



Rural Entrepreneurship, Science And Technology And Innovations In Farm Based Entrepreneurship Venture. A Case Study Of A Farmer Inventing Accustomed Machine For Tillage Farming

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Abstract:

The rural entrepreneurial ventures play a vital role in providing employment and income for the poor and unemployed in rural areas. As the population pressure grows in the land-scarce and developing countries like India, the growth in the agricultural production cannot absorb the ever increasing rural labour force in agricultural employment. This leaves the rural non-farm sector in the form of rural SMEs (small and medium entrepreneurial ventures) to absorb those released from agriculture but not absorbed in the urban industries. Contributing more than 52% of the GDP and making available more than 75% of all labour force in India the rural sector is best poised for a rapid expansion in the small and medium industry arena. The policy makers and executors have to find scope and space in the farm based entrepreneurial ventures to address to the daunting problem of unemployment in the country. The experiences of the people involved in such ventures needs to be cashed and used to make shift in the policy paradigm in the given context.

1.Introduction

1.1.The Scope Of Rural Entrepreneurship

India has been steadily growing as an economic power in the past two decades and has been able to create the bare necessary infrastructure required to sustain this rate of growth. The connectivity to remote areas has been improved to a great extent both in terms of physical accessibility by road and air and virtual accessibility in terms of telecommunications and information technology. Combined with this there is a steady growth in the education among the rural population including professional qualifications among rural youth. This presents the ideal situation for enterprises to spring in the rural areas where the cost of operation, labour and availability of raw materials is substantially cheaper as compared to urban parts of the country.

1.2.Government Agencies Set Up To Promote Rural Enterprises

The government having realized the true potential of rural SME sector has initiated a large number of programs and schemes aimed directly at boosting entrepreneurial ventures in the rural parts of the country.

1.2.1.National Agricultural And Rural Development Bank (NABARD)

This is the nodal agency that provides almost three fourth of all the financial assistance allocated by the government towards uplifting rural enterprise.

1.2.2.The Rural Small Business Development Center (RSBDC)

Sponsored by the NABARD this one it's kind of a governmental initiative in the world. The center provides for managerial and technical support to the small and micro enterprises of the rural sector. It conducts training programs on rural entrepreneurship, skill up gradation, trainer training, awareness and counseling sessions across the country to enhance the productivity of rural SME units.

1.2.3.National Small Industries Corporation (NSIC)

This central government agency is responsible for procurement and supply of indigenous as well as imported equipment and machinery on easy hire purchase terms for rural SMEs, distribute raw materials and export finished products of small and medium industries of the rural sector.

1.2.4. Small Industries Bank of India (SIDBI)

This is the primary agency that distributes direct as well indirect finance to all SMEs and coordinates the functioning of similar bodies under various schemes launched by the government from time to time.

1.2.5. Rural and Women Entrepreneurship Development Program (RWEDP)

This agency aims at creating conducive business environment as well as build infrastructure and human capital which will aid the long term growth of small industries in rural areas.

1.2.6. Scheme Of Funds For Regeneration Of Traditional Industries (SFURTI)

This body has the main objective of making the traditional industries of rural India commercially viable. Most small, micro and cottage industries are covered in its agenda.

1.2.7. District Industrial Center (DIC)

Every district in the nation now has a DIC which is responsible for integrated administrative and financial help at the district level that shall help and facilitate the growth and development of rural SME.

1.3. Govt. Schemes To Enhance Rural Entrepreneurship

In order to keep up with the demand for rapid growth of rural SMEs the Ministry of Micro, Small and Medium industries has initiated several benevolent schemes which are proving to be wonderful stimulus in this field.

- Entrepreneurship Development Institution Scheme.
- Rajiv Gandhi Udyami Mitra Yojana (RGUMY)
- Performance and Credit Rating Scheme (Implemented through NSIC).
- Product Development, Design Intervention and Packaging (PRODIP).
- Khadi Karigar Janashree Bima Yojana for Khadi Artisans.
- Marketing Assistance Scheme.

