

# FACTORS INFLUENCING THE KNOWLEDGE LEVEL ON SRI TECHNOLOGY BY THE PADDY FARMERS OF CUDDALORE DISTRICT IN TAMILNADU

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## Abstract

This paper aimed to study the relationship of socio economic and psychological characteristics of the SRI farmers with their knowledge level of recommended technologies. The study was conducted in cuddalore district of Tamil Nadu. A sample size of 300 respondents was selected using proportionate random sampling method. An ex –post facto research design was adopted for the study. The data were collected by using a well-structured interview schedule. The objective of the study was to identify the relationship between various personal, socio-psychological characteristics of the paddy farmers and their knowledge level on SRI technology. The study revealed that among the eighteen independent variables, six variables of them showed a positive and significant association with dependent variable, extent of knowledge. This paper will helps to identify the factors involved in improving the knowledge level of the paddy farmers.

**Key words:** Knowledge, SRI technology, paddy.

## Introduction

The System of Rice Intensification (SRI), developed by Fr.Henri de laulanie during eighties in Madagascar, offers opportunities for improving rice production in a variety of situations around the world (Uphoff *et. al.*, 2002), SRI was promoted under the “Integrated Cereal Development Programme -Rice” Extension services in India today have large number of professional extension workers at national, state, district, block and village level. Several programmes to help farmers to adopt the new technologies are in operation throughout the country. Still there exists a wide gap between the technology available at the research level and

its adoption at farmers level, particularly in SRI practices. Keeping this in view, an attempt has been made to study the relationship between various personal, socio-psychological characteristics of the paddy farmers and their extent of knowledge on SRI technology.

## Methodology

The present study was taken up in cuddalore district of Tamil Nadu. Cuddalore district consists of thirteen blocks namely, Cuddalore, Kurinjipadi, Panruti, Annagramam, Parangipettai, Bhuvanagiri, Keerapalayam, Kattumannarkoil, Kumaratchi, Vridhachalam, Kammapuram, Mangalur and Nallur. All the thirteen blocks of the district were selected for the study. A sample size of 300 was considered for the study. The respondents were selected from the thirteen blocks by proportionate random sampling procedure. The data were collected with the help of well structured and pre tested interview schedule.

## Findings and discussion

### Correlation between socio-economic and psychological characteristics of respondents and their knowledge level on SRI technology

An attempt was made to study the relationship of characteristics of respondents with knowledge level on SRI technology in rice cultivation. Correlation analysis was performed to find out the relationship of independent variables with the dependent variable *viz*, knowledge level of respondents on SRI technology in rice cultivation and the results are presented in Table 1.

**Table-1 Correlation between socio-economic and psychological characteristics of respondents with knowledge level on SRI technology**

(n=300)

Var. No.	Variables	'r' value
X1	Age	0.0981NS
X2	Educational status	0.127*
X3	Occupational status	- 0.012NS
X4	Annual income	0.072NS
X5	Experience in rice cultivation	0.158**
X6	Farm size	- 0.042NS

X7	Social participation	0.108NS
X8	Innovativeness	0.152**
X9	Information source utilisation	0.064NS
X10	Farm power possession	0.017NS
X11	Extension agency contact	0.132*
X12	Mass media exposure	0.082NS
X13	Training programmes attended	0.128*
X14	Risk orientation	0.119*
X15	Scientific orientation	0.028NS
X16	Economic motivation	0.028NS
X17	Information sharing behaviour	0.169NS
X18	Decision making pattern	- 0.109NS

\*\* - Significant at 0.01 per cent level of probability

\* - Significant at 0.05 per cent level of probability

NS - Non-significant

The results in Table 1 exhibited that out of eighteen variables considered for the study, only six variables *viz.*, educational status, experience in rice cultivation, innovativeness, extension agency contact, training programmes attended and risk orientation showed positive and significant relationship with knowledge level of respondents. Among the significant variables, experience in rice cultivation and innovativeness were found to be significant at one per cent level of probability. The remaining four variables *viz.*, educational status, extension agency contact, training programmes attended and risk orientation were significant at five per cent level of probability. All the other variables were found to be non-significant.

