# Adoption of rice cultivation practices by tribals in Maharashtra

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#### ABSTRACT

Study was carried out in 12 villages of Wadsa Panchayat Samiti of Gadchiroli district Maharashtra. Results of correlation analysis, revealed that education, annual income, socio-economic status, cosmopolite-ness, extension contact and awareness had significant correlation with adoption. However, age had non significant correlation with adoption, while size of holding showed highly significant correlation with adoption. However, illiteracy, irrigation facility, finance at time of sowing were the main problems faced by the farmers.

## INTRODUCTION

Adoption of improved cultivation practices as well as technology by the tribal farmers is necessary for their development. Tribals live in extremely closed and isolated societies. They have remained more or less cut-off from main stream of national development. Tribal communities are considered to be the weakest segment of Indian population.

Agriculture is the main occupation for most of the tribes in India. Rice is the most important source of food for tribal's in Gadchiroli district, and non adoption of improved package of practices is important constraint noticed in tribal agriculture. In Vidarbha, total yield of rice cultivation during 2006-2007 was 10,571 metric tonne while total yield figures in Gadchiroli, Chandrapur, Bhandara and Gondia was 2306, 2287, 3026 and 2008 metric tonne, respectively. Considering the large yield gap, there is wide scope for increasing the production of rice by adopting the improved cultivation practices by tribal farmers.

Adoption of improved rice cultivation practices is essential to achieve better results of production. The farmers should follow the important package of practices not only to increase grain yield but also to get good quality of rice for higher prices and raise their standard of living, but inadequate knowledge and nonadoption of improved cultivation practices is one of the reasons for poor economic condition of tribals.

#### **METHODOLOGY**

The present study was conducted in Wadsa (Desaiganj) Panchayat Samiti of Gadchiroli district of Maharashtra State. Wadsa tahsil is situated in North direction of Gadchiroli district. The villages were selected through random sampling method. From these 12 villages, 120 farmers were selected. From each village 10 farmers were selected randomly by using lottery method.

The data collected through personal interview schedule were analyzed and coefficient of correlation was worked out to find out the relationship between dependent and independent variables.

# **RESULTS AND DISCUSSION**

Relationship between personal and socioeconomic characteristics of farmers have been given in Table 1.

The characteristics of respondents namely, education, annual income, socioeconomic status, cosmopoliteness, extension contact and awareness had significant relationship with their adoption towards rice cultivation practices, while age had shown nonsignificant relationship with it (Table 1). Variable *i.e.* size of holding had shown highly significant relationship with adoption of the respondents towards rice cultivation practices. Similar results were observed by Patel and Manoje (1991) and Kapgate and Ingale (2006). Majority of tribal farmers were aware about high yielding varieties of rice, irrigation

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Table 1 : Relationship between personal and socio-economic characteristics of the farmers and their adoption towards rice cultivation practices		
Sr. No.	Particular of characteristics	'r' value of adoption
1.	Age	0.357 <sup>N.S.</sup>
2.	Education	0.206 *
3.	Size of holding	0.436 **
4.	Annual income	0.465 **
5.	Socio-economic status	0.318 **
6.	Cosmopoliteness	0.436 **
7.	Extension contact	0.162 *
8.	Awareness	0.502 **

\* and \*\* indicates significance of values at P=0.05 and 0.01, respectively

N.S. = Non-significant

management, preparatory tillage and transplanting of paddy seedlings. However the awareness about use of bio-fertilizers, plant protection measures and use of chemical fertilizers was lacking.

The tribal farmers had adopted the high yielding varieties and improved irrigation management practices in majority of cases. However the use of organic manures and bio-fertilizers was negligible. The majority of tribal farmers had adopted the preparatory tillage and transplanting practices of paddy. The plant protection measures were not adopted by majority of rice growing tribal farmers. They also reported the unawareness about seed treatment and difficulties in controlling pest and diseases.

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