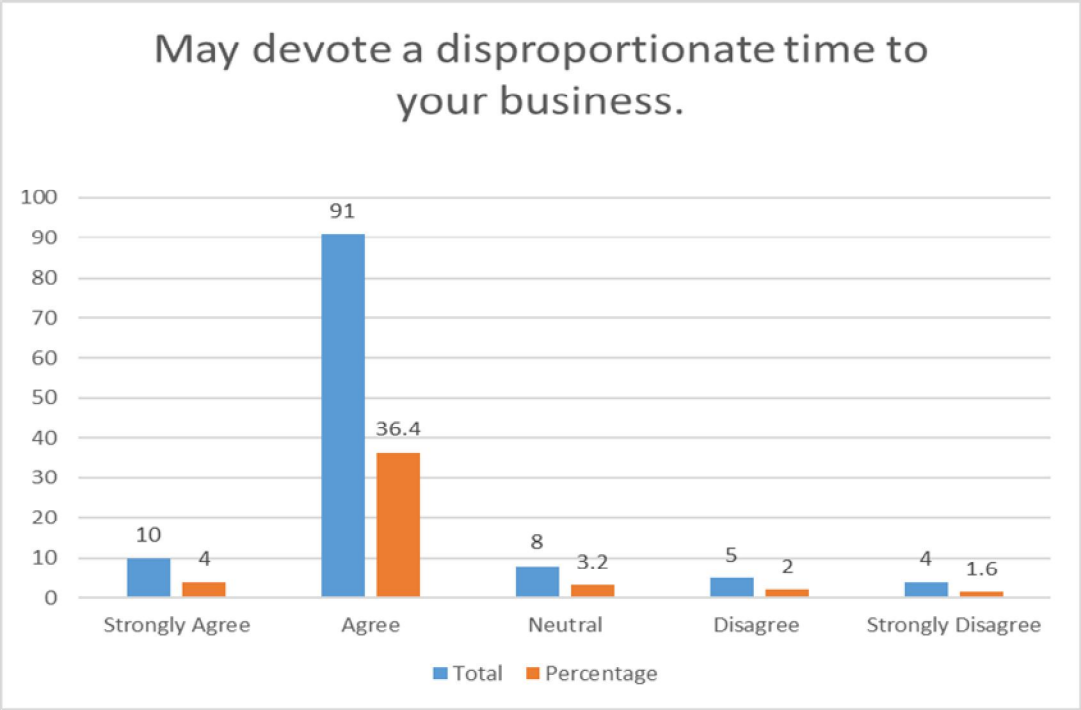

Figure No. 5.9

Interpretation: About innovative entrepreneurs may devote a disproportionate time to their business, out of the total respondents strongly agree 4%, agree 36.4%, neutral 3.2%, disagree 2% and strongly disagree 1.6%. This shows that most of the innovative entrepreneurs may devote a disproportionate time to their business.

10. Very competitive.

Table No. 5.10

Very competitive	**Total**	**Percentage**
Strongly Agree	20	8
Agree	82	32.8
Neutral	11	4.4
Disagree	4	1.6
Strongly Disagree	1	0.4
Total	118	100

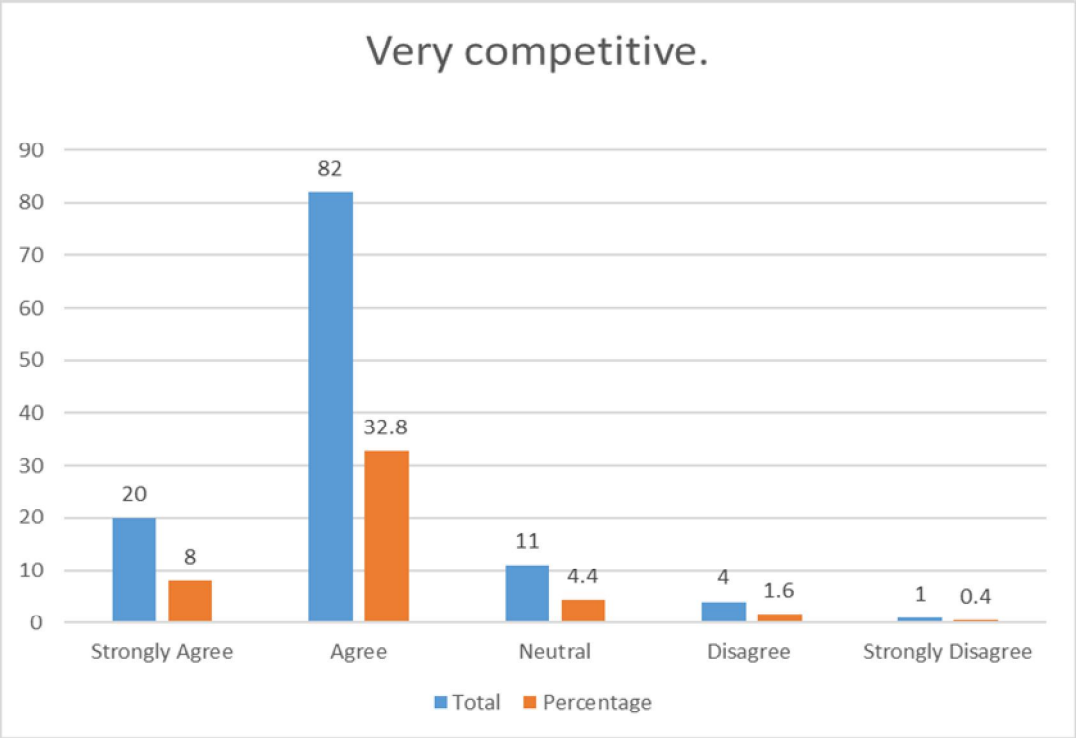

Figure No. 5.10

Interpretation: About innovative entrepreneurs very competitive, out of the total respondents strongly agree 8%, agree 32.8%, neutral 4.4%, disagree 1.6% and strongly disagree 0.4%. This shows that most of the innovative entrepreneurs very competitive.

11. May lack some business skills.

Table No. 5.11

May lack some business skills	**Total**	**Percentage**
Strongly Agree	16	6.4
Agree	87	34.8
Neutral	8	3.2
Disagree	5	2
Strongly Disagree	2	0.8
Total	118	100

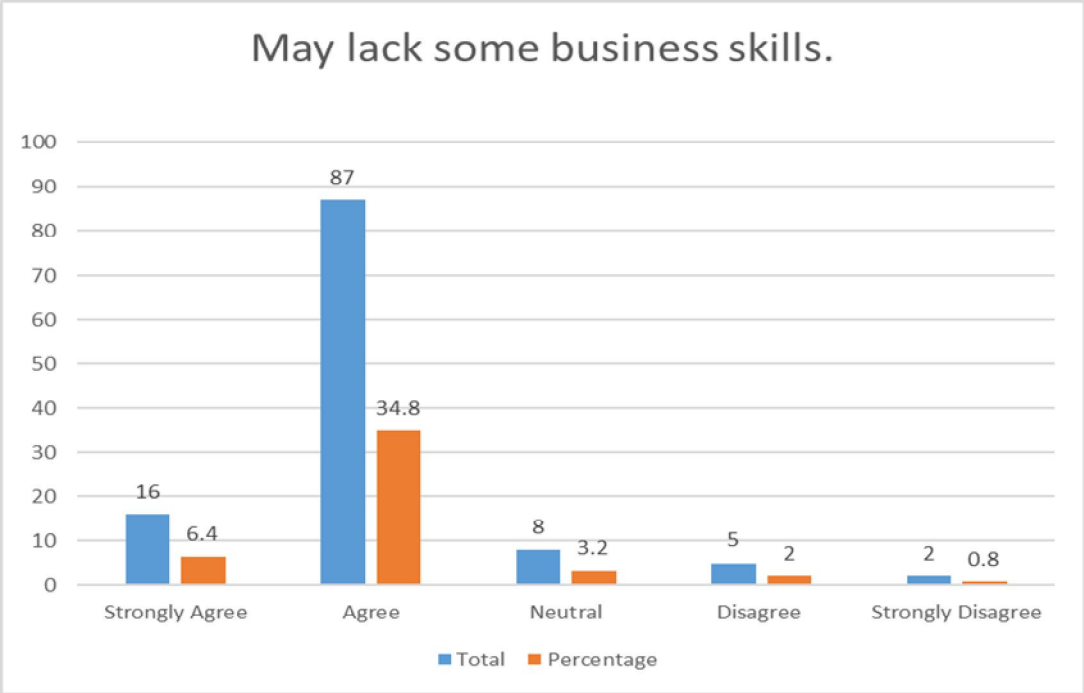

Figure No. 5.11

Interpretation: About innovative entrepreneurs may lack some business skills, out of the total respondents strongly agree 6.4%, agree 34.8%, neutral 3.2%, disagree 2% and strongly disagree 0.8%. This shows that most of the innovative entrepreneurs they may lack some business skills.

