Biological Forum – An International Journal **13(1): 723-727(2021)**

ISSN No. (Print): 0975-1130
ISSN No. (Online): 2249-3239

To Study Profile Characteristics of Paddy and Cotton Growers in Karimnagar District of Telangana State

D. Navya[1*] and K. Venkataranganaika[2]
Department of Agricultural Extension. University of Agricultural Sciences, GKVK. Bengaluru-560065, India.
Professor (Directorate of Extension), Distant Education Unit, Hebbal, Bengaluru-24, India.

(Corresponding author: D. Navya)*
(Received 12 March 2021, Accepted 21 May, 2021)
(Published by Research Trend, Website: www.researchtrend.net)

ABSTRACT: The present study was conducted in Karimnagar district of Telangana state. Ex post facto research design was adopted in the present investigation. Karimnagar district was purposively selected for the study as having highest area and production under paddy and cotton crops compared to other districts in Telangana state. The study was conducted in 6 villages selected from 3 Mandals of Karimnagar district which included 20 farmers from each selected village thus making a sample of 120 farmers. The analysis of profile characteristics of overall paddy and cotton growers indicated that majority of (48.33%) belonged to old age category, 41.67% illiterate, medium family (50.00%), belonged to small land holdings (45.83 %), high income category (46.66%), medium (39.17%) social participation, majority of respondents (42.50%) belonged to low risk orientation, 35.00 per cent of the farmers come under low economic motivation category, 41.67% distributed in low innovation category, had medium level (44.17%) of mass media participation, and 54.17% had medium extension contact. It was very difficult to get the relevant information from the farmers about their socio economic details as most of the farmers are not aware of extension contacts, mass media methods.

Keywords: Farmers, profile characteristics, paddy and cotton

INTRODUCTION

Rice in India is important to the national economy. India is the world's second largest producer with approximately 43 million hectares planted area, accounting for 23% of the world's share in production. Rice is a basic food crop and being a tropical plant, it flourishes in hot and humid climate. It is grown in assured irrigated areas and in rain fed areas that receive assured rainfall. Hence, it can be grown in both Kharif & Rabi seasons.

In Telangana the area under rice is 20.00 lakh ha and production is 66.22 lakh tones. In Telangana, Karimnagar district top in rice production compared to west Godavari in Andhra Pradesh. Karimnagar district referred to as "rice bowl" of Telangana. Area under rice in Karimnagar is Nearly 2,06,100 tonnes paddy was produced by sowing crop in 32,976 hain kharif 2016. In Rabi, 4,20,961 tonnes of yield was produced from 61,906 ha.

Cotton: In India Cotton is one of the most main fiber and cash crop in India and it plays a leading role in the industrial and agricultural sectors of the country. It affords the rudimentary raw material (cotton fiber) to cotton textile industries. Cotton in India provides nonstop livelihood to 6 million farmers and about 40 - 50 million people are engaged in cotton trade and its processing.

Telangana is the third highest in terms of cotton cultivation and production in India, after Gujarat and Maharashtra. There was substantial increase (22%) in area under cotton crop assessed in South zone this year, particularly in Telangana extra 4.15 lakh hectare enlarged under cotton cultivation. Still the cotton productivity reduced at 8.29%, cotton production significantly augmented in Telangana from 48 to 57 lakh bales with growth rate of 19% related to last year. In 2014-15, Telangana cultivated 16.93 lakh hectares of cotton, and produced 35.83 lakh bales. The following year, the state's cultivation increased to 17.78 lakh hectares and production jumped to 37.33 lakh bales in 2015-16. To know the relationship between profile characteristics of paddy and cotton growers with their knowledge and adoption level. Earlier there was no study conducted on plant protection measures in Telangana study. as in India mainly they focused on other crops but more pesticide consumption crops are paddy and cotton.

This study may help farmers to be educated about the significance of Plant Protection Measures, and consequence of over use of insecticides on health hazards, pest resistance etc. So that, they can take adequate measures related to adoption of Plant Protection Measures. and also help State Department of Agriculture, state agricultural universities and other NGOs should sort out combined and intensive extension efforts to provide prerequisite knowledge about Plant Protection Measures to paddy and cotton growers.

