RESEARCH ARTICLE :

Impact of national horticulture mission (NHM) on socio-economic status of turmeric growers

■ **Y. S. Dhruw, H. K. Awasthi and M. A. Khan**

SUMMARY : The present study was carried out during the years 2015-16 and 2016-17 in Chhattisgarh plains. The aim of this study was to know the impact of NHM on socio-economic status of turmeric growers. A total of 320 farmers (160 beneficiaries and 160 non-beneficiaries) were selected randomly. Data collection was done by the use of interview schedule through personnel interview. The collected data was analyzed with the help of suitable statistical methods. The findings reveal that majority of the beneficiaries (56.88%) belonged to middle class, whereas non-beneficiaries, 50.52 per cent of the respondents belonged to lower middle class.

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BACKGROUND AND OBJECTIVES

National Horticulture Mission (NHM) has been implemented in 2005-06 in 18 States and 3 Union Territories of India excluding the states covered under Horticulture Mission for North East and Himalayan States (HMNEH) to promote holistic growth of the horticulture sector covering fruits, vegetables, root and tuber crops, mushroom, spices, flowers, aromatic plants, cashew and cocoa. HMNEH is a separate Technology Mission restructured in 2002-03 for integrated development of horticulture in North Eastern States including Sikkim and the states of Himachal Pradesh, Jammu and Kashmir and Uttaranchal. All the States and Union Territories are covered under the Mission except the eight North Eastern States including Sikkim and the States of Jammu and Kashmir, Himachal Pradesh and Uttarakhand, which are covered under another Mission namely the Technology Mission for Integrated Development of Horticulture in the North Eastern States (TMNE). During XI plan, the assistance from Government of India will be 85 per cent with 15 per cent contribution by the State Government.

Turmeric is one of the important cash crops in India. India is the larger producer and exporter of turmeric in the world. Turmeric occupies about 6 per cent of the total area under spices and condiment products in India. In the year 2012-13, turmeric cultivation was 194 thousand ha with the production of 971 thousand tonnes. It reached to 233 thousand

ha with the production of 1190 thousand tonnes in the year 2014-15 (Anonymous, 2015).

Chhattisgarh is also one of the important states of turmeric cultivation. In the Chhattisgarh state cultivated area of turmeric is about 11.021 thousands ha with production of 113.34 thousand tonnes (Anonymous, 2014). Looking to the sizeable area of turmeric in Chhattisgarh state is the present investigation was carried out during the year 2015-16 and 2016-17 with following objectives.

Keeping in view of the above fact in to consideration, the present study was undertaken to study the impact of NHM on socio-economic status of turmeric growers.

RESOURCES AND METHODS

The present study was conducted in Chhattisgarh plains. The state comprises 27 districts, out of which 5 districts were selected purposively on the basis of maximum area and maximum number of turmeric growers. From each selected district, 2 blocks were selected purposively for the study on the basis of maximum area and maximum number of turmeric growers. From each selected block, 4 villages were selected purposively on the basis of maximum area and maximum number of turmeric growers. From each selected village, 4 beneficiaries and 4 non-beneficiaries were selected randomly for the comparison between both groups. In this way total 320 farmers were considered as respondents for the study. Data were collected by the personal interview method using structured schedule. The *ex-post-facto* research design was used for the study. Appropriate statistical tools used for analysis and interpretation of data.

The position of the respondent in the society is termed as socio-economic status, which is determined by various social and economic variables, *viz.,* caste, occupation, education, land, social participation, house, farm power, material possession and family type. The scale followed by Guru *et al.* (2015) with slight modifications. After filling the information-blank and scoring the individual items, the total score is summed up. With the help of the key provided in the manual, score is interpreted in terms of the class.

OBSERVATIONS AND ANALYSIS

The results of the investigation are presented in Table 1 and discussed in this chapter after appropriate statistical analysis. These are presented according to the specific objectives of the study.

Caste:

In case of beneficiaries, 36.88 per cent of the respondents belonged to other backward castes, while 36.25 per cent scheduled tribes and 18.13 per cent other castes. About 8.75 per cent belonged to scheduled castes category.

Similarly, in case of non-beneficiaries, 43.12 per cent of the respondents belonged to other backward castes, followed by 34.38 per cent scheduled tribes and 16.88 per cent other castes. About 5.62 per cent belonged to scheduled castes category.

This is attributed to the fact that the study area was dominated by other backward community. Hence, majority of the beneficiaries and non-beneficiaries respondents belongs to other backward class.

Occupation:

As regards to beneficiaries, 51.25 per cent are engaged in labour, followed by agriculture (31.87%), service (6.88%), business (6.25%), independent profession (2.50%) and caste (1.25%).