12. A "never, never, never quit" attitude.

Table No. 5.12

A "never quit" attitude	**Total**	**Percentage**
Strongly Agree	10	4
Agree	91	36.4
Neutral	8	3.2
Disagree	5	2
Strongly Disagree	4	1.6
Total	118	100

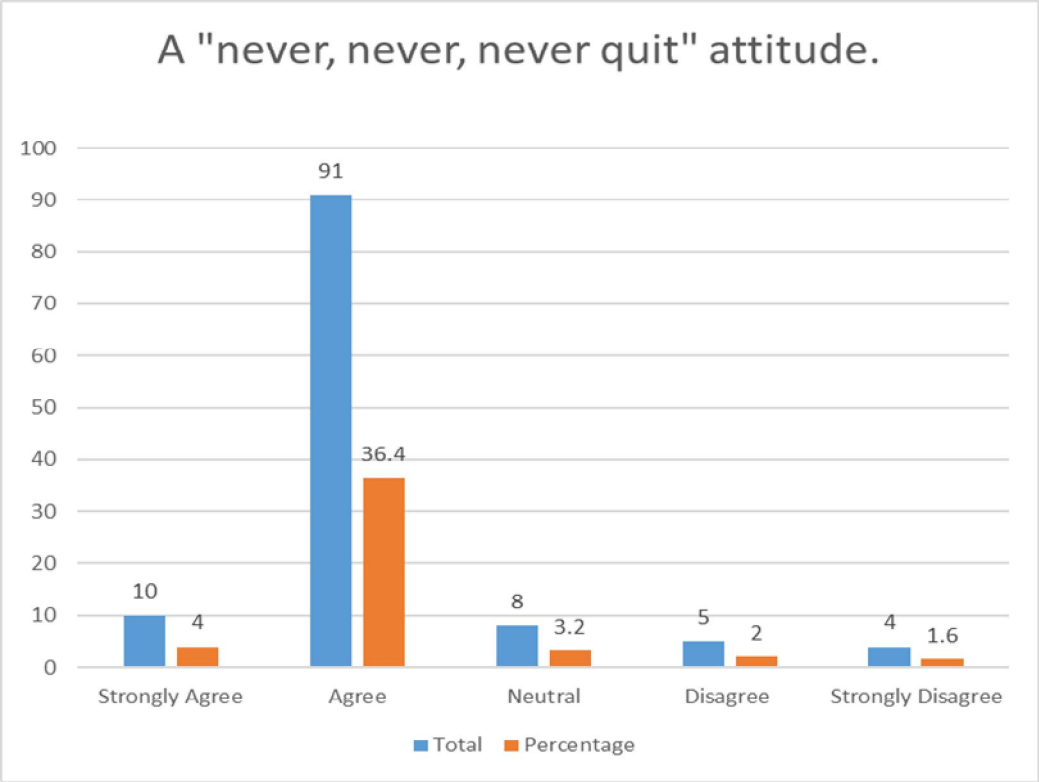

Figure No. 5.12

Interpretation: About innovative entrepreneurs A "never, never, never quit" attitude, out of the total respondents strongly agree 4%, agree 36.4%, neutral 3.2%, disagree 2% and strongly disagree 1.6%. This shows that most of the innovative entrepreneurs posses "never, never, never quit" attitude.

13. Honest and trustworthy team.

Table No. 5.13

Honest and trustworthy	**Total**	**Percentage**
Strongly Agree	20	8
Agree	82	32.8
Neutral	11	4.4
Disagree	4	1.6
Strongly Disagree	1	0.4
Total	118	100

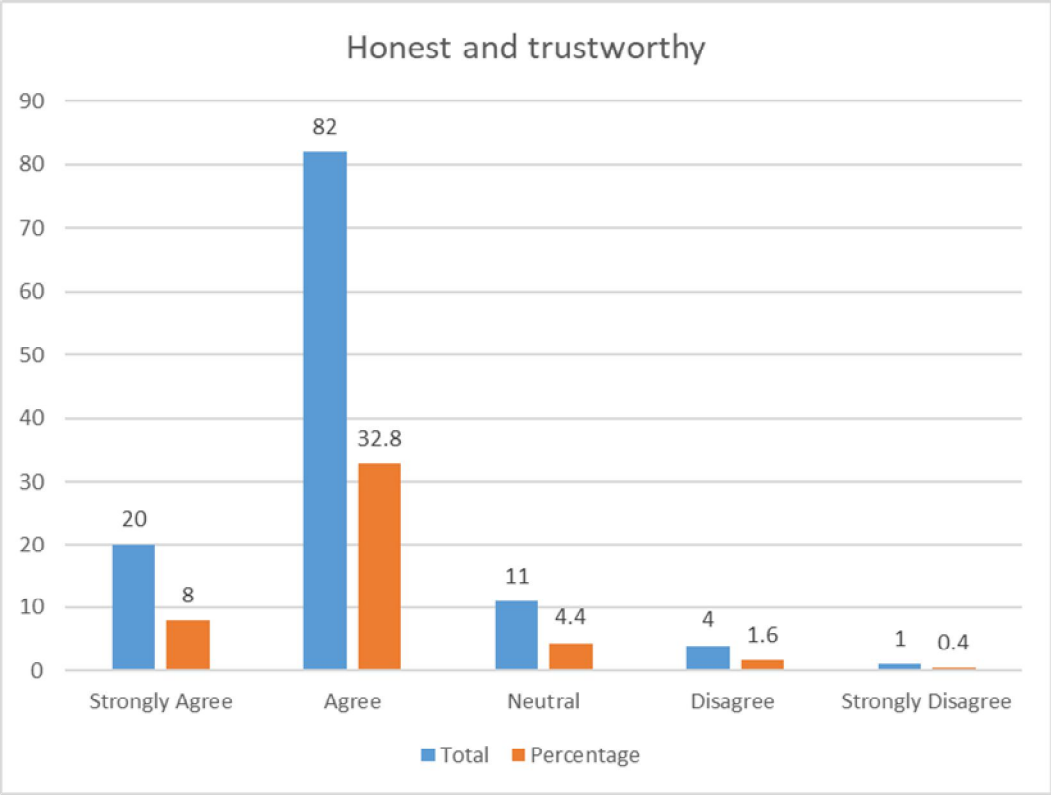

Figure No. 5.13

Interpretation: About innovative entrepreneurs Honest and trustworthy team, out of the total respondents strongly agree 8%, agree 32.8%, neutral 4.4%, disagree 1.6% and strongly disagree 0.4%. This shows that most of the innovative entrepreneurs have honest and trustworthy team.

14. Government Policies are favourable to do business.

Table No. 5.14

Government Policies are favourable to do business	**Total**	**Percentage**
Strongly Agree	18	7.2
Agree	77	30.8
Neutral	12	4.8
Disagree	10	4
Strongly Disagree	1	0.4
Total	118	100

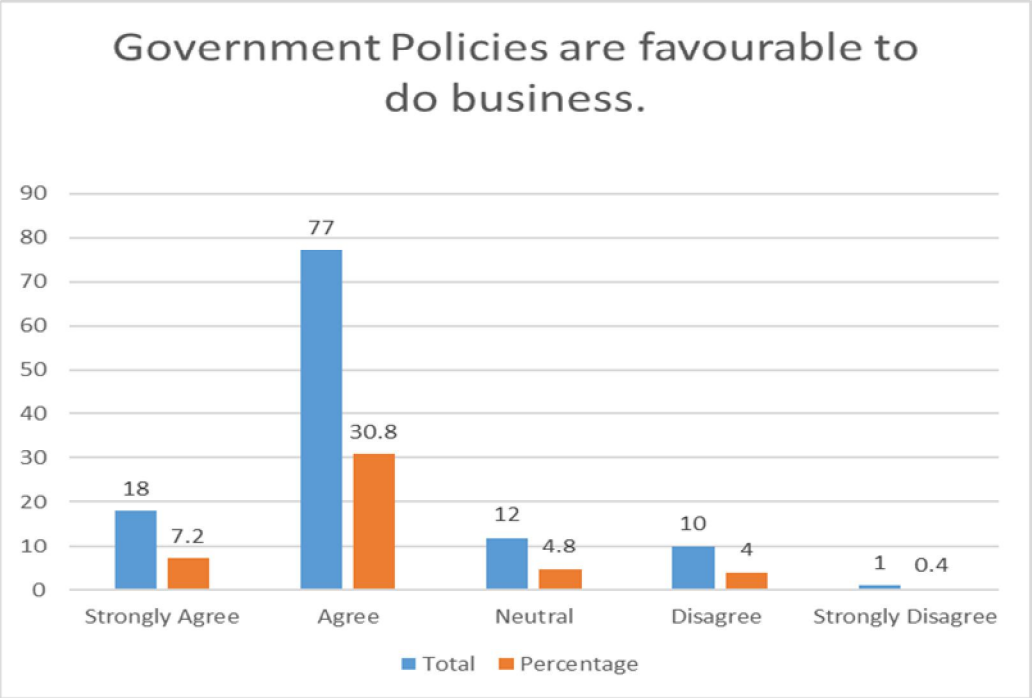

Figure No. 5.14

Interpretation: About innovative entrepreneurs government policies are favourable to do business, out of the total respondents strongly agree 7.2%, agree 30.8%, neutral 4.8%, disagree 4% and strongly disagree 0.4%. This shows that most of the innovative entrepreneurs find that government policies are favourable to do business.

15. Proper guidance is available.

Table No. 5.15

Proper guidance is available	**Total**	**Percentage**
Strongly Agree	31	12.4
Agree	64	25.6
Neutral	12	4.8
Disagree	10	4
Strongly Disagree	1	0.4
Total	118	100

