

## CONSTRAINTS FACED BY Bt COTTON GROWERS IN BHARUCH DISTRICT OF GUJARAT STATE

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### ABSTRACT

*The study was conducted to assess the constrain faced by Bt. cotton growers in Bharuch district of Gujarat state. The results of the study revealed that The major input constraints, encountered by the Bt. cotton growers were Inadequate supply of electricity, Lack of irrigation facility and canal water availability, High cost of plant protection chemicals, Non availability of required quantity of FYM, High cost of chemical fertilizer, High cost of hybrid seeds and Lack of credit facility. With respect to technical constraints, majority of the respondents faced problem of lack of knowledge disease management, High initial cost, Lack of knowledge to manage the pest and lack of knowledge about different cultivation practices. Majority of the respondents faced the problem of labour. Non-availability of labours at the required time and high wages of labourers. Regarding marketing, Low price of produce, Exploitation by middlemen were faced by farmers.*

**Keywords:** *constrains, scientific cultivation of bt. cotton, bt. cotton growers*

### INTRODUCTION

India is the home of food grains, pulses and oilseed crops like cotton, castor, groundnut etc. Cotton is known as “king of fiber” crops due to its global importance in agriculture as well as industrial economy. It is known as “White Gold”. It supplies 5 basic products viz; lint, oil, seed meal, hulls and linters. Due to its multipurpose nature and use, it has huge demand from industry side, which makes this crop most reward able among the farming community.

Bharuch district is the major cotton growing district of the state. The farmers of the district are pioneer in introducing cotton cultivation. The district comprise of 8 talukas, of which Bharuch, Amod and Jambusar, taluka has been considered as productivity potential region of cotton crop due to assured irrigation facilities and favorable soil and climatic conditions. Earlier research had revealed there is more potential in Bharuch distric in achieving higher production and productivity, Navsari Agricultural University the nodal centre for all the agricultural activities of Bharuch district. Present study scientific cultivation of Bt. cotton in Bharuch district was carried out during 2017.

### OBJECTIVE

To know the constrains faced by farmers to adopt scientific cultivation of Bt. cotton

### MATHODOLOGY

“Ex-post facto research design” was used for investigation. The research was carried out in Bharuch district of Gujarat state during 2017. The District comprises of eight Talukas, among which Bharuch, Jambusar, and Amod talukas were randomly selected for the study. From each taluka three villages were selected randomly with maximum number of Bt. cotton growers. In each of the selected villages farmers were selected according to random sampling to form 90 respondents as a sample size for the study. The interview schedule was constructed by formulating relevant questions in accordance with objectives of the study. The data were collected by personal interview method. Statistical tools viz. frequency, percentage, ranking and correlation, were used to analyze the data.

## RESULTS AND DISCUSSION

Table 1 : constraints faced by Bt. cotton growers

n=90

Sr. No.	Particulars	No.	Percent
1	<b>Input</b>		
	Inadequate supply of electricity	75	83.33
	Lack of irrigation facility and canal water availability	59	65.55
	High cost of plant protection chemicals	51	56.66
	Non availability of required quantity of FYM	40	44.44
	High cost of chemical fertilizer	39	43.33
	High cost of hybrid seeds	34	37.77
	Lack of credit facility	16	17.77
2	<b>Technical</b>		
	Lack of knowledge to manage the disease	59	65.55
	High initial cost	47	52.22
	Lack of knowledge to manage the pest	45	50.00
	Lack of knowledge about different cultivation practices	15	16.66
3	<b>Labour</b>		
	Non-availability of labourers	71	78.88
	High wages of labourers	64	71.11
4	<b>Marketing</b>		
	Low price of produce	50	55.55
	Exploitation by middlemen	44	48.88

The data in table 1 revealed that majority of the respondent Bt. cotton faced constrains as Inadequate supply of electricity (83.33%), followed by Lack of irrigation facility and canal water availability (65.55%), High cost of plant protection chemicals (56.66%), Non availability of required quantity of FYM (44.44%), High cost of chemical fertilizer (43.33%), High cost of hybrid seeds (17.33%) and Lack of credit facility (17.77%). With respect to technical constraints, majority of the respondents faced problem with respect to lack of knowledge disease management (65.55%) followed

by High initial cost (52.22), Lack of knowledge to manage the pest(50.00%) and lack of knowledge about different cultivation practices (16.66%). Majority of the respondents faced the problem of labour. Non availability of labourers at the required time and high wages of labourers were faced by 78.88 per cent and 71.11 per cent of the respondents, respectively. Regarding marketing, Low price of produce was faced by 55.55 per cent followed by Exploitation by middlemen (48.88%). Were the major constrains faced by the farmers.

Table 2 : Suggestions made by cotton growers to overcome the constrains

Sr. No.	Suggestions	Frequency	Percent	Rank
1	Electricity for irrigation should be provided regularly and for longer duration	72	80.00	I
2	Canal water are provided regularly	62	68.88	III
3	Agriculture Extension workers should provide information regarding variety, irrigation management, manure and fertilizer, plant protection and new practices of Bt. cotton crops	57	63.33	IV
4	Organization of farmers training programmes for Bt. cotton growers	55	61.11	V
5	Seeds and chemical fertilizers should be easily available at fair price	49	54.44	VI

## **CONCLUSION**

From above findings, it can be conclude that the constrains were, Inadequate supply of electricity, Lack of irrigation facility and canal water availability, High cost of plant protection chemicals, Non availability of required quantity of FYM, High cost of chemical fertilizer, High cost of hybrid seeds and Lack of credit facility. With respect to technical constraints, majority of the respondents faced problem of lack of knowledge disease management, High initial cost, Lack of knowledge to manage the pest and lack of knowledge about different cultivation practices. Majority of the respondents faced the problem of labour. Non-availability of labourers at the required time and high wages of labourers. Regarding marketing, Low price of produce, Exploitation by middlemen were faced by farmers. The major suggestions recorded in sequential order of rank were; Electricity for irrigation should be provided regularly and for longer duration, Canal water are provided regularly, Agriculture

Extension workers should provide information regarding variety, irrigation management, manure and fertilizer, plant protection and new practices of Bt. cotton crops.

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