



Entrepreneurial Effectiveness of Agripreneurs in Kerala, India

Gopika Somanath ^a^o* and B. Seema ^a[#]

^a Department of Agricultural Extension, College of Agriculture, Vellayani, Thiruvananthapuram, Kerala, India.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

The study to measure the entrepreneurial effectiveness of agripreneurs in Kerala was undertaken in the Kasargod, Thrissur and Thiruvananthapuram districts of the state. A total of 180 agripreneurs, consisting of 20 on-farm agripreneurs, 20 off-farm agripreneurs and 20 commercial farmers each belonging to each of the three selected districts, constituted the sample for the study. The data collected was statistically analyzed using arithmetic mean, percentage, correlation and analysis of variance. The study revealed that the off-farm agripreneurs were entrepreneurially the most effective category followed by the on-farm agripreneurs and the commercial farmers who were found to be on almost on par in their effectiveness. The on-farm agripreneurs, off-farm agripreneurs and commercial farmers exhibited significant differences in their effectiveness only in case of marketing management effectiveness and risk management effectiveness where as significant difference was observed between the agripreneurs belonging to the three districts in case of the possession all the six sub-dimensions of entrepreneurial effectiveness viz. production management effectiveness, finance management effectiveness, marketing management effectiveness, labour management effectiveness, risk management effectiveness and time management effectiveness.

^o Assistant Professor;

[#] Professor and Head (Retired);

*Corresponding author: E-mail: gopika.s@kau.in;

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1. INTRODUCTION

Agriculture in India and more so in Kerala, is viewed as a traditional occupation and way of life. The concept of 'agri-business' is in its infancy and has limited takers in the agrarian economy. This stands in the way of exploiting many an opportunity thrown open by the liberalized trade regimes and the resultant global market access. Hence an enterprise touch in the farm activities is the need of the hour to better equip the farmers to turn this tide in their favour. Every farmer is entrepreneurial to the extent that he/she sells at least some part of his/her produce in the market, during some point of time or the other. But it is the extent of entrepreneurial effectiveness that decides his/her relative position of advantage in the highly competitive market environment. Any programme to augment the entrepreneurial skills of the agripreneurs should be based on concrete data on the current level of performance of the agripreneurs. Hence measurement of entrepreneurial effectiveness of the agripreneurs and quantification of the parameter would serve as the foundation for the various entrepreneurship development initiatives in agriculture.

1.1 Objectives of the Study

The major objective of the study was to measure the entrepreneurial effectiveness of the agripreneurs in Kerala, with the scale developed and standardized for the purpose.

2. METHODOLOGY

The research project was undertaken in the state of Kerala. Kerala is divided into five agro-climatic zones *viz.* Southern zone, Central zone, Northern zone, High range zone and the special zone of problem areas [1]. Based on the geographical prominence, the Southern zone, the Central zone and the Northern zone were selected for the purpose of the study. From each of the three zones, one district each was selected purposively. Accordingly, Thiruvananthapuram district from the Southern zone, Thrissur from the Central zone and Kasargod from the Northern zone were selected for the study.

2.1 Categorization of Respondents

An agripreneur is operationalized as a person undertaking agriculture or allied activities as a

business with the prime objective of marketing the produce profitably and obtaining 50 per cent or more of his/her income from these activities.

The agripreneurs have been classified into three categories *viz.* commercial farmers, on-farm agripreneurs and off-farm agripreneurs following Senthilvinayagam [2].

2.1.1 Commercial farmer

A commercial farmer is operationalized as an agripreneur who cultivates a field crop, plantation crop or a horticultural crop in an area of a minimum of one acre (since the average operational holding size in Kerala is 0.4 ha = 1 acre) objective of marketing more than 50% of the produce for optimum returns.

2.1.2 On-farm agripreneurs

On-farm agripreneurs are individual agri-business operators, undertaking farm-related business activities which are not land intensive, for the production of food, fiber or horticultural raw materials with the objective of marketing more than 50% of the produce.. Eg. Mushroom cultivation, cut flower production, sericulture, apiculture etc [3-5].