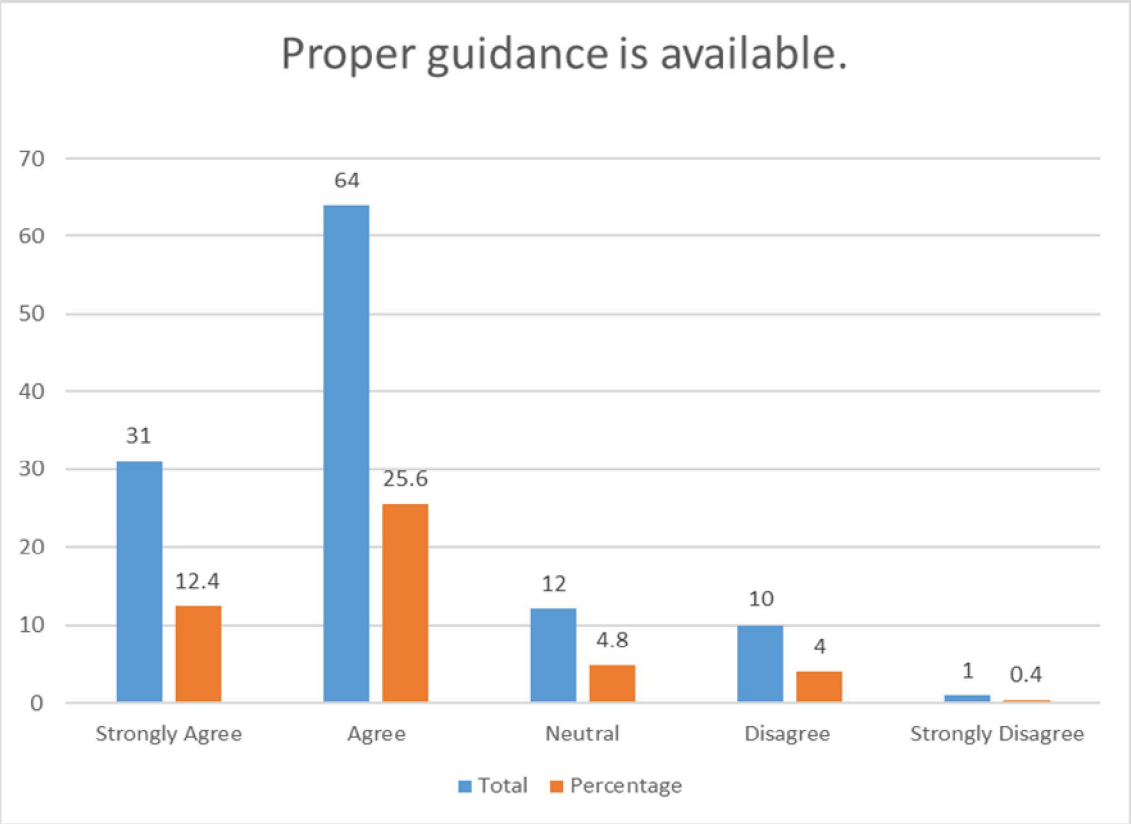

Figure No. 5.15

Interpretation: About pioneer entrepreneur's proper guidance is available, out of the total respondents strongly agree 12.4%, agree 25.6%, neutral 4.8%, disagree 4% and strongly disagree 0.4%. This shows that most of the innovative entrepreneurs get proper guidance.

CHAPTER 6

CONCLUSION

This research is based on the empirical data and to trace the pioneer innovators we visited various villages to collect the data from the farmers who are pioneer innovators. The data collected was analysed and the following conclusion is drawn:

It has been concluded that most of innovative entrepreneurs are in business because of the circumstances forced to them but they got the guidance and used their innovative ideas to become an enterpreneurs. They possess all the qualities to become an entrepreneur such as knowledge, self-confidence, risk taking aptitude, hardworking and good decision making.

Entrepreneurship help radicalise farming technologies and bring innovation to improve yields per hectare when developing alternative sources of employment.

Intelligent farming is the hour needed. In agriculture, biotechnology is being used by the pioneer innovators for advantages by improving soil health and reducing the intake of nitrogen.

The sectors that can greatly benefit from entrepreneurial interventions are food processing and packaging, seasonal fruit and vegetables preservation, seed processing, flower cultivation in addition to crop cultivation etc.

In rural sectors, agro-based industries can thrive where labour is abundant and labour costs low. Small and medium-sized enterprises established on a rural level to complement traditional farm income in large measure and to create alternative sources of revenue.

Southern Rajasthan is emerging today as a major startup hub with the city's new business energy giddy.
The government has already initiated attractive incentives to offer farmers-cum-entrepreneurs easy loans, insurance schemes and tax benefits. Developing agricultural entrepreneurs can greatly benefit the Indian economy

- Reducing the agricultural burden
- Generating rural youth employment opportunities
- Reducing the need for rural to urban migration, thus reducing urban pressures, etc.
- Increased national and individual income

Pioneer Innovators are working in the following areas in Southern Rajasthan:

1. Processing of food

Half of all exports from developing countries are agricultural-based industrial products. Most of them, however, involve exports of raw material to developed countries, the main exports of which include processed goods. We are losing income and production by continuing to operate at a low value chain. In rural areas, a whole food processing industry can be developed, increasing revenues and jobs.

2. Flower-growing

In some cases floral cultivation can be carried out on small sections of land. Most flowers are actually grown on 'micro farms.' Farmers can use some of their land alongside conventional crops to grow seasonal flowers.

However, this requires neighbouring markets and processing and preservation units. Enterprises with knowledge of flower cultivation and marketing in fertile countryside can establish parallel industries.

3. Agricultural Technology

Dependence on obsolete and inadequate technologies leads to poor productivity and low incomes. While farmers on a large scale have adopted modern technology in India, the majority of small-scale farmers still rely on age-old methods, mainly by hand.

Encouraging entrepreneurship in agriculture can boost productivity through the incorporation in farming of modern technology. The risk of monsoon and price trends in the markets can be taken care of by increasing awareness and technology.

The basis for India's growth and development is based on the significant economic contribution from rural areas through agriculture, which in turn encourages growth and development in other sectors.

Business contributes to the nation's economy, improves production and the labour market, creates jobs, and ultimately increases the employment rate, which influenced most developing countries, including India, to support and encourage entrepreneurship in their economic and unemployment growth. India concentrated on entrepreneurial development, which is nothing other than an organised and controlled growth for an entrepreneur who employs knowledge, financial support, marketing and other approaches to building entrepreneurial skills.

Pioneer Innovators Agri-business solves the following problems:

- Reduced burdens related to agriculture.
- Ensures employment opportunities for rural people in particular
- Reduced migration of young people from rural to urban
- Industrial development reduced

- Low urban pressure
- Agricultural enterprises include:
- Producers at farm level

Need for Pioneer Innovators in agri entrepreneurship

In recent years, entrepreneurs have played an important role by providing economic solutions and transforming challenges in opportunities to solve some of the pressing problems in society. Education, media, entertainment, transport, e-commerce, etc. are some of the sectors revolutionised by enterprise.

In the Indian agricultural landscape, similar challenges and opportunities are prevalent. Entrepreneurship can offer an innovative solution to some of the key agricultural questions such as:

It is also used to map crop patterns, crop intensity, draught evaluation and a better understanding of crop agronomy, etc. In the future, entrepreneurs must ensure that by expanding their businesses they minimise the costs of their services. Small and marginal farmers would thus be able to effectively use the services available.

The entrepreneurs have no lack of opportunity. Even if they reduce 'per unit' profit for their services to a minimum, they can still make large profits. In combination with the huge social dividend that these entrepreneurs will generate, agri-enterprise in India will in future be the driving force for them.

The Government of India has continuously attached increasing importance and support for rural entrepreneurship promotion and growth. Rural entrepreneurship has become a dynamic concept today. Rural entrepreneurship is generally defined as 'entrepreneurship emerging at the municipal level which can take place in a number of fields of Endeavour, including industry, business and agriculture. Rural development was linked to entrepreneurship in comparison with earlier days. It is not an easy task to define entrepreneurship. An entrepreneur is a person who either creates a new combination of production factors, such as new products, new production methods, new markets, finds new sources of supply, new products and new forms of organisation, or is willing to risk or eliminates imbalance from

aggregate demand with aggregate supply by exploiting the market opportunities. Simply put, 'entrepreneurship' is the act of being a businessman who can be defined as 'one who takes up innovations, finances and business skills in an effort to turn innovations into economic goods.' The problem is essentially a sluggish development that involves developing one area at the expense of development elsewhere, with associated underdevelopment problems. For example, in villages underemployment or unemployment has led to large influxes of rural population into towns. Currently we need to create a situation in which migration from rural to urban areas falls. Migration per se is not always unwanted, but should be minimal in terms of employment. In fact, the situation should be such that people need to move from towns and cities to rural areas because there are better facilities and opportunities.

Entrepreneurship certainly starts with action and the establishment of a new organisation. This organisation can or cannot be self-sufficient in the long run and can in fact never earn substantial income. However, when people create a new organisation they really have entered the paradigm of entrepreneurship. Balanced and sustainable development is definitely a time requirement and can only be achieved if rural areas thrive. Rural entrepreneurship growth may lead to poverty reduction, urban pollution, slum growth and population ignorance. It also helps to improve the literacy rate and the rural people's standards. Rural industries include traditional and modern industries. The former consists of the khadi and local industries, the sericulture, the handloom and the coir industries. Rural entrepreneurship problems Entrepreneurs certainly play an important part in economic development contributing to the nation's overall Gross Domestic Product. In everyday life and work, they face various problems. Because thorns are part of roses, a thriving business likewise has its own problems.

Some of rural entrepreneurs' major problems are as follows:

1. Financial issues:

Some of rural entrepreneurs' major financial problems:

a) Lack of funds: Due to the lack of tangible security and market credit, most rural entrepreneurs fail to receive external funds. The method of using the banks' loan facility is too time consuming, which often disappoints rural entrepreneurs by its delay. Rural entrepreneurs' lack of financial availability is by far one of the biggest challenges facing rural entrepreneurs today, particularly in view of the global recession.

b) Infrastructure Lack: Despite the government's efforts, the growth of rural entrepreneurs is not very healthy because of lack of adequate and proper infrastructure.

c.) Rise Element: Because of a lack of financial resources and external support, rural entrepreneurs have very low risk to bear capacity.

2. Marketing problems: Some of rural entrepreneurs' major marketing problems are as follows: A. Competition: Strong and severe competition from large organisations and urban entrepreneurs exists for rural enterprises. The cost of production is high because of high input costs. Standardization and large-scale unit competition problems are some of the main problems marketers face. New companies have limited financial resources and cannot therefore afford to spend more on marketing and advertising.
b. Intermediaries: Intermediaries exploit rural entrepreneurs. Rural entrepreneurs depend heavily on intermediaries who necessarily pocket large quantities of profit to market their products. Other marketing problems in rural areas are also poor transport facilities and storage facilities.

3. Management problems: The following are some of the main management problems:
a. Lack of I.T. knowledge: information technology as such in rural areas is not very common. Enterprises use internal links to promote the flow of services, goods, ideas and information.
b. Legal formalities: It is extremely difficult for rural entrepreneurs to comply with various legal formalities and get licences because of ignorance and analphabetism. The procurement of raw materials is also a difficult task for many rural businessmen. They can also end up with poor raw materials, which can also tackle the storage and storage problems.
c. Lack of technical knowledge: rural entrepreneurs are suffering to a significant extent from a lack of technical knowledge. The lack of educational facilities and other comprehensive services creates a hurdle for rural entrepreneurship development.
d. Low quality products: The growth of rural undertakings is another important problem, namely the poor quality of products manufactured because of the lack of available standard instruments, other equipment and poor quality of raw materials.

