

## FARM WOMEN'S KNOWLEDGE OF COTTON PRODUCTION TECHNOLOGY IN ANDHRA PRADESH

Srilatha, P.<sup>1</sup> and Srilatha Vani, Ch<sup>2</sup>

### ABSTRACT

*Farmwomen form considerable part of all the operations of cotton production. Unless their energies are utilized in meaningful and sensible manner, the economic growth in general and agricultural development of the country in particular becomes a mirage and myth. Knowledge is pre-requisite to do anything, lack or insufficient knowledge about an idea prevents an individual to avail its benefits. Perfect knowledge about an idea or practice helps an individual to relate it to his needs in terms of profitability & productivity. Against this background present study was conducted with the specific objective to study the knowledge regarding cotton production technology in Andhra Pradesh. The research study was conducted by involving 150 farmwomen selected by random method from 6 villages of Kakumanu and Pedanandipadu Mandals of Guntur districts in Andhra Pradesh. The nine important cotton production technologies such as land preparation, seeds and sowing, manures and fertilizers, weeding, insect control, disease control, irrigation, harvesting and storage were selected. The study showed that the overall knowledge was 57 per cent, indicating the moderate level of knowledge in cotton production technology.*

**Key words :** Knowledge; Farmwomen; Cotton production technology

### INTRODUCTION

Agriculture plays a crucial role in the economic development of the nation and welfare of people. Nearly 87 per cent of the economically active rural women are engaged in agriculture compared to 63 percent of men. In India, over 90 per cent of household and farm activities are done by women (Singh, 1983). Women also play a significant role in agricultural development including crop production, livestock, horticulture, post-harvest operations, agro social forestry etc. (Kapur, 1991). Farmwomen work for 15.76 hr/day. Farmwomen form considerable part of all the operations of cotton production.

However, lack of sufficient critical studies and appreciation of the knowledge possessed by women has been pointed out by Vishwanathan (1989). Researches in India and abroad have shown that most of the farmwomen are still without proper knowledge and they lack access to better technologies and tools. Knowledge is pre-requisite to do anything. Insufficient knowledge about an idea prevents an individual to avail its benefits. Perfect knowledge about an idea or practice helps an individual to relate it to his needs in terms of profitability & productivity. Against this background present study was conducted with the following specific objective to assess the knowledge level of farmwomen about scientific production technology of cotton crop and to identify the relationship between personal characteristics of farmwomen and their knowledge level.

### METHODOLOGY

The research study was conducted by involving 150 farmwomen randomly selected from 6 villages of Kakumanu and Pedanandipadu mandals of the randomly selected Guntur

district in Andhra Pradesh. The nine important cotton production technology practices such as land preparation, seeds and sowing, manures and fertilizers, weeding, insect control, disease control, irrigation, harvesting and storage were selected in consultation with the Acharya N.G. Ranga Agricultural University (ANGRAU), State Department of Agriculture. The data were collected through interview schedule, and the responses were taken on a 3-point continuum, i.e. full, partial and nil with their respective scores as 2, 1 and 0. The relationship between knowledge level and personal characteristics of farmwomen was identified by employing correlation coefficient.

### RESULTS AND DISCUSSION

(a) *Knowledge level of farmwomen:* The study showed that the overall knowledge was 57 per cent, indicating the moderate level of knowledge in cotton production technology (Table 1). The study further revealed that the knowledge level in case of harvesting was highest (62%) followed by storage (56%) and irrigation (52%). However, with respect to weeding (50%), land preparation (48%) and seeds and sowing (47%), they had medium level of knowledge. On the other hand farmwomen had low knowledge in disease control (28%) next to insect control (32%) and manures and fertilizers (42%). The present study has found support from the findings of Juliana *et al* (1991), Nirmala and Annamalai (1997).

(b) *Relationship between the knowledge level and personal characteristics of the farmwomen:* The correlation coefficient (Table 2) was worked out between independent variables and knowledge by Pearson's coefficients of correlation.

