

# PROFILE CHARACTERISTICS OF SRI FAMERS IN NAGAPATTINAM DISTRICT OF TAMIL NADU

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#### ABSTRACT

Rice is an important staple food crop for the Asian region and India is center of origin with a wide variability. As rice alone consumes 63% of the total irrigated area in Tamil Nadu state, necessitated the need for developing the alternative methods of its cultivation to reduce the stress on this dwindling natural resource. SRI (System of Rice Intensification) is a suitable alternative method of cultivating rice which not only reduces water usage and external inputs like fertilizers but also has a better yield potential. In spite of many concerted efforts since 2000, by Dr. Thiyagarajan of Tamil Nadu Agricultural University, Department of Agriculture, and NGOs, the spread of SRI with in Tamil Nadu was relatively slow. The results of the study revealed that, majority of the respondents belonged to middle age group (56.67%) having middle school level of education (25.00%) with medium farming experience (64.00%). Majority of the respondents had undergone trainings (56.67%), had medium level of economic orientation (72.50%), risk orientation (75.00%), scientific orientation (64.00%), management orientation (65.83%), innovativeness (59.17%) and achievement motivation (65.00%).

KEY WORDS: Profile characteristics, SRI technology, SRI farmers

#### **INTRODUCTION**

India is one of the largest producers of Rice in the world; however, Rice cultivation in recent times has suffered from several interrelated problems. Increased yields achieved during the green revolution through input intensive methods of high water and fertilizer use in wellendowed regions are showing signs of stagnation and concomitant environmental problems due to salinization and water-logging of fields (the grain bowls of India Punjab and Haryana are some of the areas worst affected). In other parts there have been social conflicts between water users in several canal-irrigated areas due to the water intensive nature of the crop. In the meantime in Tamil Nadu farmers started to adopt System of Rice Intensification (SRI) by replacing the conventional method.

### **MATERIAL AND METHODS**

Ex-post facto research design was followed in the investigation. The study was conducted in Nagapattinam district of Tamil Nadu. Nagapattinam district was purposively selected for the study because it is one of the leading rice producing districts of Tamil Nadu as it lies in the Cauvery Delta zone and also it ranked first in SRI paddy coverage for the period of 2011-12 in the Tamil Nadu. Out of eleven blocks from the Nagapattinam district four blocks were purposively selected to represent the north and southern parts of the districts according to the highest area under SRI. Three villages from each selected block were purposively selected according to the highest area under SRI. From each village 10 farmers were selected by following simple random sampling procedure, thus making a total of 120 respondents. Extent of adoption of SRI technology by the respondents was studied by a wellstructured and pre-tested schedule developed for the study. The study was carried out during the year 2011-12.

## **RESULTS AND DISCUSSION**

The SRI farmers were distributed into different categories based on their selected profile characteristics and the results were presented in the Table 1.

#### Age

Majority (56.67%) of the respondents were found in the middle age category followed by 31.67 per cent in the old age category and only 11.66 per cent fell under young age category. From the above findings, it could be

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understood that majority of the respondents were found to be in middle and old age categories. The possible reason might be that a large portion of the younger generation didn't prefer agriculture as they turned towards industries, IT and management. The above findings corroborate with the findings of Santhi (2006).

## Education

Majority of the respondents were educated upto middle school level (25.00%) and high school education (24.17%), followed by higher secondary (15.83%) and primary school (14.17%) education. Notably 11.67 per cent of the respondents were functionally literate. Few respondents (5.83%) belonged to collegiate. A meagre portion (3.33%) of them was illiterate. This might be because of the availability of the higher secondary schools and Arts and Science College in the study area. Only onetenth of the respondents fell under functionally literate to illiterate level of education. Most of them found to be middle to old aged. This could have been the possible reason for the various education levels observed in the study.

# **Farming Experience**

Majority (64.17%) of the SRI farmers had medium level of farming experience followed by high (18.33%) and low (17.50%). This might be due to the fact that majority of the respondents belonged to middle and old age categories. Hence most of the respondents had medium to high level of farming experience.

