



## Research Paper

### Article history :

Received : 23.09.2013

Revised : 01.11.2013

Accepted : 22.11.2013

# Satisfaction of fruit growers regarding the services availed under National Horticulture Mission

■ SAHIL GARG<sup>1</sup>, PRABHJOT KAUR AND R.K. DHALIWAL<sup>1</sup>

### Members of the Research Forum

#### Associated Authors:

<sup>1</sup>Punjab Agricultural University,  
LUDHIANA (PUNJAB) INDIA

#### Author for correspondence :

**PRABHJOT KAUR**

Punjab Agricultural University,  
LUDHIANA (PUNJAB) INDIA

**ABSTRACT :** This study was undertaken to know the services availed, satisfaction of the fruit growers regarding the services provided under National Horticulture Mission. A sample of 120 fruit growers was selected using proportional allocation method and all the extension personnel were selected for the study. The findings of the study showed that most of the respondents engaged in fruit cultivation were in the age group of 36 to 53 years, belong to nuclear family, had matriculation as their educational level, operational land holding of 4.40 to 20.02 acres and had fruit growing as their main occupation. Most of the respondents were medium on extension contacts, mass media exposure, risk bearing capacity and scientific orientation. A vast majority of respondents reported that Department of Horticulture was the first source of information regarding services of NHM. A large number of respondents availed service of establishment of new orchard followed by rejuvenation of senile plantation and showed satisfaction regarding various services rendered by NHM. Majority of the respondents gave reasons of satisfaction in descending order timeliness, assistance provided by concerned authorities, good results of services, quality of inputs, lengthy documentation procedure, less quantity of inputs and amount of subsidy.

**KEY WORDS :** Services availed, Preferences, Satisfaction, Fruit growers

**HOW TO CITE THIS ARTICLE :** Garg, Sahil, Kaur, Prabhjot and Dhaliwal, R.K. (2013). Satisfaction of fruit growers regarding the services availed under National Horticulture Mission. *Asian J. Hort.*, **8**(2): 737-742.

Recognizing the vast potential of horticulture in stimulating the growth of Indian agriculture, Government of India had launched a scheme National Horticulture Mission in May 2005 for the holistic development of this sector. Three-tier structures has been approved by Cabinet Committee on Economic Affairs for overseeing activities of the National Horticulture Mission at national, state and district levels to promote the holistic growth of horticulture in the country. National Horticulture Mission launched with a mandate of promoting integrated development in horticulture, to help coordinate, stimulate and sustain the production and processing of fruits and vegetables and to establish a sound infrastructure in the field of production, processing and marketing with a focus on post-harvest management to reduce losses. There was a pronounced changes in the production scenario as a result. Today India's horticulture production becomes almost doubled. Production of horticultural crops had jumped 44 per cent to 240 million tonnes since the launch of National Horticulture Mission (Mehta, 2012).

To achieve the targeted area expansion under different crops, strategies adopted were: Awareness building through extension and information dissemination on crop possibilities and market demand. The state horticulture extension machinery as well as private sector extension had a role to play in this. Quality planting material made available for orchard development, both through the government machinery as well as through private sector participation. This included seed material for fruit plants, tubers and spices, and certified seeds of vegetables and spices. Technical support services made available at the doorstep of farmers to ensure adoption of appropriate crop production. The role of the private sector encouraged through contract farming arrangements. The state machinery as well as the private sector, through contract farming arrangements, had a role in extension, supply of quality planting material and provision of technical support services. Organic farming in production of vegetables and spices encouraged. Since much of traditional horticulture in Punjab relied on organic methods. Since marketing has been identified as the primary

constraining factor in development of the horticulture sector, a well-coordinated strategy followed for development of marketing infrastructure and market linkages. When so many services are provided under the mission then it becomes important to study that whether the farmers are satisfied with the services. So keeping this in view, the present study was conducted.

## RESEARCH METHODS

The study was undertaken in Bhatinda, Faridkot, Ferozepur and Mukatsar districts of Punjab state. 120 fruit growers were selected using probability proportion to number of fruit growers in each district. All the extension personnel of Horticulture Department working in Bhatinda, Faridkot, Ferozepur and Mukatsar districts were selected for the purpose of this study.

The selected fruit growers and extension personnel were personally interviewed with the help of interview schedule. For the purpose of the study, data were collected from 120 fruit growers and 12 extension personnel by personal interview method.

## RESEARCH FINDINGS AND DISCUSSION

Results of the study have been discussed under the following heads :

### Profile of the respondents who had availed services under National Horticulture Mission:

It is related to the information regarding socio-personal characteristics of respondents which included age, family type, family size, education, operational land holding, land use pattern, subsidiary occupation, experience in fruit growing, extension contacts, mass media exposure, training

acquired in fruit production, risk bearing capacity and scientific orientation. Data pertaining to profile of the farmers according to their socio-personal characteristics are presented in Table 1.