It could be observed from the Table 2 that knowledge of

Table 1. knowledge level of farmwomen regarding cotton production technology

Technological Components	Category	Range	No of respondents		C.V.	Index
			Freq.	%		
Land preparation	Low	1-2	50	34	43.1	8.6
	Medium	3	68	45		
	High	4-6	32	21		
Seeds and sowing	Low	2-3	54	36	28.9	7.0
	Medium	4	66	44		
	High	5-6	30	20		
Manures & fertilizers	Low	0-3	77	51	49.4	2.2
	Medium	4	58	40		
	High	5-6	15	9		
Weeding	Low	1-2	44	30	38.2	0.5
	Medium	3	59	39		
	High	4-5	47	31		
Insect control	Low	0-2	85	57	58.7	2.3
	Medium	3	59	39		
	High	4-6	06	04		
Disease control	Low	1-2	91	61	47.0	8.1
	Medium	3	47	31		
	High	4-6	12	08		
Irrigation	Low	0-2	66	44	48.7	2.3
	Medium	4	60	44		
	High	5-6	24	16		
Harvesting	Low	2-3	54	36	28.9	2.6
	Medium	4	66	44		
	High	5-6	30	20		
Storage	Low	2-3	79	53	30.3	6.5
	Medium	4	53	35		
	High	5-6	18	12		
Overall	Low	22-28	59	39	10.7	
	Medium	29-32	85	57		
	High	33-39	06	04		

the respondents was found to be significantly related with age, land holding and cosmopolitaness at 5% level and no such relationship was observed with other variables studied.

Positive correlation between knowledge and age was found. As the age of the farmwomen increased, the knowledge also increased. These findings get support from the findings

Nagpal *et.al* (1991). From Table 2 we can observe that land holding has the positive and significant relationship with knowledge. These findings conform the findings of Reddy and Reddy (1988).

Table 2. Correlation between knowledge and independent variables of Farmwomen

S. No.	Independent variables	Correlation coefficient
1	Age	0.163*
2	Caste	0.008
3	Husband's occupation	-0.002
4	Education	-0.026
5	Family type	0.0001
6	Family size	-0.158
7	House type	-0.091
8	Land holding	0.161*
9	Material possession	-0.091
10	Farm power	0.038
11	Social participation	0.070
12	SES	0.028
13	Family education	-0.030
14	Cosmopolitaness	0.170*
15	Mass media exposure	-0.010
16	Extension contact	-0.183*
17	Scienticism	-0.078

\* Significant at 5 % level of significance

The study also revealed that cosmopolitaness of farmwomen has positive significant relationship with knowledge. It implies that with an increase in cosmopolitaness, the knowledge of farmwomen increases. It could be also observed that extension contact has negative and significant relationship with knowledge. It may be due to the fact that even though extension contact was there but it was not fruitful to the farmwomen because extension agencies were not emphasizing especially on cotton crop but they were concerned with farming in general.

### CONCLUSION

The findings of the study have brought out certain points for consideration for local extension agency. The training should be given to the farmwomen about improved cotton production technologies. The study has also indicated that though enough cotton production technologies have been evolved, farmwomen are not fully aware about it. There is a need to step up extension efforts to make farmwomen aware of the latest technology to the fullest extent, which in turn helps for greater adoption.

### REFERENCES

1. Juliana, C.S., Annamalai, R. and Soma Sundaram, S. (1991). Adaptation of IPM practices. *Indian J. Ext. Edu.* 27 (3&4): 23-27.
2. Kapur, K. (1991). Women in rainfed farming. *Maharashtra J.Ext. Edu.* 10 (1):119-130.
3. Nagapal, A. and Yadav, L. (1991). Impact of biogas on rural women. *Maharashtra J.Ext. Edu.* 10 (2): 343-345.
4. Nirmala, L. and Annamalai, R. (1997). Knowledge and training needs of TNAU labourers in rice farming. *J.Ext. Edn.* 8 (11):1676-1680.
5. Reddy, M.V. and Reddy, S.V. (1988). Relationship between selected characteristics of contact farmers and their knowledge and adoption of improved paddy cultivation practices. *Indian J. Ext.Edu.* 24 (3&4): 40-42.
6. Singh, B. (1983). Participation of tribal women in farm business in relation to their socio-economic characteristics: A selected analysis. *Institute of Social Res.J.* 3 (1): 24-31.
7. Viswanathan, B. (1989). Women in livestock in India-a desk study, FAO Regional Office for Asia and the Pacific, Bangkok, Thailand.