

AGRIPRENEURSHIP FOR SUSTAINABLE GROWTH IN AGRICULTURE AND ALLIED SECTORS: A CONCEPTUAL MODEL

M V A L Narasimha Rao* and K S Venkateswara Kumar*

India is an agriculture based economy. Agriculture sector is providing employment and livelihood for majority of the population in India and contributing significantly for GDP. Around 70% of population are living in rural and depending on agriculture. Though there is considerable growth in agriculture sector, the rate of growth is not very much satisfactory comparing to service sector and manufacturing sector. According to the agriculture ministry, India achieved an agricultural growth rate of 3.64 per cent against a target of 4 per cent growth over the 11th Plan period. An overall growth rate of 8 -9% in GDP may not be really helpful in reducing the poverty in India, unless agriculture growth is accelerated. Inclusive growth is also possible only when agriculture growth is achieved and shared among the people widely from all nooks and corners of the country. Sustainability has become an important challenge in the area of food production. The increase in agriculture produce can become raw material for a wide range of agriculture based industries, which will become a drive for the development of agriculture based industries. Considering these facts, it has become a priority to the Government to focus on the development of agriculture and agri-based industries. For sustainable development of agriculture sector and allied industries for the benefit of majority of Indian population and for achieving self-sustainability in food grains production, the concept of 'Agripreneurship' has to be promoted. In this context, this paper will cover the important areas of Agripreneurship like agricultural inputs, technology, processes and other areas like food processing, seed processing, floriculture, organic food production and so on. An effort is made to explore the avenues for Agripreneurship and to propose a frame work for the development of Agripreneurship in India.

Key words: Agripreneurship, Agricultural development, Sustainability, Inclusive Growth, Rural Development

INTRODUCTION

India is basically an agricultural based economy. Approximately 70% of the population is living in rural and depending on agriculture and allied sectors for their livelihood. India has achieved 3.64% growth rate against the target of 4% in agriculture. An overall growth rate of 7-8% may be contributing for the overall development of economy, but the very meager growth rate in agricultural sector will not help India in developing the rural. Tremendous growth in manufacturing and service sectors is contributing for the better living conditions and lifestyle of urban population whereas very meager development happening in agriculture and allied sectors could not able to improve the lives of people in rural. If we compare rural and urban, major proportion of the population living in rural is unable to reap the benefits of the development happening in India. Considering these

* Assistant Professor, K L University Business School, K L University, Vaddeswaram, Guntur District, Andhra Pradesh, E-mail: mval.narasimharao@kluniversity.in; venki@kluniversity.in

imbalances, to achieve balanced economic development, to develop rural India, it becomes inevitable to promote Agripreneurship. To take the leverage of the rich rural resources, to tap the potential in rural India, the best strategy is to promote Agripreneurship. Though it is sounding very promising and attractive, not so easy because of the problems like, lack of awareness among the people, poor entrepreneurial culture, poor infrastructural development, lack of focus by the Governments etc. Still there are so many areas for Agripreneurship development. The major opportunities are in agriculture inputs, farming processes and technology, agriculture output processing and other agriculture allied sectors like dairy development, poultry, horticulture, sericulture and so on.

AGRIPRENEURSHIP

Agripreneurship is the entrepreneurial process taken up in agriculture or the allied sectors. It is the process of adopting new methods, processes, techniques in agriculture or the allied sectors of agriculture, for better output and economic earnings. Agripreneurship converts agricultural activity into an entrepreneurial activity. Agripreneur is an innovator, who drives change in rural economy, by adopting innovative ideas in agriculture and allied sectors. He takes risk, adopts innovation, creates new ways of doing things and taps new markets. Dollinger (2003) defines entrepreneurship in agriculture as the creation of innovative economic organization for the purpose of growth or gain under conditions of risk and uncertainty in agriculture.

