

Assessment of Knowledge level of the sugarcane growers

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Abstract

The present study was conducted in Bijnore and Meerut district of western Uttar Pradesh during the year 2007-08. To know the knowledge level of the sugarcane growers, the study reveals that most of the sugarcane growers were having good knowledge with respect to land preparation practices for sugarcane cultivation. Most of the marginal, small and big farmers were having fair knowledge, while medium farmers had good knowledge about high yielding varieties of sugarcane. All categories of the farmers were having good knowledge about time of sowing of sugarcane crop besides marginal farmers. About methods of showing plant spacing in sugarcane all categories farmers were having good knowledge. Knowledge about use of fertilizers & manure all categories farmers were having good knowledge besides medium farmers. All categories farmers were having good knowledge about methods of fertilizers application sugarcane crop. Knowledge about number of irrigation in sugarcane crop marginal & small farmers were having poor & fair knowledge and medium & big farmers have good knowledge. In case of intercultural operation marginal, small farmers were having poor knowledge and medium, big farmers had good knowledge. Maximum medium and big farmers were having good knowledge about use of plant protection measures in sugarcane crop, while marginal and small farmers had poor knowledge about it.

Key words : Sugarcane growers and their knowledge

Introduction

Sugarcane is an important cash crop of India as well as of the World which is reflected with its cultivation in about 77 Countries World over, India is the largest producer of sugarcane after Brazil. The production of sugarcane 273.39 million tones during the year 2009-10 with an area of 4.4 million hectare and leading state of India is Uttar Pradesh. Uttar Pradesh which has the largest area under sugarcane, had an increase of about 18% last one decade. These are the facts which indicate that given the price attraction, the growers in the south where yield levels are also high, would go a long way to take up this crop, compared to sub-tropical belt, in spite of higher prices, there has been not much increase in the area. Keeping in view our aim to assessment of knowledge level of the sugarcane growers.

Research Methodology

For this study two districts namely Bijnore and Meerut were selected purposively. From each district two blocks were selected randomly. The total four blocks were considered for the study and two villages were purposively selected from each block, than thirty

respondents from each village were selected purposively. Thus the total sample size was of 240 respondents for the investigation. The data were analyzed, tabulated and find out the percentage.

Results and discussion

Here deals with knowledge level of sugarcane practices in respect to improved sugarcane farm practices that exist among marginal, small, medium and big farmers. It is depicted from table 1, that the maximum 65.15 percent marginal farmers were having good knowledge, while 19.70 and 15.75% marginal farmers were have fair and poor knowledge about land preparation practice for sugarcane cultivation, respectively. In case of small farmers 70.42% were having good knowledge, followed by 16.90 and 12.68% respondents have fair and poor level of knowledge.

In case of medium farmers 72.58 percent respondents were having good knowledge, while 16.13 and 11.29% were having fair & poor knowledge. In case of big farmers a very high majority i.e. 82.93 percent have good knowledge in land preparation, while only 9.75 percent respondents having fair and 7.32% respondents had poor knowledge regarding land preparation practices. Thus it is clear from the above table that most of the farmers of all categories were having good knowledge about land preparation.

As regards the awareness about high yielding variety, a majority of the respondent 53.03 percent

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Table 1: Level of knowledge of farmers about land preparation

Level of knowledge	Knowledge score	Marginal Farmers (66)		Small farmers (71)		Medium farmers (62)		Big farmers (41)	
		No.	Percent	No.	Percent	No.	Percent	No.	Percent
Poor	1-3	10	15.75	9	12.68	7	11.29	3	7.32
Fair	3-6	13	19.70	12	16.90	10	16.13	4	9.75
Good	7-10	43	65.15	50	70.42	45	72.58	34	82.93

Table 2: Level of knowledge of farmers about high yielding varieties

Level of knowledge	Knowledge score	Marginal Farmers (66)		Small farmers (71)		Medium farmers (62)		Big farmers (41)	
		No.	Percent	No.	Percent	No.	Percent	No.	Percent
Poor	0-4	18	27.27	23	32.39	20	32.26	11	7.32
Fair	4-8	35	53.03	32	45.07	18	29.03	18	63.41
Good	8-12	13	19.70	16	22.54	24	38.71	12	29.27

Table 3: Level of knowledge of farmers about time of sugarcane sowing

Level of knowledge	Knowledge score	Marginal Farmers (66)		Small farmers (71)		Medium farmers (62)		Big farmers (41)	
		No.	Percent	No.	Percent	No.	Percent	No.	Percent
Poor	1-2	18	27.27	15	21.13	9	14.52	4	9.76
Fair	3-4	27	40.91	20	28.17	15	24.19	7	17.07
Good	5-6	21	31.82	36	50.70	38	61.29	30	73.17

marginal farmers were having fair knowledge, while 27.27 percent and 19.70 percent marginal farmers have poor and good knowledge about high yielding varieties of sugarcane crop respectively. Among small farmers 45.07 percent were having fair knowledge, followed by 32.39 percent poor & only 22.54% had good knowledge. In case of medium farmers 38.71 percent were having good, followed by 32.26 percent poor and 29.03 percent had fair knowledge. In case of big farmers maximum 63.41 percent were have fair knowledge, followed by 29.27% have good and the remaining 7.32% had poor knowledge in high yielding varieties. In overall most of the marginal, small and big farmers were having fair knowledge about high yielding of sugarcane, while medium farmers and good knowledge about high yielding of sugarcane (Table 2).

