

Management of Horticultural Extension Services in Rainfed Areas

G.R. Desai¹ and P.L. Manohari²

Introduction

India has varied agro climatic conditions and natural resources to grow a large spectrum of horticultural crops like fruits, vegetables, flowers, tubers and plantations like cashew, areca nut, cardamom, rubber, coconut etc. Though the area under horticulture is only 8.5 percent, its contribution to the GDP in agriculture is to the tune of 28.5 per cent which is significant.

Food security being the national concern after independence in 1947, major emphasis was laid on achieving self-sufficiency in food production. However, for the last one-decade, due to the unexploited opportunities in horticulture, the sector has been gaining higher priority for generating employment and providing sustainable income to the farming community.

Even dry land Horticulture provides excellent opportunities in raising the income of the farmers, provides higher unit productivity and offers great scope for value addition. This sector is making inroads through the extension services in the form of Horticulture Department, organized in various states in order to provide better services for the farmers. Hence considering the importance of the sector, the present day opportunities and the existing efforts of the department, the present study was undertaken with the following objectives.

1. To understand the extent of contact of the rainfed farmers with extension officials of Department of Horticulture.
2. To know the frequency and place of contact of farmers with the horticultural officers
3. To study the extent of involvement of farmers in extension activities.
4. To understand the extent of satisfaction of the rainfed farmers with the services of the department of horticulture.

¹Director (OD & PC), National Institute of Agricultural Extension Management (MANAGE), Hyderabad.

²Research Associate, National Institute of Agricultural Extension Management (MANAGE), Hyderabad

Methodology

The study was undertaken in 12 districts each drawn from a state representing rainfed area in the country. Four categories of farmers i.e. marginal, small, medium and large were involved in the study. The data was collected by using a pre tested interview schedule from 40 farmers drawn from two villages of a rainfed block in each district. Thus, this study covers 480 farmers. The data has been analyzed by using percentages.

Findings

The findings relating to the number of farmers contacted, frequency of contact, place of contact etc. are presented below.

1. Contact with Extension Officials

The information relating to contact of extension officials of the department of horticulture with the farming community is presented in Table 1.

Table 1. Contact with Extension Officials

Sl. No	Districts	Category of farmers				Average
		Marginal	Small	Medium	Large	
1.	Mahboobnagar	0	0	0	20	5.0
2.	Kamrup	46	33	33	33	36.3
3.	Rajkot	0	0	10	20	7.5
4.	Shimla	8	53	56	100	54.3
5.	Gulbarga	0	0	0	10	2.5
6.	Indore	0	0	10	0	2.5
7.	Aurangabad	30	30	50	50	40.0
8.	Bolangir	0	0	40	0	10.0
9.	Bhilwara	22	27	22	45	29.0
10.	Salem	0	10	20	30	15.0
11.	Jhansi	22	0	14	62	24.5
12.	24 Paraganas	0	8	0	50	14.5
	Average	10.7	13.4	21.3	35.0	20.1

It can be observed from the above table that only 20 percent of the farming community on an average had contact with the extension officials of the Department of Horticulture. The maximum contacts were found among the large farmers followed by medium, small and marginal farmers. Among the districts, Shimla ranked high with 54.3 percent of the farmers contacting the department followed by Aurangabad, Kamrup, Bhilwara and Jhansi. This was due to the fact that Shimla is more a horticulture

district and Kamrup follows horticultural cropping pattern and so on. The least contact among the farmers was found to be in Indore and Gulbarga. The limited percentage of contact observed among the officials of the horticulture department was basically due to the availability of limited functionaries with the department in the district. Most of the districts have their horticultural field units up to the block level and many do not have any field officers or field functionaries below the block level. This itself limits the reach of the extension officials of the horticulture department below the block level. Since horticulture is emerging as an important area for diversification among the farming community providing higher economic returns, it is necessary that either the needed field staff have to be provided in each district or this component integrated with the agricultural department efforts so as to provide for common field functionaries to take care of both the cropping requirements.

2. Frequency of Contact with Extension Officials

The information relating to frequency of contact of farmers with extension officials of dept. of horticulture is presented in Table 2.

