

Impact of National Horticulture Mission on the Pomegranate Growers of Maharashtra

Anand M. Chavai¹ and Pandurang M. Kadam²

Abstract: This study has been undertaken in the year 2015 to assess the impact of National Horticulture Mission on the pomegranate growers in Ahmednagar District of Rahuri tahsil of Maharashtra state, India with the objectives to study the socio-economic profile of pomegranate growers, to study the impact of NHM on the pomegranate growers in terms of additional gain in yield and income and their relationship. The 120 respondents from eight villages where implantation of NHM scheme was purposively selected for the study. The study revealed that 60.83 per cent of pomegranate growers were middle aged (36 to 56 years), most of them (71.67 per cent) using medium to high sources of information about NHM, having medium (77.80 per cent) scientific orientation, medium (66.33 per cent) planning orientation, medium (65.30 per cent) risk orientation and 46.60 per cent were having 1.01 to 2 ha area under pomegranate. The 47.50 per cent were having highly favourable attitude towards NHM. In term of impact the 52.50 per cent of the pomegranate growers having additional gain in yield (5.01 to 10 T/ha.) in terms of additional gain in income majority (54.16 per cent) of pomegranate growers belonged to Rs 3,50,001 to Rs. 4,65,000 as their annual income. The. Risk orientation, attitude, sources of information, planning orientation, scientific orientation, area under pomegranate variables had shown positive and significant relationship while, age did not show any relationship with impact of NHM on pomegranate growers.

Key Words: Impact of National Horticulture Mission, pomegranate growers, Socio-economic Profile of Pomegranate growers, NHM

Horticultural crops play an important and significant role in Indian diet and economy. Although, horticultural crops cover less than 10 per cent of total cropped area, they contributed 25 per cent gross value of agricultural output and more than 52 per cent of foreign exchange earned through agriculture. National Horticulture Mission contributed lot in increasing horticulture plantation area in the state. NHM programmes made impact on livelihood of farmers. This study was undertaken in the year 2015 to know the status of farmers due to participation in the NHM programmes with specific objectives, to study the socio-economic profile of pomegranate growers, to study the impact of National Horticulture Mission on the pomegranate growers in terms of additional gain

in yield and their income and to study the relationship between socio-economic profile of pomegranate growers with their impact of NHM.

MATERIALS AND METHODS

The present study was undertaken in Rahuri tahsil of Ahmednagar District of Maharashtra state, India. This district was purposively selected since the NHM has been implemented in this district. The list of beneficiaries of National Horticulture Mission of Rahuri tahsil was obtain from the Incharge Officer of NHM at Taluka Agriculture office at Rahuri. The eight villages having at least ten and above pomegranate growers under NHM were purposively selected for study. The 120 respondents from eight villages having implantation of NHM

¹ Asstt. Professor of Agril. Extension ² M.Sc(Agri.) student

Department of Extension Education, Mahatma Phule Krishi Vidyapeeth, Rahuri 413722, Maharashtra, E-mail: anandchavai.2009@gmail.com

scheme were purposively selected for the study. Primary data were collected with the help of pretested interview scheduled specially designed in local language for the purpose. Simple statistical tools like percentage, mean, standard deviation and Karl Pearson's correlation co-efficient were used for the analysis of data.

RESULTS AND DISCUSSION

Socio-economic profile of pomegranate growers:

It is revealed from Table 1 that, The majority (60.83 per cent) of pomegranate growers were middle (36 to 56 years) aged, most of them (71.67 per cent) were used the medium to high sources of information, having medium (77.80 per cent) scientific orientation, medium (66.33 per cent) planning orientation, medium (65.30 per cent) risk orientation

Table 1
Socio-economic profile of pomegranate growers

Characters (N= 120)	Frequency	Percentage
Age		
Young (Up to 35 years)	26	21.67
Middle (36 to 56 years)	73	60.83
Old (57 and above years)	21	17.51
Sources of Information		
Low up to 24	19	15.83
Medium 25 to 36	86	71.67
High 37 and above	15	12.50
Scientific Orientation		
Low (Up to 16)	24	14.17
Medium (17 to 24)	84	77.80
High (25 and above)	12	08.33
Planning Orientation		
Low (Up to 3)	24	20.00
Medium (4 to 11)	76	66.33
High (12 and above)	20	16.67
Risk bearing ability		
Low (upto 9)	15	12.50
Medium (10 to 14)	79	65.30
High (15 and above)	26	21.67
Attitude		
Unfavorable (Up to 36)	21	17.50
Moderately favorable(37to 50)	42	35.00
Highly favorable (51 and above)	57	47.50
Area under pomegranate		
Marginal (Up to 1 ha.)	32	26.66
Small (1.01 to 2 ha.)	56	46.60
Medium (2.01 to 4 ha.)	28	23.33
Large 4.01 ha. And above	04	03.41

and having medium (66.67 per cent) area under pomegranate. The (47.50 per cent) have highly favourable attitude towards NHM. Similar, results were also noticed by Hiremath (1993) and Kausadikar *et.al* (2002).

Impact of NHM on the pomegranate growers

The assessment of the impact of NHM was made by comparing per ha. yield of pomegranate growers of base year (2010-11) with the per ha. yield obtained after three years in the NHM (2011-12 to 2013-14). The data is presented in Table 2.

