

Factors Averting the Transition of Agriculturists to Agripreneurs

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Abstract: Farmers feed the nation. But they are not getting enough from their agriculture to feed themselves. Much of the value of their effort is pocketed by the middlemen between them and the final consumers of their produce. One remedy for the situation is, the agriculturists assuming the role of agro entrepreneurs or agripreneurs. This paper analyses the feasibility of transforming agriculturists to agripreneurs. This project was taken up among the farmers domiciled in the agrarian district of Idukki in Kerala state. The study approaches the problem through analysing four factors such as awareness level of the farmers regarding suitable entrepreneurial opportunities available to them, the extent of willingness of the farmers to become entrepreneurs, the amount of business skills possessed by them and the major issues and challenges hindering the transformation of farmers to agripreneurs. The result of the research shows that the farmers have willingness to become agripreneurs, but they lack proper awareness about the opportunities available to them as well as how to go ahead in that line. Further though they possess several essential entrepreneurial skills, they face some issues and challenges preventing them from exploiting the opportunities offered by agripreneurship.

Keywords: Agriculturists, Awareness, Willingness, Entrepreneurial Skills, Agripreneurs.

INTRODUCTION

Agriculture is the most important sector of the Indian economy. It employs major part of the labour force and share of the national product originating in agriculture is large. Today the field of agriculture faces many challenges, including globalisation and market liberalisation, food price crises, natural resource depletion, climate change, rapid urbanisation, changing production and consumption patterns, demographic changes, and so on. Many of these directly or indirectly lead to market changes and create both opportunities and risks for farmers. With a growing recognition of the important role agriculture for economic growth and rural development in India, market-oriented agriculture assumes more prominence. Agripreneurship is a key aspect in this regard.

Agripreneurship is the process of injecting entrepreneurial culture in farming. It is the practice of developing the range of entrepreneurial activities by changing the quality of management in the process of cultivation. A shift from agriculture to agribusiness is an essential pathway to bring revolution in the current agricultural traditions and to make it more attractive and profitable venture. Several agripreneurs in the country

have proven that agriculture can be economically viable if various agricultural enterprises are followed up with post-harvest processing, value addition and marketing. Agripreneurship is a crucial point that has come in the development agenda recently. However a clear understanding regarding the range of opportunities and difficulties that an agriculturist has to meet in the process of becoming an agripreneur is an important prerequisite before taking up an agripreneurial venture. A study [1] stated that farmers having entrepreneurial skills have more chance to become a successful agripreneur. But the process of transforming agriculturists to agripreneurs is not an easy task.

STATEMENT OF THE PROBLEM

Indian economy is basically an agrarian economy. Presence of successful agriculturists and their emergence as entrepreneurs would have direct association with economic growth. But the field of agriculture still remains as a non-remunerative area for vast majority of the farmers. It is the business people who make use of the hard work of farmers and gain profit while the real agriculturists face all the loss. It would be beneficial to agriculturists if they are able to market their own products by avoiding intermediaries.

The question is, whether the farmers are aware about the potential opportunities to start agripreneurial activities? If yes, are they ready or willing to start agripreneurial activities? For such agripreneurship do they have the required entrepreneurial skills? A farmer or agripreneur needs technical and business training as well as the timely access to adequate financing in order to be really successful. Are they getting such supports? Though the emergence of agriculturists as agripreneurs is the need of the time, such a transformation remains only in the ideological level due to several challenges. What are the major issues and challenges hindering the farmers from emerging as agripreneurs? Several studies have been conducted on agripreneurship elsewhere. But no studies have been found undertaken in answering the pertinent research questions raised above, especially addressing the context of Kerala. This paper intends to analyse the process of transforming agriculturists to agripreneurs and evaluate the opportunities available to them as well the challenges to face.

