EMPIRICAL ANALYSIS OF AWARENESS AND ADOPTION OF PADDY PRODUCTION TECHNOLOGIES IN THIRUVANNAMALAI DISTRICT

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ABSTRACT

Tamil Nadu is one of the biggest producers of Paddy. The major food crop paddy is grown wide because rice is the staple food of the state. High variability exists in rice yields across the state. The yield variations indicate that there exists always a need to tap the high yields with productive growth parameters. Therefore the present study was taken up with the objectives of analysing the awareness, adoption and reasons for low yield in paddy crop in Thandrapattu block of Thiruvannamalai District. Five villages from Thandrapattu block viz., Pudurchekkadi, Perungolathur, Sathanoor, Radhapuram and Chinniyampettai were taken for the study. The sample size consists of 60 farmers.

While analysing the results it is observed that the variety is ADT – 43, for that the season is well known and majority of the farmers adopting the practice of sowing in correct season (91.67 per cent) and 33.67 per cent of farmers were not practicing the seed treatment technology. Majority of the farmers are not strictly adhering to the recommended age of seedlings (91.67). Spacing for the growing of paddy is also least concerned (80 per cent) by the respondents and 50 per cent of the paddy farmers only know the benefits of crop rotation. Further it is observed that non-availability of HYV seeds and using of age old seedlings were the reasons for low yield in paddy.

The low yield or the bridgeable yield gap could be addressed through ensuring the availability of HYV seeds at proper time, conducting mass awareness campaign on latest production technologies in paddy, organizing method demonstration and result demonstration in farmer's holdings with HYVs and latest production technologies and creating facilities to have quicker access to critical inputs at right time.

KEYWORDS: Awareness & Adoption in Paddy Production Technologies

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INTRODUCTION

Tamil Nadu is one of the biggest producers of paddy. The state is historically known for its agriculture from ancient times. The major food crop paddy is grown wide because rice is the staple food of the state. But there exists a high variability in rice yields across the state. The rice growers still observing the age-old practices instead of new interventions. The potential of varieties are always enhanced by the precise technologies adopted by the farmers in raising the crop. The awareness plays a major role in adopting any technology with the scope of gaining more returns. In paddy production technologies there exist inventions from the variety sown to harvest of the crop. The awareness and adoption level of the paddy growers are always influenced by their profile characteristics. As the awareness improves the adoption rate will also automatically influenced. This will lead to meet out the yield variations in the paddy crop and enhance the crop to attain its potential yield.

With this view, this study on awareness and adoption of paddy production technologies in Thiruvannamalai District in was taken up with the following objectives.

Specific Objectives

- To analyse the profile characteristics of paddy growers.
- To ascertain the Awareness and adoption levels of paddy growers on paddy cultivation
- To analyse the reasons for low yield in paddy crop.

METHODOLOGY

Agriculture and silk saree weaving are the major two enterprises in Thiruvannamalai District. More than one lakh hectares of land is under paddy cultivation in the District. In Thiruvannamalai, there are 12 taluks. Among them we have purposefully selected the Thandampattu taluk where the major crop cultivated is paddy. There are forty-seven revenue villages in Thandampattu block. Among these, five villages of having more area under paddy cultivation were selected. The selected villages were Pudurchekkadi, Perungolathur, Sathanoor, Radhapuram and Chinniyampettai.

A well-structured interview schedule was prepared and pre tested among the farmers and data were collected from the paddy growers. The independent variables identified for the study were measured using scoring procedures.

FINDINGS AND DISCUSSION

1. Profile Characteristics of Paddy Growers

In social science, it is essential to know about the farmer's characteristics which would serve as a base for clear and thorough understanding about the background of farmers. The information about these characteristics would help us for deriving exact results for data correlation. In the study it is observed that large number of respondents were having the secondary level of education (33.33 per cent) and having agriculture as their Primary occupation (73.33 per cent). It could be further observed that no members of the farmers were involved in social participation (70 per cent) and 33.33 per cent of farmers are having contact with extension agency and their purpose of contact is for agriculture alone (90 per cent). It also inferred that 93 per cent of the respondents never heard the radio, 21 per cent read the newspaper once in a week, 91.67 per cent of the farmers never read the magazine and 43.33 per cent of the farmers visited agricultural exhibition more than 3 in a year.

