

SHORT COMMUNICATION**KNOWLEDGE LEVEL OF TRIBAL FARMERS ON SUGARCANE PRODUCTION TECHNOLOGIES****R.K. Tiwari* and P.K. Jaiswal****Abstract**

The present study was carried out in eight villages of Surguja and Surajpur districts of Surguja division of Chhattisgarh State. A total of 128 sugarcane farmers formed the sample and the data were collected through pretested interview schedule. The socio-economic profile of the respondents revealed that majority of them belonged to middle age group and had middle school level of education, small family size composition, small land holding and high level of farming experience. Their major source of income was agriculture and casual labour, and maximum number of them were under low income group. Majority of the respondents had medium level of scientific orientation with no membership in any organization. The overall extent of knowledge of recommended sugarcane production technologies among the respondents was found to be of medium level (67.96%).

Key words: Sugarcane, production technologies, knowledge level, tribal farmers, socio-economic profile

Sugarcane is a major commercial crop cultivated in India in around 5 M ha with a total production of 342.20 million tonnes of sugarcane in 2011–12. In spite of the availability of enough viable technologies, India ranks only 10th in world productivity indicating a wide adoption gap among the farmers. In Chhattisgarh State, sugarcane production was hardly 45.42 thousand tonnes during 2011-12. In view of such low production levels, the present study was taken up with the objectives of studying the socio-economic attributes of tribal sugarcane growers and ascertaining their level of knowledge about recommended sugarcane production technologies.

In Chattisgarh State, Surguja Division is the second largest producer of sugarcane with 3.82 thousand ha under cultivation and hence this division was

purposively selected for the present study. Out of 13 blocks in Surajpur and Surguja districts, four blocks, namely Pratappur (1507.63 ha) and Surajpur (1077.79 ha) from Surajpur district, and Lundra (1634 ha) and Batauli (1634 ha) from Surguja district were selected randomly for the study, based on the area under cane cultivation during 2012-13 (Anonymous 2013). Two villages from each block were selected randomly for the study. The villages include Batwahi and Mahora (Lundra block), Mangari and Sarmana (Batauli block), Haripur and Kalyanpur (Surajpur block), and Kerta and Khadgawakala (Pratappur block). A list of tribal farmers growing sugarcane for the last three years was prepared with the help of RAEs of the eight villages. Sixteen tribal sugarcane growers were

R.K. Tiwari* and P.K. Jaiswal

Department of Agricultural Extension, Indira Gandhi Krishi Vishwavidyalaya, Raipur 492012

*Email: rudrakshtiwari16@gmail.com

selected at random from each of the selected villages thus making a total of 128 sugarcane growers as respondents for this study.

Socio-economic condition

The data related to socio-economic condition presented in Table 1 revealed that maximum number

Table 1. Socio economic status of tribal sugarcane growers

Parameter	Categories	No. of respondents	Percent
Age	Young(<35 years)	30	23.43
	Middle (36 to 55 years)	85	66.42
	Old (>55 years)	13	10.15
Education	Illiterate	28	21.87
	Primary	27	21.09
	Middle	33	25.78
	High school	13	10.15
	Higher secondary school	22	17.18
	College and above	5	3.93
Land holding	Marginal (up to 1 ha)	53	41.40
	Small (1 to 2 ha)	54	42.18
	Medium (2 to 4 ha)	14	10.96
	Big (>4 ha)	7	5.46
Farming experience	Low (up to 5 years)	35	27.35
	Medium (5 to 10 years)	41	32.03
	High (>10 years)	52	40.62
Annual income	Low (Up to Rs. 1 lakh)	65	50.78
	Medium (1.1 lakh to 2 lakh)	45	35.15
	High (>2 lakh)	18	14.07
Social participation	No membership	95	74.21
	Membership in one organization	21	16.45
	Membership in more than one organization	5	3.90
	Executive/ office bearer	7	5.47
Scientific-orientation	Low	17	13.28
	Medium	87	67.98
	High	24	18.75

of respondents (66.42%) were in middle age group (35 - 55 yr). Regarding education, maximum respondents had middle school education (25.78%) while 21.09% respondents were primary educated, 21.87% were illiterates, 17.18% attended higher secondary school, 10.15% under high school and only 3.93% of the respondents had college and above education .Majority of the respondents (42.18 %) had small size of land holding (1 - 2 ha) followed by 41.40% with marginal land holding(up to 1 ha).

Majority of the tribal sugarcane growers (40.62%) had more than 10 years of farming experience followed by 32.03% with medium farming experience. Majority of them (50.78 %) belonged to low annual income (upto Rs. 1 lakh), followed by 35.15% under medium annual income (Rs. 1 to 2 lakh) and only 14.07% of respondents were under high annual income (more than Rs. 2 lakh). Regarding social participation, maximum number of respondents (74.21%) had no membership in any

Table 2. Distribution of respondents (N=128) according to their practice-wise level of knowledge regarding recommended sugarcane production technologies

S.No.	Sugarcane cultivation practice	Respondents in different knowledge levels		
		Low	Medium	High
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.	Wrapping and propping	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)

#Percentage values

organization followed by 16.45% of respondents who were having membership in one organization. Only 5.47% respondents belonged to executive/office bearer category while only 3.90% had membership in more than one organization. Majority of the respondents (67.98%) had medium level of scientific-orientation, followed by 18.75% with high level of scientific-orientation.

Knowledge of sugarcane production technologies

Table 2 revealed that majority of the respondents had low level of knowledge about some of the 16 practices of sugarcane production technology, namely disease management (100.00%), insect-pest management (85.93%), wrapping and propping (85.16%), sett treatment (75.78%) and improved variety (29.69%). The respondents had medium level of knowledge regarding sugarcane production technologies, viz.. 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%). The respondents had high level of knowledge for selected practices 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 wrapping and propping of sugarcane (14.06%).

Conclusion

The findings of the study indicated that most of the sugarcane growers had medium level of knowledge regarding most of the recommended sugarcane

production technologies. The study stresses an urgent need to increase the extent of adoption of recommended sugarcane production technologies through proper utilization of source of information and conducting outreach activities like exhibitions, kisan melas and training programmes by the agencies concerned.

References

- Anonymous (2012-13) Report of Directorate of Economics and statistics, Department of agriculture and cooperation, Govt. of India
- Itawdiya K K and Singh D K 2011. A study on technological gap in sugarcane production of Sehore block of Sehore district of Madhya Pradesh M.Sc. (Agri.) Thesis, JNKVV, Jabalpur.
- Kanavi V P 2000. A study on the knowledge and adoption behaviour of sugarcane growers in Belgaum district of Karnataka. M. Sc. (Agri.) Thesis, JNKVV, Jabalpur.
- Nagaraj M V 2002. A study on knowledge of improved cultivation practices of sugarcane and their extent of adoption by farmers in Bhadra Command area in Davangere district, Karnataka. Ph.D Thesis, Univ. of Agril.Sci., Dharwad (India).
- Naik R D 2005. A study on knowledge and adoption pattern on improved sugarcane practices in Bidar district of Karnataka state, M.Sc.(Ag.) Thesis, Univ of Agril Sci Dharwad (India).
- Ram Singh and Singh S B 1994. Input management in sugarcane cultivation. Adv Agril Res India 1 : 28-29.