

Profile characteristics of paddy farmers in Eluru district, Andhra Pradesh

G Kavya Sri, M Rama Devy, M C Obaiah and V Sitarambabu

Department of Agricultural Extension, Acharya N G Ranga Agricultural University, Agricultural College, Bapatla-522101, Andhra Pradesh, India

ABSTRACT

The socio-economic characteristics of paddy farmers were studied in Eluru district of Andhra Pradesh, which was purposively selected due to its significant contribution to paddy cultivation and residue generation. Three mandals viz., Bhimadolu, Denduluru, and Pedapadu were selected randomly, and a total of 120 farmers were selected using a simple random sampling technique. The results showed that majority (50.83%) of the respondents were middle aged with medium levels of innovativeness (63.33%), mass media exposure (62.51%), extension contact (72.50%) and market orientation (74.16%). More than half (53.33%) of the farmers were from the medium income category (Rs. 2,00,001-4,00,000), and slightly more than one-fourth (25.84%) were small landholders. Rice-rice (43.33%) and rice-pulse (39.17%) were the most common cropping patterns followed by the respondents

Keywords: Paddy farmers, Residue generation and Socio-economic characteristics

Paddy cultivation holds a prominent place in the agricultural landscape of Andhra Pradesh, contributing significantly to food security, rural livelihoods, and the state's economy (Kadian and Meena, 2021). Among the various districts, Eluru stands out as a major rice-growing region owing to its favourable agro-climatic conditions, abundant water resources, and well-established irrigation infrastructure (Deep et al, 2018). Understanding the profile characteristics of paddy farmers in this region is essential for designing targeted interventions, promoting sustainable agricultural practices, and improving the adoption of modern technologies such as Paddy Residue Management Technologies (PRMTs) (Kailash et al, 2017). Farmer characteristics such as age, education, landholding size, income, farming systems, and access to information and resources play a crucial role in influencing their decision-making and responsiveness to new practices. The present study examines the socio-economic and farming characteristics of paddy farmers in Eluru district, with the aim of generating insights to inform policy formulation, strengthen extension services, and enhance technology dissemination initiatives geared toward improving paddy production and promoting environmental sustainability.

MATERIALS AND METHODS

The present study was conducted using an Ex-Post Facto research design to assess the profile characteristics of paddy farmers in Eluru district of Andhra Pradesh. Eluru district was purposively selected due to its significant contribution to paddy cultivation and residue generation. A simple random sampling procedure was followed, wherein three mandals i.e. Bhimadolu, Denduluru, and Pedapadu were selected randomly from the district. From each mandal, two villages were selected through simple random sampling, making a total of six villages. From each village, 20 paddy farmers were randomly chosen, resulting in a total sample of 120 respondents. Data were collected using a structured interview schedule and analyzed using frequency, percentage, mean, standard deviation for meaningful interpretation.

RESULTS AND DISCUSSION Age

It was visualized from the results presented in Table 1 that half of the paddy farmers (50.83%) were middle-aged followed by old (40.84%) and young aged (8.33%).

Table 1. Distribution of paddy farmers according to age (n=120)

S. No.	Age Group	f	%
1	Young (up to 35 years)	10	8.33
2	Middle (36–50 years)	61	50.83
3	Old (above 50 years)	49	40.84
Total		120	100
Mean = 2.32		SD =	0.62

Education

It was observed from Table 2. that nearly one- fourth (26.67%) of the paddy farmers were educated up to high school, followed by literates (19.17%), primary school (18.33%), illiterate (15.00%), intermediate (13.33%) and graduation & above (7.50%).

Table 2. Distribution of paddy farmers according to education (n=120)

S. No.	Education Level	f	%
1	Illiterate	18	15
2	Literate	23	19.17
3	Primary (up to 5 th std)	22	18.33
4	High School (6 th – 10 th std)	32	26.67
5	Intermediate	16	13.33
6	Graduation & above	9	7.5
Total		120	100
Mean = 3.27	7	SD = 1.49	

Land holdings

Results furnished in table 3 depicted that slightly more than one fourth (25.84%) of the paddy farmers were small land holders followed by marginal land holders (23.33%), semi-medium land holders (20.00%), medium land holders (17.50%) and large land holders (13.33%).

Table 3. Distribution of paddy farmers according to land holding (n=120)

S. No.	Land Holding	f	%
1	Marginal (< 1.00 ha)	34	23.33
2	Small (1.01–2.00 ha)	25	25.84
3	Semi-medium (2.00–4.00 ha)	24	20
4	Medium (4.01–10.00 ha)	21	17.5
5	Large (>10.00 ha)	16	13.33
Total		120	100
Mean = 2.67		SD =	= 1.40

Annual income

It was evident from the table 4 that majority (53.33%) of the paddy farmers belonged to medium annual income category followed by high (38.33%) and low (8.34%) annual income category.

