



ISSN (E): 2277-7695
ISSN (P): 2349-8242
NAAS Rating: 5.23
TPI 2022; SP-11(10): 666-671
© 2022 TPI
www.thepharmajournal.com
Received: 21-08-2022
Accepted: 25-09-2022

Veena Bushetti
Research Scholar, Department of
Agricultural Extension,
University of Agricultural
Sciences, Bangalore, Karnataka,
India

B Krishnamurthy
Associate Director of Extension,
Directorate of Extension
University of Agricultural
Sciences, Bangalore, Karnataka,
India

Entrepreneurial behaviour of Byadagi chilli growers in Haveri district of Karnataka

Veena Bushetti and B Krishnamurthy

Abstract

The study was conducted to analyse the entrepreneurial behavior of Byadagi chilli growers in Haveri district during the year 2021-22. The Ex-post-facto research design has been adopted in the present study. Total sample size encompassed to 180 farmers. It can be noticed that, among the dimensions of entrepreneurial behavior, more than one third (36.67%) of the farmers belonged to medium behavioral aspects category, 41.67 percent of the growers belongs to medium production aspects category, 41.67 percent of the growers belongs to medium climate resilient practices/adaptations aspects category, 42.22 percent of the growers belongs to medium processing/value addition aspects, 38.33 percent of the growers belongs to medium category of marketing aspects whereas in the export aspects less than two third (64.45%) of the farmers belonged to low category. The overall entrepreneurial behavior score based on the cumulative raw scores of all the six dimensions revealed that, 68.33 percent of the Byadagi chilli growers had medium level of entrepreneurial behavior.

Keywords: Entrepreneurial behaviour, Byadagi chilli growers, aspects, climate resilient practices

Introduction

Agriculture with its associated sectors is without a doubt the largest provider of livelihoods in India, more in the vast rural areas. It is also a major contributor to Gross Domestic Product (GDP). For all-encompassing rural development, sustainable agriculture is crucial in terms of food security, rural employment and ecological friendly methods including soil conservation, prudent natural resource management and biodiversity protection. The importance of agriculture, which provides a living for the majority of people in India, cannot be understated. Agricultural production increased, despite the fact that its share of the GDP decreased to less than 20 percent and other sectors had higher growth. As a result, India is now self-sufficient and is a net exporter of agricultural and related goods, as opposed to being a food basket after independence.

Byadagi chilli is a famous variety of chilli mainly grown in Karnataka. It is named after the town of Byadagi which is located in the Haveri district of Karnataka. The business pertaining to Byadagi chillies has the second largest turnover among all chilli varieties of India. An oil, oleoresin extracted from these chillies is used in the preparation of nail polish and lipsticks. Byadagi chilli is also known for its deep red colour, less spiciness and used in many food preparations of South India. Byadagi chilli has been accorded Geographical Indication (GI) in February 2011. Its GI tag is 129. In practically every state in India, chillies are cultivated. The largest producer of chillies in India is Andhra Pradesh, which provides about 26% of the nation's total chilli-growing land. Maharashtra (15%), Karnataka (11%), Orissa (11%), Madhya Pradesh (7%), and other states make up the remaining nearly 22% of the nation's total chilli-growing land (Anon., 2019) ^[2].

Several pain points for farmers such as small land holdings, labour shortage, severe weather conditions, climate change, reduction in soil fertility, etc. are making agriculture less profitable. For the last few years, agriculture is continuously challenged by climate change and other environmental problems and they create a huge hurdle in achieving enhanced productivity. Two possible options to tackle the food shortage are increasing land usage and practicing farming in large area or adapting best practices and technology support to enhance productivity. Taking into account developing nations with highly populated areas where increasing the land area is merely impossible, the only way is to go smarter with the assistance of cutting edge technologies like the Internet of Things (IoT) and allied technologies like Artificial Intelligence (AI).

