



PROFILE OF ECO-FRIENDLY TURMERIC GROWERS IN ERODE DISTRICT OF TAMIL NADU

V. KARTHIGA*, T. LAKSHMI, S.V. PRASAD AND A.V. NAGAVANI

Department of Agricultural Extension, S.V. Agricultural College, ANGRAU, Tirupati.

Date of Receipt: 22-03-2021

ABSTRACT

Date of Acceptance: 26-05-2021

The study was conducted to study the profile of turmeric growers in Erode district of Tamil Nadu. The results revealed that majority of the turmeric growers were middle age (55.83%), educated up to middle school (50.00%), small farmers (38.33%), had medium level of farming experience (60.83%), training undergone (58.33%), social participation (40.00%), extension contact (65.00%), innovativeness (65.83%), mass media exposure (44.17%), risk orientation (51.67%), economic motivation (78.33%), marketing orientation (64.17%), scientific orientation (57.50%), achievement motivation (57.50%) and market intelligence (51.67%).

KEYWORDS: Eco-friendly turmeric growers, Profile characteristics, Tamil Nadu.

INTRODUCTION

In Tamil Nadu, turmeric, a significant spice crop, is grown in an area of 20,894 ha with the production of 86,513 tonnes of rhizome. The state contributes 14.04 per cent to the total production of turmeric and Erode district alone owns 33.37 per cent of the total turmeric production in the state. The district's 24.14 per cent (9473 hectares) of the total area is used for turmeric cultivation (Anonymous, 2019). Since, turmeric is being used for culinary and medicinal purposes, chemical residues in the produce must be kept as low as possible. Eco-friendly farming is widely practiced in turmeric cultivation in Erode district of Tamil Nadu. Export Value of eco-friendly spices stood at ₹ 24,369 lakh in the year 2019-20. Eco-friendly farming fetches huge export potential for Indian spices in the international market. In order to make use of this potential, eco-friendly practices have to be popularised among the farming community.

The present study had been taken up with an objective to study the profile of turmeric growers. The findings of the study would be of a great help to the extension personnel in formulating different strategies for increasing the adoption of eco-friendly practices suited to different clientele.

MATERIAL AND METHODS

The present study was conducted by following *Ex post facto* research design. Erode district of Tamil Nadu

was selected for the study based on the highest area and production under eco-friendly turmeric cultivation. Two blocks *viz.*, Kodumudi and Modakurichi with highest area and production were selected purposively for the study. From each of the selected blocks, four villages were selected by following simple random sampling procedure. From each village, a total of 15 turmeric growers having not less than five years of farming experience were selected using simple random sampling procedure. A total of 120 respondents were studied. After review of literature and consultation with experts, a set of 15 independent variables were identified. The data were collected through a structured comprehensive interview schedule and analysed with suitable descriptive statistics.

RESULTS AND DISCUSSION

Table 1 categorised the respondents based on their identified profile characteristics.

1. Age

It could be seen from the Table 1 that 55.83 per cent of the turmeric growers were middle aged, followed by old (36.67%) and young aged growers (7.50%) respectively. Since, most of the young people had migrated to other professions after graduation especially to private jobs, businesses and self-employment, the percentage of young people who took up farming was very less compared to middle age and old age people. The findings were in accordance with the findings of Rao (2016) and Prasad *et al.* (2018).

*Corresponding author, E-mail: karthigavadel@gmail.com

Profile of eco-friendly turmeric growers

Table 1. Distribution of eco-friendly turmeric growers according to their profile characteristics

(n = 120)