It is depicted from table-3, that the maximum 40.91 percent marginal farmers were having fair knowledge about time of sugarcane showing. While remaining 31.82 and 27.27 percent marginal farmers have good and poor level of knowledge about time of sugarcane sowing respectively. In case of small farmers mostly 50.70 percent were having good knowledge but 28.17 percent and 21.13 percent respondents have fair and poor level of knowledge. In case of medium farmers 61.29 percent respondents were having good knowledge, followed by 24.19 percent have fair and the remaining 14.52 percent farmers had poor knowledge regarding time of

sugarcane sowing. In case of big farmers a very high majority i.e. 73.17 percent have good knowledge in time of sugarcane sowing. While only 17.07 percent respondents have fair and 9.76 percent had poor knowledge regarding time of sugarcane sowing.

Knowledge regarding method of sowing, it was found that maximum 48.49 percent marginal farmers were having good knowledge, 27.27 percent have poor and the remaining 24.24% had fair knowledge regarding 33.80, 16.90% have fair and poor knowledge respectively. Among medium farmers 53.22% were having good knowledge, followed by 32.26 percent fair and the remaining 14.52 percent had poor level of knowledge. In case of big farmers maximum 48.78 percent were having good knowledge the remaining and 39.02 percent, 12.20 percent found in fair and poor knowledge in the sugarcane cultivation (Table 4).

Among the different categories of the farmers, the level of knowledge about plant spacing in sugarcane cultivation was worked out. The findings indicates in (Table 5), the maximum 63.42 percent of big farmers were having good level of knowledge, while, 24.38 percent and 12.20 percent have fair and poor knowledge respectively. Among marginal farmers, a maximum of 43.94 percent were having good, followed by 33.33 percent fair and 22.73 percent had poor knowledge. In case of small farmers 52.11 percent were having good knowledge, followed by 29.58 percent have fair knowledge and the remaining 18.39

Table 4: Level of knowledge of farmers about method of sowing

Level of knowledge	Knowledge score	Marginal Farmers (66)		Small farmers (71)		Medium farmers (62)		Big farmers (41)	
		No.	Percent	No.	Percent	No.	Percent	No.	Percent
Poor	1-3	18	27.27	12	16.90	9	14.52	5	12.20
Fair	4-6	16	24.24	24	33.80	20	32.26	16	39.02
Good	6-8	32	48.49	35	49.30	35	53.22	20	48.78

Table 5: Level of knowledge of farmers about plant spacing in sugarcane

Level of knowledge	Knowledge score	Marginal Farmers (66)		Small farmers (71)		Medium farmers (62)		Big farmers (41)	
		No.	Percent	No.	Percent	No.	Percent	No.	Percent
Poor	0-2	15	22.73	13	18.39	9	14.52	3	12.20
Fair	3-4	22	33.33	21	29.58	8	12.90	4	24.38
Good	5-6	29	43.94	37	52.11	45	75.58	34	63.42

Table 6: Level of knowledge of farmers about use of fertilizer and manure

Level of knowledge	Knowledge score	Marginal Farmers (66)		Small farmers (71)		Medium farmers (62)		Big farmers (41)	
		No.	Percent	No.	Percent	No.	Percent	No.	Percent
Poor	1-4	43	65.15	39	54.93	21	33.87	15	36.59
Fair	4-8	15	22.73	17	23.94	26	41.94	12	29.26
Good	8-12	09	13.64	15	21.13	15	24.19	14	34.15

percent had poor knowledge. In case of medium farmers 72.58 percent were having good knowledge, followed by 14.52 percent have poor knowledge and the remaining 12.90 percent had fair knowledge about the plant spacing in sugarcane cultivation.

As regard use of fertilizer and manure practice in sugarcane cultivation in concerned, among the marginal farmers 65.15 percent were having poor knowledge. In case of small farmers 54.93 percent were having poor knowledge about use of fertilizer & manure in sugarcane cultivation, followed by 23.94 were having fair knowledge and the remaining 21.13 percent had good knowledge about use of fertilizer manure in sugarcane cultivation.

In case of medium farmers 41.94 percent were having fair knowledge, 33.87% poor and the remaining 24.19 percent had good knowledge. Among the big farmers 36.59% were having poor knowledge, followed by 34.14% have good knowledge and the remaining 29.26% had poor knowledge about use of fertilizer manure in sugarcane cultivation (Table 6).