Table 2
Impact of NHM on pomegranate growers

Sr. No.	Particulars	Base year (2010-11)	2011-12	2012-13	2013-14
1.	Average gain in yield (tonnes/ha.)	10.50	13.22	17.83	20.00
2.	Average income from pomegranate (Rs./ha.)	4,70,000	6,50,000	7,38,000	8,22,000

The data from Table 2 indicated that the average per hectare yield of *pomegranate* during the base year (2010-11) of the NHM was 10.50 T/ha., while, the average per ha. Yield of *pomegranate* during the NHM for succeeding three years was 13.22 T/ha. (2011-12), 17.83 T/ha. (2012-13) and 20.00 T/ha. (2013-14). These results may be attributed to fact that the beneficiary or participatory respondents in the demonstrations are adopting the recommended technologies of university. This has certainly boosted their yield. Further, the impact of NHM i.e. pomegranate management practices is depicted in additional gain in income of the respondents from their pomegranate crop yield. The data in Table 10 revealed that there was significant increase in the average income of the respondents. The average income of base year of Rs.4,70,000/- increased to Rs.8,22,000/- in third year of under this NHM scheme. The data, thus, indicated that there was a significant impact of NHM on beneficiary respondents. The findings are in line with those of Kharde (2003).

Impact of NHM in terms of additional gain in yield

Table 3
Distribution of Pomegranate growers according to their level of additional gain in yield

Sr. No.	Level of additional gain in yield (tonne/ha.)	Respondents (N=120)	
		Frequency	Per cent
1	Low (Up to 5)	25	20.83
2	Medium (5.01 to 10)	63	52.50
3	Moderate(10.01 to15)	20	16.67
4	High(15.01 and above)	12	10.00
		120	100.00

The data from Table 3 revealed that more than half i.e. (52.50 per cent) of the respondents had medium level of additional gain in yield i.e. (5.01 to 10 tonne/ha) while, (20.83 per cent) of the respondents had low level (up to 5 tonne/ha) of additional gain in yield, whereas (16.67 per cent) and (10.00 per cent) of the respondent had moderate(10.01 to 15 tonne /ha) and high level (15.01 and above tonne/ha) of additional gain in yield, respectively. From the above findings it can be concluded that majority of the respondents were found in medium level (5.01 to 10 T/ha.) of additional gain in yield. This finding is similar to finding of Dhere(2009)

Impact of NHM in terms of additional gain in income

Table 4
Distribution of Pomegranate growers according to their additional annual income

Sr. No.	Level of additional gain annual income (Rs/ha.)	Respondents	
		Frequency	Per cent
1.	Low (Up to Rs 3,50,000)	20	16.67
2.	Medium (Rs 3,50,001 to 4,65,000)	65	54.16
3.	Moderate(Rs 4,65,001 to 5,42,500)	19	15.84
4.	High (Rs 5,42,501 and above)	16	13.33
	Total	120	100.00

The data in Table 4 revealed that (54.16 per cent) of the respondents possessed medium level(Rs 3,50,001 to 4,65,000) of additional gain in income

from yield of pomegranate, while, (16.67 per cent) of the respondents possessed low level (Rs 3,50,000) of additional gain in income. Further, it was found that (15.84 per cent) and (13.33 per cent) of the respondents possessed moderate (Rs 4,65,001 to 5,42,500) and high (Rs 5,42,501 and above) additional gain in income, respectively. From the above findings it can be concluded that majority of the respondents were found in medium level (Rs.3,50,001 to 4,65,000 Rs/ha) of income from pomegranate. This finding is similar to finding of Sharnagat (2008).

Relationship between socio-economic profile of pomegranate grower with their impact of NHM

It was revealed from Table 5 that, The socio-economic profile of pomegranate growers viz. Risk orientation, attitude, sources of information, planning orientation, scientific orientation, area under pomegranate had shown positive and significant relationship while, age did not show any relationship with impact of NHM on pomegranate growers. Similar results were reported by Dhere (2009) and Sharnagat (2008).

Table 5
Relationship between selected socio-economic profile with their impact of NHM

Sr.No.	Socio-economic Profile of pomegranate grower	Correlation coefficient
1	Age	-0.11398NS
2	Source of information	0.2421**
3	Scientific orientation	0.2483**
4	Planning orientation	0.3169**
5	Risk orientation	0.1903*
6	Attitude	0.1998*
7	Area under pomegranate	0.2445**

** = Significant at 1% level * = Significant at 5% level

The study implies that pomegranate growers under NHM had medium yield and income status. It is therefore essentials to undertake suitable and appropriate measures like develop the concept of contract farming. To avoid the marketing constraints it is suggested to run Dealers farmers exhibition/ discussion forum. Farmers face the problem of bacterial blight, oily spot and certain diseases

therefore suggested to develop farmers scientist-discussion forum. To avoid the problem of grading it is implies that establish the community grading centres in the remote location.

References

- Dhere, T.B. (2009), A study of the impact of seed village programme the productivity level of chickpea participant farmers. M.Sc.(Agri.) Thesis (unpublished), submitted to MPKV Rahuri.
- Hiremath, V.M. (1993), A study of knowledge and attitude of the farmers towards Horticultural Development Programme in Pune district. M.Sc. (Agri.) Thesis (unpublished), MPKV, Rahuri.
- Kausadikar K.D. Suradkar D.D. And G.S. Narkar (2002), Determinants of attitude towards Horticultural Development Programme. Maharashtra J. Extn. Edn. Vol. 22 (2): 138-143.
- Kharade,D.P (2003), Knowledge and adoption of post harvest technology by the grape growers of Tasgaon tahsil of Sangli district.M.Sc.(Agri.) Thesis, (unpublished), MPKV, Rahuri. (M.S).
- Sharnagat, P.M. (2008), Attitude of beneficiaries towards National Horticulture Mission. M.Sc. (Agri.) Thesis (unpublished) PDKV, Akola.