2. Awareness and Adoption Level of Paddy Growers

Table 1

S. No	Particulars	Aware		Adoption	
		Aware	Un aware	Adopted	Not Adopted
1.	Season	100	0.00	91.67	8.33
2.	Varieties /Hybrids	100	0.00	100	0.00
3.	Seed treatment with bio inoculants	73.33	26.67	33.33	66.67
4.	15 days- transplanting	86.67	13.33	08.33	91.67
5.	Machine transplanting	98.33	01.67	15.00	85.00
6.	Spacing	98.33	01.67	20.00	80.00
7.	Seedling per hill	93.33	06.67	38.33	61.67
8.	Intermittent irrigation	90.00	10.00	25.00	75.00

9.	Recommended dose of fertilizer application: 150:50:50 NPK kg/ha	56.00	44.00	18.33	81.67
10.	Micronutrient spray	48.33	51.67	25.00	75.00
11.	Conoweeding	66.67	33.33	08.33	91.67
12.	Herbicide application	93.33	06.67	28.33	71.67
13.	IPM practices for pest and diseases	95.00	05.00	25.00	75.00
14.	LCC based fertilizer application	13.33	86.67	00.00	100.00
15.	Harvester (Combined harvester)	100.00	00.00	95.00	05.00
16.	Crop rotation	96.67	03.33	50.00	50.00

Here, the variety is ADT – 43, for that the season is well known and majority of the farmers adopting the practice of sowing in correct season (91.67 per cent) and 33.67 per cent of farmers were not practicing the seed treatment technology. Majority of the farmers are not strictly adhering to the recommended age of seedlings (91.67). Spacing for the growing of paddy is also least concerned (80 per cent) by the respondents and 50 per cent of the paddy farmers only know the benefits of crop rotation.

3. Reasons for Low Yield in Paddy Crop

The farmers' responses against the reasons for low yield were counted as percentage and the results presented in Table 3.

Table 2: Reasons for Low Yield in Paddy Crop

S. No	Particulars	Percent
Technological Aspects		
1.	Non availability of suitable HYV seeds	55.67
2.	Using Age old seedlings	29.00
3.	Lack of information about pest and diseases	12.33
4.	Lack of awareness or knowledge of about certain technologies	04.00
5.	Lack of conviction in the new technology	04.00
6.	Micro nutrient deficiency in Soil	02.00
Institutional Aspects		
7.	Extension agency contact at village level	50.00
8.	Unaware of services offered by the govt.	50.00
Resources		
9.	Non-availability of seed at proper time	43.33
10.	Lack of irrigation facility	20.00
11.	High cost of fertilizers	16.00
12.	High cost of pesticides	12.00
13.	High cost of Labour	04.67
14.	Using own seeds for a number of years	04.00

It is observed from table 2, that under technological aspects non-availability of high yielding variety seeds (55.67 %), Using Age old seedlings (29.00%) and lack of information about pest and diseases (12.33%) were reported by the paddy growers as the reasons for low yield. Further, it is observed that weak extension activities at village level and lack of awareness on services offered by the Government are the institutional related constraints. Under resources, Non-availability of seed at proper time and Lack of irrigation facility are the major constraints faced by the paddy growers.

CONCLUSIONS

The reasons for low yield in paddy could be addressed through ensuring the availability of good quality HYV seeds at proper time to the farmers, conducting mass awareness campaign on varieties and improved production technologies in paddy, organizing method demonstration and result demonstration in farmer's holdings and creating facilities to have access to critical inputs at right time.

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