### Age:

It is revealed from the data (Table 1) that more than sixty per cent of the respondents (61.67%) belonged to the age group of 36-53 years, about 22 per cent respondents were in the age group of 19-36 years and rest 16 per cent of the respondents belonged to the age group of 53-70 years. It can be concluded that majority of the respondents were of the middle age group (36-53 years). Similar findings were reported by Gill (1998), Josan (2002), Kaur (2002) and Kakkar (2011).

### Family type:

Data in Table 1 indicates that majority (79.17%) of respondents belonged to nuclear family, whereas 21 per cent of the respondents belonged to joint family. These findings are in line with those of Poonam (2006). It may be due to the reason that joint family system is breaking up and more and more nuclear families are coming.

### Family size:

Family size was divided into three categories on the basis of range method *i.e.* small, medium and large. Perusal of data (Table 1) indicate that more than 45 per cent of the respondents were having small family, about 47 per cent of respondents belonged to medium family and only 7.50 per cent of the respondents belonged to large size family. Similar findings were reported by Sharma (1999), Kaur (2005) and Poonam (2006). Medium size families may be having sufficient man power to take care of the field, so they may

Sr. No.	Socio-personal characteristics	Scores/range	Frequency	Percentage
1.	Age (years)	19 – 36 (young)	27	22.50
		36 – 53 (middle)	74	61.67
		53 - 70 (old)	19	15.83
2	Family type	Joint	25	20.83
		Nuclear	95	79.17
3	Family size (members)	3 – 7	55	45.83
		7 – 11	56	46.67
		11 and above	9	7.50
4.	Education	Illiterate	27	22.50
		Up to Matric	51	42.50
		Senior secondary	7	5.83
		Graduation and above	35	29.17
5	Operational land holding (acres)	4.40 – 20.02	50	41.67
		20.02 – 39.10	37	30.83
		39.10 – 90.10	33	27.50

be getting the benefit of mission to increase the yield of horticultural crops.

#### Educational level:

The educational qualification was categorized into four categories *i.e.* illiterate, upto matric, senior secondary, graduation and above on the basis of their education level. Data revealed that about 22.50 per cent of the respondents were illiterate, about forty two per cent of the respondents were matriculate, only 5.83 per cent were educated up to senior secondary level. About 30 per cent of the respondents were educated up to graduate and above level. The possible reasons may be rural social environment in which they live might not have encouraged them to have higher education. In villages mostly older persons are illiterate. The findings are similar with the results reported by Sharma (1999) and Poonam (2006).

#### Operational land holding:

Operational land holding of the respondents was categorized into three categories with the help of cumulative frequency cube root method. It can be inferred from the data given in Table 1 that 42 per cent of the respondents had land holding up to 20.02 acres. About 31 per cent of the respondents had land holding between 20.02-39.10 acres, whereas 27.50 per cent of the respondents had 39.10 to 90.10 acres of operational land holding. It may be due to the reason that all the respondents are fruit growers and they were having large farm holdings.

#### Training acquired in fruit growing:

It referred to the training acquired by the respondent

regarding fruit production. Data in Table 2 revealed that 45.83 per cent of the respondents acquired training regarding fruit production and 54.17 per cent of the respondents had not taken any training regarding fruit production. It can be concluded that more number of the respondents had not taken training regarding fruit production.

#### Extension contacts :

A close examination of data given in Table 3 points that about 54 per cent of the respondents had medium level of extension contacts, whereas, more than one fourth per cent of the respondents (26.66%) had high level and rest (19.17%) of the respondents had low level of extension contacts. Only 26 per cent of the respondents maintain the high extension contacts. Rest of the respondents may solve their problems by discussing either among their elders or fellows. These findings are in line with the findings of Chandergowda and Jayaramain (1990), Roy *et al.* (1992), Anupam (2005), Poonam (2006) and Kakkar (2011).

#### Mass media exposure:

Mass media exposure of the respondents was studied in terms of viewing farm telecast, listening to radio programmes, reading magazines, newspaper, package of practice, etc. The respondents were placed into three categories *i.e.* low, medium and high by using range method. It was quite clear from the data placed in Table 4 that about 50 per cent of the respondents had medium mass media exposure, whereas 35 per cent of them had low mass media exposure. Possible reason for less mass media exposure may be that farmers may not be free at the time of telecast/ broadcast of agricultural programme on T.V. and radio. These

Sr. No.	Variables	Category	Frequency	Percentage
1.	Experience in fruit growing (years)	Up to 12	49	40.83
		12-24	54	45.00
		24 and above	17	14.17
2.	Training acquired in fruit growing	Yes	55	45.83
		No	65	54.17

Sr. No.	Variable	Category	Range (scores)	Frequency	Percentage
1.	Extension contacts	Low	5-9	23	19.17
		Medium	9-13	65	54.17
		High	13-17	32	26.66

Sr. No.	Category	Range (scores)	Frequency	Percentage
1.	Low	6-10	42	35.00
2.	Medium	10-14	59	49.16
3.	High	14-18	19	15.84

findings are in consonance to Kaur (2002) and Kakkar (2011).