4. Problems with human resources: Some of the main problems with human resources found in the organisation are: A. Low level of skills: Most entrepreneurs working in rural areas are unable to find highly skilled workers. They need to be trained and their education too generally is a serious problem for entrepreneurs, as they are largely untrained and training in a local language they can easily understand.

b. Negative attitude: In family, society and support systems at times, the environment is not sufficiently conducive to encourage rural people to take up business careers. It can certainly be due to a lack of awareness and knowledge of business opportunities. Young, mostly well-educated young people tend to leave. Remedial measures to solve rural entrepreneurs' problems Various organisations such as IFCI, SIDBI, ICICI, NABARD, etc. attempt to resolve the major problems facing rural entrepreneurs. Marketing problems are mainly related to price, distribution channels, promotion of products etc. The following measures can be adopted in order to make rural entrepreneurs know the business venture: a. Creating financial cells: banks and financial institutions supplying entrepreneurs with financing need to create special cells for easy financing of rural entrepreneurs. b. Concessional interest rates: finances should be provided to rural entrepreneurs on an easy repayment basis and at concessional interest rates. The lumpy formalities in the sanction of loans to rural entrepreneurs should necessarily be avoided.

c. Offering training facilities: training is critical for overall entrepreneurial development. It also allows rural entrepreneurs to successfully undertake the project as it certainly imparts the necessary skills in running the business. The economically weaker entrepreneurs of society currently need a government-of-India training facility to develop the skills of existing entrepreneurs, so that rural entrepreneurs can generate income and jobs in rural areas. d. Power supply of raw materials: it should surely be a priority for rural entrepreneurs to ensure proper supply of scare raw materials. Subsidies may also be offered to make rural entrepreneurs' products reasonable and cost-effective at times. e. Establishment of marketing co-operatives: rural entrepreneurs should be given adequate support and encouragement to establish marketing co-operatives. These partnerships help to get different inputs at a reasonable rate and help you sell your products at remuneration prices. Through extensive training, adequate education, the creation of separate financial institutions, the development of marketing cooperatives, rural entrepreneurs in India flourish to a significant extent.

Rural entrepreneurs definitely play a key role in India's economic progress. They play an important role in turning developing countries into developed countries. In today's global market, the economic policy environment of a country must toujours be conducive to efficiency for an organisation. The country's economic policy should also allow entrepreneurs, regardless of whether the public, private or joint sector, to magically touch an organisation to achieve innovativeness, speed, flexibility and also a strong sense of self-

determination. However, rural entrepreneurship is the best response to rural poverty eradication in India. Government should therefore emphasise and further emphasise integrated rural development programmes. Most rural young people do not see entrepreneurship as an option for a career.

Organizations and governments therefore need to develop training and support systems which provide all the support needed to motivate rural young people to take up enterprise as a career. In addition, efficient regulated markets should be established, and governments should also help in this context. Standardization and classification should be promoted and promotional activities to encourage rural entrepreneurs should also be enhanced. Full government support should also be provided to NGOs. In the current context, entrepreneurship studies help entrepreneurs not only meet their personal needs but also contribute to the economic contribution of new enterprises. In addition to increasing national incomes by creating new jobs, rural entrepreneurship also serves as a key bridge between innovation and the market. To conclude, institutions of change must concentrate on synergies between education, innovation and entrepreneurship.

5. Small illiterate owners are struggling to make their farms a company because of lack of information, investment, innovation and market exposure.

6. Service awareness must first be developed among farmers before it is promoted by self-employed groups.

7. In promoting services that cause farmers to neglect services provided by self-employed teams, the impact of free services extended by government organisations on farmers is enormous.

8. Need of technical and business-related support services for self-employed experts, access to marketing agencies, key input and tooling providers and monitoring stations undergoing modern technological development.

9. Specific organisations, cooperatives and private traders have more legal barriers to agri-businesses.

10. The reluctance of people's organisations to use huge investments and state-of-the-art

technology is affecting their organisations' profitability, and eventually losing interest in their businesses and leaders.

Factors enhancing future scope of Pioneer Innovators in Agri-Business:

1. India's talented pre-climate is agricultural commodities such as temperature, sub-tropical and tropical.

2. Agricultural inputs, such as inorganic and organic fertilisers, fodder, etc., will always be in demand.

3. There is an increasing scope for biotechnology application to seed farming, bio-resistant agents, bakery microbes, etc.

4. The improved export rate to increase the country's economic growth. According to the World Trade Organization, India has a vast export potential for agricultural commodities such as oil, fruit, vegetables, spices, cereals, etc. both raw or processed.

5. There are scope for primary secondary and tertiary processing of agricultural commodities during increasing production standards.

6. Livestock also provides the rural population with enormous scope.

7. Forest bio-waste can also be used for production.

8. There are massive opportunities for apiary and beekeeping.

9. The cultivation of mushrooms is also carried out using well-established methods.

10. The demand for organic products is increasing as people become equally health conscious because of the increased use of pesticide in agriculture, which gives farmers an opportunity to move towards traditional agriculture.

11. On the other hand there is an increasing need for bio-pesticides and bio-control agents for crop protection.

12. Seed and hybrid crops are more likely to exist in India as most plant varieties have

reached the plateau stage.

13. Shifts to micro-irrigation systems and human resource reducing equipment have fairly good chances because of lower groundwater and the demand for rural labour.

14. Exports of greenhouse-grown vegetables and flowers.

15. Trained human resource consulting services will look after extended agricultural systems due to the reduced resources from the State and central government funding.

16. Agricultural production always provides opportunities for employment in marketing, transport, storage etc.

CHAPTER 7
SUGGESTIONS

The following proposals are made to solve the various problems of small-scale innovation. The proposals are categorically addressed to the government, banks and other financial institutions and Innovative entrepreneurs.

Proper training, motivation and wide exposure becomes extremely important in order to run industrial enterprises on efficient lines. "Entrepreneurs can be taught and trained" is universally accepted. In India, analphabetism was the main obstacle to the development of innovation. The first step is therefore to provide people with adequate education and training. The promotion and development of innovation culture should be central to our education system so that young men and women can become "employees" and not "employees"

A company's unused capacity is an index of its problems, and all the problems it faces lead to the underuse of installed capacity. Power shortages are the main reason for capacity underuse. Every possible step must be taken to prioritise the improvement of the state's power condition.

The government must provide innovative entrepreneurs with efficient and effective consultancy services. Unhealthy competition between small units and large units in marketing issues should be discouraged. In this respect, the state government needs to be active. The government departments should procure products produced by the entrepreneurs as a sign of encouragement to local contractors.

It is a common understanding that not all those who want bank loans need to be genuine businessmen or entrepreneurs. Some people want loans simply to distract them for non-productive purposes. Banks may not find it difficult to identify such people. But banks should not dissuade genuine entrepreneurs while doing so.

Credit seekers should be treated as customers by financial institutions, not beggars. Entrepreneurs and banking companies can improve their confidence through constant monitoring and monitoring. It helps develop a sense of partnership between bankers and

entrepreneurs in the growth of small businesses.

Commercial banks and financial agencies may set up smaller industrial specialist branches to meet financial needs for small-scale businesses, with at least one in each district headquarters.

Application procedures and approval criteria should be made at branch-level with simple and fast loan approvals. Design suitable saving schemes for the poor; they are valued and an important source of rural mobilisation funds. Entrepreneurs must be provided with timely and adequate funding extending into the operational cycle of the activity. Banking services should be provided near the entrepreneurs / company; the banker should go to the borrower if necessary rather than round the other way.

Banks must reconsider their credit policies for entrepreneurs. Working capital shortages are the main factor responsible for the slow start of an industrial unit. So it is very important to handle this problem properly.

Entrepreneurs should receive proper training before starting a unit through government and non-governmental agencies, thus providing entrepreneurs with the opportunity to protect their units from illness.

Entrepreneurs should employ the latest production techniques and skilled labour to improve the quality and marketing of products. Since competition in many units is found to be an important problem, entrepreneurs should try to convert to less competitive areas and they should analyse demand before they enter.
The low education level should not discourage one from entering an industrial company, however, it is a fact that people with higher education levels have an easier access to the company. In addition, the higher the level of education, the higher is the opportunity to become an entrepreneur of the first generation.

Men's motivating ambitions. It activates men, expands their vision and gives meaning to their lives. Many entrepreneurs expect a lot from the state government and other NGOs. But never expect its exact accomplishment.

Previous company experience or employment should provide the basis for the selection of the

correct industry type. The most important factor for starting a company is the availability of sufficient financing. Without it, the idea of starting business or entrepreneurship will always remain a simple wish.

There should be some fundamental and essential managerial skills for entering into industrial innovation in functional areas such as finance, production and marketing. The age group of 21-30 years is the right time to start a business. The attendance of EDPs can provide entrepreneurs with reliable and profitable support in operating companies.

Labor should be given full training opportunities. The problem of labour absenteeism needs to be examined in a humane way. Within the industrial unit there should be an employer-employee friendly relationship. Employers must rethink their banking practises. Banks are here to assist entrepreneurs, but this doesn't mean the banks' aid is taken for granted. The need for an hour is the prompt repayment of bank loans.

Small industrial units should keep proper account books. The units should be required to maintain and prepare their professional accounting books by statutory obligation.

Unable everyone to be a successful businessman. A person must have certain values and characteristics to become a successful contractor. The characteristics and values need achievement, power need, positive work value, moderate job anxiety, risk-taking, internal control orientation, high aspirational levels and a preference for participatory and nutritional styles.

Entrepreneurship capacity can be built through a variety of initiatives, including educational efforts, on-the-job training, outreach and extension.

