

Original Research Article

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## Profile Characteristics of Rice Farmers in Nellore District of Andhra Pradesh, India

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### ABSTRACT

The present investigation was done to study the profile characteristics of rice farmers in Nellore district of Andhra Pradesh. *Ex-post facto* research design was followed for the study and a sample of 120 respondents was drawn. The results of the study revealed that most of the respondents were middle aged (57.50%), high school educated (32.50%), medium farmers (35.00%), had medium annual income (70.00%), medium level of farming experience (50.83%), medium cost of cultivation (54.17%), medium net returns (48.33%), medium extension contact (60.83%), medium mass media exposure (49.17%), medium social participation (50.83%), medium economic orientation (57.50%), medium risk orientation (46.67%), medium management orientation (55.83%), medium innovativeness (47.50%), medium decision making ability (43.33%), medium scientific orientation (52.50%) and medium deferred gratification (48.34%).

#### Keywords

Profile characteristics, Rice farmers, Media exposure

#### Article Info

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### Introduction

Rice is most important and extensively grown food crop in the world. Almost one-fifth of the world's population, depend on rice cultivation for their livelihoods. It is a primary food source for more than one-third of world's population and grown in 11 per cent of the world's cultivated area. Andhra Pradesh is popularly known as granary of South India because of its abounding surplus in the production of food crops. It is often called as

rice bowl of south India. The state is not only self-sufficient in food grains but also exports nearly one-fifth of its rice produced. Rice is of key importance to Andhra Pradesh's economy and its people. A large percentage of labour force earns a living from agriculture by cultivating rice. The state has significant strengths in rice production enjoying the right conditions for growing rice. The study area, Nellore is famous for its paddy fields and is the highest rice producing district in Southern agro-climatic zone. About 70 per cent of the

working population of the district is either directly or indirectly engaged in agricultural and allied activities.

### **Materials and Methods**

The study was conducted in Nellore district of Andhra Pradesh during the year 2018-19. *Ex-post facto* research design was followed for the study. Three mandals of Nellore district and four villages from each mandal viz., Mypadu, Pallipadu, Somarajupalle and Indukurpet from Indukurpeta mandal, Naidupalem, Kodavalur, Gandavaram and Talamanchi from Kodavalurmandal, Allur, Isakapalle, Beeramgunta and Velicherla from Allurmandal were selected by using simple random method from which 120 rice farmers were selected as sample. Pre-tested interview schedule was used to collect the primary data and statistical techniques like Arithmetic mean, Standard deviation, Frequencies and Percentage were used.

### **Results and Discussion**

It is clear from the Table 1 that about (57.50%) of the respondents was middle aged followed by old (29.17%) and young age (13.33%) groups, respectively. A critical observation of the above findings indicated that a considerable percentage of the respondents are of middle aged followed by old aged and the possible reasons may be that, as rice is the evergreen crop which feeds the world, the dependence on rice cultivation might be highly optimistic and comfortable to the farming community. Even though it involves lot of drudgery and hard work, the farmers with orthodox and traditional life style might be continuing the cultivation of rice. On the other side, young farmers might be shifting towards non-agricultural occupation in urban/semi urban areas. The finding is in line with the findings of Sriharinarayana (2013) and Phenica (2018).

It is evident from the Table 1 that (32.50%) of the respondents had education level of high school level education followed by primary school (20.83%), middle school (19.17%), collegiate (11.67%), illiterate (9.16%), and graduate (6.67%), and none in post graduate categories. The probable reason for above trend might be that, as one third of the respondents were under old age category, they might have undergone primary education, few of them might be illiterates and continuing the rice cultivation as a part of their livelihood. On the other side, the farmers with middle school, high school and college education were forced to take up agriculture as their occupation due to lack of employment opportunities. This result is in line with findings of Arathybalakrishnan (2011), Sridivayarani (2015) and Saidhar (2016).

It can be seen from Table 1 that majority of respondents (70.00%) had medium level of income followed by high (18.33%) and low (11.67%) levels of income, respectively. The farmers under small and medium land holding category might be taking up agriculture and allied activities as a part of their farming and earn their income by adopting sustainable farming practices. On the other side, the marginal farmers might have the option of rice cultivation, apart from engaging themselves as agricultural labourers resulting in low annual income. Further the large farmers as well as the farmers with diversified occupations including jobs, business etc., might be obtaining high annual income. Similar findings were reported by Chidananda (2008) and Chinnamnaidu (2012).

