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Indigenous technical knowledge used in paddy cultivation in Rajnandgaon District, Chhattisgarh

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Abstract

The study was conducted in eight villages of Ambagarh Chowki and Dongargaon block of Rajnandgaon district. Rice is the main crop being cultivated. The paper describes the indigenous technologies used by the farmers in paddy cultivation. For preventing the crop from insect/pest attack in the field and during the storage they apply their rich traditional knowledge. They find the indigenous knowledge very useful, therefore indigenous technical knowledge possessed by the farmers shall be identified and farmers shall be helped to understand and exchanged the cheaper, viable and reliable technologies in their areas.

Keywords: indigenous knowledge, traditional pest control, traditional seed storage

Introduction

Indigenous technical knowledge (ITK) is the knowledge that people in given community have developed. It is based on experiment, often tested over long period of use, adapted to local culture and environment, dynamic, changing and lay emphasis on minimizing risk rather than maximizing profits. Knowledge skill and survival strategy of farmers operating with low external inputs have often ignored to promote modern agriculture (Rizwana and Lyajet 2011). Farmers based indigenous traditional knowledge has scientific rational and great deal of relevance for agricultural productivity and sustainability. Indigenous knowledge is found to be socially desirable, economically, affordable, sustainable and involves minimum risk and rural farmers and producers. The failure of modern chemical farming to deliver prosperity to agriculture communities; increase in pest attack of crops, deterioration of soil and water resources, cost to human and animal health has forced scientist to examine whether traditional practices of farmers have any answers to the problems of modern agriculture. Thus the study was, conducted to identify indigenous technical knowledge in paddy cultivation in Ambagarhchowki and Dongargaon block of Rajnandgaon district of Chhattisgarh.

Methodology

Based on the objective of the study, an ex- post facto research design was adopted for the study. The study was conducted in Rajnandgaon district of Chhattisgarh state. Ambagarh Chowki and Dongargaon block wereselected purposively as paddy is main crop being cultivated there. Eight villages from these two blocks were selected, Janakpur, Talwartola, Turregarh and Sitakasa from dongargaon block and Atra, Jhitutola, Dumarghucha and Bararmundi from Ambagarh Chowki block are selected by random sampling method. Twenty farm families are selected randomly from each village thus making the total respondents 160. Firsthand information is collected from the respondents through well-structured schedule.

Results and discussion

Indigenous technical knowledge is possessed by the formers and passed on from generation to generation. Many of the modern agriculture practices based on indigenous agriculture are prevailing in the farming community. The ITK may vary from region to region based on farmers need. It was found in all the eight villages, respondents were making use of the indigenous knowledge for preventing the attack of insects/pests. Farmers were used karra stick with leaves, the size of stick was 2 to 3 metre and it was prepared as one side sharp to placed this in paddy field, the sharp size is placed under the soil and above part with leaves, it was placed in odd numbers like 5,7,9, and 11 per acre. It was found to be very effective with banaced dose of fertilizers and it was used in all eight villages for the control of all insects in paddy field. Mice are serious problem in paddy field as well as during storage of paddy. For the control of mice in paddy field the tender tendu stick were used. The tender tendu stick with bark and two branches (like V shape) was used, it was prepared with upper portion like V

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shape and lower portion is sharp for inserting in soil into the paddy field 5,7,9 and 11 place per ha was used. To save paddy field from bunki (local name of insect), 50 ml of kerosene oil/ sprayer or with cow dung was used and placed five to seven places were used for control of bunki attack. In storage of paddy, Rodents are serious problem to control;

farmers used special structure called 'kothi'. 'Kothi' was prepared with mud or bricks or both. And placed paddy seed under it then it was sprinkled of some neem leaves for the control of (rucy) and finally it was plastered with mud, then it was heavily sprinkled with parosi (small pieces of paddy straw), it was found to be effective in all eight villages.

Table: Different ITKs used by the village peoples

Sl. No	village	ITKs Used	Percent of farmers used
1.	Janakpur	Karra, stick, Tendu Stick, Kothi storage system	90
2.	Talwartola	Karra, stick, Tendu Stick, Kothi storage system	90
3.	Turregarh	Karra, stick, Tendu Stick, Kothi storage system	90
4.	Sitakasa	Karra, stick, Tendu Stick, Kothi storage system	80
5.	Atra	Karra, stick, Tendu Stick, Kothi storage system	70
6.	Jhitutola	Karra, stick, Tendu Stick, Kothi storage system	90
7.	Dumarghucha	Karra, stick, Tendu Stick, Kothi storage system	80
8.	Bararmundi	Karra, stick, Tendu Stick, Kothi storage system	80

Conclusion

In the study area farmers were used ITKs with modern package of practices, found to be very useful, economically as it was available at their fields and it is sustainable because of the use of these ITKs was eco-friendly and not affects the environment. Thus, it can be concluded that indigenous technical knowledge possessed by the farmers shall be identified and given due importance and recognition.

References

1. Joshi CP, Singh BB. Indigenous agriculture knowledge in kumon hills of Uttaranchal, Indian Journal of Traditional Knowledge. 2006; 5(1):19-24.
2. Manjhi SK. Indigeous technical knowledge for control of insect and livestock disorder, Indian Journal of Traditional knowledge. 2008; 7(3):463-465.
3. Rizwana, Lyaqet. Traditional knowledge used in paddy cultivation in Raipur district, Chhattisgarh, Indian Journal of Traditional Knowledge. 2011; 10(2):384-385.