Corresponding Author:
Veena Bushetti
Research Scholar, Department of
Agricultural Extension,
University of Agricultural
Sciences, Bangalore, Karnataka,
India

The farming activity is itself an example of entrepreneurship as it has all elements of an Enterprise i.e. land, labour, capital, process, technology, inputs, finance, risk, marketing etc. Farmers invest money, labour and inputs to get the final output i.e. harvest. However, the income level of the rural mass is much lower than the urban people. It is said that risk taking capacity of rural people is lower than the urban people, which is not correct. Agriculture itself is a high risk low return activity and farmers are taking risk year after year to increase the agriculture production. The farmers can prove to be better entrepreneurs if proper training is provided. Several advantages are there in rural areas especially in respect of agro-products and animal husbandry related industries. Since the farming is seasonal activity, the farmers can start and run small and micro enterprises. In the present scenario, the rural areas are source of raw materials and the urban areas are acting as processing centres. This reminds us the typical set up during industrial revolution when colonies were source of raw materials and European Nations were processing and selling back the same to undeveloped nations.

Prosperity will not come to rural areas unless the value addition takes place at the rural areas itself. The absence of entrepreneurship in rural yards is main cause of poverty in rural areas. Establishment of micro or household industries in rural premises can break the cycle of poverty. This won't just result in prosperity but also provide employment to youth and landless people.

The entrepreneurial characteristics of Byadagi chilli grower helps to maintain his farm profitably along with the growth of farming communities. Knowledge regarding the farm activities, risk-bearing capacity, social participation, scientific orientation and many more factors will enhance his entrepreneurial environment towards a new era of progress in the industry and farming sector. Entrepreneurship in chilli cultivation, processing and export can be handled as a changing mode of development from conventional pattern of farming towards business opportunities. The study was

undertaken with the objective, to analyses the entrepreneurial behaviour of Byadagi chilli growers.

Methodology

The study was conducted in Haveri district of Karnataka during the year 2021-22. Haveri district has been purposively selected for the study, since it is the major export hub for Byadagi chilli. The *Ex-post-facto* research design was adopted for the study. Based on the statistical data of Byadagi chilli production and productivity in the year 2019-20, talukas having high, medium and low productivity of chilli were selected for the study. i.e. Haveri (high), Hangal (medium) and Byadagi (low). Simple random sampling technique was employed for selection of the respondents. From each taluka five villages selected based on availability of more number of Byadagi chilli growers after discussion with Agriculture and Horticulture officers. So total number of villages selected was 15 and from each village 12 farmers were selected. Thus, the total sample size of the study constitutes was 180.

Entrepreneurial behavior of Byadagi chilli growers is operationally defined as “Cumulative outcome of practices of the farmers with respect to behavioral aspects, chilli production, climate resilient practices / adaptations, processing/value addition, marketing and export.

The entrepreneurial behavior was measured with the inclusion of 6 key dimensions influencing the entrepreneurial behavior. The distribution of respondents was analysed with respect to all the 6 dimensions measured on a Likert (1932) [6] and Edwards (1969) [3] scale of 5 point continuum. The distribution of respondents into three categories of low, medium and high based on mean and standard deviation for the components of entrepreneurial behaviour are presented in the following tables. There are six dimensions in entrepreneurial behaviour, i.e. behavioural aspects, production aspects, climate resilient practices / adaptation aspects, processing / value addition aspects, marketing aspects and export aspects.

Table 1: Distribution of respondents according to different dimensions of entrepreneurial behavior

Sl. No	Characteristics	Category	Byadagi chilli growers	
			Frequency	Percent
1	Behavioural aspects	Low (<72.30)	61	33.89
		Medium (72.30-84.00)	66	36.67
		High (>84.00)	53	29.44
		Mean= 78.15	S.D=11.70	
2	Production aspects	Low (<25.70)	61	33.89
		Medium (25.70-29.92)	75	41.67
		High (>29.92)	44	24.44
		Mean= 27.81	S.D=4.22	
3	Climate resilient practices / adaptations aspects	Low (<27.06)	61	33.88
		Medium (27.06-31.36)	73	40.56
		High (>31.36)	46	25.56
		Mean= 29.21	S.D=4.30	
4	Processing / value addition aspects	Low (<18.61)	56	31.11
		Medium (18.61-21.71)	76	42.22
		High (>21.71)	48	26.67
		Mean=20.16	S.D=3.10	
5	Marketing Aspects	Low (<20.76)	62	34.45
		Medium (20.76-24.34)	69	38.33
		High (>24.34)	49	27.22
		Mean=22.55	S.D=3.58	
6	Export aspects	Low (<2.70)	116	64.45
		Medium (2.70-3.37)	47	26.11
		High (>3.37)	17	9.44
		Mean= 3.03	S.D=0.67	

