

SOCIO ECONOMIC STUDY OF COTTON GROWERS AND CONSTRAINTS IN COTTON PRODUCTION IN BHADRADRI KOTHAGUDEM DISTRICT OF TELANGANA

Abstract

The purpose of this study is to find out problems faced by the cotton growers. A random sample of 100 cotton growers was selected from Bhadradi kothagudem District of Telangana .A total of five villages in the Cherla block Viz Upparigudem, Singhasamudram, Mallaram, Gannavaram and G.colony were selected randomly for the study. The issues that farmers encounter in cotton growing were examined in this research. This study examines the socio-economic conditions in the selected area of the study . The study finds that improved cotton cultivation is significantly influenced by the head of household's age, education, and farming experience. To find out the most significant factor which influences in cotton cultivation , Garrett's ranking technique is used to determine the most important factor influencing the response. Garrett's Ranking Technique allows you to convert the orders of problems into numerical scores.. The benefit of this method is that the problems are sorted according to their severity from the respondents' perspective and it concludes that cotton farmers' biggest issue was their ignorance of modern scientific crop practises, and their least significant issue was a lack of timely access to financing.

Keywords: *socio economic status, Marginal farmers, Constraints , Garrett ranking*

Introduction

Cotton is an important principal commercial fiber crop. It is one of the most leading and important cash crops in the Indian economy. It is the number one crop in natural fiber utilized by textile industries and plays a very vital role in international trade. An important characteristic of cotton production is the low average yield that has translated to low marginal profitability for small producers. In some cases, farmers' productivity are in the range of 300 to 600 kg/ha, while the yield potential of improved varieties at the research station could reach up to 2500 kg/ha. This has resulted in a high yield gap between the research station and actual farmers plots. Due to low production, low productivity and vulnerability to low prices of cotton, climate, pests and diseases, farmers often resort to alternative cash crops to

diversify their businesses and ensure greater safety and security. The consequence of this is the fall of the exchange rate, the lack of raw materials for fabrics and oil mills. Thus, this study was undertaken to suggest suitable measures for bridging the yield gap and enhance the income of farmers in the study area.

Cotton has become one of India's leading fibre and cash crops and a significant contributor to India's agricultural and industrial economy. This provides the cotton textile industry the raw material (cotton fibre). About 40-50 million people are employed in cotton manufacturing and trading

Research Methodology

Selection of study area

Bhadrachalam district was selected purposively for the present study because this state is one of the leading producers of cotton.

Selection of block

Bhadrachalam district comprises of 23 blocks, viz .Allapalli, Annapureddypalli, Aswaraopeta, Aswapuram, Bhadrachalam, Burgampahad, Cherla, Chunchupali, Dammapeta, Dummugudem, Gundala, Julurpad, Karakgudem, kothagudem, Laxmidevipalli, Manuguru, Mulakalapally, pinapaka, Palavanthangal, Sujatanagar, Tekulapally, Yellandu. Among all these blocks, Cherla block was purposely selected due to the largest area and production of cotton crop.

Selection of Sample Villages

A complete list of all villages were obtained from sampled blocks office. Therefore, the villages were arranged in ascending order on the basis cotton cultivation area, and then 6 per cent villages were selected randomly. As a result, 5 sample villages were selected for the present study.

Selection of Sample Respondents/Farmers

A complete list of all cotton growing respondents was obtained from the Gram Panchayat office in all the selected villages. Therefore, the respondents were arranged in ascending order of area under cotton cultivation and then respondents were classified into three different size farm groups on the basis of area under cultivation .

- 1) Marginal farmers – less than 1 ha
- 2) Small farmers– 1 ha to less than 2 ha and
- 3) Medium farmers – 2 to 10 ha
- 4) Large farmers - 10 & above

Following that, 5% of responders were chosen from each of the three size groups of farms in each community. The total number of responders was 100, divided into three groups: 46 small farms, 41 medium farms, and 13 large farms, respectively.

Tabulation and evaluation

The raw data collected was summarised and analysed in such a way that the end product, which was given in the tabular form, became pertinent to the study's objectives. The data was first transferred village wise on different sheets. The corresponding master tables were designed befit to different analysis of the objectives. The entire information was arranged in a particular manner to provide a base for further analysis, thus, facilitating the interpretation of the result

Nature and source of data

Primary data:

The primary method of data collection used in this study is interview method with a structured interview

Secondary data:

The secondary data was being obtained from the published sources like journals, bulletins, internet, etc.