2.1.3 Off – farm agripreneurs

An off – farm agripreneur is operationalized as an agro-entrepreneur who runs his/her unit using the farm-based agricultural produces as raw materials, to be processed into value added products, which are marketed as such or are tenable for further processing, with the objective of marketing more than 50% of the produce [6-8].

Eg. Oil mills, food processing units, mat weaving units, fiber extraction units etc.

2.2 Sampling Procedure

The respondents for each district was identified from the prepared list of agripreneurs on the basis of the following criteria through simple random sampling [9-11]:

- i. Minimum of three years experience in the enterprise activity.
- ii. Enterprises with investment (cost of infrastructure and equipment) not exceeding Rs. 10 lakhs.

2.3 Selection of Respondents

From each of the selected districts, 20 on-farm agripreneurs, belonging to the identified categories were selected randomly from the prepared inventory, in such a way that not more than four respondents belonged to the same agro-enterprise activity. This ensured that a minimum of five different categories of agripreneurs were included as respondents from each district. Thus a total of 60 respondents from the three selected districts constituted the sample of on-farm agripreneurs for the study. Similar procedure was followed in the selection of 60 off-farm agripreneurs from the selected districts. From the universe of the commercial farmers cultivating the three main crops of Kerala namely coconut, rice and rubber – 20 respondents each were selected from each district. Constituting a sample of 60 farmers. Thus a total of 180 agripreneurs selected from the three districts constituted the statistically representative sample for the study.

2.4 Operationalization and Measurement of the Dependent Variable

The dependent variable, entrepreneurial effectiveness has been operationalized as the extent to which an entrepreneur achieves the output requirement of his enterprise in a time bound manner, making optimum use of all the available and potential resources, towards the sustained profitable operation of the enterprise. The entrepreneurial effectiveness is measured in terms of the six sub - dimensions identified through judges relevancy rating viz. production management effectiveness, finance management effectiveness, marketing management

effectiveness, labour management effectiveness, risk management effectiveness and time management effectiveness.

2.5 Statistical Tools Used

The statistical tools used for the study includes the various descriptive statistics and ANOVA.

3. RESULTS AND DISCUSSION

The entrepreneurial effectiveness of the agripreneurs were analyzed district-wise and category wise with respect to the six sub-dimensions and the results have been presented under the following heads.

3.1 Production Management Effectiveness

The district-wise distribution of the agripreneurs revealed that more than 70 percent each of the agripreneurs in the Thrissur and the Thiruvananthapuram districts belonged to the medium effectiveness group. In case of the Kasargod district, it was observed that though a majority 43.33 percent of the agripreneurs belonged to the medium effectiveness category, a comparable 41.67 percent of them belonged to the low effectiveness category. Comparison of the on-farm agripreneurs, off-farm agripreneurs and commercial farmers revealed that around one-half of the respondents in all the categories possessed medium levels of effectiveness. Not much variation was observed in the distribution of the three groups of respondents within the low and high categories.

Table 1. Comparison of the agripreneurs district-wise and category-wise based on their production management effectiveness scores

Sl. No.	District/ Category	Low (Percentage)	Medium (Percentage)	High (Percentage)	Mean score	F- value (ANOVA)
I. District-wise comparison						
1.	TSR	18.33	73.33	8.33	0.53	66.86 **
2.	KSG	41.67	43.33	15	0.19	
3.	TVM	15	71.66	13.33	0.38	
II. Category-wise comparison						
1.	On- farm agripreneurs	26.67	53.33	20	0.39	1.0097 ^{NS}
2.	Off-farm agripreneurs	30	48.33	21.67	0.34	
3.	Commercial farmers	30	50	20	0.36	

TSR – Thrissur, KSG – Kasargod, TVM – Thiruvananthapuram

** Significant at 0.01 %; NS Not significant

The results of analysis of variance (ANOVA) indicated that among the agripreneurs in the three districts the differences in production management effectiveness were highly significant (at 0.01 percent) while among the three categories of agripreneurs the difference with regard to this sub-dimension was observed to be non-significant as is evident from the mean scores.

