A study on Problems Faced by Rice Growers and Suitable Extension Strategies in Adoption of rice Production Technologies in muzaffarnagar District of Western Uttar Pradesh, India

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Abstract

The study was conducted in district Meerut during 2017-18 to investigate the problems faced by rice growers. To this study, primary data was collected through pre-structured interview schedule using a sample of size one hundred twenty allocating to four block selected purposively, each comprising three villages selected on the basis of highest production area of rice and 10 farmers selected from each village. Thus total sample size 120 farmers were selected for study. The data presented in the above table revealed that maximum rice growers were related to high prices of new seeds, fertilizer & chemical, it was ranked first. The findings revealed that majority of the respondents lack of knowledge about micro nutrients ranked second followed by Lack of knowledge about application plant protection measure was ranked third. The suitable extension strategy for promotion of rice production create knowledge and awareness about improved rice production technology for rice growers through trainings, meetings, demonstrations and media exposure on different aspects of rice production technology in the study area.

Key words: Rice growers, Problems and suitable extension strategies.

Introduction

Rice (Oryza Sativa) is the most important cereal crop of Uttar Pradesh and India. India is an important centre of rice production. The rice is produced on the largest areas in India. It is usually grown as an annual plant, but in the tropics it can be grown as a perennial. Rice generally prefers a warm or tropical climate, with heavy rainfall. But if irrigation facility available, rice could also be grown in drought prone areas or during dry season. Rice is usually a self-pollinating crop, but cross pollination through wind is possible. Rice is individual and primary source of food of the half population of world. A total of 49% calories consumed by the human population come from wheat, maize and rice where 17% are provided by wheat, 9% by maize and 23% are provided by rice (Subudhi et al., 2006). The area production of rice in India 43.79 million hectare, the production of rice is 112.91 million tones and the productivity is about 2578 kg/ha. Rice having cultivated in almost all the states in the India however the 5 major states in rice production are West Bengal, Uttar Pradesh, A.P., Punjab and Tamil Nadu. The west Bengal produces 15 percent of total quantity of rice produced in the country. The production of rice in Uttar Pradesh 13.27 million tonnes, area 5.81 million hectare and productivity 2283 kg/h. (Directorate of Economics & Statistics, DAC&FW-2018).
Methods and material

The study was conducted in Muzaffarnagar District of Western Uttar Pradesh during year 2017-18. Muzaffarnagar district comprise of 09 blocks, out of them four blocks namely Budhana, Morna, Shahpur and Jansath were purposively selected. three villages from each block were purposively selected and 120 rice growers were randomly selected from all villages. Thus total sample size was of 120. The sample was collected through personal pre-structured interview Schedule. The problems related to rice growers respect of adoption of improved production technologies were studying and computing constraints score. Simple comparison has been done on the basis of percentage of the constraints faced by the rice growers. Data were summarized analysed in terms of mean percentage score and rank order. The following formula was used to calculate the percentage:

\[
\text{Percentage} = \frac{\text{Frequency}}{\text{Number of Respondents}} \times 100
\]

Result and Discussion

Table: Frequency and percentage distribution of respondents’ according to various constraints of rice growers.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Constraints</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Rank Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Lack of knowledge about improved high yielding varieties</td>
<td>82</td>
<td>68.33</td>
<td>VI</td>
</tr>
<tr>
<td>2.</td>
<td>Lack of knowledge about application plant protection measure</td>
<td>89</td>
<td>74.16</td>
<td>III</td>
</tr>
<tr>
<td>3.</td>
<td>Unavailability of critical inputs in government’s sales centers</td>
<td>76</td>
<td>63.33</td>
<td>VIII</td>
</tr>
<tr>
<td>4.</td>
<td>High prices of new seeds, fertilizers &amp; chemicals</td>
<td>98</td>
<td>81.66</td>
<td>I</td>
</tr>
<tr>
<td>5.</td>
<td>Poor roads and transportation facilities</td>
<td>65</td>
<td>54.16</td>
<td>X</td>
</tr>
<tr>
<td>6.</td>
<td>Less numbers of information centers</td>
<td>79</td>
<td>65.83</td>
<td>VII</td>
</tr>
<tr>
<td>7.</td>
<td>Untimely availability of electricity</td>
<td>50</td>
<td>41.66</td>
<td>XI</td>
</tr>
<tr>
<td>8.</td>
<td>High irrigation charge</td>
<td>46</td>
<td>38.33</td>
<td>XII</td>
</tr>
</tbody>
</table>
The data presented in the above table revealed that maximum rice growers were related to high prices of new seeds, fertilizer & chemical, it was ranked first. The findings revealed that majority of the respondents lack of knowledge about micro nutrients ranked second followed by lack of knowledge about application plant protection measure, lack of knowledge about bio- fertilizers and lack of knowledge about balance fertilizers ranked third, fourth and fifth respectively. Reported that the lack of knowledge about improved high yielding varieties is ranked sixth followed by less numbers of information centers, unavailability of critical inputs in government’s sales centers, unavailability of organic manure and Poor roads and transportation facilities was ranked seventh, eighth, nine and tenth respectively. The result revealed that least constraints faced by rice growers were untimely availability of electricity and high irrigation charge was ranked eleventh and twelve.

**Suitable extension strategies for removal of constraints in adoption of rice production technologies.**

1. The Govt. Should be provide the subsidy on chemicals & fertilizers, new seeds and irrigation charges so farmers should be more adopted of new production technique so rice production will be increase.

2. Preparation of location specific crop production technologies in different agro climatic zone through demonstrations on farmer's fields and organizing of trainings for farmers including women in improved crop production technology.

3. Provide regular & timely electricity in rural areas for reasonable irrigation of rice to increase the production of rice because rice want regular irrigation.

4. Government regional research station, SAUs, KVKs, NGOs and line department provide timely information to the rice growers through on and off campus training on all aspects of rice production technology.

   The extension personnel should be timely visit at farmers’ fields to provide timely and adequate information to farmers and solve their problems on spot. For the desire impacts better linkages should be within the extension personnel, agriculture department, K.V.Ks., NGOs, line department experts.
Conclusion

It was observed that maximum rice growers faced input related problems like high price of seeds and chemicals and lack of knowledge about micro nutrients. Hence it is suggested to government provide timely technical training & information and subsidy also on fertilizers and chemical about new package and practices of rice production technology.

Reference