NEED FOR AGRIPRENEURSHIP DEVELOPMENT

Indian Economy has gone tremendous reforms during 1991. A remarkable growth is expected in the rural sector also. During the early days after liberalization, almost up to 1998, there was considerable performance in agricultural sector. Later on the growth has been contributed by majorly service sector and then by manufacturing sector. The contribution of agricultural sector in GDP in India has declined to 13.7% in 2012-13 from 51.9% in 1950-51. Though it is explained that the decline is due to the shift from traditional agricultural economy to industry and service sectors, this performance is very meager if we consider the size of the employment in this sector. In 2013-14, the GDP contribution of agricultural sector has been improved to 18%. More than 50% of people are employed in agricultural sector contributing to only 18% of GDP. India stands second in the world with respect to agricultural production but it is ranked 14th in agricultural exports. It is reported that the India's average agricultural production per hectare is only 50% of the world's average, which shows the need for a lot of development in this area. By the analysis of above figures with reference to the greatest strengths of Indian agricultural sector like 157.35 million hectares of agricultural land, all the 15 major climates and 45 of the 60 soil types in the world, it can be stated that the current

performance of agricultural sector in India is not up to the mark. Hence there is a clear need for agripreneurship development.

National Agricultural Policy (NAP) announced by the Government of India in July 2000 seeks to actualize vast untapped growth potential of Indian agriculture, strengthen rural infrastructure to support faster agriculture development, promote value addition, accelerate growth of agribusiness, create employment in rural areas, secure a fair standard of living for farmers and agricultural workers and their families, discourage migration to face challenges arising out of economic liberalization and globalization etc.

REVIEW OF LITERATURE

Agripreneurship is now-a-days, an area of interest for research. Some researchers have contributed valuable findings to add considerable metal for the study of Agripreneurship. Some research contributions are summarized hereunder.

Dollinger (2003) defines entrepreneurship in agriculture as the creation of innovative economic organization for the purpose of growth or gain under conditions of risk and uncertainty in agriculture. Contribution of Agripreneurship for the development of economy is well understood by means of certain studies. Agripreneurship plays various roles in the growth and development of national economy through entrepreneurship development which increases the income level and employment opportunities in rural as well as urban areas (Bairwa et al., 2012). It is worth noting that the emergence of the free market economies globally has resulted in the development of a new spirit of enterprise “Agripreneurship” and the increased individual need for responsibility for running their own businesses (Alex, 2011). The Agripreneurship program is necessary to develop entrepreneurs and management workforce to cater agricultural Industry across the world (Bairwa et al., 2014b). Agripreneurship is greatly influenced mainly by the economic situation, education and culture (Singh, 2013). Entrepreneurs are those people who exhibit common traits such as single-mindedness, drive, ambition, creative, problem solving, practical, and goal-oriented. An entrepreneur is an individual who recognizes an opportunity or unmet need and takes the risk to pursue it. He needs to develop these abilities, managing productivity and seeking out new markets (Singh, 2013). Personal qualities of an agri-entrepreneur significantly affect the agribusiness (Brockhaus and Horwitz, 1986; Nandram and Samson, 2000). Hanf and Muller (1997) suggest that in a dynamic environment with fast technical progress, open minded farm entrepreneurs will recognize more problems than they are able to rationally solve. Man et al., (2002) categorized entrepreneurial competences in six key areas which includes opportunity recognition skills, relationship building, Organizing, Strategic competences, conceptual thinking and problem solving skills. Kallio and Kola (1999) in a study of farmers in Finland attempted to determine what factors gave farmers competitive advantage over other

farmers suggest that there are seven characteristics of a successful farm and farmer (1) profitable production seemed to be associated with continuous evaluation of production, incomes and expenditures (2) constant development of cognitive and professional skills i.e. Continual Professional Development (CPD) (3) They benefit from a positive work ethic (4) goal-oriented operation, i.e., the ability to set goals, to reach them and to set new ones (5) utilization of recent information that is relevant for the individual farmer's own circumstances and the needs of the farm (6) favourable starting points for the enterprise, meaning good condition of machinery, buildings, land and an appropriate balance between pricing of product and investments in production (7) cooperation with others in the supply chain. Schiebel (2002) reported that successful farmers differ from others in terms of three personality traits. They have more belief in their ability to control events, problem-solving abilities and social initiative.

OPPORTUNITIES FOR AGRIPRENEURSHIP DEVELOPMENT

Agriculture has been considered as primary sector in Indian economy. This has got forward and backward linkages with secondary and tertiary sectors i.e. manufacturing and service sectors. Opportunities in agriculture and allied sectors can be identified at different phases of agriculture process. Basically, the opportunities are at Input stage, Farming stage, Value chain, output processing and marketing stage and related services. These opportunities are discussed in detail here under.