3.2 Finance Management Effectiveness

Critical examination of the distribution of the agripreneurs in Table 2 reveals that in case of all the three district categories, more than 75 percentage each of the agripreneurs possessed medium levels of finance management effectiveness. It was also interesting to note that the agripreneurs belonging to the Kasargod district had a comparatively lower representation in the 'low' category and higher representation in the 'high' category indicating a marginally better effectiveness in finance management as compared to the other two districts. This may perhaps be due to the fact that their business units were smaller in size and availed less credit and hence were free from the hassles of repayment. Though this contributes to their effectiveness in finance management, it points to their lower risk propensity. Category-wise comparison of the agripreneurs revealed that more than 45 percentage of the respondents in all the three categories possessed medium levels of effectiveness in finance management.

The F-values computed indicated that the agripreneurs in the three sample districts differed significantly (at 0.05 percent) with respect to their

effectiveness in finance management. However the F-values indicated no significant disparity among the three categories of agripreneurs with respect to this dimension. The cumulative figures indicated that the finance management effectiveness of the agripreneurs were in the medium to low range.

3.3 Marketing Management Effectiveness

A probe into the Table 3 reveals that majority of the agripreneurs in the three selected districts possess medium level of effectiveness in market management. It was observed that the Thiruvananthapuram district had the maximum representation (16.67%) in the low effectiveness category, which points to the marketing problems in the district, while not much variation was observed in the distribution of respondents in the 'high' category.

With regard to the category-wise distribution of the agripreneurs, the majority (>50% each) of the on-farm agripreneurs, off-farm agripreneurs and commercial farmers were found to be effective in market management to a medium extent. The percentage of off-farm agripreneurs was found to be the lowest in the low category and the highest in the high category indicating a relatively better effectiveness in market management. This may be due to the fact that the off-farm agripreneurs were mainly dealing with the production of processed products much in line with the ever increasing demand for the ready to use products. Also these processed products provide scope for delayed marketing and hence the need for distress sale is reduced considerably. The overall figures indicate that the market

Table 2. Comparison of the agripreneurs district-wise and category-wise based on their finance management effectiveness scores

Sl. No.	District/ Category	Low (Percentage)	Medium (Percentage)	High (Percentage)	Mean score	F- value (ANOVA)
I. District-wise comparison						
1.	TSR	13.33	78.33	8.33	0.55	6.209 *
2.	KSG	8.33	76.67	15	0.20	
3.	TVM	11.67	76.67	11.67	0.38	
II. Category-wise comparison						
1.	On- farm agripreneurs	30	48.33	21.67	0.40	1.308 ^{NS}
2.	Off-farm agripreneurs	28.33	46.67	25	0.34	
3.	Commercial farmers	23.33	53.33	23.33	0.39	

TSR – Thrissur, KSG – Kasargod, TVM – Thiruvananthapuram

* Significant at 0.05 %, NS - Not significant

Table 3. Comparison of the agripreneurs district-wise and category-wise based on their marketing management effectiveness scores

Sl. No.	District/ Category	Low (Percentage)	Medium (Percentage)	High (Percentage)	Mean score	F- value (ANOVA)
I. District-wise comparison						
1.	TSR	11.67	75	13.33	0.52	
2.	KSG	6.67	78.33	15	0.21	
3.	TVM	16.67	68.33	15	0.39	48.67 **
II. Category-wise comparison						
1.	On- farm agripreneurs	26.67	55	18.33	0.43	
2.	Off-farm agripreneurs	23.33	53.33	23.33	0.33	
3.	Commercial farmers	30	56.67	13.33	0.36	3.22 *

TSR – Thrissur, KSG – Kasargod, TVM – Thiruvananthapuram

** Significant at 0.01 %, * Significant at 0.05 %

management effectiveness of the agripreneurs in the state fall in the medium to low category.