It is observed from Table 1 that more than one-third of the respondents (35.00%) of the respondents were medium farmers followed by small (27.50%), semi-medium (14.17%) marginal (12.50%), and large (10.83%) farmers. Fragmentation of land holdings due to proneness towards nuclear family approach

might have resulted in low land holdings among half of the farmers. On the other side, the remaining half of the farmers might be maintaining their farms duly taking up agriculture as their main source of income and residing in the villages. This result is in agreement with Chinnamnaidu (2012) and Sriharinarayana (2013) and Srividyanani (2015).

It is apparent from Table 1 that more than half (50.83%) of the rice farmers had medium level of farming experience followed by high (29.17%) and low levels of farming experience (20.00%). It could be observed that majority of the respondents had medium level of farming experience followed by those having high and low levels of experiences in rice farming. This might be due to the fact that majority of the respondents belonged to middle and old age categories, younger generation is not interested in agriculture and were seeking other activities and white collar jobs. Hence most of the respondents were falling under medium to high farming experience. This result is in agreement with Arathybalakrishnan (2011) and Phenica (2018).

Table 1 revealed that majority (54.17%) of the respondents had medium cost of cultivation followed by low (23.33%) and high (22.50%) cost of cultivation. High cost of cultivation might be due to use of over doses of fertilizers, pesticides and other inputs as well as the costs incurred towards labour. On the other side, the farmers with technical knowledge might be so rational in use of different inputs to reduce the cost of cultivation. This result is in agreement with Phenica (2018).

It is clear from the Table 1 that majority (48.33%) of the respondents had medium net returns followed by low (26.67%) and high (25.00%) net returns. High net returns might

be attributed to judicious use of fertilizers, pesticides and other inputs keeping in view of the crop growth, environment and incidence of pests and diseases.

Table 1 revealed that majority (60.83%) of the respondents had medium extension contact followed by low (21.67%) and high (17.50%) levels of extension contact. The possible reason for the above trend might be due to the fact that majority of the farmers might be contacting locally available input dealers to solve their field problems. They were also completely depending on input dealers as they are purchasing inputs on credit basis. On the other side, progressive farmers with higher educational qualification might be approaching scientists and extension functionaries for diagnosis and suitable recommendations to the location specific problems. This result is in agreement with Naik (2006) and Arathybalakrishnan (2011). Table 1 revealed that more than half (50.83%) of the respondents had medium social participation followed by low (26.67%) and high (22.50%) social participation. Due to the increased nuclear family pattern, the farmers might be living in isolation and leading their lives without much interaction with the members of the society. This situation might have created less scope for social participation among the rice farmers. On the other side, with the increased awareness on the importance of social organization/ institutions as well as their role in motivating the farmers, they became a part of different organization/ institution as members and other portfolios. This result is in agreement with Sriharinarayana (2013) and Srividyanani (2015).

An overview of the Table 1 indicated that majority (49.17%) of the respondents had medium level of mass media exposure followed by high (31.66%) and low (19.17%) levels of mass media exposure.

