

ASSOCIATION OF THE PADDY GROWERS' SOCIO-PERSONAL TRAITS WITH THEIR ADOPTION LEVEL ON RECOMMENDED PLANT PROTECTION PRACTICES IN WEST BENGAL

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ABSTRACT

The present study was undertaken to ascertain the level of adoption of the recommended plant protection practices of paddy growers and find out the association of the paddy growers' socio-personal traits with their adoption level. The study was conducted in Midnapur district of West Bengal. The study indicates that paddy growers having larger size of land holding, better SES and more frequent contact with extension personnel possess higher level of adoption on the recommended plant protection practices for paddy cultivation, while caste, occupation, education and mass media exposure did not show any significant association with the adoption level of recommended plant protection practices of paddy growers. Based on the findings, it may be recommended that the extension personnel should strengthen their efforts to educate and convince the paddy growers on recommended plant protection practices with demonstrations, exhibitions, field trips, distribution of literature in local dialect and other extension communication methods.

INTRODUCTION :

Rice occupies a lion's share in the total food grain production in India. It is grown extensively as the most important food crop. The state, West Bengal holds first position in our country by occupying an area of 5.094 million hectare and having total rice production of 13.317 million tonnes. However, the productivity of the crop is lower than other states namely Tamil Nadu, Punjab, Andhra Pradesh, Goa, Karnataka and Manipur in the duration of 1998-99. Tamil Nadu has highest productivity (3443 kg/ ha) whereas the productivity of paddy in West Bengal is only 2255 kg/ha (Anonymous, 2000).

Although there could be many factors and conditions responsible for the low productivity of any crop but control of insect-pests and diseases is the major one. According to Bhan & Mishra (2001) losses caused by various pests in India are - weeds 33 per cent, plant diseases 26 per cent, insect 20 per cent, miscellaneous pests 8 per cent, storage pests 7 per cent and rodents 6 per cent. Thus, the crop losses due to weeds, insect pests and diseases are tremendous and to minimize them there is an immediate need. With this view in mind, the present study was undertaken with the following specific objectives :

To ascertain the paddy growers' existing level of adoption of the recommended plant protection practices.

To find out the association of the paddy growers' socio-personal traits with their adoption level.

METHODOLOGY :

The study was conducted in West Bengal. Multi-

stage purposive sampling technique was used for selection of area and respondents. At the first stage of sampling, district Midnapur (presently two districts) was purposely selected. This district is further divided agriculturally into two districts, Midnapur (East) and Midnapur (West). Two blocks were randomly selected (one from each district) at the second stage of sampling. A sample of 50 respondents was then randomly selected from each of the two selected villages, comprising of small, medium and big farmers proportionate to their population.

RESULTS AND DISCUSSION :

The Table 1. presents the finding on the association of paddy growers' socio personal traits with their adoption level. The values of correlation co-efficient express the nature and extent of relationship.

The table under reference shows that size of land holding ($r = 0.225$) and socioeconomic status ($r = 0.293$) had positive and highly significant association (at 0.01 level of probability) with the adoption level of paddy grower whereas extension contact

Table 1. Correlation coefficient between paddy growers' socio-personal traits and adoption level

S. No.	Socio-personal traits	Correlation coefficient ('r' values)
1.	Age	-0.069
2.	Caste	0.153
3.	Occupation	0.084
4.	Education	0.046
5.	Size of land holding	0.255**
6.	Social participation	-0.084
7.	Socio-economic status (SES)	0.293**
8.	Extension contact	0.249*
9.	Mass media exposure	0.023

0.05 level of probability). This indicates that paddy growers having larger size of land holding, better SES and more frequent contact with extension personnel possess higher level of adoption on the recommended plant protection practices for paddy cultivation. It is also implies that size of land holding and socio-economic status (SES) were comparatively more important in affecting paddy growers' level of adoption than the variable of extension contact.

On the other hand, caste ($r = 0.153$), occupation ($r = 0.084$), education ($r = 0.046$) and mass media exposure ($r = 0.023$) did not show any significant association with the adoption level of paddy growers indicating that these variables did not play any important role in affecting the adoption level of paddy growers on recommended plant protection practices for paddy cultivation. The findings are in agreement with Pandey (1991) who reported that caste did not affect adoption level of recommended farming practices. Similarly, Singh (1984) reported that there was no significant association between caste and adoption of recommended farm practices in paddy cultivation.

Age ($r = 0.069$) and social participation ($r = -0.084$) had non-significant negative correlation with the adoption level of paddy growers. It might be that the old

age farmers due to traditional and conservative culture and practicing more time and effort on social activities rather than concentrating on adoption of recommended plant protection practices, indicate lower level of adoption. Similar results were also noticed by Kher *et al.* (1991) who observed that age and social participation did not affect the adoption level of improved cultural practices of almond.

CONCLUSION :

Among the nine different independent variables, size of land holding and socio economic status were found to be significant at 0.01 level of probability, whereas extension contact was found to be significant at 0.05 level of probability and other variables did not cause any significant variation in the adoption level of farmers. Since, the variables are significant to cause variation in the adoption level of paddy growers, the extension agency should emphasize them in their extension programme as the important components. The extension personnel are required to strengthen their efforts to educate and convince the paddy growers on recommended plant protection practices with demonstrations, exhibitions, field trips, distribution of literature in local dialect and other extension communication methods.

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