From the Table 1 among the dimensions of entrepreneurial behavior, more than one third (36.67%) of the farmers belonged to medium behavioral aspects category followed by 33.89 and 29.44 percent of them belongs to low and high category respectively. Behavioral aspects includes

innovativeness, scientific orientation, risk orientation, achievement motivation, decision making ability, coordinating ability, economic motivation and management orientation.

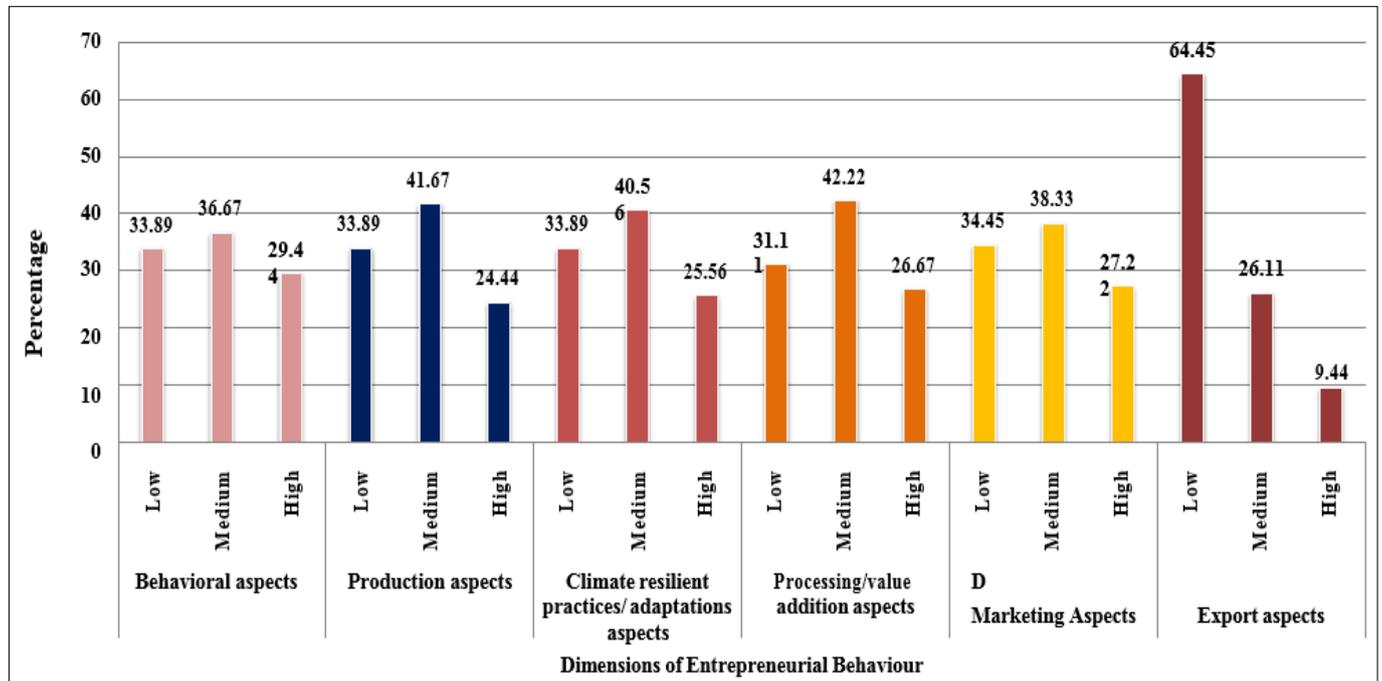


Fig 1: Distribution of respondents according to different dimensions of entrepreneurial behavior

