



Agricultural Education for Sustainable Growth, Entrepreneurial Skills and Self Reliance

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ABSTRACT

Post independence, the focus of Government of India was to frame major policies based on equity along with growth in the agriculture sector. Although several efforts have been made towards economic and social stabilization over the past decades but the growth of agro-processing sector which is the focal point of second green revolution for value addition has not been encouraging till date. Farmers still lack access to adequate skill and knowledge in agro-processing sector and its linkage to market is very much poor especially in under developed states. Though the small families has increased their desire level of productivity enhancement but they are unable or ignorant how quality has to be linked with market for better premium due to lack of knowledge and skill. With increase in production, the needs of the day to translate its effect in the process of production is missing. Entrepreneurship is into help a shift which may turn the focus of local government on locally available resources and encourage people to start an enterprise with their idea and creativity. Generally small, and initially financed and operated by a handful of founders or one individual, entrepreneurship are aimed to help bring a shift from agriculture to agribusiness to revitalize Indian agriculture and to make it a more attractive and profitable venture. Among educated agricultural youth, the problem of unemployment can have serious repercussions in terms of social instability which, in turn, may affect governance and growth adversely. Globally, more than 66 per cent of the world's population is predicted to be urban by 2050. A serious implication of expanding urbanization will be a decline in the rural population. To ensure the sustainability of food production, rural communities, and natural resources, outmigration needs to be reduced by linking agricultural education, which will help to ensure entrepreneurship ability and skill of the local people. Location based crops which are grown and dominant, helps to get not only dividend but also help to recapture the geographical importance, Agricultural Entrepreneurship is a strategic development intervention that has the potential to accelerate the rural development process.

1. Introduction

“Sometimes our ‘I can’ is more important than our I.Q.” Things are always created twice: first in the workshop of the mind and then, and only then, in reality. We can call the process 'blueprinting' because anything that we create in our outer world began as a simple blueprint in our inner world, on the lush picture screen of our mind. We all need

to think in a different way and see the seeds of opportunity in our daily life and more importantly had the courage to nourish them. Entrepreneurship is all about creating new ideas and turning those ideas into reality. Ducker suggests that “An entrepreneur is one who always searches for change, responds to it as an opportunity. Entrepreneurs innovate. Innovation is a specific instrument of entrepreneurship”. Agripreneurship is the profitable marriage of agriculture and entrepreneurship. Agripreneurship turn your farm into an agribusiness. The term Agripreneurship is synonym with entrepreneurship in

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agriculture and refers to agribusiness establishment in agriculture and allied sector. Agripreneurship defined as “generally, sustainable, community-oriented, directly-marketed agriculture. Sustainable agriculture denotes a holistic, systems oriented approach to farming that focuses on the interrelationships of social, economic, and environmental processes”. Indian economy is basically agrarian economy. Since the inception of New Economic Reforms, adoption of liberalization, privatization and globalization (LPG) and world trade organization (WTO) in 1992 – 95, it is expected that rural area will grow at par with urban area. Applying the thought and practice of entrepreneurship in the field of agriculture generates wide range of economic benefits like – increased agri productivity, creation of new business ventures, new Jobs, innovative products and services, development of rural areas and increased wealth . Developing entrepreneurs in agriculture will solve the entire problem like (a) Reduce the burden of agriculture (b) Generate employment opportunities for rural youth (c) Control migration from rural to urban areas (d) Increase national income (e) Support industrial development in rural areas (f) Reduces the pressure on urban cities. These changes have cleared the way for new entrants, innovation, and portfolio entrepreneurship.

Key points of Agri Start up campaign:

1. Single window clearance even with the help of mobile application.
2. 80 per cent reduction in patent registration fee.
3. Freedom from mystifying inspection for 3 years.
4. Freedom from capital gain tax for 3 years.
5. Eliminating red tape.
6. New schemes to provide IPR protection to start – ups and new firms.
7. Freedom from tax in profits for 3 years.
8. Innovation hub under Atal innovation mission.

Major reasons for promoting entrepreneurial skill and self reliance in India:

In India, 52% of total land is cultivable as against 11% in the world. All 15 major climates of the world, snow bound Himalayas to hot humid southern peninsula; Thar Desert to heavy rain areas all exist in India. There are 20 agro-climatic regions and nearly 46 out of 60 soil types in the country. Agriculture remains a key sector of the Indian economy accounting for 13.2 per cent share in the gross domestic product (GDP) and about 13 per cent of the total export earnings. The share of agriculture in the total value

added to the economy, at around 13.2 per cent, is still quite high. This implies that agriculture is likely to remain a priority, both for policy makers as well as businesses, in the foreseeable future and any move to ramp up the sector calls for a multi-pronged strategy. There is so much unemployment in India, and agricultural graduates are part of them. Lack of recruitment and more number of agricultural graduates is making difficult for the graduates to earn livelihood solutions. 13.3% Unemployment rate in 15-29 age groups in 2012-13: Survey (Source: Press Trust of India, Dec 1, 2013). So Capacity utilization of Agricultural graduates is of utmost importance. Today, problem is not whether the technology is available. The problem is whether there is India specific solutions. Thus, Indian agriculture needs to convert in agribusiness for self reliance and sustainable growth of the economy.

