



ISSN (E): 2277- 7695

ISSN (P): 2349-8242

NAAS Rating: 5.03

TPI 2020; 9(11): 415-416

© 2020 TPI

[www.thepharmajournal.com](http://www.thepharmajournal.com)

Received: 15-10-2020

Accepted: 21-11-2020

**RS Karangami**

Ph.D. Students, Department of  
Agriculture Extension, MPKV,  
Rahuri, Maharashtra, India

**GR Uike**

Assistant Professor, College of  
Horticulture, Mulde, Tal. Kudal.  
Sindhudurg, Maharashtra, India

**HJ Wagh**

Assistant Professor, College of  
Horticulture, Mulde, Tal. Kudal.  
Sindhudurg, Maharashtra, India

## Constraints in adoption of recommended rice cultivation practices by rice growers

**RS Karangami, GR Uike and HJ Wagh**

### Abstract

More than a third of world's population, predominantly in Asia, depends on rice as a primary staple food. In Asia, more than 2.8 billion people derive 35 to 60 per cent of their calories from rice. The present study was conducted in Gadchiroli district of Maharashtra state to assess the constraints in adoption of recommended agricultural practices in paddy cultivation which helps to provide feedback to the stakeholders of the programme for its improvement. A sample of 120 farmers were selected by purposive random sampling technique. Thus the total numbers of 120 paddy growers were selected. The major constraints faced by the farmers in adoption of recommended Paddy Production Practices were Non availability of technical knowledge (71.67), lower market price of produce (70.83 per cent), High cost of inputs (69.17 per cent), Shortage of labour (66.67 per cent), Unavailability of fertilizer at proper time (65.00 per cent), Inadequate irrigation facility (62.50 per cent), High cost of machineries (68.34 per cent), and non-availability of hired farm machineries at time of operations (57.50), Lack of result-oriented trainings and demonstrations (50.00 per cent) and Poor economic condition (50.00 per cent) The extension workers and the scientists concerned to conduct awareness campaign as a suitable means to reach greater mass effectively and to create awareness among the paddy farmers to suggest overcoming constraints experienced by the farmers. Government and voluntary agencies should organize demonstration in farmer's holdings to show the worthiness of various practices and thereby to reduce their constraints.

**Keywords:** Constraints, adoption, rice cultivation practices, rice growers

### Introduction

Rice (*Oryza sativa* L.) is one of the most important cereal grains in the world today and serves as a staple food source for more than half of the world's population (Source. [www.thecropsite.com](http://www.thecropsite.com)), particularly in India, China and a number of other countries in Africa and Asia. Rice (*Oryza sativa*) is known as the "King of Cereals" as it is one of the most important cereal crops of the world. Rice is a tropical crop and flourishes well in hot and humid climate. India is facing the challenges of food and fodder production to meet the demand of rising human and cattle population. One of the major causes of this problem is low level of adoption of improved agricultural practices by the farmers. Rice is the primary crop of the district. Gadchiroli district is well-known for the forest resources. Out of the total geographical area, 76% (1133 thousand hectare) is under forest. Silk is also largely produced in the district. Most of the area (85.76%) of district is occupied by the forest and therefore cultivable land is very less. There are three seasons for growing rice in India viz. autumn, winter and summer. The main rice growing season in the country is 'kharif'. It is known as winter rice as per the harvesting time. The sowing time of kharif rice is June - July and it is harvested in September - October. India is an important centre of rice cultivation. A major need to the developing countries is to raise the standard of living of the people in general and ruralities in specific. In India, where agriculture occupies a dominant position in the economy of country, economic growth and progress actually depends to a large extent on the improvement of agricultural technology and adoption of agricultural innovations by the farmers. Therefore, it is necessary to change the attitude of the farmers so that they may shift from traditional to modern methods of farming. For this purpose, it is essential to disseminate the useful technical know-how to the millions of farmers. There has been a significant progress in increasing crop production, productivity and acquiring fair degrees of self-reliance over the last decades. This is mainly attributable to the policies, strategies and programmes adopted by the government and also the intensive efforts made by the state agricultural universities and ICAR institutes to achieve a dynamic response of the farmers. The study mainly aimed at understanding the constraints in adoption of rice cultivation practices by the farmers from Gadchiroli district of Maharashtra state.

**Corresponding Author:**

**RS Karangami**

Ph.D. Students, Department of  
Agriculture Extension, MPKV,  
Rahuri, Maharashtra, India

## Materials and Methods

Present study was carried out in Gadchiroli district of Maharashtra state. Two tahsils namely, Armori and Dhanora selected purposively for this study on the basis of maximum area under cultivation of rice crop. From each selected tehsil

six villages were randomly selected, applying the criterion of maximum rice area. Thus, total twelve villages were selected. From each selected village ten respondents were selected randomly. Thus, total 120 respondents were randomly selected for this study. Ex- post facto study design was used.

