



Profile Characteristics of the Farmers Followed Indigenous Agricultural Practices in Rayalaseema Region of Andhra Pradesh

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJAEES/2022/v40i630897

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/68736>

Original Research Article

**Received 19 January 2022
Accepted 25 March 2022
Published 31 March 2022**

ABSTRACT

The study was conducted with an Ex-post facto research design in Rayalaseema region of Andhra Pradesh to identify the profile characteristics of the farmers followed indigenous agricultural practices in major three crops (paddy, groundnut and red gram). Data were collected from a randomly selected 180 farmers from two districts i.e. Ananthapur and Kurnool of Rayalaseema region by personal interview method. The results revealed that majority of the respondents are middle aged (60.00%), illiterates (37.78%), semi-medium farmers (36.11%), had medium farming experience (52.22%) with medium family size (77.78%), family income (41.11%), extension contact (47.77%), mass media exposure (45.56%), innovativeness (41.67%), fatalism (63.89%), social participation (55.56%), achievement motivation (41.11%), scientific orientation (44.45%), economic orientation (62.22%), market orientation (59.45%) and attitude towards indigenous agricultural practices (50.56%).

Keywords: Profile characteristics; farmers; indigenous agricultural practices.

1. INTRODUCTION

Indian agriculture is predominantly of pro-nature and it was characterized by the cultivation practices aiming at sustainable productivity even though the production level was subsistence. These are referred as indigenous traditional knowledge or indigenous agricultural practices (IAPs). The Indigenous Technical Knowledge (ITK) system has been developed by the people based on their experiences and continuous improvement through informal experimentation over centuries and is adapted to local culture. These ITKs are interwoven and assimilated in the cultural life of the people. The traditional sources are often highly suited to the ecology of the region and for the farmers concerned. Farmers are very keen to observe the problems arising during farming and seek solutions to adjust to their local environment conditions, thereby developing a rich store house of practical knowledge connected to their situation. They developed farming systems based on local resources with minimal use of outside inputs and henceforth it was evident that nescient farmers are capable of creating and maintaining large and complex systems to achieve mutually beneficial results.

2. MATERIALS AND METHODS

An Ex-post research design was adopted in the present investigation. Rayalaseema region of Andhra Pradesh state was selected purposively for the study as the researcher hails from the same area and was familiar with local language and culture. Two districts were selected purposively based on the highest cultivated area viz., Ananthapur and Kurnool. From Kurnool district, Bandi Atmakur, Devanakonda and Krishnagiri mandals were selected. From Ananthapur district, Kalyanadurgum, kudair and Atmakur mandals were selected based on the highest cultivated area. Two villages were selected from each of the 6 mandals by following simple random sampling thus making a total of 12 villages. From each village, 15 farmers were selected by following simple random sampling procedure, thus making a total of 180 respondents who were cultivating three crops i.e. paddy, groundnut and red gram.

3. RESULTS AND DISCUSSION

The data presented in Table 1 could be inferred that majority of the farmers were categorized into middle age group (60.00%), 31.11 per cent

belonged to young age group and rest of them (8.89%) were in old age group categories. The reason might be that, young farmers might have engaged in non- agricultural activities and less interested in agricultural sector and they were moving to other commercial enterprises. This finding is in line with the results Rajput and Dighe [1], Rahman [2] and Nicolas and Cabarogias [3].

It is evident from the Table 1 that majority of the respondents were illiterates (37.78%), followed by primary school (19.44%), functionally literate (18.89%), high school (10.56%), college level (7.22%) and middle school (6.11%) education.

It could be concluded that majority of the respondents were illiterate which might be due to a majority of them belonging to middle to old age group. Most of the farmers entered farming at a very young age leaving education and some of the farmers had different levels of education. High educational level may influence adoption of modern farming practices. This finding is in line with the results Rahman [2] and Odoemelam and Ajuka [4].

It could be inferred from the Table 1 that majority (36.11%) of the respondents were semi-medium farmers followed by 27.22 per cent were medium farmers, 20.56 per cent were small farmers, 11.67 per cent were marginal farmers and very meagre percentage (4.44%) of them were large.