**Table.1** Distribution of respondents according to their profile characteristics (n=120)

| S. No | Variables  | Category             | Respondents |            |
|-------|--|----------------------|-------------|------------|
|       |  |                      | Frequency   | Percentage |
| 1     | Age  | Low                  | 16          | 13.33      |
|       |  | Medium               | 69          | 57.50      |
|       |  | High                 | 35          | 29.17      |
| 2     | Education  | Illiterate           | 11          | 9.16       |
|       |  | Primary school       | 25          | 20.83      |
|       |  | Middle school        | 23          | 19.17      |
|       |  | High school          | 39          | 32.50      |
|       |  | Collegiate education | 14          | 11.67      |
|       |  | Graduate             | 8           | 6.67       |
|       |  | Post graduate        | -           | -          |
| 3     | Annual income  | Low                  | 14          | 11.67      |
|       |  | Medium               | 84          | 70.00      |
|       |  | High                 | 22          | 18.33      |
| 4     | Farm size  | Marginal farmer      | 15          | 12.50      |
|       |  | Small farmer         | 33          | 27.50      |
|       |  | Semi-Medium farmer   | 17          | 14.17      |
|       |  | Medium farmer        | 42          | 35.00      |
|       |  | Large farmer         | 13          | 10.83      |
| 5     | Farming experience<br>Mean=24.48<br>Standard deviation=10.05     | Low                  | 23          | 20.00      |
|       |  | Medium               | 59          | 50.83      |
|       |  | High                 | 38          | 29.17      |
| 6     | Cost of cultivation<br>Mean=25.48<br>Standard deviation=11.05    | Low                  | 28          | 23.33      |
|       |  | Medium               | 65          | 54.17      |
|       |  | High                 | 27          | 22.50      |
| 7     | Net returns<br>Mean=23.48<br>Standard deviation=12.05            | Low                  | 32          | 26.67      |
|       |  | Medium               | 58          | 48.33      |
|       |  | High                 | 30          | 25.00      |
| 8     | Extension contact<br>Mean=10.50<br>Standard deviation=5.47       | Low                  | 26          | 21.67      |
|       |  | Medium               | 73          | 60.83      |
|       |  | High                 | 21          | 17.50      |
| 9     | Social participation<br>Mean=3.30<br>Standard deviation=1.21     | Low                  | 32          | 26.67      |
|       |  | Medium               | 61          | 50.83      |
|       |  | High                 | 27          | 22.50      |
| 10    | Mass media exposure<br>Mean=12.59<br>Standard deviation=4.95     | Low                  | 23          | 19.17      |
|       |  | Medium               | 59          | 49.17      |
|       |  | High                 | 38          | 31.66      |
| 11    | Economic orientation<br>Mean=18.63<br>Standard deviation=5.70    | Low                  | 28          | 23.33      |
|       |  | Medium               | 69          | 57.50      |
|       |  | High                 | 23          | 19.17      |
| 12    | Risk orientation<br>Mean=13.58<br>Standard deviation=3.41        | Low                  | 19          | 15.83      |
|       |  | Medium               | 45          | 37.50      |
|       |  | High                 | 56          | 46.67      |
| 13    | Management orientation<br>Mean=55.37<br>Standard deviation=20.71 | Low                  | 21          | 17.50      |
|       |  | Medium               | 68          | 56.67      |
|       |  | High                 | 31          | 25.83      |
| 14    | Innovativeness<br>Mean=18.22<br>Standard deviation=2.48          | Low                  | 44          | 36.67      |
|       |  | Medium               | 59          | 49.17      |
|       |  | High                 | 17          | 14.16      |
| 15    | Decision making ability<br>Mean=9.37<br>Standard deviation=3.40  | Low                  | 39          | 32.50      |
|       |  | Medium               | 52          | 43.33      |
|       |  | High                 | 29          | 24.17      |
| 16    | Scientific orientation<br>Mean=33.69<br>Standard deviation=8.83  | Low                  | 36          | 30.00      |
|       |  | Medium               | 63          | 52.50      |
|       |  | High                 | 21          | 17.50      |
| 17    | Deferred gratification<br>Mean=31.11<br>Standard deviation=7.83  | Low                  | 37          | 30.83      |
|       |  | Medium               | 58          | 48.34      |
|       |  | High                 | 25          | 20.83      |

Recent advances in ICT, especially in transfer of technology, the farmers might have been motivated to utilise different mass media for different technological interventions. The access of different social media viz., television, radio, mobile apps might have significantly influenced the farmers in creating awareness and acquisition of knowledge for better farm management. On the other side, illiterate farmers and farmers with low ICT literacy might be poor in their mass media exposure. This result is in agreement with Sriharinarayana (2013) and Phenica (2018).

It is transparent from Table 1 that more than half (57.50%) of the rice farmers had medium economic orientation followed by low (23.33%) and high (19.17%) levels of economic orientation. Pride of realizing highest productivity per unit area might be diverting the rice framers towards indiscriminate use of fertilizers/ pesticides in a competitive mode with fellow farmers. The orientation towards economy might have been fully minimized resulting in high investment. The attributes like illiteracy, exploitation of input dealers, false prestige, over ambitiousness might have contributed to the above trend. On the other side, the shift from productive grains to economic gains has been popularized among the farming community to think towards reducing cost of cultivation and enhancing higher returns from unit area. Accordingly, there has been meticulous planning among the farmers to invest a rupee for each and every operation and proportionate returns from every investment. This result is in agreement with Arathybalakrishnan (2011) and Chinnamnaidu (2012).