Tools and Techniques

Simple statistical tools used for analysing the data include Percentages, Tables, Pie diagrams and Bar diagrams.

Period of study:

The study was conducted for the Agricultural year 2021-22.

Study of socio-economic status of selected farmers

1.1 Distribution of respondents according to their area under cultivation

The majority of cotton growing farmers are small farmers (57%) ,marginal (25%) and then medium (18%) because Bhadrachalam has only recently begun to practise cotton cultivation. The majority of the cotton-growing area is upto 2 hectares , but it is growing every year due to high returns.

Table no :1Distribution of Respondents according to their cultivation area

S.no	Category	Number	Percent
1.	Marginal (>1ha)	25	25%
2.	Small (1 – 2ha)	57	57%
3.	Medium (2 – 10ha)	18	18%

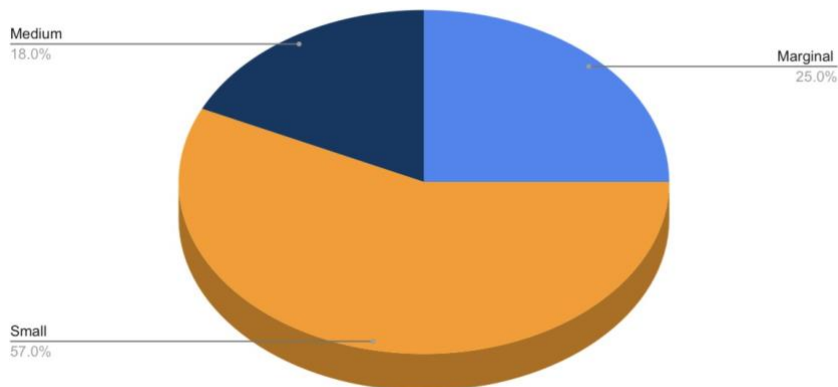


Fig no 1 Distribution of farmers based on area under cultivation

1.2 Gender composition of sample households

Since women are typically assigned to work as daily wage workers in other farms, it is evident that many cotton growers are men about 68 percent and female are about 32 percent.

Table no : 2 Gender composition of sample households

S.No	Members	Farm Groups			All farms
		Marginal	Small	Medium	
1.	Male	16 (64)	38 (66.7)	14 (77.8)	68
2.	Female	9 (36)	19 (33.3)	4 (22.2)	32
	Total	25	57	18	100

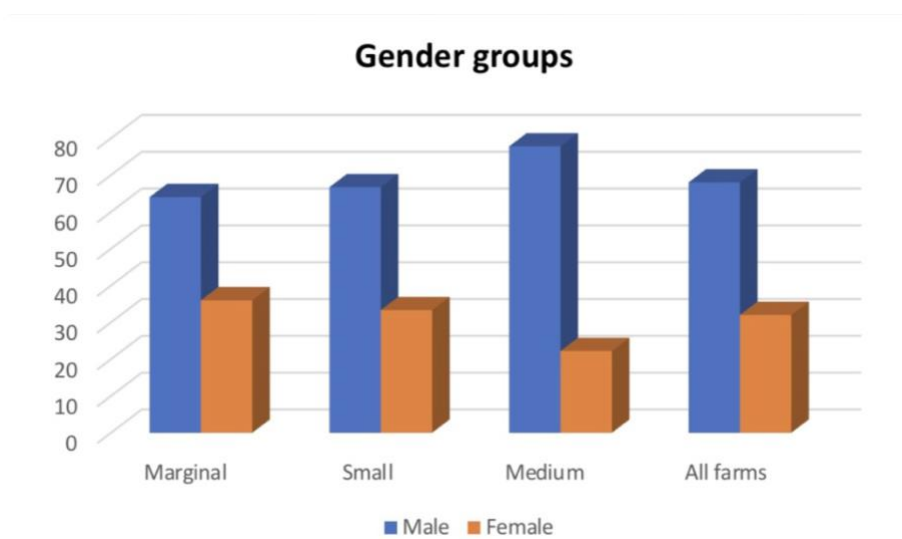


Fig no 2 Gender composition of sample households

1.3 Distribution of Cotton growers according to their age

Table 3 analysis showed that 68 percent of the sample farmers are from 36-58 years old. Thus, it may be concluded that the middle age generation are interested in cultivating cotton more than younger and older generations

