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Extension Participation of National Horticulture Mission Beneficiaries of Davanagere District in India

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Authors' contributions

This work was carried out in collaboration among all authors. Author RJ designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors MM and SS managed the analyses of the study and managed the literature searches. All authors read and approved the final manuscript.

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ABSTRACT

The present study was conducted in all the six blocks (taluks) of Davanagere district of Karnataka state, India. The sample size was 144 randomly selected beneficiaries of National Horticulture Mission from 24 villages. Ex-post facto research design was employed for this study. The results revealed that family members (34.26%), neighbors (33.56%), friends and relatives (33.45) are the major sources of information for the NHM beneficiaries followed by other service providers, fellow beneficiaries and NHM personnel. Among the extension media, the farm magazine (66.21%), radio (57.87%), newspapers (55.10%), internet (44.44%), WhatsApp (42.36%) and mobile SMS (32.27 %) are regularly used by the beneficiaries. In case of contact with extension personnel, 42.82 per cent of beneficiaries had contact with agricultural assistant followed by 36.11 per cent with assistant agriculture officer, 30.09 per cent with veterinary officer and 28.70 per cent had contact with agriculture officer. The extension participation reveals that 33.45 per cent of beneficiaries

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participated in group meetings whereas, 33.10 per cent in *krishi melas*, 31.02 per cent in field visits and 28.47 per cent in training programmes. In all, 40.97 per cent of beneficiaries visited town or cities twice in a week while, 38.18 visited once in a week and 16.67 per cent visited once in fortnight.

Keywords: Extension participation; extension contact; sources of information; cosmopoliteness, national horticulture mission.

1. INTRODUCTION

Agricultural extension services are one of the important instruments for increased productivity. India has, in fact, one of the largest institutional agricultural extension system in the world. The impressive growth in agricultural production after independence particularly that by means of the green revolution was greatly facilitated by the large network of agricultural extension services. The dichotomy between extension (education) functions on the one hand and supplies and services function on the other is largely in the Indian situation. Educating rural community in techniques designed to bring about better living is no doubt the primary objective of extension, but the educative process itself is unlikely to succeed in the long run unless its relative efficiency can be demonstrated and it is guaranteed that the adopter shall have no difficulty what even in implementing it. According to Prasad et al. [1] these are four types of extension services in India namely; 1. The first line extension system, comprising mainly the Indian Council of Agricultural Research (ICAR) institutes and the Agricultural Universities, 2. Extension system of the Ministry of Agriculture and the State Department of Agriculture, 3. Extension system of the Ministry of Rural Development and the State Development Departments and 4. Development work by the Voluntary Organizations (VO), NGOs, Business Houses, consultancies, etc. In this background, the present study was undertaken to analyse extension participation of National Horticulture Mission beneficiaries.

2. MATERIALS AND METHODS

The present study was undertaken in all the six taluks of Davanagere district, viz. Harapanahlli, Jagalur, Davangere, Harihara, Channagiri and Honnali. Four villages from each of these six taluks were selected by considering highest activity under NHM programme after consultation with taluk level Senior Assistant Director of Horticulture, Department of Horticulture. From among these selected villages, six beneficiaries were selected randomly thus, a total sample for the study was 144 beneficiaries from 24 villages. The data was collected using structured interview schedule through personal interview method. The data subjected to statistical analysis to draw meaningful conclusions. Ex-post facto research design was employed for this study.

3. RESULTS AND DISCUSSION

The main sources of information are family members, neighbors and friends and relatives showed in Table 1. These sources are readily available to the beneficiaries and discuss agricultural related issues including NHM. Further, the beneficiaries also get information from other beneficiaries and NHM personnel during various extension programmes. These findings were in line with Reddy [2], Arulprakash [3], Jayanta Roy [4] and Mankar et al. [5].

The data in Fig. 1 indicates that NHM beneficiaries are subscribers for one or more farm magazines to get information on new technologies. The educational level of beneficiaries coupled with subscription to farm magazines from agricultural universities and other organizations are readily available to beneficiaries. The beneficiaries had the opportunity to listen radio from both AIR Chitradurga and Bhadravati. This may be due to fact that scientists from KVK, Agricultural University and personnel from development departments regularly participate in radio programmes and give need based farming information. Newspaper, Internet, WhatsApp, Mobile SMS are other media used by beneficiaries for information. Krishi Vigyan Kendra (KVK) and development departments formed WhatsApp groups even at Raitha Samparka Kendra (RSK) level. Further, mobile SMSs are sent regularly by KVK and development departments on crops, government schemes and market prices. The education level of beneficiaries coupled with financial status might have contributed for this type of findings. Mass media serves as source of technologies to the beneficiaries along with entertainment and

leisure. The findings are in conformity with Ravikumar et al. [6], Santosh and Bheemappa [7] and differ from Sunil Kharatmol [8].

The frequency of extension contact depicted in Table 2. The majority of the extension contacts are from agriculture and allied service personnel from the government bodies, lesser percentage is contributed by agricultural universities and non-government organization in spreading the awareness about the NHM initiatives. The extension personnel from development departments are based at grass root level and available to beneficiaries regularly, in addition the credibility of these personnel from many years are the reasons for this kind of results. The results of present study are in confirmatory with that of Kudari and Patil [9].

