RESEARCH ARTICLE

To Study the Profile Characteristics of National Horticulture Mission farmers in Krishnagiri District of Tamil Nadu

Mokesh S[1] and T. Raj Pravin [2]

PG Scholar, Department of Agricultural Extension, Faculty of Agriculture, Annamalai University, Annamalai Nagar, Tamil Nadu – 608002, India

Associate Professor (Agricultural Extension), Horticultural Research Station, Tamil Nadu Agricultural University, Pechiparai, Tamil Nadu – 629101, India.

ABSTRACT

The study done on the profile characteristics of National Horticulture Mission farmers in Krishnagiri district revealed that the majority (53.33%) of the NHM beneficiaries belonged to the old and middle age (40.00%) category. They were educated from primary school (20.00%), functional literate (18.33%), High School (16.67%), Intermediate (11.67%) and Illiterate level (8.33%). Majority do farming (66.67%) and farming with animal husbandry (23.333%) according to this study. Regarding land holding, the majority (55%) are small and marginal farmers (21.67%). They possess medium (51.67%) annual income and 40% belong to low medium income category. With regard to farmers experience, they had high (43.33%) and low level (38.34%) of farming experience. They possess medium (60.00%) and low (28.34%) less of extension agency contact. Majority (60.00%) had a medium level of risk orientation, followed by 33.67% with a high level of risk orientation in Krishnagiri district. The majority had (45.00%) medium level of scientific orientation followed by a medium to high level of mass media exposure (26.67%) in this study.

INTRODUCTION

The National Horticulture Mission implemented in TamilNadu and across India aims to improve the horticulture production, productivity and marketability of horticultural produce. Involving the small and marginal farmers, farmer organizations like Farmer Interest Groups, and Farmer's Producer Organisations, it aims at achieving economies of scale across the nation. At present, more focus is given on raising more crop per drop and doubling of our farmers income through increasing the yield through using excellent germplasm available with us, using improved plant material stocks for propagation and utilising the present-day advanced precision technologies by carrying out micro irrigation technologies. To foster skill development and create new employment opportunities for rural youth in horticultural sector and in post-harvest management technologies, today National Horticultural Mission (NHM) is focusing on establishing new cold chains, value addition centres, ware housing facilities with advanced logistics support to improve the productivity and profitability of horticultural sector. Keeping this in view, the present research was undertaken to study the profile characteristics of National Horticulture Mission farmers in Krishnagiri district of Tamil Nadu.

---

*Corresponding author mail: trajpravin@gmail.com

MATERIALS AND METHODS

The study was undertaken in Krishnagiri district. Three taluks, namely Krishnagiri, Hosur, and Shoologiri, were selected for this study based on the participation of beneficiaries under NHM. A list of villages was selected from the respective blocks where more NHM activities were carried out. From the list, two villages in each block were selected based on the maximum number of trainees of NHM. Nagondapalli, Thattiganapalli, Maharajakadai, Naralapalli, Kudisadhanapalli, and Panapalli were the six villages selected for this study. A total of 120 beneficiaries was selected using a proportionate random sampling method.

Findings and Discussion

The findings on the distribution of NHM beneficiaries according to their profile characteristics of NHM are presented below