Majority of the farmers belonged to medium to low category of behavioural aspects, this might be due to how they were adopted innovations in chilli farming, how they scientifically following practices of production/processing / value addition, how they are managing risk occurs in farming, how much they are ambitious to achieve something, how they took decisions about timely operations of chilli farming activities, whether their practices are economically viable and how they could managed all activities related farming / processing / marketing / export, etc. Majority of them belonged to medium category on these aspects. This might be the reason for the above trend.

In the present study, production aspects has been operationalized as the degree to which Byadagi chilli grower is involved in selection of Byadagi chilli improved varieties, method of sowing/transplanting, spacing, seed/seedlings treatment, application of fertilizers and manures, weed management, irrigation management and plant protection methods. In the study area 41.67 and 33.89 percent of the growers belongs to medium and low category respectively followed by 24.44 percent belonged to high category.

Climate resilient practices / adaptations has been operationalized as the degree to which Byadagi chilli grower is adopted the soil and moisture conservation practices, agronomic practices and institutional measures. Here 40.56

and 33.89 percent of the growers belongs to medium and low category respectively followed by 25.56 percent belonged to high category.

In the present study, processing aspects has been operationalized as the degree to which Byadagi chilli grower is adopted / following the drying and grading of chilli after harvesting, storage practices and value addition to it. It can be noticed that 42.22 and 31.11 percent of the growers belongs to medium and low category respectively followed by 26.67 percent belonged to high category.

marketing aspects has been operationalized as the degree to which Byadagi chilli grower is involving in marketing of chilli and value added chilli products, price, proximity to market and quantity of sold. The marketing aspects data shows that 38.33 and 34.45 percent of the growers belongs to medium and low category respectively whereas more than one fourth (27.22%) of them belonged to high category.

An export aspect has been operationalized as the degree to which Byadagi chilli grower is involving in exporting of chilli / its value added products. In the export aspects less than two third (64.45%) of the farmers belonged to low category followed by more than one fourth (26.11%) and 9.44 percent belongs to medium and high category respectively. The possible reason for this trend is due to small quantity and finds difficulty to complete all formalities to export by them.

Table 2: Distribution of respondents according to different dimensions of behavioural aspects of entrepreneurial behavior

Sl. No	Characteristics	Category	Byadagi chilli growers	
			Frequency	Percent
1	Innovativeness	Low (<7.63)	75	41.67
		Medium (7.63-9.75)	78	43.33
		High (>9.75)	27	15.00
		Mean= 8.69	S.D=2.12	
2	Scientific orientation	Low (<10.25)	67	37.22
		Medium (10.25-12.30)	76	42.22
		High (>12.30)	37	20.56
		Mean=11.27	S.D=2.05	
3	Risk orientation	Low (<7.94)	61	33.89
		Medium (7.94-9.87)	90	50.00
		High (>9.87)	29	16.11
		Mean=8.91	S.D=1.93	
4	Achievement motivation	Low (<11.31)	83	46.11
		Medium (11.31-13.29)	62	34.45
		High (>13.29)	35	19.44
		Mean=12.30	S.D=1.98	
5	Decision making ability	Low (<7.24)	31	17.22
		Medium (7.24-9.17)	131	72.78
		High (>9.17)	18	10.00
		Mean=8.21	S.D=1.93	
6	Coordinating ability	Low (<10.37)	76	42.22
		Medium (10.37-12.38)	76	42.22
		High (>12.38)	28	15.56
		Mean=11.38	S.D=2.01	
7	Economic motivation	Low (<8.30)	52	28.89
		Medium (8.30-9.80)	99	55.00
		High (>9.80)	29	16.11
		Mean=9.05	S.D=1.50	
8	Management orientation	Low (<8.17)	53	29.44
		Medium (8.17-9.95)	97	53.89
		High (>9.95)	30	16.67
		Mean=9.06	S.D=1.78	