Participation in group meetings, *krishi mela*, field visits, training programmes and method demonstrations are more by the beneficiaries. These extension activities are regularly organized by the development departments, KVK and NGOs working in agricultural sector to impart skill and knowledge. In addition, higher mass media participation coupled with increased usage of recent Information Communication Technology tools resulted in higher extension participation.

The beneficiaries who are highly cosmopolite will visit nearby cities or towns to purchase agricultural inputs, seeking innovative technologies. They might also visit for various other reasons like purchase of household essentials, food items, medicines, cloths and entertainment. Other reasons being the income level of beneficiaries whose purchasing power is high. The findings are in line with the findings of Suresh [10], Waman and Rahane [11], Ankaiah [12] and Suresh et al. [13]. Great majority of beneficiaries (40.97 %) visited town or cities twice in week followed by 38.20 per cent once in week Fig. 2 coupled with 54.17 per cent visit by the beneficiaries for personal/domestic purpose Fig. 3 implies that lack of services and supply of basic needs in rural areas like health and education.

Table 1. Distribution of respondents based on frequency of getting information from various sources (n=144)

Sources	Frequency of getting information								Overall sources of information	
	Most often		Often		Sometimes		Never			
	F	%	F	%	F	%	F	%	%	Rank
Family members	49	34.03	59	40.97	31	21.53	5	3.47	34.26	1
Neighbors	50	34.72	50	34.72	40	27.78	4	2.78	33.56	2
Friends & relatives	55	38.19	43	29.86	38	26.39	8	5.56	33.45	3
Other service providers	27	18.75	78	54.17	32	22.22	7	4.86	31.14	4
Fellow Beneficiaries	10	6.94	22	15.28	81	56.25	31	21.53	17.94	5
NHM Personnel	7	4.86	36	25.00	35	24.31	66	45.83	14.82	6

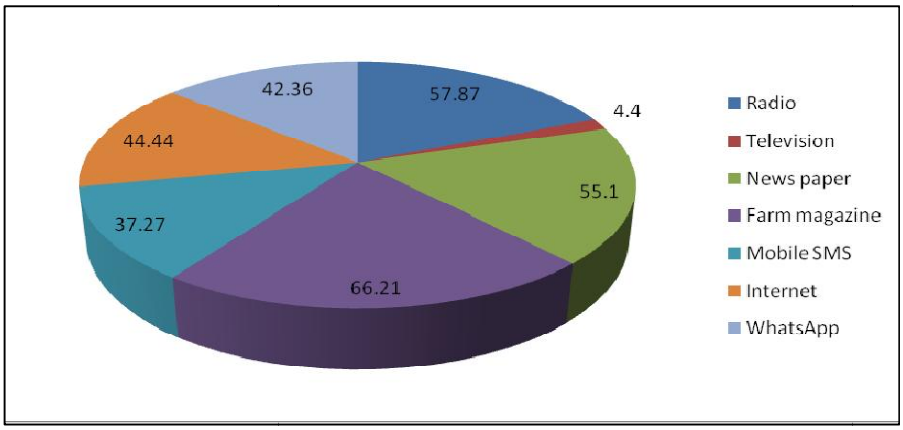

Fig. 1. Distribution of percent respondents based on frequency of information from various media

Table 2. Distribution of respondents based on frequency of extension contact (n=144)

Personnel	Frequency of contact						Overall extension contact	
	Regular		Occasionally		Never			
	F	%	F	%	F	%	%	Rank
Agriculture Assistant	49	34.03	87	60.42	8	5.56	42.82	1
Assistant Agriculture Officer	28	19.44	100	69.44	16	11.11	36.11	2
Veterinary officer	36	25.00	58	40.28	50	34.72	30.09	3
Agriculture Officer	21	14.58	82	56.94	41	28.47	28.70	4
Horticulture Assistant	13	9.03	72	50.00	59	40.97	22.69	5
Assistant Director of Agriculture	14	9.72	47	32.64	83	57.64	17.36	6
Assistant Horticulture Officer	16	11.11	43	29.86	85	59.03	17.36	6
Scientist (UAS / KVK)	7	4.86	36	25.00	101	70.14	11.57	8
Senior Assistant Director of Horticulture	2	1.39	35	24.31	107	74.31	9.03	9
NGO service providers	0	0.00	1	0.69	143	99.31	0.23	10

Table 3. Distribution of respondents based on frequency of extension participation (n=144)

Extension Activities	Frequency of extension participation								Overall extension participation	
	Always		Most of the times		Rarely		Never			
	F	%	F	%	F	%	F	%	%	Rank
Group meeting	55	38.19	41	28.47	42	29.17	6	4.17	33.45	1
Krishi melas	39	27.08	68	47.22	33	22.92	4	2.78	33.10	2
Field visit	41	28.47	52	36.11	41	28.47	10	6.94	31.02	3
Training programme	29	20.14	57	39.58	45	31.25	13	9.03	28.47	4
Method demonstration	34	23.61	43	29.86	38	26.39	29	20.14	26.16	5
Farm and home visit	34	23.61	25	17.36	64	44.44	21	14.58	25.00	6
Field day	19	13.19	38	26.39	77	53.47	10	6.94	24.31	7
Result demonstration	10	6.94	48	33.33	44	30.56	42	29.17	19.68	8

