



To Estimate the Resource of Productivity and Efficiency of Cotton in Mancherial Districts of Telangana, India

Pulugam Srilatha^{a++*} and Jahanara^{a#}

^a Department of Agricultural Extension and Communication, SHUATS, Prayagraj-21007, India.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

A present study entitled "A Study on Production of Cotton Cultivation in Mancherial District, of Telangana". Was carried during the session 2021-2023. One hundred and twenty farmers were selected by using pre tested schedule and analyzed using appropriate statistical tools. It was found that majority of respondents were having medium level of socio economic profile. Analyzing the production level highest level of respondents i.e. 52.50 percent were having medium level of production followed by 25.50 percent, and low level followed by 22.50 percent. On analyzing the marketing strategy level, highest level of respondents 31.67 percent, were medium level allowed marketing strategies were followed by 50.00 percent, 18.33 having low level. Independent variables namely age, education, family type, caste, house type, occupation, landholding, mass media exposure, extension contact source of information, economic motivation. had positive and significant relationship with production and marketing respectively. The major constraints were faced by high cost of fertilizers, lack of knowledge about disease and pest, high cost of seeds, lack of transportation facilities, lack of knowledge about market, lack of storage facilities respectively.

⁺⁺ Research Scholar;

[#] Associate Professor;

*Corresponding author: E-mail: pulgamsrilatha@gmail.com;

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1. INTRODUCTION

Cotton (*Gossypier spp.*) it belongs to the family Malvaceae. is the most important fibre crop being in many countries, cotton is the king of fibres, is often quoted as white gold because its higher commercial value. Cotton is an important fibre crop of global significance for its lint seed, Cotton is considered to be important cash crop. Gujarat is the largest producer of cotton in India. Indian sub-continent has a long History of cultivating traditional varieties of cotton found in India. Cotton was used in old world at least 700 years ago. Dating back in 1904, and further strengthened with constitution of Indian central cotton committee (ICCC) in 1923. The Indian economy is agrarian, and agriculture is its cornerstone, serving as the backbone of the rural livelihood security system. In provides a living for approximately 58% of the Indian people. Agriculture has been continuous to be the lifeline of the Indian economy, as economic security is largely depend on agricultural and allied sectors.

It is an important raw material for the Indian textile industry. India holds the first position in the Cotton cultivation. It is also stands at second in the consumption and export in the world. Chief cotton producing countries are India, China, USA, Brazil, Pakistan, West Africa, Uzbekistan, Egypt, Argentina, Australia, Grace and Turkey. The introduction and adoption of new technologies and expansion of the area under cotton had led to sustainable productivity improvements in cotton the world. Cotton is the king of fibers is one of the largest kharif crop of the country. India has largest cotton cultivated area which constitutes about 30 percent of the global area [1-5].

Long stapled cotton (27.50 to 32.00mm) also called Sea Island Cotton. Originate in South America. Long stapled cotton featured by long fibre and high intensity, which is suitable for high intensity, which is suited for high country yarn spinning.

Medium stapled cotton (20.to 27.00 mm) also named upland cotton, originated in Central American cotton. This kind of cotton characterized by wide application, high output,

long fibre and quality, which is fit for medium count yarn spinning.

Short stapled cotton (2.00 mm and below) also called Asiatic cotton, originated in India. This cotton has rarely grown for its low out put short, rough fibre.

2. METHODOLOGY

The study was conducted in Mancherial District of Telangana. Mancherial district was purposively selected for the study because of availability of maximum cotton growers. There are 18 blocks in Mancherial district. Out of which Bheemini block were selected purposively for study. 5 villages were selected purposively (Rampur, Bitturpalli, Bheemini, malledi, Achalapur) thus in all 120cotton growers constituted sample for the investigation [6-8]. Based on the objectives of the study, an interview schedule was prepared. The information was elucidated from respondents with the help of pre structured schedule through descriptive research design. The information was collected by personally interviewing respondents using pre structured interview schedule.