The results of one-way ANOVA indicated that the agripreneurs in the Thrissur, Kasargod and Thiruvananthapuram districts differed significantly (at 0.01%) with respect to their effectiveness in market management. The on-farm agripreneurs, off-farm agripreneurs and commercial farmers were also found to differ significantly in this respect as indicated by the F-value.

3.4 Labour Management Effectiveness

The district-wise and category-wise distribution and comparison of the agripreneurs based on labour management effectiveness is presented in Table 4. Among the three district categories, about two-thirds each of the respondents belonged to the medium effectiveness category. The Kasargod district was found to have the least representation in the 'low' category and the highest representation in the 'high' category indicating a comparatively better effectiveness in labour management. The smaller size of the units and the consequent lesser requirement for labour might be the probable reasons for their better performance in labour management, since most of the operations in these units were carried out by the owner entrepreneurs, thus reducing the dependence on external labour.

In case of the Thiruvannanthapuram and Thrissur districts, the size of the units were found to be comparatively larger and hence the dependence on external labour was found to be more.

However, the shortage of skilled and unskilled labour in these two districts might have contributed to their lower labour management effectiveness. Among the three categories of agripreneurs, more than 65 percentage each of the agripreneurs were found to belong to the medium effectiveness category, while the figures within the low and high categories were found to be comparable.

The F-values computed using one-way ANOVA indicate that the agripreneurs in the three selected districts differed significantly (significant at 0.05%) in their labour management effectiveness while no significant difference was observed between the on-farm agripreneurs, off-farm agripreneurs and commercial farmers with respect to this dimension.

3.5 Risk Management Effectiveness

The results of the comparison of the risk management effectiveness scores across the various districts and categories and the F-values of the corresponding tests of significance are presented in Table 5. More than 70 percent each of the respondents in the three sample districts were found to belong to the medium effectiveness category. In the low and high categories, the distribution of respondents in the Thrissur and Thiruvananthapuram districts were found to be comparable. The Kasargod district was found to have the highest representation in the high category (18.33%) and the least representation (10%) in the low category, indicating relatively lower risk management effectiveness in comparison to the other two districts.

Table 4. Comparison of the agripreneurs district-wise and category-wise based on their Labour management effectiveness scores

Sl. No.	District/ Category	Low (Percentage)	Medium (Percentage)	High (Percentage)	Mean score	F- value (ANOVA)
I. District-wise comparison						
1.	TSR	18.33	71.67	10	0.49	18.53 *
2.	KSG	11.67	73.33	15	0.37	
3.	TVM	21.67	66.67	11.67	0.41	
II. Category-wise comparison						
1.	On- farm agripreneurs	16.67	71.67	11.67	0.44	1.19 ^{NS}
2.	Off-farm agripreneurs	20	66.67	13.33	0.41	
3.	Commercial farmers	13.33	70	16.67	0.41	

TSR – Thrissur, KSG – Kasargod, TVM – Thiruvananthapuram

* Significant at 0.05 %; NS Not significant

Table 5. Comparison of the agripreneurs district-wise and category-wise based on their risk management effectiveness scores

Sl. No.	District/ Category	Low (Percentage)	Medium (Percentage)	High (Percentage)	Mean score	F- value (ANOVA)
I. District-wise comparison						
1.	TSR	8.33	76.67	15	0.47	29.013 **
2.	KSG	18.33	71.67	10	0.39	
3.	TVM	10	73.33	16.67	0.51	
II. Category-wise comparison						
1.	On- farm agripreneurs	15	70	15	0.42	6.470 *
2.	Off-farm agripreneurs	23.33	66.67	10	0.35	
3.	Commercial farmers	13.33	68.33	18.33	0.44	

TSR – Thrissur, KSG – Kasargod, TVM – Thiruvananthapuram

** Significant at 0.01 %; * Significant at 0.05 %

Among the three categories of agripreneurs, not much variation was observed in the distribution of respondents in case of the on-farm agripreneurs and commercial farmers. The risk management effectiveness of the off-farm agripreneurs was found to be low as is evident from the lower mean score (0.35). These findings are supported by the previous findings that the extent of diversification is low among the off-farm agripreneurs, which is perhaps reflecting in their lower risk management effectiveness.

