

Awareness about Cotton Production Technology of Tribal Farmer

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ABSTRACT

Cotton (Gossypium hirsutum L.) is one of the most important commercial crops playing a key role in economic, political and social affairs in our country as well as world. The present study was conducted Rama block of Jhabua district due to maximum tribal farmer population lives & highest production of long staple cotton (DCH-32). A list of cotton growing village of the block was prepared and 5 villages will be selected randomly. After the selection of village, a village wise list of the cotton growing tribal farmer of the selected 5 village was prepared and 25 farmers from each village will be randomly selected. Thus, the total sampling consisted of 125 tribal farmers spread over five selected village. For the purpose present study, ten recommended production technology package of practices about cotton production technology viz. improved varieties, seed rate, seed treatment, field preparation, time of sowing, method of sowing, recommended dose of chemical fertilizers, irrigation managements, method of weed control and plant production were selected. Majority of the respondents were found in highly aware and high adoption category in practices like method of sowing, field preparation and time of sowing.

Key words : Awareness; Adoption; Cotton production technology; Tribal farmers;

Cotton (*Gossypium hirsutum L.*) is one of the most important fiber and commercial crop playing a key role in economic, political and social affairs in our country as well as world. India has the largest area 8.9 million hectare under cotton and contributes 69.09 percent of the total production. Cotton is an important cash crop of Madhya Pradesh and occupies an area of 5.20 lakh hectares. The main cotton growing area in Madhya Pradesh is East and West Nimarh (Khandwa, Khargone, Barwani) and Jhabua hills (Jhabua and Alirajpur district). Jhabua district is one of the main cotton-growing tracks. To achieve the higher level of production and productivity the inadequate level of knowledge of the recommended technology as well as its non-adoption may be a big hindrance which also hampers the production potential of the cotton crops. The gap always appears between the recommended technologies and their use in farmer's field. Besides this agro-economic, socio-psychological characteristics of the farmers play a major role in their knowledge and adoption for increasing production in tribal areas further it is necessary to prioritize strategy to increase the

knowledge and adoption level of the tribes. Keeping this in view the present investigation has been planned to explore the awareness and also determine the extent of adoption of cotton production technology. The studies are objectives.

1. To study the level of awareness of tribal farmers about improved cotton production technology.
2. To study the extent adoption of improved cotton technology by the tribal farmers.

METHODOLOGY

The study was conducted purposively in Jhabua districts due to maximum area and production of long staple cotton. The districts comprises 6 blocks, out of which Rama block of Jhabua district was selected purposively due to maximum tribal farmer population (more than 90%) lives. highest production of long staple cotton amongst the other blocks. A list of cotton growing village of Rama block was prepared and 5 village will be selected randomly. After the selection of the village, a village wise list of the cotton growing tribal farmer of the selected 5 village was prepared and

25 farmers from each village will be randomly selected. Thus, the total sampling consisted of 125 tribal farmers spread over five selected village. The primary data were collected with the help of interview schedule, which was prepared on the basis of objectives of the study. The secondary data were obtained from department of agriculture, Jhabua and published journals and book.

RESULTS AND DISCUSSION

Awareness of tribal farmers about improved cotton production technology : Table -1. Revealed that out of the total of 125 cotton growers, 13.60 per cent had low awareness about the field preparation, while 23.20 per cent had medium awareness about field preparation practices and 63.20 per cent had high awareness. About the time of sowing, 16.80 per cent low awareness, while 33.60 respondents had medium awareness about the sowing time and 49.60 per cent had high awareness. Regarding improved varieties, 58.40 per cent low awareness, while 32.00 respondents had medium awareness about the improved varieties and 09.60 per cent had high awareness. About the seed rate, 54.40 per cent had low awareness, while 35.20 respondents had medium awareness about the seed rate and 10.40 per cent had awareness. In case of seed treatment 69.60 per cent respondents had low awareness, while 23.20 respondents had medium awareness and 07.20 per cent had high awareness. Regarding method of sowing, 12.80 had low adoption, while 23.20 per cent respondent had medium awareness and 64.00 per cent had high awareness. About the recommended dose chemical fertilizer, 62.40 per cent low awareness, while 24.80 respondents had medium awareness about the recommended dose chemical fertilizer and 12.80 per cent had high awareness. In case of irrigation management 28.00 per cent respondents had low awareness, while 55.20 respondents had medium awareness and 16.80 per cent had high awareness. Regarding method of weed control, 24.00 per cent low awareness, while 41.60 respondents had medium awareness about the method of weed control and 34.40 per cent had high awareness. In case of plant production 52.00 per cent respondents had low awareness, while 34.40 respondents had medium awareness and 13.60 per cent had high awareness.