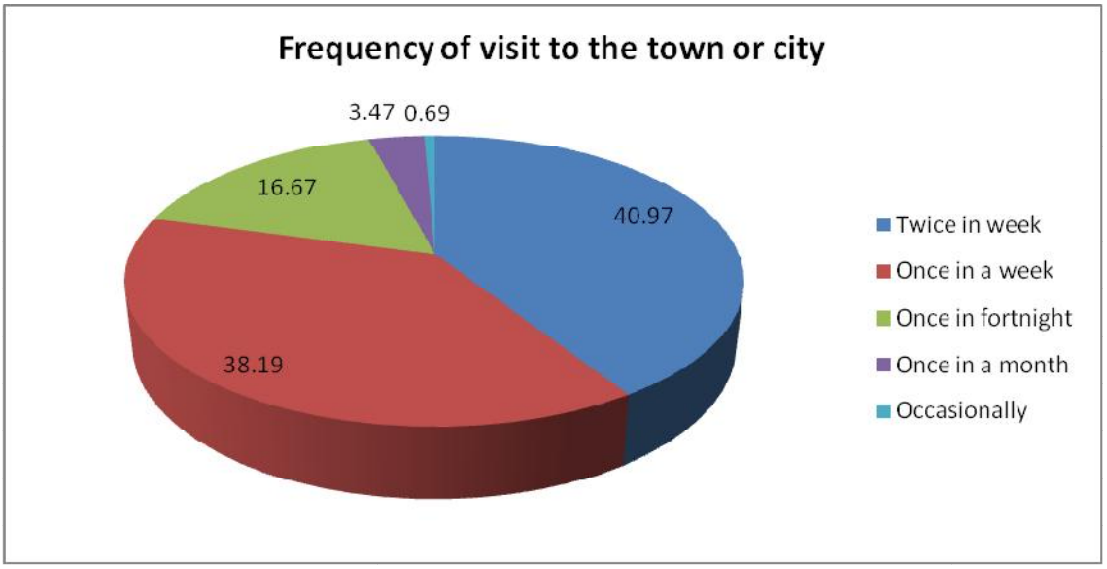

Fig. 2. Frequency of visit to the town or city

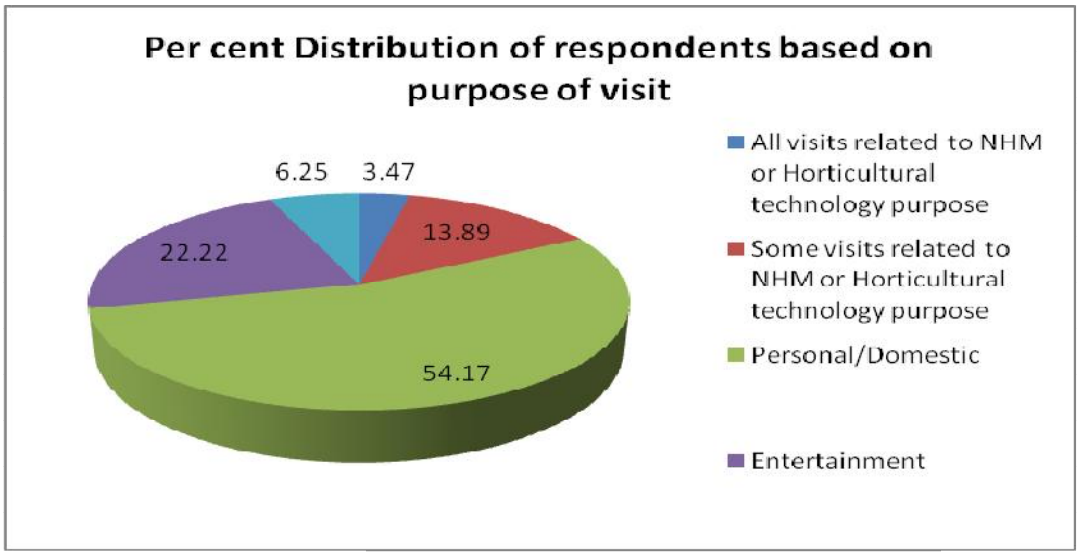

Fig. 3. Frequency distribution of the purpose of visit to the town or city

4. CONCLUSION

Extension participation and extension contact play important role in dissemination agricultural information to the farmers. Institutional sources like development department are lacking behind when compared to non-institutional sources like family members, neighbors, friends and relatives. The increased participation in extension participation by the beneficiaries helps in transfer technical knowledge to the beneficiaries. Mass media like farm magazines, radio and newspapers serves media in dissemination technical knowledge.

CONSENT

As per international standard or university standard, Participants' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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