The data presented in table 7, that the maximum 50.00 percent marginal farmers were having good knowledge, while remaining 30.30 percent and 19.70 percent have fair and poor knowledge about method of fertilizers application in Sugarcane crop respectively. In case of small farmers 78.42 percent were having good knowledge about methods of fertilizer application in sugarcane cultivation, followed by 15.49 percent

have poor knowledge and the remaining 14.09 percent and fair knowledge regarding methods of fertilizer application in sugarcane cultivation.

In case of medium farmers 72.58 Percent were having good knowledge, but 17.74% and 9.68 percent respondents have fair and poor knowledge. In big farmers a very high majority i.e., 85.37 percent have good knowledge in method of fertilizers application, while only 9.76 percent have fair and 4.88 percent sugarcane have poor knowledge regarding method of fertilizer application in sugarcane cultivation. Thus, it is clear from the above table that majority of the big farmers were having good knowledge about method of fertilizers application in sugarcane cultivation.

The data presented in table 8, indicate that maximum 37.88 percent marginal farmers were having poor knowledge regard number of irrigation in sugarcane cultivation, followed by 33.33% have fair and the remaining 28.79% had good knowledge. In case of small farmers 35.22% were having fair knowledge. In poor & good knowledge found to have good knowledge about number of irrigation in sugarcane cultivation, followed by 19.51 and 12.20% found to have fair, poor knowledge respectively.

As regards the awareness about intercultural operation presented in table 9, reveals that the majority of respondents 45.45 percent marginal farmers having poor level of knowledge. While remaining 34.85 percent and 19.70 percent marginal farmers have fair

Table 7: Level of knowledge of farmers about methods of fertilizer application

Level of knowledge	Knowledge score	Marginal Farmers (66)		Small farmers (71)		Medium farmers (62)		Big farmers (41)	
		No.	Percent	No.	Percent	No.	Percent	No.	Percent
Poor	1-2	13	19.70	11	15.49	6	9.68	2	4.88
Fair	3-4	20	30.30	10	14.09	11	17.74	4	9.76
Good	5-6	33	50.00	50	78.42	45	72.58	35	85.37

Table 8: Level of knowledge of farmers about number of irrigation in sugarcane cultivation

Level of knowledge	Knowledge score	Marginal Farmers (66)		Small farmers (71)		Medium farmers (62)		Big farmers (41)	
		No.	Percent	No.	Percent	No.	Percent	No.	Percent
Poor	1-3	25	37.88	23	32.39	15	24.19	5	12.20
Fair	4-6	22	33.33	25	35.22	18	29.03	8	19.51
Good	7-9	19	28.79	23	32.39	29	46.78	28	68.29

Table 9: Level of knowledge of farmers about intercultural operation

Level of knowledge	Knowledge score	Marginal Farmers (66)		Small farmers (71)		Medium farmers (62)		Big farmers (41)	
		No.	Percent	No.	Percent	No.	Percent	No.	Percent
Poor	1-3	30	45.45	24	33.80	15	24.90	9	21.95
Fair	3-4	23	34.85	26	36.62	18	29.03	13	31.71
Good	5-6	13	19.70	21	29.58	29	46.78	19	46.34

Table 10: Level of knowledge of farmers about plant protection measures

Level of knowledge	Knowledge score	Marginal Farmers (66)		Small farmers (71)		Medium farmers (62)		Big farmers (41)	
		No.	Percent	No.	Percent	No.	Percent	No.	Percent
Poor	0-5	28	42.42	32	45.07	81	29.03	6	14.63
Fair	6-10	27	40.90	26	36.62	21	33.87	12	29.27
Good	10-15	11	16.68	13	18.31	23	37.10	23	56.10

and good knowledge about intercultural operation of sugarcane cultivation respectively. Among small farmers 36.62 per cent were having fair knowledge, followed by 33.80 per cent having poor and the remaining 29.58 per cent had good level of knowledge. In case of big farmers maximum 46.34 percent were having good knowledge followed by 31.71 percent have fair and the remaining 21.95 per cent poor knowledge about intercultural operation in sugarcane cultivation.

The data presented in table 10, reveals that 42.42% marginal farmers were having poor knowledge about plant protection measures, followed by 40.90% were have fair and the remaining 16.68 per cent had good knowledge. In case of medium farmers 37.10% were having good knowledge about plant protection measures, followed by 33.87% have fair knowledge and the remaining 29.03 percent had poor knowledge.

In case of small farmers 45.07 percent were having poor knowledge about the plant protection measures, followed by 36.62 percent have fair

knowledge and data remaining 18.31 percent had poor knowledge. In case of big farmers 56.10 percent were having good knowledge about plant protection measures, followed by 29.27 percent have fair knowledge and the remaining 14.63 percent had poor knowledge about plant protection measures.

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