MATERIALS AND METHODS

This is a descriptive study based on primary data collected through survey using interview schedule. Responses from a sample of 75 farmers of Idukki in Kerala who are doing some sort of agripreneurial activities are collected. The district of Idukki is selected since agriculture is the main occupation of the people in that district. The district is at the forefront in the state in the production of agricultural produces. The district has the cultivation of plantation crops like tea, coffee, rubber, coconut, cardamom, pepper etc. Small and marginal farmers are predominant in the district. There are also large holdings of tea and cardamom plantations. Diary is the main supplementary source of income of the farmers in the district.

The sample respondents were identified through convenient sampling technique. The interview schedule is pre tested by conducting pilot survey. For the convenience of collecting data from farmers, the interview schedule was translated to Malayalam, the regional language. The data collected is analysed using statistical and mathematical tools and techniques like percentages, mean scores and correlation analysis etc. Statistical Package for Social Sciences (SPSS) software is used in the process of data analysis. The results of analysis are presented in the form of tables and graphs followed by inferences and interpretations.

OBJECTIVES

- To assess the awareness level of the farmers regarding the agripreneurial activities that they can undertake.
- To understand the extent of readiness of the farmers for attempting to become agripreneurs in their given situations.
- To evaluate the level of entrepreneurial skills possessed by the farmers.

- To identify the issues and challenges hindering the farmers from emerging as agripreneurs.

REVIEW OF LITERATURE

Becoming an agripreneur offers both opportunities as well as challenges to the agriculturists. The main opportunity identified is related to social and financial aspects. In a study [2] it is mentioned that economically viable agripreneurs can provide their families sufficient, safe and nutritious food that is affordable. Agripreneurship helps to build resources in families that are drained by poverty. In an article on Agriculture and Economic Development [3] it is opined that farmers sell their quality products to generate income and free cash flow to sustain their family and the growth of their business. Another author [4] has an opinion that agripreneurs can learn and embrace sustainable farming methods to ensure secured income in way of becoming players in the cycle of the agripreneurship system. In a paper [5] an effort is made to approach agripreneurship as an opportunity to eradicate poverty. The authors concluded that participation of women in agripreneurship ventures has led to increased income and higher productivity which solve many of the family problems. In another research [6] the author views agripreneurship as the engine of economic growth and wheel of economic development.

Agriculturalists having entrepreneurial skills have more chance to become a successful agripreneurs [7]. Entrepreneurial skills like self-criticism, market orientation and creativity are considered as competencies required for accomplishing tasks and activities related to farm business. That means personal qualities of an agripreneur significantly affect the agribusiness. A study [8] considers the attitude towards entrepreneurship as a function of demographic and psychological characteristics like achievement motivation, innovativeness, personal control and self-esteem and their interaction. Promotion of agribusiness centres and incubation centres should be emphasized to facilitate favourable agripreneurial attitude and willingness among the farmers to take up entrepreneurial venture for employment, income generation and livelihood security [9].

New developments in the field of agriculture based businesses are many in number. Some such areas of developments that can be considered as a fruitful opportunity to farmers are dairying, sericulture, goat rearing, rabbit rearing, floriculture, fisheries, shrimp farming, sheep rearing, vegetable cultivation, nursery farming [10]. The other possible areas of entrepreneurship in agriculture identified [11] includes agro produce processing units, agro produce manufacturing units, agro inputs manufacturing units, agro service centres, agro food processing and storage units and seed processing units.

Food purchasing behaviour of consumers has significantly changed and that could be an exploitable opportunity for agripreneurs. In a study on buying behaviour of customers in case of food [12] it is mentioned that preferences of the consumers clearly indicate their priority for cleanliness/freshness of food products followed by price, quality, variety, packaging, and non-seasonal availability. In another study [13] it is observed that establishing food processing, storage and other connected units will help farmers to execute their entrepreneurial skills. The author [14] identified the need of entrepreneurial approach and innovativeness in agro food system which requires an organised progress. Steven Carr [15] measures agripreneurship as a complete range of agribusiness opportunities within the extended food system that can include activities as diverse as processing, logistics, services, cooking and recycling waste.