# Land Holding

From Table 1 it is evident that 42.50 per cent of the respondents were medium farmers followed by semimedium (24.16%), small (20.00%), marginal (6.67%) and big (6.67%) farmers. The possible reason might be that in the recent times most of the families are of nuclear system and joint family system is gradually fading away. This resulted in fragmentation of land among the family members. As the capital investment in farming was rising, more and more farmers showed interest towards the conversion to commercial ventures.

# **Training Undergone**

Majority (56.67%) of the respondents had received only one training followed by two trainings (35.00%), no training (6.67%) and three and above (1.67%) trainings. The possible reason for this might be that the duration of the training was half day or one day. Most of the farmers were trained at least once. Efforts made by State Department of Agriculture to conduct effective training programmes at local level, had attracted even old aged farmers. Hence most of the respondents belonged to medium to low training undergone categories. There is every need on the part of the officials and extension agencies to organize more number of need based trainings to encourage the participation of all age groups of farmers.

## **Social Participation**

The little more than three-fourth (78.33%) of the respondents had medium level of social participation followed by low (15.00%) and high (6.67%) levels. It could be concluded that, very few SRI farmers had enrolled as members in Self-Help Groups, Agricultural co-operative credit societies, Milk co-operative societies and Gram panchayat and others were concentrating on their own business. This might be the possible reason for their medium to low level of social participation. This result is in agreement with Santhi (2006).

## **Extension Contact**

Majority (67.50%) of the respondents had medium extension contact followed by high (18.33%) and low (14.17%) levels of extension contact. The possible reason for the medium level of extension contact could be that majority of the respondents were lured by the subsidies. A sizable portion of them who lie in first two of the adopter categories were keen in keeping touch with department officials and they had high level of extension contact. Extension machinery had been forced to take this programme to the farmers and the performance of them was quite significant in taking the SRI to them. In fact the extension personnel played major role in this regard and their work was laudable. This might be the possible reason for the medium followed by the high levels of extension contact. This result is in agreement with Ramesh and Govind (2004).

### **Economic Orientation**

Nearly three–fourth (72.50%) of the SRI farmers had medium level of economic Orientation followed by low level (18.33%) and high level (9.17%) of economic Orientation. This might be due to the common truth that the respondents had the urge for more monetary profit per unit area and naturally that would have motivated the farmers to adopt SRI cultivation practices. This finding is in accordance with the findings of Kiran and Shenoy (2010).

### **Scientific Orientation**

More than half (64.17%) of SRI farmers possessed medium level of scientific orientation followed by low (20.00%) and high level (15.83%) of scientific orientation. This might be due to the respondent's level of education, the number of trainings attended and extension contact. These factors ultimately lead to more faith on technology and contribute for medium to high level of scientific orientation. This finding is in line with the findings of Sangeetha (2005).

### **Management Orientation**

Majority (65.83%) of the respondents had medium management orientation followed by low (19.17%) and high (15.00%) levels of management orientation. Management orientation is the ability of the farmer in scientific farm management in planning, production and marketing. Majority of the farmers being medium to old aged were having higher levels of farming experience. From the vast experience of farming they were good in planning and production aspects of farm management. This could be the probable reason for the medium level of management orientation. But it was observed that majority did not know about planning, marketing and record keeping aspects of farm management. This result is in agreement with Ramu (2005).

### Innovativeness

Majority (59.17%) of the respondents had medium innovativeness followed by high (22.50%) and low (18.33%) levels of innovativeness. The possible reasons might be that majority of the farmers involved in farming were of medium to old aged category and further innovativeness is generally associated with younger age. But it was observed that the farmers because of their better educational status and extension contact were curious about SRI cultivation.

### **Achievement Motivation**

Majority (65.00%) of the respondents had medium achievement motivation followed by low (19.17%) and high (15.83%) levels of achievement motivation. The probable reason for this might be that majority of the SRI farmers had medium level of education. Since it is a new technology, the respondents who had experienced the benefits of this technology previously might have opted for SRI cultivation. This finding is in line with Ramu (2005).

