

A Study on the Extent of Adoption of Rice Production Management Practices through Krishi Vigyan Kendra Training by the Farmers' of Keonjhar District in Odisha

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Abstract: *The concept of vocational training in agriculture through Krishi Vigyan Kendra grew substantially due to greater demand for improved agricultural technology by the farmers. The study was carried out in Keonjhar Sadar, Champua, Patna and Harichandanpur blocks of Keonjhar district of Odisha. The four block was purposively selected because of large number of farmers' participation in KVK's training programme. For the selection of respondents, a list of rice trainees of KVK during was prepared. Out of 250 trainees list only 120 farmers' were randomly selected from KVK adopted villages of four blocks. It was found that the majority of the respondent 50.00 percent had medium extent of adoption of rice production technologies. Mean adoption was highest in land preparation (2.85) and nursery raising (2.85) followed by pest and disease management (2.78), transplanting (2.74), fertilizer and manure (2.51) and lowest mean score was water management (2.48), followed by cultural management (2.38) and adoption of variety (2.01).*

Keywords: KVK, Adoption

1. Introduction

Agriculture is a mainstay sector which plays a strategic role in the process of economic development of a country. Government initiated lot of trainings or programmes for the better improvement of agricultural production. Trainings contribute a major role in agricultural production and it is also a fundamental concept in human resource development and it refers to teaching and learning activities. It also helps the members of an organization in attaining knowledge and skills. An Agricultural invention and innovation continuum in all facets of agriculture and allied activities with its effective diffusion helps in increasing production and productivity. There is need for the transfer of improved agricultural technology from research station to the farmers field. In rural India to raise the level of farm productivity, income and employment with application of agricultural innovations an innovative extension education institution KVK was introduced by ICAR. in context with Keonjhar district of Odisha rice is the most prominent crop of the district where rice is grown in 175.37000ha with average yield of 1450kg/ha. KVK has been conducting a number of training programmes on location specific technological aspects of rice crop. The main purpose of the training programme is to accelerate the adoption and diffusion rate of improved rice production technologies.

2. Materials and Methods

The present study was conducted in Keonjhar district of Odisha. The district has 13 blocks, Out of 13 blocks four blocks namely Keonjhar Sadar, Champua, Patna and Harichandanpur blocks was selected because in this block

the number of trained farmers' under KVK trainings is maximum during the last 5 years. Six villages in Keonjhar Sadar, two villages in Patna and one each from Harichandanpur and Champua block on the basis of large number of trainees under rice training programme was selected for the present study. A village wise list of trainees who attended rice training programmes on rice crop was prepared. From this list the farmers was selected from each village through proportionate random sampling method to make a sample of 120 respondents.

Table 1: List of selected villages and number of respondents selected from each villages.

| District | Block | Gram Panchayat | Village | No. of Respondents |
|----------|----------------|----------------|--------------|--------------------|
| Keonjhar | Sadar | Dimbo | Dimirimunda | 5 |
| | | | Dhurudupal | 16 |
| | | Handibhanga | Badaomuni | 12 |
| | | | Sunaripasi | 21 |
| | | Raghunathapur | Kadhadiha | 10 |
| | | Kandarapasi | Kalisui | 14 |
| | Patna | Jamunapasi | Jamunapasi | 17 |
| | | Chinamalipasi | Nuapada | 14 |
| | Champua | Rajia | Maheswarapur | 8 |
| | Harichandanpur | Sunapentha | Nipania | 3 |
| Total | 4 | 8 | 10 | 120 |

3. Result and Discussion

Impact of training in term of adoption of rice production technology.

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Table 2: Mean score of the selected trained farmers' and their adoption of rice production technology

| S. No | Components | Average Mean Score | Rank |
|-------|-------------------------------------|--------------------|------|
| 1 | Land preparation | 2.85 | I |
| 2 | Nursery raising | 2.85 | I |
| 3 | Adoption of Variety | 2.01 | VIII |
| 4 | Transplanting | 2.74 | III |
| 5 | Fertilizer and Manure | 2.51 | V |
| 6 | Water Management | 2.48 | VI |
| 7 | Pest and Disease Management | 2.78 | II |
| 8 | Cultural Management | 2.38 | VII |
| 9 | Harvest and Post harvest Management | 2.57 | IV |

The data presented (Table 2) revealed that the mean adoption score was highest in land preparation and nursery raising (2.85) followed by pest and disease management (2.78), transplanting (2.74), harvest and post harvest management (2.57), fertilizer and manure (2.51), water management (2.48), cultural management (2.38) and lowest mean score was application of adoption of variety (2.01).

Table 3: Distribution of the respondents according to extent of adoption about recommended practices of rice crop

| S. No. | Categories | Adoption Score | Frequency | Percentage |
|--------|------------|------------------------|-----------|------------|
| 1 | Low | below 21.64 | 18 | 15 |
| 2 | Medium | between 21.16 to 26.16 | 72 | 60 |
| 3 | High | above 26.16 | 30 | 25 |
| | Total | | 120 | 100 |

Mean - 23.9 S. D. - 2.26

The data in the table 3 show that out of 120 respondents 60.00 percent had medium adoption level followed by 25.00 percent had low adoption level regarding recommended practices of rice. Similar, findings are also reported by Singh and Varshaney (2010) reported that majority of the respondents 44.17 percent were found to be medium adopter and Rahangdale et al. (2011) found that majority 50.00 percent paddy growers had medium adoption level of paddy cultivation. According to Behera et al. (2014) KVK playing a vital role in disseminating the improved crop production technology and helps in increasing the crop yield. Similarly, Kharatmol (2006) was also reported that majority of the trained respondents 45.00 percent had high level of adoption followed by medium 40.00 percent and low level of adoption 15.00 percent.

4. Conclusion

Majority of the respondents 60.00 percent had medium adoption of recommended rice production technologies. Similarly, Balaso (2011) found that majority 54.00 percent of hybrid rice grower were from medium adoption level. According to Joshi et al. (2012) found that 71.66 percent of the respondents had medium level of adoption followed by 15.83 percent respondents having high level of adoption and only 12.51 percent had low adoption level.

Mean adoption score was highest in land preparation and nursery raising (2.85) followed by pest and disease management (2.78), transplanting (2.74), harvest and post harvest management (2.57), fertilizer and manure (2.51), water management (2.48), cultural management (2.38) and lowest mean score was application of adoption of variety

(2.01). Thus, it can be concluded that the KVK contributed positively in enhancing the adoption level of farmers' in various recommended practices of rice production technologies. KVK practices created great awareness and motivated the other farmers' to adopt appropriate recommended practices. Indeed the effort of the KVK seemed to have a positive effect in enhancing the farmers'. Due to the interventions of KVK scientists in training, demonstrations activities, on farm trials and other extension activities helped in enhancing the knowledge level of farmers which in turn led medium to high adoption of recommended practices of rice production technology.

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