Age

Age is an important factor as it reveals the mental maturity of an individual to take decisions for meeting his/her needs. The distribution of farmers according to their different age is presented in Fig 1
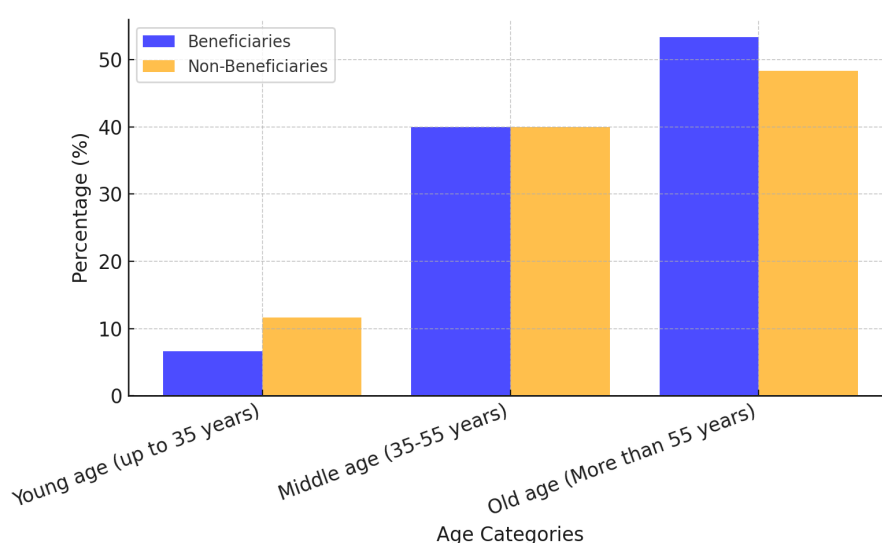
Data presented in the Table 1 indicated that, among beneficiaries, the majority (53.33%) of the respondents in this study belonged to the old age category, followed by middle (40.00%) and young (6.67%). In case of non-beneficiaries, 48.34 per cent of the respondents belonged to old age group followed by middle (40.00 %) and young (11.66%). From the above result, it can be concluded that the majority of both beneficiary and non-beneficiary farmers belonged to the old age group, followed by the middle age group. The young generation today do not show interest to take up farming as their profession because of low profitability and hard work, as farming involved lot of physical work. Further, the younger generation today are educated, and they try to get into other sector jobs which are more remunerative and need less labour. The results are in accordance with the findings of Latha (2015)
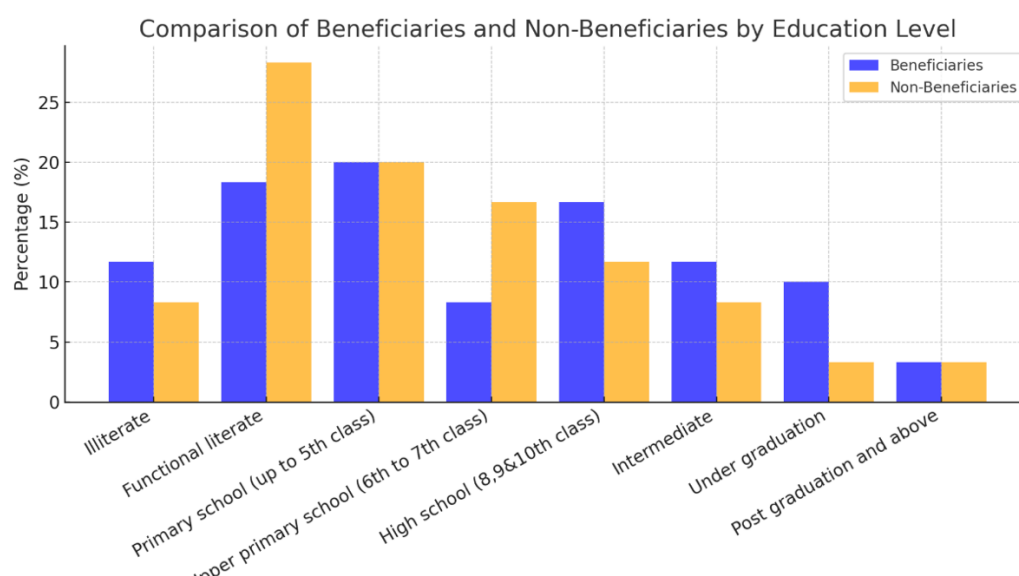
Education

Educational status of an individual farmer plays a vital role in enhancing his knowledge level. It plays a role in motivating him/ her towards knowing new things and understanding them new things. The distribution of respondents according to their level of education is furnished in Figure 2

From the findings presented in Table 2, it was evident that 20.00 percent of beneficiary respondents studied up to primary education, followed by 18.33 percent being functionally literate, 16.67 percent in High school, and 11.67 percent in Illiterate and Intermediate, and only 3.33 percent studied upto Post graduation level. In the case of non-beneficiaries, 28.33 percent of the respondents were functional literate, followed by 20 percent with primary school education and 16.67 percent with upper primary school education. Approximately 11.67 percent of the non-

Fig 1. Distribution of beneficiary and non-beneficiary farmers according to their age (N=120)

