

# A Study of Major Problems Faced by Sugarcane Farmers in Powayan block of Shahjahanpur District, Uttar Pradesh

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**Abstract**— Agriculture is main economic activity in Shahjahanpur district providing employment opportunity to large number of people. Sugarcane is a main commercial crop of the district sprawled over about sixty-five thousand hectares of land in the district. Powayan block in Shahjahanpur district has large concentration of sugarcane crop. The main aim of the study is to find the main difficulties faced by sugarcane growers in Powayan block of Shahjahanpur district. The study is based on the primary source of data which is collected from five randomly selected villages of Powayan block namely, Ajmatpur, Gangsara, Marena, Katka and Dalippur. The data is gathered by using a well-structured interview schedule including the questions regarding the demographic information, agricultural behavior, and their problems in sugarcane cultivation. The total sample size was taken of 100 farmers who are cultivating sugarcane in their fields. The analysis of data has been done with the help of SPSS software. The major findings of the study reveal that majority of farmers who are engaged in sugarcane cultivation were aged 46-55 years. Literacy rate among the respondents was very poor only 18 percent of respondents were educated. Moreover, the main problem among the farmers was delay in payments by sugar factories. The farmers who have small landholding under sugarcane crop cannot wait for long time for their payments consequently they sell their crops to middleman at very low price because of family requirements. Hence, it is suggested that sugar factories should make the payments as early as possible, which will save the farmers from borrowing the money from unorganized sector.

**Keywords:** Farmers, Powayan, Production, Payments, Sugarcane

## I. INTRODUCTION

Sugarcane is important commercial crop of India and it has an immense position in the agrarian economy of the country. India is the largest producer of sugar and second largest producer of sugarcane in the world. The area under sugarcane crop in India is about 49.71 lakh hectares. The total sugarcane production in India is about 405.37 million tonnes (2018-19). Sugarcane is the prime source of sugar in India. Sugarcane crop has significant role in national economy and provide raw material to sugar and other various industries viz. producing alcohol, papers, chemicals, and cattle feed. Due to its multipurpose uses in different industries, the demand of sugarcane is increasing day by day. Sugarcane and its allied industries provide the employment opportunities to large number of people. In India sugarcane is produced in two distinct regions, the tropical region, and the subtropical region. Production of sugarcane in India is not uniform, fluctuating trend of production has been found. In India sugarcane is mainly produces in the states of Uttar Pradesh,

Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh, Gujrat, Bihar, Haryana, and Punjab. Uttar Pradesh alone produces more than 45 percent of sugarcane crop in the country. In Uttar Pradesh, the largest concentration of Sugarcane areas is found in Upper Ganga-Yamuna Doab, Rohilkhand and Trans-Saryu areas which together produced about 70 percent of total sugarcane produced in the state. Western Uttar Pradesh is considered as cane heartland of the state. Most of the farmers of western Uttar Pradesh produce sugarcane as a chief crop since a long time. So, the socio-economic development of the growers is depending upon the sugarcane cultivation. Shahjahanpur district is an important sugarcane producing district of Uttar Pradesh. The sugarcane crop is produced in all blocks of the Shahjahanpur district. Powayan block is a significant producer of sugarcane in the district. A sugar mill is established in Powayan block which encouraged to the farmers to produce the more sugarcane crop. The problem that affects the sugarcane production are small size of land holding, lack of capital, lack of modern technology, unavailability of irrigational water, and government price policies. Sugarcane is the only crop which governs the regional politics. Sugarcane is one of the politically sensitive industry. Due to bulkiness, non-storability, post-harvest deterioration, government high regulation is the limitation in sugarcane marketing (Yadav et al. 2006). The present study will examine the main problems faced by the sugarcane farmers in the Powayan block of the Shahjahanpur district.