The F-values obtained from the one-way analysis of variance of the different categories indicate that significant difference existed among the agripreneurs in the three districts (significant at 0.01%) with respect to this dimension. The on-farm agripreneurs, off-farm agripreneurs and

commercial farmers were also observed to show significant variations (significant at 0.05%) in their risk management effectiveness.

3.6 Time Management Effectiveness

The results presented in Table 6 indicates that more than 60 percentage each of the respondents in the three districts belonged to the medium effectiveness category. The distribution of the respondents in the various categories were found to be comparable in case of the Thrissur and Kasargod districts indicating a medium to high level of effectiveness in time management. The Thiruvananthapuram district fared poorly with respect to this dimension, which may be attributed to their higher preference for employment in the formal sector and a

secondary occupation status attributed to agribusiness in terms of time allocation. The on-farm agripreneurs, off-farm agripreneurs and commercial farmers were found to exhibit medium to low levels of time management effectiveness.

The results of the test of significance indicate that there existed significant difference in the time management effectiveness of the agripreneurs in the three selected districts, whereas the differences between the on-farm agripreneurs, off-farm agripreneurs and commercial farmers with respect to this dimension were found to be non-significant.

3.7 Entrepreneurial Effectiveness of Agripreneurs

The distribution of the respondents in the low and high categories in case of the Thrissur and Thiruvananthapuram districts were found to be comparable. However in case of the Kasargod district, the percentage of respondents in the 'low' category was found to be high and that in the 'high' category was found to be low, indicating a relatively lower effectiveness of the agripreneurs in the district. These findings are also supported by the relatively lower mean score (0.29) in comparison to the other districts.

Table 6. Comparison of the agripreneurs district-wise and category-wise based on their time management effectiveness scores

Sl. No.	District/ Category	Low (Percent-age)	Medium (Percent-age)	High (Percent-age)	Mean score	F- value (ANOVA)
I. District-wise comparison						
1.	TSR	11.67	66.67	21.67	0.55	6.260 *
2.	KSG	15	61.67	23.33	0.48	
3.	TVM	30	60	10	0.51	
II. Category-wise comparison						
1.	On- farm agripreneurs	21.67	60	18.33	0.52	0.93 ^{NS}
2.	Off-farm agripreneurs	28.33	60	11.67	0.51	
3.	Commercial farmers	15	75	10	0.49	

TSR – Thrissur, KSG – Kasargod, TVM – Thiruvananthapuram

* Significant at 0.05 %; NS Not significant

Table 7. Distribution and comparison of the agripreneurs district-wise and category-wise based on their entrepreneurial effectiveness scores

Sl. No.	District/ Category	Low (Percent-age)	Medium (Percent-age)	High (Percent-age)	Mean score	F- value (ANOVA)
I. District-wise comparison						
1.	TSR	13.33	75	11.67	0.53	53.458 *
2.	KSG	21.67	70	8.33	0.29	
3.	TVM	11.67	78.33	10	0.41	
II. Category-wise comparison						
1.	On- farm agripreneurs	26.67	53.33	20	0.40	1.746 ^{NS}
2.	Off-farm agripreneurs	21.67	55	23.33	0.44	
3.	Commercial farmers	28.33	55	16.67	0.38	