Figure 2. Distribution of beneficiary and non beneficiary farmers according to their educational status (N = 120)

beneficiaries have a high school education, followed by another 8.33 percent who belong to the illiterate and intermediate categories. A meager 3.33 percent have undergraduate and postgraduate education and above. The reason for the considerable portion of the respondents having functional literate, primary education to high schooling education in case of both beneficiary as well as non-beneficiary is due to the presence of more government educational institutions offering their educational services free of cost in the study area . The results is in accordance with the findings of Latha (2015)

Farm Size

It was operationalized as the total land possessed by the respondent at the time of investigation. Farm Size was conceptualized as the area of land (in hectare) owned and operated by the individual farmers.

The results on the distribution of the respondents according to their farm size are presented in Table 1

From the data figured in Table 4, it could be observed that a majority (55.00%) had small farm size ranging from 1-2 ha. of land followed by 21.67 per cent having marginal land holding below1 .00 ha of land, 13.33 per cent medium ,6.67 per cent of semi medium and 3.33 per cent belonged to large farmers under NHM beneficiaries category. In case of non-beneficiary farmers majority (55.00 per cent) of farmers had marginal land holding followed by small (35.00%), semi medium (5.00%), and medium (5.00%). None of them belonged to large farm size.

The above mentioned table 1 revealed that majority of beneficiary and non-beneficiary farmers of NHM possessed marginal land holding to small land holding. This is due to the fragmentation of their

Table 1. Distribution of beneficiaries and non-beneficiaries according to their farm size (N=120)

S.No	Category	Beneficiaries n=60		Non-Beneficiaries n=60	
		F	%	F	%
1.	Marginal (below 1.00ha)	13	21.67	33	55.00
2.	Small (1-2ha)	33	55	21	35.00
3.	Semi medium (2-4ha)	4	6.67	3	5.00
4	Medium (4-10ha)	8	13.33	3	5.00
5	Large (above 10 ha)	2	3.33	0	0
	Total	60	100	60	100

Table 2. Distribution of beneficiaries and non-beneficiaries according to their Annual Income (N = 120)

S. No	Category	Class Interval		Beneficiary n=60		Non-Beneficiaries n=60	
		Beneficiary in Rs.	Non-Beneficiary in Rs.	F	%	F	%
1.	Low level of annual income	55200-2,26408	45300-186200	24	40	37	61.67
2.	Medium level of annual income	226408-397616	186200-327100	31	51.67	20	33.33
3.	High level of annual income	397616-568824	327100-468000	5	8.33	3	5.00
	Total			60	100	60	100

ancestral land holding from generation to generation leading to the sub division of land to smaller size of land holding.

Annual Income

From the data figured in Table 2 it could be observed that a majority (51.67 Per cent) of beneficiaries belonged to medium annual income group i.e., Rs. 4,00,000 followed by 40.00 per cent of beneficiaries falling under low income group of Rs.2,50,000, followed by 8.33 per cent of beneficiaries under high income group of Rs more than 5,50,000/-. Whereas 61.67 per cent of non beneficiaries fall under low income group followed by 33.33 per cent in medium income group and 5.00 per cent of non beneficiaries fall under high income group. As majority of beneficiaries belonged to medium level of income group due to the fact that the beneficiaries gained income by cultivating more of Horticulture crops namely fruits (Mango, banana etc..) and flowers (Rose, Gerbera, carnation etc..) under National Horticulture Mission. As the horticultural crops of perennial in nature planted under various components of NHM will take up more gestation period to realize profit, the beneficiaries gain income through other allied agricultural activities namely fisheries by maintaining pond in their field or rearing of animals. In case of the non beneficiaries, majority belonged to low income group and the reason possibly might be that they depend upon farming alone which fetches them less farm income. In the study area the farming community also takes up agriculture as profitable venture by integrating all components namely poultry, dairy and fishing which fetches them off seasonal income to compensate their losses due to seasonal monsoon fluctuation

contributing to the loss of agricultural crops. This might be reason for the above results behind that not much of variance being observed in the income level of both beneficiaries and non-beneficiaries of NHM. The results is in accordance with the findings of Latha (2015)