## II. STATEMENT OF THE PROBLEM

In India most of the rural population is engaged in agricultural activities for their survival and the farmers are facing many problems related to their crops. These issues may differ from one crop to other crop according to the type of crop cultivated. The farmers who are engaged in sugarcane cultivation are faced the many problems like low yield of sugarcane, high cost of production, old and obsolete machinery, unavailability of labour, shortage of water supply, Price fluctuation, late payment by the sugar mills. In Shahjahanpur district, the main problem faced by almost all farmers is delay in payment by the factories. The farmers who have minimum acres of land for sugarcane crop cannot wait for long time for payment by factories because of the family requirements so they sell their crops to middleman at lower price. There are numerous schemes initiated by the government to support the farmers like providing the seeds and fertilizer to the farmers, crop loans, and fixing guaranteed rate of certain specific crops etc. But these schemes are not properly approachable by the needy groups of framers. Hence, the farmers are struggling for the capital and borrow regularly to meet their daily requirements of the family. So, the government should need

to take the necessary step to monitor the problems of the farmers and try to solve it in better way.

### III. OBJECTIVES OF THE STUDY

- To identify the real situation of sugarcane growers
- To find out the main problems related with sugarcane crop
- To find the remedial measure to solve the issues faced by the farmers

### IV. MATERIALS AND METHODS

The present study is entirely based on primary source of data. The study was conducted in Powayan block of Shahjahanpur district. Powayan block is an important block of the district in terms of sugarcane cultivation. For the study, five sugarcane producing villages namely Ajmatpur, Gangsara, Marena, Katka, and Dalipur were randomly selected by using convenient sampling method. Total 100 respondents were surveyed who were primarily engaged in sugarcane cultivation. The data was collected by interviewing respondent by pre-tested interview schedule. For showing the relationship between the variables chi-square method is used. The analysis of the data is done with the help of SPSS software.

### V. RESULT AND DISCUSSION

Name of Villages	No. of Sample respondent
Ajmatpur	19
Gangsara	23
Marena	20
Katka	17
Dalippur	21
Total no. of respondent	100

Table 1: Number of Respondents from each selected villages

Source: Based on field survey, 2019

Villages	Up to 30 years	31-45 years	46-55 years	Above 55	Total
Ajmatpur	3 (16)	5 (26)	10 (53)	1 (5)	19 (100)
Gangsara	3 (13)	4 (17)	14(61)	2 (9)	23 (100)
Marena	6 (30)	2 (10)	12 (60)	0(0)	20 (100)
Katka	2 (12)	3 (17)	11 (65)	1 (6)	17 (100)
Dalippur	2 (10)	3 (14)	13 (62)	3 (14)	21 (100)
Total	16	17	60	7	100

Table 2: Distribution of Respondents by their Age Group

Source: Based on field survey, 2019

Table 2 shows the number of respondents according to their age in study area. For the study, respondent have been divided into four age groups. Majority of farmers were under 46-55 age group. About 60 percent of farmers were found under this age group. This was the most dominant age group in the study area. About 17 percent of farmers were lying under 31-45 age group. Percentage of the age group above 55 years was only

7 percent. And only 16 percent of respondents up to 30 years were engaged in sugarcane cultivation. It is clear from the table that young people (up to 30 years) were not as much interested in cultivating sugarcane.

No. of Villages	Educational Status			Total
	Illiterate	Primary	Secondary	
Ajmatpur	15 (78)	2 (11)	2 (11)	19
Gangsara	17 (74)	4 (17)	2 (9)	23
Marena	17 (85)	2 (10)	1 (5)	20
Katka	15 (88)	1 (6)	1 (6)	17
Dalippur	18(85)	2 (6)	1 (9)	21
Total	82	11	7	100

Table 3: Distribution of Respondents according to their Educational status

Source: Based on field survey, 2019

Table 3 demonstrates the educational status of the sugarcane farmers in the study area. Majority (82 percent) of the respondent in the study area were illiterate. Only 18 percent respondents were literate. Out of literate farmers, 11 of farmers were up to primary level of education and 7 percent were up to secondary level of education. It is clear from the table that overall Educational level of the respondent was very disappointing.