Table : 3 Distribution of Cotton growers according to their age

S.no	Categories	Marginal	Small	Medium	Total
1.	Young (18 - 35 years)	10 (40)	8 (14.1)	2 (11.1)	20
2.	Middle age (36 - 58 Years)	12 (48)	42 (73.7)	14 (77.8)	68
3.	Old age(59 - 66 Years)	3 (12)	7 (12.2)	2 (11.1)	12
	Total	25	57	18	100

AGE GROUP OF RESPONDENTS

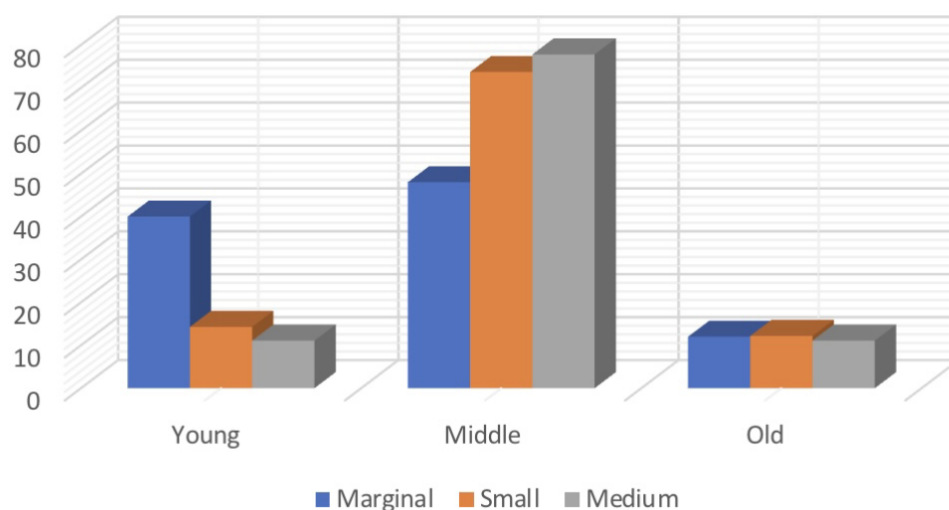


Fig no : 3 Age group of Respondents

1.4 Distribution of Cotton growers according to their level of education

The analysis of education level of sample respondents showed that majority of farmers are illiterate about 48 per cent , upto middle class were about 35 per cent and 17 percent of higher secondary . Majority of small farmers possessed education up to high secondary & above

Table 4 Distribution of Cotton growers according to their level of education

s.no	Categories	Marginal	Small	Medium	Total
1.	Illiterate	11 (44)	27 (47.3)	10 (55.5)	48
2.	Upto middle school	10 (4)	20 (35.1)	5 (27.8)	35
3.	Higher secondary & above	4 (16)	10 (17.6)	3 (16.7)	17
	Total	25	57	18	100