Colleges, universities, and secondary schools can play a significant role in helping foster the development of entrepreneurial knowledge, skills, attitudes, and behaviours. Educational institutions of all levels can help young people think about how they can use their education to maximise profits, secure gainful employment, and generate wealth instead of simply looking for employment and experiencing a more restricted lifestyle.

Educational institutions and programmes often fail in many countries. Programs are

frequently underfunded, inflexible, and lack inspiration. In India, a significant percentage of teachers are unqualified, have inadequate resources, are unmotivated, and use antiquated teaching techniques. Since students are not encouraged to think and act entrepreneurially, the education they receive does not foster such behaviour.

At the same time, basic education contributes to an overall skill set that entrepreneurs require. As part of these abilities, basic literacy and numeracy skills are required. It is extremely important to be able to read, write, and calculate when doing financial transactions and dealing with financial institutions. The importance of getting literacy skills as a child through the school system in order to foster the development of entrepreneurship skills among adults cannot be overstated.

Also, schools could help prepare their students for further study by encouraging them to go into farming and small-business work as is common in many rural communities.

If a participatory approach to learning were adopted in the classroom, it could greatly improve the educational experience for children. In my opinion, this could potentially shift the focus from the idea of knowledge transfer to that of a child's personal development and how to respond to life's challenges. This will be useful for aspiring entrepreneurs, who will have an opportunity to figure out solutions through research and experimentation.

The training provided by schools, as well as on-the-job experience, has a role to play in teaching entrepreneurship-related skills such as team collaboration, critical thinking, and strategic planning. This is laying the groundwork for future stages of entrepreneurial development, which will require skills that are more advanced and deal with the intricate details of business operations. While these must be learned through doing, basic skills are indispensable for learning.

Systematic Training Courses (Formal Education Programs**)** Formal training courses that are especially arranged are an effective way to train farmer-entrepreneurs. Farmers with such programmes can enhance their business and entrepreneurial capabilities. A benefit of formal training is providing a supervised environment for people to practise skills like bookkeeping, running an enterprise budget, or preparing a farm business plan.

Attending training courses is difficult unless a farmer is motivated to do so. The time involved in a course takes up valuable resources. Farmers may also need support and incentives to take part. Agents should be incentivized to attend training programmes. To do so, objectives of the programme must be attractive.

Training programmes should have clearly defined objectives, be offered at convenient times and locations, and must offer beneficial results to participants. In order to learn, we must first discover, discuss, and practise new skills.

Entrepreneurial training should first motivate farmers to act, and then provide them with the capability to act. The participants must be able to join the programme during convenient times and in convenient locations; and potential benefits must be apparent to them. Procedures should be kept simple to prevent over-simplification. Training should consist of elements that are used across the board as well as elements that cater to participants' specific needs.

Many training programmes are structured to transfer required knowledge and skills, but, often, there is little practical application of what is learned, and what is learned can be forgotten within a short time period. A learning process should be characterised by exploration, practise, and contemplation. Learning by doing is essential for any effective programme for skill and capacity development.

It is possible to design and implement training programmes in a variety of ways. A comprehensive education course or programme can be one that is of long duration, one that is made up of many short courses and workshops, or one that is available at an especially convenient time for the students.

Long-term programmes are better suited for students who prefer consistency and continuity in their learning because they include numerous aspects of the programme that connect over time. Despite that, farmers are rarely able to attend class full-time because of the time demands on their farms.

Focusing on issues instead of topics allows farmers to have more control and often makes programmes more alluring to them. The biggest disadvantage is the loss of the individual courses' learning and continuity. Programs should be built with the intention of offering

students continuity of learning, building capacity, and being affordable. Additionally, training programmes should be relevant and applicable, highly collaborative, and provide participants with the opportunity to work on genuine business issues. It is important to be flexible and accommodating when training participants, as the methods and content should all be adaptable.

Programs should be hassle-free, as well as reasonably priced. Generally, short workshops are used to educate participants about a particular issue, which is referred to as awareness-raising. It is also frequently used to motivate participants, helping them to visualise and think outside of the box. Opportunities for participants to exchange experiences and learn from one another are provided in this process. To give one specific example, a producer.

BIBLIOGRAPHY

BOOKS

55. Aggarwal, V.K.(1975) Initiative, Enterprise and Economic Choices in India, Munshiram Manoharlal, New Delhi.

56. Akhouri, M.M.P. and Sharma S.V.S.,(1978) Small Entrepreneurship Development in North Eastern India, SIET, Hyderabad.

57. Ankur Budhiraja and Dr. Bhawna Bhatnagar (2009), Entrepreneurship and Small Business Management, Vayu Education of India, New Delhi, .

58. Arora, S. Gupta, A. and Mittal, S. (2009) Handbook of Business Plans, Guru Gobind Singh Indraprastha University, Excel Books, New Delhi.

59. Ashok Kumar, S, (1990) Entrepreneurship in Small Industry, Discovery Publishing House, New Delhi..

60. Badhai B.(2001), Entrepreneurship for Engineers, Dhanpat Rai and Co. Pvt Ltd., New Delhi.

61. Bammback, C.M. and J.R. Mancusu (Eds.) (1976), Entrepreneurship and Venture Management, Prentice Hall, New Jersey.

62. Banumathy, Dr.K., Dr. Prabhu N.R.V. and Nagendran R. (2002) , Entrepreneurship Management and Development of Small Business, Centre for Research and Action for Integrated Development, Chennai.

63. Basotia G.R. and Sharma K.K.(1999), Handbook of Entrepreneurship Development: An Entrepreneur's Guide to Planning, Starting, Developing and Managing a New Enterprise, Mangal Deep Publications, Jaipur.

64. Batra G.S.(2002), Development of Entrepreneurship, Deep and Deep Publications Pvt Ltd., New Delhi.

65. Batra, G.S. and Bhatia, B.S. (2000), Entrepreneurship and Small Business Management, Deep & Deep Publications Pvt. Ltd., New Delhi.

66. Batra, G.S. and Daugal, R.C.(2000), Entrepreneurship and Small Scale Industries, Deep and Deep Publication Pvt. Ltd., New Delhi.

67. Bhagwari Jugolish (1996), The Economics of Underdeveloped Countries, World University Library, London.

68. Bhanushali, S.C.(1987): Entrepreneurship Development, Himalaya Publishing House, New Delhi .

69. Bhatia, B.S. and Batra, G.S.(2000), Entrepreneurship and Small Business Management, Deep & Deep Publications Pvt. Ltd., New Delhi.

70. Bhattacharjee, H.(1979), Entrepreneurial Development-A Behavioural Model, SEDME, Hyderabad.

71. Bhawna Bhatnagar, Dr. and Ankur Budhiraja (2009), Entrepreneurship and Small Business Management, Vayu Education of India, New Delhi.

72. Bholanath Dutta (2009), Entrepreneurship Management: Text and Cases, Excel Books, New Delhi.

73. Bisht, N.S. et al (Eds.) (1989): Entrepreneurship Reflections and Investigations, Chugh Publications, Allahabad, 1989.

74. Buchanan, D.H.(1934), The Development of Capitalistic Enterprise in India, New York.

75. Cantillon, Richard (1971), Entrepreneurship and Economic Development, The Free Press, New York.

76. Carol Upadhya and Mario Rutten (1997), Small Business Entrepreneurs in Asia and Europe, Towards a Comparative Perspective, Sage Publication, New Delhi.

77. Centre for Entrepreneurship Development, Entrepreneurship and Small Business Management, Madurai, 1995.

78. Chamberlain, N.W. (1968), Enterprise and Environment-The Firm in Time and Place, McGraw Hill, New York.

79. Chandra, P.(1999), Projects-Preparation, Appraisal and Implementation, Tata McGraw Hill, New Delhi.

80. Cherunilam, Francis (2001), Business and Government, Himalaya PublishingHouse, Bombay.

81. Chopra, K.C.(1974), Entrepreneurship and Promotion of Small Industries in India, The Banker, Bombay.

82. Chris Boulton and Patrick Turner (2006), Mastering Business in Asia, Entrepreneurship, Willey India Pvt Ltd., New Delhi.

83. Daugal, R.C. and Batra, G.S.(2000), Entrepreneurship and Small-Scale Industries, Deep and Deep Publication Pvt. Ltd., New Delhi.

84. Davenport Robert W.(1967), Financing the small Manufacturing in Developing Countries, McGraw Hill Book Company, New York.

85. David C. McClelland, the Achieving Society, D. Van Nostrand Co. Inc., London, 1961.

86. David H. Holt (2000), Entrepreneurship: New Venture Creation, Prentice – Hall of India Private Ltd., New Delhi.

87. Dean A. Shepherd, Robert D. Hisrich, and Michael P. Peters (2007), Entrepreneurship, Tata McGraw Hill Education Private Limited, New Delhi.

88. Desai, V. (2000), Entrepreneurial Development, Himalaya Publishing House, Bombay.

89. Desai, Vasant, Small Scale Industries and Entrepreneurship, Himalaya Publishing House, Mumbai, 2000.

90. Desai, Vasant (2002), Dynamics of Entrepreneurial Development and Management, Himalaya Publishing House, Mumbai.

91. Deshpande, M.U. (1982), Entrepreneurship of Small-Scale Industries Concept, Growth, Management, Deep & Deep Publications, New Delhi, .

92. Dhameja S.K. (2002), Women Entrepreneurs: Opportunities, Performance, Problems, Deep & Deep Publications Pvt Ltd., New Delhi,

93. Dhameja S.K. and Rathore B.S. (2000), Entrepreneurship in the 21st Century, Rawat Publications, Jaipur.

94. Dilip Gangopadhyay (2001), Enterprise and Entrepreneurs, Basabi Gangopadhyay, Howrah.

95. Dina Dhar S., Ratna Ghosh, and Meenakshi Gupta (1998), Women and Entrepreneurship in India, in the book edited by Rabindra N. Kanungo, Sage Publications, New Delhi, 1998.