#### Risk bearing capacity:

It was found that 52.50 per cent of the respondents exhibited medium level of risk bearing capacity (Table 5). Six per cent of the respondents had low level of risk bearing capacity while 41.67 per cent of the respondents possessed high level of risk bearing capacity. It may be due to traditional practices as well as thinking to get more income are the possible reasons for having medium level of risk bearing capacity. The findings were in accordance with the results reported by Sharma (1999) and Poonam (2006).

#### Scientific orientation:

Data placed in Table 5 depicted that 52.50 per cent of the respondents had medium to high (38.33%), whereas only 9.17 per cent of them had low scientific approach.

#### First source of information regarding services of National Horticulture Mission:

It referred to the source from where respondent got very first information about services of National

Horticulture Mission. Data in Table 6 showed that majority of the respondents (70.83%) got information from officials of Department of Horticulture. Twenty one per cent of the respondents got information from their friends. Whereas, very less respondents got first information regarding services of National Horticulture Mission from seminars (5%) organized by National Horticulture Mission, newspapers and television (1.67%) each. As the data revealed that respondents maintain the contacts with extension workers, so their main source of knowledge was officials of Department of Horticulture.

#### Services availed by the respondents under National Horticulture Mission:

The respondents were inquired about whether they availed service under National Horticulture Mission. The results revealed that respondents availed services under various schemes. Data in Table 7 revealed that majority of the respondents (74.16%) had availed service for establishment of new orchards like grapes, malta, guava and Kinnow. About 27 per cent of the respondents availed service of rejuvenation of senile plantation while about 10 per cent attended trainings, camps, seminars organized by National

Sr. No.	Variable	Category	Range	Frequency	Percentage
1.	Risk bearing capacity	Low	13-16	7	5.83
		Medium	16-19	63	52.50
		High	19-22	50	41.67
2.	Scientific orientation	Low	10-13	11	9.17
		Medium	13-16	63	52.50
		High	16-19	46	38.33

Sr. No.	Sources of information	Frequency	Percentage
1.	Friends	25	20.83
2.	Officials of Deptt. of Horticulture	85	70.83
3.	Newspaper	2	1.67
4.	Seminars	6	5.00
5.	Television	2	1.67

Sr. No.	Services availed by respondents under National Horticulture Mission	Frequency*	Percentage
1.	Establishment of new orchards	89	74.16
2.	Rejuvenation/replacement of senile plantation	32	26.66
3.	Creation of water sources like community water tank, farm ponds/ reservoirs	10	8.33
4.	Provision of shade net, plastic tunnel for protected cultivation	1	0.83
5.	Vermi composting unit under organic farming	9	7.5
6.	HRD-training, seminars, camps, etc.	12	10.00
7.	Honey bee colonies with boxes for beekeeping	4	3.33

\*Multiple response

Horticulture Mission. Only few respondents had availed services on creation of water storage community tanks (8.33%), vermi-composting units (7.50%), bee keeping boxes (3.33%) and protected cultivation (0.83%).

#### Preference for the services provided under National Horticulture Mission:

It referred to the preference given by the respondents to the various services of National Horticulture Mission. List of the various services was provided and the respondents were asked to rank the various services provided under National Horticulture Mission, according to their preference, mean rank was worked out.

It is very clear from the Table 8 that top four ranks were given to the services by the respondents were creation of water sources like community water tank, farm ponds/ reservoirs, followed by nursery raising for production of planting material, establishment of new orchards and

rejuvenation/replacement of senile plantation, followed by provision of shade net, plastic tunnel for protected cultivation. Trainings and seminars were assigned 7th rank followed by vermicomposting units under organic farming, export promotion and ninth rank was assigned to the services under post harvest management *i.e.* pack house, cold storage unit, ripening chambers, refer vans, grader unit and waxing unit followed by honey bee colonies with boxes. Last ranks were given to contract farming followed by processing unit for value addition and drip irrigation and sprinkler irrigation under micro irrigation. It can be concluded that there is a great scope for improvement of the utilization of the services.

#### Satisfaction of respondents regarding services availed under National Horticulture Mission:

Satisfaction of respondents related to various aspects of National Horticulture Mission is presented in Table 9.