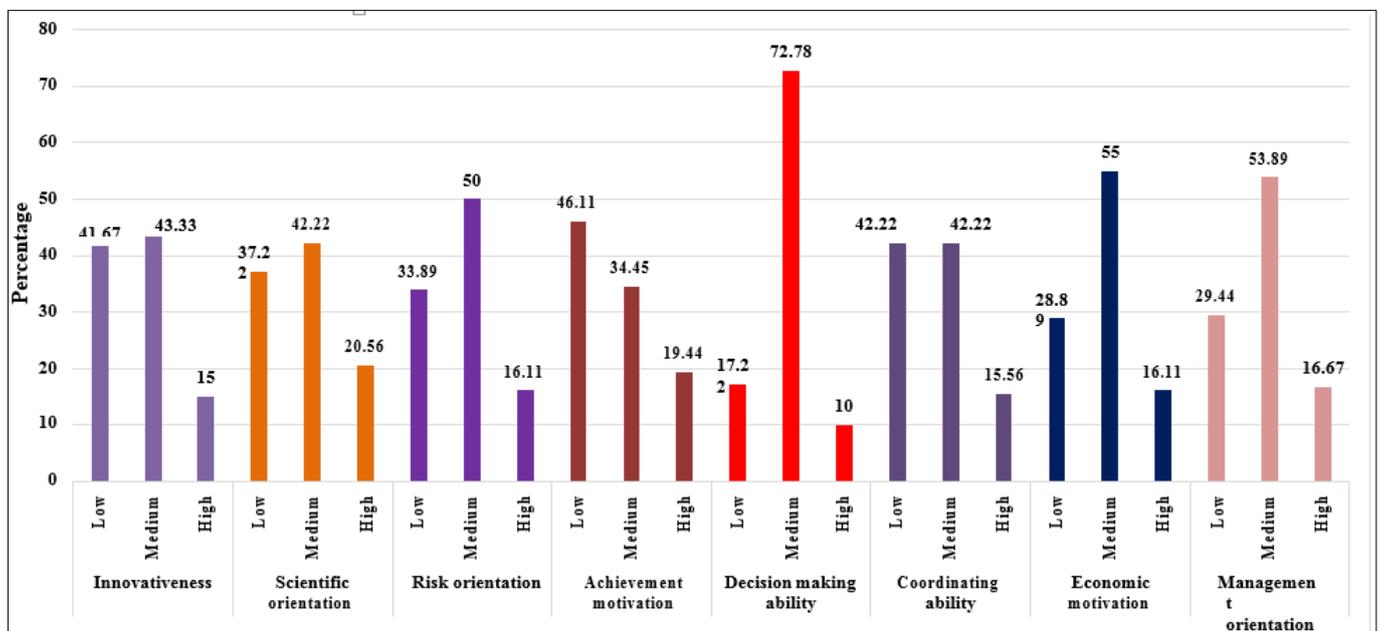


Fig 2: Distribution of respondents according to different dimensions of behavioural aspects of entrepreneurial behaviour

From the Table 2 it can be observed that behavioural aspects of entrepreneurial behaviour includes innovativeness, scientific orientation, risk orientation, achievement motivation, decision making ability, coordinating ability, economic motivation and management orientation. Nearly equal number (43.33 and 41.67%) of the farmers belonged to

medium and low innovativeness category respectively followed by only 15.00 percent of them belonged to high category. Less than half (42.22%) of the farmers belonged to medium category of scientific orientation, whereas, more than one third (37.22%) and 20.56 percent of them belonged to low and high category respectively. Half (50.00%) of the farmers

belonged to medium category of risk orientation followed by more than one third (33.89%) and only 16.11 percent of them belonged to low and high category respectively. The apparent reason behind this medium level of risk bearing ability might be due to their fear of failure in adopting new farm practices. Less than half (46.11%), 34.45 and less than two fifth (19.44%) of the farmers belonged to low, medium and high category of achievement motivation category. Nearly three fourth (72.78%) of the Byadagi chilli growers belonged to medium decision making ability category, besides 17.22 and 10.00 percent of them belonged to low and high category

respectively. Equal number (42.22%) of the farmers was in medium and low category of coordinating ability and only 15.56 percent of them belong to high category. More than half (55.00%) and more than one fourth (28.89%) of the farmers belongs to medium and low category of economic motivation respectively followed by only 16.11 percent were in the category of high. More than half (53.89%) and more than one fourth (29.44%) of the farmers belongs to medium and low category of management orientation respectively whereas, only 16.11 percent were in the category of high.

