"Extension Participation and Training need analysis of Orange Growers"

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Abstract—The present investigation was carried out in Nagpur district of Maharashtra. A sample of 100 respondents spread over 10 villages of two blocks. The data were collected with the help of pretested structured interview schedule by conducting personal interview. The present study revealed that majority of farmers had low extension participation. The selection of planting materials found to be most essential training need of orange growers. Also most of orange growers perceived more training need in plant protection measures and selection of suitable land for orange plantation. The majority of respondents had medium level of training need in relation to improved package of practices of mandarin orange. The present study indicates the need to put more efforts for enhancing extension participation of orange growers and to organize training of orange growers to help them to improve quality and productivity of orange.

Keyword: Extension participation, Training need analysis, Orange growers.

1. INTRODUCTION

India has achieved self sufficiency in food grain production but not in fruit production. Citrus is the largest fruit industry in India after banana and mango in terms of area under cultivation. But comparative analysis of yield of citrus fruits shows that our orange fruit production per hectare is very low (9-10 t/ha) as compared to developed countries. Hence it is imperative to boost orange fruit production in country. The clamour for higher productivity in orange can be achieved not only by coming up with improved technology but also with extension participation of farmers which help to adopt new agricultural practices prior to other in his social system.

Extension participation play an important role in the field of agriculture. More the participation in various extension activities more will be the knowledge gain on new technology aspect. It also provides information on agricultural practices and creates an interest in the farmers to seek more information regarding particular practice. Hence extension participation helps the farmers to get information from various sources.

A training need is a shortage of skill or abilities which could be reduced or eliminated by means of training and development. Training provides a systematic improvement of knowledge and skills which in turn helps the trainees to function effectively and efficiently in their given task on completion of the training. Training is essential to induce motivation, create confidence and inculcate efficiency in an individual. Training of farmers had assumed further importance in the context of improved practices of agriculture and allied fields. In order to make any training meaningful and effective, it is imperative on the part of the training organizers to identify the training needs of the farmers based on which a suitable training module can be developed so that appropriate training is given to the right people, in the right form, at right time so that higher degree of productivity and profitability can be achieved. Hence keeping in mind the importance of extension participation of farmers and their training needs, the study was conducted.

2. METHODOLOGY

The present investigation was carried out in Nagpur district of Maharashtra. A sample of 100 orange growers was selected randomly from 10 villages of two purposefully chosen talukas having highest area under orange cultivation and from each village 10 growers as respondents. The data were collected with the help of well structured interview schedule. Before actual investigation for data collection the interview schedule was pre-tested.

The identified concepts for study were to know the extent of extension participation of orange growers in various extension activities and the training needs perceived by them in improved orange cultivation practices. The data were collected by personal interviewing the sample respondents. The data were checked, tabulated and analyzed with the help of frequencies, percentage, mean and standard deviation.

In the present study, extension participation refers to the awareness of respondents about various extension activities and their extent of participation in them. Quantification of this variable was done as per the procedure followed by Biradar(1997). The score `1' was given for awareness of extension activity and `0, for not awaring the extension activities. The source `4' was given for regular participation in extension activities, `2' for occasional and `0' for never

participating in extension activities. Respondents were further grouped into different categories of extension participation on the basis of mean and standard deviation as high, medium and low.

A list of 15 major improved orange cultivation practices was prepared. Training needs of orange growers was worked out with the help of a Training Need Quotient (TNQ) developed by sidhu (1973). The formula for calculating Training Need Quotient is TNQ = (oTig / MTS)*100 where oTig = sum ofthe observed training scores of the items of the ith respondents, MTS = sum of maximum scores attributed to the items rated by the ith respondents. Based on the TNQ scores obtained, the respondents were categorized into three group's viz high, medium and low level using mean and standard deviation. The Training Importance Scores (TIS) of each items was calculated with the help of the following formula as suggested by Tantry (1989) as TIS = cumulative training importance score over all respondents / total number of respondents. The training areas were ranked based on training importance score values. In present study, the farmers responses' were collected in three point continuum scale as most essential, essential and not essential by giving scores of 3,2 and 1 respectively.