MATERIAL AND METHODS

The research design adopted for this study was ex-post-facto research technique, since the phenomenon has already occurred. The State of Telangana was selected purposively for the following reasons; a. The

investigator hails from the same state. Hence the study in the investigator's area can help the researcher to elicit the data easily. b. Since the researcher was well-known with local language, which would help to make quick rapport and also enable in-depth study pooled with personal observation. Karimnagar district was selected among 10 districts in Telangana state is having highest area and production under paddy crops compared to other districts in Telangana state. Manthani, Pedhapally, and Kamanpoor mandals were purposively selected since these mandals are having more number of paddy and cotton growers and occupy more area under paddy and cotton cultivation as compared to the other mandals in the district.Two villages were selected randomly from each mandal. Thus, constitute 6 villages (2×3) for the study. Gopalpoor, Kammampalli, from Manthani; Elukalapally, Jayyaram, from Ramagundam, Dharamaram, Kamanpoor, from Pedhapally were selected. Ten farmers were selected randomly from each village using random number tables. Thus, constitute (20×6) 120 respondents for the study. The data was collected from Karimnagar district of Telangana state using a pretested interview schedule, the interview method was adapted wherever needed and confirmed. The final interview schedule was taken to elicit the information from the respondents by personal interview schedule. The data was analysed by means of suitable statistical tools. The statistical tools such as mean, standard deviation, percentage, frequency and correlation were employed wherever needed appropriate and data were used to draw valid inferences.

RESULTS AND DISCUSSION

A. To Study Profile Characteristics of Paddy and cotton Growers in Karimnagar District of Telangana State

Age. It is clear from the table that nearly half of the paddy (48.33) and cotton growers (48.33) belonged to old age category fallowed by, paddy (38.33) and cotton growers (40.00) were under middle age. Whereas very little percentage of paddy (8.00) and cotton growers (7.00%) belonged to young age category. The probable reason might be that a majority of younger generation didn't choose agriculture as their profession and they turned towards IT and management and industries. Besides, age being a physical factor nothing to do with the Agril. As old aged elders are decision makers in the family it is true in many Indian states. These findings are similar with the results of Thatchinamoorthy and Rexlinselvin (2014).

Education. With regard to level of education, it can be observed from same Table that, 48.33 percent of the paddy growers were illiterate, followed by 18.33 and 16.66 percent of farmers educated up to primary school and middle school respectively. 8.33 and 11.66 of growers studied high school and PUC respectively. And 6.66 per cent them were graduates. In case of cotton majority of the cotton growers were illiterate (45.00) and educated up to primary school (20.00), followed by 11.66 and 13.33 were completed their middle and high school respectively. Whereas, 6.66 per cent of farmers studied PUC followed by Degree (3.33). Thus, the findings revealed that majority of the respondents found to be illiterate. However, education is a decisive factor in determining economic prosperity of the region. This might be due to non-availability of the schools, colleges and lack of transport facilities in the study area. These results are similar to that of Thatchinamoorthy and Rexlinselvin (2014).

Family size. From the same table it is clear that majority of the paddy growers belonged to small family (43.33), followed by medium size family (53.33%). Only 3.33 per cent of them come under large size family. In case of cotton that 38.33 percent of cotton growers come under small family, whereas, nearly half of the respondents belonged to medium size family (46.66%) followed by large size family (15.00) The possible reasons behind these result could be that young and middle aged people would have a preference to live in nuclear families and old age people wish to be with joint family. Further, awareness and formal education of respondents might have helped them to maintain the small size family. These findings are in line with the results of Manjunath (2010) and Samarpita *et al.,* (2016).

Land Holding. From the same table it is clear that majority of the farmers were small farmers (51.66%), followed by marginal (26.66%) and big farmers (21.00%) in paddy. In case of cotton, we can observe that 43.33 per cent of the cotton growers were marginal farmers, whereas 40.00 and 16.00 percent of the farmers were small farmers and big farmers respectively. majority of the respondents were having small land holdings. The reason might be due to most of families now days are small and medium size families and joint family system gradually fading away. This leads to the fragmentation of land among families results in small land medium holdings. These findings are in line with the results of Prasad (2017) Ranganatha and Ramachandra (2018).

Annual income. It could be observed from table that majority of the paddy growers belonged to high income category, followed by medium income (31.66%) and low income category (28.33). in case of cotton growers 30.00 per cent, 16.66 per cent and 53.33 per cent belonged to low, medium, high income category, respectively. The possible reason that could be recognized was their better socioeconomic conditions. The other possible reasons were non-farm occupation respectively like dairy, poultry to support their income. The survival of family size of 3 to 4 members where number of earning members were found occupied in different occupation other than agriculture might also be considered as another reason. These findings are similar with the results of Satish (2010).