S. No.	Variables	Category	Frequency (f)	Percentage (%)	Mean	S.D.
1.	Age	Young (< 35 yrs)	9	7.50	-	-
		Middle (36 - 55 yrs)	67	55.83		
		Old (> 55 yrs)	44	36.67		
2.	Education	Illiterate	4	3.34	-	-
		Can read only	1	0.83		
		Can read and write	0	0.00		
		Primary school	6	5.00		
		Middle school	60	50.00		
		High school	24	20.00		
		Graduate	25	20.83		
3.	Farm size	Marginal farmer (< 2.5 acres)	38	31.67	-	-
		Small farmer (2.5 to 5.0 acres)	46	38.33		
		Medium farmer (5.0 to 25.0 acres)	32	26.67		
		Big farmer (> 25.0 acres)	4	3.33		
4.	Farming experience	Low	21	17.50	28.42	11.05
		Medium	73	60.83		
		High	26	21.67		
5.	Training undergone	Low	32	26.67	7.05	6.00
		Medium	70	58.33		
		High	18	15.00		
6.	Social participation	Low	39	32.50	1.05	0.97
		Medium	48	40.00		
		High	33	27.50		
7.	Extension contact	Low	28	23.33	6.06	4.65
		Medium	78	65.00		
		High	14	11.67		
8.	Innovativeness	Low	20	16.67	17.69	2.35
		Medium	79	65.83		
		High	21	17.50		
9.	Mass media exposure	Low	31	25.83	7.23	3.33
		Medium	53	44.17		
		High	36	30.00		
10.	Risk orientation	Low	28	23.33	21.83	6.11
		Medium	62	51.67		
		High	30	25.00		
11.	Economic motivation	Low	15	12.50	25.43	3.76
		Medium	94	78.33		
		High	11	9.17		
12.	Market orientation	Low	15	12.50	24.50	3.65
		Medium	77	64.17		
		High	28	23.33		
13.	Scientific orientation	Low	23	19.17	25.07	4.14
		Medium	69	57.50		
		High	28	23.33		
14.	Achievement motivation	Low	27	22.50	29.53	3.50
		Medium	69	57.50		
		High	24	20.00		
15.	Market intelligence	Low	26	21.67	12.11	2.20
		Medium	62	51.67		
		High	32	26.67		

2. Education

It is obvious from the Table 1 that, half of the respondents (50.00%) were educated up to middle school, followed by graduates (20.83%), high school (20.00%) and primary school education (5.00%) respectively. Further 0.83 per cent and 3.33 per cent of respondents formed can read only and illiterate categories respectively. It was clear that the availability of educational infrastructure in rural areas had increased and that respondents had got a better understanding of the necessity of education for their overall development.

3. Farm size

Table 1 results reveal that majority of the respondents were small farmers (38.33%) followed by 31.67 per cent marginal farmers, 26.67 per cent medium farmers and only 3.33 per cent of the turmeric growers were big farmers. Majority of the farmers were found be small and marginal farmers. It could be substantiated that the sub division and fragmentation of the farm land from one generation to another generation was the foremost reason for decline in the land holding size of each farmer in the rural areas. The above results were in accordance with Govind *et al.* (2018) and Prasad *et al.* (2018).

4. Farming experience

Table 1 results indicate that majority of the turmeric growers had medium farming experience (60.83%), followed by high farming experience (21.67%) and the remaining respondents (17.50%) had low farming experience. Undoubtedly, farming experience was an important factor which influences the farmers to accept, evaluate and experiment the innovative technologies in their farm. As most of the turmeric farmers were middle aged, they had medium level of experience in farming. Results from Rao (2016) and Phenica (2018) were in line with the study findings.

5. Training undergone

From the Table 1, it could be inferred that more than majority of the respondents had undergone medium training (58.33%), followed by low (26.67%) and high (15.00%) trainings. Young and middle-aged persons who were interested in learning about new agricultural innovations in turmeric cultivation would make time to attend the training programme. The elderly might not be willing to attend the trainings as they might not find the training sessions quite suitable and would not accept the

new technologies coming in agriculture. In order to attract all age group of turmeric growers, the trainings should be conducted timely and by appropriate agencies using innovative training modules. The results were in line with the results obtained by Naidu (2012) and Rani (2020).

6. Social Participation

Table 1 results show majority (40.00%) of the respondents had medium, followed by low (32.50%) and high (27.50%) levels of social participation respectively. Since, major proportion of turmeric growers had medium education level, extension contact and mass media exposure, they either did not realize the importance of social participation or denied the opportunities of social participation.. The studies by Saiva (2012) and Babu (2014) also showed similar results.