1.4.Obstacles For Rural Entrepreneurship

1.4.1.Lack Of Knowledge

There is a distinct lack of knowledge of entrepreneurial opportunities among the rural youth. The better educated and trained youth mostly leave for urban destinations in search of employment.

1.4.2.Lack Of Finance

Despite sustained efforts from the government there is a clear hindrance in obtaining capital to start a new venture in the rural areas. Non availability of adequate collateral security often mars the chances of rural youth in obtaining funds in time to set up their own venture.

1.4.3.Lack Of Skills

There is an acute shortage of trained manpower in the rural areas to commence small industries. Adequate facilities for vocational training are yet no available to the majority of the rural population. Management of accounts, handling of human resources and many such other facets which are essential for running a successful enterprise are unheard of in most rural areas.

1.4.4.Lack Of Infrastructure

In many areas the road connectivity is a major impediment in setting up of rural enterprise. Infrastructure requirements such as cold storage facilities, rail transport, electricity, etc are yet to be developed to a level which will promote entrepreneurship in remote localities.

1.5.Finance Options For Rural Entrepreneurship Schemes

As a direct result of the plethora of schemes and programs that have been launched by the government to encourage rural entrepreneurship in India, the financing of such a project is now easier than a similar venture in the urban areas. Gramin Banks, Local Cooperative Banks and all public sector banks have now been authorized by the RBI to finance project up to Rs 2 Crore under any of the above listed schemes and then obtain refinance for the same from NABARD and SIDBI. Additionally most of the finance schemes with pragmatic periods of moratorium to help the rural venture stand on its feet

and become economically viable. There are many subsidies of these schemes which make them extremely lucrative options for starting a rural SME.

1.6.Type Of Rural Entrepreneurship In Demand

Various types of sectors and enterprises currently witnessing a boom in the rural areas can be broadly classified under the following categories:

1.6.1.Agro Based Enterprises

These include direct sale or processing of agro products such as jaggery, sugar industries, pickles, oil processing from oil seeds, fruit juice, dairy products, spices, etc.

1.6.2.Forest Based Industries

Such industries include wood products, bidi making, coir industry, bamboo products, honey, making eating plates from leaves.

1.6.3.Mineral Based Industry

Such industries include cement industries, stone crushing, red oxide making, wall coating powders etc.

1.6.4.Textile Industry

These include weaving, spinning, coloring, bleaching.

1.6.5.Handicrafts

Such industries include making of wooden or bamboo handicrafts that are local to that area, traditional decorative products or toys and all other forms of handicrafts typical to the region.

1.6.6.Engineering

Small and medium sized industries to produce agricultural machinery, equipment for usage in rural areas etc.

1.6.7.Services

There are a wide range of services including m0obile repair, agriculture machinery servicing, etc which are being undertaken under this category.

1.6.8. Tourism

These activities including conduct of ethnic, eco and rural travels and tours by local operators.

Keeping all the above factors in mind it can be safely assumed that commencing a rural SME venture is the ideal business idea in the current times. Factors such as easy and cheap availability of labour, simplified finance schemes and provision of government facilities for marketing of the finished goods or product will make rural SMEs highly competitive. However there still exists a lack of infrastructure in terms of accessibility and storage facilities which restricts the full potential of the sector. The private sector has now initiated many cold storage chain facilities across most parts of the country which shall address this issue in a couple of years.

1.7. Rural Innovation And Farming

Rural Innovation and Farming is focused on identifying the key entrepreneurial and innovating leverages that will increase the overall livelihood and quality of life of small farmers and rural inhabitants (while sustaining food security). To achieve this various models in India and Africa have created successful models of entrepreneur centered innovations that use agriculture and sustainable rural development as the basis of economic growth. Various studies have made an attempt to chart out a roadmap for making institutional changes favoring rural entrepreneurship and developing a plan of action for reaching at the top of ladder in rural innovation by applying entrepreneurial principles and concepts of capacity building prevalent in the corporate world. In today's global interconnected world, the term "global" should subsume "rural" in the context of the Indian economy, since rural innovations are imperative to build societal capital as a path towards sustainable development and value creation. Since the days of Industrial revolution, industry has focussed on "factors of production" as a means of gaining competitive advantage and it is only in the recent past that "innovation" has become an imperative to achieve "sustainable competitive advantage".