Social participation. It is evident from the table that 38.33per cent and 30.00 per cent of paddy growers belonged to low and medium social participation category, respectively. Followed by high (31.66%) social participation. In case of cotton that nearly half of the respondents (48.33%) come under medium level social participation, whereas 35.00 per cent and 16.66 per cent of the cotton growers had low and high level of social participation. Majority of the respondents come

under low social participation the probable reason for low participation could be due to the lack of awareness, illiteracy, and lack of interest. These findings were similar with the results of Praveen Babu (2014) and Sampath Kumar and Vasantha (2017).

Risk orientation. It is observed from the table that majority of respondents (43.33%) belonged to low risk orientation, followed by medium (33.33%) and high risk orientation (23.33) in paddy. in case of cotton that 41.66 per cent of the cotton growers had low level risk orientation. Whereas 36.66 per cent of respondents come in medium level risk orientation followed by high level risk orientation category (21.66). The reason for low risk orientation might be that medium level of social participation, low income, lack of awareness and medium levels of innovativeness. And other reasons for medium risk orientation might be farmers want to earn more income. These findings support the results of Praveen Babu (2014).

Economic motivation. From table it could be noticed that 38.33 per cent of the farmers come under low economic motivation category, followed by medium (36.66) and high economic motivation (25.00%) category in paddy. In case of cotton that majority of the respondents come under (41.66%) medium economic motivation category, followed by low (31.33%) and high (26.66) economic motivation category. Reason for this findings might be due to farmers were ready to take medium risk, might be having medium economic motivation compared to low risk taker. And other reasons could be medium education, medium social and mass media participation, and high income level. These findings are in line with the results Kiran and Shenoy (2010), Manjunath (2010) and Praveen Babu (2014).

Innovation. Data in the table depicts that half of the respondents (50.00%) distributed in low innovation category, followed by medium (33.33%) and high (16.66%) innovation category in paddy. In case of cotton that 48.33 per cent of paddy growers belonged to medium level innovation category, followed by low (33.33%) and high (18.33%) level innovation group. The reason might be low innovation, majority of the famers were old age, generally innovation associated with young age. others reasons might be low education, lack of awareness and medium risk orientation. These findings seek support of Basakanad (2011) and Praveen Babu (2014).

Table 1: Socio-Economic profile characteristics of Paddy and cotton growers.

(n=120)

Sr. No.	Variable	Category	Paddy		Cotton		Total	
			F	%	F	%	F	%
1.	Age	Young age (up to 30 years) Middle age (31 - 50 years) Old age (> 51 years)	8 23 29	13 38.33 48.33	7 24 29	11.66 40.00 48.33	15 47 58	12.50 39.17 48.33
2.	Education	Illiterate Primary school Middle school High school PUC Degree and above	23 11 10 5 7 4	38.33 18.33 16.66 8.33 11.66 6.66	27 12 7 8 4 2	45.00 20.00 11.66 13.33 6.66 3.33	50 23 17 13 11 6	41.67 19.17 14.17 10.83 9.16 5.00
3.	Family size	Small (< 5) Medium (5-8) Large (>8)	26 32 2	43.33 53.33 3.33	23 28 9	38.33 46.66 15.00	49 60 11	40.83 50.00 9.17
4.	Landholding	Marginal (<2.5 acres) Small (2.5 to 5 acres) Big farmers (>5 acres)	16 31 13	26.66 51.66 21.66	26 24 10	43.33 40.00 16.00	42 55 23	35.00 45.83 19.17
5.	Annual income	Low income (<3.87) Medium Income(3.87to5.24) High income (>5.25)	17 19 24	28.33 31.66 40.00	18 10 32	30.00 16.66 53.33	35 29 56	29.17 24.17 46.66
6.	Social Participation	Low (<7.5) Medium (7.5 to 8.6) High (>8.7)	23 18 19	38.33 30.00 31.66	21 29 10	35.00 48.33 16.66	44 47 29	36.67 39.17 24.16
7.	Risk orientation	Low (<8.9) Medium (8.9 to 11.7) High (>11.8)	26 20 14	43.33 33.33 23.33	25 22 13	41.66 36.66 21.66	51 42 27	42.50 35.00 22.50
8.	Economic motivation	Low (<2.9) Medium (2.9 to 4.1) High (>4.2)	23 22 15	38.33 36.66 25.00	19 25 16	31.66 41.66 26.66	42 47 31	35.00 39.17 25.83
9.	Innovation	Low (<6.8) Medium (6.8to 8.6) High (>8.7)	30 20 10	50.00 33.33 16.66	20 29 11	33.33 48.33 18.33	50 49 21	41.67 40.83 17.50
10.	Mass media exposure	Low (<7.43) Medium (7.43 to 9.01) High (>9.02)	22 26 12	36.66 43.33 20.00	22 27 11	36.66 45.00 18.33	44 53 23	36.67 44.17 19.16
11.	Extension contact	Low (<8.9) Medium (8.9 to 10.10) High (>10.11)	14 35 11	23.33 58.33 18.33	19 30 11	31.66 50.00 18.33	33 65 22	27.50 54.17 18.33