7. Extension Contact

An overview of the Table 1 inferred that, majority of the respondents had medium (65.00%) extension contact followed by low (23.33%) and high (11.67%) extension contact. The probable reason for above trend might be that, lack of sufficient numbers of field level extension functionaries, especially Assistant Horticultural/Agricultural Officers working at grass root level for transfer of technologies. Hence, regular visits and follow up by the extension personnel to farmers might secure high extension contact. The results were in similarity with Phenica (2018).

8. Innovativeness

The results from the Table 1 indicated that majority of the respondents had medium (65.83%), followed by high (17.50%) and low (16.67%) levels of innovativeness respectively. It was one of the several factors contributing for adoption of improved practices. Farmers with middle school to graduate level of education and bright exposure to mass media might have high chances of success in the endeavours they took up. This might have improved their self-confidence in turn impacting the farmers' innovativeness. This outcome is in similarity with Babu (2014) and Govind *et al.* (2018).

9. Mass Media Exposure

It is certain from the Table 1 that, majority of the respondents were with medium (44.17%) mass media exposure, followed by high (3.00%) level of mass media exposure and low (25.83%) level of mass media exposure.

Being exposed to mass media such as television, radio, magazines, internet and mobile apps improved the knowledge and awareness of farmers on latest farm technologies. Availability of mass media channels for technological development such mobile apps, agri tech portals etc. might be the reason for above trend. The sizeable number of farmers who had low level of mass media exposure might be the old-aged farmers lacking acquaintance with mass media such as internet, magazines, television, etc. The results of Ramu (2005) and Phenica (2018) also depicted similar results.

10. Risk orientation

It could be understood from Table 1 that majority of the respondents had medium (51.67%) followed by high (25.00%) and low (23.33%) levels of risk orientation. Risk orientation was found to play a major role in the adoption of new technologies by the farmers. Above trend might have resulted due to small and marginal farm size of majority of the turmeric growers. This outcome is in line with Govind *et al.*, (2018)

11. Economic Motivation

From the Table 1, it could be concluded that more than three-fourth of the respondents had medium (78.33%) economic motivation and low (12.50%) level of economic motivation followed by high (9.17%) economic motivation. The probable reason for the above trend might that the farmers were unable to get remunerative price for their produce. Requirement of hard labour to get economic yields, lack of farm resources and higher education, small and marginal farm size and low exposure to mass media could also be attributed as the reasons for the findings obtained. The above results were in conformity with Narbaria (2017).

12. Marketing Orientation

From the Table 1, it could be seen that majority of the respondents had medium (64.17%) marketing orientation followed by high (23.33%) and low (12.5%) levels of marketing orientation. When the farmers were oriented towards the marketing of the produce, they would be able to end with a good sale of their produce which in turn would motivate the farmer to adopt new scientific farm technologies. The reason for the above trend might be the availability of proper marketing channels for turmeric sale such as regulated market and lack of

warehouse facilities. The results were in conformity with the conclusion of Babu (2014).

13. Scientific Orientation

From the overview of the Table 1, it could be found that majority of the respondents had medium (57.50%) scientific orientation. The remaining respondents had high (23.33%) and low (19.17%) levels of scientific orientation. Orientation of farmers towards scientific methods in farming and for decision making is indispensable for the acceptance and adoption of new technologies. The farmers level of education might be the reason for the above trend. Extension methods such as demonstrations, models and exposure visits which facilitate easy understanding of scientific technologies may be used to align the farmers' thought process scientifically. The results were supported by the conclusions of Prasad (2014) and Govind *et al.* (2018).

14. Achievement Motivation

It is obvious from the Table 1 that respondents had medium (57.50%) followed by low (22.50%) and high (20.00%) levels of achievement motivation. Achievement motivation puts oneself in the pathway to success. The more a farmer is motivated towards achievement, the more is the persuasion to adopt an improved farm technology. Not getting adequate price for the produce and lack of follow up from the extension officials might be the possible reasons for weakening the farmers' desire for success. Gopinath (2005) and Begum (2008) reported similar results.

