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Periodic Research

Technological Knowledge of Sugarcane Growers in Tribal Area's of Chhattisgarh

Abstract

The finding of present study revealed that the socio- economic profile of respondents belonged to middle age group, middle school level of education, small size of family composition, small size of land holding, high level of farming experience, major source of income was agriculture with casual labour, maximum number of respondents belonged under low income group. Majority of respondents had no member of any organization, medium level of scientific orientation.

The overall extent of knowledge of recommended production technology among respondent were found medium level (67.96%).

Keyword Knowledge, Tribal, sugarcane, Tying of sugarcane;

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Introduction

Sugarcane is one of the oldest crops being cultivated in India. India occupies the first rank in production of sugarcane in the world. However, it ranks only 10th in world productivity .though enough viable and adoptive technologies of its cultivation have been developed, there enlists a wide adoption gap among the farmers. In consequence to this the production of sugarcane in the country 342.20 million tonnes in 2011 – 12. In Chhattisgarh, sugarcane production was 45.42 thousand tonnes during 2011-12.

Objectives

1. To study the socio - economic attributes of tribal sugarcane growers,
2. To ascertain the level of knowledge of the tribal sugarcane growers about recommended sugarcane production technology.

Materials and Methods

Surguja Division is the 2nd largest producer of noble cane (sugarcane) and the area (3.82 Thousand ha.) under cultivation is high in Chhattisgarh, therefore it was purposively selected for the present study. Out of 13 blocks of both districts, four blocks have been selected randomly for study, namely (Pratappur 1507.63 ha), Surajpur (1077.79 ha.) from Surajpur district and Lundra (1634 ha), Batauli (1634 ha.) from Surguja district during 2012-13 respectively (Deptt. of Agriculture). Two villages from each selected block have been selected randomly for study. Thus survey as per objective of study work made in 8 villages namely Batwahi and Mahora (Lundra block), Mangari and Sarmana (Batauli block), Haripur and Kalyanpur (Surajpur block), Kerta and Khadgawakala (Prtappur block). A list of tribal sugarcane growing farmers was prepared who were cultivating sugarcane from last three years, with the help of RAEOs of the eight villages. Sixteen tribal sugarcane growers have been selected randomly from each of the selected village. Thus the total 128 Sugarcane growers (16X8) =128 was considered as respondent for this study.

Results and Discussions

Socio-economic condition

The data related to socio-economic condition have been presented in table 1, revealed that maximum number respondents (66.42%) were found to be in middle age group (35 to 55 years). The maximum respondents were under middle school (25.78%) while (21.09%) respondents under primary school, (21.87%) under illiterate, (17.18%) under higher secondary school, (10.15%) under high school and only (3.93%) of the respondents had college and above education level. The maximum number of the respondents (42.18 %) had small size of land holding (1 to 2 ha.) followed by 41.40 % marginal (up to 1 ha). The majority of tribal sugarcane growers (40.62%) have more than 10 year of farming experience followed by (32.03%) with medium farming

experience. The majority of respondents (50.78 %) belong to low annual income (upto Rs. 1 lakh), followed by (35.15%) of respondents under medium annual income (Rs. 1 lakh to 2 lakh) and only (14.07 %) of respondents under high annual income (more than Rs. 2 lakh). Regarding social participation, maximum number of respondents (74.21%) had no membership in any organization followed by (16.45%) of respondents who were having membership in one organization. Only (5.47%) respondents who belonged to executive/ office bearer category while only (3.90%) had membership in more than one organization. The majority of the respondents (67.98%) had medium level of Scientific–orientation, followed by (18.75%) had high level of scientific–orientation.