Entrepreneurial qualities and entrepreneurial skills for self reliance:

An entrepreneur is an individual who recognizes an opportunity or unmet need and takes the risk to pursue it. Entrepreneurship skills are considered to be those competencies required to accomplish tasks and activities related to the farm business. These can be developed by learning and experience. Entrepreneurial competences can be categorized into six categories opportunity recognition skills, relationship building, Organizing, Strategic competences, conceptual thinking and problem solving skills. In addition to that other critical success factors include management and strategic planning, knowledge of the ecosystem, capable and professional staff, understanding of the value chain perspective, craftsmanship, ability to learn and seek opportunity and enterprising personal characteristics. Thus, management skills are the complete package of skills that a farmer would use in order to develop the farm business.

Application to the problems:

Linkage of Agri-enterprise, Startup India and Skill India with the Agricultural Graduates especially who are unemployed, this linkage will provide for the necessary growth required by an agricultural graduate in the field of business. There is so much unemployment in India, and agricultural graduates are part of them. Lack of recruitment and more number of agricultural graduates is making difficult for the graduates to earn livelihood. So, entrepreneurship is one of the best opportunities for them to earn for themselves and for others. They are already having some of the technical expertise in the field of agriculture, so their capacity can be utilized fully.

ARYA- Attracting and Retaining Youth in Agriculture:

The purpose is to establish economic models for youth in the villages so that youths get attracted in agriculture and overall rural situation is improved. To attract and empower the youth in rural areas to take up various agriculture, allied and service sector enterprises for sustainable income and gainful employment in selected districts. ARYA project will be implemented in 25 states through KVKs, one district from each state. In one district, 200-300 rural youths will be identified for their skill development in entrepreneurial activities and establishment of related micro-enterprise units in the area of Apiary, Mushroom, seed-processing, soil testing, poultry, Dairy, Goatry, Carp-hatchery, Vermi-compost *etc.* KVK will involve the agricultural universities and ICAR institute as technology partners.

Skill India Program:

Currently, entrepreneurs are suffering with the inadequate talent in the job market, due to which the creation and growth of agriculture venture are facing challenges. But these constraints can be removed with the help of Agricultural Skill Council of India (ASCI) which is providing ample opportunities for the individuals with agriculture background to develop their skills as per the competency standards and qualifications. So, it is necessary to link them to the Skill India program. The campaign was launched with an aim to train 40 crore people in India in different skills by 2022. Another remarkable feature of the 'Skill India' programme would be to create a hallmark called 'Rural India Skill', so as to standardize and certify the training process.

Major reasons for promoting entrepreneurship in North East India

India's North East has long been neglected in terms of both economic and social development. For decades, the North East has been a black-hole for business and enterprise. The sustained conflict, geographical isolation, militarization and migration have led to a drying up of investments, and the lack of economic and social development in the region. This is despite the richness of natural resources in the region, presenting a huge opportunity for investment, and the growth of enterprise in the region. A large part of emergence arises from economic need, and hence the solution lies in economic (and social) development of the region. However, for economic development to take place, several key players need to step up and take initiative in the region. While the hidden talents stored in the North East have recently been highlighted through a range of

platforms, set up by civil society actors, the market in the North East however comes with its challenges. With cheap Chinese imports having flooded the market, as well as a lack of demand for local products, local artisans are slowly losing ground. For example, a local woman would buy a shawl from an artisan only once- this will last her for a whole lifetime. There is no steady need for local handicrafts in this region.

Thus, these products, emerging from a tradition of arts and crafts, have less value within the region, as compared to the rest of the country and for that matter, the world. To allow local entrepreneur to reach such emerging markets, there needs to be significant thrust towards the development of a relationship between the rest of the country and people from this region. Such a long-term relationship will not only lead to the creation of a dependable marketplace for local artisans and entrepreneurs but will also help in creating employment opportunities among the masses.

Mushroom development foundation started by Pranjal Baruah works closely with mushroom farmers in Assam, putting them in control of their produce through his land-to-lab strategies, training and support, thereby creating 'mushroom entrepreneurs'. Similarly, with weaving being the second largest economy in Assam, we can organize women weavers into cooperatives, connecting them directly to the market and also an industry can be advanced with great cultural significance for the people of North East.