2.1 Objectives of the Study

1. To find out the socio-economic profile of the respondents.
2. To estimate the resource of productivity and efficiency of cotton

3. RESULTS AND DISCUSSION

From the Table 4. Analyzed the variables namely age, education, family type, caste, type of house, landholding, occupation, income extension contact, source of information, economic motivation were positively and significantly correlated with production of cotton growers towards improved cotton production practices at 0.1% of profitability [9-11]. Therefore, the null hypothesis was rejected for these variables, whereas the variable type of house and landholding availed negatively and significantly correlated with the production of cotton growers towards improved cotton production of cotton growers towards improved cotton production practices at both 0.01% & 0.05% of profitability respectively. Therefore, the null hypothesis was accepted for this variable.

Table 1. Socio economic profile of the respondents

Sl. No.	Independent variables	Category	Frequency	Percentage
1.	Age	Young 20-30	25	20.83
		Middle36-55	62	51.67
		Above 55	33	27.00
2.	Education	Illiterate+ Primary	36	21.67
		High school + Intermediate	59	49.17
		Graduate	35	29.16
3.	Family type	Nuclear family	66	55.00
		Joint family	54	45
4.	Caste	General	28	23.34
		OBC	53	44.16
		ST&SC	39	32.5
5.	House type	Hut(kachha)	25	20.83
		Semi-cemented	39	32.50
		Cemented	56	46.67
6.	Landholding	Marginal (<1)	25	20.84
		Small (1-3)	28	23.33
		Medium (3-4)	41	34.16
		Large (>4)_	26	21.67
7.	Annual income	Low (<80,000)	26	21.70
		Medium (80,000-2 lakhs)	37	30.80
		High (above 2 lakhs)	57	47.50
8.	Occupation	Agriculture	23	19.17
		Agriculture+labour	40	33.33
		Agriculture+business	30	25.00
		Agriculture+service	27	22.50
9.	Mass media exposure	Low (7-10)	33	27.50
		Medium (11-12)	45	37.50
		High (13-15)	42	35.00
11.	Extension contact	Low	28	23.40
		Medium	61	50.80
		High	31	25.80
12.	Source of Information	Low	26	21.66
		Medium	51	42.50
		High	43	35.84
13.	Economic motivation	Low	31	25.80
		Medium	53	44.20
		High	36	30.00

Table 2. To estimate the resource of production and of cotton cultivation practice

Sl. No.	Statements	Fully Agree (%)	Evaluation Partially Agree (%)	Never Agree (%)
1.	Which soil is suitable for cotton crop?	59 (49.36)	42 (35.42)	19 (15.22)
2.	Do you follow chisel ploughing or deep ploughing?	31 (49.36)	48 (40.00)	41 (34.10)
3.	Seed rate (12-16kg / ha)	52 (43.34)	27 (43.34)	41(34.16)
4.	Seed selected Previous year KVK Krishi service center Fertilizer	71 (59.16)	23 (19.17)	26 (21.67)
5.	Do you prefer cotton or Bt cotton in your field?	60 (50.00)	42 (35.00)	18 (18.33)
6.	Do you prefer intercropping in your main fields?	45 (37.50)	53 (44.17)	22 (18.33)
7.	Do you prefer any seed treatment methods before sowing?	33 (27.50)	56 (46.66)	31 (25.84)
8.	How much cost do you get per quintal?	51 (42.51)	29 (24.16)	40 (33.33)
9.	What is the maximum selling price do you get?	20 (16.66)	66 (55.00)	34 (28.34)
10.	Do you prefer Hand weeding or Application of weedicides?	19 (15.84)	57 (47.50)	44 (36.66)
11.	Which month is the best suitable for production purpose?	53 (44.17)	35 (29.19)	32 (26.66)
12.	At what time you harvest the crop?	35 (29.16)	55 (45.84)	30 (25.00)
13.	How many pickings you follow in your field?	53 (44.17)	44 (36.670)	23 (19.16)
14.	What are the markets you sell your product?	61 (50.83)	40 (33.34)	19 (15.83)
15.	Do you observe any bollworm pest incidence in your crop?	34 (28.33)	59 (49.17)	27 (22.50)
16.	How much yield you get from your field?	71 (59.16)	30 (25.00)	19 (15.84)
17.	What are storage conditions you follow the crop?	53 (44.16)	37 (30.84)	30 (25.00)
18.	Soil type (Medium / well drained)?	62 (51.67)	23 (19.16)	35 (29.17)

