



A study on training needs of cotton farmers in Guntur district of Andhra Pradesh

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Abstract : The study was conducted in Yedlapadu Mandal of Guntur district of Andhra Pradesh in 2019 to identify the training needs of cotton farmers. A total of 80 respondents were purposively selected from the members of Farmer Producer Organization (FPO). A list of 15 major areas of training needs were identified in relation to improved package of practices of cotton cultivation was prepared. In the present study, training importance score of each area was measured on three point continuum namely, Most needed, Needed and Least needed with was assigned as 3, 2 and 1, respectively. The statistical tools like frequency and percentage were used for data analysis. The study found that most (93.75%) of the cotton farmers were perceived training need in the area of plant protection measures followed by market information system (MIS) (87.50%) and diagnosis of important insects pests and disease (78.50%). Whereas, half (50 %) of the respondents were perceived as least training need in the area of seed treatment followed by post harvest technology (28.75 %). Majority (53.75%) of the cotton farmers were belonged to middle age followed by (40 %) illiterate, (96.25%) of the cotton farmers had medium family size, (43.75%) belonged to annual income of Rs. 51,000/- (44 %) had medium level of farming experience and (37.50%) have semi medium land holdings, (62.50%) medium level of achievement motivation and (50 %) of them had low level of social participation

Keywords: Cotton farmers, plant protection, profile, training needs

Cotton (*Gossypium* sp) the "King of Fibre Crops", plays a very vital role in the Indian economy. It is named as a major cash crop of India. It is the major input to the Indian cotton textile industry. It generates employment to millions of people from cotton background engaged in various operations like; harvesting, plucking, and marketing, ginning and pressing of cotton. Cotton is one of the leading crops since it is labor intensive, it needs season long plant protection measures and also it is harvested not once, as in the case of most other crops, but four of five times in a season. It also contributes significantly to the country's foreign trade. More importantly, it is the highest earner of net foreign exchange, contributing over 30 per cent from textile industry, which is fully dependent on Indian raw cotton. India ranks first in the world accounting for 20 per cent of the total area under cotton plantation. However, even with highest area under cotton which is 9 million hectares;

India occupies third position with only 13 per cent of global production share. In Indian national scenario, though Maharashtra tops in total area under cotton cultivation which is 38.27 lakh hectares but trails Gujarat in both total production as well as in productivity. Although enough viable and adoptive technologies have been developed in *Bt* cotton cultivation but many of these have not reached to the growers till today. There is significant yield gap existed in *Bt* cotton in Maharashtra. It is due to several reasons including the technological as well social aspects.

In Andhra Pradesh, cotton scenario before the introduction of *Bt* cotton was not a bright picture. The crisis in cotton revolves around the main issues like increasing the cost of cultivation, hiked use of pesticides, consequent endemic pest and diseases and market fluctuations which have hit the producers so severely that most of them end up deep in debt. Epidemics of whitefly and bollworms, besides

frequent and severe droughts, had forced several farmers to commit suicide. Under these circumstances, *Bt* cotton emerged as an attractive option for the cotton farmers.

OBJECTIVES OF THE STUDY

- 1) To study the profile characters of cotton farmers
- 2) To identify the training needs of the farmers regarding cotton cultivation practices

The present study was conducted in Yadlapadu Mandal of Guntur district of Andhra Pradesh. A total of 80 respondents were purposively selected from the members of two farmer producer organizations (FPOs). An Ex-

Table 1. Distribution of respondents according to their profile characters

S. No.	Category	Respondents (n=80)	
		Frequency	Percentage
A	Age		
1	Young age (Upto 35)	25	31.25
2	Middle age (36-50)	43	53.75
3	Old age (Above 50)	12	15.00
B	Education		
1	Illiterate	32	40.00
2	Primary school (1st to 4th standard)	24	30.00
3	Middle school (5th to 7th standard)	14	17.50
4	High school (8th to 10th standard)	3	3.75
5	College (11th and above)	7	8.75
C	Family size		
1	Small (1 to 3) members		
2	Medium (4 to 6) members	3	3.75
3	Large (7 to 9) members	77	96.25
4	Very large (10 and above)	0	0.00
D	Annual income		
1	Upto Rs. 50,000	35	43.75
2	Rs. 50,001 to Rs.1,00,000	27	33.75
3	Rs. 1,00,001 to Rs. 1,50,000	11	13.75
4	Rs. 1,50,001 to Rs. 2,00,000	4	5.00
5	Above Rs. 2,00,000	3	3.75
E	Land holding		
1	Marginal (Upto 1.00)	10	12.50
2	Small (1.01 – 2.00)	23	28.75
3	Semi medium (2.01 – 4.00)	30	37.5
4	Medium (4.01 – 10.00)	15	18.75
5	Large (Above 10.00)	2	2.50
F	Farming experience		
1	Low (1-5 years)	12	15.00
2	Medium (11-15)	44	55.00
3	High (16-20)	24	30.00
G	Achievement motivation		
	Low	18	22.50
	Medium	50	62.50
	High	12	15.00
H	Social participation		
	Low	40	50.00
	Medium	21	26.25
	High	19	23.75