## Results and Discussion

Constraints in adoption of recommended rice cultivation practices by the rice growers.

**Table 1:** Constraints in adoption of recommended rice cultivation practices by the rice growers

Sr. No.	Constraints	Respondents (N=120)		
		Frequency	Percentage	Rank
1.	Shortage of labour	80	66.67	V
2.	Unavailability of fertilizer at proper time	78	65.00	VI
3.	Unavailability of seeds in desired quantity.	75	62.50	VII
4.	Inadequate irrigation facility	82	68.34	IV
5.	Lower market price of produce	85	70.83	II
6.	High cost of inputs	83	69.17	III
7.	High cost of machineries	69	57.50	X
8.	Lack of knowledge for making appropriate concentration of insecticide / fungicide for use.	78	65.00	VI
9.	Non availability of quality seeds	74	61.67	VIII
10.	High cost of pesticide and fungicides	73	60.08	IX
11.	Non availability of technical knowledge	86	71.67	I
12.	Unavailability of weedicide at village	63	52.50	XI
13.	Non availability of compost	56	46.67	XIII
14.	unavailability of seeds in time	47	39.17	IX
15.	Could not identified pest and disease	45	37.50	XV
16.	Lack of result-oriented trainings and demonstrations	60	50.00	XII
17.	Poor economic condition	60.	50.00	XII
18.	non availability of hired farm machineries at time of operations	69	57.50	X

The present study, major Constraint faced by farmers in rice cultivation were Non availability of technical knowledge (71.67 per cent) followed by Lower market price of produce (70.83 per cent), High cost of inputs (69.17 per cent), Inadequate irrigation facility (68.34 per cent), Shortage of labour (66.67 per cent), Unavailability of fertilizer at proper time (65.00 per cent) and Lack of knowledge for making appropriate concentration of insecticide / fungicide for use(65.00), Inadequate irrigation facility (62.50 per cent), Non-availability of quality seeds (61.67 per cent), High cost of pesticide and fungicides (60.08 per cent), High cost of machineries (57.50 per cent) and non-availability of hired farm machineries at time of operations (57.50), Unavailability of weedicide at village (52.5 per cent), Non-availability of compost (46.67 per cent), Lack of result-oriented trainings and demonstrations (50.00 per cent) and Poor economic condition (50.00 per cent), and unavailability of seeds in time (39.17 per cent) and Could not identified pest and disease (37.50).

## Conclusion

From the above findings it can be concluded that the maximum number of rice growers were experienced various constraints, but major constraint was revealed that though the Paddy is cultivated by many farmers in the study area, their scientific knowledge about the crop and scientific adoption have the gaps, High cost of inputs,. One of the best ways to overcome this is to vigorously utilize the scientific expertise of KVKs (Krishi Vigyan Kendras) for conducting regular off campus training for the farmers. Conducting Farmer's Field Schools would certainly helps to bridge these gaps. Much emphasis thus should be given for such extension approaches by the line departments, high cost of fertilizers, low rate of Paddy in local market, non-availability of proper irrigation

facilities and lack of skill in seed treatment were the important problems expressed by the farmers that need intervention of researchers and other agencies. Government should ensure that the seeds are made available to the farmers in adequate quantity before the season starts at nearby place to increase the adoption level of recommended Paddy Production Practices. Publication of folders, leaflets, posters on recommended Production Practices of Paddy and its coverage through radio, television and newspaper is needed to educate farmers and other concerned.

## References

- Shigwan AS, Meshram NA, Dalvi VV. Constraints faced by the tribal farmers in rainfed rice production in Konkan region - a village level study. Bull Environ Pharmacol Life Sci. 2019;8(4):49-51.
- Waris A, Nirmala B, Sunder Rao N, Jangaiah B. Socio-economic profile and constraints faced by rice farmers in tribal areas of Nalgonda district of Telangana. Agric Update. 2020;15(1-2):56-61.
- Nithin Raj K, Lazarus TP, Vijayan A, Durga AR, Aparna B, Joseph B, Stephen R. Constraints in paddy cultivation faced by the farmers in Upper Kuttanad: a study in Alappuzha district of Kerala. J Pharmacogn Phytochem. 2020;9(4):370-373.
- Muthukumar R, Sindhuja R, Jayasankar R. Constraints faced by the paddy growers in adopting the post-harvest technologies. Plant Arch. 2020;20(2):3789-3790.
- Shriwas Y, Awasthi HK, Shrivastava KK, Verma AK. Constraints faced by the rice growers and their suggestions to overcome the constraints in adoption of farm machineries in Chhattisgarh plains. J Pharmacogn Phytochem. 2019;8(1):1139-1142.