

A study on correlation of profile and adoption behaviour of Rythu Seva Kendras in Andhra Pradesh

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ABSTRACT

Rythu Seva Kendras (RSKs) are established for the welfare of the farmers in every panchayat in the state of Andhra Pradesh to cater to the needs of the grass-roots level. The RSKs provide a wide range of services like e-crop booking, crop health monitoring, Polambadi (farmers field school programs), product procurement, financial assistance in inputs and field advisory. The present study highlights the correlates of the adoption behavior of RSK beneficiaries in the selected districts of Andhra Pradesh. Simple random sampling method was used, and a sample size of 240 was selected from the East Godavari, Nellore and Kurnool districts. An ex post facto research design was used for the purpose of the study. The findings specified that the variables viz., land holding, social participation, source of information, mass media exposure, market orientation, risk orientation, scientific orientation, economic orientation and innovativeness had a positive and significant relationship with the level of adoption of technologies disseminated by RSKs.

Keywords: *Adoption, Beneficiaries and Rythu Seva Kendra (RSK)*

Agriculture is the main source of livelihood for most of the population in India. Pre and post green revolution systems in India had played a commendable role in the dissemination of transfer of technologies. On the contrary farmers face many problems in the process of input procurement, product selling, market prices, etc. It is impossible for the extension worker to meet each farmer personally. Rythu Seva Kendra at every panchayat with a trained staff of various disciplines of agriculture and allied sectors were established. Earlier the farmers had to visit the mandal level offices of agriculture, horticulture, veterinary and fisheries to address any work but with the introduction of RSK at panchayat level, the staff including VAA- Village Agriculture Assistant, VHA- Village Horticulture Assistant, VSA- Village Sericulture Assistant, VFA- village Fishiculture Assistant (where intensive fish culture is present) are easily accessible to the farmers at village level. services like agri input shop, farmers knowledge center, custom hiring centers, PM-Kisan, E-crop booking, crop health monitoring, commodity market prices and procurement, Polambadi, (Farmers Field School), Polambadi

magazine, YouTube channel, method demonstration, quality input distribution, etc. are available for the farmers welfare.

There are limited testing facilities for agricultural inputs like seeds, fertilizers and pesticides in the state. All of these lead to a supply of low quality inputs to farmers, causing losses to farmers. The availability of extension functionaries to farmers is very low. Before the introduction of RSKs, the seed distribution was mainly done at the mandal level and farmers waited in long queues and spent more money on the transportation of seeds. Crop insurance and crop booking were done at the mandal headquarters. Low-quality inputs were procured and less access to technical advisories was experienced by the farmers. But with the RSK at the village level, it has given access to facilities that were earlier not possible for these farmers.

Keeping in view of the above facts, to understand the farmers affecting the viability of RSKs in the study area, the present study was undertaken with specific objectives are to study the profile characteristics of RSK beneficiary farmers and study

the relationship of profile characteristics of beneficiaries with their adoption of technologies disseminated by RSKs.

MATERIAL AND METHODS

The present study was conducted in three districts of Andhra Pradesh *i.e.* East Godavari, Nellore, Kurnool of Andhra Pradesh in the year 2023-24. Two blocks from each district and four RSKs were randomly selected from each block. Ten farmers from each RSK were selected for the study. Therefore a total of 240 respondents were selected. Primary data was collected with the help of well-structured interview schedule. Required secondary data collected from government offices like panchayat office, mandal office, village secretariat, journals, magazines, publications etc. Descriptive statistics like Frequency, Percentage, Mean, Standard deviation and mean scale values were used for categorizing the respondents. For analyzing the relationship between the variables, Karl Pearson's correlation coefficient test was applied.

