

## CONSTRAINTS FACED IN ADOPTION OF MODERN PRACTICES OF COTTON CULTIVATION BY THE FARMERS

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### ABSTRACT

*The present study was undertaken in the villages of Dholka and Dhandhuka talukas located on southern part of Ahmedabad district of Gujarat to know the constraints of cotton growers in adoption of modern practices of cotton cultivation and to seek suggestions to overcome these constraints. The major constraints were faced by cotton growers were non availability of irrigation facilities including salty underground water and shortage of rainfalls, considerable adoption gap was found in shortage of FYM, risky cultivation, fluctuation in market price and poor social-economic condition. The major suggestions recorded were; the Government should provide irrigation facility through canal, subsidy or loan for seeds and fertilizers and also give information of modern practices of cotton.*

### INTRODUCTION

Gujarat is one of the major cotton producing states in the country. Cotton is widely grown, particularly in all districts of the state and it is divided into four well-defined cotton zones. *Wagad* cotton zone faces the complex problems like drought, occasional frost, soil salinity and shallow soil depth. At present, the average productivity of the zone is very low. It affects the productivity of the state. Hence, the productivity of the zone is required to be explored by developing suitable technologies including high yielding varieties for this area.

Cotton has been considering as one of the important cash crops of Gujarat. It has taken long stride due to introduction of improved seeds and modern practices. The cotton growing farmers can increase production of cotton through adoption of new varieties with modern practices. Keeping this in view the study was carried out with following specific objectives:

### METHODOLOGY

In order to achieve the above objectives, the

present study was undertaken in the villages of Dholka and Dhandhuka talukas located on southern part of Ahmedabad district of Gujarat state. From selected eleven villages, a random sample of 110 cotton growers was selected for this study.

A simple ranking system technique was applied to measure constraints in adoption of modern practices of cotton and suggestions to overcome the constraints.

### FINDINGS AND DISCUSSION

It is imperative to note that the yield obtained from the cotton growers' fields in case of cotton is comparatively lower than that of the yield obtained in demonstration plots. It seems that they might have faced certain problems in adoption of modern practices of cotton cultivation. These constraints may be social, economic, physical or psychological. The constraints faced by the cotton growers hinder the progress and hence, desired results cannot be achieved. Therefore, it was felt necessary to identify the constraints faced by

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them in adoption of modern practices of cotton cultivation.

Constraints faced by the cotton growers were measured with the help of four point rating scale. The total score and mean score for each constraint was calculated and rank was assigned from higher to lower score. The data regarding this are presented in Table-1.

It can be concluded that non availability of irrigation facilities including salty underground

water and shortage of rainfall, shortage of FYM, risky and fluctuation of market price, poor social and economic condition, high price rate and shortage of inputs, lack of knowledge, shortage of labours and its high rate, susceptibility of crop to pests and diseases and complicated method of fertilizer application were the major constraints faced by the cotton growers in adoption of modern practices of cotton cultivation.

**Table 1 : Constraints faced by the COTTON GROWERS in adoption of modern practices of cotton cultivation** n=110

Sr. No.	Constraints	Total score	Mean score	Rank order
1	Non availability of irrigation facility	310	2.82	I
2	Salty underground water	310	2.82	I
3	Shortage of rainfall	305	2.77	II
4	Shortage of FYM	279	2.54	III
5	Cotton cultivation is risky	277	2.52	IV
6	Fluctuation in cotton price	277	2.52	IV
7	Poor social and economic condition of farmers	263	2.39	V
8	Non availability of remunerative price of cotton	234	2.13	VI
9	High price of fertilizers	212	1.93	VII
10	Lack of knowledge about modern practices	196	1.78	VIII
11	High rate of labour	180	1.64	IX
12	Shortage of labour	171	1.55	X
13	High price of pesticides	138	1.25	XI
14	Crop susceptible to pests and diseases	120	1.09	XII
15	High price of seeds	109	0.99	XIII
16	Shortage of certified seeds	92	0.84	XIV
17	Complicated method of fertilizer application	60	0.55	XV
18	Customs against plant protection	12	0.11	XVI

The efforts were also made to ascertain the suggestions offered by the cotton growers to overcome the problems in adoption of modern practices of cotton cultivation. The data regarding this were collected from the respondents. According to relative importance, the suggestions were made based on percentage.

Table-2 reveals that the suggestions given by the cotton growers to adopt modern practices

of cotton on large scale. The major suggestions recorded in sequential order of rank were; the Government should provide irrigation facility through canal, subsidy or loan for seeds and fertilizers and also give information as well as demonstrations of modern practices of cotton, the produce should be purchased by the government agencies at reasonable price and crop insurance procedure should be made easier.

**TABLE 2 : Suggestions made by the cotton growers to overcome the constraints in adoption of modern practices of cotton cultivation**

n=110

Sr. No.	Suggestions	Frequency	Per cent	Rank order
1	Govt. should provide irrigation facility through canal	38	34.55	I
2	Govt. should provide subsidy or loan for seeds and fertilizers	24	21.82	II
3	Govt. should give information and conduct demonstrations of modern practices of cotton	20	18.18	III
4	The produce should be purchased by the Govt. agencies at reasonable rates	13	11.82	IV
5	Crop insurance procedure should be made easier	09	8.18	V

**CONCLUSION**

From the above findings, it can be concluded that the constraints were; non availability of irrigation facilities, salty underground water and shortage of rainfall. It was also found that a considerable adoption gap was found in some practices such as shortage of FYM, risky cultivation, fluctuation in market price, poor social and economic condition, high price rate and shortage of inputs, lack of knowledge, shortage of labours and its high rate, susceptibility of crop to pests and diseases and complicated method of fertilizer application. The major suggestions recorded in sequential order of rank were; the Government should provide irrigation facility through canal, subsidy or loan for seeds and fertilizers and also give information as well as demonstrations of modern practices of cotton.

**IMPLICATIONS**

The extension agencies need to put their more efforts to transfer the technical knowhow of modern practices to the cotton growers as speedily as possible. Efforts should be made at first to contact literate cotton growers to train them with demonstration modern practices of cotton cultivation for quick adoption, while illiterate cotton growers should be followed them about modern practices of cotton cultivation.

The essential inputs required for cotton crop such as seeds, FYM, chemical fertilizers and pesticides should be made available as subsidized rate through Govt. agencies. Irrigation facilities should also be ensured throughout cotton cultivation period to ensure application of irrigation at critical stage.

*Your character depends upon the quality of thoughts. you entertain in your mind.. The mental pictures and idels entertained by you determine your future. If you entertain noble thoughts, you will have a magnanimous character. Evil thoughts will perish by themselves. They will be powerless before sublime and divine thoughts.*

*- Swami Shivanand*