Educational status showed a positive and significant relationship with knowledge level of respondents. It is quite understandable that the educated persons would have an orientation towards seeking information through all possible sources. As more than forty per cent of the respondents were functionally literates and had medium level of information source utilization behaviour, they would have been exposed to more information sources and hence acquired better knowledge. This finding is in line with the findings of Jeyalakshmi (2008).

Experience in rice cultivation was found to have a positive and highly significant relationship with knowledge level of the respondents. The farmers who possessed more

experience in rice cultivation would have naturally been exposed to all possible sources of information so that they would have gained knowledge on various technologies. This result derives support from the findings reported by Punitha (2005) and Suhirdha (2009).

There was a positive and highly significant relationship between innovativeness and knowledge level of the respondents. It is understandable that the innovative farmers were the first to adopt any new technology. Hence they would have got an urge to get information about the new technology from all possible sources. This might be the probable reason for the existing relationship between these two variables. This finding derives support from the findings of Prakasam (2005) and Suhirdha (2009).

The variable, extension agency contact was found to have a positive and significant relationship with knowledge level of respondents. As SRI was introduced recently, the extension workers were taking more efforts to disseminate the technology to the farmers. As they are the personal sources, they could give information about SRI practices. This may be the reason for the significant relationship reported.

It was found that the variable 'training programmes attended' was positively and significantly related to knowledge level of respondents. It is possible to bring out desirable change in knowledge and skill through training programmes on any aspect. Hence, it is quite obvious that those who have attended more number of training programmes would have acquired better knowledge.

Risk orientation showed a positive and significant relationship with knowledge level. The farmers with high degree of risk would always be ready to adopt the technologies earlier and hence they acquire complete knowledge on recommended practices so as to adopt them. As SRI has been introduced recently, the farmer with certain degree of risk would be ready to execute the technology earlier at field level when compared to others. For better execution, they need complete knowledge. The medium level of risk orientation would have enabled them to acquire better knowledge. This finding is in line with the findings of Suhirdha (2009).

The rest of the characteristics *viz.*, age, occupational status, annual income, farm size, social participation, information source utilisation, farm power possession, mass media exposure, scientific orientation, economic motivation, information sharing behaviour and

decision making pattern showed non-significant relationship with the knowledge level of respondents on SRI technology in rice cultivation.

## Conclusion

It may be concluded that among eighteen variables considered for the study, only six variables *viz.*, educational status, experience in rice cultivation, innovativeness, extension agency contact, training programmes attended and risk orientation showed positive and significant relationship with knowledge level of respondents. These six variables were considered to be the crucial variables influencing the knowledge level of respondents in rice cultivation.

## References

- Jeyalakshmi, M. 2008. “An Analytical Study on Knowledge and Adoption of Farm Women on Sustainable Agricultural Technologies in Paddy and Onion in Dindigul Districts of Tamil Nadu”, Unpublished Ph.D (Ag.) Thesis, Annamalai University, Annamalai Nagar.
- Prakasam, T. 2005. Knowledge level and extent of Adoption of Arecanut Growers of Salem District”, Unpublished M.Sc. (Ag.) Thesis, Annamalai University, Annamalai Nagar.
- Punitha, P. 2005. “Adoption of Herbicide Technology in Paddy and Sugarcane Cultivation in Perambalur District”, Unpublished M.Sc. (Ag.) Thesis, Annamalai University, Annamalai Nagar.
- Suhirdha, P. 2009. A Study on Adoption of Pest Management Technologies by Tomato Growers in Mettur Taluk of Salem District. Unpublished M.Sc. (Ag.) Thesis, Annamalai University, Annamalai Nagar.
- Uphoff, N. 2000. Opportunities for Raising Yields by Changing Management Practices: the System of Rice Intensification in Madagascar. *Agro-ecological – Innovations: Increasing Food Production with Participatory Development*, p.145-161.