96. Drucker, P.F. (1995), Innovation and Entrepreneurship, Heinemann, London.

97. Dutta, Amlan (1961), Essays on Economic Development, Book Land Pvt. Ltd, Calcutta.

98. Fucini, J.J. and Fucini, S. (1987), Experience Inc., Men and Women who founded famous companies after the age of 40, The Free Press, New York.

99. Fucini, S and Fucini, J.J. (1987), Experience Inc., Men and Women who founded famous companies after the age of 40, The Free Press, New York.

100. Gangadhara Rao (1973), N., Entrepreneurship and Growth of Enterprise in Industrial Estates, Deep & Deep Publications, New Delhi, 1973.

101. Gaikwad, V.R et al (1974): Entrepreneurship Concept and Approaches, Indian Institute of Management, Ahmedabad.

102. Ganguli, B.C. and others (et.al) (1977): Management Guide for Small Entrepreneurs, Kwality Books, Calcutta.

103. Ganguli, S. (1978), What Motivated Mr. Small Entrepreneur, IndianManagement, Delhi.

104. Gayathri J. (2009), Entrepreneurship Development, Mayura Books, Chennai.

105. Geoffrey G. Meredith, Robert E. Nelson, and Philip A (1994). Neck, ThePractice of Entrepreneurship, Sultan Chand & Sons, New Delhi,.

106. Guha, A., Parsi Seths (1970) as Entrepreneurs, Economic and Political

Weekly,Bombay.

107. Gomathi, S. and Dr. Prabhu (2005), N.R.V. Essentials of Entrepreneurship,Vellore.

108. Gupta, A. Arora, S. and Mittal, S. (2009) Handbook of Business Plans, GuruGobind Singh Indraprastha University, Excel Books.

109. Gupta, C.B. and Khanka, S.S. (1996), Entrepreneurship and Small BusinessManagement, Sultan Chand & Sons, New Delhi.

110. Gupta, Dr. C.B. and Dr. Srinivasan, N.P. (1999), EntrepreneurshipDevelopment: Text and Cases, Sultan Chand & Sons, N. Delhi.

111. Gupta, C.B. and Srinivasan, N.P. (2001), Entrepreneurial Development, SultanChand & Sons, New Delhi.

112. Gupta, M.K (1987), Entrepreneurship in SSI, Anmol, Delhi.

113. Gupta, Dr. S.L. and Sathish Taneja (2001), Entrepreneur Development: New Venture Creation, Galgotia Publishing Company, New Delhi.

114. Hammid, K.A. (1974), Enterprise-Industrial Entrepreneurship andDevelopment, Sage Publications, London, .

115. Heckman, J. (Eds.) (1983), Entrepreneurship and the Outlook for America FreePress, New York.

116. Hundal, P.S. (1977), Achievement, Motivation and its Structure, Guru NanakDev University, Amritsar, 1977.

117. Igor Pavlin and Joseph Prokopenko (1992), Entrepreneurship Development in Public Enterprises, Oxford & IBH Publishing Co. Pvt Ltd., New Delhi.

118. James J. Berna (1960), Industrial Entrepreneurship in Madras State, Asia Publishing House, Bombay.

119. James T. McCrory, A Study on a Small Industry in a North Indian Village, Ministry of Commerce & Industry, Government of India, 1956.

120. Jasmer Singh Saini (2005), Entrepreneurship Development: Programmes and Practices, Deep & Deep Publications Pvt Ltd., N. Delhi.

121. Jeffrey Timmons et al., New Venture Creation, Richard D. Irwin (1985), Illinois.

122. John Kenneth Galbraith (1969), Economic Development, Harvard University Press, Cambridge.

123. Joseph Prokopenko and Igor Pavlin (1992), Entrepreneurship Development in Public Enterprises, Oxford & IBH Publishing Co. Pvt Ltd., New Delhi, 1992.

124. Joshi, A. and Singh K., Lala Shri Ram (1975)-A Study in Entrepreneurship and Management, Orient Longman, New Delhi.

125. Kalpana Vaish (1993), Entrepreneurial Role of Development Banks in Backward Areas, Concept Publishing Company, New Delhi.

126. Kamala Singh (1992), Women Entrepreneur, Government. of India, Ashish Publication, Delhi.

127. Kao, J. (Ed) (1990), Global Entrepreneurship, Harvard Business School, Harvard.

128. Kao, J., (1989) Entrepreneurship, Creativity and Organisation, Prentice Hall, New Jersey.

129. Kao, J. and H.: Stevehson (Ed.) (1989), Entrepreneurship-What it is and How to Teach it, Harvard University Press, Harvard..

130. Kapoor, T.N. (Ed.) (1967), Industrial Development in the States of India,Sterling Publishers, New Delhi.

131. Kaur Kulwinder (1983), Structure of Industries in India, Deep and DeepPublications, New Delhi.

132. Kenneth, R. (1980), Entrepreneurship and Small Business Management, Harvard University Press, Boston.

133. Kent, C.A. et al (Eds.) (1982): Encyclopedia of Entrepreneurship, Prentice Hall,New Jersey.

134. Khanka S.S. (2009), Entrepreneurship Development, S. Chand & Co. Ltd., NewDelhi.

135. Khanka, S.S.(2002), Entrepreneurial Development, S. Chand & Company Ltd.,New Delhi.

136. Khanka, S.S. and Gupta, C.B. (1996), Entrepreneurship and Small BusinessManagement, Sultan Chand & Sons, New Delhi.

137. Kilby, P. (Eds.) (1971), Entrepreneurship 'and Economic Development, TheFree Press, New York.

138. Killy, Peter (Ed.) (1971), Entrepreneurship and Economic Development, TheFree Press, New York.

139. Kumar, S.A. (1990), Entrepreneurship in Small Industry, Discovery PublishingHouse, New Delhi.

140. Kumaresan R. (2009), Entrepreneur versus Entrepreneurship Development,MSK Publications, Salem.

141. Lakhanpal (1990), A.: Entrepreneurship Development - An Institutional Approach, Commonwealth Publishers, New Delhi.

142. Lakshmana Rao V.(1986), Industrial Entrepreneurship in India, Chugh Publishers, Allahabad.

143. Lakshman Prasad and Subhasish Das (2008), Entrepreneurial Climate: AnAssorted Coverage, Excel Books, New Delhi.

144. Mancusu J.R. (Eds.) and Bammback, C.M. (1976), Entrepreneurship and Venture Management, Prentice Hall, New Jersey.

145. Manohar U. Despande (1982), Entrepreneurship of Small Scale Industries, Deep and Deep Publications, New Delhi.

146. Mansfield, R.S. et. al. (1987), The Identification and Assessment of Competence and Other Personal Characteristics of Entrepreneurs in Developing Countries, McBer and Co., Boston.

147. Marc J. Dollinger (2003), Entrepreneurship: Strategies and Resources, Pearson Education, New Delhi.

148. Mark Casson (1982), the Entrepreneur: An Economic Theory, Martin Robertson & Co. Ltd., Oxford.

149. Mario Rutten and Carol Upadhya (1997), Small Business Entrepreneurs in Asia and Europe, Towards a Comparative Perspective, Sage Publication, New Delh.

150. McBennet, R (1990).: Starting up your Own Business, Mercury Books,London.

151. McClelland, D.C. (1961), The Achieving Society, D. Van Nostrand and Co., New York.

152. McClelland, D.C. and Winter D.G. (1969), Motivating Economic Achievement, The Free Press, New York.

153. Meenakshi Gupta, Dina Dhar S., and Ratna Ghosh (1998), Women and Entrepreneurship in India, in the book edited by Rabindra N. Kanungo, Sage Publications, New Delhi.

154. Meredith Geoffrey G, Nelson Robert E, and Neck Philip A (1982), the Practiceof Entrepreneurship, Sultan Chand & Sons, New Delhi.

155. Michael P. Peters, Dean A. Shepherd and Robert D. Hisrich,(2007) Entrepreneurship, Tata McGraw Hill Education Private Limited, New Delhi.

156. Mishra, D.N.(1990), Entrepreneur and Entrepreneurship Development and Planning in India, Chugh Publications, Allahabad.

157. Mishra, P.N. (1986), Development Banks and New Entrepreneurship in India, National Publishing House, New Delhi.

158. Mittal, S. Arora, S. and Gupta, A.(2009), Handbook of Business Plans, Guru Gobind Singh Indraprastha University, Excel Books, New Delhi.

159. Murthy (1989), Entrepreneurship Development in India, Mittal Publications, New Delhi, 1989.

160. Nandy, A. and Ownes, R.L. (1978), The New Vysyas, Allied Publishers, Bombay.

161. Nagendran R., Dr. Banumathy K. and Dr. Prabhu N.R.V. (2002),

Entrepreneurship Management and Development of Small Business, Centre for Research and Action for Integrated Development, Chennai.

162. Nagendra, Dr. P. Singh (1985) Emerging Trends in ED: Theories and practices, International Foundation for Development Management, New Delhi.

163. Nandan H. (2007), Fundamentals of Entrepreneurship, Prentice – Hall of India Private Ltd., New Delhi.

164. Naunihal Singh (2003), Effective Entrepreneurial Management, Anmol Publications Pvt Ltd., New Delhi.

165. Neal Thornberry (2006), Lead like an Entrepreneur, Tata McGraw – Hill Publishing Company Ltd., New Delhi.

166. Neck Philip A, Meredith Geoffrey G, and Nelson Robert E (1982), the Practiceof Entrepreneurship, Sultan Chand & Sons, New Delhi.

167. Neeta Baporikar (2002), Entrepreneurship and Small Industry, Himalaya Publishing House, Mumbai.

168. Nelson Robert E, Neck Philip A and Meredith Geoffrey G (1982), the Practiceof Entrepreneurship, Sultan Chand & Sons, New Delhi.

169. Norman M. Scarborough and Thomas W. Zimmerer (2006), Essentials of Entrepreneurship and Small Business Management, Prentice - Hall of India Private Ltd., New Delhi.