TSR – Thrissur, KSG – Kasargod, TVM – Thiruvananthapuram

* Significant at 0.05 %; NS Not significant

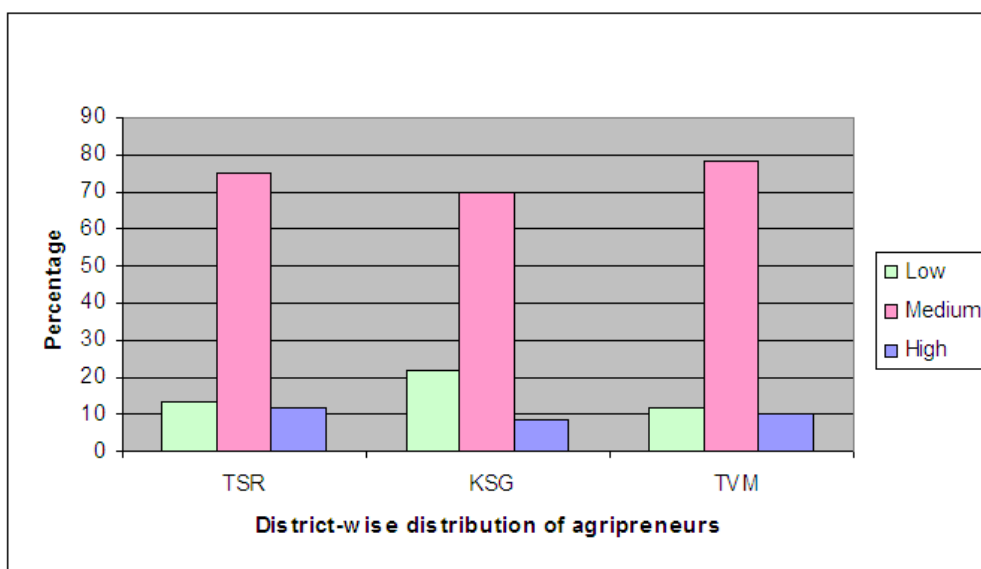


Fig. 1. Enterpreneurial effectiveness of agripreneurs – District-wise comparison
 TSR – Thrissur, KSG – Kasargod, TVM – Thiruvananthapuram

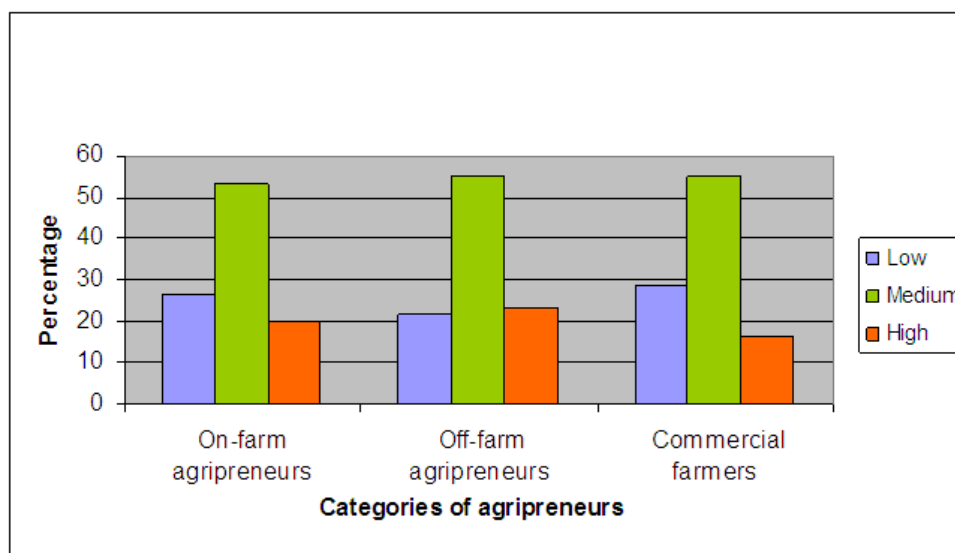


Fig. 2. Enterpreneurial effectiveness of agripreneurs – Category-wise comparison

The category-wise comparison of the agripreneurs reveal that more than one-half of the respondents in all the three categories possess medium levels of effectiveness. While in the 'low' category, the percentage of respondents was found to be highest (28.33%) in case of the commercial framers, the percentage of respondents in the 'high' category was found to be the maximum (23.33%) in case of the off-farm agripreneurs. These figures indicate that the off-farm agripreneurs were entrepreneurially the most effective followed by the on-farm agripreneurs and the commercial farmers who

