Standard of Living of National Horticulture Mission Beneficiaries in Davanagere District of Karnataka

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ABSTRACT

The study was conducted in six talukas of Davanagere district to analyze shift in the standard of living of beneficiaries before and after participation in NHM programme. A total of 144 beneficiaries from randomly selected 24 villages formed the population of the study. The data were collected using pre tested structured schedule through personal interview method. The components of standard of living included were annual income, social status, employment generation and re-investment pattern. The results revealed that social status of the beneficiaries increased by 197.7 per cent compared to before and after participation in NHM followed by 178.1 per cent value addition in education, 68.1 per cent in investment on social functions, 30.5 per cent in annual income, 21.8 per cent in investment on savings, 20.9 per cent in employment generation and 6.8 per cent in investment on assets. The overall standard of living of beneficiaries after participation in NHM was raised by 76.6 per cent. This confirmed the positive effects of the NHM programme on the living standards of the beneficiaries.

Key Words: Beneficiaries, National Horticulture Mission, Standard of Living, Social Status.

INTRODUCTION

The rapid growth in population of the country necessitated the increase in food production to ensure food security and nutritional requirement. One of the biggest challenges today in agricultural sector is to increase productivity of crops to augment food production and alleviate poverty in the country. National Horticulture Mission (NHM) was launched in 2005-06 by the Central Government to promote holistic growth of the horticulture sector and improve nutritional security and income support to farm households and other sector through an area based regionally differentiated strategies.

The main activities under NHM includes increased area under horticulture crops through subsidies, farm mechanization, integrated pest and disease management, integrated nutrient management, support to drip and sprinkler irrigation system, post harvest processing units, trainings and extension activities. NHM was launched in Davanagere district during 2008-09 in all the six taluks. Mankar *et al* (2013) documented the impact of NHM on its beneficiaries in Vidarbha region of Maharashtra reported that level of impact of NHM had created a moderate impact on 68.3 per cent beneficiaries followed by high impact on 15.0 per cent beneficiaries. Further, impact of NHM showed that before participation in NHM majority of beneficiaries (29.1%) had income of Rs. 1.01 to 1.50 *lakh*/yr. After participation in NHM majority of beneficiaries (38.3%) seen in Rs. 1.51 to 2.00 *lakh* income category/yr. Before participation in NHM majority of beneficiaries each (24.1%) exhibited in the category of 51 to 100 and 101 to 150d in their employment in terms of man days per year. After participation in NHM, majority of beneficiaries (68.3%) exhibited above 250d category in their employment in terms of man days per year. This present study was thus, undertaken to know the impact of the NHM on the standard of living of the beneficiaries in Davanagere District of Karnataka.

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MATERIALS AND METHODS

The study was conducted in all the six talukas of Davanagere district namely Channagiri, Honnali, Davangere, Harihara, Jagalur and Harapanahlli. Four villages from each talukas were selected for their coverage of highest activity under NHM programme. Six beneficiaries each from each selected villages were selected randomly thus, a total sample for the study was 144 beneficiaries from 24 villages. The data were collected using structured interview schedule through personal interview method during June to September 2018. The collected data were analysed using statistical methods like mean, standard deviation, frequency, percentage and paired t test to draw meaningful conclusions. The beneficiaries were classified in to low, medium and high category using mean and half standard deviation as measure of check. Ex-post facto research design was employed for this study. The standard of living has been analysed through annual income, social status, employment generation and re-investment pattern. Further, re-investment pattern has been analysed through value addition in education, investment on assets, investment on savings and investment on social function.

RESULTS AND DISCUSSION

The data (Table 1) revealed the categorization of NHM beneficiaries based on standard of living and its components. The annual income of NHM beneficiaries indicated that before participation in NHM programme, majority of the beneficiaries belonged to medium income group (73.6%) followed by 15.9 per cent to low and 10.4 per cent to high income group. After participation in NHM, 76.3 per cent of beneficiaries belonged to medium income group followed by 15.9 per cent to low and 7.6 per cent to high income groups. Social status of the NHM beneficiaries shows that before NHM, majority of the beneficiaries had medium level social status (73.6%), followed by 13.8 per cent high level and 12.5 per cent had low level social status, while, after participation in NHM, 75.6 per