Table 2 . Frequency of Contact with Extension Officials

(%)

Sl. No	Districts	Type of visit	Category of farmers				Average
			Marginal	Small	Medium	Large	
1.	Mahboobnagar	Fortnightly	0	0	0	20	5.0
2.	Kamrup	Fortnightly	20	10	10	10	12.5
		Monthly	26	23	23	23	23.8
3.	Rajkot	Casual	0	0	10	10	5.0
4.	Shimla	Casual	8	53	56	100	54.3
5.	Gulbarga	Casual	0	0	0	10	2.5
6.	Indore	Weekly	0	0	10	0	2.5
7.	Aurangabad	Weekly	30	30	40	40	35.0
		Casual	0	0	10	10	5.0
8.	Bolangir	Fortnightly	0	0	20	0	5.0
		Monthly	0	0	20	0	5.0
9.	Bhilwara	Quarterly	22	27	22	45	29.0
10.	Salem	Monthly	0	0	20	30	12.5
		Casual	0	10	0	0	2.5
11.	Jhansi	Monthly	0	10	0	25	8.8
		Half Yearly	10	0	7	0	4.3
		Casual	10	0	7	37	13.5
12.	24 Paraganas	Half Yearly	0	8	0	15	5.8
		Casual	0	0	0	35	8.8

The data reveals that 35 percent of the farmers in Aurangabad tended to have weekly contacts followed by fortnightly contacts among 20 percent of the large farmers in Mahaboobnagar, 12.5 percent in Kamrup and 20 percent of the medium farmers in Bolangir. The rest of the farmers were found to have monthly, half yearly or no regular contacts. Lack of regular contacts of the officials with the farmers was mainly due to limited number of officials below the block level apart from the fact that most of the horticultural crops undertaken by farmers were perennial crops that demanded limited focus of the extension worker due to long gestation periods. However, the results from the districts of Shimla and Aurangabad are quite encouraging, since horticulture has been integrated under the diversification mode with the existing farming system .In Aurangabad the horticultural wing of the department is integrated with the Commissioner? of Agriculture, which has helped in bringing in effective coordination. In the rainfed regions, since water availability is limited, diversification into perennial horticultural crops is necessary for the farmers. Hence, it is necessary to increase the frequency of contact between the farmers and extension workers to make horticulture more effective.

3. Place of Contact of Rainfed Farmers with Extension Officials of Horticultural Department

Farmers are contacting extension officials at different places as may be seen in Table 3.

It is found from the data that the farmers are contacting extension workers in three places i.e in the field, Panchayat office and horticulture office. In a majority of the districts, farmers used Panchayat office as a common venue to contact field officers. Apart from this, the farmer's fields and horticultural office were the other two venues used by the farmers. The number of officials is generally limited in the horticulture department. Hence officials are using the panchayat office as one of their venues to cover more number of villages. However, visit to the farmer's fields or a horticultural orchard would be more meaningful as a venue for interaction. Hence, it is suggested that specific efforts be made to introduce appropriate approaches such as farmer field schools, exposure visits, farmers training so that most of the interaction generally are undertaken on the farms. This can help improve the knowledge and skill level of the farmers.

Table 3. Place of Contact with Extension Officials

(%)

Sl. No	District	Place of contact	Category of farmers				Average
			Marginal	Small	Medium	Large	
1.	Mahboobnagar	Panchayat	0	0	0	20	5.0
2.	Kamrup	Field	10	10	10	10	10.0
		Office	10	10	10	10	10.0
		Panchayat	26	13	13	13	16.3
3.	Rajkot	Office	0	0	10	0	2.5
4.	Shimla	Field	0	13	22	0	8.8
5.	Gulbarga	Office	0	0	10	0	2.5
6.	Indore	Office	0	0	10	0	2.5
7.	Aurangabad	Field	10	10	30	40	22.5
		Panchayat	30	10	0	0	10.0
		Office	10	10	40	10	17.5
8.	Bolangir	Panchayat	0	0	40	0	10.0
9.	Bhilwara	Panchayat	10	10	15	25	15.0
10.	Salem	Panchayat	0	0	20	20	10.0
		Office	0	10	0	10	5.0
11.	Jhansi	Field	10	0	0	0	2.5
		Panchayat	0	0	10	40	12.5
		Office	10	0	10	40	15.0
12.	24 Paraganas	Panchayat	0	0	0	40	10.0
		Office	0	8	0	10	4.5

4. Participation of Farmers in Extension Activities

The results relating to participation of farmers in extension activities of the Department of Horticulture are presented in Table 4.

