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Relationship Between the Personal Characteristics of BT and non BT Cotton Growers and their Level of Knowledge

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ABSTRACT

The study was conducted among the comparative study on Bt and non Bt cotton growers of Bharuch district of Gujarat state. Ex-post Facto research design was used and by using the proportionate random sampling technique used. The study was consisted of 75 Bt and 75 non – Bt cotton growers as respondents were obtained for the present study. The Bt cotton growers, social participation and extension contact were found positively and significantly correlated with knowledge level, where age, education, occupation, family size, family income and land holding were non significant and other hand In case of non Bt cotton growers, land holding and extension contact were found to be positively and significantly correlated with knowledge level, whereas, age, education, occupation, family size, family income and social participation were non significant.

Keywords: *Relationship, knowledge, cotton, Bt Cotton & Non Bt Cotton*

INTRODUCTION

Cotton, the 'White gold' occupies an enviable place amongst commercial crops of our country. Cotton plays a dominant role in agriculture as well as in industrial economy. It is one of the prime sources of natural fibers. It gives support to prestigious textile industry and produces employment to millions of people. The pattern of cotton production and consumption shows that the India has major strides since independence from net importer to self sufficiency and a marginal exporter of raw cotton. Cotton cultivation area 9.3 million hectares (25 per cent) is in India. However, India ranks second (18 per cent) in total cotton production in the world. Gujarat state is India's number one cotton producing state and it produced cotton worth Rs 8,000 crore in 2006-07. Cotton is the most important commodity throughout the world, which shares considerably in the Indian economy. Cotton is one of the major cash crops of India. Cotton seed and seed cakes are important sources of concentrate and feed to animals. It is also being used in manufacturing synthetic rubber, soaps, cosmetics, plastics, explosive etc. Considering its importance, cotton is grown on a large scale throughout the world. Cotton being cultivated in 93 m. hectares, which covers about 25 per cent of total area of the country however, in which context to production, India securing second rank with 18 per cent of production of the world. (Khadi, 2005).Hybrid cotton cultivation about 70 per cent of total cotton area is a significant milestone achievement in Indian Agricultural scenario. Basically, it is cultivated in three distinct agro-ecological regions *viz.,* North, Central and South, of which, 21 per cent area is under cultivation in North zone which is 100 percent irrigated and contributes 25 per cent of the total production. The Central zone is predominantly rainfed and occupies more than 56 per cent of the total area, but contributing less than 50 per cent of the total production and hybrid cultivation is dominant in this zone. In South zone is representing all types of cotton, *viz.,* irrigated and rainfed, hybrids (inter and intra-specific, diploids, and tetraploids) and varieties (diploids and tetraploids).

Keeping in view of this importance, the present study was undertaken with following specific objectives:

Relationship between the personal, socio-economic and psychological characteristics and level of knowledge

METHODOLOGY

Bharuch is one of the major cotton growing district in south Gujarat. This district has eight talukas. Out these eight talukas, Ankaleshwar, Amod, Bharuch, Wagara and Walia have highest area under Bt cotton. All these five

talukas were purposively selected. A list of cotton growing villages was obtained from the District Agricultural Officer, Department of Agriculture, Bharuch. Out of these, fifteen villages were selected purposely. The lists of Bt and non Bt cotton growers of selected villages were obtained from Talati-cum-mantri. Out of total, five Bt cotton growers were selected randomly while, five non Bt cotton growers of same village were selected by considering actual cultivated area of Bt cotton growers. This way, the study was consist of 75 Bt and 75 non Bt cotton growers as respondents. In all one hundred fifty respondents were considered as sample size for the present study. The basic method was used for the collection of data by personal interview from 150 respondents of 15 villages' of selected Bharuch talukas by the investigator.Ex-post-facto research design was used. This design was considered appropriate because the phenomenon has already occurred. Keeping in the view, the objectives of study, the interview schedule was prepared and respondents were interview at their home.

RESULTS AND DISCUSSION

Table 1: Relationship Between Selected Characteristics and Level of Knowledge

Sr. No.	Characteristics	Coefficient of correlation *(r)*	
		Bt cotton growers	Non Bt cotton rowers
1	Age	0.12053	0.17821
2	Education	-0.06272	-0.08119
3	Occupation	-0.21073	-0.05306
4	Family Size	-0.07610	0.03466
5	Family Income	-0.08123	-0.14780
6	Land Holding	0.06206	0.27346*
7	Social Participation	0.23451*	0.01271
8	Extension Contact	0.42224*	0.40161*

***Significant at 5 per cent probability level (Critical value +/- 0.22701)**

The association between the selected characteristics of cotton growers viz, age, education, occupation, family size, family income, land holding, social participation and extension contact and knowledge level were worked out with the help of coefficient of correlation. The findings were presented in table 15.

The data manifested in table 1 revealed that in case of Bt cotton growers, social participation (0.23451*) and extension contact (0.42224*) were found positively and significantly correlated with knowledge level, where age, education, occupation, family size, family income and land holding were non significant.

In case of non Bt cotton growers, land holding (0.27346*) and extension contact (0.40161*) were found to be positively and significantly correlated with knowledge level, whereas, age, education, occupation, family size, family income and social participation were non significant.

As such hypothesis set for this study that "there is a no relationship between the personal, socio-economic and psychological characteristics of Bt and non Bt cotton growers and their level of knowledge" is rejected.

This finding is in the agreement with the findings of Madiajaan and Somasundaram (2002), Katole *et al.* (1996), Nimje *et al.* (1990) and Murthy (1990).

CONCLUSION

From the findings of the study, it can be concluded that, The Bt cotton growers, social participation and extension contact were found positively and significantly correlated with knowledge level, where age, education, occupation, family size, family income and land holding were non significant and other hand In case of non Bt cotton growers, land holding and extension contact were found to be positively and significantly correlated with knowledge level, whereas, age, education, occupation, family size, family income and social participation were non significant.

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