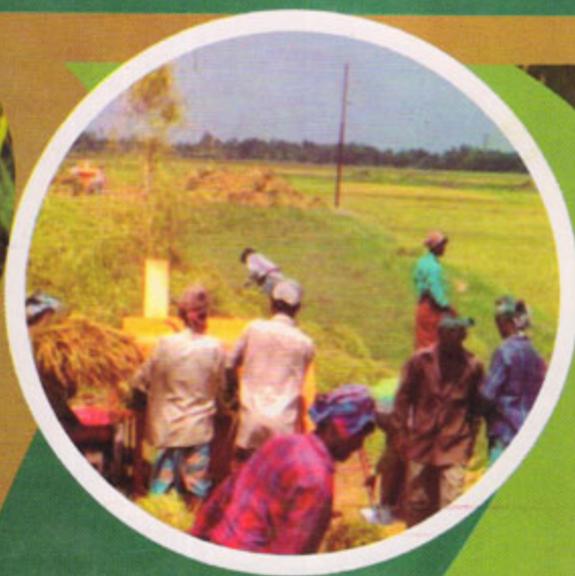


Boro Rice Cultivation and Productivity



S.K. Jha

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CULTIVATION AND
PRODUCTIVITY**

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Preface

Training is a critical input for the rapid transfer of agricultural technology to the user. It aims at helping each individual by way of increased knowledge improved skill and changed attitude enabling him to perform his job with better consequences. There is already a wide gap between the transferable technology and transferred technology as far as the main beneficiaries are concerned. The farmers of lower socio-economic status and of less education having less knowledge about modern agricultural technologies can be well equipped through effective training programmes. Boro rice has a high production potential of 7.5-8.9 tonnes/ha with the possibilities of further increase under better management. Its cultivation is increasing not only in Bihar but in other states also. The strategy for transfer of technology of new innovation of boro rice over the year has not proved to be successful because of gaps in the field application of technology. Farmers need and preferences have remained still un-explored. It needed the training programme tailored to the needs and problems of farmers to be organized to improve their agricultural productivity.

Objective of the Study

The present study has planned to convert the available boro rice technology into production accomplishments with the following objectives:

1. To identify agro-economic, socio-psychological and communicational characteristics of boro rice growing farmers.
2. To assess the training needs in respect of scientific boro rice production as perceived by farmers.
3. To find out the association of the training needs with certain selected agro-economic, socio-psychological and communicational variables.
4. To seek the opinion of farmers in respect of different components of training programme.
5. To develop training strategy for different categories of farmers for increasing boro rice production.

Methodology

Madhubani district of North Bihar was purposely selected for this study. Two blocks namely Madhepur and Lakhnaur were purposively selected. A total of 200 boro rice growing farmers belonging to marginal, small and medium categories were selected for the study on the basis of probability proportionate to the number of farm families under each category.

Summary and Findings

In case of marginal farmers, the highest technological gap was observed in the use of improved seed and their

treatment followed by fertilizer application, sowing methods and irrigation. The highest gap was found in the practice of "fertilizer application" and irrigation by small as well as medium farmers. Improved cultural practices emerged as the top most priority training area as there was common consciousness in all the three categories of farmers in having training in this area as most needed. The finding reveals that use of integrated nutrient management and water management were preferred as a priority area by the marginal, small and medium farmers respectively. In the sub-areas of training, transplanting of boro rice seedling, identification of HYV rice, time of irrigation, method of storage and weed control by manual, chemical and mechanical methods have been given top priority by all the three categories of farmers.

The variables cropping intensity and economic motivation were found to be positively and significantly associated with training need in all the three categories of farmers. The variables farm size, education of the farmer and utilization of personal cosmopolite were positively and significantly associated with training need of marginal farmers in boro rice technology. Technological gap and utilization of mass media were found to be positively and significantly associated with training need of small farmers. Variables farm mechanization, risk orientation, market orientation, utilization of mass media and utilization of personal cosmopolite sources were found to have positive and significant association with training need of medium farmers. Variables farm size, education, of the farmers, economic motivation and cropping intensity emerged as significant contributors towards identifying the training need of marginal farmers. Only three variables namely economic motivation,

cropping intensity and utilization of mass media emerged as powerful predictors in case of small farmers. Variables market orientation, utilization of mass media and economic motivation emerged as powerful predictors in case of medium farmers in boro rice technology. The variables farm size, economic motivation and market orientation were the deciding factors affecting the training need as these variables yielded the highest substantial direct effect on training need of marginal, small and medium farmers respectively.

Organization of training programme in the village during slack season was most preferred by small framers. However, medium farmers preferred the university/ college campus and the time of training before the commencement of crop season. All the three categories of farmers showed their desire for organization of training programme with a group of 20 to 25 farmers to be imparted by the boro rice scientists (university) and also their interaction with farmers at regular intervals after participating in the training programme. In case of single method of training question-answer method was ranked first by the marginal farmers whereas small and medium farmers gave top priority to training by demonstration at the field level. Under combination of three methods, lecture + method demonstration + practice by trainees was ranked first by marginal farmers, whereas small and medium farmers gave top priority for the training methods as lecture + method demonstration + published material. Under combination of four methods, lecture + method demonstration + practice by trainees + published material was ranked first by marginal farmers whereas small and medium farmers gave top priority for training methods as method demonstration + question-answer + tour + published material. Under

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combination of five methods, audio visual aids + practice by trainees + question-answer + published material + tour was ranked first by marginal farmers. Whereas, small and medium farmers gave top priority for training methods as lecture + method demonstration + practice by trainees + tour + publication.

This work would have not been possible without the support of friends and well wishers. The words are inadequate to express my gratitude to them. First of all, I am grateful to my guide Dr. K. Mishra, Additional Director Academic, Lalit Narayan Mishra College of Business Management & Dean, Faculty of Management, BRA Bihar University Muzaffarpur for his precious and imposing guidance and constructive criticism during the course of investigation and preparation of the dissertation.

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I offer my sincere gratitude to my juniors who were associated directly or indirectly during the entire course of this investigation.

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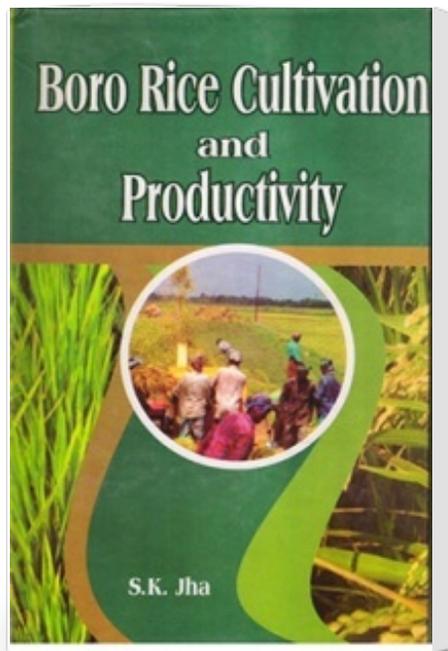
Within the family I owe my hearty appreciation, affection and loving gratefulness to each and every member, who not only encouraged me to carry out and complete this thesis, but also provided me with congenial environment to bring this work to fruition. Particularly I can not forget Nila Jha my wife, Madan Mohan Jha my son, Dharmendra Kumar Thakur my son-in-law, Madhuri Thakur my daughter and Mamta Jha my daughter-in-law. Words are inadequate to express my feeling and gratitude towards them.

S. K. Jha

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