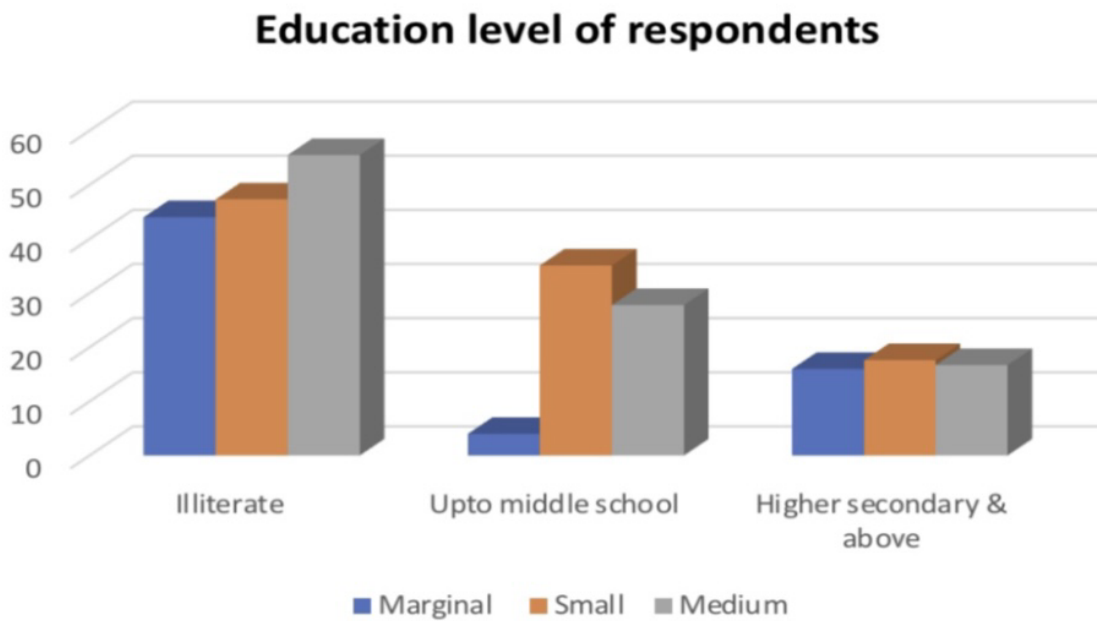


Fig 4 Education level of respondents

1.5 Distribution of Respondents based on the farm experience

Table 5 showed that between 6 and 23 years of farming experience were held by approximately 45 percent of the respondents. 51% of those interviewed has experience about 24& above years. 4 percent of the respondents reported having experience farming for upto 5 years

Table 5 Distribution of Respondents based on the farm experience

S.no	Category	Marginal	Small	Medium	Total
1.	Upto 5 Years	1 (4)	3 (5.2)	-	4
2.	From 6 to 23 Years	18 (72)	20 (35.1)	7 (38.9)	45
3.	24 and above	6 (24)	34 (59.7)	11 (61.1)	51
	Total	25	57	18	100

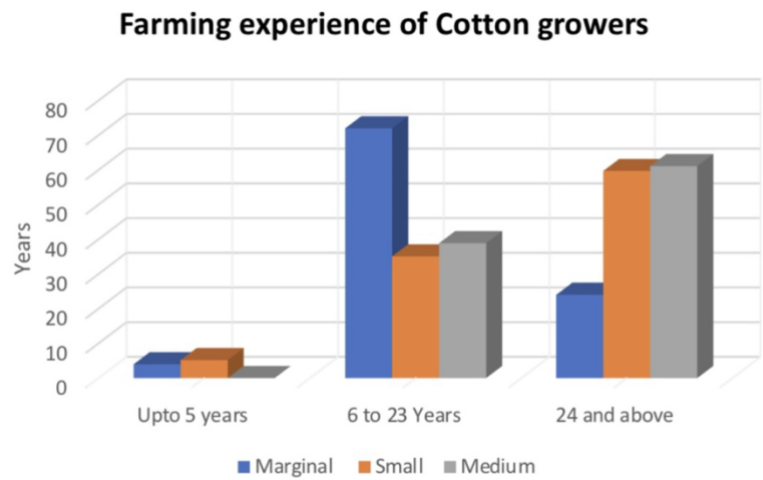


Fig 5 Farming experience of Cotton growers

1.6 Farm distribution according to their Occupation

It has been observed that the majority of cotton farmers (73%) work a daily wage job in addition to farming, which is followed by a 19% farming-only job and an approximate 8% farming-with-self employment job.

Table : 6 Farm distribution according to their Occupation

S.no	Category	Frequency	Percentage
1.	Solely farming	19	19
2.	Farming + Daily wage worker	73	73
3.	Farming + Self employed	8	8
	Total	100	100

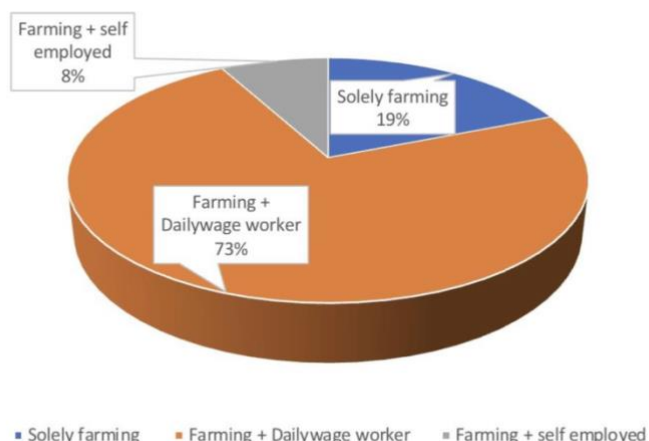


Fig 6 Farm distribution based on their occupation

Application of the Garrett Ranking Technique

An attempt is made to recognise the problems faced by the growers in the cultivation of Bamboo. The identified problems of growers in the cultivation of Bamboo are ranked by making use of Garrett’s Ranking Technique. The technique was used to rank the preference mentioned by the respondents on different factors and aspects of the cultivation process. It is used to find the most significant factor which had influenced the respondent in their practices. Founded on theGarret’sRankingtechnique,thestudyhadtherespondents rank different problems and outcome based on their impact thereby converting into score value and rank with the help of following formula

