GROWERS' INFORMATION NEEDS RELATED TO COTTON FARMING

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ABSTRACT

Acquisition of information has always been regarded as a critical aspect in manipulate human behavior to take any decision. Similarly, information shall also help a farmer in taking an economic decision regarding farming. For preparing good content for cotton information system, the assessment of information needs of the actual users is the pioneer requirement. The present study was conducted to assess information needs of cotton growers in Mansa taluka. The farmers have expressed their needs for information about marketing, water management, plant protection measures, fertilizer management and variety. Variables like use of information sources, extension participation, land under cotton cultivation and cosmopoliteness had significant correlation with information needs of the cotton growers. A model of technology transfer to cater the information needs of the cotton growers was also suggested.

INTRODUCTION

Cotton, an important commercial crop of India, is cultivated across nine major states of the country in over nine million hectares. Cotton plays a major role in India's economy. The pattern of cotton production and consumption shows that India has made major strides since independence from net importer to self-sufficiency and a marginal exporter of raw cotton. Though India is having the largest area under cotton, its average productivity is low as against the world average productivity. There may be many reasons for such a low productivity of cotton in India. These may include deficiencies at the level of technology generation i.e. research system; information & transfer of technology level i.e. extension system; and at production level i.e. farming system.

Information is considered as a critical input in decision-making. Information is known as power, those who own it. In contrast, lack of information causes uncertainty about the possible impact of decisions on results. Lack of accurate and timely information is one of the important factors for the inefficiency and imperfections observed in the agricultural marketing system in India (Lee, 1973, Bapna, 1982). Now, 'Information' has started gaining importance. Acquisition of information has always been regarded as a factor playing an important role in molding human behaviour leading to decision for adopting of innovation. The need for information systems to facilitate sound decisions in agriculture were greatly felt (Stigler, 1961). An integrated system providing the required information to the various decision-makers at the right time and place is envisaged. For preparing good content of information of cotton farming, it should be based on the information needs of the farmers. Content that is based on actual need of the users will be of great interest and use by them. Identifying information needs of the users can become solid basis for developing meaningful information warehouse.

The overall objective of the study was to ascertain information needs of the cotton growers that will form a base for any good farm information system.

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Objectives of the study

1. To study the profile of the cotton growing farmers.

2. To ascertain the information needs of the cotton growers.

3. To study the relationship between selected personal, social communicational, economical and psychological characteristics of cotton growers and their information needs.

4. To suggest a model of technology transfer to cater the information needs of the cotton growers.

METHODOLOGY

Keeping in view the significance of the information needs of the cotton growers, the study was conducted in Mansa taluka of Gandhinagar district of Gujarat State (India). The taluka not only carries highest area under cotton in the district, but also the productivity levels are quite good. List of cotton growing villages along with area under cotton crop was obtained from office records of taluka panchayat of all 49 villages of Mansa. These villages were divided in to three stratums on account of the area under cotton in those villages. Four villages from each stratum were selected by following stratified random sampling technique. Ultimately, a total of 124 respondents were selected for the study. Required information was obtained through interview schedule specifically structured keeping in view the objectives of the study.

The information needs of the cotton growers were assessed for the areas right from the requirements for selection of crop and variety, through the availability of inputs, production technologies, harvesting, grading and packaging; till farm level processing and marketing of the produce. Thus, the information needs of cotton farmers about various aspects of cotton cultivation were ascertained. The extent of information needs of the cotton growers was availed on a three-point continuum ranging from most needed, needed and not needed. The three categories were assigned with 2 score, 1 score and 0 score respectively. The information needs were worked out for each of the major areas considering the total score for information need acquired by the respondents. On the basis of the mean score, the ranks to the major areas of information needs were assigned to know relative importance.

Series of group discussions was conducted with the respondents to know the exact time of the year, when they need particular information related to agriculture.

RESULTS AND DISCUSSION

Information Needs

The data regarding distribution of respondents according to their information needs are presented in Table 1.

