Adoption of low cost crop cultivation technology by the paddy growers

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ABSTRACT

The study was conducted in Sakoli tahsil of Bhandara district. The data were collected from 150 paddy growers for the study. It was revealed that more than three-fourth (77.75 per cent) paddy growers were adoption about proper tillage operations. About (70.55 per cent) paddy growers were adoption of appropriate seed rate. Majority (92.00 per cent), (89.00 per cent) (88.50 per cent) of paddy growers were adopt the puddling operation before transplantation, weeding or intercultural operations and proper harvesting operations. The negatively significant relationship was observed between age of farmer and their adoption level. The education, socio-economic status, cosmopoliteness of the farmers was highly significant with adoption level. The significant relationship was observed between the land holding, extension contact and cropping intensity of the farmer with their adoption level of low cost crop cultivation technology of paddy.

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INTRODUCTION

Paddy is grown in tropical and subtropical countries of the world and happens to be the major staple crop. Considering large area under paddy in Vidarbha, there is a wide scope for increasing the production by adopting the improved low cost crop cultivation methods of paddy by the farmers.

What is low cost crop cultivation technology ?

Low cost crop cultivation technology means use of more low cost and no cost practices like selection of proper variety, use of organic manure(farmyard manure), biofertilizers (blue green algae), green manuring (dhaincha,sunhemp, glyricidia), seed treatment with common salt (brine solution),use of organic insecticides like spreading of garadi (*Cleistanthus collinus*) in the paddy field.

In adoption of low cost crop cultivation practices, the farmer is required to invest less on the cultivation practices. If a farmer can get better output the farming becomes sustainable.Therfore,in order to understand the extent of adoption of low cost crop cultivation technology of paddy. The present research was undertaken with the objectives: to study the adoption level of paddy growers about low cost crop cultivation technology and to study the relationship between adoption of low cost crop cultivation technology and selected personal, socio-economic and situational characteristics of paddy growers.

METHODOLOGY

The present study was conducted in the Sakoli Tahsil of Bhandara district as this Tahsil has maximum area under paddy. The ten villages were selected randomly. From ten villages, 150 farmers were selected randomly for the purpose of data collection. Data were collected by personally interviewing the respondents with the help of the interview schedule.

RESULTS AND DISCUSSION

The findings obtained from the present study have are presented in Table 1 and 2:

Adoption level of paddy growers about low cost crop cultivation technology:

Adoption level in Table 1 reveals that 66.16 per cent farmers adopted proper selection of

Table 1: Adoption level of paddy growers about low cost crop cultivation technology

Sr. No.	Low cost crop cultivation practices	Average score of adoption	Max. score	Percentage
1.	Selection of proper varieties	3.97	6	66.16
2.	Tillage	3.11	4	77.75
3.	Use of organic /green manuring	2.84	6	47.33
4.	Seed bed preparation	3.8	8	47.50
5.	Appropriate seed rate	2.81	4	70.25
6.	Seed treatment	2.44	4	61.00
7.	Plant population	0.70	2	35.00
8.	Distance between plant and rows	3.18	6	53.00
9.	Puddling before transplantation	1.84	2	92.00
10.	Use of fertilizers	4.05	10	40.50
11.	Water conservation and management	6.87	10	68.70
12.	Intercultural/weeding	1.78	2	89.00
13.	Plant protection	16.00	26	61.53
14.	Harvesting	3.54	4	88.50
15.	Total	56.68	94	60.29

variety. 77.75 per cent farmers had adoption of proper tillage operations, 47.33 per cent farmers had adoption of organic and green manuring. Nearly 47.50 per cent farmers had adoption of seed bed preparation and 70.55 per cent farmers used appropriate seed rate. 61.00 per cent farmers had adoption of seed treatment, 35.00 per cent were maintaining proper plant population, 53.00 per cent were maintaining distance between plant and rows. Majority of farmers *i.e.* 92.00 per cent farmers adopted the puddling operation before transplantation, 40.50 per cent farmers adopted actual dose of fertilizers, 68.70 per cent adopted water conservation and management practices. Majority of farmers (89.00 per cent) were adopt weeding or intercultural operations.61.53 per cent paddy grower were adopting plant protection measures. Majority (88.50 per cent) of paddy growers adopted the proper harvesting operations. The findings of the present study are similar to those of Lanjewar *et al*. (2005).

Table 2 : Relationship between personal socio-economic characteristics and adoption of low cost crop cultivation technology

Sr. No.	Personal ,socio-economic and situational characteristics	Adoption r
1.	Age	-0.659**
2.	Education	0.760**
3.	Land holding	0.551**
4.	Socio-economic status	0.761**
5.	Extension contact	0.751**
6.	Cosmopoliteness	0.803**
7.	Cropping intensity	0.554**

** significant at 0.01 level of probability

Relationship between personal socio-economic characteristics and adoption of low cost crop cultivation technology:

The negatively significant relationship was observed between age of farmer and their adoption level. The education, socio-economic status, cosmopoliteness of the farmers were highly significant with adoption level. The significant relationship was observed between the land holding, extension contact and cropping intensity of the farmer with their adoption level of low cost crop cultivation technology of paddy. The findings of the present study are similar to those of Khule *et al.* (2009).

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REFERENCES

Khule, R.P., Lanjewar, D.M. and Jagdale, U.D. (2009). Knowledge level of paddy growers about low cost crop cultivation technology. *Asian J. Extn. Edu.*, **27**(1&2):25-28.

Lanjewar, D.M., Nagalwade, L.D., There, D.N. and Deotale, S.L. (2005). Knowledge and adoption of low cost and no cost crop cultivation and soil conservation technologies in paddy based cropping systems of eastern Vidharbha, R.R.C. Report, *Department of Extn. Edu*., Dr. Panjabrao Deshmukh Krishi Vidhyapeeth, Akola, pp. 14-19.

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