Sugarcane Production Technology Knowledge

The data presented in the (table 2) revealed that majority of the respondents had low level of knowledge regarding selected 16 practices of sugarcane production technology *i.e*. disease management (100.00%), insect-pest management (85.93%), tying of sugarcane (85.16%), seed treatment (75.78%) and improved variety (29.69%). Whereas, the majority of the respondents were having medium level of knowledge regarding sugarcane production technology *i.e.* fertilizer use (77.34%), improved variety (62.43%), weed management (41.41%), selection of land (39.06%), insect-pest management (14.06%), earthing up (12.05%), harvesting time (10.93%) and seed rate (5.46%). While respondents had high level of knowledge group for selected practices is like marketing facility (100.00%), preparation of land (98.46%), seed selection (96.88%), time of irrigation (95.32%), seed rate (94.53%), ratoon management (93.75%), harvesting (89.06%), earthing up (87.05%), selection of land (58.59%), weed management (57.03%), seed treatment (21.88%), improved variety and fertilizer use (21.87%) and tying of sugarcane (14.06%), of respondent were having high level of knowledge respectively.

Conclusion

The findings of the study indicated that most of the sugarcane growers were in middle range categories in respect to their extent of adoption regarding recommended sugarcane production technology. Thus, there is an urgent need to increase the extent of adoption of sugarcane growers about recommended sugarcane production technology, through proper utilization of source of information, extension contact, exhibition, kisan mela and training programme in different aspect should be conducted by the concerned agencies.

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Table 1
Socio economic condition of tribal sugarcane growers (n=128)

S.No.	Particulars	Frequency	Percent
Age			
1.	Young(<35)	30	23.43
2.	Middle (36 to 55 Year)	85	66.42
3.	Old (>55)	13	10.15
	Total	**128**	**100.00**
Education			
1.	Illiterate	28	21.87
2.	Primary	27	21.09
3.	Middle	33	25.78
4.	High school	13	10.15
5.	Higher secondary school	22	17.18
6.	College and above	5	3.93
	Total	**128**	**100.00**
Land holding			
1.	Marginal (up to1 ha..)	53	41.40
2.	Small (1 to 2 ha.)	54	42.18
3.	Medium (2 to 4 ha.)	14	10.96
4.	Big (>4 ha.)	7	5.46
	Total	**128**	**100.00**
Farming experience			
1	Low (up to 5 year)	35	27.34
2	Medium (5 to 10 year)	41	32.03
3	High (>10 year)	52	40.62
	Total	**128**	**100.00**
Annual income			
1.	Low (Up to Rs. 1 lakh)	65	50.78
2.	Medium (1.1 lakh to 2 lakh)	45	35.15
3.	High (>2 lakh)	18	14.07
	Total	**128**	**100.00**

Social Participation			
1	No membership	95	74.21
2	Membership in one organization	21	16.45
3	Membership in more than one organization	5	3.90
4	Executive/ office bearer	7	5.47
	Total	**128**	**100.00**
Scientific-orientation			
1.	Low	17	13.28
2.	Medium	87	67.98
3.	High	24	18.75
	Total	**128**	**100.00**

Table2

Distribution of respondents according to their practices-wise level of knowledge regarding recommended sugarcane production technology.

n=128

S. no.	Sugarcane cultivation practices	Level of knowledge		
		Low	Medium	High
		f (%)	f (%)	f (%)
1.	Selection of land	3 (2.34)	50 (39.06)	75 (58.59)
2.	Preparation of land	0 (0.00)	2 (1.56)	126 (98.46)
3.	Seed selection	0 (0.00)	4 (3.12)	124 (96.88)
4.	Seed treatment	97 (75.78)	3 (2.34)	28 (21.88)
5.	Seed rate	0 (0.00)	7 (5.46)	121 (94.53)
6.	Improved variety	38 (29.69)	62 (48.43)	28 (21.87)
7.	Fertilizer use	1 (0.78)	99 (77.34)	28 (21.87)
8.	Time of irrigation	0 (0.00)	6 (4.68)	122 (95.32)
9.	Weed management	2 (1.56)	53 (41.41)	73 (57.03)
10.	Insect pest management	110 (85.93)	18 (14.06)	0 (0.00)
11.	Disease management	128 (100.00)	0 (0.00)	0 (0.00)
12.	Earthing up	0 (0.00)	16 (12.5)	112 (87.5)
13.	Tying	109 (85.16)	1 (0.78)	18 (14.06)
14.	Harvesting	0 (0.00)	14 (10.93)	114 (89.06)
15.	Marketing	0 (0.00)	0 (0.00)	128 (100.00)
16.	Ratoon management	2 (1.56)	6 (4.68)	120 (93.75)