As for as non-beneficiaries are concerned, 70.00 per cent are engaged in labour, while agriculture (16.87%), other profession (5.00%), service (4.37%) and caste and business (1.88%).

Education:

In case of beneficiaries, most of the respondents (26.87%) were educated upto middle school, followed by primary school (26.25%), higher secondary (14.37%), illiterate (10.00%), high school (9.38%), graduate (8.13%) and post-graduate (5.00%).

Similarly, in case of non-beneficiaries, 29.38 per cent of the respondents were educated upto primary school, whereas middle school (25.00%), illiterate (13.12%), higher secondary (12.50%), high school (11.25%), graduate (7.50%) and post-graduate (1.25%).

Category	Score
Lower class (Upto 12 score)	1
Lower middle class (13 to 23 score)	2
Middle class (24 to 32 score)	3
Upper middle class (33 to 42 score)	4
Upper class (Above 42 score)	5

Table 1: Distribution of the respondents according to their profile characteristics

Profile	Beneficiaries		Non-beneficiaries	
	F	%	F	%
Caste				
Scheduled castes	14	8.75	9	5.62
Scheduled tribes	58	36.25	55	34.38
Other backward castes	59	36.88	69	43.12
Other castes	29	18.12	27	16.88
Occupation				
Only agriculture	51	31.87	27	16.87
Agriculture + Labour	82	51.25	112	70.00
Agriculture + Caste occupation	2	1.25	3	1.88
Agriculture + Business	10	6.25	3	1.88
Agriculture + Independent professions	4	2.50	8	5.00
Agriculture + Service	11	6.88	7	4.37
Education				
Illiterate	16	10.00	21	13.12
Primary school	42	26.25	47	29.38
Middle school	43	26.87	40	25.00
High school	15	9.38	18	11.25
Higher secondary	23	14.37	20	12.50
Graduate	13	8.13	12	7.50
Post-graduate	8	5.00	2	1.25
Land holding				
Marginal (Upto 1.00 ha)	10	6.25	9	5.62
Small (1.01 to 2.00 ha)	65	40.62	67	41.88
Semi-medium (2.01 to 4.00 ha)	54	33.75	76	47.50
Medium (4.01 to 10.00 ha)	27	16.88	8	5.00
Big (above 10.00 ha)	4	2.50	0	0.00
Social participation				
No membership in any organization	11	6.87	22	13.75
Membership in one organization	120	75.00	130	81.25
Membership in more than one organization	14	8.75	4	2.50
Office bearer	11	6.88	3	1.88
Public leader	4	2.50	1	0.62
House type				
Kutcha house	50	31.25	56	35.00
Mixed house	61	38.12	82	51.25
Pucca house	49	30.63	22	13.75
Farm power				
No farm power	0	0.00	0	0.00
One or two bullock	92	57.50	80	50.00
Oil engine	7	4.37	9	5.62
Electric motor	10	6.25	6	3.75
Tractor	38	23.75	19	11.88

F- Frequency, % - Percentage   *Table 1 : Contd...........*

Table 1: Contd………..

Material possession				
Bullock cart	47	29.38	60	37.50
Cycle	160	100.00	160	100.00
Radio	28	17.50	49	30.63
Chairs	160	100.00	160	100.00
Mobile phone	160	100.00	160	100.00
Television	152	95.00	147	91.88
Refrigerators	38	23.75	8	5.00
Family type				
Nuclear	66	41.25	89	55.62
Joint	94	58.75	71	44.38
Family size				
Small (Upto 4 members)	35	21.88	45	28.12
Medium (5 to 8 members)	60	37.50	67	41.88
Large (above 8 members)	65	40.62	48	30.00

F- Frequency, % - Percentage

Land holding:

In case of beneficiaries, 40.62 per cent of the respondents were small farmer (1.01 to 2.00 ha), whereas semi-medium farmers (33.75%), medium farmers (16.88%), marginal farmers (6.25%) and big farmers (2.50%).

Similarly, in case of non-beneficiaries, 47.50 per cent of the respondents were semi-medium farmers, while small farmers (41.88%), marginal farmers (5.62%) and big farmers (5.00%).

Thus, it can be concluded that the majority of the beneficiaries and non-beneficiaries respondents belonged to small to semi-medium land holding category.

Social participation:

In case of beneficiaries, most of the respondents (75.00 %) had membership in one organization, followed by 8.75 per cent respondents had membership in more than one organization, while 6.88 per cent respondents had office bearer and 6.87 per cent had no membership in any organization. About 2.50 per cent involved in public leader.