Farming Experience

Adoption, knowledge, skills, participation and decision making of beneficiaries of National Horticulture Mission might be influenced by their farm experience in horticultural crop farming. The data regarding the experience of the beneficiary farmers was collected and are presented in Table:3

It could be seen from the table 3 that 43.33 per cent of respondent farmers were found to have high level of farming experience of 34 to 46 years of experience followed by 38.34 per cent of respondents falling under low experience of 10-22 years followed by 18.33 per cent of beneficiaries falling under medium level of farming experience with 22-34 years of experience in farming. In case of non –beneficiaries, majority (56.67 %) of respondents falls under the low level of farming experience followed by 23.33 per cent of high level and 20 per cent with medium level of experience in farming .It could be concluded that majority of the NHM farmers has rich farming experience as they are involved in agriculture and related allied farm activities including Agri business as the main occupation for decades together. Whereas in case of non-beneficiary respondents, they had low level of farming experience due to the fact that majority of them depend upon service sector (Government /

Table 3. Distribution of beneficiaries and non-beneficiaries according to their farming experience in horticulture (N=120)

S.No	Category	Class Interval		Beneficiaries n=60		Non Beneficiaries n=60	
		B	NB	F	%	F	%
1.	Low level of farming experience	10-22 years	10-23 years	23	38.34	34	56.67
2.	Medium level of farming experience	22-34 years	23-36 years	11	18.33	12	20
3.	High level of farming experience	34-46 years	36-50 years	26	43.33	14	23.33
	Total			60	100	60	100

Table 4. Distribution of beneficiaries and non beneficiaries according to their extension agency contact (N=120)

S.No	Category	Class Interval		Beneficiaries n=60		Non-Beneficiaries n=60	
		B	NB	F	%	F	%
1.	Low level of extension agency contact	9-22	12-24	14	23.33	26	43.33
2.	Medium level of extension agency contact	23-35	25-36	36	60	32	53.34
3.	High level of extension agency contact	36-48	37-48	10	16.67	2	3.33
	Total			60	100	60	100

private) in their young age , and after retirement has entered into horticulture as their main venture which was noticed by the researcher during investigation.

Extension agency contact

The results on distribution of the respondents according to their extension agency contact are presented in Table 4

The data depicted in table 4 indicated that, Majority (60.00 %) of respondents fall under the medium extension agency contact with a score of 23-35, followed by 23.33 per cent fall under low level of contact and another 16.67 per cent under high level of extension agency contact as in the case of beneficiaries of National Horticulture Mission. Whereas in case of non-beneficiaries, a majority (53.34%) of non-beneficiaries fall under the category of medium level of extension agency contact, followed by 43.33 per cent of respondents falling under low and a meagre (3.33 %) falling under high level of extension agency. From the above findings it could be concluded that majority of respondents from beneficiaries and non-beneficiaries fall under medium level of extension agency contact. The results

are in concurrence with the findings of Deshmukh (2003)

Risk orientation

Management in farming generally is characterized by many uncontrollable variables like climate change, price fluctuations in farm markets and so on. Studies in the developed and developing countries have shown that individuals vary in their willingness to take risk. Therefore, it was felt appropriate to study the risk-orientation of the beneficiaries of National Horticulture Mission. Data in this regard are collected and presented in Table: 5.

The data presented in table 5, it was revealed that majority (60 per cent) of the NHM beneficiaries belonged to category of medium risk taking ability followed by 36.67 per cent under high risk and 3.33 per cent under low risk taking ability in case of beneficiaries.

Similar trend was observed in case of non-beneficiary also as majority of 76.67 per cent of non-beneficiary belonged to medium risk taking

Table 5 Distribution of beneficiaries and non-beneficiaries according to their risk orientation (N=120)

S. No	Category	Class Interval		Beneficiaries n=60		Non-Beneficiaries n=60	
		B	NB	F	%	F	%
1.	Low level of risk orientation	6-18	9-20	2	3.33	13	21.67
2.	Medium level of risk orientation	19-30	21-31	36	60	46	76.67
3.	High level of risk orientation	31-42	32-42	22	36.67	01	1.66
	Total			60	100	60	100

ability followed by 21.67 per cent of the respondents belonging to low risk taking ability and the remaining meagre (1.66%) having high level of risk taking ability in this study. The findings is in accordance with the results of Krunal Gilkari (2011)