Mass media exposure. Data in same table clearly shows that majority of the respondents had medium level (43.33) of mass media participation, followed by low (43.33%) and high (20.00%) level of mass media participation in paddy. In case of cotton that nearly half of the respondents belonged to (45.00%) medium level of mass media participation.

Whereas 36.66 per cent and 18.3 per cent of them fitted to low and high level of mass media participation category respectively. The reason might be due to the majority of respondents having television and radio, that leads to higher participation in social media, and other reason could be interest of respondents towards social media, availability of newspapers at cheaper rate etc. The universal fact that in less developed countries mass media exposure is very less could be. These findings are similar with the results of Kalyan (2011) and Jamanal and Syed (2017).

Extension contact. Data presented in same table clearly shows that more than half of the respondents (58.33%) had medium extension contact, followed by low (23.33%) and high (18.33%) extension contact. Whereas in cotton that half of the respondents had medium extension (50.00%) contact, followed by low (31.66%) and high (18.33) extension contact. The possible reason for medium contact of extension by the farmers due to non-availability of extension officials. Majority of the respondents not having any contact with agricultural officers and agricultural officers due to not have interest to meet them as they are situated at a distant place which might have not permitted them to contact regularly. It is an established fact that the ratio between extension workers to farmers in Asia 1:2000, in India it is 1.1300this calls for concerted efforts of line departments to bridge this gap. These findings are similar with the results of Jamanal and Syed (2017).

CONCLUSION

Profile characteristics of overall paddy and cotton growers indicated that majority of (48.33%) belonged to old age category, 41.67% illiterate, medium family (50.00%), belonged to small land holdings (45.83 %),high income category (46.66%),medium (39.17%) social participation, majority of respondents (42.50%) belonged to low risk orientation,35.00 per cent of the farmers come under low economic motivation category,41.67%distributed in low innovation category,had medium level (44.17%) of mass media participation, and 54.17% had medium extension contact.

REFERENCE

Abhay Patki (2017). Effect of Pesticides on Health of Agricultural Farm Female Workers in Ghatanji Region of Yavatmal District, Maharashtra. *International Journal of Theoretical & Applied Sciences*, **9**(2): 31-34.

Akbari, Ramin Sara Nosrati, Maral Salek Maghsoodi, Siamak Alizadeh and Seyed Mahdi Hosseiniyan Khatibi (2015). The role of pesticides in Parkinson disease and Integrated Pest Management. *Biological Forum – An International Journal*, **7**(2): 318-321.

Ashok K.M., And Syed H.M. (2018). Relationship between Profile Characteristics with Knowledge and Adoption of Transplanting Method of Pigeon Pea Cultivation Practices, *Economic Affairs*, **63**(2): 299-305.

Babu, R.P., and Narayana, S.G. (2015). Knowledge level of paddy farmers in East Godavari District of Andhra Pradesh. *International Journal of Tropical Agriculture*, **33**(2): 1727-1730.

Balakrishnan, T. and Vasanthakumar, J. (2010), Knowledge level of System of Rice Intensification (SRI) Technology among farmers in cuddalore district of Tamil Nadu. *International Journal of Current Research*, **9**(3): 65-68.

Basak, N.C. and Pandit, J.C. (2011). Farmers' attitude towards the use of USG in rice cultivation. *Journal of Bangladesh Agricultural University*, **9**(2): 179-185.