It could be inferred that the sub division and fragmentation of the farm land from one generation to another generation is the main cause for declining the land holding size of each farmer in the rural areas.

Half of the (52.22%) farmers were grouped under medium farming experience followed by 25 per cent were high farming experience and remaining 22.78 per cent were low farming experience.

The medium experience of the respondents in farming might be attributed to their middle age. Further much experienced farmers would be in a better position to check well and standardize the indigenous agricultural practices with the help of their experience in farming. The longer the years of farming experience, the more exposed the farmer becomes and the more efficient the farmer is expected to be in the use of indigenous knowledge and practices for sustainable conservation of agro-biodiversity. This finding is in line with the results Sundaramari [5] and Rahman [2].

It is evident from the Table 1 that majority of (77.78%) the farmers were grouped under medium family size followed by 19.44 per cent were high family size and remaining 2.78 per cent were low family size. This finding is in line with the results Nicolas and Cabarogias [3].

It could be indicated from the Table 1 that majority of the respondents had medium family income (41.11%) followed by low (36.67%) and high (22.22%) family income respectively. This might be because of majority of the farmers were having medium annual family income. It is quite natural when the farmers are having small land holding with agriculture as a major occupation, farmers can earn only medium annual family income. The findings is in agreement with the findings of Rambabu [6].

It is evident from the Table 1 that nearly half (47.77%) of the respondents had medium extension contact followed by 33.33 per cent and 18.90 per cent had low and high extension contact respectively.

This might be the reason that majority of the farmers were found to be middle to old aged with low educational level and medium family income, they might have tried to exploit only a lesser

opportunities to establish contacts with extension functionaries. This finding is in line with the results of Rajput and Dighe [1].

It could be indicated from the Table 1 that, nearly half (45.56%) of the respondents had medium level of mass media exposure followed by low (29.44%) and high (25.00%) levels of mass media exposure respectively.

It could be observed that majority of the respondents had medium level of mass media exposure followed by low and high mass media exposure respectively. This is perhaps due to their low education, medium family income. Due to their low literacy level, they could not read newspapers, farm magazines and agricultural news articles. The poor financial status also does not facilitate the farmers to own electronic mass media devices like television, cable net work etc. This finding is in line with the results of Sundaramari [5], Sunitha kumari [7] and Rahman [2].

It could be indicated from the Table 1 that majority (41.67%) of the respondents had high innovativeness followed by 31.67 per cent had medium innovativeness and 26.66 per cent had low innovativeness.

Table 1. Distribution of respondents according to their profile characteristics (n=180)

S.No	Components	Categories	Frequency	Percentage
1.	Age	Young	16	8.89
		Middle	108	60.00
		Old	56	31.11
2.	Education	Illiterate	68	37.78
		Functionally literate	34	18.89
		Primary school	35	19.44
		Middle school	11	6.11
		High school	19	10.56
		College level	13	7.22
3.	Farm size	Marginal	21	11.67
		Small	37	20.56
		Semi- medium	65	36.11
		Medium	49	27.22
		Large	08	4.44
4.	Farming experience	Low	41	22.78
		Medium	94	52.22
		High	45	25.00
5.	Family size	Low	05	2.78
		Medium	140	77.78
		High	35	19.44
6.	Family income	Low	66	36.67
		Medium	74	41.11
		High	40	22.22

S.No	Components	Categories	Frequency	Percentage
7.	Extension contact	Low	60	33.33
		Medium	86	47.77
		High	34	18.90
8.	Mass media exposure	Low	53	29.44
		Medium	82	45.56
		High	45	25.00
9.	Innovativeness	Low	48	26.66
		Medium	75	41.67
		High	57	31.67
10.	Fatalism	Low	17	9.44
		Medium	115	63.89
		High	48	26.67
11.	Social participation	Low	72	40.00
		Medium	100	55.56
		High	08	04.44
12.	Achievement motivation	Low	52	28.89
		Medium	74	41.11
		High	54	30.00
13.	Scientific orientation	Low	47	26.11
		Medium	80	44.45
		High	53	29.44
14.	Economic orientation	Low	13	7.22
		Medium	112	62.22
		High	55	30.56
15.	Market orientation	Low	26	14.44
		Medium	107	59.45
		High	47	26.11
16.	Attitude towards indigenous agricultural practices	Low	46	25.56
		Medium	91	50.56
		High	43	23.88