The main difficulty behind the establishment of agripreneurship as identified by most of the authors is the occurrence climatic changes. To learn more about this an attempt was made [16] and it explored the impact, adaptation and mitigation regarding global climate change in Indian agriculture. The authors says that the climatic changes would lead to more frequent hot extremes, floods, droughts, cyclones and gradual recession of glaciers which in turn would result in greater instability in food production. Climatic change and its impact is the main theme of a research [17] which stated that global climatic changes and increasing climatic variability are likely to exert pressure on agricultural systems and may constrain attainment of future food production targets.

There are more hampers to agripreneurship as identified by various studies. In a study [18] identified difficulties faced by agripreneurs like lack of access to land, low education level, access to information etc among others. The other difficulties brought to light [19] include capital inadequacy, unavailability of the required infrastructures and shortage of manpower. A study [20] shows that entrepreneurial attitude among farmers is very low. The reason behind this scenario is mostly due to lack of technical knowhow, unwillingness to take risk and inferior personality. In another study on development of agriculture in India through agripreneurs [21] it is mentioned that various risks like production risk, price risk and financial risk and changes in Government programs are also hindrances towards agripreneurship.

MAJOR FACTORS OF THE STUDY

The major agricultural activities adopted by the farmers of Idukki district include the cultivation of cash crops and food crops, animal husbandry and floriculture. The major cash crops grown by the farmers here are pepper, cardamom, coffee, tea, rubber, nut mug, cocoa and vanilla. The important food crops they

grow are tapioca, banana, plantain, coconut, paddy, fruits and vegetables.

The animal husbandry initiates of these farmers include dairy farming, goat/sheep rearing, poultry farming, rabbit rearing, fisheries and beekeeping. In floriculture they primarily cultivate rose, orchid, jasmine and gerbera. In this the present study focuses on four basic factors as listed below.

Factor 1: Awareness of the farmers about the potential to start agripreneurial activities

Factor 2: Willingness of the farmers to start agripreneurial activities

Factor 3: The entrepreneurial skills required by farmers to become agripreneurs

Factor 4: Issues and challenges hindering the farmers from emerging as agripreneurs

ANALYSIS OF THE DATA

The analysis is done in three stages. The first is a profile analysis of the respondents. The second part is inferential analysis leading to findings. The last section is the hypotheses testing.

Profile of the respondents

The major demographic aspects of the respondents as resulted from the profile analysis are:

- Out of the 75 agriculturists majority [67.1%] are middle aged people, followed by senior citizens [17.1%] and youngsters [15.7%]. The fact that the number of youngsters in the agricultural field is very low is a matter of concern.
- Majority of the farmers [57.14%] are males and females constitute 42.86%.
- Among the farmers 42.9% have only high school level education. Another 31.43 % have passed plus two. Only 20% are graduates and as low as 5.7% only are post graduates. This outcome indicates that as education level increases people have reluctance to opt agriculture as their main occupation.
- As much as 47.1% agriculturists are highly experienced with more than 20 years of farming back ground. Of the remaining 25.71% are in the field for more than 10 years while 27.19% have only less than 10 years of agriculture background.

METHODOLOGY OF INFERENTIAL ANALYSIS OF THE FACTORS

The data about the major factors of this study and the variables constituting those factors are collected on a five-point Likert scale. On the five-point scale there are different categories of response options. For the first factor, the response options are 'highly aware', 'aware', 'neutral', 'not aware', 'not at all aware'. In the case of the second factor the options are 'highly willing', 'willing', 'neutral', 'not willing', 'not at all willing'. Response option like 'very strong', 'strong',

‘neutral’, ‘weak’, ‘very weak’ are used in the case of the third factor. In the case of the last factor the options are ‘strongly agree’ ‘agree’, ‘neutral’, ‘disagree’ and ‘strongly disagree’. In all these cases, the five different response options carry scores 5,4,3,2 and 1 respectively.

