

DETERMINANTS IN ADOPTION OF MODERN COTTON CULTIVATION PRACTICES

P. J. Joshi¹, N. B. Chauhan² and K. F. Patel³

ABSTRACT

With a view to know the correlation of adoption about modern practices of cotton cultivation with the cotton growers' characteristics, the present study was undertaken in Bhal area of Gujarat. Majority of the cotton growers had low to medium level of adoption of modern practices of cotton cultivation. The significant and positive correlation was observed in ten characteristics out of fourteen characteristics of cotton growers with extent of adoption of modern practices of cotton cultivation.

INTRODUCTION

Cotton is one of the most important commercial fibre crops of India. Besides food and housing, clothing is one of the prime needs of human beings. In future; cotton production must expect stiff competition both in terms of price and quality. *Herbaceum* cotton scores better than hybrids on account of its less cost of the production, tolerance to biotic and abiotic stresses, loose attachment of fibre to seeds, fibre maturity, etc. Gujarat has immense scope in producing organic cotton particularly in *Wagad* areas. *Bhal* is one of the major *herbaceum* cotton producing areas of this state.

Adoption of modern practices of cotton increased the cotton yield. Therefore, they deserved better attention for adopting modern practices of cotton production by the cotton growers under rainfed area. The degree or extent of adoption might be the result of influence of the personal, socio-economic and psychological characteristics of the cotton growers.

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 growers can increase production of

cotton through adoption of new varieties with modern practices

METHODOLOGY

The present study was carried out in *Bhal* area of Gujarat State. The selection of Dholka and Dhandhuka talukas were done purposively because these talukas cover major parts of *Bhal* tract. A random sample of total 110 cotton growers was selected from the 5 villages of Dholka and 6 villages of Dhandhuka talukas on the basis of area covered under cotton cultivation. In order to measure relationship between profile of cotton growers and extent of adoption of modern practices of cotton cultivation, various scales developed by different social scientists were adopted with due modifications and correlation coefficient "r" test was calculated.

FINDINGS AND DISCUSSION

A scientific approach was followed to study the profile of the cotton growers and established their relationship with extent of adoption of modern practices of cotton cultivation. Correlation coefficient was computed and data were presented in Table-1.

The non-significant relationship between age and level of adoption indicated that the young cotton

1 Planning Officer (Asstt. Prof.), Planning Cell, DOR, Anand Agril. University, Anand.

2 Prof. & Head, Dept. of Ext. Edu., BA College of Agri., Anand.

3 Ex Director of Ext. Edu., Anand Agricultural University, Anand.

growers were more dynamic and curious enough to adopt modern practices of cotton cultivation. Thus, the age was found to be an independent factor in extent of adoption.

Table 1: Relationship between profile of the cotton growers and their extent of adoption of modern practices of cotton cultivation
n=110

Sr. No.	Profile	'r' value
1	Age	- 0.0910
2	Education	0.3415 *
3	Social participation	0.1210
4	Extension contact	0.2419 *2
5	Media exposure	0.3247 *
6	Size of land holding	0.1486
7	Cotton cultivated area	0.2574 *
8	Animal possession	- 0.0606
9	Material possession	0.4082 *
10	Income	0.2146 *
11	Economic motivation	0.4137 *
12	Risk orientation	0.4712 *
13	Market orientation	0.4481 *
14.	Attitude	0.4921 *

*Significant at 0.05 per cent level of probability.

It is cleared that education of the cotton growers had significant relationship with the extent of adoption of modern practices of cotton cultivation. It shows that the level of adoption increased with increase in level of education. The result reveals that the level of adoption increased with increase in degree of extension contact. This may be due to the fact that farmers who might have contacted the extension agencies were remained abreast with latest technical know-how and received help and guidance as and when needed. The greater contact with the larger society via media exposure seemed to be associated with higher adoption of modern practices of cotton cultivation.

The data given in Table-1 indicated that size of land holding of the cotton growers had non-significant relationship with extent of adoption about modern practices of cotton cultivation.

Result shows that extent of adoption of cotton was observed to be better among big cotton growers as compared to small cotton growers as well as it was also observed to be better among those cotton growers who had more area under cotton cultivation. Due to the fact that irrigation facility is not a the more number of material possessions by the cotton growers means cotton growers have high level of economic condition. This may be the probable reason to have positive relationship between material possession and extent of adoption of modern practice of cotton cultivation. Naturally, those who have more income can adopt modern practices of cotton. This may be due to the fact that cultivation of cash crop like cotton is expansive. Cotton growers having high economic motivation possess a strong economic urge to earn profit. Thus, higher economic motivation leads the cotton growers more to adopt modern practices of cotton cultivation. The adoption of any new practices in agriculture iThere was positive and significant relationship between market orientation and adoption of modern practices of cotton cultivation. The cotton grower with high level of market orientation means person with all the necessary awareness about market related information required for getting higher economic return from his farm products. The data presented in Table-1 clearly indicates that attitude towards modern practices of cotton cultivation had significant relationship with its adoption. It is natural that person with positive feeling towards modern practices will have interest to adopt it practically at his own situation.

CONCLUSION

From the above study, it can be concluded that out of fourteen characteristics, ten characteristics viz. Education, Extension contact, Media exposure, Cotton cultivated area, Material possession, Income, Economic motivation, Risk orientation, Market orientation and Attitude of the cotton growers were relatively important to adopt modern practices of cotton cultivation.