It could be observed that majority of the respondents had medium innovativeness followed by high and low innovativeness respectively. This is perhaps due to medium level of extension contact and medium mass media contact. This finding is in line with the results of Sundaramari [5].

It could be indicated from the Table 1 that more than half (63.89%) of the farmers had medium fatalism followed by 26.67 per cent had low fatalism and 9.44 per cent had high fatalism. It could be observed that majority of the farmers had medium fatalism, this might be the reason that majority of the farmers were middle aged, illiterate and with medium level of innovativeness. This finding is in line with the results of Ambegaonkar and Wangikar [8] and Sundaramari [5].

It could be inferred from the Table 1 that majority of the respondents had medium level of social participation (94.45%) followed by high (4.44%) and low (1.11%) level of social participation

respectively. It could therefore be inferred that a majority of respondents were found to have medium level of social participation, it might also be due to their low level of education and not knowing the importance of the organizations. This finding is in line with the results of Sundaramari [5].

It could be indicated from the Table 1 that majority of the respondents had medium (41.11%) level of achievement motivation followed by high (30.00%) and low (28.89%) level of achievement motivation respectively. It could be the reason that majority of the farmers were middle aged, medium extension contact, medium economic orientation and medium market orientation. This finding is in line with the results of Naik [9] and Begum [10].

It could be indicated from the Table 1 that nearly half (44.45%) of the respondents had medium scientific orientation followed by 29.44 per cent of them had high scientific orientation and 26.11 per cent had low scientific orientation.

It could be the reason that majority of the farmers were under medium scientific orientation followed by high and low scientific orientation respectively. The reason behind this may be that the farmers with medium social participation, medium extension contact and medium mass media exposure might had less knowledge about scientific developments, thus they were medium in scientific orientation. This finding is in line with the results of Sundaramari [5].

It could be indicated from the Table 1 that more than half (62.22%) of the respondents had medium economic orientation followed by 30.56 per cent of them had high economic orientation and 7.22 per cent had low economic orientation.

It could be observed that majority of the farmers had medium economic orientation, this might be the reason that majority of the farmers were illiterate, medium family income, medium mass media exposure, medium extension contact and medium market orientation due to which it has become difficult to orient towards profit maximization in farming and the farmers are not getting the remunerative prices for their produce. This finding is in line with the results of Kumar [11], Rambabu [6] and Sunitha kumari [7].

It could be indicated from the Table 1 that more than half (59.45%) of the respondents had medium market orientation followed by 26.11 per cent of them had high market orientation and 14.44 per cent had low market orientation.

It could be the reason that majority of the farmers had medium market orientation, this might be the reason that majority of the farmers were illiterate, medium family income and had medium economic orientation. It might also be the reason that farmers had medium mass media exposure, it indicated that farmers lack knowledge on market prices of the produce. This finding is in line with the results of Gopinath [12].

It could be indicated from the Table 1 that half (50.56%) of the respondents had medium (50.56%) level of attitude towards indigenous agricultural practices followed by low (25.56%) and high (23.88%) level of attitude towards indigenous agricultural practices respectively. It could be the reason that majority of the farmers had medium attitude towards indigenous agricultural practices followed by high and low attitude towards indigenous agricultural practices which might be due to majority of the farmers were middle aged, illiterate, medium extension

contact, medium mass media exposure and medium social participation. This finding is in line with the results of Rahman [2].

4. CONCLUSION

The developed farming systems based on local resources with minimal use of outside inputs and henceforth it was evident that nescient farmers are capable of creating and maintaining large and complex systems to achieve mutually beneficial results.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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