Some possible areas of enterprise and self reliance in North East India:

1. Khasi Mandarin of Meghalaya

The renowned Khasi Mandarin of Meghalaya has a tight and smooth skin that makes it different from other mandarin varieties. 80 per cent of our daily nutritional need is provide by a single mandarin, it contains more than 60 flavanoids, the peel contains 4 times more fiber as the fruit along with 30 per cent vitamin C. Khasi Mandarin has obtained the geographical indications (GI) tag. But there are many challenges: road connectivity is the biggest issue, government provides them with mandarin saplings but they are not of good quality, there are no facilities to transport their produce and farmers make long difficult journeys on foot to bring them to the market stalls of nearby villages. But we can convert these challenges into opportunities, the growers have traditionally turned the fruit into jams, and now there is an attempt to recover this local tradition, respecting the historic recipes but drawing on the help of a technical team to make the product marketable.

2. Pork and meat processing

Pork is undoubtedly the most preferred meat of the inhabitants of north eastern (NE) region of India. The NE region constitutes more than 1/3 of the nation's swine population. Still then, the local supplies are inadequate and there is huge inflow of meat and meat animals. It has a number of biological advantages over other meat producing animals, no social and cultural taboo against pork, large scale pig husbandry shall not only meet the ever-increasing demand of meat but shall a way of solving unemployment problem. Commercial pig production is certainly a lucrative venture when approached with a scientific outlook and entrepreneurial attitude.

3. Kachai lime of Ukhrul, Manipur

This fruit is a unique lemon endemic to Kachai village, Ukhrul district of Manipur which is found to contain 51 per cent ascorbic acid, the highest so far available in the realm of Citrus fruits. The juice content is 36-56 ml per fruit. The rich potential of the district can be harvested fruitfully if the required technology and credit support are extended to this village. However, although production and area expansion of the crop have tremendously increased unfortunately because of transport bottleneck coupled with non-availability of credit support farmers fails get remunerative price for their produces as no processing unit could be set up in the village till now.

4. CHAK-HAO as the capital resource of Manipur

Black scented rice (*Oryza sativa Linnaeus*) locally known as Chak-Hao amubi/ Chak-Hao poireiton is now confined to serving only as delicacy in local feast and festivities. Till very late, the black rice is not cultivated commercially as the same cannot be used as staple food thereby resulting to limited market access. But now having realized the inherent unique properties, a good scope for commercial cultivation and value addition of its products for a profitable agro-business have been envisioned. Even though the yield of Chak-Hao is very as compared to HYV rice, it is still more profitable in term of economic returns as evident from the analysis reports that it contains highest antioxidant and more fiber (4.9) and protein (8.7) compared to average rice. Also, The returns from the sale of unprocessed paddy @50/kg = RS. 1, 56,000.00 for 1 Ha and sale of processed rice @80/kg = Rs. 1, 59,120.00 for 1 Ha. With average production of 3120 kgs (paddy) and 2028 kgs (processed rice). As of now, few enterprising units and state's entrepreneurs are regularly marketing the processed

and graded rice in the national markets and receiving demands from South Asian and European countries.

Other possible areas of entrepreneurship:

1. Agro produce processing units – There units do not manufacture any new product. They merely process the agriculture produce *e.g.* Rice mills, Dal mills, decorticating mills *etc.*
2. Agro Produce manufacturing units – These units produce entirely new products based on the agricultural produce as the main raw material. *e.g.* Sugar factories, Bakery, Straw board units *etc.*
3. Agro-inputs manufacturing units – These units produce goods either for mechanization of agriculture or for increasing manufacturing plants, *e.g.*-Fertilizer production units food processing units, agricultural implements *etc.*
4. Agro service centres –These include the workshops and service centre for repairing and serving the agricultural implement used in agriculture.
5. Miscellaneous areas – besides the above mentioned areas, the following areas may prove to be encouraging to establish agri enterprises such as setting up of Apiaries ,feed processing units, seed processing units, mushroom production units, commercial vermin-compose units, goat rearing farmers club, organic vegetable and fruits retail outlet, bamboo plantation and jatropha cultivation.

Way forward:

Many of the Agri enterprise is inspired by western countries with the intention of solving the problems. But most of these people have no idea what the problems really are, because these ideas mostly fit the developed countries which are non-agrarian country. So such startup needs to be encouraged which understand the farmers' background and can visualize the problems from the farmers' point of view. ICAR can become a nodal agency for technology licensing for private agriculture enterprises and Agri startups. Agricultural Extension can play a major role in motivating and guiding the farmers to take up new Agri-startups and transforming their ideas into reality.

Conclusion

Entrepreneurship and self reliance is the need of hours to make agriculture a more attractive and profitable venture. It is clear that there is a great scope for entrepreneurship in agriculture and this potentiality can be tapped only by effective management of agri elements such as – soil, seed, water, market and information needs..

An individual with risk bearing capacity and a quest for latest knowledge in agriculture sector can prove to be a right entrepreneur. Our main idea should be in changing the capex to opex model. The agriculture sector has a large potential to contribute to the national income while at the same time providing direct employment and income to the numerically larger and vulnerable section of the society. Entrepreneurship is not only an opportunity but also a necessity for improving the production and profitability in agriculture and allied sector and for that agriculture education will need to play a pivotal role.

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