Villages	Area under Sugarcane crop			Total
	Below 5 acres	5-10 acre	More than 10 acres	
Ajmatpur	10 (53)	6 (31)	3(16)	19
Gangsara	15 (65)	7 (31)	1 (4)	23
Marena	11 (55)	7 (35)	2 (10)	20
Katka	10 (59)	6 (35)	1 (6)	17
Dalippur	11 (52)	7 (34)	3 (14)	21
Total	57	33	10	100

Table 4: Distribution of Respondents according to the Land under Sugarcane crop

Source: Based on field survey, 2019

Table 4 shows that 57 percent of the respondents were cultivating sugarcane crop in less than 5 acres of land. And 33 percent respondents were growing the sugarcane crop over 5-10 acres of land. And only 10 percent of the farmers were cultivating the sugarcane crop on more than 10 acres of land. It is observed from the above table that majority of the sugarcane farmers are not cultivating the sugarcane crop on their whole agricultural land. They also grow some other crops in their lands because sugarcane is a long duration crop and payment process of sugarcane by sugar Mills takes long time, so for the survival of their families, farmers also prefer some other crops which gives quick returns as compare to sugarcane.

Villages	Mode of Transportation		Total
	Bullock	Tractor	
Ajmatpur	3	16	19
Gangsara	4	19	23
Marena	3	17	20
Katka	3	14	17
Dalippur	3	18	21
Total	16	84	100

Table 5: Mode of Transportation adopted by Respondents for their Sugarcane

Source: Based on field survey, 2019

Table 5 shows the mode of transportation adopted by respondents for their crops. It revealed from the table that 84 percent of farmers were using tractors to transport their crop and 16 percent of farmers were using bullocks. It is observed from the survey that some farmers are not adopting the new methods because of less willing to adopt the new methods, they preferred traditional methods

Educational Status	Mode of Transportation		Total
	Bullocks	Tractors	
Illiterate	8 (13.12)	74 (68.88)	82
Primary	4 (1.76)	7 (9.24)	11
Middle	2 (1.12)	5 (5.88)	7
Total	16	84	100

Table 6: Chi square relationship between educational level of respondents and their mode of transportation

Source: Calculated by authors, data obtained from field survey, 2019

From the table 6, by applying the chi square test it is found that chi square value is 6.59 with P value 0.036 at 2 degree of freedom. Hence, P value is less than 0.05 it shows that there is significant association between educational status of respondent and their adoption of mode of transportation.

Villages	Period of cultivating sugarcane crop			Total
	From last 3 years	From last 3-6 years	More than 6 years	
Ajmatpur	2 (10)	7 (37)	10(53)	19(100)
Gangsara	2 (9)	8 (35)	13 (56)	23 (100)
Marena	1 (5)	7 (35)	12 (60)	20 (100)
Katka	3 (18)	5 (29)	9 (53)	17 (100)
Dalippur	4 (19)	5 (24)	12 (57)	21 (100)
Total	12	32	56	100

Table7: Distribution of farmers regarding the Period of Cultivating Sugarcane crop

Source: Based on field survey, 2019

Table 7 shows the distribution of farmers according to their period of cultivating sugarcane crop. Respondent are divided in to three categories to know about the how long they are cultivating the sugarcane crop. It is clear from the table that most of the farmers (56 percent) were cultivating sugarcane crop more than 6 years. In Marena village most of the farmers were growing the sugarcane crop in their fields since long time. 32 percent of the respondent were producing the sugarcane from last 3-6 years. And only 12 percent respondents started sugarcane crop from last 3 years.

Villages	Future prospect of Sugarcane crop			Total
	Good	Average	Less	
Ajmatpur	7	9	3	19
Gangsara	9	12	2	23
Marena	10	8	2	20
Katka	5	9	3	17

Dalippur	7	12	2	21
Total	38	50	12	100

Table 8: Distribution of respondent concerning future prospect about sugarcane crop in their fields

Source: Based on field survey, 2019

From the above table it is observed that farmers interest about the sugarcane crop is average. In the study area 38 percent of respondent had perception that future scope of sugarcane crop is good. According to the 50 percent of respondent, future prospect of sugarcane crop is average. And 12 percent of farmers have views that future prospect under sugarcane is less. It is clear from the above table that most of the farmers of the Powayan block thinks that future prospect under sugarcane crop is good, it means the farmers of the study area are interested to cultivate the sugarcane crop in future.