170. Oomen, M.A., (1972) Small Industry in Indian Economic Growth-A case study of Kerala, S.B. Press, Trivandrum.

171. Ownes, R.L. and Nandy, A (1978). The New Vysyas, Allied Publishers, Bombay.

172. Pandit, M.L. (1985), Industrial Development in the Punjab and Haryana, B.R Publishing Corporation, New Delhi.

173. Pankaj Kumar and Sharma P.N. (2009), Development of Women Entrepreneurs in India: With special reference to Bihar, in the book edited by Dr. Anil Kumar Thakur and Dr. Rahman R., Women Entrepreneurship, Deep & Deep Publications Pvt Ltd., New Delhi.

174. Pareek, U. and Rao T.V. (1978), Developing Entrepreneurship, Learning Systems, New Delhi.

175. Pareek, V.I. and Rao T.V. (1979), Counseling and Helping Entrepreneurs in Ahmedabad, Ahmedabad.

176. Patel, V.G. (1987): Entrepreneurship Development Programme in India and its Relevance to Developing Countries, EDII, Ahmedabad.

177. Patil, Dr. B.S. (2009), Social Entrepreneurship, ALP Books, New Delhi.

178. Patrick Turner and Chris Boulton (2006), Mastering Business in Asia, Entrepreneurship, Willey India Pvt Ltd., New Delhi.

179. Patvardhan V.S. (1990), Growth of Indigenous Entrepreneurship, Bombay Popular Prakashan Pvt Ltd., Bombay.

180. Peter, Dr. A. (2004), Youth Entrepreneurship Everywhere, Youth Entrepreneurship Development Organization, Chennai.

181. Peter Kilby (Ed.) (1971), Entrepreneurship and Economic Development, theFree Press, New York.

182. Philip A. Neck, Geoffrey G. Meredith, and Robert E. Nelson (1994), The Practice of Entrepreneurship, Sultan Chand & Sons, New Delhi.

183. Poornima M. Charantimath (2008), Entrepreneurship Development and Small Business Enterprises, Pearson Publication, New Delhi.

184. Prabhu, Dr. N.R.V, Nagendran R., and Dr. Banumathy K. (2002), Entrepreneurship Management and Development of Small Business, Centre for Research and Action for Integrated Development, Chennai,.

185. Prabhu, Dr. N.R.V. and S. Gomathi (2005), Essentials of Entrepreneurship,Vellore.

186. Prasain, G.P. (2003), Entrepreneurship Development, Sunmarg Publishers and Distributors, New Delhi.

187. Prasain, G.P (2006)., Entrepreneurship and Small Scale Industries, AkanshaPublishing House, New Delhi.

188. Prayag Mehta, Venkateswara Rao T., and Udai Pareek (1978),

Developing Entrepreneurship, Learning Systems, Indian Institute of Management, Ahmedabad.

189. Priti Krishnan (2007), ICFAI Business School Case Studies on Entrepreneurship Volume I, Chennai.

190. Rajendra Jain and Sanjay Dubey (2009), Strategies of developing Countries: Opportunities and Challenges, Prestige Institute of Management, Excel Books, Dewas.

191. Rao, N.Q. (1986): Entrepreneurship and Growth of Enterprise in Industrial Estates, Deep & Deep Publications, New Delhi.

192. Rao, T.V. and Moulik T.K. (Eds.) (1979), Identification and Selection of Small Scale Entrepreneurs, IIM, Ahmedabad.

193. Pareek, U. and Rao T.V. (1978), Developing Entrepreneurship, Learning Systems, New Delhi.

194. Rao, Subha P. (2001), Entrepreneurship and Small Business Management, Discovery Publishing House, New Delhi.

195. Rathore B.S. and Dhameja S.K. (2000), Entrepreneurship in the 21st Century, Rawat Publications, Jaipur.

196. Rathore B.S. and Saini J.S. (2001), Entrepreneurship, Wheeler Publishing, New Delhi.

197. Ratna Ghosh, Meenakshi Gupta and Dina Dhar S. (1998), Women and Entrepreneurship in India, in the book edited by Rabindra N. Kanungo, Sage Publications, New Delhi.

198. Renu Arora and Dr. Sood S.K. (2004), Entrepreneurial Development, Kalyani Publishers, New Delhi.

199. Robert D. Hisrich, Michael P. Peters and Dean A. Shepherd (2007), Entrepreneurship, Tata McGraw Hill Education Private Limited, New Delhi.

200. Robert E. Nelson, Philip A. Neck, and Geoffrey G. Meredith (1994), The Practice of Entrepreneurship, Sultan Chand & Sons, New Delhi.

201. Saini J.S. and Rathore B.S. (2001), Entrepreneurship, Wheeler

Publishing, New Delhi.

202. Sanjay Dubey and Rajendra Jain (2009), Strategies of developing Countries: Opportunities and Challenges, Prestige Institute of Management, Excel Books, Dewas.

203. Saravanavel P. (1991), Entrepreneurship Development: Principles, Policies and Programmes, Ess Pee Kay Publishing House, Madras.

204. Sathish Khanna (2004), the Rising Indiapreneur: Instilling Entrepreneurial Skills, Macmillan India Ltd., Delhi.

205. Sathish Taneja and Dr. Gupta S.L. (2001), Entrepreneur Development: New Venture Creation, Galgotia Publishing Company, New Delhi.

RESEARCH WORKS

1. Aitken, H.Q.H.: Entrepreneurial Potential in Underdeveloped Countries, Ph.D. Dissertation, University of Tennessee, Tennurel, 1967.

2. Deshpande, M.U, Small Scale Industrial Entrepreneurship in a Developing Region, Marathwada University, Maharashtra, 1979.

3. Gaikwad, V.R., and Tripathi, R.N., "Socio-Psychological Factors Influencing Industrial Entrepreneurship in Rural Areas, National Institute of Community Development, Hyderabad, 1970.

4. Saini, J.S., Effectiveness of Entrepreneurship Development Programmes in Northern India, Doctoral Research, Department of Business Management, Punjabi University, Patiala, 1993.

5. Sharma, C.P.: Industrialization of Punjab, Role of State Development Institution, Ph.D. Thesis submitted to Punjabi University, Patiala, 1986.

ARTICLES

1. Bhargava, R.K. (1998), Importance of Small Scale Industries, Commerce (Supplement) 124 (3190), 24 June, 1972.

2. Bhat, A.R. (1998), Development of Small Industries in Free India, Commerce,125 (3196), 19 August, 1972.

3. Bhatia, B.S. (1998), Entrepreneurship in Punjab: Problems and Opportunities Appraised, Commerce, Vol. 113, No. 2888, September 10, 1966.

4. Gaikwad, V.R., and Tripathi, R.N. (1998), Socio-Psychological Factors Influencing Industrial Entrepreneurship in Rural Areas, National Institute of Community Development, Hyderabad, May 1970.

5. Guha Amalendu, Parsi Seths (1998) as Entrepreneurs, Economics and Political Weekly, Vol. V, No. 36, August, 29, 1970.

6. Gupta S.K., Entrepreneurship Development Training Programme in India, Small Enterprise Development, Vol. 1, No.4, December 1990.

7. Hazarika (1998), Jatin, National Seminar on Entrepreneurship Development - Keynote Address, IIE Guwahati, 10th December 1998.

8. Himachalam, D. (1998), Entrepreneurship Development Programme: Need for Revival, Banking and Finance, January 2001.

9. Khanka, S.S. (1998), Making the Entrepreneurial Society with reference to North East India, National Seminar on Entrepreneurship Development, II E, Guwahati, 2000.

10. Mali, D.D. (1998), Developing Entrepreneurship in North East - Experiencesand Strategies, Keynote Address, ICSSR, 2005.

11. Mathew, P.M. (1998), Union Budget and Small Enterprises, Economic and Political Weekly, Vol. XXXII, No. 14, April 5, 1997.

12. Nagayya, D (1998), Data Base in Researchable Areas in the Small Enterprise Sector, National Seminar on Entrepreneurship Development, IIE, Guwahati, December 1998.

13. Nagayya, D. and Appa Rao, P.B. (1998), Perspective of Entrepreneurship Education and Training, National Seminar on Entrepreneurship Development, IIE, Guwahati, Dec 1998.

14. Nandy, Ashish (1998), Entrepreneurial Man, Economic and Political Weekly (Supplement), Vol. VIII, No. 47, Nov. 24, 1973.

15. Nixon Singh E. and Bijoykumar Singh E. (1998), Entrepreneurship in Manipur: Problems & Prospects, Paper presented in the V Annual Conference of North Eastern Economic Association, Assam, Dec 2002.

16. Pathak, H.N. (1998), The Entrepreneur Technician and Manager in Small Scale Units, Economic and Political Weekly, Review of Management, Vol. VII, No. 48, November, 1972, pp. M 179 M 187.

17. Ram Charan, Competing for Growth, Business Standard, Chennai, Volume IX, No.1, February 2011.

18. Ranju Sarkar, Scripting the future, Business Standard, Chennai, Volume IX, No.1, February 2011.

19. Shirsat B.G., Charge of the entrepreneurs, Business Standard, Volume IX, No.1, February 2011.

20. Vepa, Ram K. (1998), Small Can Be Beautiful - Recommendations on Small Enterprises, Economic and Political Weekly, Vol. XXXII, NO. 27, July5, 1997.

21. Vepa Ram K. (1998), Entrepreneurship for Development of Backward Areas, National Productivity Council, New Delhi, 1973, PP. 14 -15.

22. Vander Veen, J.H. (1998), Commercial Orientation of Industrial Entrepreneurs in India, Economic & Political Weekly, Vol. XIII. No.3, Sept. 1975, pp. 318-30.