15. Market Intelligence

Table 1 results indicate that, majority of the respondents had medium (51.67%) followed by high (26.67%) and low (21.67%) levels of market intelligence. Market intelligence enables the respondents to make better marketing decisions depending on the market information. Possible reason for the above results might be the farmers' interest and understanding of need to access market information to sell their produce for better price. Exposure and education also contributed to the above trend. The results were found to be in accordance with Dhara *et al* (2015).

CONCLUSION

The research results revealed that there is an ample need for various actions such as attracting youth towards farming, gearing up non-formal educational programmes, emphasizing the harmful effects of chemical farming, strengthening the communication channels, proper follow up by extension agency and encouraging the innovative farmers by inculcating their ideas while framing schemes and policies. Since, most of the turmeric growers belong to medium category of all the selected profile characteristics, it is suggested to improve some of the manageable profile characteristics through training programs, demonstrations, field visits and suitable extension methods.

LITERATURE CITED

- Anonymous. 2019. <http://www.tn.gov.in/deptst/agriculture.pdf> (accessed on 22.12.2021)
- Babu, R.P. 2014. A study on knowledge and adoption levels of paddy farmers in East Godavari district of Andhra Pradesh. *M.Sc. (Ag.) Thesis*. Acharya N.G. Ranga Agricultural University, Guntur.
- Begum, M.K. 2008. A study on participation and decision making of woman farmers in rainfed groundnut cultivation. *M.Sc. (Ag.) Thesis*. Acharya N.G. Ranga Agricultural University, Hyderabad.
- Dhara, R., Umamageswari, M and Porchezian, S. 2015. Characteristics and marketing behaviour of coconut growers in Thanjavur district of Tamil Nadu. *International Research Journal of Agricultural Economics and Statistics*. 6 (1): 74-77.
- Gopinath, M. 2005. Knowledge and adoption of bengal gram farmers in Kurnool district of Andhra Pradesh. *M.Sc. (Ag.) Thesis*. Acharya N.G. Ranga Agricultural University, Hyderabad.
- Govind, S., Sangma, M and Kavaskar, M. 2018. Adoption of indigenous paddy cultivation practices among tribal farm women of West Garo hills district of Meghalaya. *Mysore Journal of Agricultural Sciences*. 52(3): 613-620.
- Naidu, D.C. 2012. A study on farming performance and entrepreneurial behaviour of sugarcane farmers in north coastal zone of Andhra Pradesh. *Ph.D. Thesis*. Acharya N.G. Ranga Agricultural University, Hyderabad.
- Narbaria, S. 2017. A study on identification, characterization and adoption pattern of farm practices in existing farming systems of Northern hills of Chhattisgarh. *Ph.D. Thesis*. Indira Gandhi Krishi Vishwavidyalaya, Raipur.
- Phenica, A.B. 2018. A study on production constraints of rice cultivation in Kurnool district of Andhra Pradesh. *M.Sc. (Ag.) Thesis*. Acharya N.G. Ranga Agricultural University, Guntur, Andhra Pradesh.
- Prasad, G. 2014. A study on extent of adoption of recommended groundnut production technology among the farmers of Raigarh district of Chhattisgarh state. *M.Sc. (Ag.) Thesis*. Indira Gandhi Krishi Vishwavidyalaya, Raipur.
- Prasad, H.D.V., Premalatha, S and Venkatramulu, M. 2018. Study on farmers level of knowledge towards vegetable cultivation. *The Journal of Research ANGRAU*. 46(2): 75-82.
- Ramu, A.G. 2005. Knowledge and adoption of turmeric farmers in Kadapa district of Andhra Pradesh. *M.Sc. (Ag.) Thesis*. Acharya N.G. Ranga Agricultural University, Hyderabad.
- Rani, S.N. 2020. An analysis of sustainable cultivation practices followed by groundnut farmers in Andhra Pradesh. *Ph.D Thesis*. Acharya N.G. Ranga Agricultural University, Guntur.
- Rao, S.N. 2016. A study on knowledge and adoption of turmeric farmers in Guntur district of Andhra Pradesh. *M.Sc. (Ag) Thesis*. Acharya N. G. Ranga Agricultural University, Guntur.
- Saiva, G.P. 2012. Farmers perception and adoption of groundnut production technology. *Ph.D. Thesis*. Junagadh Agricultural University, Junagadh.