Table 3. Overall level production and marketing of cotton crop

Sl. No.	Production level	Frequency	Percentage
1.	Low (14-21)	27	22.50
2.	Medium (22-28)	63	52.50
3.	High (29-35)	30	25.00
	Total	120	100.00

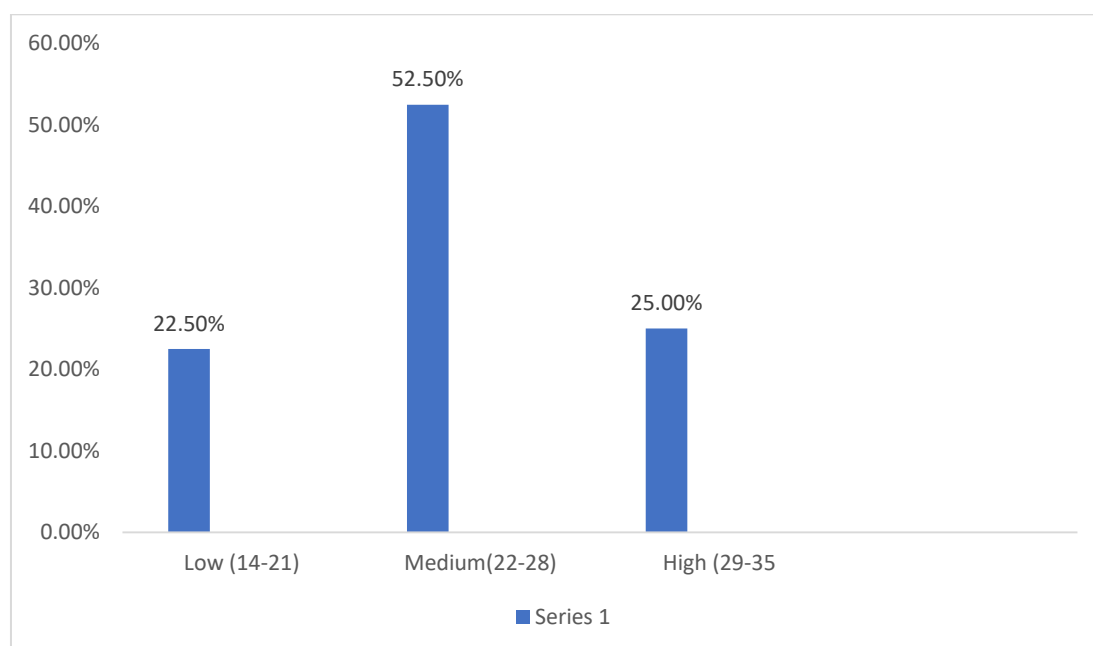


Fig. 1. Distribution of respondents on the basis of production and marketing of cotton cultivation practices

Table 4. Associated between selected dependent variables production of marketing respondents towards improved towards cotton production practices

Sl. No.	Variables	Correlation Coeffivoent
1.	Age	0.9913*
2.	Education	0.981665*
3.	Family type	0.76465*
4.	Caste	0.928938*
5.	Type of house	0.019349NS
6.	Landholding	0.057259NS
7.	Occupation	0.826033*
8.	Income	0.56321**
9.	Mass media exposure	0.745528*
10.	Extension contact	0.999975*
11.	Source of information	0.794044*
12.	Economic motivation	0.989743*

*= Correlation is significant at the 0.01% level of profitability

**=Correlation significant at the 0.05% level of profitability

4. CONCLUSION

It was concluded that the socio-economic profile of the research group were medium level. It was evident that the production and marketing of cotton cultivation practices were found medium level, whereas as it was evident that the farmers towards improve the cotton production practices were found in medium level. The farmers influencing in production of farmers towards improved cotton production practices are age, education, family type, caste, house type landholding, occupation, annual income, mass media exposure, extension contacts, source of information, economic motivation. The factors influencing production of farmers towards

improved the production of cotton cultivation practices age, education, family type, landholding occupation, mass media exposure, extension contact and economic motivation. The factors influence the marketing the marketing of farmers towards improved the marketing strategies for cotton are age, education, family type, caste, occupation, landholding, annual income mass media exposure, extension contact and economic motivation.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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