### **Mass media Exposure**

Majority (66.66%) of the respondents had medium mass media exposure followed by low (24.17%) and high (9.17%) levels of mass media exposure. This trend might be due to the fact that majority of the respondents were small farmers with medium level of education. Though almost every household possessed television, they were not keen on watching television. Like this they did not pay much attention to print media despite the availability at lower rate. Hence they showed meagre interest towards print media, educational films, and agricultural programmes in television etc. This finding is in line with Hemanthkumar (2002).

### **Risk Orientation**

Majority (75.00 %) of the SRI farmers had medium level of risk orientation followed by low (14.17%) and high (10.83%) levels of risk orientation. This shows that the young, educated and interested respondents with medium levels of scientific orientation and innovativeness were ready to face the risk while adopting the SRI technology. This finding is line with the findings of Subramanyam (2002).

# CONCLUSION

The results showed that majority of the respondents belonged to middle age group having middle school level of education with medium farming. Majority of the respondents had undergone trainings, had medium levels of economic orientation, risk orientation, scientific orientation, management orientation, innovativeness and achievement motivation.Hence, there is an immediate need to promote SRI method of cultivation, focusing more on imparting the principles of SRI during the training programmes and demonstrations, skill development among rural youth and farmers.

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S. No.	Category	Frequency	Percentage	Mean	S.D.
1.	Age	· · ·			
1.	Young (35 and below)	14	11.66		
2.	Middle (36 to 55 years)	68	56.67		
3.	Old (56 years and above)	38	31.67	-	-
	Total	120	100.00		
2.	Education				
1.	Illiterate	4	3.33		
2.	Functionally illiterate	14	11.67		
3.	Primary school	17	14.17		
4.	Middle school	30	25.00		
5.	High school	29	24.17	-	-
6.	Higher secondary	19	15.83		
7.	Collegiate	7	5.83		
	Total	120	100.00		
3.	Farming Experience				
1.	Low	21	17.50		
2.	Medium	77	64.17		
3.	High	22	18.33	23.52	14.28
	Total	120	100.00		
4.	Land Holding				
1.	Marginal farmer	8	6.67		
2.	Small farmer	24	20.00		
3.	Semi-medium farmer	29	24.16		
4.	Medium farmer	51	42.50	-	-
3.	Big farmer	8	6.67		
	Total	120	100.00		
5.	Training Undergone				
1	No training	8	6.67		
2	One training	68	56.67		
3	Two trainings	42	35.00	2.08	1.69
4	Three and above trainings	2	1.66		
•	Total	120	100.00		
6.	Social Participation		100000		
1.	Low	18	15.00		
2.	Medium	94	78.33		
3.	High	8	6.67	5.55	2.46
	Total	120	100.00		
7.	Extension contact	•			
1.	Low	17	14.17		
2.	Medium	81	67.50		
2. 3.	High	22	18.33	6.55	1.94
	Total	120	100.00		

Table 1. Profile characteristics of SRI farmers

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S. No.	Category	Frequency	Percentage	Mean	S.D.
8.	Economic motivation				
1.	Low	22	18.33	25 19	1.87
2.	Medium	87	72.50		
3.	High	11	9.17	25.18	
	Total	120	100.00		
9.	Scientific orientation				
1.	Low	24	20.00	22.51	2.88
2.	Medium	77	64.17		
3.	High	19	15.83		
	Total	120	100.00		
10.	Management orientation				
1.	Low	23	19.17	46.95	3.50
2.	Medium	79	65.83		
3.	High	18	15.00		
	Total	120	100.00		
11.	Innovativeness				
1.	Low	22	18.33	18.53	2.12
2.	Medium	71	59.17		
3.	High	27	22.50		
	Total	120	100.00		
12.	Achievement Motivation				
1.	Low	23	19.17		2.13
2.	Medium	78	65.00	10.60	
3.	High	19	15.83	19.60	
	Total	120	100.00		
13.	Mass Media exposure				
1.	Low	29	24.17		1.44
2.	Medium	80	66.66	4.62	
3.	High	11	9.17		
	Total	120	100.00		
14.	<b>Risk Orientation</b>				
1.	Low	17	14.17		1.46
2.	Medium	90	75.00	15.02	
3.	High	13	10.83		
	Total	120	100.00		

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