At the stage of Agricultural inputs, there are many potential opportunities for entrepreneurs. Agriculture process needs so many kinds of inputs like seeds, fertilizers, pesticides and farming technology. So many opportunities envisaged in the areas of developing and producing these inputs. There are excellent opportunities for entrepreneurial process in the areas like bio-pesticides, bio-fertilizers, vermin compost, testing and amending soil etc. The increasing focus on organic farming is opening still more opportunities. Different varieties of species are being developed with respect to fruits, vegetables and other crops. There is a lot of scope for R&D with respect to seed development. New varieties of seeds are to be developed to improve the agri output. Even these varieties of seeds are expected to serve even in odd climatic conditions. Per hectare agri production should be improved a lot so that the agriculturist can realize maximum revenue. India is able to record only 50% of the average world production per hectare.

Further, there is a lot scope in the area of agri tech products. In India, so many farmers are conducting small scale farming. These people cannot afford to purchase hi-tech machines for farming. Hence, there is a need for low cost machines for the purpose of small scale farming. There is a gradual shift happening from the usage of chemical intensive fertilizers and pesticides to natural manure and pesticides. This change is again opening up opportunities in the area of developing and manufacturing natural manures and pesticides.

At the stage of farming, the chief objective is to maximize the output and leveraging the advantage of seasons. There is a chance to go innovative with regard to use of fertilizers and pesticides, adopting multiple crops simultaneously, changing crops season by season to protect the quality of soil, using the agri tech machines to reduce the cost on labor etc.

In the post-harvest stage, the opportunities are felt in the areas of value chain, output processing and marketing. The changes happening in supply chain management of agriculture produce are opening doors for new businesses. Agri products processing units are booming up. There are opportunities in the area of distribution and logistics.

Agriculture related service is another area for the promotion of agripreneurship. These services include procurement of seeds, fertilizers, pesticides etc. and distribution at village level, providing agri tech equipment like multifunction harvesting machines, tractors, sprayers etc. on lease, offering technical services like soil testing, plant protection, weed control, installation and maintenance of irrigation facilities, transportation and storage of agri products etc.

To specify, for agripreneurship development, there are opportunities in the areas of farming vegetables, fruits, food grains, pulses, oil seeds etc., developing greenhouse concept, herbal plantation, dairy and poultry development, animal husbandry, grading and packaging of agri products, establishing food processing units, establishing cold storages, sericulture, horticulture and many more.

CHALLENGES FOR AGRIPRENEURSHIP DEVELOPMENT

Though there are many entrepreneurial opportunities in Agriculture and allied sectors, there are some important challenges in the process of agripreneurship development.

Poor Infrastructural facilities: For any kind of development, infrastructure is a pre requisite. In rural India, the infrastructural facilities are very poor with respect to the facilities like transportation, communication, power and marketing networks. There is a bad need for the development of these facilities to accelerate growth of economic activity in rural.

Poor entrepreneurial culture among people: In India, in many areas very poor entrepreneurial culture has been identified. Very a few sections of the society like Gujaratis, Marwaris and Rajastanis are known for their entrepreneurial imitiveness. Lack of education and awareness is causing a gap in the development of entrepreneurial culture among rural people.

Talent Migration from rural to urban: People from rural are migrating to urban because of very poor living conditions and lack of proper opportunities in rural areas. This migration is creating a gap in the rural talent. Skilled, educated and trained people are not willing to live rural and migrating to urban to have a better career for themselves.

Poor technologies and equipment: Today we are in the era of Information Technology. It helps people to explore information and to make appropriate decisions. Lack of information is a big gap in agripreneurship development. Further, there is no proper availability of farm equipment. Lack of Information Technology and knowledge of farm equipment will have an adverse impact on the development of Agripreneurship. Now-a-days ICT is playing very important role everywhere. Poor technological facilities and equipment will not facilitate the required information and support for Agripreneurship development.