Similarly, in case of non-beneficiaries, majority of the respondents (81.25%) were involved membership in one organization, followed by 13.75 per cent respondents did not involved in any organization, while 2.50 per cent respondents involved in more than one organization and 1.88 per cent office bearer. About 0.62 per cent involved

Table 2 : Distribution of the respondents according to their socio-economic status

Socio-economic status (SES)	Beneficiaries		Non-beneficiaries	
	F	%	F	%
Lower class (Upto 12 score)	0	0.00	0	0.00
Lower middle class (13 to 23 score)	29	18.12	81	50.62
Middle class (24 to 32 score)	91	56.88	70	43.75
Upper middle class (33 to 42 score)	32	20.00	7	4.38
Upper class (above 43 score)	8	5.00	2	1.25

F- Frequency, % - Percentage

Table 3: Comparison between beneficiaries and non-beneficiaries respondents with respect to their socio-economic status

Characteristics	Mean score		'Z' value
	Beneficiaries	Non-beneficiaries	
Socio-economic status	28.44	23.72	3.124**

** indicate significance of value at P=0.01

in public leader.

House type:

In case of beneficiaries, most of the respondents (38.12%) had mixed type of house, followed by 31.25 per cent respondents had *Kutcha* house and 30.63 per cent of them pucca house.

With respect to non-beneficiaries maximum number of the respondents (51.25%) had mixed house, whereas 35.00 per cent respondents had *Kutcha* and 13.75 per cent of them had pucca house.

Farm power:

In case of beneficiaries, 57.50 per cent of the respondents possessed one or two bullock, while tractor (23.75%), electric motor (6.25%) and oil engine (4.37%).

With respect to non-beneficiaries, 50.00 per cent of the respondents possessed one or two bullocks, followed by tractor (11.88%), oil engine (5.62%) and electric motor (3.75%).

The reason for this kind of increase in possession of farm power may be due to high subsidy facility and also due to increase income might have motivated them to go for more number of improved implements.

Material possession:

In case of beneficiaries, cent per cent of the respondents possessed cycle, chairs and mobile phone, followed by television (95.00%), bullock cart (29.38%), refrigerators (23.75%) and radio (17.50%).

Similarly, in case of non-beneficiaries, cent per cent of the respondents possessed cycle, chairs and mobile phone, followed by television (91.88%), bullock cart (37.50%), radio (30.63%) and refrigerators (5.00%).

Family type:

In case of beneficiaries, majority of the respondents (58.75%) belonged to joint family and 41.25 per cent of the respondents belonged to nuclear family.

Similarly, in case of non-beneficiaries, 55.62 per cent of the respondents belonged to nuclear family and 44.38 per cent belonged to joint family.

It can be concluded that majority of the beneficiaries respondents belonged to joint family and non-beneficiaries respondents are belonging to the nuclear family.

Family size:

In case of beneficiaries, 40.62 per cent of the respondents had large family size, while 37.50 per cent medium size and 21.88 per cent small size of family.

Similarly, in case of non-beneficiaries, 41.88 per cent of the respondents had medium family size, followed by 30.00 per cent large size and 28.12 per cent small size of family.

Socio-economic status:

The data presented in Table 2 indicates that in case of beneficiaries, 56.88 per cent of the respondents belonged to middle class, followed by upper middle class (20.00%), lower middle class (18.12%) and upper class (5.00%). There is not a single respondent who belonged to lower class.

Similarly, in case of non-beneficiaries, 50.62 per cent of the respondents belonged to lower middle class, followed by middle class (43.75%), upper middle class (4.38%) and only upper class (1.25%). There was not a single respondent who belonged to lower class.

Comparison between beneficiaries and non-beneficiaries respondents with respect to socio-economic status:

To determine the level of difference between beneficiaries and non-beneficiaries respondents related to socio-economic status. 'Z' test was applied and results are summarized in Table 3.

The calculated 'Z' value for socio-economic status was 3.124 which was found to be significant at 1 per cent level of probability. Thus, the earlier stated Null hypothesis that there is no difference between the socio-economic status of beneficiaries and non-beneficiaries was rejected. Therefore, it can be concluded that there is significant difference between the socio-economic status of beneficiaries and non-beneficiaries respondents. Similar work related to the present investigation was also conducted by Badodiya *et al*. (2011 and 2012); Chinchmalatpure (2016); Das and Puzari (2010); Deshmukh *et al*. (2011); Dhalpe and Dawane (2016); Gamanagatti and Dodamani (2016); Kadam *et al*. (2013) and Kumari and Laxmikant (2015).

Conclusion:

From the above findings it can be concluded that the land holding, farm power and material possession were more in case of NHM beneficiaries as compared to non-beneficiaries. Majority of the beneficiaries (56.88%) belonged to middle class, whereas non-

beneficiaries, 50.52 per cent of the respondents belonged to lower middle class. The Z value for socio-economic was found to be significant. Therefore, it can be concluded that there is significant difference between the socio-economic status of beneficiaries and non-beneficiaries respondents.

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