cent had medium social status followed by 12.5 per cent low and 11.8 per cent high social status.NHM 45.1 per cent of beneficiaries belonged to medium employment generation categories followed by 29.1 per cent low and 25.6 per cent high category. After participation in NHM, 36.1 per cent of beneficiaries belonged to high followed by 34.7 per cent low and 29.1 per cent medium category. Before NHM majority of beneficiaries (45.8%) belonged medium category of reinvestment pattern followed by low 31.9 per cent and high 22.2 per cent high category. After NHM 54.8 per cent belonged to low and 45.1 per cent high category. Before NHM 69.4 per cent of NHM beneficiaries belonged medium category of value addition in education followed by 15.9 per cent low and 14.5 per cent high category. After NHM majority (70.1%) belonged to medium category followed by 15.9 per cent high and 13.8 per cent low category.

Data (Table 1) also revealed the investment on assets by NHM beneficiates. Majority of beneficiaries before NHM belonged to medium category (97.9%) and 2.08 per cent high category while, after NHM 65.9 per cent belonged to medium category followed by 22.2 per cent low and 11.8 per cent to high category. It was observed from that more than half of the (52.0%) NHM beneficiaries belonging to medium level investment on savings followed by 31.9 per cent belonged to low level and 15.9 per cent to high level before NHM. After NHM, 43.0 per cent of beneficiaries falling under medium level of investment on saving following by 38.1 per cent belong to low and 18.7 per cent to high level. Majority (56.9%) of NHM beneficiaries belonged to low level investment on social function followed by 37.5 per cent high level and 5.56 per cent medium level before NHM. while, after NHM 52.0 per cent belonged to low level of investment on social function followed by 26.3 per cent and 21.5 percent of beneficiaries belonged to high and medium level, respectively. The overall standard of living of NHM beneficiaries reveals that before participation in NHM programme majority belongs medium category (68.0%) followed by 27.0 per

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Table 1. Categorization of NHM beneficiaries based on Standard of Living and its components.

(n=144)

Component	Category	Before NHM				After NHM			
		No	Per cent	Mean Score	Standard deviation	No	Per cent	Mean Score	Standard deviation
Annual income	High	23	15.9	177389	163033	23	15.9	231558	269613
	Medium	106	73.6			110	76.3		
	Low	15	10.4			11	7.6		
Social status	High	18	12.5	3.52	1.24	18	12.5	10.48	1.47
	Medium	106	73.6			109	75.6		
	Low	20	13.8			17	11.8		
Employment generation	High	42	29.1	127.40	29.46	50	34.7	153.89	32.63
	Medium	65	45.1			42	29.1		
	Low	37	25.6			52	36.1		
Reinvestment pattern	High	32	22.2	5.15	0.83	79	54.8	5.51	0.96
	Medium	66	45.8			0	0.0		
	Low	46	31.9			65	45.1		
Value addition in education	High	23	15.9	7.22	2.75	20	13.8	20.08	2.70
	Medium	100	69.4			101	70.1		
	Low	21	14.5			23	15.9		
Investment on assets	High	0	0	411493	126655	32	22.2	439562	105557
	Medium	141	97.9			95	65.9		
	Low	3	2.0			17	11.8		
Investment on savings	High	46	31.9	145384	183592	55	38.1	177083	187092
	Medium	75	52.0			62	43.0		
	Low	23	15.9			27	18.7		
Investment on social function	High	82	56.9	269944	314854	75	52.0	454028	661978
	Medium	8	5.5			31	21.5		
	Low	54	37.5			38	26.3		
Overall Standard of Living	High	39	27.0	1241.8	1958.73	87	60.4	2194.16	4692.09
	Medium	98	68.0			45	31.2		
	Low	7	4.8			12	8.3		

cent high and 4.3 per cent low category while, after participation in NHM programme majority belonged to high category (60.42%) followed by 31.2 per cent medium and 8.3 per cent low category.