Chouhan, H.S. (2003) Effect of cotton production technology in terms of adoption and production among the tribal farmers of Nisarpur block of Dhar district, M.P. M.Sc. (Ag.) Thesis JNKW, Jabalpur (M.P.). 47-83.

Dhenge, S.A. (2014). knowledge level of farmers about integrated pest management practices of paddy. *International quarterly journal of environmental sciences*, **6**(2): 27-33.

Gamanagatti, P.B., and Dodamani, M.T. (2016). Socio-economic conditions of Bt cotton growers across different farm size holders in northern transitional zone of Karnataka. *International Research Journal of Agricultural Economics and Statistics*, **7**(2): 57-60.

Haobijam, J.W., Marak, B.R., Rede, G.D. and Mandal, T.K. (2016). Socio-economic characteristics of the farmers practicing paddy-cum-fish cultivation in the low lying paddy field of Manipur. *Journal of Crop and Weed*, **12**(3): 94-99.

Inderadevi, P. (2010). Pesticide in agriculture A Boon or a curse A case study of Kerala. Economic and Political weekly, **45**(4): 26:27

Jamanal, S.K. and Syed, S. (2017). Socio-economic characteristics of soybean growers. *Journal of Pharmacognosy and Phytochemistry*, **6**(5): 2766-2768.

Kalyan, V.N. (2011). Impact analysis of groundnut production technologies in Chittoor district of Andhra Pradesh. *M.Sc. (Agri.) Thesis.* ANGRAU, Hyderabad, India.

Mandal, B.K. And Dipak, D.E. (2010). Socio economic profile and communication behaviour of paddy growers A study of Banka district. *Journal of Communication Studies*, **25**(4): 121-123.

Manjunath, T. (2010). A study on knowledge and adoption of plant protection measures by paddy growers of Raichur district. *M. Sc. (Agri.) Thesis*, Univ. Agric. Sci., Raichur, Karnataka (India).

Nagadev, B. and Venkataramaiah, P. (2007). Characteristics of Integrated Pest Management (IPM) trained dry paddy farmers. *The Andhra Agricultural Journal*, **54**(3&4): 240-242.

Prasad, J.V.D. (2017). Study on the Profile of Organic Cotton Farmers of Karimnagar District of Telangana, *International Journal of Advance Research and Development*, **2**(5): 741-745.

Praveen Babu, B. (2014). A study on knowledge and adoption levels of paddy farmers in east Godavari district of Andhra Pradesh. *M.Sc.(Agri.) Thesis*, ANGRAU, Bapatla, India.

Rajini Devi, D.A. and Divakar Reddy P. (2016). Socio-economic constraints faced by paddy farmers in Warangal district of Andhra Pradesh, *Progressive Research International Journal*, **11**(2): 1438-1440.

Ranganatha, A.D. and Ramachandra, C. (2018). Studies On Adoption of Rice Production Technologies in Cauvery Command Area of Mandya District, *Bulletin of*

Environment, Pharmacology and Life Sciences, **7**(8): 18-21.

Sadeghi Maryam, Soleiman Rasouliazar and Nouraldin Shayesteh (2015). The Investigation and Analysis of the Required Management Skills in Using Pesticides in Farms (A Case Study in West Azerbaijan Province). *Biological Forum – An International Journal*, **7**(2): 48-55(2015)

Sampathkumar, M., Vasantha, R. And Shivacharan, G. (2017). Profile characteristics of paddy and irrigated dry crop growers of Karimnagar district, Andhra Pradesh. *International Journal of Farm Sciences*, **7**(1): 44-48.

Sathish, H.S. (2010). Farmers' perceptions, preferences and utilization of SRI and traditional Paddy straw for livestock. *M. Sc. (Agri.) Thesis.* University of Agricultural Sciences, Dharwad, India.

Thatchinamoorthy, C. And Rexlin S. (2014). A study on profile of system of rice intensification (SRI) paddy growers in Tirunelveli district of Tamil Nadu, *International Journal of Current Research*, **6**(4): 6064-6066.

How to cite this article: Navya, D. and Venkataranganaika, K. (2021). To Study Profile Characteristics of Paddy and Cotton Growers in Karimnagar District of Telangana State. *Biological Forum – An International Journal*, **13**(1): 723-727.