Sr. No.	Services provided under National Horticulture Mission	Mean rank
1.	Nursery raising for production of planting material	3.7
2.	Establishment of new orchards	4.2
3.	Rejuvenation/replacement of senile plantation	4.3
4.	Creation of water sources like community water tank, farm ponds/ reservoirs	3.2
5.	Provision of shade net, plastic tunnel for protected cultivation	5.9
6.	Vermi composting unit under organic farming	7.4
7.	HRD-training, seminars, camps, etc.	7.0
8.	Honey bee colonies with boxes for beekeeping	8.8
9.	Establishment of pack house, cold storage unit, ripening chambers, refer vans, grader unit, waxing unit under post harvest management	8.5
10.	Export promotion	8.4
11.	Contract farming	9.0
12.	Processing unit for value addition	9.2
13.	Drip irrigation, sprinkler irrigation under micro irrigation	9.9

Response	Frequency	Percentage
Very much satisfied	26	21.66
Satisfied	92	76.67
Dissatisfied	02	1.67

Sr. No.	Reasons for satisfaction	Frequency*	Percentage
1.	Due to financial help	26	22.03
2.	Knowledge provided about prevention of the orchard diseases.	11	9.32
3.	Timeliness	66	55.93
4.	Good results	35	29.66
5.	Quality of inputs	30	25.42
6.	Community water tank scheme saves the water wastage/ loss	9	7.63

\*Multiple response

Figures presented in Table 9 indicate that 1.67 per cent of the respondents were dissatisfied while 76.67 per cent and 21.66 per cent of the respondents were satisfied and very much satisfied, respectively. It can be concluded that majority of the respondents were satisfied with the services of National Horticulture Mission.

A close look at data presented in Table 10 points that one fourth per cent of the respondents (25.42%) were very much satisfied because of quality of inputs provided, 56 per cent of the respondents were satisfied for timely availability of services whereas, satisfaction due to knowledge provided about prevention of the orchard diseases was shown by about 10 per cent of the respondents. Regarding financial help only 22 per cent of the respondents had shown satisfaction. Thirty per cent of the respondents were satisfied with the good results of the services provided. All the respondents who availed service of community water tank were satisfied as tank saves the water wastage loss.

### Conclusion:

It was concluded that majority of the fruit grower's availed services on establishment of new orchards and rejuvenation of old orchards. More than 76 per cent of the fruit growers were satisfied with the services provided by the National Horticulture Mission.

### REFERENCES

- Anupam (2005).** The extent of utilization of PAU farmer's helpline by farmers and farm women of Punjab. M.Sc. Thesis, Punjab Agricultural University, Ludhiana, PUNJAB (INDIA).
- Chandregowda, M.J. and Jayaramaian, K.M. (1990).** Impact of watershed development programme on socio-economic status, land productivity and income of small and marginal farmers. *Indian J. Ext. Edu.*, **25** (3&4) : 44-47.
- Gill, T.S. (1998).** Adoption of recommended practices for Toria crop in Amritsar district of Punjab. M.Sc. Thesis, Punjab Agricultural University, Ludhiana, PUNJAB (INDIA).
- Josan, K.P.S. (2002).** Pea cultivation in Nizampur village of Amritsar district in Punjab. M.Sc. Thesis. Punjab Agricultural University, Ludhiana, PUNJAB (INDIA).
- Kaur, G. (2005).** Utilization of information relating to home and farm by the farm women, disseminated through Changi Kheti magazine of the Punjab Agricultural University. M.Sc. Thesis, Punjab Agricultural University, Ludhiana, PUNJAB (INDIA).
- Kaur, A. (2002).** Training needs of vegetable seed producers and status and scope of vegetable seed production in selected districts of Punjab. Ph.D. Thesis. Punjab Agricultural University, Ludhiana, PUNJAB (INDIA).
- Kakkar, N. (2011).** Reactions of farmers regarding agricultural subsidies provided by State Department of Agriculture under National Food Security Mission in Ludhiana district. M.Sc. Thesis, Punjab Agricultural University, Ludhiana, PUNJAB (INDIA).
- Poonam (2006).** A study of services provided by Indian Farmers Fertilizer Cooperative Limited (IFFCO) to the farmers of Ludhiana district. M.Sc. Thesis, Punjab Agricultural University, Ludhiana, PUNJAB (INDIA).
- Roy, A., Adhikari, M.M., Mondal, T. and Chowdhury, R. Basu (1992).** Impact of special jute development programme. *Indian J. Ext. Edu.*, **28**: 120-123.
- Sharma, A., (1999).** Study of the services of plant clinic of PAU. M.Sc. Thesis, Punjab Agricultural University, Ludhiana, PUNJAB (INDIA).

8<sup>th</sup>  
Year  
★★★★★ of Excellence ★★★★★