The annual income of the NHM beneficiaries (Table 2) showed 34.9 per cent increase in income from other sources followed by 34.6 per cent dairy, 27.3 per cent from horticulture, 23.5 per cent daily wages and 12.6 from agriculture. Paired t-test reveals significant increase was found in agriculture, horticulture and dairy activities of the beneficiaries. This may be due to the fact that farmers who became beneficiaries in NHM programme were exposed to extension agency and gained knowledge in agriculture allied activities. This has helped in not only getting higher yields but also realizing higher

Table 2. Annual Income of the beneficiaries from different sources before and after participation in NHM. (n=144)

Sr. No.	Source of income	Annual income (Rs)		Per cent Increase	Paired t-test	P-level
		Before NHM	After NHM			
1	Agriculture	46711	52625	12.66	2.1875*	0.0303
2	Horticulture	135871	172965	27.30	2.9323**	0.0039
3	Dairy	1830	2464	34.64	2.3296*	0.0212
4	Daily wages	17	21	23.53	1.0000	0.3190
5	Others sources	4375	5903	34.93	1.7862	0.0762

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

income. The results also indicated increased income from many sources contributing increased standard of living. It was evident that there has been 68.5 per cent increase in employment generation through agriculture related subsidiary activities followed by 20.9 per cent in agriculture activities and 4.5 per cent directly through NHM (Table 3). Overall before the NHM, the employment generation was 127.3 man days and after NHM it was increased to 153.9 and found increase of 20.9 per cent. This may be due to the fact that the components of the NHM were either structures based or activities based. These horticulture crops based activities involves physical works and not season specific. It was observed that employment generation through agriculture related subsidiary activities was more indicating that farmers once became beneficiaries of the NHM programmes might have acquired information and benefits from other extension agencies like dairy, poultry, nursery management among others.

The mean values of different dimensions of standard of living before and after participation in the NHM programme was presented in Table 4. The social status of the beneficiaries was found 197.7 per cent increase compared to before and after participation in NHM followed by 178.1 per cent in value addition in education, 68.1 per cent in investment on social functions, 30.5 per cent in annual income, 21.8 per cent in investment on savings, 20.91 per cent in employment generation and 6.8 per cent in investment on assets. The overall standard of living of beneficiaries considering all the dimensions was found to be 76.6 per cent increase indicating positive impact of NHM programme. The statistical analysis of data revealed that annual income, social status, employment generation, value addition in education and investment on social function was found to be highly significant at one per cent level where as, investment on saving was found to be significant at five per cent level and

Table 3. Employment generation of beneficiaries before and after participation in NHM. (n=144)

Sr. No.	Activity	Employment generation (Man days)		Per cent Increase
		Before NHM	After NHM	
1	Agriculture activities	125.4	151.7	20.9
2	Agriculture related subsidiary activities (Excluding NHM)	0.3	0.5	68.5
3	NHM	1.5	1.60	4.5
Total		127.3	153.9	20.9

Table 4. Mean values of different dimensions of standard of living before and after NHM. (n=144)

Sr. No.	Dimensions of standard of living	Mean values		Percent increase	Paired 't' test value
		Before NHM	After NHM		
1	Annual income (Rs.)	177389	231557	30.53	3.305**
2	Social status (Score)	3.52	10.48	197.73	77.094**
3	Employment generation (Man days)	127.33	153.96	20.91	13.341**
4	Value addition in education (Score)	7.22	20.08	178.12	57.639**
5	Investment on assets (Rs.)	411493	439562	6.82	0.152
6	Investment on savings (Rs.)	145384	177083	21.80	2.407*
7	Investment on social functions (Rs.)	269944	454028	68.19	3.743**
	Overall(units)	1241.80	2194.16	76.69	2.695**

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

investment on assets found to be non-significant. The overall dimensions for standard of living found to be highly significant at 1.0 per cent. The technologies and extension services received by the beneficiaries under NHM programme have resulted in an increase in annual income, social status, employment generation and re-investment pattern and there by increased standard of living.

CONCLUSION

The study on the standard of living of NHM beneficiaries before and after the programme implementation has resulted in significant increase in standard of living. The components of standard of living namely; annual income, social status, employment generation, value addition in education, investment on assets, investment on savings and investment on social function have found to be significantly increased after NHM. It is evident from the results that by becoming NHM beneficiaries, they have received extension services and benefits from other development agencies. This confirms the need for convergence of extension activities at least at the district level to save all sorts of resources.

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