It is clear from Table 1 that about 46.67 per cent of the respondents had medium risk orientation followed by low (37.50%) and high (15.83%) levels of risk orientation.

Farmers might be tilted towards imitative approach by simply following the fellow farmers' practices and incurring huge expenditure rather than adopting innovative approach through taking calculated risk. Too much sensitivity towards protecting the crop and realising huge productivity might have contributed for low risk orientation. On the other side, the progressive/innovative farmers might be so cognitive and always taking up optimistic risk in their day to day farm operations. This result is in agreement with Sriharinarayana (2013) and Phenica (2018).

From the Table 1 it could be inferred that more than half (55.83%) of the respondents had medium management orientation followed by high (26.67%) and low (17.50%) management orientation respectively. Management is an art and science in handling the situation. The farmers' orientation towards managing their farms might have been influenced by both personal and environmental factors. The farmers with good knowledge and bright exposure to the scientific rationality might have high management orientation, taking up their farm operations in line with the environmental factors and achieving success. On the others side, the farmers with illiteracy and poor access to information and inputs might be forcing them towards poor management of their farms. This result is in agreement with Sriharinarayana (2013) and Phenica (2018).

A glance at Table 1 indicated that about (49.17%) of the respondents had medium innovativeness followed by low (36.67%) and high (14.16%) levels of innovativeness respectively. Innovativeness is an index for uncertainty. Being farmers, they might have been prone to enormous environmental aberration as well as technological errors and might have experienced failures in their day to day farm operations. The probable reason for this might be due to lack of knowledge

and skills in handling the situation leading to poor performance. On the other side, the farmers with good educational qualification, knowledge and bright extension contact might be taking up all operations with high precision, achieving success in their endeavours. This might have developed self-confidence which in turn had impact on innovativeness. This result is in agreement with Sriharinarayana (2013).

From the Table 1 it could be inferred that majority (43.33%) of the respondents had medium decision making ability followed by low (32.50%) and high (24.17%) decision making ability respectively. Cognition is the precursor for sound decision making. Acquisition of knowledge gained through day to day experiences coupled with strong technological base will enrich the quality decision making. The farmers might be just taking up their farm operations with an imitating style by depending on input dealers and fellow farmers leading to poor decision making. On the other side, educated farmers and the farmers with high scientific rationality might be judging the situation and taking appropriate decisions for achieving success. This result is in agreement with Arathybalakrishnan (2011) and Chinnamnaidu (2012).

It is clear from Table 1 that more than half (52.50%) of the respondents had medium scientific orientation followed by low (30.00%) and high (17.50%) levels of scientific orientation. This trend might be due to the fact that majority of the participant farmers were using scientific methods in agriculture and their regular touch with the extension personnel helped them to adopt the modern rice production technologies specified by the scientists. Hence the above trend was observed. Less contact with extension personnel and poor exposure to various information sources were also considered as

other probable reasons for 'medium to low' level of scientific orientation. Similar observations were reported by Gopinath (2005) and Ashok (2012).

A glance at Table 1 indicated that about (48.34%) of the respondents had medium deferred gratification followed by low (30.83%) and high (20.83%) levels of deferred gratification respectively. The possible reason for the above trend might be due to fact that, small and marginal farmers with their limited land holding and poor economic status depending on different sources of credit and might be going for immediate realization of income. On the other side, medium to big farmers might be selling their farm produce at higher prices. This finding is in line with the finding of Srinivasareddy (2008) and Chinnamnaidu (2012).

The findings revealed that majority of the farmers were middle aged, educated up to high school, had medium level of annual income, most of them were medium farmers, had medium farming experience, medium cost of cultivation, medium net returns, medium extension contact, medium social participation, medium mass media exposure, medium economic orientation, medium risk orientation, medium management orientation, medium innovativeness, medium decision making ability, medium scientific orientation and medium deferred gratification.

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