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EDUCATION TRIGGERS UP THE USE OF RECOMMENDED PLANT PROTECTION MEASURES AMONG THE FARMERS

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The Mobile Farm Extension Services (M.F.E.S.) Project was undertaken at Eminabad, District Gujranwala from January 1987 to June 1988 jointly by the Fauji Fertilizer Company Limited (F.F.C.), Pakistan and M/S EniChem Agricoltura S.P.A. of Italy. The main objectives of the project were to create awareness and promote the use of modern crop production technology among the farmers for getting enhanced per hectare yield and income, in addition to finding out the part played by education in this respect. The study area comprised 25 km radius from the project centre. Wheat, rice and sunflower were selected as target crops. The data collected from 150 respondents revealed a positive and statistically significant correlation between their education and use of the recommended plant protection measures by them as compared to the illiterates.

INTRODUCTION

Fauji Fertilizer Company Limited (F.F.C.), Pakistan collaborated with M/S EniChem Agricoltura S.P.A. of Italy for carrying out Mobile Farm Extension Services (M.F.E.S.) Project for enhancing per hectare yield and income of major crops at Eminabad, District Gujranwala; Chak Abdullahpur, Tehsil Lodhran, District Multan; Mandra, District Rawalpindi and Rahim Yar Khan. The total project cost of Rs. 10 crores was equally shared by the Italian Government and F.F.C. The EniChem Agricoltura provided machinery and experts and the F.F.C. experts shared their expertise with the Italians in carrying out the project.

The first six months i.e. from July to December, 1986 were spent for site selection and surveying the socio-economic conditions of the project areas, the crops to be included and the number and size of demonstration plots. The plan execution period was divided into two phases of $1\frac{1}{2}$ years duration each. During the first execution phase, the project was initiated at Eminabad and Chak Abdullahpur. In the second phase, the project was executed at Mandra and Rahim Yar Khan.

MATERIALS AND METHODS

The M.F.E.S. project was carried out at Eminabad, District Gujranwala from January 1987 to June 1988. The project area comprised 25 km radius from the project centre. Wheat, rice and sunflower were chosen as the target crops. Demon-

stration plots of the target crops, each measuring 2 to 5 hectares, were sown in 15 villages. The Agricultural Extension Experts of the project held farmers' meetings during early night hours. Announcements about the place, date and time of the meetings were made well before time. Introduction of the programme, alongwith light cultural entertainment (movies, dramas, folk songs, etc.) was presented to motivate the people. An agronomist was also present in the meetings. Printed material was provided to the audiance at such occasions.

Afterwards, only the selected farmers were invited to the meetings. In addition to discussion, other media like video films, slides, over-head projector, graphs and charts were used to explain and elucidate the activities to be undertaken by them. The project experts obtained soil and water samples from the farmers' fields. On the basis of results of sample analysis, the experts advised the farmers regarding the crops to be sown and the kind and quantity of fertilizers to be used at different stages of crop production.

Ten villages were drawn randomly from the project area for this study. Thereafter, 15 farmers were selected at random from each selected village. Thus study sample consisted of 150 respondents. The relevant data were collected by interviewing the respondents individually with the help of a standardized interview schedule for finding out if there was any relationship between education of the farmers and adoption of the recommended plant protection measures by them. Chi-square test was used for finding out such relationship.

RESULTS AND DISCUSSION

It is evident from the data embodied in Table 1 that there existed a positive and significant relationship between education of the respondents and adoption of the recommended weed control measures in case of wheat and sunflower crops. No doubt, the relationship between education and adoption of weed control measures was positive in case of rice crop as well but it was statistically non-significant. These re-

Table 1. Relationship between education and adoption of weed control by the respondents

Category	Rice			Wheat			Sunflower		
	Adopted	Not adopted	Total	Adopted	Not adopted	Total	Adopted	Not adopted	Total
Literate	37	3	40	62	7	69	14	8	22
Illiterate	58	7	65	34	17	51	4	19	23
Total	95	10	105	96	24	120	18	27	45

Table 2. Relationship between education and adoption of insect/pest control by the respondents

Category	Rice			Wheat			Sunflower		
	Adopted	Not adopted	Total	Adopted	Not adopted	Total	Adopted	Not adopted	Total
Literate	35	5	40	35	34	69	13	9	22
Illiterate	56	9	65	12	39	51	3	20	23
Total	91	14	105	47	73	120	16	29	45

sults were in agreement with the findings of Aslam (1972) and Tarar (1983) who established a positive correlation between education of the respondent farmers and adoption of recommended plant protection and other improved farming practices by them. It also confirmed the observations of Coombs *et al.* (1973) who termed education as one of the extremely vital inputs for rural development.

The data given in Table 2 also revealed a positive and statistically significant correlation between education of the farmers and adoption of the recommended insect/pest control measures of wheat and sunflower by them. However, correlation between education and adoption of the recommended plant protection measures of rice by them was positive but statistically non–significant. These conclusions were quite in consonance with those arrived at by Hussain (1988). He established that education played a significant role in the adoption or rejection of farming innovations by the farmers.

CONCLUSIONS

1. There existed a positive and statistically significant relationship between education of the farmers of the M.F.E.S. Project area and adoption of weed and insect/pest control measures of wheat and sunflower crops by them. Such relationship was also positive but statistically non–significant in case of rice crop.
2. Education accelerated the use of modern crop production technology among the farmers.

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