Training Needs of Cotton Growers in Dindigul District

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ABSTRACT

The study was aimed to assess the training needs and to reveal the problems encountered by the cotton growers in adopting the recommended technologies. The study was conducted in five villages of Reddiarchattram block of Dindigul district. A sample of 120 farmers cultivating cotton was selected from five villages using proportionate random sampling method. The training needs of the cotton growers were assessed and the training strategies preferred by them were recorded. It was assessed that maximum level of training need were with regard to complex and high cost technologies.

Training makes a person to sharpen his skills and his performance. Under such condition trainings are more important to improve the competency and assure their income from cotton cultivation. With this in view, the training needs of members of the farm families in improved cotton cultivation are to be assessed. Based on the training needs, different organisation and institutions can organize, reorient and conduct appropriate and need based training programmes to the family members.

The study was aimed to bring out the characteristics of cotton growers and to assess their knowledge and adoption level of latest technologies and also to find out the relations between characteristics of farmers with knowledge and adoption. Further it aimed to assess the training needs and to reveal the problems encountered by the cotton growers in adopting the recommended latest technologies.

METHODOLOGY

The study was conducted in five villages of Reddiarchattram block of Dindigul district. A sample of 120 farmers cultivating cotton was selected from five villages using proportionate random sampling method. Data were collected through pre tested interview schedule.The data were statistically analysed using percentage analysis, mean, cumulative frequency, simple correlation, multiple regression, path analysis and Garrett ranking.

Training needs of each major subject matter area were assessed over a three point continuum such as Most needed, Needed and Not needed and they were quantified by assigning scores 3,2 and 1 respectively. Index was computed for different items for each subject matter areas. The obtained score for each respondent was worked out by multiplying the number of respondents with their corresponding scores given (i.e. most needed 3, needed 2, and not needed 1). The

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obtained scores of all the items were added and divided by the potential scores of to arrive at the Training Need Index (subject matter).

Training need index = Summation of obtained score / Potential score

Obtained score of an item = No. of respondents X score given to the corresponding subject matter.

Potential score = Total number of respondents X Highest rank given for subject matter.

FINDINGS AND DISCUSSION

Training needs can be defined in terms of gaps between requirements and performance. The gaps could be in terms of knowledge, skill and attitude. Training is considered to be an essential factor that has its own influence in gaining knowledge and skill in respect to subject matter that is taught during the training. Subject matter wise training need was assessed and findings are presented in the Table 1.

Table 1.
Distribution of Respondent According to their Subject Matter wise Training Needs

Sl. No.	Subject Matter	Most needed		Needed		Not Needed		Index
		No.	%	No.	%	No.	%	
1.	Selection of variety	19	15.83	42	35.00	59	49.17	0.555
2.	Preparation of land	19	15.83	37	30.83	64	53.34	0.542
3.	Seed treatment	22	18.33	56	46.67	42	35.00	0.611
4.	Intercultural operations							
	Herbicide application	30	25.00	63	52.50	27	22.50	0.675
	Weeding	24	20.00	44	36.67	52	43.33	0.588
	Thinning	23	19.17	35	29.17	62	51.66	0.588
	Gap filling	25	20.83	37	30.83	58	48.34	0.575
5.	Manures & fertilizer management	50	41.67	53	44.17	17	14.16	0.758
6.	Soil management	42	35.00	43	35.83	35	29.17	0.686
7.	Insect Pest Management	63	52.50	40	33.33	17	14.17	0.794
8.	Disease Management	62	51.66	44	36.67	14	11.67	0.800
9.	Post Harvest Management	16	13.00	60	50.00	44	36.67	0.588

From the Table 1 it could be observed that most of the respondents preferred training on plant protection measures. The disease management (0.800) and insect pest management (0.794) were the indicated areas.

Manures and fertilizer management was the next major area (0.758) were the training was needed.

Regarding the intercultural operations the training needs for Herbicide application

(0.675), weeding (0.588) & thinning (0.588) and gap filling (0.575) were also indicated. Post harvest technology (0.588) , selection of variety (0.555) and preparation of land (0.542) were the other subject matter areas mentioned.

Training type, training venue, duration, timing, season trainer's preference by the respondents were also assessed and the findings are presented in percentage. Training strategies are very important area to conduct the training to the respondents.