In the case of India, we have to achieve inclusive growth and have a seamless transition from "factor driven" to "efficiency driven" to innovation driven" to take our rightful place in the world economic order.

2.Rationale Of The Present Study And Methodology

The Present paper is a case study of the countryside (farmer) entrepreneur. The journey of the entrepreneur from conception of the idea till the successful launch of the venture envisaged highlights various principals of management behind success of any entrepreneurial venture.

3.A Challenge Accepted And Delivered By A Humble Farmer- T Guraviah' Seed Drill Cum Herbi Sprayer. A Success Story As Narrated By Brigadier P. Ganesham.

Guraviah (a countryside farmer) has seen over six decades of life and has been a devoted farmer. Though he fulfilled his family commitments and there was no need for him to continue farming still he had not stopped farming. He was actively involved in the farmer community activity. In one of the farmers' meeting, an Agri Scientist challenged the group of farmers present to develop a custom machine to dispense the maize seeds for zero tillage farming in the paddy fields immediately after farming. The challenge was accepted by Guraviah. He had a clear idea of the device which can meet the needs of the farmers for the purpose stated above. However, he did not even have the requisite technical knowledge to make such a device. Nevertheless, Guraviah was sure that he would deliver the device.

4.Learning.

- "Necessity is the mother of invention". The technological invention out of Gurvian's farming experience came from inherent need to improvise upon six decades of his farm experiences.
- Moreover Science and technology inventions have their origin in the field and they reach the laboratory for theoretical backup.

In case of Gurvian he approached the nearest Agri Engineering College in Bapatla and sought technical assistance and fund support for the project. Some help came and he could prove the concept. He became more confident of the outcome. College could not help further due to its inability to support such projects. He was then supported by Palle Srujana and linked him to NABARD. With the fund support available and the mentoring provided by Palle Srujana, Guraviah set about making the machine.

Learning. Need based Science and Technology based ventures in farming have to be supported by the financial backup. In case of Gurvian NABARD came to his rescue.

Gurvian adopted a very novel method of developing the device. With the help of one young mechanic from nearby town he made a device and invited many farmers in the village for its demonstration. He ensured that the mechanic is also present for each demonstration. Farmers provided free views on the device during the trials and made very significant suggestions based in their pain points. Guraviah quietly sat down and listened to all the suggestions and went back for improving it. Guraviah improvised the device further based on the feedback of the farmers and arranged for the subsequent trials. He iterated the development of the device 5 times by public brain storming during the Public demonstration of the device. What came out finally was totally acceptable to all the farmers. The entire process took nearly six months. The device was now ready for freezing the design and ready for production.

5.Learning

- Choosing a team. The team with both technical and theoretical knowledgebase about the device in question is a boon.
- Multiple Trial sessions with the potential/probable users of the technology and utilizing the feedback every time ensures a product with minimal errors and optimal utility. (A step extremely important before the actual launch of the product.

Guraviah's device does five functions: Makes furrows, drops the seed, adds fertilizer, closes the furrow and sprays weedicide between the furrows. Guraviah with his enthusiasm to serve the farmer fraternity, and decades of experience in farming evolved a new model of developing innovation by public brainstorming and ensured a quickest way of developing farm equipment.

6.Summary And Conclusion

The Gurvian's farming experience of inventing the seed drilling machine for making farming easier is an experience which is worth utilizing by the budding and aspiring entrepreneurs in the field and also give important tips to the policy makers for realizing the importance of field experiences in policy provisions. Most of the policies of India and other countries are not able to yield desired results because they are made in virtual labs and not in the field. So, Gurvian's experience in that context is worth considering and keeping appropriate provisions for different stages of inventions at the policy level only.

7.Reference

1. Pertin, T (1997), "Entrepreneurship as an economic force in rural development", in " Rural Development through Entrepreneurship", Compiled and edited by Tea, REU Technical Series 41, FAO Regional Office for Europe, FAO of the United Nations, Rome
2. honeybeeap@gmail.com www.pallesrujana.org.
3. <http://farming.ashoka.org>.