On completion of the interview of all the 75 respondents, the respective scores applicable to each response of interviewees were assigned and fed in to the computer using the software Statistical Package for Social Science [SPSS].

Based on the data and values entered in the SPSS the Arithmetic Mean [Mean score] for each element/variable of the various factors is calculated from the responses of all the 75 sample respondents. Such mean scores can fall in five different categories as shown in the following table. The interpretations are made based on the range in which the mean scores of the variables fall.

Table-1: Basis of interpretation of mean scores

Category	Mean Scores	Inference			
1	Between 1 and 1.49	Not at all aware	Not at all willing	Very weak	Strongly disagree
2	Between 1.5 and 2.49	Not aware	Not willing	Weak	Disagree
3	Between 2.5 and 3.49	Neutral	Neutral	Neutral	Neutral
4	Between 3.5 and 4.49	Aware	Willing	Strong	Agree
5	Above 4.5	Highly aware	Highly willing	Very strong	Strongly agree

Source: Compiled by the researcher

Factor 1: Awareness of farmers about the potential to start agripreneurial activities

The farmers can undertake several agripreneurial activities. The result of the attempt made

to understand the level of awareness of the farmers regarding those agripreneurial activities that they can undertake along with their routine farming works are summarised in the table below.

Table-2: Awareness level of farmers regarding agripreneurial activities

Agripreneurial Activities	Mean Score	Inference
Starting a retail business unit using their agro produce	3.41	Neutral
Starting agro tourism initiatives	3.39	Neutral
Making new products from their agro produces	3.37	Neutral
Commercial waste recycling	3.06	Neutral
Directly marketing their produce	3.01	Neutral
Processing and value addition of their produces	2.93	Neutral
Exporting the produce	2.77	Neutral
Starting agricultural consultancy service	2.50	Neutral
Starting service centres of agricultural implements	2.47	Not aware

Source: Primary data

RESULTS AND DISCUSSIONS

Out of the nine variables used to measure the awareness level of farmers regarding agripreneurial activities that they can undertake, the mean scores of eight activities are rated in the 2.5 to 3.49 [neutral] ranges. The indication is that the farmers have no clear idea whether they are aware or unaware about the different agripreneurial activities related to their field. This is a very unpleasant sign as far as agriculture, the primary sector of our economy, is concerned. The neutral stand adopted by the farmers is a clear indication that they lack proper awareness about their potential to start any kind of entrepreneurial activities related to their field. This is definitely a severe problem facing our economy that calls for the attention of the policy makers. In the case of ‘starting service centres for agricultural implements’ the mean score is in the

range of 1.5 to 2.49, which means that the farmers are not aware about their potential to exploit that particular option. This finding indicates the need for giving the farmers practical exposure to various entrepreneurial activities they can commence. This can be done by familiarising them with those agripreneurs who are already successful in the field.

Factor 2: Willingness of the farmers to start entrepreneurial activities

Whether the farmers are aware of the opportunities or not, they can start any entrepreneurial activity only if they are willing and prepared to venture into the business arena. Taking the same set of variables listed in table 2, the attempt here is to understand the extent of the farmer’s willingness to start any such business activities.

Table-3: Willingness of farmers to start entrepreneurial activities

Agripreneurial Activities	Mean Score	Inference
Commercial waste recycling	4.13	Willing
Making new products from their agro produces	4.11	Willing
Starting a retail business unit using their agro produce	4.07	Willing
Processing and value addition of their produces	4.00	Willing
Directly marketing their produce	3.97	Willing
Exporting the produce	3.23	Neutral
Starting agro tourism initiatives	3.11	Neutral
Starting agricultural consultancy service	2.99	Neutral
Starting service centres of agricultural implements	2.93	Neutral