Table 2.
Distribution of Respondents According to their Training Needs   (n=120)

Sl.No.	Particulars	Number	Percentage
1.	**Training type**		
	Institutional training	115	95.83
	Peripatetic training	88	73.33
2.	**Training venue**		
	School	91	75.83
	Panchayat Union Office	100	83.33
	Krishi Vigyan Kendra	74	61.67
3.	**Duration**		
	One day	28	23.33
	Two days	58	48.33
	Three days	30	25.00
4.	**Timing**		
	Forenoon	16	13.33
	Afternoon	60	50.00
	Full day	44	36.67
5.	**Season**		
	Kharif	83	69.17
	Rabi Summer	89	74.17
	All season	44	36.67
6.	**Trainers**		
	Progressive farmers	114	95.00
	Extension officers	87	64.17
	KVK staff	89	74.17

From Table.2, it could be seen that most of the trainees preferred institution training (95.83 per cent) followed by peripatetic training (73.33 per cent). Among various training venue, as seen in the table most of the respondents preferred panchayat union office (83.33 per cent), followed by school in the village (75.83 per cent), Krishi Vigyan

Kendra (61.67 per cent).Most of the trainees preferred two days training (48.33 per cent) followed by three days (25.00 per cent) and one day (23.33 per cent).Regarding the timing, half of the trainees (50.00 per cent) preferred afternoon trainings because they had work in their field during the forenoon session. Next preference was full day training (36.67 per cent), following by forenoon training (13.33 per cent). Regarding the season of training most of the trainees preferred training conducted during Rabi season (74.17 per cent). Kharif season training was suggested by (69.17 per cent) of the respondents. About (36.67 per cent) of the respondents opined that training season was not a constraint and expressed that the training can be conducted at any time. The order of preference given by the trainees regarding was progressive farmers (95.00 per cent) followed by KVK staff (74.17 per cent) and extension officer (64.17 per cent).

Training methods are means of attaining the designed objectives in a learning situation. Nine training methods were listed and ranking procedure was used to rack of methods. The results are given below.

Table 3.
Training Methods Preferred by the Cotton Growers

(n= 120)

Sl.No.	Training methods	Mean	Rank
1.	Field visit	62.58	I
2.	Demonstration	61.93	II
3.	Exhibition with discussion	58.22	III
4.	Study tour	49.27	IV
5.	Discussion	48.82	V
6.	Lecture and discussion	46.21	VI
7.	Lecture	43.07	VII
8.	Village seminar	41.45	VIII
9.	Campaign	38.75	IX

From Table.3, it could be seen that most of the trainees preferred field visit (62.58), since it got the first ranking, this was followed by demonstrations (61.93). Exhibition with discussion (58.22), study tour (49.27), discussion (48.82), lecture and discussion (46.21), lecture (43.07) and village seminar (41.45) were the other methods widely preferred and campaign got the ninth rank (38.75).

A constraint analysis is becoming one of the most important components of extension research. Without analyzing the constraints it is impossible to diffuse the needed technologies among the farming community. The possible constraints were enumerated from the related studies, in consultation with the development workers, social scientists and farmers of non sample area. The constraints encountered by the farmers in adoption of recommended technologies have been given in the Table.4.

Table 4.
Constraints in the Adoption of Latest Cotton Production technologies

(n= 120)

Sl.No.	Constraints	Number	Per cent
1.	Erratic monsoon	100	83.33
2.	High risk and uncertainty of returns	90	75.00
3.	Complex nature of technology	80	66.67
4.	Non availability of labours	76	63.33
5.	Poor infrastructural facilities to obtain inputs	70	58.33
6.	Lack of credit facilities	55	45.83
7.	Lack of marketing facilities	52	43.33
8.	Lack of knowledge	50	41.67
9.	High cost of inputs	44	36.67
10.	Lack of technical support	21	17.50

The table shows that vast majority (100 numbers) of the respondents stated that erratic monsoon was the vital problem. Due to erratic monsoon the farmers were uncertain about their returns. This was expressed by 83.33 per cent of the respondents.

The new technologies are too complex to more than half of the respondents. It was expressed by 75.00 per cent of the respondents. Generally the farming operations being in a specific time in all the areas of Rediarchattram block, this might have resulted in the inadequacy of labour availability. This was expressed by 63.33 per cent of the respondents. Poor infrastructural facilities were expressed as one of the constraints by 58.33 per cent of the respondents.

It was opined that the agricultural extension centers i.e Government Departments are situated far away from the villages. This distant location would have caused the additional cost for transport of inputs and produces. Too little, less than half of the respondents expressed that lack of credit facilities (45.83 per cent), lack of marketing facilities (43.33 per cent) and lack of knowledge (41.67 per cent) were constraints. High cost of inputs was a constraints to 36.67 per cent of the respondents. Less than one fifth of the respondents (17.50 per cent) had lack of technical support as a constraint.

CONCLUSION

It could be inferred that the respondents had more training needs in disease management, insect pest management, manure and fertilizer management, soil management, weeding and seed treatment. Since the respondents had comparatively low level of knowledge and adoption for the above mentioned practices, they would have indicated high training need. This showed that knowledge and training needs were indirectly proportional with each other.

It could be concluded that the field visit and demonstration were the most preferred methods. Exhibition with discussion, study tour, lecture with discussion, seminar and campaign were the other training methods preferred by the respondents in that order.

The major constraints were erratic monsoon, high risk and uncertainty of returns, complex nature of technology, non availability of labour and poor infrastructural facilities. The other constraints were lack of credit, knowledge about recommended cultivation practices and market facilities. The high cost of input was also one of the constraints.

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