It can be observed from the data that very few farmers in general have participated in the extension activities of the department. Hence, only four major activities were being observed across the districts. Demonstrations, mini kits and farmers training have been the traditional activities undertaken by the department since a long time, where few farmers have participated. Apart from this, a small percentage of farmers were involved in exposure visits in four states. The results highlight the fact that limited activities are being conducted by the department of horticulture for the benefit of the farmers. Since horticulture is emerging as a very important alternate vocation for the

rained farmers, it is necessary that sufficient attention be paid to provide adequate funds to undertake effective extension activities involving a large number of farmers relating to horticultural crops.

Table 4. Participation of Farmers in Extension Activities

(%)

Sl. No	State	Type of activity	Category of farmers				Average
			Marginal	Small	Medium	Large	
1.	Mahboobnagar	Trainings	0	0	0	10	2.5
2.	Kamrup	Mini kits	10	10	10	10	10
		Trainings	10	10	10	10	10
3.	Rajkot	Trainings	0	0	0	10	2.5
4.	Shimla	Demonstrations	0	0	33	0	8.3
5.	Gulbarga	Trainings	0	0	0	10	2.5
6.	Indore	Trainings	0	0	10	0	2.5
		Exposure visits	0	0	10	0	2.5
7.	Aurangabad	Trainings	0	0	10	20	7.5
		Exposure visits	0	0	20	40	15.0
8.	Bolangir	Trainings	0	0	30	0	7.5
9.	Bhilwara	Minikits	22	27	22	0	17.8
		Exposure visits	10	0	0	0	2.5
10.	Salem	Exposure visits	0	10	10	20	10.0
11.	Jhansi	Demonstrations	0	0	10	0	2.5
		Mini kits	0	0	0	10	2.5
		Trainings	10	0	0	10	5.0
12.	24 Paraganas	Trainings	0	10	0	20	7.5

5. Satisfaction with Services

The information relating to satisfaction of farmers with the services of department of horticulture is presented in Table 5.

It can be observed from the data that most of the farmers are not satisfied with the services offered by the department. On an average, the level of satisfaction was found to be 9.5 percent, which is quite low. There is a drastic need to improve the delivery and performance of the horticultural departments across the districts in different states in line with the department of agriculture.

Table 5. Satisfaction with the Services

(%)

Sl. No	Districts	Category of farmers				Average
		Marginal	Small	Medium	Large	
1.	Mahboobnagar	0	0	0	15	3.8
2.	Kamrup	20	15	15	15	16.3
3.	Rajkot	0	0	10	10	5.0
4.	Shimla	8	0	33	25	16.5
5.	Gulbarga	0	0	0	10	2.5
6.	Indore	0	0	10	0	2.5
7.	Aurangabad	0	0	30	50	20.0
8.	Bolangir	0	0	20	0	5.0
9.	Bhilwara	10	10	20	20	15.0
10.	Salem	0	10	10	20	10.0
11.	Jhansi	0	0	14	25	9.8
12.	24 Paraganas	0	8	0	24	8.0
	Average	3.2	3.6	13.5	17.8	9.5

Conclusion

The study indicated that the contact of farmers with the extension officers was limited (20 per cent) and the frequency of contact varied from fortnightly to half yearly among rainfed districts. Grama Panchayat office is the common meeting place of farmers with extension officers. Horticulture covers different types of crops like short duration vegetables to long duration orchards and spices requiring frequent guidance. As such, there is a need to provide exclusive horticultural advisers at the field level or club the agriculture and horticulture departments to provide integrated delivery of services to the farmers.

Participation of farmers in extension activities was found to be low. Very few farmers (9.5 per cent) were satisfied with the services of department of horticulture. Accordingly, there is a need to intensify and diversify the range of services in horticultural sector related to production, post harvest management, farm level processing etc. for the benefit of farmers. It is also necessary to increase the range and coverage of extension activities such as farmer field schools, exposure visits, training, promoting farmers organisations etc. With the advent of horticultural mission, in the present context, the extension services for horticultural crops could be geared up to address the upcoming challenges.

Reference

Desai.G.R. et al, (2007). A study on improving the performance of farming systems in Rainfed Areas. (Unpublished research study) National Institute of Agricultural Extension Management (MANAGE), Hyderabad.