Source: Primary data

RESULTS AND DISCUSSIONS

The outcome of the analysis is promising. Out of the nine types of entrepreneurial activities listed, five are rated with mean score above 3.4 indicating the willingness of the farmers to exploit the opportunities of starting those type of businesses. Considering the outcomes of table 1 and 2 together, it can be seen that the farmers are interested in commercial waste recycling [eg. bio gas, vermin compost etc], making new products from their agro produces [eg. furniture from wood, oil from coconut, chocolate from cocoa, medicines from medicinal plants etc], starting a retail business unit using their agro produce, processing and value addition of their produces [eg. making chips from banana, jam and squash from fruits etc] and directly marketing their agro produces to the end users rather than to the middlemen. But the other side of the coin is

that farmers badly lack the knowhow and guidance for proceeding in this line. The various promotional agencies functioning in the governmental and non-governmental segments have a lot to do in this area.

Factor 3: Entrepreneurial skills required by farmers to become agripreneurs

To start and succeed on agripreneurship, farmers need certain specific skills set. Agripreneurs tend to start ventures that are built on specific skills and knowledge they have already developed and acquired. Through the literature review seven such primary skills required by agriculturists to become agripreneurs are identified. The effort here is to understand the level of possession of these entrepreneurial skills by the farmers.

Table-4: Level of entrepreneurial skills possessed by farmers

Entrepreneurial Skills	Mean Scores	Inference
Risk taking	4.00	Strong
Confidence	3.97	Strong
Innovativeness	3.81	Strong
Motivation	3.79	Strong
Identifying opportunities	3.77	Strong
Achievement orientation	3.51	Strong
Market orientation	3.29	Neutral

Source: Primary data

RESULTS AND DISCUSSIONS

The table shows the mean score assigned by the farmers for each of the entrepreneurial skills that they think they have. The farmers feel that they are strong [mean score between 3.5 and 4.49] in all of the skill required except in the case of market orientation. As per their self-assessment the farmers think that they possess rather good level of entrepreneurial skills such as risk taking capacity, followed by confidence, innovativeness, motivation, ability to identify opportunities and achievement orientation in that order. At the same time it can be observed that in case of these skills, scope for improvement to higher level – from strong to very strong level- exists. In the case of market orientation which is also very essential for an

entrepreneur, the farmers feel that they are not up to the mark.

Factor 4: Issues and challenges to become agripreneurs

The agriculturist may face several issues and challenges in transforming themselves into agripreneurs. Seven such probable difficulties in the specific context of the farmers of Idukki district were identified through the literature review as well as discussions with experienced farmers. During the data collection process the farmers were asked to mark their responses regarding the extent of such difficulties faced by them. The summary of response of the farmers is provided in the table below.

Table-5: Issues and challenges of becoming agripreneurs

Issues and Challenges	Mean Score	Inference
Less awareness about agripreneurial opportunities	4.10	Agree
Lack of technical knowhow	3.94	Agree
Low entrepreneurial attitude	3.89	Agree
Climatic changes	3.87	Agree
Shortage of capital	3.76	Agree
Lack of market understanding	3.57	Agree
Lack of infrastructure	3.46	Neutral

Source: Primary data

RESULTS AND DISCUSSIONS

Of the seven issues placed before the farmers, six are rated with mean score in the range of 3.5 to 4.49 indicating their agreement to the fact that these variables are real issues challenging them from transforming to agripreneurs. The major issue pointed out is their lack of awareness about the different agripreneurial opportunities available to them. This finding reiterates the outcome of analysis done and shown in table 1, about the awareness level of the farmers regarding the various agripreneurial opportunities available to them. Similarly lack of technical knowledge concerning the commencement and management of a business, absence of proper entrepreneurial attitude, and the recent phenomena of severe climatic change which badly affect the whole agricultural scenario and want of proper understanding of the complexities of the market are also hindering them from becoming agripreneurs. At the same time they don't consider the lack of infrastructure facilities as a serious issue. The outcome of the analysis of this factor emphasise the need for providing practical exposure to the farmers regarding different dimensions of entrepreneurship.