NEWSPAPER REPORTS

1. Arun Shourie, Charge of the Indian Brigade, Indian Express, 04/4/2004.

2. Balasubramanian D., The Innovation Quarter to Success, The Hindu, 22/01/09.

3. Bureau Report, TN announces policy on Micro, SME sectors, Business Line dated 23/2/2008.

4. Entrepreneurs in India and China, the Economist, February 23 – March 5, 2009.

5. Entrepreneur and philanthropist Jeysingh Thomas passes away, The Hindu, 19/10/2009.

6. Harshika Udasi, Drama Queen Gets Real, The Hindu, 29/07/2007.

7. Hemamalini Venkatraman, TN readies new MSME policy, The Economic Times dated 20/2/2008.

8. India's shining hopes, The Economist, 21/2/2004.

9. Innovative India, The Economist, 03/04/2004.

10. Madhusudhan Veeraraghavan, Growth of SMEs in manufacturing, The Economic Times dated 11/3/2008.

11. Rajat Gupta, Creating Indian Entrepreneurs, *India Today,* February 12, 2001

12. The Rise of India, Business Week, 12/4/2004.

13. Vijay Kelkar, India on the growth turnpike, October 2003.

14. Vinita Nayar, Doing the city pride, The Hindu, 22/08/2009.

REPORTS AND SURVEYS

1. All Manipur Entrepreneurs' Association (AMEA), Economic Development Towards 2001 AD.

2. Cashin, P. & R. Sabay, Regional Economic Growth and Convergence in India, Finance and Development, IMF, March, 1996.

3. Census of India, 2001.

4. Government of Punjab, Department of Industries, Administrative Reports, Chandigarh.

5. Government of Punjab, Department of Industries, Records, Chandigarh.

6. Government of Punjab, Department of Planning, Draft Five Year Plan, Chandigarh.

7. Government of Punjab, ESO, Statistical Abstract of Punjab, Chandigarh, Annual Issues.

8. Government of India, Guidelines for the Preparation of Feasibility Reports, Planning Commission, New Delhi.

9. Manimala, M.: Emergence of Pioneering Innovative Entrepreneurship - A Psychological Model, Working Paper, p. 24, II M, Ahmedabad, August, 1986.

10. Ministry of Industry, India, Report of the Expert Committee on Small Enterprises, New Delhi, 1997.

11. McCrory, James: Case studies in Latent Industrial Potential: Small Industry in North Indian Town, Ministry of Commerce, Government of India, New Delhi, 1956.

12. Punjab State Industrial Development Corporation, Chandigarh, Annual Reports, 1990 - 2000.

13. Punjab Financial Corporation, Chandigarh, Annual Reports, Chandigarh, 1990-2000.

14. Punjab Small Industries and Export Corporation, Chandigarh, Annual Reports, Chandigarh, 1999 – 2000.

15. Reserve Bank of India (RBI), Compendium of Circulars on Small Scale Industries, (July 1978 - December 1999) Mumbai, March, 2000.

16. Report of the Fiscal Commission, Government of India, New Delhi, 1950.

17. Shivaraman, S.: Entrepreneurship and Enterprise Growth A Survey, IIM Bangalore, Bangalore, 1982.

PERIODICALS

1. Business India, Kolkata

2. Business World, New Delhi

3. Economic and Political Weekly, New Delhi

4. IBA Bulletin, Mumbai

5. Indian Manager, New Delhi

6. Industrial Herald, Chennai

7. Productivity, New Delhi

8. Yojana, New Delhi

JOURNALS

1. Akhouri, M.M.P. (1980), Self - Employment through Entrepreneurship Development Strategies, an experiment in Assam, National Labour Institute Bulletin, Jan.-June, pp. 49-58.

2. Akhouri M.M.P. and Bhattacharya S.K. (1975), Profile of a Small Industry Entrepreneurship, SEDME, Vol. 2, No.1, SIET, Hyderabad.

3. Ashish Nandy (1973), Entrepreneurial Cultures and Entrepreneurial Man; Economic and Political Weekly, Review of Management, Vol. VIII, No. 47, November 24, pp. M98-M106.

4. Batra, G.S. (1995), Entrepreneurship Business: Failure and Turnaround Management, South Asian Journal of Management, Hyderabad, Vol. 2, No. 394, July-Dec.

5. Baumol, W.J. (1968), Entrepreneurship in Economic Theory, American Economic Review, May, pp. 64-71.

6. Bhat, R.S. (1974), Growth of Entrepreneurship in Small and Medium Sectors, Indian Journal of Public Administration, Vol. XX. No.3, July-September.

7. Bhatia, B.S., (1974) New Industrial Entrepreneurs-Their Origins and Problems, Journal of General Management, Autumn, 1974, pp. 72-73.

8. Burgelman, RA (1984): Designs for Corporate Entrepreneurship in Established Firms, California Management Review, California, 26(3), Spring 1984.

9. Chadha, V. and R.S. Johar (1980), "Industrial Development of Punjab: Pattern, Problems and Perspective", in PSE Economic Analyst, Amritsar, Vol. II, Dec., 1980.

10. Chandra, Poojary M. (1996), "Small Scale Sector: Myth and Reality", Economic and Political Weekly, Vol. XXXI, No.21, May, 25, 1996.

11. Collins, E.G.C. (1982), The Entrepreneur sees herself as Manager, Harvard Business Review, Harvard, July 1982, pp. 140.

12. Desai, A.N. (1981), Exploration of Entrepreneurial Talents, Indian Journal ofIndustrial Relations, Delhi, Vol. 10, No.3.

13. Desai, A.V. (1988), The Origins of Parsi Enterprise, Indian Economic and Social History Review, Bombay, Vol. 5, Dec. 1988, pp.307-17.

14. Hussain, Abid (1998), Small Enterprises Protection, Laghu Udyog, Vol. XXII & XXIII, No.6 to 7, Jan- Sept 1998.

15. Jha, L.K., (1970) Role of New Entrepreneurs, Southern Economist, Vol. IX, Annual Number, May I, 1970.

16. Lal, Sudarshan (1974), What Do We Mean by Small Industries, Yojana, Vol.No. XVII Nos. 23 and 24, January 1974.

17. Left, N.H., (1978) Industrial Organization and Entrepreneurship in the Developing Countries, Economic Development and Cultural Change, July, 1978, pp. 616-21.

18. Mahima Rai (2010), Horning Entrepreneurial Skills: Role of B Schools, MBA Review - Special edition on Entrepreneurial Skills, Hyderabad.

19. Manalel, James (1997), How Beautiful is Small, SEDME, Vol. XXIV (4), No.4.

20. Maichique, M.A. (1980), Entrepreneurs, Champions and Technological Innovation, Sloan Management Review, California, Winter, 1980, pp. 56-76.

21. Mary Kay Copeland (2010), Strategies for developing Entrepreneurship: Nature or Nurture, MBA Review - Special edition on Entrepreneurial Skills, Hyderabad.

22. Mohamed, S. E (1998), Marketing in 21st Century, Indian Journal of Marketing,XXXII (11), 15-20.

23. Nandy, A. (1974), Entrepreneurial Cultures and Entrepreneurial Men, Economic and Political Weekly, Vol. VII, No. 47, Bombay, Nov. 1974, pp. 98-105.

24. Papanek, G.F. (1962), The Development of Entrepreneurship, American Economic Review, Vol. LII, May, 1962, p. 46.

25. Prasain, G.P., Devi Sancharita R.K. (1997), Women Traders in Manipur - ACase Study, Indian Journal of Commerce, Vol. L. No. 193, Part IV.

26. Sujatha Mukherjee (2010), Profiling the Urban Women Micro - entrepreneurs in India, The IUP Journal of Entrepreneurship Development, Volume II, No.3,

27. Surinder Kapur, Raghavendra Rao and Sanjeev Bikhchandani (2007), Genesis- Creating value through entrepreneurial initiative, Vikalpa, April-June 2007.

28. Timmons, J.A. (1987), Characteristics and Role Demands of Entrepreneurship, American Journal of Small Business, 3 (1987), pp. 5-17.

29. Tripathi, D. (1981), Occupational Mobility and Industrial Entrepreneurship in India - Historical Analysis, Developing Economies, March 1981, pp. 52- 68.

30. Verma, M.C. (1978), Entrepreneurs Attitudes towards Organizing and Risk- taking, Indian Psychological Review, 1978, pp. 213-29.

31. Vries, M.K.D. (1985), The Dark Side of Entrepreneurship, Harvard Business Review, Harvard, Nov.-Dec. 1985, pp. 160-67.

ABBREVIATIONS

1. ACA – Angel Capital Association
2. API – Application Programming Interface
3. ARR – Annual Recurring Revenue
4. ARR – Annual Run Rate
5. ASP – Application Service Provider
6. AUM – Assets Under Management
7. B2B – Business to Business
8. B2C – Business to Consumer
9. BDC – Business Development Company
10. CAC – Customer Acquisition Cost
11. CAGR – Compound Annual Growth Rate
12. CRM – Customer Relationship Management
13. EBITDA – Earnings Before Interest, Taxes, Depreciation and Amortization
14. EIN – Employer Identification Number
15. EOD – End of Day
16. IRR – Internal Rate of Return

QUESTIONNAIRE

For the report entitled

"PIONEERING INNOVATORS IN THE SOURTHERN RAJASTHAN"

(To be filled in by the Agri Enterpreneur)

This exercise is intended to help farmers to identify their strengths and weaknesses as entrepreneurs. The extension worker can help farmers to build on their strengths and to strengthen their weaknesses. One strategy to follow is to get those farmers with strength in a particular characteristic to coach and assist farmers who are weaker in the same characteristic. They could meet to discuss the characteristic and ways to strengthen it.

Section – A

1) Name of the Farmer: _____
2) Marital Status _____
3) Gender _____
4) Age _____
5) Village _____
6) Tehsil _____
7) District _____
8) Contact No. _____
9) Education _____
10) About your Business _____
11) Your achievements _____
12) Challenges faced _____
13) Innovative Techniques and Methods used _____

Section-B

Sr.No.	Particulars	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Like being your own boss					
2	Self-confidence					
3	Sense of urgency					
4	High energy					
5	A willingness to risk money and security					

6	Ability to inspire and energise others					
7	Strong will					
8	Ability to learn from failures					
9	May devote a disporportionate time to your business					
10	Very competitive					
11	May lack some business skills					
12	A "never, never, never quit" attitude					
13	Honest and trustworthy					
14	Government Policies are favourable to do business					
15	Proper guidance is available					

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