$$r = \frac{\sum xy - \frac{\sum x \sum y}{n}}{\sqrt{\left[\sum x^2 - \frac{(\sum x)^2}{n} \right] \left[\sum y^2 - \frac{(\sum y)^2}{n} \right]}}$$

r = Correlation coefficient

$\sum x$ = Sum of scores of independent variables

$\sum y$ = Sum of scores of dependent variables

$\sum x^2$ = Sum of the squares of scores of an independent variables

$\sum y^2$ = Sum of the squares of scores of a dependent variable

$\sum xy$ = The sum of productivity of x and y n = Size of the sample

RESULTS AND DISCUSSION

Profile of RSK Beneficiaries

As revealed in the table 1 that, majority (71) per cent of the beneficiaries belonged to be middle age. The individuals in this age group usually have families and similar to the findings of Sravya (2022). It was found that that overall, 30 per cent beneficiaries

were illiterate/ no schooling, possible reasons for the various education levels may be due to lack of interest and awareness among elders in the villages and findings was in conformity with the findings of Archana (2016). Overall, 55.83 per cent of beneficiaries were belonged to agriculture, evident from the result that most of the farmers rely mainly on farming as agriculture. The present study was in line with the study of Kondal (2014). Also indicated that, 70.83 per cent of beneficiaries had medium annual income, farmers under medium and small 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 practice. The findings were supported by Jain (2017).

It is evident that overall, 56.66 per cent beneficiaries belonged to marginal land holding followed by those belonged to small (22.91%) land holdings, reason might be that, in the recent times, most of the families were of nuclear system and joint family system was gradually fading away. This result is in partial agreement with Saifuddin (2022). Social participation of more than three-fifths (76.25%) of the beneficiaries found to be medium category. 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 source of information to beneficiaries. This result is in agreement with Anuhya (2021).

More than three-fifths (68%) of the rice farmer beneficiaries of RSK found to be medium in source of information followed by those with low (22%) and high (10%), this phenomenon would be due to their greater exposure to mass media. The results of the present study were in accordance with the findings of Shankar (2020). About 70 per cent of the rice farmer beneficiaries of RSK found to have medium mass media exposure followed by those had low (17%) and high (13%) mass media exposure, 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. This result is in agreement with Vasanthi (2017) and Saifuddin (2022).

Table1. Distribution of respondents according to their selected characteristics (n=240)

S. No	Profile	Categories	F	%	Mean	S.D
1	Age	Young (<35 years)	64	27	39.2	9.6
		Middle(36-58 Years)	170	71		
		Old(>58 Years)	6	3		
2	Education	Illiterate / No Schooling	72	30		
		Primary School	30	12.5		
		Middle School	54	22.5		
		High School	48	20		
		Intermediate / Diploma	25	10.41		
		Graduation	11	4.58		
		Post-Graduation	0	0		
3	Occupation	Agriculture	134	55.83		
		Animal husbandry	30	12.05		
		Horticulture	41	17		
		Sericulture	7	3.52		
		Agricultural laborer	28	11.6		
4	Annual income	Low (Up to Rs. 70976)	30	12.5		
		Medium (Rs. 70976 to Rs. 355859)	170	70.83		
		High (More than Rs. 355859)	40	16.67		
5	Land holding	Landless (No Land)	0	0		
		Marginal (Up to 2.5 Acres)	136	56.66		
		Small (2.5 to 5 Acres)	55	22.91		
		Semi medium (5 to 7.5 Acres)	20	8.33		
		Medium (7.5 to 10 Acres)	14	5.83		
		Large (>10 Acres)	15	6.27		
6	Social participation	Low	25	10.42	29.7	6.5
		Medium	183	76.25		
		High	32	13.33		
7	Source of information	Low	52	22	36.7	12
		Medium	163	68		
		High	25	10		
8	Mass Media Exposure	Low	41	17	9.7	2.1
		Medium	167	70		
		High	32	13		
9	Market orientation	Low	30	12.5	13	1.4
		Medium	183	76.25		
		High	27	11.25		
10	Risk orientation	Low	42	17.5	15.4	1.3
		Medium	128	53.33		
		High	70	29.17		
11	Scientific orientation	Low	44	18.33	12.2	1.7
		Medium	171	71.25		
		High	25	10.42		
12	Economic orientation	Low	24	10	12.7	1.9
		Medium	188	78.33		
		High	28	11.67		
13	Innovativeness	Low	38	15.83	17.8	1.7
		Medium	75	31.25		
		High	27	11.25		
14	Information seeking behavior	Low	34	14.17	33.9	5.4
		Medium	148	61.67		
		High	58	24.17		

Majority (76.25%) of beneficiaries have medium market orientation. It also indicated that, less than two-thirds (53.33%) of the beneficiaries found to have medium risk orientation. The progressive/innovative farmers might be so cognitive and always taking up optimistic risk in their day to day farm operations. This finding is in line with the findings of Ramalakshmi (2023). More than half (71.25%) of the beneficiaries found to have medium scientific orientation. 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. This finding was in line with Sarnaik *et al.* (2020).