Problems in marketing of agricultural products: Production has no value unless it is sold and consumed. The marketing of agricultural products has become difficult for the farmer because of so many problems. Lack of proper transportation, warehousing facilities, lack of facility to promote the agri-products, lack of market information, destabilized prices for agriculture products, uneven demand, influence of local mediators and many more are creating a lot of trouble for farmers in the process of marketing their products.

High costs of Physical Logistics: Indian villages are poorly connected by any mode of transportation. Farmers are facing problems in moving their produce to nearby markets. They are unable to store their product, because of lack of warehouse facilities. It is becoming a high cost factor for the former to move the product to the market. Not only in the context of transporting the agricultural output, even to get the agricultural inputs like seeds, fertilizers and pesticides.

Unresponsive Government Policies: Though there are number policies made by the Government, the implementation is felt not appropriate because of the problems like corruption and bureaucracy. Because of illiteracy and ignorance, the rural people are unable to get the information of the policies of the Government and get the benefit. Critically speaking, the support from the Government in agriculture sector is much less than the support extended to industry and service sectors development.

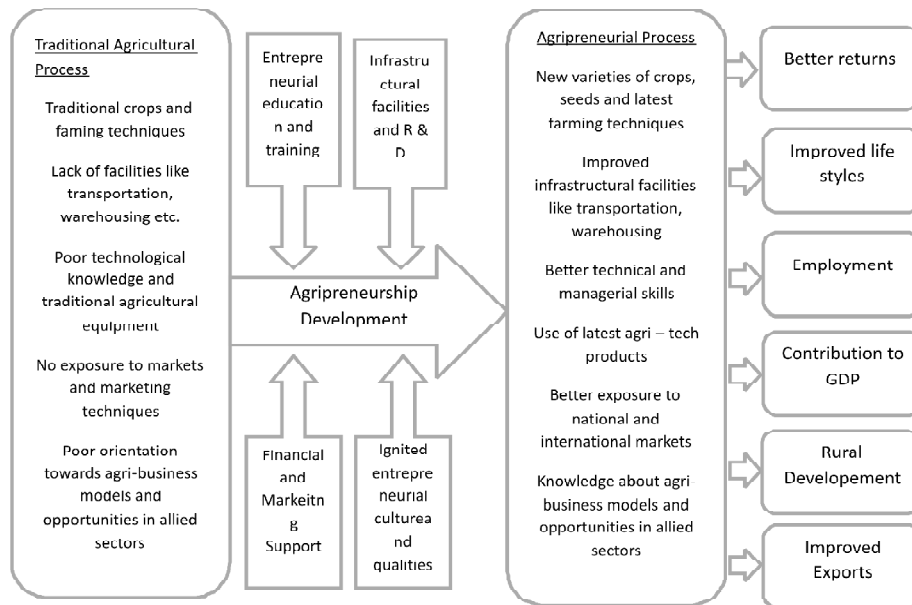
The problems discussed above are making the sector unattractive. It is becoming a discouraging factor for the potential entrepreneurs to enter into this sector. Further, in agriculture, in most of the areas, people are still depending on monsoons for farming. No alternative sources are developed in so many areas. There is no proper awareness among the people about crop insurance and other ways of protection in the case of any damage because of natural calamities or something else.

SOME SUGGESTED STEPS FOR THE DEVELOPMENT OF AGRIPRENEURSHIP IN INDIA

- Promoting entrepreneurial culture among the people in rural areas and to create a vibrant environment for the development of rural areas
- Providing entrepreneurial education and training to the potential rural youth

- Improving the infrastructural facilities in rural areas, so that entrepreneurial activity can be initiated
- Identifying the trust areas for agripreneurial development across the stages of value chain of the agricultural process and designing appropriate strategies for the promotion
- Identifying promising agriculture allied areas of business to promote entrepreneurial activity
- Providing area specific technical training programs to develop the required technical competency among the potential entrepreneurs
- Establishing area specific entrepreneurial development organizations to facilitate focused efforts for the development of identified areas
- Establishing development fund, to support the start-up processes of Agripreneurship
- Establishing agricultural incubation centers
- Extending support in terms of proving financial and marketing support
- Promoting exports of the products of agripreneurs
- Protecting the agripreneurs from the unexpected crisis in their ventures
- Extending subsidies, incentives and so on for new agripreneurialorganisations

A PROPOSED MODEL FOR AGRIPRENEURSHIP DEVELOPMENT



The proposed model explains how the Agripreneurship Development process can be done, what are the developments that are envisaged and the expected results through Agripreneurship Development.