3. RESULTS AND DISCUSSION

The results of the present research work are presented below.

<u>Extension participation</u>-It is apparent from the table 1 that majority of respondents (62 %) had low extension participation followed by medium and high extension participation with 36 and 2 percent respectively.

 Table 1: Distribution of the respondents on the basis of their extension participation

Sr.No.	Extension participation	Respondents			
		Frequency	Percentage		
1.	Low (Below 11.67)	62	62.00		
2.	Medium (11.67 to 28.11)	36	36.00		
3.	High (above 28.11)	2	02.00		
10.00 0.0.0					

Mean=19.89 S.D. =8.22

This clearly indicates the need to put more efforts for enhancing the extension participation of orange growers which helps to get farm information and to adopt new agricultural practices earlier than others in the social system. The results are in conformity with finding of Sakharkar (1905) and Angadi (1999).

Training needs in relation to improved packages of practices of mandarin orange –

The data in table 2 shows that majority (59 %) of respondents had medium level of training needs in relation to improved packages of practices of mandarin orange; followed by low level of training need comprising 22 percent of respondents and 19 percent of them had high of training need

Table 2: Distribution of the respondents according to their training needs in relation to improved packages of practices of mandarin orange

Sr.No.	Training needs of	Respondents			
	farmers	Frequency	Percentage		
1.	Low (Below 10.48)	22	22.00		
2.	Medium (10.48 to 39.26)	59	59.00		
3.	High (above 39.26)	19	19.00		
N. 04.05.0 D 14.00					

Mean=24.87 S.D. =14.39

This clearly indicates the need to organize specialized training programme covering all the aspect of improved orange cultivation technology to keep them abreast of the latest innovation so as to improve quality and productivity of orange.

Important training need area identified with respect to improved orange cultivation practices –

 Table 3: Rank of training need of orange grower in relation to improved packages of practices of mandarin orange

Sr. No.	Area of training need	Training	Rank
		importance	
		score	
1.	Suitable land for orange	0.80	3
	plantation		
2.	Different varieties of orange	0.47	8
3.	Selection of planting materials	1.24	1
4.	Time and spacing for planting	0.25	12
5.	Fertilizer management	0.50	7
6.	Irrigation management	0.21	14
7.	Pruning and training	0.29	10
8.	Weed control	0.28	11
9.	Intercropping	0.24	13
10.	Bahar treatment	0.77	4
11.	Fruit drop control	0.75	5
12.	Plant protection measures	0.85	2
13.	Harvesting and storage	0.36	9
14.	Rejuvenation of old orchards	0.58	6
15.	Export quality orange production	0.11	15

The data in Table 3 reveals that the training needs of the farmers based on training importance score obtained was found most essential in the field of selection of planting materials having rank first. The most of orange growers perceived more training need in plant protection measures and suitable land for orange plantation which was ranked second and third respectively. Also bahar treatment and fruit drop control were ranked as fourth and fifth respectively.

The orange growers perceived training need in other area like rejuvenation of old orchards, fertilizer management, different varieties of orange. While a very few orange growers had training need in areas like harvesting and storage of orange, pruning and training etc.

This finding clearly indicates that priority should be given for training in area like selection of planting materials, plant protection measures, and suitable land for orange plantation, bahar treatment and fruit drop control.

4. CONCLUSION

It may be concluded that the majority of respondents (62 percent) had low extension participation. Extension activities conducted in the area have direct effect on knowledge gained about improved agricultural practices and create an interest in the farmers to seek more information regarding particular practice. Hence the study recommends that extension activity should effectively make use of all available means of communication with orange growers so as to ensure that extension activities goes round and its well received by all orange growers to improve the quality and productivity of orange.

Also the majority (59%) of orange growers had medium level of training needs in relation to improved packages of practices of mandarin orange. Most important training need area was identified in the field of selection of planting materials followed by plant protection measures and suitable land for orange plantation respectively. The results show that even though considerable efforts have been made in training of farmers in improved orange cultivation practices, there still remains a gap which need to be addressed.

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