Conclusion

The findings of the present study reveal that Majority (53.33%) of the NHM beneficiaries belonged to old age and middle age (40.00%). In the non-beneficiaries category, Majority and another belong to old (48.34%) and middle age (40.00%). With regard to their education status, the beneficiaries of NHM were educated from primary school (20.00%), Functional literate (18.33%), High school (16.67%), Intermediate (11.67%) and Illiterate level (11.67%). In the non-beneficiary category, they are mostly functional literate (28.33%), with primary school level (16.67%) upto High school level (11.67%) and in Intermediate and Illiterate (8.33% and 8.33%) in this study. In occupational status, Majority of NHM beneficiaries do farming (66.67%) and farming with animal husbandry (23.33%). In the non-beneficiary category, Majority (56.67%) do farming and another category 36.67% do farming with animal husbandry in the study area. In land holding, among the beneficiaries of NHM, Majority (55.00 per cent) are small and marginal farmers (21.67%). In the non-beneficiary category majority (55.00%) are marginal (55.00%) and small (35.00%) farmers in this study. In Annual income, among the beneficiaries of NHM, Majority (51.67%) have below to the medium level of annual income and 40 per cent belong to the low level of annual income category in this study. With regard to non- beneficiaries of NHM in the study area, majority (61.67%) have low level of annual income and about 33.00 per cent of the respondents have medium level of annual income. With reference to experience in horticulture, Majority (43.33%) of the beneficiaries of NHM have high level of farming experience followed by low level (38.34%) of farming experience in this study. Majority (60.00%) of the NHM beneficiaries have medium and low level (23.33%) of extension agency contact in this study. With regard to non-beneficiaries majority (53.34%) had medium to low (43.33%) level of extension agency contact. With regard to non-beneficiary respondents, medium (53.34%) to low (43.33%) level of extension agency contact was reported in this study. Majority (60.00%) of the beneficiaries of NHM have medium level of risk orientation followed by 33.67% with high level of risk orientation in the study area. In the non-beneficiary category, majority (76.67%) have medium level of risk orientation followed by 21.67% o the respondents with low level of risk orientation in this study.

REFERENCES

Deshmukh, A., Agrawal, S. and Jallaraph, V. (2021) Constraints Faced by Orange Growers about Production and Marketing Orange. Int. J. of Agri., Envir. and Biot.14(1):11-16.

Krunal Gulkari ., Attitude of Beneficiaries towards National Horticulture Mission, M.Sc. (Ag.) Thesis, Anand Agricultural University, Anand.

Latha .M., (2015) Impact of National Horticulture Mission in North and Middle Andaman District of Andaman and Nicobar Islands. M.Sc. (Ag.) Thesis. Professor Jayasankar Telangana State Agricultural University, Hyderabad.

Patil, Bheemanagouda O. and Hosamani, S.B. (2017). Impact of the National Horticulture Mission (NHM) scheme on horticulture development in Vijayapura district Karnataka. Internat. J. Com. & Bus. Manage, 10(2) : 121-128, DOI: 10.15740/HAS/IJCBM/10.2/121-128.

Yami Melo Anup Kumar Das Growth of Area and Production of Selected Horticulture crops in

the States under the Scheme Horticulture Mission for North East and Himalayan States of India. The Dera Natung Government College Research Journal DOI: https://doi.org/10.56405/dngcrj.2022.07.01.10

(B. . Kaur, S. . Chander, S. . Baloda, A. K. . Godara, S. . Boora, & Manisha , Trans.). (2022). Attitude of Farmers Toward National Horticulture Mission in Haryana. *Indian Journal of Extension Education*, *59*(1), 162-165. https://doi.org/10.48165/IJEE.2023.59135

Mokesh, S. (2024). A Study on the Socio-economic impact of National Horticulture Mission (NHM) on Horticulture farmers in Krishnagiri District, Unpublished M.Sc. (Ag.) Thesis, Department of Agricultural Extension**,** Annamalai University, Annamalai Nagar.