IMPACT OF SPECIAL FOODGRAINS PRODUCTION PROGRAMME - AN ANALYSIS

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ALBSTRACT

An expost facto study was conducted with the objective of analysing the knowledge and adoption levels of beneficiaries of the Special Foodgrains Production programme. The results revealed that 92.50 per cent of beneficiaries reported low yield gap in paddy production. Of the twenty one variables, sixteen showed significant and positive relationship towards extent of adoption. These variables significantly contributed to 68.11 per cent variation in their knowledge level and 50.05 per cent variation in their extent of adoption of rice technologies.

KEY WORDS : Extent of Adoption, Yield Gap, Potential Yield, SFPP (Special Foodgrains Production Programme), Innovativeness and Risk Orientation

INTRODUCTION

Rice being the principal crop in Tamil Nadu, the exploitation of the inherent potential of the currently available varietal technology remaining undertapped in the irrigated areas, stabilisation of yield through insulation of future varieties from major pests and diseases, intensification of cropping and maximisation of yield levels of diverse rainfed ecosystems are some of the viable technological options available to step up rice production and productivity.

The Special Foodgrains Production Programme (SFPP) has been implemented in Tamil Nadu from 1988 - '89 onwards to increase the rice production and productivity in eight rice growing districts of the state. This study was formulated to critically analyse the impact of this special programme in accomplishing the task of increasing rice production at farmers' level with the specific objective of studying the knowledge and adoption levels of the beneficiaries of the programme and the relationship of their characteristics with knowledge, extent of adoption and yield gap.

RESEARCH METHODOLOGY

Among the various districts of the state in which the SFPP was implemented, the South Arcot was selected for the study due to the familiarity of the researcher with the study area. With an area of nearly three lakh hectares under rice, this district is second only to undivided Tanjore district. Out of the thirteen agricultural sub-divisions in South Arcot, (all these were implementing the scheme), the Chidambaram sub-division was chosen as the study area as it had maximum area under rice crop. Among the three blocks in Chidambaram, Keenapalayam block with maximum area under rice was selected. In accordance with the study objectives, it was necessitated to select the farmers who had availed the subsidies and other benefits provided under SFPP Scheme. Accordingly, applying random sampling procedure, 120 respondents were selected which formed the sample size for this expost facto study.

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Table 1.   Rice Yield Gap among SFPP Beneficiaries

Gap Levels	Number	Per cent
No Yield Gap	3	2.5
Low Yield Gap		
a) Less than 500 Kg/ac	83	69.17
b) 501 to 1000 Kg/ac	28	23.33
High Yield Gap		
a) 1001 to 1500 Kg/ac	6	5.00
b) 1501 to 2000 Kg/ac	-	-

RESULTS AND DISCUSSION

Yiled Gap Recorded by the Beneficiaries of SFPP

The yield gap was divided into **yield gap I** and **yield gap II**. The former represents the difference between experiment station yield and potential farm yield. The later represents the difference between potential and actual farm yield. The maximum paddy yield actually obtained by a farmer (or) farmers in the study area was assessed for 1990 - 91 samba season and taken as potential yield for calculating this yield gap.

The incidence of yield gap was examined. For this, yield gaps were classified as 1) No yield gap 2) Low yield gap (a) Below 500 kg/ac (b) Between 501 to 1000 kg/ac and 3) High yield gap (a) Between 1001 to 1500 kg/ac (b) Between 1501 to 2000 kg/ac.

Rice yield Gap among SFPP Beneficiaries

The Table:1 reveals that majority of the SFPP beneficiaries (92.50 per cent) reported low yield gap, only 2.5 and 5.0 per cent had no yield gap and high yield gap respectively. In confirmity with this, Rajagopalan (1986) stated that 68.50 per cent of rice growers had low yield gap and his is also in agreement with the findings of Yadava and Gangwar (1986)

Relationship of Socio-personal, Psychological and Economic characteristics of Respondents with their knowledge, Extent

The Table: 2 reveals that out of the twenty characteristic variables studied, the correlation values of sixteen characteristics namely educational status, occupational status, annal income, farm structure, farm power, material possession, livestock possession, irrigation structure, cropping pattern, social participation, mass media exposure, economic motivation, scientific orientation, risk orientation, innovativeness and awareness of SFPP of beneficiaries were positive and highly significant in their relationship with knowlege on improved rice technologies.

Correlation of Characteristics of Beneficiaries of SFPP with Knowledge

Educational status was found to have a positive and significant relationship with knowledge about rice technologies. Hence, this implies that higher the education, greater would be their knowledge. Palani (1987) and Rao (1988) also reported such relationship. A farmer with agriculture as primary occupation will have greater motivation and inclination to gain more information on various technologies as against one who is involoved in other occupations along with agriculture. Hence, occupational status would have shown positive and significant relationship with knowledge level in this study. This is in confirmity with the finding of Jeyakrishnan (1984). Non-availability of finance will limit the farmers from adopting ractices as in recent days, the

Table 2. Correlation of Characteristics of Beneficiaries of SFPP with Knowledge

Sl. No.	Variables	'r' value
1.	Age	0.0278 NS
2.	Educational status	0.4758 **
3.	Nature of family	0.0236 NS
4.	Farming experience	0.0774 NS
5.	Occupational status	0.3963 **
6.	Annual income	0.4930 **
7.	Farm structure	0.5273 **
8.	Farm power	0.5941 **
9.	Material possession	0.4854 **
10.	Livestock possession	0.5067 **
11.	Irrigation structure	0.5242 **
12.	Cropping pattern	0.3140 **
13.	Social participation	0.4594 **
14.	Contact with extension agency	0.1559 NS
15.	Mass media exposure	0.5861 **
16.	Economic motivation	0.4012 **
17.	Scientific orientation	0.2444 **
18.	Risk orientation	0.2533 **
19.	Innovativeness	0.5226 **
20.	Awareness of SFPP	0.7273 **

** Significant at 0.01 level of probsbility
NS Non Significant

inputs for agriculture have become costlier. Under such conditions, a farmer with sufficient annual income alone can afford to adopt all the recommended practices. Hence, this would have made the farmer in accruing more knowledge. The study of Karthikeyan (1984) also observed such relationship between annual income and knowledge.

Relationship of Characteristics of Respondents with their Extent of Adoption

Of the twenty one variables studied, sixteen showed significant and positive relationship towards extent of adoption. It is inferred that adoption was the function of their educational status, occupational status, annual income, farm size and power.

irrigation structure, cropping pattern, social participation, contact with extension agency, mass media exposure, economic motivation, scientific and risk orientation, innovativeness, awareness of SFPP and their knowledge about rice production technologies.

The positive and significant relationship was observed between the knowledge level of beneficiaries and their extent of adoption. Knowlege is a pre-requisite for adoption, has been proved in this and is in confirmity with the findings of Rao (1988), Seetharaman (1988) and Athimuthu (1990).

Contribution of Characteristics of Beneficiaries towards their Knowledge level and Extent of Adoption:

The twenty independent variables of beneficiaries together significantly contributed to 68.11 per cent variation in their knowledge level and 50.05 per cent variation in their extent of adoption of rice technologies. The partial regression co-efficients of farming experience, innovativeness, awareness of SFPP and knowledge on rice farming were significant. Thus every unit increase in farming experience of the beneficiaries would have resulted in 0.5397 units increase in their extent of adoption. Likewise, for every unit increase in innovativeness, their extent of adoption would have increased by 4.166 units. More so, for every unit increase in awareness of SFPP and knowledge on rice farming would have resulted in increase of 0.7893 and 0.8638 units in their extent of adoption respectively, keeping all the other variables constant.

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