CONCLUSION

Being the primary sector, agriculture will continue to be a major sector for employment and GDP contribution. In the present day context, this sector is felt not so attractive, because of the problems that have been understood in the agriculture. People are migrating to other sectors, which is going to show impact on the performance of primary sector and its contribution in terms of GDP, employment, sustainability in food production, rural development. The agricultural sector is losing flavor. Though manufacturing and service sectors are booming up, a country like India, which is having so many strengths like fertile land, good climate, varieties of soils and big population in rural cannot afford to neglect the agriculture and rural development. Further, It is believed that Agripreneurship Development will help the economy to leverage the identified strengths and to achieve tremendous growth in primary sector and to contribute for rural development. It helps the economy to achieve self-sustainability in food production. Further, it helps in achieving balanced economic growth. The government has to make policies for focused Agripreneurship Development and establish developmental organizations to support the process. Agripreneurship Development is going to give excellent results at rural level and macro level also.

References

- Alex, Lwakuba (2011). A Review and Analysis of Policies on Farmers' Entrepreneurship Development, A publication of PELUM, Misereor, pp. 1-55.
- Bairwa S L, KerobimLakra, S. Kushwaha , L. K. Meena and Pravin Kumar (2014). Agripreneurship Development: As a tool to Upliftment of Agriculture, *International Journal of Scientific and Research Publications*, pp 1-4.
- Bairwa, S. L. and Kushwaha S. (2012). Agro Industry scenario in India In Edited by Prof. S. P. Singh, Agricultural research and Sustainable development in India, Bharti Publications, New Delhi, 110093, pp 159-182.
- Bairwa, S. L., Kalia, A., Meena, L. K., Lakra, K. and Kushwaha, S. (2014b). Agribusiness Management Education: A Review on Employment Opportunities, *International Journal of Scientific and Research Publications (IJSRP)*, 4, (2) 1 - 4.
- Brockhaus, R. H. and Horwitz, P. S. (1986). The psychology of the entrepreneur (in D.L. Sexton and R.W. Smilor (eds.), *The art and science of entrepreneurship*. Ballinger publishing company, Cambridge, pp. 25-48.
- Dollinger, M. J. (2003). *Entrepreneurship – Strategies and Resources*, Pearson International Edition, New Jersey.
- Economic Times, August 30, 2013.

- Hanf, C. and Müller, R. (1997) Schlüsselaktivitäten bei trieblicher Anpassung: Informationsbeschaffung, Wissensakquisition, Erwerb von Fähigkeiten, Schriften der Gesellschaft für Wirtschaft- und Sozialwissenschaften des Landbaus, Vol. 33, p. 207-218.
<http://www.ibef.org/industry/agriculture-presentation>
<http://www.yourarticlelibrary.com/entrepreneurship/7-challenges-involved-in-developing-agri-preneurship/41110/>
- Kallio, V. and Kola, J. (1999). Maatalousyrittymenestystekijät: Aluetutkimus Etelä-Karjalassa, Etelä-Savossa ja Kymenlaaksossa. (Success Factors of Farm Enterprises in Finland.), University of Helsinki, Department of Economics and Management, Publications No. 24.
- Man, T. W. Y., Lau, T. and Chan, K. F. (2002). The competitiveness of small and medium enterprises - A conceptualization with focus on entrepreneurial competences, *Journal of Business Venturing*, 17, pp.123-142.
- Nandram, S. S. and Samson, K. J. (2000). Successful entrepreneurship: more a matter of character than of knowledge (in Dutch with English summary). Nyenrode Centre for Entrepreneurship, Breukelen, The Netherlands, p. 242.
- Schiebel W (2002). Entrepreneurial Personality Traits in Managing Rural Tourism and Sustainable Business, *Agramarketing Aktuell* 2002/2003, pp 85-99.
- Singh, A. P. (2013). Strategies for Developing Agripreneurship among Farming Community in Uttar Pradesh, India, *Academia: An International Multidisciplinary Research Journal*, 3(11) 1- 12.