Table 1. Level of awareness of the respondent about cotton production technology

S. N.	Practices	Level of awareness		
		Low	Medium	High
1	Field preparation	17(13.60)	29(23.20)	79(63.20)
2	Time of sowing	21(16.80)	42(33.60)	62(49.60)
3	improved varieties	73(58.40)	40(32.00)	12(09.60)
4	Seed rate	68(54.40)	44(35.20)	13(10.40)
5	Seed treatment	87(69.60)	29(23.20)	09(07.20)
6	Method of sowing	16(12.80)	29(23.20)	80(64.00)
7	Recommended dose of chemical fertilizer	78(62.40)	31(24.80)	16(12.80)
8	Irrigation management	35(28.00)	69(55.20)	21(16.80)
9	Method of weed control	30(24.00)	52(41.60)	43(34.40)
10	Plant production	65(52.00)	43(34.40)	17(13.60)

Adoption of improved cotton production technology by the tribal farmers : Table -2. Shows that out of the total of 125 cotton growers, 18.40 per cent had low adoption, while 26.40 per cent had medium awareness about field preparation practices and 55.20 per cent had high adoption. About the time of sowing, 17.60 per cent low adoption, while 33.60 respondent had medium adoption about the sowing time and 48.80 per cent had high adoption. Regarding improved varieties, 52.00 per cent low adoption, while 36.00 respondents had medium adoption about the improved varieties and 12.00 per cent had high adoption. About the seed rate, 48.80 per cent had low adoption, while 40.00 respondents had medium adoption about the seed rate and 11.20 per cent had adoption. In case of seed treatment 64.80 per cent respondents had low adoption, while 26.40 respondents had medium adoption and 08.80 per cent had high adoption. Regarding method of sowing, 14.40 had low adoption, while 27.20 per cent respondent had medium adoption and 58.40 per cent had high adoption. About the recommended dose chemical fertilizer, 55.20 per cent low adoption, while 30.40 respondents had medium adoption about the recommended dose chemical fertilizer and 14.40 per cent had high adoption. In case of irrigation management 30.40 per cent respondents had low adoption, while 53.60 respondents had medium adoption and 16.00 per cent had high adoption. Regarding method of weed control, 26.40 per cent low adoption, while 41.60 respondents had medium adoption about the method of weed control and 32.00 per cent had high adoption. In case of plant production 46.40 per cent respondents had low adoption, while 39.20 respondents had medium adoption and 18.40 per cent had high adoption.

Table 2. Extant of adoption of the respondent about cotton production technology

S. N.	Practices	Level of adoption		
		Low	Medium	High
1	Field preparation	23(18.40)	33(26.40)	69(55.20)
2	Time of sowing	22(17.60)	42(33.60)	61(48.80)
3	improved varieties	65(52.00)	45(36.00)	15(12.00)
4	Seed rate	61(48.80)	50(40.00)	14(11.20)
5	Seed treatment	81(64.80)	33(26.40)	11(08.80)
6	Method of sowing	18(14.40)	34(27.20)	73(58.40)
7	Recommended dose of chemical fertilizer	69(55.20)	38(30.40)	18(14.40)
8	Irrigation management	38(30.40)	67(53.60)	20(16.00)
9	Method of weed control	33(26.40)	50(40.00)	42(33.60)
10	Plant production	58(46.40)	49(39.20)	18(14.40)

CONCLUSION

Regarding the level of awareness of the tribal farmers about recommended cotton production technology, the majority of the respondent who were

found in high awareness category, like field preparation (63.20), time of sowing practices (49.60) and method of sowing (64.00), whereas medium awareness were found in practices like irrigation management (55.20) and method of weed control (41.60) while awareness were found in practices like improved varieties (58.40), seed rate (54.40), seed treatment (69.40), recommended dose of the chemical fertilizer (55.20) , and plant production (46.40).

Regarding the adoption of the tribal farmers about recommended cotton production technology, the majority of the respondent who were found in high adoption category, like field preparation (55.20), time of sowing practices (48.80) and method of sowing (58.40), whereas medium adoption were found in practices like irrigation management (53.60) and method of weed control (40.00) while adoption were found in practices like improved varieties (52.00), seed rate (48.80), seed treatment(64.80), recommended dose of the chemical fertilizer (55.20) and plant production (46.40).

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