Period of cultivating Sugarcane	Future Prospect of Sugarcane crop			Total
	Good	Average	Less	
From Last 3 years	4 (4.56)	6 (6)	2 (1.44)	12
From 3-6 years	16 (12.16)	12 (16)	4 (3.84)	32
More than 6 years	18 (21.28)	32 (28)	6 (6.72)	56
Total	38	50	12	100

Table 9: Relationship between experience of farmers and future prospect of sugarcane cultivation

Source: Calculated by author, data obtained from field survey, 2019

From the calculation of above table, it is found that value of chi square is 3.66 with P value 0.454 at 4 degree of freedom. Hence, the P value 0.454 is greater than 0.05, it is clearly indicating that there is non- significant relationship between experience of farmers and perception of farmers regarding future prospect of growing sugarcane crop in the study area.

Villages	Major problems faced by sugarcane growers									
	Problem of variety		Poor irrigation		Disease		High cost of Inputs		Problem of late payment by sugar factory	
	Y ES	N O	Y ES	N O	Y ES	N O	Y ES	N O	Y ES	N O
Ajmatpur	3	16	6	3	11	8	17	2	19	0
Gangsara	12	19	1	4	13	10	20	3	23	0
Marena	8	15	2	5	10	19	1	19	1	20
Katka	8	14	9	3	11	6	15	2	17	0
Dalippur	11	19	1	2	12	9	19	2	21	0
Total	42	82	5	17	57	43	90	10	100	0

Table 10: Major Problems faced by sampled Sugarcane growers

Source: Based on field survey, 2019

Main problems faced by sugarcane grower in the study area are categorized in table 10. Main difficulties faced

by farmers in Powayan blocks is problem of late payment by sugarcane factory. Problem of late payment is faced by all respondent (100 percent) in the study area. Many farmers who sell their produces to the factories do not get immediate payment and to that extent their financial viability suffers. Quite often the farmer harvest and sells the produces only to meet some family financial commitments in the expectation that they will get quick returns. But very rarely such that happens. The factory and the private crushers also come out with certain explanations of their own as to why they are not able to settle the bills quickly.

Another major problem faced by famers in Powayan block is high cost of Input. From the table 10, ninty percent of respondents in study area faced the problem of high cost of input. Farmers require heavy amount of finance for cultivation of sugarcane crop. Most of the farmers do not have enough capital due to poor economic condition. Under such situation they either borrow the institutional borrowing or private borrowing. Under institutional borrowing they can borrow from commercial banks and cooperative institutions. The loans provided banks are not timely which results the crop failure. And under private borrowings the rate of interest is so high which increase the production cost of crop. Sugarcane crop requires regular supply of larger quantity of water for its growth. Availability of Sufficient water mainly depends on rainfall. Fluctuation in seasonal rainfall adversely affect the production of sugarcane. Sugarcane being a long duration crop which requires more irrigation. Poor water availability leads to drying of crop and yield loss.82 percent of respondents (table 10) have problem of poor irrigation facilities.57 percent of farmers suffering from the problem of disease in their sugarcane crop in study area.

## VI. CONCLUSION

It is evident from the study that sugarcane is important cash crop of Powayan block, but there are some major problems faced by sugarcane farmers in study area. The main problems faced by sugarcane growers are delay in payments by factories, high cost of cultivation, lack of irrigation facility. Among all problems faced by sugarcane growers, the major problem in the study area is late payment by sugar factories. For starting the cultivation of next crop, they need finance. Hence, they approach the money lenders for the financial support where they must pay the high rate of interest. Hence, it suggested that sugar factories may arrange for payments as early as possible, which will not drive the farmers to borrow from unorganized sector. Another major difficulty faced by farmers is water supply. Sugarcane crop requires huge quantity of water, but the rainfall pattern of study area is very uneven, so at the government level, it is necessary to provide the information of weather and monsoon to the farmers. These initiatives would help to increase the scope and production of sugarcane in the study area.

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