$$\text{Percent position (PP)} = \frac{100 (R_{ij} - 0.5)}{N_j}$$

Where

R_{ij} = Rank given for the ith variable by jth respondents

N_j = Number of variable ranked by jth respondents

Findings and Discussion

Table 7 Constraints analysis of Cotton Production

S.NO	Constraints	Percentage	Rank
1	lack of knowledge about improved scientific practice in the crop	59.04	1
2	High price of chemical fertilizers	43.6	9
3	High labour charges	52.3	3
4	lack of proper storage facility	49.48	8
5	Non availability of implements for sowing proper seed rate and depth	49.88	7
6	Non availability of labour during peak period	51.3	5

7	High initial investment	54.34	2
8	Market places are far away	51.96	4
9	High cost of transportation	51.08	6
10	Non availability of finance in time	42.88	10

Constraints in Cotton production

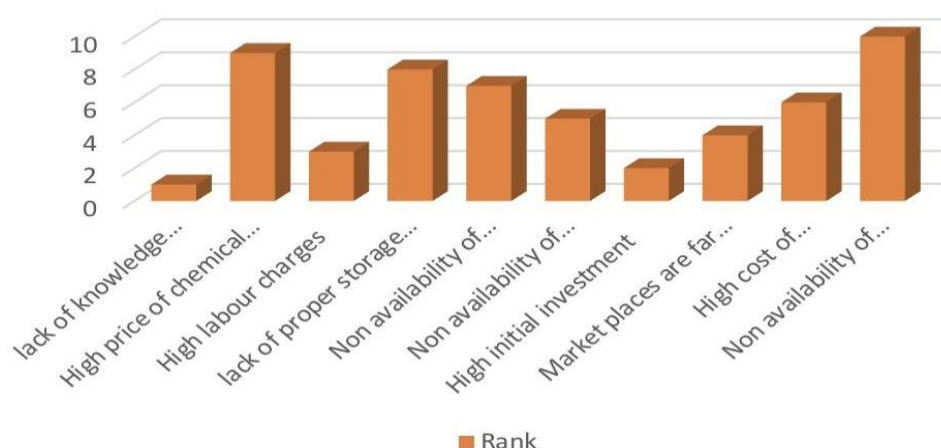


Fig 7 Constraints in cotton production

As seen from the table ,lack of knowledge about improved scientific practice in the crop(54.04%),High price of chemical fertilizers (43.6%),High labour charges(52.3%),lack of proper storage facility(49.48%),Non availability of implements for sowing proper seed rate and depth(49.88%),Non availability of labour during peak period(51.3%),High initial investment(54.34%),Market places are far away (51.96%),High cost of transportation (51.08%),Non availability of finance in time;42.88%)are the major constraints faced by cotton growers in management of cotton cultivation.

Summary

The research identified the socioeconomic characteristics of the cotton growers. Having analysed the findings based on the information collected, About 57 percent of cotton growers are small farmers (1-2 hectares), and men are more active in farming than women. Farmers between the ages of 36 and 58 are more enthusiastic about growing cotton. Farmers have a poor level of education, with only roughly 48% of them being literate. The bulk of farmers have 6 to 23 years of experience. In addition to farming, the farmers' primary employment was to work as a daily wage job.

The cotton farmers' biggest issue was their ignorance of modern scientific crop practises, and their least significant issue was a lack of timely access to financing .Therefore, they advised that the government should provide enough information regarding approved technology and recommended dosage of fertiliser, insecticides, and pesticides, among other things.

Conclusion

The aspects that determine the farmer community's position in Bhadrachalam have been looked into in the current study. The primary source of data is the foundation of the study. The study finds that improved cotton cultivation is significantly influenced by the head of household's age, education, and

farming experience . Since majority of Cotton growers are illiterate they are ignorant of modern scientific techniques for the crop and are unaware of the negative effects of pesticide and fertilizer use. Due to their aversion to crop loss, farmers have spent more money on pesticides to protect their crops. The high expense of cultivation was a direct effect of this. The government should implement an enabling marketing policy through the Product Marketing Corporation, which will act as a clearinghouse for cotton marketing, and the agro-service agencies should set up an appropriate inputs delivery network, conduct adequate and intensive research, and deliver extension services in order to pursue a consistent and systematic campaign for cotton production.

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