Table 3: Distribution of respondents according to overall entrepreneur behaviour of Byadagi chilli growers

	Category	Byadagi chilli growers	
		Frequency	Percent
Overall Entrepreneur Behaviour	Low (<167.41)	35	19.45
	Medium (167.41-194.51)	123	68.33
	High (>194.51)	22	12.22
	Mean= 180.96	S.D=27.10	

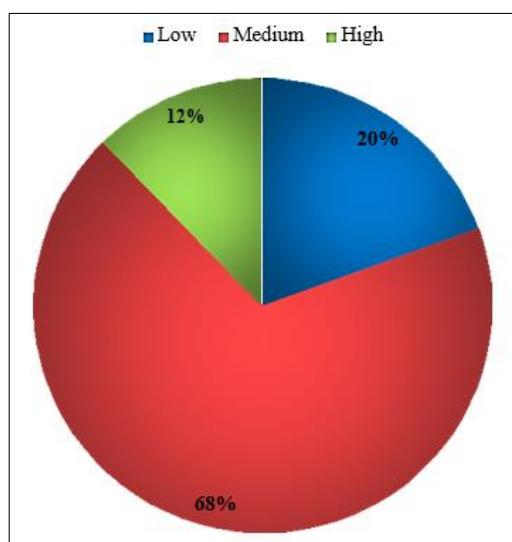


Fig 3: Distribution of respondents according to overall entrepreneur behaviour of Byadagi chilli growers

Table 3 reveals that the overall entrepreneurial behaviour score based on the cumulative raw scores of all the six dimensions revealed that, more than two third of (68.33%) of the Byadagi chilli growers had medium level of entrepreneurial behaviour followed by 19.45 percent under low category and remaining (12.22%) had high entrepreneurial behaviour. This might be due to the medium score on majority of the dimensions (behavioural aspects, production aspects, climate resilient practices/ adaptations aspects, processing / value addition aspects, marketing aspects and export aspects) selected to measure entrepreneurial behaviour. Better score might have helped them in managing their Byadagi chilli farming activity more efficiently and profitably. When looked in to the context, these findings leads to conclusion that Byadagi chilli growers have been efficiently managing the chilli farming and allied entrepreneurial activities. Anitha (2004) [1], Reddy (2004) [12], Kumar (2012) [5], Patel *et al.* (2014) [9], Shirur *et al.* (2014) [1], Shirur (2015) [15], Naresh (2018) [7] and Riza (2021) [13] reported similar trends in entrepreneurial behaviour level. Porchezian *et al.* (1998) [11], Narmatha *et al.* (2002) [8] and Ghadge *et al.* (2010) [4] reported higher level of

entrepreneurial behaviour. However, Paul and Sharma (2007) [1] observed low level of entrepreneurial behaviour among the agri-based entrepreneurs.

Table 4: Index value to different dimensions of entrepreneurial behavior

Sl. No	Characteristics	Index value
1	Behavioural aspects	78.16
2	Production aspects	69.52
3	Climate resilient practices/ adaptations aspects	83.46
4	Processing/value addition aspects	67.02
5	Marketing aspects	69.06
6	Export aspects	30.88
	Mean index	53.34

The results in the Table 4 indicates that climate resilient practices / adaptations aspect with a maximum index value of 83.46 is the most important factor contributing to successful entrepreneurship among the Byadagi chilli growers, followed by behavioural aspects, production aspects and marketing aspects with an index value of 78.16, 69.52 and 69.06 respectively. With an index value of 67.02 and 30.88 of processing/value addition aspects and export aspects respectively contributed to entrepreneurial behaviour of Byadagi chilli growers. Climate-resilient agriculture practices look at adaptive agricultural methods that can withstand the shocks of climate change and weather extremes. These practices must be flexible enough to prepare and tackle long-term climate change as well as short-term weather shocks such as storms, hail, droughts, *etc.* it will increase quality and quantity of production and also significantly contributes to farmer income. The behavioural approach aspects focuses on the nature of decision making by farmers related to marketing / export / processing / value addition and on the many influences which affect such decisions. This might be the possible reason for the above trend results.