post facto design of social research was used for the present investigation and the respondents were being interviewed with a structured interview schedule. A list of 15 major areas of training needs in relation to improved package of practices of cotton cultivation was prepared. Training needs of farmers in cotton cultivation was worked out. In the present study, training importance score of each area was measured on three point continuum as Most needed, Needed and Least needed by giving scores of 3, 2 and 1, respectively. Data was tabulated, classified and analyzed using SPSS software. Appropriate statistical tools like frequency, percentage and mean used for the analysis of data.

Age: It is evident that more than half (53.75%) of the cotton growers were belonged to middle age followed by young (31.25%) and old (15 %) age category.

Education: It is concluded that less than half (40 %) of the cotton farmers were illiterate followed by those belonging to primary school (30%), middle school (17.50%), college (8.75%) and high school (3.75%) education.

Family size: It concluded that majority (96.25%) of the cotton farmers had medium family size followed by those with small family (3.75%) and none of them were in the category of large families.

Annual income: The data indicates that less than half (43.75%) of the cotton growers belonged to annual income of Rs. 50,000/ followed by (33.75%) annual income of Rs. 51,000-1,00,000/- (13.75%) annual income of Rs.1,00,001 to 1,50,000/- (5.00%) of the annual income of Rs. 1,50,001 to Rs. 2,00,000 and (3.75%) annual income of above Rs. 2,00,000/-.

Land holding: It is clear from that majority (37.50%) semi medium land holding followed by small (28.75%), medium (18.75%), marginal (12.50%) and large (2.50%).

Farming experience: The results indicate that more than half (55%) of the cotton farmers had medium level of farming experience (44 %) followed by high (30 %) and low farming experience (15 %).

Achievement motivation: It is observed that more than half (62.50%) of the cotton

Table 2. Training needs of cotton growers on various crop practices

S. No	Major components	Respondents (n=80)		
		Most needed	Needed	Least needed
		(3)	(2)	(1)
		Freq. (%)	Freq. (%)	Freq. (%)
1.	High yielding varieties seeds	60 (75.00%)	20 (25.00%)	0 (0.00%)
2.	Seed treatment	0 (0.00%)	40 (0.00%)	40 (50.00%)
3.	Bollworm management	67 (83.75%)	13 (16.25%)	0 (0.00%)
4.	Diagnosis of important insects, pests and their life cycles	70 (87.50%)	10 (12.50%)	0 (0.00%)
5.	Pest control methods	42 (52.50%)	38 (47.50%)	0 (0.00%)
6.	Usage and use bio fertilizers, green manures, and Organic fertilizers	50 (62.50%)	30 (37.50%)	0 (0.00%)
7.	Organic farming	34 (42.50%)	26 (32.50%)	20 (25.00%)
8.	Nutrient management	60 (75.00%)	20 (25.00%)	0 (0.00%)
9.	Post harvest technology	27 (33.75%)	30 (37.50%)	23 (28.75%)
10.	Value addition	45 (56.25%)	30 (37.50%)	5 (6.25%)
11.	Market information source(MIS)	70 (87.50%)	10 (12.50%)	0 (0.00%)
12.	Plant protection measures	75 (93.75%)	5 (6.25%)	0 (0.00%)
13.	Credit availability	44 (55.00%)	36 (45.00%)	0 (0.00%)
14.	Raising of horticulture crops	70 (87.50%)	10 (12.50%)	0 (0.00%)
15.	Dairy management practices	30 (37.50%)	34 (42.50%)	16 (20.00%)

farmers had medium level of achievement motivation followed by low (22.50%) and high (15%) levels of achievement motivation.

Social participation: It is observed that half (50%) of cotton farmers had low social participation followed by medium (26.25%) and high (23.75%) social participation.

The findings revealed that 93.75 per cent of the cotton farmers were perceived training need in the area of plant protection measures followed by market information system (MIS) (87.50%) and diagnosis of important insects pests and disease (78.50%). Whereas, half (50%) of the respondents were perceived as least training need in the area of seed treatment followed by post harvest technology (28.75 %).

CONCLUSION

Based on the findings it could be concluded that the majority of the farmers perceived that most needed training areas *viz.*, plant protection measures, market information source(MIS)and raising of horticulture crops. These aspects may be considered as priority areas for imparting trainings to the cotton farmers towards upgrading their knowledge and skill in the field of agriculture. The findings of the investigation would be helpful to the planners, progressive farmers, extension workers and research workers to fill up the gap which exists between knowledge and adoption of practices for improvement of agriculture practices the needs of the paddy farmers must be taken into account in order to develop a future strategy to exploit their potentialities.

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