were found to be almost on par in their effectiveness, which is also supported by their mean scores.

4. SUMMARY OF FINDINGS

The district wise categories of agripreneurs showed significant differences with regard to all the six sub-dimensions of entrepreneurial effectiveness, while the on-farm agripreneurs, off-farm agripreneurs and commercial farmers exhibited significant differences only with regard to their marketing and risk management

effectiveness. It was observed that significant differences existed between the entrepreneurial effectiveness of the agripreneurs in the Thrissur, Kasargod and Thiruvananthapuram districts, while the on-farm agripreneurs, off-farm agripreneurs and commercial farmers exhibited no significant differences in their agripreneurial effectiveness scores.

5. CONCLUSION

The off-farm agripreneurs were observed to be entrepreneurially the most effective category followed by the on-farm agripreneurs and the commercial farmers who were found to be almost on par in their effectiveness, which is supported by the significant differences in the marketing and risk management effectiveness scores of the three categories of agripreneurs. The assessment the entrepreneurial effectiveness of the different categories of agripreneurs in the state provided vital information for efficient and rational decision making which could be used for improving the entrepreneurial performance, identifying the training needs and in designing suitable entrepreneurship development programmes.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. KAU. National Agricultural Reseach Project – Status report of the central zone. Kerala Agricultural University, Thrissur. 1989;1: 1-43.
2. Senthilvinayagam S. Entrepreneurial behaviour of agri - business operators in Kerala. Ph.D. thesis, Kerala Agricultural University, Vellanikkara, Thrissur; 1998.
3. Elakkiya S and Asokhan M. A Tool to Measure Entrepreneurial Skill among Agripreneurs. Asian J. Agric. Ext. Economics Sociol. 2021;39(12):91-97.
4. Mukembo, SC.; Edwards, MC; Robinson, Shane J. J Agri Educ. 2020;61(2):93-114.
5. Mukaila R. Agricultural entrepreneurship among the youth: The case of youth involvement in rabbit production in Nigeria. International Entrepreneurship Review. 2022.8(1):35-46. Available:<https://doi.org/10.15678/IER.2022.0801.03>
6. Murugesan SV, Rajarajan M. Problems and prospects of agricultural marketing. Int. J. World Res. 2016;1(29):45-50.
7. Raju JK, Somashekhar IC, Hemapatil. Agriculture supply chain management: A scenario in India. Res. J. Social Sci. Manag. 2014;4(7):89-99.
8. Ram DMK, Singh SS, Singh N, Gopimohan M, Ghadei K. Entrepreneurial behavior of vegetable growers. J. Commun. Stud. 2010;28(3):51-57.
9. Singh K, Misra M. Developing an agricultural entrepreneur inclination model for sustainable agriculture by integrating expert mining and ISM–MICMAC. Environ Dev Sustain. 2021;23:5122–5150. Available:<https://doi.org/10.1007/s10668-020-00806-x>
10. Waghulkar S, Ganjre K, Behare N Diwan NA. Feasibility study for online marketing of agricultural greenhouse products w.r.t. Pune district. Int. J. Manag. 2017;8(1): 98-110.
11. Yoganandan G, Rahman AAA Vasan M. et al. Evaluating agripreneurs' satisfaction: exploring the effect of demographics and emporographics. J Innov Entrep. 2022;11(2). Available:<https://doi.org/10.1186/s13731-022-00193-9>

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