Table: 1 Distribution of respondents according to information needs   n = 124

Sr. No.	Areas of information	Mean score	Rank
1.	Variety	1.039	V
2.	Land preparation and sowing	0.879	VIII
3.	Fertilizer management	1.071	IV
4.	Weed management and inter culturing	0.891	VII
5.	Water management	1.224	II
6.	Plant protection measures	1.193	III
7.	Harvesting and post harvesting technology	0.509	IX
8.	Marketing	1.379	I
9.	Supportive facts	0.998	VI
	Overall information need	1.020	

Table: 2 Correlation between personal traits of cotton growers and their information need

Sr. No.	Personal traits	Correlation coefficient (' r ' value)
1.	Age	0.00029
2.	Education	0.12029
3.	Use of information sources	0.18395*
4.	Social participation	0.13910
5.	Extension participation	0.27608*
6.	Size of land holding	-0.06554
7.	Land under cotton cultivation	0.43145*
8.	Irrigated area to total land	0.08453
9.	Annual income	-0.10208
10.	Cosmopoliteness	-0.18950*
11.	Economic motivation	-0.00450
12.	Market orientation	-0.12377

*Significant at 0.05 per cent level of probability
Critical value (2 tail, 0.05) = ± 0.17635

The data in Table 1 revealed that majority of the farmers have expressed their needs for information about marketing (1.379 mean score), water management (1.224 mean score), plant protection measures (1.193 mean score), fertilizer management (1.071 mean score) and variety (1.039 mean score). This means that the cotton growers gave highest emphasis on market related information, as this information can help them to a great extent to convert their produce in more money. They are also conscious about water management as well as plant protection measures. The data also reflects that the cotton growers have become more vigilant about fertilizer management may be due to new trend of organic cotton framing.

Correlation between Personal Traits of the Cotton Growers and their Information Need

Personal, social-communicational, economical and psychological characteristics of farmers play very important role in exhibiting information need for successful farming. With this in view, efforts were made to study the correlation, if any, between personal traits of the cotton growers and their information need. To examine this relationship, correlation coefficient (r) was computed, the results of which are presented in Table 2.

Independent variables like use of information sources, extension participation, land under cotton cultivation and cosmopoliteness had significant correlation with information needs of the cotton growers. Where as age, education, social participation, size of land holding, irrigated area to total land holding, annual income, economic motivation and market orientation had non-significant correlation with information needs of the cotton growers.

Model of Technology Transfer

The farmers were asked to tell the exact time of the year, when they need particular information related to agriculture. Series of group discussions was conducted with the respondents for the purpose. On the basis of information retrieved from the farmers, a model was suggested for technology transfer to cater the information needs of the cotton growers (Fig.1).

CONCLUSION

It can be concluded from the investigation that majority of the farmers have expressed their needs for information about marketing, water management, plant protection measures, fertilizer management and

Areas of Information	Month	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
Land preparation & Soil treatment		▨	▨	▨	▨	▨										
Organic manure			▨	▨	▨	▨										
Variety				▨	▨	▨	▨									
Seed, Seed rate, Seed treatment				▨	▨	▨	▨									
Sowing, Spacing, Gap filling				▨	▨	▨	▨	▨								
Nutrient requirements of plant				▨	▨	▨	▨	▨	▨	▨						
Chemical fertilizer				▨	▨	▨	▨	▨	▨	▨						
Bio-fertilizers				▨	▨	▨	▨									
Fertilizer application				▨	▨	▨	▨	▨	▨	▨						
Integrated pest management																
Insecticides and pesticides																
Control of insects/pests																
Disease control																
Chemical weed control						▨	▨	▨								
Weeding and inter-culturing							▨	▨	▨	▨	▨					
Schedule and method for irrigation						▨	▨	▨	▨	▨	▨	▨				
Irrigation equipments						▨	▨	▨	▨							
Time and method of harvesting												▨	▨	▨	▨	
Care during and after harvesting												▨	▨	▨	▨	
Farm level processing & packaging												▨	▨	▨		
Marketing										▨	▨	▨	▨	▨	▨	▨
Weather forecast																
Cotton related Govt. policies																
Credit / loan facilities																
Insurance of cotton crop																
Subsidies for cotton cultivation																

variety. So while preparing extension education programmes for the area required information by the cotton growers should be given due importance to support them to take decision regarding cotton cultivation.

The transfer of technology agents shall keep the results of this study in view while taking decisions as regards to what content of the technological information regarding cotton cultivation should be taken to which type of the farmers. Further, they should concentrate on major areas, identified by this study for deciding the content of the message to be prepared for the cotton growers.

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