CONCLUSION OF INFERENTIAL ANALYSIS

From the outcomes of the four factors analysed in this section, it can be concluded that agriculturists are willing to start agripreneurial activities. Also, the

farmers believe that they possess the essential entrepreneurial skills. But what pull them back is the lack of appropriate awareness about their potential for it as well as how to undertake such activities. Because of this lack of awareness, they face several issues and challenges in transforming themselves as agripreneurs.

TESTING OF HYPOTHESES

The inferential analysis made it clear that the farmers are willing to start agripreneurial activities but have no clear awareness about their potential for it. Now the question arises as to whether these two factors are correlated or not. Similarly it is found that the agriculturists possess a reasonable extent of several entrepreneurial skills but at the same time face several issues and challenges in becoming agripreneurs. Are these two factors correlated? To get an answer, suitable hypotheses are developed and Karl Pearson's correlation co-efficient [*r*] is used to test them.

In order to identify the nature of relationship between the factors awareness and willingness, the following null hypothesis is developed and tested.

[H01]: There is no correlation between the awareness level of farmers regarding the agripreneurial activities they can undertake and the extent of their willingness to become agripreneurs.

Table-6: Correlation between awareness and willingness of the farmers regarding agripreneurship

Factor	Descriptive Statistics	Awareness	Willingness
Awareness	Pearson Correlation	1	0.261*
	Sig.(2-tailed)		0.029
	N	75	75
Willingness	Pearson Correlation	0.261*	1
	Sig.(2-tailed)	0.029	
	N	75	75

Source: Primary data *Correlation is significant at the 0.05 level (2-tailed)

RESULTS AND DISCUSSIONS

The table shows that the Pearson's coefficient of correlation is 0.261. The significance value [0.029] is less than 0.05. When the significance value is less than 0.05, the null hypothesis [H01] stands rejected at 5% level of significance and the alternate hypothesis stands accepted. Therefore the indication from the hypothesis

testing is that the two variables are positively correlated and the correlation is significant. That means there is relationship between the awareness regarding various agripreneurial activities that farmers can undertake and their willingness to start such activities. Hence implication is that if the awareness level of the farmers about various agripreneurial activities is improved it

will result in proportionate increase in their willingness for starting agriculture related business activities.

Similarly to understand the nature of relationship between the factors entrepreneurial skills possessed by the farmers and the issues and challenges

faced by them, the following null hypothesis is developed and tested.

[H02]: There is no correlation between the entrepreneurial skills possessed by the farmers and the issues and challenges faced by them in becoming agripreneurs.

Table-7: Correlation between entrepreneurial skills and issues and challenges

Factor	Descriptive Statistics	Entrepreneurial Skills	Issues and Challenges
Entrepreneurial Skills	Pearson Correlation	1	-0.260*
	Sig.(2-tailed)		0.030
	N	75	75
Issues and Challenges	Pearson Correlation	-0.260*	1
	Sig.(2-tailed)	0.030	
	N	75	75

Source: Primary data *. Correlation is significant at the 0.05 level (2-tailed)

RESULTS AND DISCUSSIONS

The table shows that the Pearson’s coefficient of correlation is - 0.260 which indicates negative relationship between the two factors. Since the significance value [0.03] is less than 0.05, the null hypothesis [H02] stands rejected at 5% level of significance and the alternate hypothesis stands accepted. Therefore the indication from this hypothesis testing is that the two variables are negatively correlated and the correlation is significant. That means there is inverse relationship between the level of entrepreneurial skills that the farmers possess and the extent of issues and challenges they face. Hence the implication is that if the degree of entrepreneurial skills of the farmers is increased, magnitude of the issues and challenges they face in becoming agripreneurs can be reduced.

CONCLUSION OF HYPOTHESES TESTING

The hypotheses testing show that the willingness of farmers to venture into suitable agripreneurship activities can be enhanced through increasing their awareness about such opportunities. The various problems they face in becoming agro entrepreneurs can be reduced through improving their business skills.

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