Conclusion

It can be concluded from the study that majority of the Byadagi chilli growers were found to have medium level of entrepreneurial behaviour, upon analysis during the course of

study, two things emerged. One is yield gap between what growers realise and what State Agricultural Universities (SAU's) recommended Package of Practices (POP). Second aspect is beyond production they don't step into further stages of chilli value chain. It becomes imperative on the part of frontline extension agencies like SAU's, KVK, Karnataka State Department of Horticulture and Spice Board to find out the reason for yield gap and address these reasons by making use of various extension tools to educate, so that production is enhanced and growers are motivated to become more enterprising with the additional money earned. This might lead to enhance the financial capability of growers to enter into a value addition part of Byadagi chilli value chain.

References

1. Anitha B. A study on entrepreneurial behaviour and market participation of farm women in Bangalore rural district of Karnataka. M.Sc. (Agri.) Thesis (Unpub.), Univ. Agric. Sci., Bangalore; c2004.
2. Anonymous. Post-harvest profile of chilli, Government of India, Ministry of Agriculture (Department of agriculture and Cooperation), Directorate of Marketing and Inspection, Nagpur; c2019.
3. Edwards AL. Techniques of attitude scale construction. Vakils, Feffer and Simons Inc, New York; c1969.
4. Ghadge SN, Chandgude DS, Jadhav MV. Entrepreneurial behaviour of cut flower producers. Agriculture Update. 2010;5(1-2):128-131.
5. Kumar NP. Entrepreneurial behaviour of pomegranate farmers in Chitradurga district of Karnataka. M. Sc. (Agri) Thesis (Unpub.), Univ. Agric. Sci., Bangalore; c2012.
6. Likert R. A technique for the measurement of attitudes. Archives of Psych. 1932;22(140):55.
7. Naresh NT. A Study on entrepreneurial behaviour of rural youth practicing integrated farming system in Chamarajanagara district. Ph.D. Thesis (Unpub.), Univ. Agric. Sci., Bangalore; c2018.
8. Narmatha N, Krishnaraj R, Mohmed Safiullah A. Entrepreneurial behaviour of livestock farm women. J Extn. Edu. 2002;13(4):3431-3438.
9. Patel P, Patel MM, Badodia SK, Prabhakar Sharma. Entrepreneurial behaviour of dairy farmers. Indian Res. J. Extn. Edu. 2014;14(2):46-50.
10. Paul N, Sharma VP. A Study on entrepreneurial behaviour of poultry farmers. J Res. ANGRAU. 2007;35(3):45-50.
11. Porchezian MR, Vijayaraghavan R, Babykumari P, Suseelamary T. Entrepreneurial behaviour of farmers. J Extn. Edu. 1998;9(1):1963-1964.
12. Reddy SJ. Entrepreneurship concept and development. Third Concept. 2004;17(203):39-42.
13. Riza M. A study on entrepreneurial and marketing behaviour of cassava growers in Thiruvananthapuram district of Kerala state. M. Sc. (Agri) Thesis (Unpub.), Univ. Agric. Sci., Bangalore; c2021.
14. Shirur M, Ahlawat OP, Manikandan K. Profile characteristics and entrepreneurial attributes of trainees of national training programme on mushroom cultivation. Mushroom Res. 2014;23(1):101-106.
15. Shirur MA, Shivalingegowda NS. Mushroom marketing channels and consumer behaviour: A critical analysis. Mysore J Agric. Sci. 2015;49(2):390-393.