Table 4. Distribution of paddy farmers according to annual income (n=120)

S. No.	Annual Income	f	%
1	Low (<rs. 2,00,000)<="" td=""><td>10</td><td>8.34</td></rs.>	10	8.34
2	Medium (Rs. 2,00,001-4,00,000)	64	53.33
3	High (>Rs. 4,00,001)	46	38.33
Total		120	100
Mean = 2.30 SD = 0.61		- 0.61	

Occupation

The results from the table 5 projected that slightly more than one fourth (27.50%) of the paddy farmers were practicing only agriculture followed by Agriculture + Diary (24.16%), Agriculture + Poultry (17.50%), Agriculture + Wage earning (13.33%), Agriculture + Business (6.66%), Agriculture + Job (5.83%) and Agriculture + Livestock + Wage earning (5.02%).

Table 5. Distribution of paddy farmers according to occupation (n=120)

S. No.	Occupation	f	%
1	Agriculture	33	27.5
2	Agriculture + Wage earning	16	13.33
3	Agriculture + Dairy	29	24.16
4	Agriculture + Poultry	21	17.5
5	Agriculture + Livestock + Wage earning	6	5.02
6	Agriculture + Business	8	6.66
7	Agriculture + Job	7	5.83
Total		120	100
Mean = 3.16		SD =	1.85

Innovativeness

A detailed examination of the table 6 indicated that nearly two-thirds (63.33%) of the paddy farmers had medium level innovativeness followed by low (20.83%) and high (15.84%) level of innovativeness.

Table 6. Distribution of paddy farmers according to innovativeness (n=120)

S. No.	Innovativeness	f	%
1	Low innovativeness	11	9.16
2	Medium innovativeness	90	75
3	High innovativeness	19	15.84
Total		120	100
Mean = 11.37 SD = 2.2		2.24	

Mass media exposure

A cursory look from the table 7 it could be revealed that almost two-thirds (62.51%) of the paddy farmers had medium level of mass media exposure followed by high (21.66%) and low (15.83%) level of mass media exposure.

Table 7. Distribution of paddy farmers according to mass media exposure (n=120)

S. No.	Mass media exposure	f	%
1	Low mass media exposure	19	15.83
2	Medium mass media exposure	75	62.51
3	High mass media exposure	26	21.66
Total		120	100
Mean = 20.67		SD =	2.27

Extension Contact

An outlook of table 8 shown that majority of the paddy farmers (72.50%) were found under medium extension contact category followed by high (15.00%) and low (12.50%) extension contact.

Table 8. Distribution of paddy farmers according to Extension Contact (n=120)

S. No.	Extension contact	f	%
1	Low extension contact	18	15
2	Medium extension contact	87	72.5
3	High extension contact	15	12.5
Total		120	100
Mean = 4.10		SD =	46.08

Market orientation

A panoramic view of Table 9 exhibited that the three-fourths (74.16%) of the paddy farmers had medium market orientation, followed by high (14.17%) and low (11.67%) market orientation.

Table 9. Distribution of paddy farmers according to Market orientation (n=120)

S. No.	Market orientation	f	%
1	Low market orientation	14	11.67
2	Medium market orientation	89	74.16
3	High market orientation	17	14.17
Total		120	100
Mean = 14.57		SD =	= 1.68

Cropping Pattern

Table 10 clearly demonstrated that slightly greater than two-fifths (43.33%) of the paddy farmers practice rice-rice pattern followed by rice-pulse (39.17%) and rice-fallow (17.50%).

Table 10. Distribution of paddy farmers according to Cropping pattern (n=120)

S. No.	Cropping pattern	f	%
1	Rice-Rice	52	43.33
2	Rice-Pulse	47	39.17
3	Rice-Fallow	21	17.5
Total		120	100
Mean = 1.74 SD = 0.74		= 0.74	

CONCLUSION

The study highlights that paddy farmers in Eluru district are largely middle-aged, moderately educated, and predominantly small to marginal landholders with medium income levels. Most farmers exhibited medium levels of innovativeness, mass media exposure, extension contact and market orientation, indicating a reasonable but improvable capacity to adopt new technologies. Their strong reliance on ricerice and rice-pulse systems reflects both ecological suitability and traditional preferences in the region. These findings suggest that farmers are receptive to improved practices but require more focused support to strengthen their decision-making and adoption behaviour, especially in areas such as paddy residue management and sustainable production technologies.

Enhancing the reach and quality of extension services, expanding ICT-based advisories, and creating more inclusive, farmer-friendly training programs can help bridge existing knowledge gaps (Anand, 2019). Policies that address the needs of small and marginal farmers particularly improved access to information, technology, and markets will be essential for boosting productivity while ensuring environmental sustainability (Kaushik and Sabharwal, 2021). Overall, the study provides actionable insights that can guide more responsive extension strategies and evidence-based policymaking for the paddy sector in Eluru district.

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