Furthermore, it is observed in table 1, that more than half (78.33%) of the beneficiaries have medium economic orientation. Majority (72.92%) of the beneficiaries were with medium innovativeness, reason for this might be due to lack of knowledge and skills in handling the situation leading to poor performance and findings are in line with Ramalakshmi (2023). Majority (61.67%) of beneficiaries were with medium information seeking behaviour, reason would be due to their greater exposure to mass media promoted by RSK in accordance with the findings of Kavithaa (2014).

Extent of Adoption of RSK Technologies by the Beneficiary Farmers

Figure 1 shows that majority of the respondents (42.08%) had a medium level of adoption i.e., moderate adoption rate of services or technologies of RBKs followed by high adoption (40.42%) and low adoption (17.50%) levels. The farmers in the study area were found to have a good response

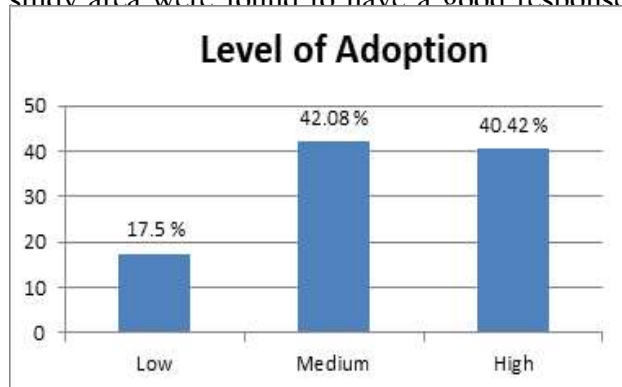


Figure 1. Distribution of respondents according to their level of adoption of technologies disseminated by RSKs.

Table 2. Correlation coefficient of profile of RSK beneficiaries with their level of adoption

Sl. No.	Selected variables	'r' value
1	Age	0.094 NS
2	Education	0.006 NS
3	Occupation	0.147 NS
4	Annual income	0.010 NS
5	Land holding	0.304 **
6	Social participation	0.331 **
7	Source of information	0.706 **
8	Mass media exposure	0.843 **
9	Market orientation	0.781 **
10	Risk orientation	0.846 **
11	Scientific orientation	0.810 **
12	Economic orientation	0.752 **
13	Innovativeness	0.455 **
14	Information seeking behavior	0.024 NS

towards the technologies recommended by RSKs. These specifications were similar to Kumar (2019) and Usha (2021).

Correlation of Profile Characteristics of Beneficiary Farmers with the Adoption of Technologies Disseminated by RSKs

A perusal of Table 2 reveals the correlation between the adoption of technologies disseminated by RSKs and the selected variables. The calculated correlation coefficient "r" value revealed the relationship between personal, socio-economic and psychological characteristics of farmers with their adoption of technologies of RSKs. It was observed that the characteristics namely land holding, social participation, source of information, mass media exposure, market orientation, risk orientation, scientific orientation, economic orientation, innovativeness were positively and significantly correlated with adoption level at 0.01 per cent level of significance and the variables viz., age, education, occupation and annual income had a positive non-significant relationship with the adoption level.

CONCLUSION

The majority of the farmers had a medium level of adoption of the technologies disseminated by the RBKs which reveals that farmers had a good response to the services of RSK. Some of the profile characters

were found to be significantly correlated with their adoption levels. Moreover, a large number of farmers had a medium level of adoption. As a result, the production in the study area is to be improved. Thus, proper identification of problems realized by the farmers in the area is the need of the hour. Government can make provisions to create awareness regarding the various services of improved disseminated technologies to achieve the maximum utilization of these Rythu Seva Kendras in Andhra Pradesh.

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